



Broadcast Electronics

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**Marti
Electronics**

**Broadcast Remote Pickup Transmitter
MODELS: RPT-2 & RPT-15**

597-8106 rev D
March 22, 2011

Marti Electronics

Broadcast Remote Pickup Transmitter

MODELS: RPT-2 & RPT-15

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Telephone: +1 (217) 224-9617

E-Mail: rfservice@bdcast.com

Fax: +1 (217) 224-6258

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General E-Mail: bdcast@bdcast.com

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Broadcast Electronics, reserves the right to modify the design and specifications of the equipment in this manual without notice. Any modifications shall not adversely affect performance of the equipment so modified.

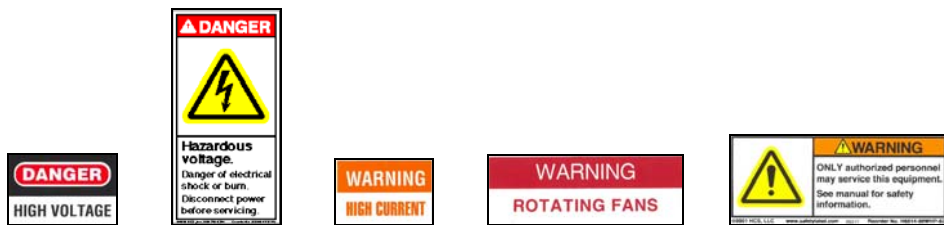




SAFETY PRECAUTIONS

PLEASE READ AND OBSERVE ALL SAFETY PRECAUTIONS!!

ALL PERSONS WHO WORK WITH OR ARE EXPOSED TO POWER TUBES, POWER TRANSISTORS, OR EQUIPMENT WHICH UTILIZES SUCH DEVICES MUST TAKE PRECAUTIONS TO PROTECT THEMSELVES AGAINST POSSIBLE SERIOUS BODILY INJURY. EXERCISE EXTREME CARE AROUND SUCH PRODUCTS. UNINFORMED OR CARELESS OPERATION OF THESE DEVICES CAN RESULT IN POOR PERFORMANCE, DAMAGE TO THE DEVICE OR PROPERTY, SERIOUS BODILY INJURY, AND POSSIBLY DEATH.



DANGEROUS HAZARDS EXIST IN THE OPERATION OF POWER TUBES AND POWER TRANSISTORS -

The operation of power tubes and power transistors involves one or more of the following hazards, any one of which, in the absence of safe operating practices and precautions, could result in serious harm to personnel.

- A. HIGH VOLTAGE** - Normal operating voltages can be deadly. Additional information follows.
- B. RF RADIATION** - Exposure to RF radiation may cause serious bodily injury possibly resulting in Blindness or death. Cardiac pacemakers may be affected. Additional information follows.
- C. HOT SURFACES** - Surfaces of air-cooled radiators and other parts of tubes can reach temperatures of several hundred degrees centigrade and cause serious burns if touched. Additional information follows.
- D. RF BURNS** - Circuit boards with RF power transistors contain high RF potentials. Do not operate an RF power module with the cover removed.

HIGH VOLTAGE –

Many power circuits operate at voltages high enough to kill through electrocution. Personnel should always break the primary AC Power when accessing the inside of the transmitter.

RADIO FREQUENCY RADIATION -

Exposure of personnel to RF radiation should be minimized, personnel should not be permitted in the vicinity of open energized RF generating circuits, or RF transmission systems (waveguides, cables, connectors, etc.), or energized antennas. It is generally accepted that exposure to “high levels” of radiation can result in severe bodily injury including blindness. Cardiac pacemakers may be affected.

The effect of prolonged exposure to “low level” RF radiation continues to be a subject of investigation and controversy. It is generally agreed that prolonged exposure of personnel to RF radiation should be limited to an absolute minimum. It is also generally agreed that exposure should be reduced in working areas where personnel heat load is above normal. A 10 mW/cm² per one tenth hour average level has been adopted by several U.S. Government agencies including the Occupational Safety and Health Administration (OSHA) as the standard protection guide for employee work environments. An even stricter standard is recommended by the American National Standards Institute which recommends a 1.0 mW/cm² per one tenth hour average level exposure between 30 Hz and 300 MHz as the standard employee protection guide (ANSI C95.1-1982).

RF energy must be contained properly by shielding and transmission lines. All input and output RF connections, such as cables, flanges and gaskets must be RF leak proof. Never operate a power tube without a properly matched RF energy absorbing load attached. Never look into or expose any part of the body to an antenna or open RF generating tube or circuit or RF transmission system while energized. Monitor the tube and RF system for RF radiation leakage at regular intervals and after servicing.

HOT SURFACES –

The power components in the transmitter are cooled by forced-air and natural convection. When handling any components of the transmitter after it has been in operation, caution must always be taken to ensure that the component is cool enough to handle without injury.



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1 INTRODUCTION

Marti Model RPT-2 and RPT-15 Transmitters are designed to operate in the Remote Pick-Up Broadcast Service as defined in Part 74, Subpart D, of the FCC Rules and Regulations. The suffix letter of the transmitter indicates the FCC frequency group it is designed to operate on. Refer to **SPECIFICATIONS** for a listing of the various models offered for available bandwidths. These transmitters, when used with the recommended companion receiver, provide a remote broadcast link having audio quality not approached by conventional voice communication radio equipment. The RPT-2 and RPT-15 transmitters operate from both 115 volt, 50 - 60 Hz. AC commercial power and 11 to 14 volt battery (NEGATIVE GROUND) supply in fixed, portable, or mobile, service. In addition, the RPT-2 can operate from an internal (optional) rechargeable NI-CAD battery (see charging procedure, page 14). Two audio input channels are provided with individual mixing gain controls. A meter and selector switch are provided for monitoring audio compression, RF output, and power supply voltage. The solid-state audio processing technique pioneered and proven by Marti Electronics in thousands of remote pick-up broadcast transmitters over the past 30 years has been applied to this model, resulting in the highest audio quality possible, consistent with transmission bandwidth and other factors.

The RPT-2 and RPT-15 have been designed to operate with other Marti equipment to form large communications systems capable of covering large areas with broadcast-quality audio, while providing continuous-duty operation.

1.1 RPT-2 and RPT-15 Features:

- Continuous-duty output
- Microphone input (push to talk) and Hi-level input with mixing gain controls
- Dual-Frequency capability
- Sub-Audible Encoder
- Internal FM Compressor-Limiter
- Internal Noise Reduction System (2:1 Audio Compander - optional)
- Portable or Mobile operation from internal AC supply, external DC, (RPT-2 optional internal rechargeable battery)
- Meter indicates audio compression, RF output, or power supply voltage



1.2 MODEL RPT-2 SPECIFICATIONS

Frequency Range and Maximum Power Output:	140 - 180 MHz - 2.5 watts 200 - 260 MHz - 2.5 watts 280 - 340 MHz - 2.5 watts 400 - 800 MHz - 2.5 watts
(into 50 ohm loads)	
RF Connector:	SO-239
Operating Temp. Range:	-10 C° to +45 C°
Modulation (Specify):	10KOF3E FCC Frequency Group P 25KOF3E FCC Frequency Group K, L, N2 50KOF3E FCC Frequency Group N1, R
Channels (Frequencies):	Two frequencies selected by switch. Frequency separation 1.1% maximum. Also selects FM deviation.
Frequency Stability:	Mobile: .0005% Base: .00025% (above 400 MHz.)
Spurious Emissions:	Meets FCC requirements.
Audio inputs:	One microphone (150 - 500 ohms) input (XLR-4-31) and one high level (8 - 600 ohms) unbalanced input (1/8" miniature phone jack). Individual mixing gain controls. Microphone input level, -68 dB to -35 dB. High level input, 0 to +10 dBm. Unbalanced line level input on 9-pin "D" connector on rear panel.
Modulation Control:	Broadcast-quality compressor/limiter built in.
Encoding:	Subaudible 27 Hz. tone encoder built in.
Metering/Indicators:	Meter indicates audio compression, RF output, power supply voltage.
Controls:	(1) MIC GAIN, (1) AUX GAIN, METER switch, ENCODE switch, FREQUENCY switch, CONTROL switch, POWER SOURCE switch.
Power Requirements:	120/220/240 VAC (voltage must be specified on original order), 50/60 Hz. DC operation on 11 - 13.5 volt negative ground , 1/2 Amp DC operation on 28 volt negative ground with optional APS-28-18 Power Supply. Internal 750 ma. NI-CAD battery and charger



AC Fuse Rating:	For 120 v. use 3/4Amp slo-blo, 3AG fuse
DC Fuse Rating:	For 12 v DC use 1 1/2 Amp, 3AG fuse
(585-069 DC Cable Assy)	
Accessory Connector:	9-pin D connector for DC power, remote control, encode, line level audio input.
Weight:	Net 7 pounds. Domestic packed 10 pounds. Net 3.2 kilograms. Export packed 4.6 kilograms.
Dimensions:	8.75 in. wide x 3.75 in. high x 11 in. deep. (22.2 cm. wide x 9.5 cm. high x 27.9 cm. deep.)
Type Acceptance Numbers (FCC Part 74):	FCC ID: BEN9EZRPT2-150 FCC ID: BEN9EZRPT2-450
DOC/MDC (Canada) Certificate Numbers:	E8462, E8463, E8464, E8465 (RPT-2/450 models)

Available OPTIONS for the RPT-2 Transmitter

Marti No.	Description
Crystal	Factory installed with original order-second frequency of DF
MCD-70C	Cardioid dynamic microphone with 3-pin XLR-3 plug. 14' cable
MCD-70D	As above except includes a 9' coiled retractable cable
700-252-1	Mobile mounting kit.
586-069	RPT-2 DC power plug, cable, 1 1/2 Amp 3AG fuse
585-037-1	Fixed repeat cable, CR-10 to RPT-2
585-037-2	Mobile repeat cable, AR-10 to RPT-2
RMH3	Rack mount shelf
550-111	DB-9 female plug for RPT-2 Accessory connector. Requires 550-066 shell below
550-066	DB-9 shell for 550-111 above (order together)
Option 01	Antenna relay for 2-way operation (requires factory installation)
585-026	20 inch coax cable connects RPT-2 with receiver for two-way operation
585-038-2	Mute cable, mutes receiver while transmitting during two-way operation
004-001-1	NI-CAD Battery
MCS-800	Noise Reduction System (2:1 audio compander) This system consists of 3 modules (2 for transmitter and 1 for receiver), and is a factory installed option ONLY. Contact factory for details.



1.3 MODEL RPT-15 SPECIFICATIONS

Frequency Range and Maximum Power Output:	140 - 180 MHz - 15 watts 200 - 260 MHz - 15 watts 280 - 340 MHz - 15 watts 400 - 800 MHz - 15 watts
(into 50 ohm loads)	
RF Connector:	SO-239
Operating Temp. Range:	-10 C° to +45 C°
Modulation (Specify):	10KOF3E FCC Frequency Group P 25KOF3E FCC Frequency Group K, L, N2 50KOF3E FCC Frequency Group N1, R
Channels (Frequencies):	Two frequencies selected by switch. Frequency separation 1.1% maximum. Also selects FM deviation.
Frequency Stability:	Mobile: .0005% Base: .00025% (above 400 MHz.)
Spurious Emissions:	Meets FCC requirements.
Audio inputs:	One microphone (150 - 500 ohms) input (XLR-4-31) and one high level (8 - 600 ohms) unbalanced input (1/8" miniature phone jack). Individual mixing gain controls. Microphone input level, -68 dB to -35 dB. High level input, 0 to +10 dBm. Unbalanced line level input on 9-pin "D" connector on rear panel.
Modulation Control:	Broadcast-quality compressor/limiter built in.
Encoding:	Subaudible 27 Hz. tone encoder built in.
Metering/Indicators:	Meter indicates audio compression, RF output, power supply voltage.
Controls:	(1) MIC GAIN, (1) AUX GAIN, METER switch, ENCODE switch, FREQUENCY switch, CONTROL switch.
Power Requirements:	120/220/240 VAC (voltage must be specified on original order), 50/60 Hz. DC operation on 11 - 13.5 volt negative ground , 3 Amps. DC operation on 28 volt negative ground with optional APS-28-18 Power Supply.



AC Fuse Rating:	For 120 v. use 1 1/2 Amp slo-blo, 3AG fuse
DC Fuse Rating:	For 12 v DC use 4 Amp, 3AG fuse
(586-070 DC Cable Assy)	
Accessory Connector:	9-pin D connector for DC power, remote control, encode, line level audio input.
Weight:	Net 10 pounds. Domestic packed 13 pounds. Net 4.6 kilograms. Export packed 5.9 kilograms.
Dimensions:	8.75 in. wide x 3.75 in. high x 12.5 in. deep. (22.2 cm. wide x 9.5 cm. high x 31.7 cm. deep.)
Type Acceptance Numbers (FCC Part 74):	FCC ID: BEN9EZRPT15-150 FCC ID: BEN9EZRPT15-450

Available OPTIONS for the RPT-15 Transmitter

Marti No.	Description
Crystal	Factory installed with original order-second frequency of DF
MCD-70C	Cardioid dynamic microphone with 3-pin XLR-3 plug. 14' cable
MCD-70D	As above except includes a 9' coiled retractable cable
700-252-1	Mobile mounting kit.
586-070	RPT-15 DC power plug, cable, 4 Amp 3AG fuse
585-037-1	Fixed repeat cable, CR-10 to RPT-15
585-037-2	Mobile repeat cable, AR-10 to RPT-15
RMH3B	Rack mount shelf
550-111	DB-9 female plug for RPT-15 Accessory connector. Requires 550-066 shell below
550-066	DB-9 shell for 550-111 above (order together)
Option 01	Antenna relay for 2-way operation
585-026	20 inch coax cable connects RPT-15 with receiver for two-way operation
585-038-2	Mute cable, mutes receiver while transmitting during two-way operation
040-009	Battery pack
MCS-800	Noise Reduction System (2:1 audio compander) This system consists of 3 modules (2 for transmitter and 1 for receiver), and is a factory installed option ONLY. Contact factory for details.



2 UNPACKING & INSPECTING

This equipment was factory tested, inspected, packed, and delivered to the carrier with utmost care. Do not accept shipment from carrier which shows damage or shortage until the carrier's agent endorses a statement of the irregularity on the face of the carrier's receipt. Without documentary evidence, a claim cannot be filed.

Unpack equipment immediately upon receipt and thoroughly inspect for concealed damage. If damage is discovered, stop further unpacking and request immediate inspection by local agent of carrier. A written report of the agent's findings, with his signature is necessary to support claim. Check your shipment against the shipping papers for possible shortage. Do not discard any packing material until all items are accounted for. Small items are often thrown away with packing material. Packing material should be retained until equipment testing is completed. Any equipment returned to the factory should be packed in original cartons, insured, and pre-paid.

3 INSTALLATION

Install rack-mounted equipment in a well-ventilated, well-grounded, and shielded rack cabinet. Do not locate solid-state equipment in a rack above tube-type equipment which produces high temperatures.

Problems can also be avoided by locating this unit away from other equipment which has transformers that produce strong magnetic fields. These fields can induce hum and noise into the Marti equipment thus reducing performance. Strong radio-frequency (RF) fields should be avoided where possible. Extensive shielding and filtering have been incorporated into this equipment to permit operation in moderate RF environments. All equipment racks, cabinets, etc., should be bonded together by wide copper grounding strap to ensure that all system elements are at RF ground potential.

3.1 STATIONARY REMOTE BROADCAST INSTALLATION

The basic stationary remote installation consists of the RPT-2 or RPT-15 transmitter, a 115 VAC power source, a microphone and other audio program source, and a portable antenna. Remotes using portable antennas inside buildings have very limited range (typically less than one mile). If greater range is needed, consider locating the transmitting antenna outside the building at a height necessary to provide a line-of-sight path to the receiving antenna. This may not be practical if a great length of coaxial cable is required. Many broadcasters are using the Marti mobile relay system to do remotes from inside buildings. This system consists of the originating transmitter with its antenna inside the building which transmits to a "mobile relay" parked outside the building. The mobile relay consists of a Marti Model AR-10 receiver and Marti RPT series transmitter with mobile antennas installed in a vehicle. The AR-10 receiver picks up the encoded signal originating from the RPT series transmitter located inside the building, automatically turns on the relay transmitter (on a different frequency), which re-transmits the program to the distant receiving antenna at the radio station studio or transmitter site. (Mobile relay equipment packages are available from Marti.)

3.2 STATIONARY REMOTE INSTALLATION PROCEDURE

1. The transmitter is normally located near the announcer or engineer to permit access to gain controls, audio inputs, the monitor jack, and metering.





CAUTION

HIGH LEVEL RF RADIATION

Personnel must not be near the antenna when radiating. Locate antenna as far as possible from people and equipment susceptible to RF radiation. Do not mount antenna directly on transmitter. Refer to ANSI C95.1 "Limits on Non-Ionizing Radiation."

2. With the RPT-2 or RPT-15 CONTROL switch in "OFF" position, plug the transmitter into a grounded, three-prong, 115 volt, AC outlet.

WARNING

THIS EQUIPMENT MUST BE OPERATED WITH A 3-PRONG, GROUNDED, 115 VOLT, AC OUTLET RECEPTACLE!

FAILURE TO USE A PROPERLY GROUNDED OUTLET COULD RESULT IN A SAFETY HAZARD OR FAULTY EQUIPMENT PERFORMANCE. IF AN EXTENSION CORD IS USED, IT MUST BE THE THREE-WIRE GROUNDING TYPE TO INSURE SAFETY.

DO NOT CUT OFF THE GROUND PIN OF A 3-PRONG PLUG!

Excessively long extension cords should be avoided since the voltage drop can degrade equipment performance. Do not allow the RPT-2/RPT-15 to get wet. Do not operate where personnel touching the transmitter (or its microphone, antenna, or other connected equipment) are standing on wet ground or concrete.

3. For locations where AC power is not available, the RPT-2/RPT-15 can be powered from a fully charged automobile battery. The RPT-15 draws three (3) amps at 12.6 volts DC. Use D.C. Power Cable, Fuse and Plug, No. 585-070. The RPT-2 draws a half (.5) amp at 12.6 volts DC. Use D.C. Power Cable, Fuse and Plug, No. 585-069. The RPT-2 can also operate from its own internal battery pack (optional).

NOTE: OBSERVE POLARITY: Red wire is (+) Positive and Black is (-) Negative.

4. Connect a portable antenna such as the Marti PAV/150, PAV-450, or YC-450 to the ANTENNA connector on the right side of the transmitter. **ALWAYS MAKE SURE ANTENNA IS CONNECTED BEFORE POWER IS APPLIED TO TRANSMITTER.**

3.3 MOBILE INSTALLATION

The RPT-2/RPT-15 transmitter can be installed in the vehicle under-dash or on the transmission hump (by



selecting the appropriate mounting bracket) where the controls ("OFF" - "STANDBY" - "TRANSMIT") can be operated directly, or the transmitter can be located elsewhere (in the trunk of a car or rear of a van) and controlled remotely. The choice depends upon the type of vehicle and the type of operation anticipated. The antenna(s) are usually mounted on top of the vehicle to provide maximum height.

3.3.1 Transmitter Mounting

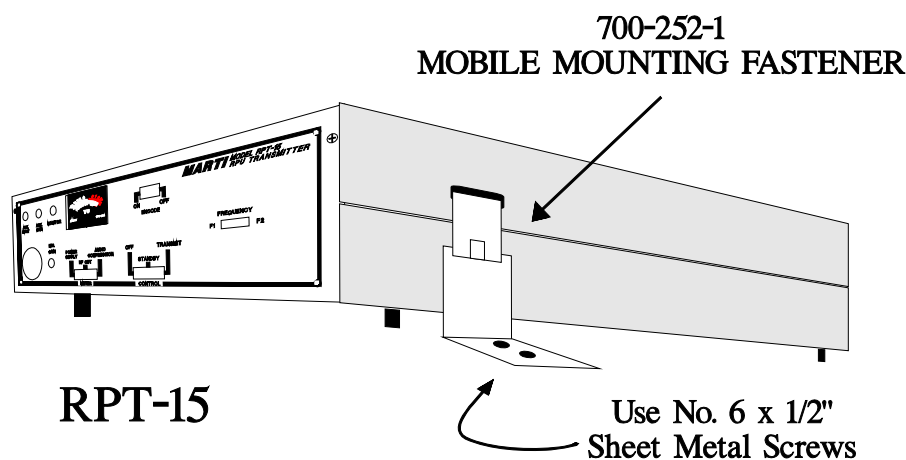
1. Locate transmitter where vent holes on top and rear of unit are not obstructed. Leave enough space for the mic. plug on the front panel and the accessory plug on rear of unit.
2. Hook the two mounting fasteners (in retracted position in the two slots on the sides of the transmitter. See Fig. 1. (Fasteners are in Mobile Mounting Kit, 700-252-1)
3. Mark the location of the two mounting holes in each fastener bracket. Drill 7/64" diameter holes into the mounting surface at the marked places for #6 x 1/2" sheet metal screws.
4. Attach the mounting fasteners with the sheet metal screws provided. Secure the transmitter with the fasteners.

3.3.2 Receiver Mounting

For mobile repeat using the Marti AR-10 Mobile Repeat Receiver, mount the receiver near the transmitter using the three fasteners supplied in Mobile Mounting Kit, 700-251.

If two-way operation is desired install optional connecting coax cable 585-026 from receiver to J7 (REC) of the transmitter. (OPTION 01 for the RPT-2/RPT-15, which permits 2-way operation, includes Jack J7 and the antenna relay, and must be FACTORY INSTALLED.) Connect optional muting cable, 585-038-2 from transmitter to receiver to mute receiver while transmitting.

FIG. 1



3.3.3 ELECTRICAL CONNECTIONS

WARNING

This equipment is designed for NEGATIVE GROUND, 12 volt vehicles only. Reverse polarity may destroy all transistors in the RPT-2/RPT-15.

1. The RPT-2/RPT-15 provides two inputs and two independent mixing gain controls. Input #1 is for push-to-talk microphone operation, and is wired for the Marti MCD-70C or MCD-70D microphones which are equipped with a momentary push-to-talk switch. The "TRANSMIT" switch on the transmitter control panel parallels the push-to-talk switch, eliminating the need to hold down the microphone switch for long transmissions.



2. Input #2 is an unbalanced high level input for tape player connection to the transmitter. Use single circuit 1/8" miniature phone plug.

3. Compressed audio from all inputs can be monitored at the monitor jack. Use a standard 1/8" single circuit miniature phone plug with headphones having an impedance of 300 ohms or higher. Audio at the monitor jack is unbalanced and resistance limited to prevent loading of the modulator circuit.

3.4 ADDITIONAL INSTRUCTIONS FOR RPT-2 INSTALLATIONS

3.4.1 Placement

The RPT-2 transmitter is designed for portable operation using its internal AC supply, external DC supply, or internal battery pack. While this provides a great deal of flexibility in uses of the unit, several factors should be considered in order to insure reliable operation. Because the RPT-2 has only 2.5 watts power output and a very short and inefficient antenna, relatively minor factors can have a large effect upon the quality of communication attained from the transmitter. Some of these factors are:

3.4.2 Rubber or Whip Antenna

When using the vertical whip or rubber antenna connected directly to the transmitter, do NOT place this unit near objects which can de-tune or absorb the power radiating from the antenna. People moving near the antenna often cause fading of the signal reaching the receiver. Remember, the whip antenna is **vertically polarized** and the receiving antenna must also be **vertically polarized** for good results.

3.4.3 Other Transmitting Antennas

In some situations it is desirable to disconnect the small whip antenna from the RPT-2 transmitter and connect a coaxial cable to a more efficient antenna. For example, a directional antenna such as the Marti YC-Series of Yagi antenna, supported at a reasonable height above ground level, can enable transmissions over distances several times greater than the whip antenna.

Mobile

The RPT-2 transmitter can be used inside vehicles or aircraft by installing the proper mobile antenna with a short length of coaxial cable and connectors to fit the RPT-2. Since the RPT-2 gives approximately two hours operation from its internal battery supply, it is not necessary, in many cases, to connect the unit to the vehicle power. When necessary to connect to vehicle 12 volt DC power, it is often most convenient to use an accessory cable which plugs into the cigarette lighter receptacle of the vehicle.

Distant Receiving Antenna

In portable broadcast work it is generally understood that the portable transmitter and its antenna will be operating under less than perfect conditions. Much of this situation can be overcome by providing the best possible receiving antenna and receiver. For maximum communications range it is necessary to employ a hi-gain receiving antenna having directional or non-directional characteristics as desired. This antenna should be at a height dictated by the distance and terrain involved, and an efficient coaxial cable such as LDF4 or LDF5 should be used. Marti Electronics offers high quality receivers and receiving antennas especially suited to broadcast work.

Local Receiving Antenna

In cases where the RPT-2 portable transmitter is required to communicate with a nearby receiver feeding a telephone line or repeater transmitter, the receiver antenna can be a single vertical whip or directional antenna supported on an improvised mast. In these installations, avoid placing the receiving antenna near traffic areas having high auto ignition noise or other electrical noise sources.



3.5 MOBILE REMOTE CONTROL

Remote control of the RPT-2/RPT-15 transmitter requires a switch to control primary +12 volt DC power and a second switch to control the transmit function. The primary +12 volt control requirement can be met by tapping the "Accessory" circuit of the vehicle which is controlled by the ignition switch. The "transmit" function can be performed by installing a switch on the vehicle or by the push-to-talk switch on a microphone such as the Marti MCD-70C or MCD-70D.

FIG. 2. shows the electrical circuit of a mobile installation.

CAUTION: TOTAL CONTROL CIRCUIT RESISTANCE MUST NOT EXCEED 0.3 OHMS!

Control circuits having more than 0.3 ohms resistance should employ a relay with low resistance contacts located near the transmitter.

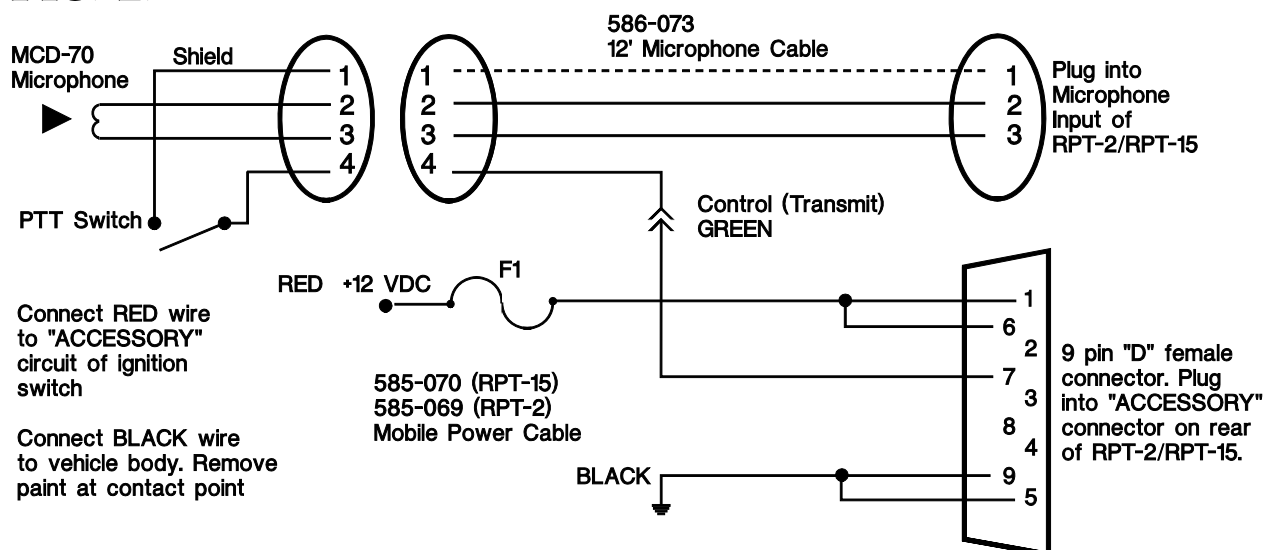
3.6 MOBILE REPEAT

Mobile repeat operation is covered under **STATIONARY REMOTE BROADCAST INSTALLATION**. Electrical connection is through Mobile Repeat Cable No. 585-037-2. This cable is connected between the RPT-2/RPT-15 transmitter and AR-10 receiver. Power is obtained by connecting the fused RED wire to the vehicle "Accessory" +12 volt circuit controlled by the vehicle ignition switch. The electrical diagram of this cable is shown in FIG. 3.

3.6.1 Mobile Antenna Installation

One or more mobile antennas are required depending upon the various receive and transmit frequencies and whether antenna duplexing is used. Antennas are specified in the various system packages listed in the Marti literature. The installer should follow the instructions supplied with the mobile antennas.

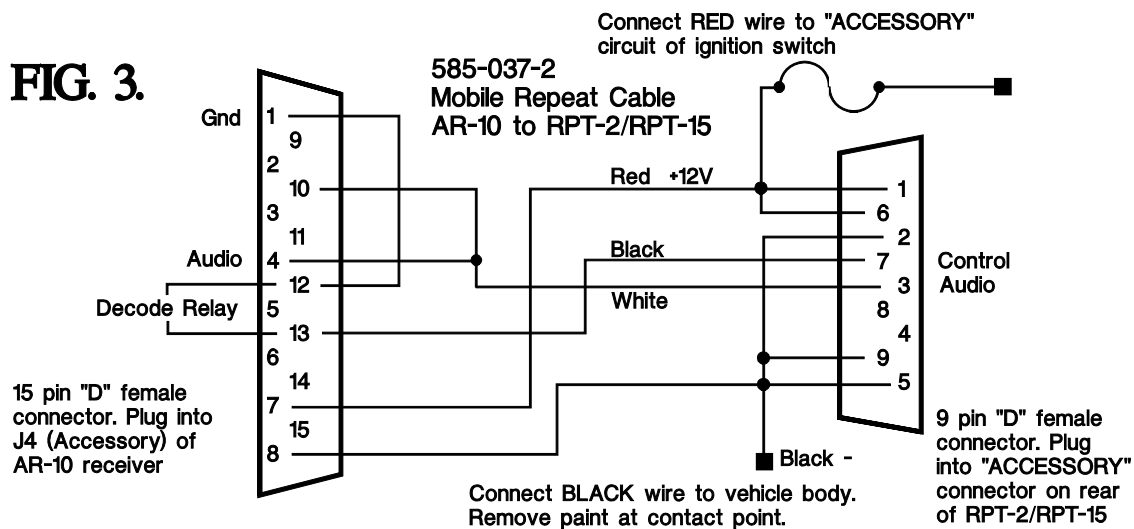
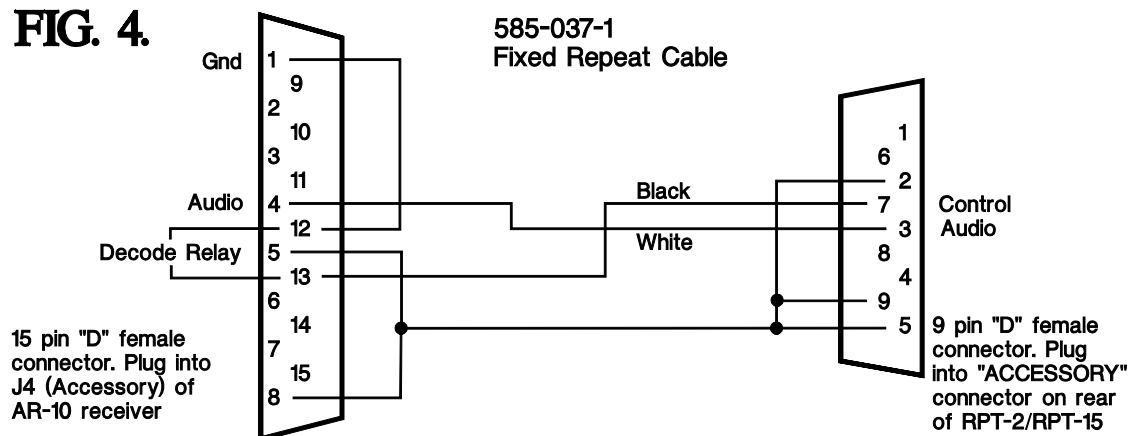
FIG. 2.



3.7 FIXED BASE STATION, TSL, & REPEATER INSTALLATION

1. Install transmitter in standard rack by using Rack Mounting Shelf (see options listed after **SPECIFICATIONS** at the beginning of this manual) available from Marti.
2. Connect transmitting antenna to ANTENNA connector on shelf rear panel.
3. If a receiver is to share the antenna with the transmitter (as in a two-way base station), the transmitter must be equipped with OPTION 01 (factory installed) from Marti. Connect RECEIVER jack on RPT-2/RPT-15 rear panel to receiver antenna connector using 20-inch Coaxial Cable No. 585-026. Receiver muting during transmitting is accomplished using Mute Cable No. 585-038-2. This cable plugs into the ACCESSORY connectors on each unit.
4. Plug transmitter into a 3-prong, grounded 115 volt, AC outlet. **WARNING:** Failure to use a properly grounded outlet could result in a safety hazard or faulty equipment performance.
5. For fixed automatic repeater operation, connect Cable No. 585-037-1 (FIG. 4.) between accessory connectors of the receiver and transmitter. Connect receiving antenna to receiver J6 and transmit antenna to RPT-2/RPT-15 ANTENNA connector.



FIG. 3.**FIG. 4.**

4 ANTENNAS

4.1 BASE STATION ANTENNA INSTALLATION CHECKLIST

The following suggestions are offered to help those responsible for antenna installations avoid costly errors in assembly and adjustment. Marti Electronics, Inc. assumes no responsibility for the installation and performance of antenna systems associated with its equipment. The following suggestions are not intended to be a complete step-by-step procedure, simply a listing of some of the most frequently reported errors in antenna system installation.

4.1.1 Antenna Assembly

Follow the manufacturer's instructions carefully. If no instructions were included with the antenna, call or write the antenna manufacturer for instructions. Antennas which have phasing or stacking cables must be assembled carefully to avoid phase reversal or signal cancellation.

4.1.2 Transmission Line Connector Assembly

Do not use RG-58 U or RG-8 U cable for STL station antennas! They have too much loss at VHF and UHF frequencies. Follow the instructions furnished by the manufacturer when cutting coaxial cable. Inspect the cable ends for small metal fragments which can short-circuit the line inside the connector assembly. Check the line for a short-circuit condition after each connector is installed by using an ohmmeter. Pressurized line should be checked for several days under pressure before installation on a tower to ensure that there are no leaks in the line or fittings

4.1.3 Moisture Proofing Coax Connectors and Fittings

Extreme care must be exercised with coaxial cable before and after connectors have been installed to ensure that moisture does not enter the line. Foam dielectric line can take on moisture absorption which is difficult to detect and remedy. Therefore, keep the line dry while in storage with ends tightly capped. Coaxial splices, connectors, and fittings, to be located outside should be made mechanically tight, then coated with a weather-proofing material over at least two layers of vinyl plastic electrical tape. Moisture problems in antenna systems are usually traced back to connectors which have NOT been properly taped. The Marti K-1 Grounding and Weatherproofing Kit is recommended for use in each new antenna installation.

4.1.4 Location and Grounding of Coaxial Cable

Keep the RPU receiver coaxial cable as far from the broadcast transmitter and its coaxial cable as possible. ***DO NOT STRAP RECEIVER CABLE TO THE MAIN ANTENNA CABLE AT ANY POINT. PLACE THE RECEIVER ANTENNA COAXIAL CABLE ON THE OPPOSITE SIDE OF THE TOWER FROM THE MAIN ANTENNA CABLE.*** Maintain maximum separation between these cables at all points, including the distance from tower base to transmitter building as well as inside the building.

4.1.5 System Grounding

It is essential that the RPU antenna system be properly grounded for safety and proper operation.

4.1.6 Antenna Installation and Adjustment

The polarization of the transmit and receive antennas of the RPU system must be the same! This means that if the transmitting antenna is vertical, the receiving antenna must also be vertical. Each antenna should be attached to the tower using the proper side mount or top mount hardware. If an RF wattmeter is available, each antenna and transmission line can be checked for VSWR when the transmitter is supplying power to it.



The VSWR should be less than 1.5 to 1 (1.5:1). **IF THE ANTENNA SYSTEM FAILS TO GIVE THE PREDICTED SIGNAL STRENGTH LEVEL, THE FOLLOWING ITEMS SHOULD BE CHECKED:**

1. Check for correct assembly of antenna.
2. Check that antennas have same polarity.
3. Check VSWR of both transmit and receive antennas. VSWR should be less than 1.5:1.
4. Check for obstructions in the path such as trees and man-made structures. The base antenna must be high enough to provide a line-of-sight path to the remote transmitting antenna.

CAUTION & WARNING

YOU CAN BE *KILLED* IF AN ANTENNA COMES IN CONTACT WITH ELECTRIC POWER LINES OR EXPOSED ELECTRICAL WIRING. FOR YOUR SAFETY USE EXTREME CAUTION WHEN IN-STALLING ANTENNAS. KEEP AWAY FROM POWER LINES.

5 OPERATION

5.1 CONTROL & CONNECTOR FUNCTIONS

5.1.1 FREQUENCY Switch

This switch selects one of two possible operating frequencies. If you have only one frequency, make sure the switch is not accidentally switched to the unused position, since the transmitter will NOT operate in this condition.

5.1.2 MIC Input Connector

This input is for any 150 ohm dynamic microphone with standard XLR-3 or A3M connector. Microphone connections are given in **INSTALLATION**.

If push-to-talk operation is desired, the Marti MCD-70C or MCD-70D microphone and its associated cable, must be used. The MCD-70C and MCD-70D microphone are equipped with a 4 pin connector. The associated cable (14' cable for MCD-70C and 9' coiled retractable cable for MCD-70D) adapts the 4 pin microphone to the 3 pin connector on the transmitter. Place the OFF-STANDBY-TRANSMIT switch to "Standby" position. The transmitter will then radiate power immediately upon pressing the microphone switch.

CAUTION: The CONTROL switch must be placed in "Standby" position a minimum of 2 1/2 minutes before switching to "Transmit" in order to insure on-frequency operation.

5.1.3 AUX. Input Connector

This input is for a high level input such as a tape player, etc. The input level should be 0 to +10 dBm at 8 to 600 ohms impedance.

5.1.4 ACCESSORY Input Connector

When Input 4 is switched to "HI" level, audio can be fed into pins 2 and 3 of the ACCESSORY connector on the rear of the transmitter. Input level should be between 0.2 volts to 2.0 volts rms. The output impedance of the device connected to Input 4 should be 8 - 600 ohms. For unbalanced operation ground pin 2 to pin 5 and connect audio to pin 3. Use standard 9-pin "subminiature D" female connector with cover.

"TRANSMIT" control can be accomplished remotely by a low resistance switch circuit connected to pins 7 and 9. **CAUTION: TOTAL CONTROL CIRCUIT RESISTANCE MUST NOT EXCEED 0.3 OHMS!**



5.1.5 GAIN Controls

The slot adjusted gain potentiometer to the right of each input connector provides an independent level adjustment for that input. Each gain potentiometer is adjusted as follows:

1. Connect input source at normal audio level.
2. Turn GAIN potentiometer to maximum counter-clockwise ("OFF") position.
3. Place CONTROL switch in "STANDBY" position and allow METER pointer to reach 0 VU. Slowly increase gain (clockwise) until METER begins deflecting to the left on audio peaks. Maximum deflection should be -3 to -5 VU on the METER scale. This indicates 100% modulation of the transmitter. Excessive gain settings cause high compression values which result in annoying increase in background noise. A 600 ohm headset may be plugged into the MONITOR jack to aid in arriving at the proper gain adjustment. In high noise environments, close-talk the microphone and reduce MIC gain until a maximum of -2 VU gain-reduction is indicated.
4. Once the proper gain level is determined, it will not be necessary to change it for that particular microphone or tape player. The broadcast quality compressor/limited built into the unit will maintain modulation at the maximum level while preventing over-modulation.

5.1.6 POWER SOURCE Switch (RPT-2 only)

Select the desired power source with this switch. If "AC MAINS" is selected, use Belden 17250 grounding type cord set to plug unit into standard 3-prong grounding 115 volt AC receptacle. Select "EXT. DC" for use with an external source of 11.5 - 13 volts DC at 2.6 amps. Connection is through J5, located on rear of transmitter. Pins 1 and 6 are positive, pins 5 and 9 are negative. Use in-line fuse, 2.5 amps. An optional internal battery is selected in "INTERNAL BATTERY" position.

5.1.7 CONTROL Switch

When the transmitter is not in use (or when the RPT-2 battery is being charged), the CONTROL switch should be in the "OFF" position. The switch should be placed in "STANDBY" position at least 2 1/2 minutes before transmission is anticipated. This activates all audio circuits, MONITOR jack and METER. Current drain is minimal in "STANDBY" position. If a push-to-talk microphone is used, the switch remains in "STANDBY" position and the transmissions are controlled by the switch on the MCD-70C or MCD-70D microphones. If a regular microphone is used, the power switch is placed in "TRANSMIT" position when transmission is desired. The CONTROL switch should be returned to "STANDBY" or "OFF" position as soon as a transmission is completed.

5.1.8 ENCODE Switch

The internal subaudible encoder can be switched "ON" or "OFF" by the front panel switch. Encoding is used to activate a repeater station, tape recorder, etc.

5.1.9 MONITOR Jack

The MONITOR jack is active in "STANDBY" and "TRANSMIT" positions of the CONTROL switch. A high-quality headset having 300 ohms or higher impedance can be plugged into the MONITOR jack to make adjustments or to monitor the quality of the audio being transmitted. A miniature, single circuit, 1/8 inch, phone plug should be used with the MONITOR jack.

5.1.10 METER

The VU METER serves the function of indicating the relative power supply voltage, relative RF power output, and the amount of audio compression. The METER indicates RF output only when the CONTROL switch is in the "TRANSMIT" position.



5.1.11 ANTENNA Connector

Connection of various antenna systems is covered under **INSTALLATION** and **ANTENNAS**. It is only necessary for the operator or announcer to see that the ANTENNA connector is tight and that the antenna is clear of objects which may affect its radiation efficiency. **CAUTION: THE ANTENNA MUST BE CONNECTED BEFORE SWITCHING TO "TRANSMIT".**

5.1.12 RECVR Connector

If the RPT-2/RPT-15 is equipped with optional antenna relay (OPTION 01), the transmit antenna can be used for receiving by connecting a coaxial cable (No. 585-026) between the RECV jack on the transmitter and ANTENNA connector of the receiver (MARTI AR-10). To silence the receiver while transmitting, Mute Cable No. 585-038-2 is plugged into the ACCESSORY connector on each unit.

5.1.13 RPT-2 BATTERY CHARGER

The RPT-2 transmitter has an internal battery charging capability. To charge the battery, plug AC power cable into 115 volt AC power receptacle. Make sure the receptacle is an approved grounding type which matches the plug supplied with the RPT-2. **The CONTROL switch should be in "OFF" position while charging the battery. Set POWER SOURCE switch to "AC" position.** The battery is charged on a constant current provided by a special regulator circuit. The charge rate provided is approximately 150 milliamps, or one-tenth the amp-hour capacity of the battery. The time necessary to fully charge a discharged battery is 14 to 16 hours. The nickel-cadmium battery supplied with this transmitter is a high-quality type capable of many charge-discharge cycles. Replacement batteries are available from Marti Electronics by ordering Part No. 040-001-1. Never leave the battery on charge for more than 24 hours.

5.1.14 BATTERY MEMORY

Many RPT-2 users will complain of shortness of battery life. This problem is usually caused by battery memory. Battery memory is caused when the battery is not completely used to full capacity. If the battery is only half discharged and then recharged a number of times, the battery will develop a memory. When memory occurs the RPT-2 will operate for only a short time. The memory can be overcome by discharging the battery down to five or six volts then recharging the battery. A reading of -4 on the meter with the meter switch in the "POWER SUPPLY" position will correspond to 5 volts. The battery should be discharged and charged three or four times. The process should eliminate the battery memory. Memory can be avoided by discharging the battery every time the RPT-2 is operated on battery. The unit should be operated until there is no RF output.

5.2 STEP BY STEP OPERATING PROCEDURE

1. Position CONTROL switch to "OFF", then plug transmitter into a 115 volt, AC, grounded, 3-prong receptacle.

WARNING

THIS EQUIPMENT MUST BE OPERATED WITH A 3-PRONG, GROUNDED, 115 VOLT, AC OUTLET RECEPTACLE!



FAILURE TO USE A PROPERLY GROUNDED OUTLET COULD RESULT IN A SAFETY HAZARD OR FAULTY EQUIPMENT PERFORMANCE. IF AN EXTENSION CORD IS USED, IT MUST BE THE THREE-WIRE GROUNDING TYPE TO INSURE SAFETY.

DO NOT CUT OFF THE GROUND PIN OF A 3 PRONG PLUG!!

2. Connect antenna to the ANTENNA connector on the right side of the transmitter..
3. Place CONTROL switch in "STANDBY" position. (Allow for a 2 1/2 minute warm-up!)
4. Plug in microphone(s) or recorder and check operation by observing compression on METER and by headset plugged into MONITOR jack. Set GAIN controls for no more than -3 VU audio compression on the METER.
5. To transmit, move CONTROL switch to "TRANSMIT" position or press push-to-talk switch on MCD-70C/MCD-70D microphone.

6 THEORY OF OPERATION

Refer to Block Diagram Drawing No. 702-006 and appropriate Schematic Diagrams.

6.1 PRE-AMP/MIXER COMPRESSOR BOARD, 800-166

Several functions are performed on this board. Integrated Circuit IC-1 serves as a (a) pre-amp, (b) pre-emphasis amplifier, (c) voltage-controlled attenuator, (d) regulator/ripple rejection. Pre-emphasized audio out of IC-1B is also fed to D2 - D3 which form an adjustable series peak-limiting circuit. This circuit is adjusted to limit only audio peaks which get past the compressor. The limiter circuit feeds a low-pass filter (L1, C23, R46) which reduces the audio bandwidth to that specified for the operating channel of the transmitter. To this is mixed the output of the tone encoder, IC-2A, which is a low-distortion Wien bridge oscillator. This composite signal is then fed to the FM Modulator. This audio signal is also fed to IC-2B which amplifies it to a level suitable for a 600 ohm headphone monitor. IC-2C is a DC amplifier the input of which is connected to the AGC (automatic gain control) circuit and the output of which drives the audio compression meter.

6.2 FM MODULATOR, 800-160

The modulator consists of a voltage-controlled crystal oscillator, Q1, precision voltage regulator, IC-1, and oven heater control, Q2. Precise frequency control is obtained by thermally coupling components Y-1, Q1, Q2, and IC-1 to the temperature-regulated Frequency Control Module No. 800-160-1.

6.3 MULTIPLIER BOARD, 800-163

The modulator RF output is frequency-multiplied in the multiplier board to obtain the various operating frequencies listed on the **SPECIFICATION** sheet.

The multiplication factor for various frequency bands is as follows:

140 - 180 MHz	12 X
200 - 260 MHz	16 X
280 - 340 MHz	24 X
400 - 480 MHz	24 X

The power level at the input to the multiplier is approximately 5 mw. and the output level is 0.9 to 1.5 watts.



6.4 RPT-2 RF POWER AMPLIFIER, 800-169

RF output of the MULTIPLIER BOARD is connected to the input of the power amplifier by a 50 ohm coaxial cable. Impedance step-down for the base of Q1 is performed by C4, C5, L2. R3 and R5 are used to attenuate and stabilize the input RF drive power. L4, L10, R2 and R4 provide a DC current path for the base of Q1 as well as reducing low frequency gain and instability. Collector current is supplied to Q1 by de-coupling/filter network L1, C1, C2, C3, C11 and choke L3. The collector impedance of Q1 is transformed to 50 ohms by L5, C6, C7.

6.5 OUTPUT LOW-PASS FILTER/RF SAMPLER

RF output from the RF power amplifier passes through a three-section low-pass filter L7, L8, L9, C9, C10. Choke L12 provides a static discharge path to ground. "RF OUT" metering is obtained by a pick-up loop placed near the output circuit. This RF sample is current limited by R1, rectified by D1 and filtered by C8 to obtain a DC current proportional to power output.

6.6 RPT-15 RF POWER AMPLIFIER, 800-170

RF output of the MULTIPLIER BOARD is connected to the input of the power amplifier board at a 50 ohm impedance. Transformation of the 50 ohm input to the base impedance of Q1 is accomplished by C1, C2, and L1. L1, L12 and R1 provide a path for Q1 base current and the L12 - R1 parallel circuit reduces low frequency gain and instability. The RF output power of Q1 is approximately 4 watts and is fed to the base of Q2 by the L-C impedance matching network shown on the schematic. L13 and R2 reduce low-frequency gain and instability. RF power at the collector of Q2 is matched to 50 ohms by the L-C network shown. The collector supply to Q1 and Q2 is decoupled by L4 and C7 - C12. D1 rectifies sampled output to drive the front panel relative RF output meter.

6.7 OUTPUT LOW-PASS FILTER/RF SAMPLER

RF output from the RF POWER AMPLIFIER passes through a three-section low-pass filter L9, L10, L11, C17, C18 before reaching the output connector J4. L14 provides a static discharge path to ground. "RF OUT" metering is obtained by a pick-up loop placed near the output circuit. This RF sample is current limited by R3, rectified by D1, and filtered by C20 to obtain a DC current proportional to power output.

6.8 RPT-2 POWER SUPPLY/CHARGER, 800-167

The RPT-2 Power Supply Board contains a bridge rectifier (D1, 2, 3, 4), a precision voltage regulator (IC1) (13.2 volts), a constant current regulator (IC2) for battery charging, and a battery voltage sensor/charge terminator circuit consisting of D8, D11 and Q1.

The constant voltage regulator is capable of powering the transmitter while operating on AC power independent of the battery charging function.

6.9 RPT-15 POWER SUPPLY, 800-168

Board 800-168 contains a bridge rectifier (D1 - 4), filter capacitor C5, and voltage adjust pot R2, and reverse polarity protection diodes D5, D6, and D7. The unregulated output voltage of this supply is 17 - 20 volts. Series regulator IC-1 is located on the heat sink and supplies 13.5 volts DC at 3 amps.



7 TEST EQUIPMENT

Distortion Analyzer	Krohn-Hite Model 6801
Oscillator	Krohn-Hite Model 4500
Attenuator Set	Hewlett-Packard Model 3500
Frequency Counter	Hewlett-Packard Model 5383A (option 001)
Digital Multimeter	Beckman Model 3030
Analog Multimeter	Triplett Model 630
RF Attenuator	adjustable 0-110 dB
RF Signal Generator	Marconi Model 2022C
Spectrum Analyzer	Hewlett-Packard Model 8558B
Wattmeter (50 ohms impedance)	Bird Model 43
5 or 50 watt element	100-250 MHz or 400-1000 MHz, Bird
Automatic Modulation Meter	Wavetek Model 4101
50 watt RF Load	Microwave Associates Model 44003
Stereo Monitor	Belar Model FMS-2
Stereo Generator	Aphex Model AX400
Oscilloscope	Tektronix Model 2215

8 TOOLS FOR ALIGNMENT

Tuning Tool	GC 9300
Tuning Tool	GC 9440
Tuning Tool	Spectrol 8T000
Tuning Tool	Sprague-Goodman
Screwdriver	Xcelite R184, 1/8" x 4"



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9 RPT-2 AND RPT-15 TRANSMITTER FACTORY TEST DATA

Customer: _____

Address: _____

Serial No.: _____ Frequency #1 (F1): _____ Frequency #2 (F2): _____

140 - 200 MHz		200 - 480 MHz	
TP1	0.35 - 0.70	TP1	0.25 - 0.50
TP2	0.40 - 0.80	TP2	0.20 - 0.60
TP3	NOT USED	TP3	0.60 - 1.20
TP4	0.25 - 0.50	TP4	0.45 - 0.90
TP5	0.30 - 0.60	TP5	0.80 - 1.60

- Battery Charge Supply voltage on RPT-2 (14.0 - 14.3 VDC)
- 8 volt regulator (7.45 - 7.65 VDC)
- Audio Compressor Meter set at 0 VU
- Limiter Set
- Encode frequency set at 27 Hz.
- Encode frequency set at 1 KHz. deviation
- Set power on 120 volt AC operation at _____ watts
- DC voltage on 120 volt AC operation set
- Response within specifications
- Distortion within specifications
- Signal to noise within specifications
- Metering satisfactory

Test Equipment

Frequency Counter, HP Model 5383A
Deviation Monitor, Wavetek Model
4101

DATE

SIGNATURE



10 TUNE-UP AND ADJUSTMENTS

Refer to Location of Adjustments Drawing No. 702-007 and appropriate schematic diagrams for each module.

This equipment was thoroughly tested and inspected at the factory prior to shipment. The actual equipment performance was recorded on the factory test report (RPT-2 and RPT-15 TEST REPORT). Adjustments should rarely be necessary in the field and should be attempted only by highly trained technicians familiar with this type equipment. Laboratory grade test equipment is required and is listed under "TEST EQUIPMENT AND TOOLS." For location of adjustments and test points in the transmitter refer to Adjustment Location Diagram, 702-007.

10.1 POWER SUPPLY VOLTAGE ADJUSTMENT (RPT-15 only)

1. Connect Dummy Load to RF output J4. Remove top cover of transmitter. Connect the positive lead of a 0-20 volt DC, digital voltmeter of 0.2% accuracy (or better) to TP1 on POWER SUPPLY BOARD, 800-168. Connect negative lead to chassis ground.
2. Place CONTROL switch in "TRANSMIT" position and adjust R1 for 13.5 volts, DC.

10.2 LOW-LEVEL ADJUSTMENTS

Remove top cover of unit. Remove coaxial cable plug at RF Output Jack J2 of MULTIPLIER BOARD, 800-163.

1. Connect Bird Model #43 Wattmeter with 1-watt element and 50 ohm load to J2 of MULTIPLIER BOARD, 800-163. Connect sensitive multimeter (0-3 volt DC range) negative probe to TP1 of MULTIPLIER BOARD, and the positive probe to chassis ground. Place CONTROL switch in "TRANSMIT" position and the FREQUENCY switch to "F1" position. A minimum of 0.25 volts should be indicated; if not see **Modulator Adjustments** elsewhere in this section.
2. Move negative probe of meter to TP2, adjust L1 and L2 for maximum indication.
3. Move negative probe to TP3, adjust L3 and L4 for maximum indication.
4. Move negative probe of meter to TP4, adjust L5 and L6 for maximum indication.

NOTE: OMIT THIS STEP ON THE 140 - 180 MHz UNITS.

5. Move negative probe of meter to TP5, adjust C27 and C28 for maximum indication.
6. Adjust C36 and C37 for maximum indication on the wattmeter connected to J2 with R14 power pot set for maximum. Adjust power level to approximately 0.5 watts.
7. Place CONTROL switch in "OFF" position. Remove wattmeter from J2 and re-install coaxial cable plug at J2.

10.3 POWER AMPLIFIER ADJUSTMENTS

Remove the four screws holding the power amplifier in place at the rear of the transmitter, and place the amplifier board near horizontal so that the trimmer capacitors are accessible. Connect Bird wattmeter with 50 ohm load and an element (for the correct frequency range) to ANTENNA connector. Connect a 13.5 volt DC regulated bench power supply with an accurate 0-6 Amp. meter to transmitter using POWER CABLE, 586-069 (RPT-2) or 585-070 (RPT-15) (see FIG 2, page 6).



1. Place CONTROL switch in "TRANSMIT" position and tune trimmers, beginning at the RF input and progressing to the output circuits. Reset power output potentiometer R14 on MULTIPLIER BOARD, 800-163 for rated power.
2. Adjust collector output matching capacitors in the final stage for **best efficiency** at rated output by slightly retuning for minimum current at rated power out. Total current to the transmitter is approximately:

RPT-2/150	0.35 Amps.
RPT-2/450	0.40 Amps.
RPT-15/150	2.10 Amps.
RPT-15/450	2.25 Amps.

3. Place CONTROL switch in "OFF", remove bench supply, resolder red wire. Replace power amp cover with the four screws. Recheck power output and adjust R14 if necessary.

10.4 MODULATOR ADJUSTMENTS

Connect dummy load with sampling attenuator to ANTENNA connector of transmitter. Connect an accurate standard FM deviation meter and frequency counter to sampling attenuator. Place CONTROL switch in "TRANSMIT" position.

1. Measure bias voltage at TP (test point) of MODULATOR BOARD, 800-160 using sensitive DC voltmeter. This voltage should be between 4.5 and 5.8 volts DC.
2. Set transmitter on frequency by adjusting L1 with FREQUENCY switch in "F1" position. If necessary, coarse adjustment can be made using L2 (for F1) and L3 (for F2).
3. Feed a 2500 Hz audio tone into AUX Input (HIGH LEVEL) and set level for a 3 VU gain reduction on "AUDIO COMPR" meter. Set deviation pot R1 (F1) and pot R2 for correct deviation specified by the FCC for the assigned frequencies. **Encode switch should be off during this adjustment.** Refer to the SPECIFICATION sheet (page 2) for designators.
4. Remove 2500 Hz tone. Place ENCODE switch in "ON" position and adjust encode level pot R33 on AUDIO BOARD, 800-166 for 1.0 KHz deviation.

10.5 AUDIO ADJUSTMENTS

1. With no audio input, switch METER to "AUDIO COMPR" position and set "0 VU Adjust" pot R22 on AUDIO BOARD, 800-166 to read 0 VU on the meter.
2. With ENCODE switch "OFF", connect a harmonic distortion analyzer to the audio output of the Marti receiver being used with the RPT-2/RPT-15. Feed a 100 microvolt signal from the transmitter into the receiver RF input. (from the sampling attenuator) NEVER FEED THE OUTPUT OF THE RPT-2/RPT-15 DIRECTLY INTO A RECEIVER! The input stage of the receiver will be destroyed instantly! Modulate the transmitter with a 2500 Hz tone at 3 dB compression. Turn "Limit Level" pot R26 on AUDIO BOARD, 800-166 to maximum counter-clockwise position. Note distortion. It should be less than 2%. Slowly turn R26 clockwise until an additional 0.1% distortion is indicated on the distortion meter.
3. With ENCODE switch "ON" and using a Marti receiver having a subaudible decoder which has been set to 27 Hz by an audio generator of at least 1% accuracy, adjust "Encode Frequency" pot R37 for maximum indication on the "DECODE SIGNAL LEVEL" meter of the receiver.



4. Connect an audio voltmeter to the output terminals of the Marti receiver. Feed a 100 microvolt signal into the receiver from an RF attenuator/sampler connected to the output of the transmitter.

Using an audio signal generator connected to AUX Input (HIGH LEVEL) of the transmitter with a level 20 dB below compression level at 2500 Hz, sweep the audio over the audio response range for the transmitter model number being aligned.

Refer to the **SPECIFICATIONS** for correct response for designator on your transmitter.

At the maximum specified response frequency adjust the tuning slug in coil L1 on AUDIO BOARD, 800-166 for maximum level or best response curve.

10.6 FREQUENCY MEASUREMENT

The RF output frequency of this transmitter should be measured as often as necessary to insure on-frequency operation and to comply with regulations. Frequency measurement can be made at the FREQ. TEST jack (RCA phono plug) protruding through the transmitter rear panel. The adjustment procedure is covered in the section above, **MODULATOR ADJUSTMENTS**.



11 FUNCTION OF SEMICONDUCTORS IN THE RPT-2

Device Designation	Reference Schematic	Function
IC-1A	800-166	Integrated Circuit, Microphone Preamplifier
IC-1B	800-166	Integrated Circuit, Pre-emphasis Audio Amplifier
IC-1C	800-166	Integrated Circuit, Audio Rectifier and Voltage-Controlled Audio Attenuator (Compressor)
IC-1D	800-166	Integrated Circuit, Power Supply, Electronic Filter
IC-2A	800-166	Integrated Circuit, Encode Oscillator
IC-2B	800-166	Integrated Circuit, Monitor Amplifier
IC-2C	800-166	Integrated Circuit, DC Amplifier for Audio Compression Meter
D1	800-166	Diode, Voltage Level Sensor for fast recovery time constant for compressor
D2	800-166	Diode, Positive Peak Limiter
D3	800-166	Diode, Negative Peak Limiter
D4	800-166	Diode, Oscillator Amplitude Limiting
D5	800-166	Diode, Oscillator Amplitude Limiting
D6	800-166	Diode, Polarity Sensor for Compression Meter
IC-1	800-160	Integrated Circuit, Voltage Regulator
Q1	800-160	Transistor, Crystal Oscillator
Q2	800-160	Transistor, Darlington Amplifier for Temperature Control
D1	800-160	Diode, Temperature Compensation
800-160-1	800-160	Module, Frequency Control
Q1	800-163	Transistor, Frequency Tripler
Q2	800-163	Transistor, Frequency Doubler
Q3	800-163	Transistor, Frequency Doubler
Q4	800-163	Transistor, Frequency Doubler
Q5	800-163	Transistor, RF Amplifier
D1	800-163	Diode, RF Sensing
Q1	800-169	Transistor, RF Power Amplifier
D1	800-169	Diode, RF Output Sensor
IC-1	800-167	Integrated Circuit, Constant Voltage Regulator
IC-2	800-167	Integrated Circuit, Constant Current Regulator
Q1	800-167	Transistor, Voltage Level Sensing Circuit for Battery Charge Shut-down
D1	800-167	Diode, Power Rectifier
D2	800-167	Diode, Power Rectifier
D3	800-167	Diode, Power Rectifier
D4	800-167	Diode, Power Rectifier
D5	800-167	Diode, Reverse Voltage Protector for IC-1
D7	800-167	Diode, Reverse Voltage Protector for IC-1
D11	800-167	Diode, Part of Battery Charge Sensing Circuit
D12	800-167	Diode, Reverse Voltage Protector for IC-2
D13	800-167	Diode, Reverse Voltage Protector for Transmitter
D14	800-167	Diode, Reverse Voltage Protector for Transmitter



12 FUNCTION OF SEMICONDUCTORS IN THE RPT-15

Device Designation	Reference Schematic	Function
IC-1A	800-166	Integrated Circuit, Microphone Preamplifier
IC-1B	800-166	Integrated Circuit, Pre-emphasis Audio Amplifier
IC-1C	800-166	Integrated Circuit, Audio Rectifier and Voltage-Controlled Audio Attenuator (Compressor)
IC-1D	800-166	Integrated Circuit, Power Supply, Electronic Filter
IC-2A	800-166	Integrated Circuit, Encode Oscillator
IC-2B	800-166	Integrated Circuit, Monitor Amplifier
IC-2C	800-166	Integrated Circuit, DC Amplifier for Audio Compression Meter
D1	800-166	Diode, Voltage Level Sensor for fast recovery time constant for compressor
D2	800-166	Diode, Positive Peak Limiter
D3	800-166	Diode, Negative Peak Limiter
D4	800-166	Diode, Oscillator Amplitude Limiting
D5	800-166	Diode, Oscillator Amplitude Limiting
D6	800-166	Diode, Polarity Sensor for Compression Meter
IC-1	800-160	Integrated Circuit, Voltage Regulator
Q1	800-160	Transistor, Crystal Oscillator
Q2	800-160	Transistor, Darlington Amplifier for Temperature Control
D1	800-160	Diode, Temperature Compensation
800-160-1	800-160	Module, Frequency Control
Q1	800-163	Transistor, Frequency Tripler
Q2	800-163	Transistor, Frequency Doubler
Q3	800-163	Transistor, Frequency Doubler
Q4	800-163	Transistor, Frequency Doubler
Q5	800-163	Transistor, RF Amplifier
D1	800-163	Diode, RF Sensing
Q1	800-170	Transistor, RF Driver
Q2	800-170	Transistor, Final RF Amplifier
D1	800-170	Diode, RF Output Sensor
IC-1	800-168	Integrated Circuit, Voltage Regulator
D1	800-168	Diode, Power Rectifier
D2	800-168	Diode, Power Rectifier
D3	800-168	Diode, Power Rectifier
D4	800-168	Diode, Power Rectifier
D5	800-168	Diode, Reverse Voltage Protector for IC-1
D6	800-168	Diode, Reverse Voltage Protector for IC-1
D7	800-168	Diode, Reverse Voltage Protector for Transmitter



13 RPT-2 BILL OF MATERIAL

This bill of material uses an indented structure to show relationships of parts into sub assemblies.

Example; all BOM LEVEL 2 parts are contained in the BOM LEVEL 1 part immediately above it. BOM level 0 is the top level.



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BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
0	705-T02-1	RPT-2/150; 120VAC		
..1	320-036L	TRANSFORMER, POWER, RPT2 110V W/LUGS	1	
....2	320-036	TRANSFORMER, POWER, 15905	1	
0	705-T02-12	RPT-2/150; 220VAC		
..1	320-036AL	TRANSFORMER, POWER, RPT2 220V W/LUGS	1	
....2	320-036A	TRANSFORMER, POWER, 15905M 220V	1	
0	705-T02-13	RPT-2/150; 230VAC		
..1	320-036CL	TRANSFORMER, POWER, RPT2 230V W/LUGS	1	
....2	320-036C	TRANSFORMER, POWER, 15905C 230V 50Hz	1	
0	705-T02-14	RPT-2/150; 240VAC		
..1	320-036BL	TRANSFORMER, POWER RPT2 240V W/LUGS	1	
....2	320-036B	TRANSFORMER, POWER, 15905MA 240V	1	
....2	550-126	Connector, crimp terminal pin Molex 08- 50-0187	2	
..1	586-011	Cable Assembly, RPT-2/15 Harness (SBCM)	1	
....2	500-128	Eyelet, GS4-4 brass	1	
....2	550-122	CONNECTOR, 10 PIN MOLEX HOUSING 09-50-8100	1	
....2	550-126	Connector, crimp terminal pin Molex 08- 50-0187	16	
....2	550-133	CONNECTOR, PHONE PLUG 3C1215	1	
....2	550-135	Connector, 6 pin Molex housing 09-50- 8060	1	
....2	580-033	Coax high shield RG-316/U Manhatten M4259	0. 44	
....2	580-041	Wire, UL1061 22/7 OTC Brown	0. 5	
....2	580-043	Wire, UL1061 22/7 OTC Red	0. 46	
....2	580-044	Wire, UL1061 22/7 OTC Yellow	0. 54	
....2	580-046	Wire, UL1061 22/7 OTC Green	0. 75	
....2	580-047	Wire, UL1061 22/7 OS-1 Orange	0. 58	
....2	580-051	Wire, UL1061 22/7 OTC White/Blue	0. 57	
....2	580-088	Shielded Wire, 16-C-22-SPJ White/Red 1 Cond. 22/19x34 pvc	0. 61	
....2	580-089	Shielded Wire, 16-C-22-SPJ White/Orange 1 cond 22/19x34 pvc	0. 44	
....2	580-091	Shielded Wire, 16-C-22-SPJ White/Green 1 Cond.22/19x34 pvc	0. 46	
....2	580-092	Shielded Wire, 16-C-22-SPJ White/Blue 1 Cond.22/19x34 pvc	0. 46	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
..1	586-057	Cable Assembly, RPT-2/15 14.5 Internal TAC-9720 (SBCM)"	1	
..1	586-068	Cable Assembly, RPT-2 Power Supply (SBCM)	1	
....2	550-080	Connector, 3 pin Molex housing 03-06-2032	1	
....2	550-081	Connector, pin Molex 02-06-2103 male	3	
....2	550-126	Connector, crimp terminal pin Molex 08-50-0187	3	
....2	580-040	Wire, UL1061 22/7 OTC Black	0. 48	
....2	580-047	Wire, UL1061 22/7 OS-1 Orange	0. 48	
....2	580-133	Wire, UL1061-18/16 #18 Red #M370-2	0. 48	
..1	586-085	Cable Assembly, RPT-2 #1 (SBCM)	1	
....2	550-122	CONNECTOR, 10 PIN MOLEX HOUSING 09-50-8100	1	
....2	550-126	Connector, crimp terminal pin Molex 08-50-0187	9	
....2	580-041	Wire, UL1061 22/7 OTC Brown	0. 54	
....2	580-043	Wire, UL1061 22/7 OTC Red	0. 53	
....2	580-045	Wire, UL1061 22/7 OTC Blue	0. 44	
....2	580-046	Wire, UL1061 22/7 OTC Green	0. 52	
....2	580-048	Wire, UL1061 22/7 OTC Violet	0. 82	
....2	580-050	Wire, UL1061 22/7 OS-1 White/Red	0. 61	
....2	580-059	Wire, UL1061 22/7 OTC Yellow/Blue	0. 92	
....2	580-133	Wire, UL1061-18/16 #18 Red #M370-2	0. 46	
....2	580-137	Wire, UL1061 18/19 #18 Orange Tinned Copper	0. 57	
..1	586-086	Cable Assembly, RPT-2 #2 (SBCM)	1	
....2	550-122	CONNECTOR, 10 PIN MOLEX HOUSING 09-50-8100	1	
....2	550-126	Connector, crimp terminal pin Molex 08-50-0187	20	
....2	550-137	Connector, 8 pin Molex housing 09-50-8080	1	
....2	550-159	Connector, 4 pin Molex housing 09-50-8040	1	
....2	550-205	Connector pins, Molex 16-02-0086	8	
....2	550-222	Connector, 8 dual row housing Molex 22-55-2081	1	
....2	580-041	Wire, UL1061 22/7 OTC Brown	1	
....2	580-043	Wire, UL1061 22/7 OTC Red	1	
....2	580-045	Wire, UL1061 22/7 OTC Blue	1. 42	
....2	580-046	Wire, UL1061 22/7 OTC Green	1.	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
			29	
....2	580-048	Wire, UL1061 22/7 OTC Violet	1	
....2	580-050	Wire, UL1061 22/7 OS-1 White/Red	0.	
			42	
....2	580-059	Wire, UL1061 22/7 OTC Yellow/Blue	2	
....2	580-133	Wire, UL1061-18/16 #18 Red #M370-2	1	
....2	580-137	Wire, UL1061 18/19 #18 Orange Tinned Copper	1	
..1	700-220-18	Cover, RPT-2/15/30 Modular .032 aluminum	1	
..1	700-220-1A	RPT-2 Final Assembly	1	
....2	030-034M	Meter, VU	1	
.....3	030-033	200 Micro-Amp Meter	1	
.....3	030-033-1	VU Meter Scales	1	
....2	100-103	POT, 10K OHM TYPE T270D VH4340 EXC.270	2	
....2	100-1551	RES,15K OHM,1/4W,1%	1	
....2	145-431	Resistor, 432 ohm 1/4 watt 1% metal film Mepco SFR25	1	
....2	236-501	Capacitor, uncased mica, 500 pf 33v 5% FWJ101	2	
....2	253-471	CAPACITOR, 470 PF 50V 10% Y5P DISC	1	
....2	297-222	Cap,.0022mf 400v ceramic disc MURATA DE1007E222M-KH	2	
....2	401-338	IC, SMT, REGULATOR, 5 AMP, LM338T *NOTE*	2	
....2	402-0005	PRESS CLIP,NYLON W/ADHESIVE BACK	1	
....2	420-4104	SCREW,4-40X.250,S.S. PH	17	
....2	420-4106	SCREW,4-40X.375,S.S. PH	5	
....2	420-4296	SCREW,4-40X.375,PH PAN HD SC	4	
....2	421-4007	4-40 X .187 S.S. HEX NUT	2	
....2	421-6005	6-32 ELASTIC STOP HEX NUT	2	
....2	423-4001	#4 FLAT SS .250 X .125 X .018	2	
....2	423-4002	#4 LOCK S.S. SPLIT	2	
....2	423-6003	#6 LOCK INT TOOTH	8	
....2	500-002	Hex Nut, #4-40 Extra Small Pattern Nickel Plated	2	
....2	500-002-1	Hex Nut, #4-40 Regular Nickel Plated	4	
....2	500-022	Screw, 6-32 x 3/8 phillips pan head M/S nickel plated"	10	
....2	500-055	Lockwasher, #4 internal tooth small pattern zinc plated	10	
....2	500-105	Pop-Rivet, AD42BS Aluminum	18	
....2	500-115	Pop-Rivet, SK42BS counter sunk	12	
....2	500-123	Washer, Switchcraft #S1790-1	2	
....2	500-162	Screw, 4-40 x 7/16 phillips pan head MS zinc plated"	2	
....2	500-180	Screw, 4-40 x 1/4 phillips pan head M/S Black Zinc"	4	
....2	500-183	Screw, 6-32 x 1/4 phillips pan head	14	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
		Black Zinc"		
....2	500-188	Screw, 4-40 x 3/8 phillips,flat head,black oxide"	2	
....2	500-199	Keps nut 4 x 40 zinc 4CNKEOZ	13	
....2	500-245	Lock Washer, 1/4 Internal Tooth L/W Zinc"	2	
....2	510-002	Shrink-Tubing, 3/4 black W3B2 3/4"	0.	
		Sumitomo"	08	
....2	510-005	Polytube, Manhatten#AF155A-20-yel	0.	
			55	
....2	510-009	Fuse, 3/4 Amp. 3AG Littlefuse #312.750	1	
....2	510-032	Grommet, 1/2 HHS#2175"	2	
....2	510-072	Fuseholder, Littlefuse #342-004	1	
....2	510-090	Cable Ties, 4 Panduit PANPLT1M-M MS3367-4-9"	7	
....2	510-191	#4 Bracket, Keystone 612	14	
....2	510-192	Connector, AC receptacle, Switchcraft EAC-309	1	
....2	510-210	Brackets, #6 Keystone 634	2	
....2	510-246	Flexible Grommet, (NOTE)	0.	
			12	
			5	
....2	512-008	Solder Lug, #4 Concord 707-1404	2	
....2	513-027	Spacer, 4-40 x 1-1/4 hex threaded EFJ 313-6477-040	2	
....2	513-030	SPACER, 6-32 X 15/16 HEX THREADED	4	
....2	550-083	Connector, Tini-Jax Switchcraft 41	2	
....2	550-124	Connector, 5 pin Molex housing 09-50-8050 *NOTE*	1	
....2	550-155-2	Connector Shell XLR Receptacle DH-NF-BAG-O	1	
....2	580-005	Buss Wire, #22AWG Solid Tinned Copper	0.	
			9	
....2	580-040	Wire, UL1061 22/7 OTC Black	1.	
			8	
....2	580-046	Wire, UL1061 22/7 OTC Green	0.	
			29	
....2	580-134	Wire, UL1061-18/16 #18 Black	0.	
			33	
....2	580-138	Flat Braid, 1/4 #1231"	0.	
			08	
....2	600-043	STYROFOAM COVER, CONVERTER	1	
....2	700-091-15	Mounting Bracket, RPT-2/15 Meter	2	
....2	700-220-16A	RPT-2/15 Multiplier Heat Sink Assembly	1	
.....3	500-113	Screw, 4-40 x 1/8 slotted pan head M/S zinc plated"	1	
.....3	520-046	Heatsink, Thermalloy 1116B round	1	
.....3	700-220-16	Copper Heatsink, RPT-2/15	1	
....2	800-259A	RPT-15 Microphone Conn. Bd.	1	
.....3	270-102	Cap,monolithic,1000pf 50v	2	
		5%KemetC1206C102J5GACTR marked		C4,C5



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
.....3	413-1597	TERM,TURRET,2 SHLDR,,219,GOLD FLASH	3	E1,E2,E3
.....3	550-155-1	Connector, XLR Receptacle Insert Nuetrik#3FD-V-I-O	1	P1
.....3	800-259B	PC Board, Microphone Connector RPT- 2/15	1	PCB
....2	DB61024	Washer, TO-220 Shoulder NYL Thermalloy #7721-7PPS	4	
....2	DB68027	Sil Pad TO220 .75x.5" ADHSV Berquist 3223-07AC-58"	2	
..1	700-220-1P	Front Panel, RPT-2 (SBCM)	1	
....2	500-073	Fastener, PEM S-632-1 ZI	2	
....2	500-184	RIVET, 1/8 x .165 SEMI-TUBULAR BLACK 100 CE100732	10	
....2	510-191	#4 Bracket, Keystone 612	2	
....2	530-001	Switch, slide DPDT Switchcraft	1	
....2	530-018	Switch, slide DPIT Switchcraft 46313LDR	2	
....2	530-021	Switch, slide TPTT Switchcraft 11H-1086	1	
....2	700-220-1	Front Panel, RPT-2	1	
.....3	698-220-1	Front Panel, RPT-2 Bare Metal	1	
.....3	699-220-1	Front Panel, RPT-2 Contract Labor Painting	1	
..1	700-220-2P	Rear Panel, RPT-2/15 (SBCM)	1	
....2	500-073	Fastener, PEM S-632-1 ZI	2	
....2	700-220-2	Rear Panel, RPT-2/15	1	
..1	700-220-3P	Frame, R/H Side RPT-2/15 (SBCM)	1	
....2	500-073	Fastener, PEM S-632-1 ZI	4	
....2	700-220-3	Frame, R/H Side RPT-2/15	1	
..1	700-220-4P	Frame, L/H Side RPT-2/15 (SBCM)	1	
....2	500-073	Fastener, PEM S-632-1 ZI	4	
....2	700-220-4	Frame, L/H Side RPT-2/15	1	
..1	700-220-5P	Top Cover, RPT-2/15 w/feet (SBCM)	1	
....2	500-119	Rivet, CE100 7/32 steel nickel	2	
....2	500-127	Washer, C-126=820W Brass/Nickel Plated	2	
....2	510-205	BUMPER, BRUCE PLASTICS 0772- 0014 BLACK	2	
....2	700-220-5	Top Cover, RPT-2/15	1	
..1	700-220-6P	Bottom Cover, RPT-2/15 w/ft & hand (SBCM)	1	
....2	500-119	Rivet, CE100 7/32 steel nickel	6	
....2	500-127	Washer, C-126=820W Brass/Nickel Plated	8	
....2	500-186	Rivet, 1/8 x .312 semi-tubular standard finish	2	
....2	510-132	Handle Assy., black w/black plated steel hdwe #1879-376-370	1	
....2	510-205	BUMPER, BRUCE PLASTICS 0772- 0014 BLACK	6	
....2	700-220-6	Bottom Cover, RPT-2/15	1	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
..1	700-220-7PB	Partition, RPT-2/15 #1 w/bd	1	
....2	420-4104	SCREW,4-40X.250,S.S. PH	4	
....2	500-199	Keps nut 4 x 40 zinc 4CNKEOZ	4	
....2	700-220-7	Partition, RPT-2/15 #1	1	
....2	800-254A	RPU/STL-30 Feed-Thru Board	1	
.....3	270-102	Cap,monolithic,1000pf 50v 5%KemetC1206C102J5GACTR marked	10	C1,C2,C3,C4, C5,C6,C7,C8, C9, C10
.....3	550-156	Connector, 10 pin Molex header 26-48-4102 *NOTE*	1	P1/P2
.....3	800-254B	PC Board, Feed-thru RPT-2/15/30	1	PCB
..1	700-220-8	Partition, RPT-2/15 #2	1	
..1	700-220-9	Partition, RPT-2 #3	1	
..1	800-160A1	RPU 150/215/300 Modulator Board	1	
....2	100-1041	RES,1K OHM,1/4W,1%	1	R17
....2	101-104	Potentiometer, 100K ohm cermet Bourns 3309P-1-104	2	R1,R2
....2	103-2744	RES,2.74K OHM,1/4W,1%,METAL	1	R9
....2	103-4741	RES,4.75K OHM,1/4W,1%,METAL	1	
....2	103-4755	RES,47.5K OHM,1/4W,1%,METAL	4	R3,R4,R5,R6
....2	104-502	Potentiometer, 5K ohm cermet Spectrol 64Y502 top adjust	1	R8
....2	145-030	RESISTOR, 3.3 OHM 1/4 WATT 1% METAL FILM MEPCO SFR25	2	R10,R16
....2	145-122-1	Resistor, 1.2k ohm 1/4 watt 1% CCF07 1.2K MF TR	1	R13
....2	145-182-1	RESISTOR, 1.8K OHN 1/4 WATT 1% RL07S182G MF	1	R14
....2	145-241-1	RESISTOR, 240 OHM 1/4 WATT 1% SFR55 240 1% TR	2	R7,R12
....2	145-363-1	Resistor, 36k ohm 1/4 watt 1% RL07S363G	2	R11,R18
....2	203-4148	DIODE,1N4148	1	D1
....2	217-103	CAP,0.1UF 250VDC 5%,POLY FILM	3	C3,C4,C11
....2	217-104	CAPACITOR, .01 UF 50V GMV DISC	1	C8
....2	219-220	CAPACITOR, ELECTROLYTIC 22uF RADIAL 35V	1	C10
....2	255-161	CAPACITOR, 160 PF 300V 5% SIVLER MICA	1	C6
....2	255-241	Capacitor, 240 pf 500v 5% silver mica CD10FD241J03	1	C7
....2	255-271C	CAPACITOR, 270pF 5% 200V CERAMIC DIPPED	1	C5
....2	299-470	CAP, TANTALUM, 4.7 UF 16V	3	C1,C2,C9
....2	330-007	Inductor, 1 uH Dale IM-2 1UH +/-5%	1	L5
....2	350-025	INDUCTOR, 1.5 - 3 UH WITH SHIELD CAN #47271-021	2	L2,L3
....2	350-037	INDUCTOR, 13 1/2 TURN ORANGE COILCRAFT 143-13J12S	2	L1,L4



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	411-404	DIODE,MOT. HYPER-ABRUPT TUNING SMV-1732/CRYSTALONICS MV1404	1	
....2	440-245-1	TRANSISTOR, 2N2857	1	
....2	511-038	Terminal, Keystone 1238	1	Q1 TP1
....2	520-040	CRYSTAL SOCKET, CS-109-07	2	Y1,Y2
....2	520-041	Clip, transistor, Atlee 100-200-1-2 cad plated	1	Q1
....2	530-051	SWITCH, SIDE ACTION SLIDE DPDT	1	S1
....2	550-136	Connector, 6 pin Molex header (cut from 550-162)	1	P1
.....3	550-162	Connector, 24 pin break-away (straight) Molex 26-48-6248	0. 25	
....2	800-160-1A	X-Mitter Freq. Control Module (oven w/diode)	1	IC1/M1/Q2
.....3	120-002	THERMISTOR, 1000 OHM @ 25C 10%	1	
.....3	125-150	Resistor, 15 ohm 5% BWH/SPH	1	
.....3	401-338	IC, SMT, REGULATOR, 5 AMP, LM338T *NOTE*	1	
.....3	450-110	Transistor, SGS TIP-110	1	
.....3	500-130	Screw, #4 x 1/4 slot. hex wash hd type B tapping zinc plate"	2	
.....3	510-235	Caplug, 5/32SCx5/8 230801HB	1	
.....3	520-045	Oven can	1	
.....3	DB61024	Washer, TO-220 Shoulder NYL Thermalloy #7721-7PPS	2	
.....3	DB68027	Sil Pad TO220 .75x.5" ADHSV Berquist 3223-07AC-58"	2	
....2	800-160B	PC Board, Modulator RPT-2/15	1	PCB
..1	800-163A1	X-mitter 150 Multiplier	1	
....2	046-0022	CAP,MICA,RF,22PF	2	C24,C39
....2	100-1041	RES,1K OHM,1/4W,1%	2	R1,R17
....2	100-1051	RES,10K OHM,1/4W,1%	2	R2,R11
....2	100-1551	RES,15K OHM,1/4W,1%	1	R5
....2	101-502	POT,5K,SINGLE TURN,HORIZONTAL PCB MOUNT	1	R14
....2	103-2744	RES,2.74K OHM,1/4W,1%,METAL	1	R4
....2	103-3163	RES,316 OHM,1/4W,1%,METAL	1	R50
....2	103-3323	RES,332 OHM,1/4W,1%,METAL	1	R10
....2	103-4753	RES,475 OHM,1/4W,1%,METAL	2	R13,R16
....2	103-4755	RES,47.5K OHM,1/4W,1%,METAL	1	R18
....2	145-030	RESISTOR, 3.3 OHM 1/4 WATT 1% METAL FILM MEPCO SFR25	1	R12
....2	145-101	RESISTOR, 100 OHM 1/4 WATT 1% METAL FILM MEPCO SFR25	1	R3
....2	145-680-C	Resistor, 68 ohm 1/4 watt 5% carbon comp 30BJ250	1	R6
....2	210-0120	TSTR,TIP120 NPN SILICON PWR	1	Q50
....2	217-103	CAP,0.1UF 250VDC 5%,POLY FILM	2	C11,C35
....2	217-104	CAPACITOR, .01 UF 50V GMV DISC	3	C2,C4,C9



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	230-109	Capacitor, variable, 1.9-15.7 pf	2	C27,C28
....2	241-470	CAPACITOR, UNCASED MICA 47PF 5% FWM602	1	C29
....2	253-471	CAPACITOR, 470 PF 50V 10% Y5P DISC	1	C31
....2	255-020	Capacitor, 2 pf 5% type QC	2	C6,C13
....2	255-241	Capacitor, 240 pf 500v 5% silver mica CD10FD241J03	2	C1,C8
....2	255-750	CAPACITOR, 75 pF 5% NPO DISC	1	C5
....2	256-131	CAPACITOR, 130 pF 5% 50V NPO DISC	1	C22
....2	256-151	CAPACITOR, 150 pF 5% NPO DISC	1	C7
....2	256-680C	Cap., 68pF 5% 200V ceramic dipped Kemet C317C680J2G5CA	2	C12,C14
....2	268-102	CAPACITOR, .001 uF 50V DISC - 20+80%	6	C10,C23,C25, C30,C34,C38
....2	268-203	CAPACITOR, .02 UF 50V Z5U DISC	1	C3
....2	270-102	Cap,monolithic,1000pf 50v 5%KemetC1206C102J5GACTR marked	1	C26
....2	290-521	CAP, VARIABLE, 5-25 pf	2	C36,C37
....2	299-220	Capacitor, tantalum, 2.2 mf 25v ECS- F1EE225K Panasonic	1	C33
....2	330-020	Inductor, .33 uH Coilcraft 90-07	1	L12
....2	330-021	INDUCTOR, 3.3uH AXIAL LEAD CHOKE	1	L11
....2	350-039	INDUCTOR, 2 1/2 TURN RED	2	L3,L4
....2	350-040	INDUCTOR, 6 1/2 TURN BLUE	2	L1,L2
....2	350-152	Inductor, 6 turn 22 AWG Red CW 215 Mult.	1	L8
....2	350-153	Inductor, 4 turn 20 AWG Buss Wire CW	1	L10
....2	350-156	Inductor, 6 turn 20 AWG Red CCW	1	L13
.....3	580-103	Magnet Wire, #20AWG Single Nyleze (RED)	0. 01 2	
....2	350-164	Inductor, 4 turn 22 AWG Red	1	L9
....2	407-0132	WASH,SHOULDER #4 .215 OD POLY	1	
....2	409-7403	PAD,TSTR MTG,TO-220 CASE	1	
....2	412-494	DIODE, GERMANIUM 1N270 (note)	2	D1,D2
....2	414-007	Diode, General Instruments 1N4007	1	D3
....2	420-237	Transistor, Micro Semi SD1127	1	Q5
....2	420-4106	SCREW,4-40X.375,S.S. PH	1	
....2	421-4007	4-40 X .187 S.S. HEX NUT	1	
....2	423-4001	#4 FLAT SS .250 X .125 X .018	1	
....2	423-4002	#4 LOCK S.S. SPLIT	1	
....2	424-427	TRANSISTOR, MOTOROLA/SGS/MICRO SEMI 2N4427 SRF944	1	Q4
....2	440-245-1	TRANSISTOR, 2N2857	2	Q1,Q2
....2	455-7805	HEATSINK,TO-220PKG,LOW PROFILE	1	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	520-049	Heatsink, Thermalloy 2260R red or black	1	Q4
....2	550-084	CONNECTOR,PHONO JACK,PCB MOUNT	2	J1,J2
....2	550-197	Header, Breakaway 4x2,0.1 Spacing(Cut from 550-316)"	1	P1
.....3	550-316	HEADER, BREAKAWAY 40x2, 0.1 SPACING"	0. 1	
....2	580-046	Wire, UL1061 22/7 OTC Green	0. 10 5	
....2	800-163B	PC Board, Multiplier RPT-2/15/30 STL- 10	1	PCB
..1	800-166A	RPU Audio Board	1	
....2	100-1013	RES,1 OHM,1/4W,5%	1	R48
....2	100-1041	RES,1K OHM,1/4W,1%	1	R43
....2	100-1551	RES,15K OHM,1/4W,1%	1	R46
....2	215-102	CAPACITOR, .001 uFD 2.5% 100V POLYPRO	1	C23
....2	800-166CM	Generic RPU Audio Board Assembly (SBCM)	1	
.....3	033-0123	CAPACITOR, .012 MFD 1% 100V POLYPRO	2	C20,C22
.....3	100-1041	RES,1K OHM,1/4W,1%	1	R1
.....3	100-1051	RES,10K OHM,1/4W,1%	1	R34
.....3	100-1531	RES,150 OHM,1/4W,1%	1	R5
.....3	101-104	Potentiometer, 100K ohm cermet Bourns 3309P-1-104	2	R26,R33
.....3	101-502	POT,5K,SINGLE TURN,HORIZONTAL PCB MOUNT	1	R22
.....3	103-1007	RES,1 MEG OHM,1/4W,1%,METAL	2	R38,R39
.....3	103-1062	RES,100K OHM,1/4W,1%,METAL	4	R6,R11,R12,R17
.....3	103-1823	RES,182 OHM,1/4W,1%,METAL	1	R3
.....3	103-2211	RES,22.1K OHM,1/4W,1%,METAL	1	R32
.....3	103-2216	RES,221K OHM,1/4W,1%,METAL	1	R31
.....3	103-2241	RES,2.21K OHM,1/4W,1%,METAL	1	R27
.....3	103-2744	RES,2.74K OHM,1/4W,1%,METAL	2	R24,R45
.....3	103-3323	RES,332 OHM,1/4W,1%,METAL	1	R13
.....3	103-3324	RES,3.32K OHM,1/4W,1%,METAL	2	R32
.....3	103-3325	RES,33.2K OHM,1/4W,1%,METAL	1	R16
.....3	103-3924	RES,3.92K OHM,1/4W,1%,METAL	3	R8,R10,R15
.....3	103-4731	RES,475K OHM,1/4W,1%,METAL	3	R20,R35,R36
.....3	103-4741	RES,4.75K OHM,1/4W,1%,METAL	1	R25
.....3	103-4755	RES,47.5K OHM,1/4W,1%,METAL	1	R2
.....3	103-5623	RES,562 OHM,1/4W,1%,METAL	1	R41
.....3	104-105	POTENTIOMETER, 1MEG OHM TOP ADJUST	1	R37
.....3	145-030	RESISTOR, 3.3 OHM 1/4 WATT 1% METAL FILM MEPCO SFR25	1	R9
.....3	145-106	Resistor, 10 meg ohm 1/4 watt 5% metal film Mepco SFR25	1	R29
.....3	145-221	Resistor, 220 ohm 1/4 watt 1% metal film Mepco SFR25	1	R17



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
.....3	145-225	Resistor, 2.21 meg ohm 1/4 watt 1% metal film (2.21 Meg 1%)	4	R19,R28,R40, R42
.....3	145-472	OBSOLETE REPLACE W/103-4741 (NLU-03)	0	
.....3	145-681	RESISTOR, 681 OHM 1/4 WATT 1% METAL FILM MEPCO SFR25	1	R4
.....3	145-822	Resistor, 8.25k ohm 1/4 watt 1% metal film Mepco SFR25	2	R14,R44
.....3	145-825	Resistor, 8.2 meg ohm 1/4 watt 5% carbon film 29SJ250	1	R30
.....3	203-4148	DIODE,1N4148	5	D1,D2,D3,D4,D5
.....3	215-223	Capacitor, .022 mfd 2.5% 100v polypro Seacor PFWAC220HGUE	1	C25
.....3	215-392	Capacitor, .0039 mfd 2.5% polypro	1	C26
.....3	215-822	CAPACITOR, .0082 MFD 2.5% 100V POLYPRO	1	C11
.....3	217-103	CAP,0.1UF 250VDC 5%,POLY FILM	1	C16
.....3	217-104	CAPACITOR, .01 UF 50V GMV DISC	2	C12,C28
.....3	219-106	CAPACITOR, 10UF 50V RADIAL ELECTROLYTIC	2	C3,C18
.....3	219-220	CAPACITOR, ELECTROLYTIC 22uF RADIAL 35V	3	C4,C21,C30
.....3	219-221	CAPACITOR, ELECTROLYTIC 220uF 25V RADIAL	3	C9,C13,C14
.....3	226-274	Cap.,.27 mf 100v 10% polypro CD MTC1P27K OR Bishop C21B274K	2	C7,C31
.....3	253-471	CAPACITOR, 470 PF 50V 10% Y5P DISC	3	C1,C15,C29
.....3	255-470C	CAP, 47pF 5% 200V CERAMIC DIPPED	2	C24,C27
.....3	256-680C	Cap., 68pF 5% 200V ceramic dipped Kemet C317C680J2G5CA	1	C10
.....3	270-102	Cap,monolithic,1000pf 50v 5%KemetC1206C102J5GACTR marked	10	C32,C33,C34, C35,C36,C37, C38,C39,C40, C41
.....3	299-470	CAP, TANTALUM, 4.7 UF 16V	3	C2,C17,C19
.....3	350-032	Inductor, 387-150M 40000-150000 uH	1	L1
.....3	401-054	Integrated Circuit, SGS TDA1054M	1	IC1
.....3	403-900	IC, QUADRUPLE NORTON OP AMP	1	IC2
.....3	414-007	Diode, General Instruments 1N4007	1	D6
.....3	550-123	Connector, 10 pin header (cut from 550- 162)	1	P1
.....4	550-162	Connector, 24 pin break-away (straight) Molex 26-48-6248	0. 41 7	
.....3	800-166B	PC Board, Audio RPT-2/15/30	1	
..1	800-167A	RPT-2 Power Supply (note)	1	
....2	101-501	Potentiometer, 500 ohm cermet Bourns 3309P-501	1	R9



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	103-2241	RES,2.21K OHM,1/4W,1%,METAL	1	
....2	103-4741	RES,4.75K OHM,1/4W,1%,METAL	1	
....2	125-100	Resistor, 10 ohm 2 watt BWH/SPH	1	R3
....2	145-221	Resistor, 220 ohm 1/4 watt 1% metal film	1	
		Mepco SFR25		R7
....2	145-241-1	RESISTOR, 240 OHM 1/4 WATT 1%	2	
		SFR55 240 1% TR		R1,R4
....2	145-300	Resistor, 30 ohm 1/4 watt 5% metal film	1	
		Mepco SFR		R5
....2	145-752	Resistor, 7.5k ohm 1/4 watt 5% metal	1	
		film Mepco SFR25		R10
....2	202-0502	RECT,3A,200V,IN5402	2	
				D13
....2	211-3904	TSTR,2N3904	1	Q1
....2	219-080	Cap,electrolytic 10uF 25V Nichicon	1	
		TVX1E100MAA		C7
....2	219-200	CAPACITOR ELECTROLYTIC 22UF	1	
		25V		C6
....2	219-472	CAPACITOR, ELECTROLYTIC 4700UF	1	
		25V		C5
....2	253-471	CAPACITOR, 470 PF 50V 10% Y5P	1	
		DISC		C23
....2	270-102	Cap,monolithic,1000pf 50v	24	C1,C4,C8,C9,
		5%KemetC1206C102J5GACTR marked		C10,C11,C12,
				C13,C14,C15,C16,C17,
				C18,C19,C20,
				C21,C22,C24,C25,C26,
				C27,C28,C29,
				C30
....2	270-103	Cap, Monolithic chip 10000pF 10% XR7	2	
		Kemet C1206C103J5RACTR		C2,C3
....2	330-018	INDUCTOR, 10 uH, 10%	3	L3,L4,L5
....2	330-019	INDUCTOR, 2.5 TURN, HIGH	1	
		FREQUENCY SUPPRESSION		L1
....2	410-666	Diode, FDH666	1	
				D8
....2	414-007	Diode, General Instruments 1N4007	7	D1,D2,D3,D4,D5,D7,D12
....2	415-244	Diode, Motorola 1N5244B	1	D11
....2	550-125	Connector, 5 pin Molex Header (cut from	1	
		550-162) *NOTE*		P2
.....3	550-162	Connector, 24 pin break-away (straight)	0.	
		Molex 26-48-6248	20	
			8	
....2	550-138	Connector, 8 pin Molex header (cut from	1	
		550-162)		P1
.....3	550-162	Connector, 24 pin break-away (straight)	0.	
		Molex 26-48-6248	33	
			3	
....2	550-154	CONNECTOR, D-SUB 9 PIN ANGLE	1	
				J5



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	800-167B	PC Board, Power Supply RPT-2	1	
..1	800-169A1	RPT-2/150 Amplifier(COMPLETE ASSEMBLY)	1	
....2	100-1531	RES,150 OHM,1/4W,1%	1	
....2	105-471	Resistor, 470 ohm 1/2 watt 5% carbon comp 30BJ500	1	R2
....2	145-100-C	RESISTOR, 10 OHM 1/4 WATT 5% CARBON COMP 30BJ250	1	L3
....2	145-220	Resistor, 22 ohm 1/4 watt 5% metal film Mepco SFR25	1	R4
....2	145-680-C	Resistor, 68 ohm 1/4 watt 5% carbon comp 30BJ250	1	R7
....2	217-103	CAP,0.1UF 250VDC 5%,POLY FILM	1	R1
....2	219-200	CAPACITOR ELECTROLYTIC 22UF 25V	1	C1
....2	236-501	Capacitor, uncased mica, 500 pf 33v 5% FWJ101	3	C11
....2	240-220	Capacitor, uncased mica, 22 pf 33v 5% FWJ101	2	C2,C3,C8
....2	240-600	Capacitor, variable, trimmer 12-65 pf FW C4004/OXSB Gullwing	2	C10,C12
....2	240-602	Cap., variable, trimmer 25-115 pf FW C4006/OXSB Gullwing	2	C4,C6
....2	330-012	Inductor, 15 uH Coilcraft 90-27	1	C5,C7
....2	330-019	INDUCTOR, 2.5 TURN, HIGH FREQUENCY SUPPRESSION	1	L10
....2	350-110	Inductor, 6 turn AWG (CW)	1	L1
.....3	555-110	COST, LABOR FOR 350-110	1	L9
.....3	580-103	Magnet Wire, #20AWG Single Nyleze (RED)	0. 00 1	
....2	350-111	Inductor, 3 turn 20 AWG Red (CW)	2	
.....3	555-111	COST, LABOR FOR 350-111	1	L8,L11
.....3	580-103	Magnet Wire, #20AWG Single Nyleze (RED)	0. 00 1	
....2	350-112	Inductor, 3 turn 22 AWG Red (CCW)	1	L4
.....3	555-112	COST, LABOR FOR 350-112	1	
.....3	580-104	Magnet Wire, #22AWG Single Nyleze (RED)	0. 00 1	
....2	350-113	Inductor, 3 turn 16 AWG Buss Wire (CW)	1	L5
....2	350-114	Inductor, 1 turn 16 AWG Buss Wire (CCW)	1	L2
....2	350-140	Inductor, 16 turn 20 AWG Red	1	L12
.....3	555-140	COST, LABOR FOR 350-140	1	
.....3	580-103	Magnet Wire, #20AWG Single Nyleze	0.	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
		(RED)	00	
			1	
....2	410-1416	LUG,TERM,BENT,11/16	2	
....2	410-305-1	Diode, Motorola MBD101	1	D1
....2	440-312	TRANSISTOR, PHOLIPS BLY87C (REPLACES BLY87A) (NOTE)	1	Q1
....2	500-114	Copper Washer, Seastrom 5716-61-.051	1	
....2	500-121	Rivet, 3 x 8 F metric 101203081 M3X8	6	
....2	510-005	Polytube, Manhattan#AF155A-20-yel	0.	
			06	
....2	550-012	CONN, SO-239A UHF PANEL RECEPTACLE	1	J4
....2	580-105	Magnet Wire, #27AWG Single Nyleze	0.	
			00	
			6	
....2	586-094	Cable Assembly, RPT2/15 Amplifier (SBCM)	1	
.....3	550-126	Connector, crimp terminal pin Molex 08- 50-0187	3	
.....3	550-159	Connector, 4 pin Molex housing 09-50- 8040	1	
.....3	580-040	Wire, UL1061 22/7 OTC Black	0.	
			46	
.....3	580-043	Wire, UL1061 22/7 OTC Red	0.	
			46	
.....3	580-046	Wire, UL1061 22/7 OTC Green	0.	
			5	
....2	700-220-10	Cover, RPT-2 Amplifier	1	
....2	700-220-20	Amplifier Connector Plate	1	
....2	703-009	Copper Foil, .0014 x .250"	0.	
			00	
			1	
....2	800-169B	PC Board, Power Amp. RPT-2	1	PCB
..1	800-270A	STL-10/RPT2/15 Sm. Feed Thru Board	1	
....2	270-103	Cap, Monolithic chip 10000pF 10% XR7 Kemet C1206C103J5RACTR	3	C1,C2,C3
....2	550-172	Connector, 4 pin Molex angle header long (cut from 550-171)	1	P1
.....3	550-171	Connector, 24 pin break-away (Long pins) Molex 26-58-1241	0.	
			16	
			7	
....2	800-270B	PC Board, Feedthru RPT-2/15/STL-10	1	PCB



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
0	705-T02-2	RPT-2/215; 120VAC		
..1	320-036L	TRANSFORMER, POWER, RPT2 110V W/LUGS	1	
....2	320-036	TRANSFORMER, POWER, 15905	1	
0	705-T02-22	RPT-2/215; 220VAC		
..1	320-036AL	TRANSFORMER, POWER, RPT2 220V W/LUGS	1	
....2	320-036A	TRANSFORMER, POWER, 15905M 220V	1	
0	705-T02-23	RPT-2/215; 230VAC		
..1	320-036CL	TRANSFORMER, POWER, RPT2 230V W/LUGS	1	
....2	320-036C	TRANSFORMER, POWER, 15905C 230V 50Hz	1	
0	705-T02-24	RPT-2/215; 240VAC		
..1	320-036BL	TRANSFORMER, POWER RPT2 240V W/LUGS	1	
....2	320-036B	TRANSFORMER, POWER, 15905MA 240V	1	
....2	550-126	Connector, crimp terminal pin Molex 08- 50-0187	2	
..1	586-011	Cable Assembly, RPT-2/15 Harness (SBCM)	1	
....2	500-128	Eyelet, GS4-4 brass	1	
....2	550-122	CONNECTOR, 10 PIN MOLEX HOUSING 09-50-8100	1	
....2	550-126	Connector, crimp terminal pin Molex 08- 50-0187	16	
....2	550-133	CONNECTOR, PHONE PLUG 3C1215	1	
....2	550-135	Connector, 6 pin Molex housing 09-50- 8060	1	
....2	580-033	Coax high shield RG-316/U Manhattan M4259	0.44	
....2	580-041	Wire, UL1061 22/7 OTC Brown	0.5	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	580-043	Wire, UL1061 22/7 OTC Red	0.46	
....2	580-044	Wire, UL1061 22/7 OTC Yellow	0.54	
....2	580-046	Wire, UL1061 22/7 OTC Green	0.75	
....2	580-047	Wire, UL1061 22/7 OS-1 Orange	0.58	
....2	580-051	Wire, UL1061 22/7 OTC White/Blue	0.57	
....2	580-088	Shielded Wire, 16-C-22-SPJ White/Red 1 Cond. 22/19x34 pvc	0.61	
....2	580-089	Shielded Wire, 16-C-22-SPJ White/Orange 1 cond 22/19x34 pvc	0.44	
....2	580-091	Shielded Wire, 16-C-22-SPJ White/Green 1 Cond.22/19x34 pvc	0.46	
....2	580-092	Shielded Wire, 16-C-22-SPJ White/Blue 1 Cond.22/19x34 pvc	0.46	
..1	586-057	Cable Assembly, RPT-2/15 14.5 Internal TAC-9720 (SBCM)"	1	
..1	586-068	Cable Assembly, RPT-2 Power Supply (SBCM)	1	
....2	550-080	Connector, 3 pin Molex housing 03-06- 2032	1	
....2	550-081	Connector, pin Molex 02-06-2103 male	3	
....2	550-126	Connector, crimp terminal pin Molex 08- 50-0187	3	
....2	580-040	Wire, UL1061 22/7 OTC Black	0.48	
....2	580-047	Wire, UL1061 22/7 OS-1 Orange	0.48	
....2	580-133	Wire, UL1061-18/16 #18 Red #M370-2	0.48	
..1	586-085	Cable Assembly, RPT-2 #1 (SBCM)	1	
....2	550-122	CONNECTOR, 10 PIN MOLEX HOUSING 09-50-8100	1	
....2	550-126	Connector, crimp terminal pin Molex 08- 50-0187	9	
....2	580-041	Wire, UL1061 22/7 OTC Brown	0.54	
....2	580-043	Wire, UL1061 22/7 OTC Red	0.53	
....2	580-045	Wire, UL1061 22/7 OTC Blue	0.44	
....2	580-046	Wire, UL1061 22/7 OTC Green	0.52	
....2	580-048	Wire, UL1061 22/7 OTC Violet	0.82	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	580-050	Wire, UL1061 22/7 OS-1 White/Red	0.61	
....2	580-059	Wire, UL1061 22/7 OTC Yellow/Blue	0.92	
....2	580-133	Wire, UL1061-18/16 #18 Red #M370-2	0.46	
....2	580-137	Wire, UL1061 18/19 #18 Orange Tinned Copper	0.57	
..1	586-086	Cable Assembly, RPT-2 #2 (SBCM)	1	
....2	550-122	CONNECTOR, 10 PIN MOLEX HOUSING 09-50-8100	1	
....2	550-126	Connector, crimp terminal pin Molex 08- 50-0187	20	
....2	550-137	Connector, 8 pin Molex housing 09-50- 8080	1	
....2	550-159	Connector, 4 pin Molex housing 09-50- 8040	1	
....2	550-205	Connector pins, Molex 16-02-0086	8	
....2	550-222	Connector, 8 dual row housing Molex 22- 55-2081	1	
....2	580-041	Wire, UL1061 22/7 OTC Brown	1	
....2	580-043	Wire, UL1061 22/7 OTC Red	1	
....2	580-045	Wire, UL1061 22/7 OTC Blue	1.42	
....2	580-046	Wire, UL1061 22/7 OTC Green	1.29	
....2	580-048	Wire, UL1061 22/7 OTC Violet	1	
....2	580-050	Wire, UL1061 22/7 OS-1 White/Red	0.42	
....2	580-059	Wire, UL1061 22/7 OTC Yellow/Blue	2	
....2	580-133	Wire, UL1061-18/16 #18 Red #M370-2	1	
....2	580-137	Wire, UL1061 18/19 #18 Orange Tinned Copper	1	
..1	700-220-18	Cover, RPT-2/15/30 Modular .032 aluminum	1	
..1	700-220-1A	RPT-2 Final Assembly	1	
....2	030-034M	Meter, VU	1	
.....3	030-033	200 Micro-Amp Meter	1	
.....3	030-033-1	VU Meter Scales	1	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	100-103	POT, 10K OHM TYPE T270D VH4340 EXC.270	2	
....2	100-1551	RES,15K OHM,1/4W,1%	1	
....2	145-431	Resistor, 432 ohm 1/4 watt 1% metal film Mepco SFR25	1	
....2	236-501	Capacitor, uncased mica, 500 pf 33v 5% FWJ101	2	
....2	253-471	CAPACITOR, 470 PF 50V 10% Y5P DISC	1	
....2	297-222	Cap,.0022mf 400v ceramic disc MURATA DE1007E222M-KH	2	
....2	401-338	IC, SMT, REGULATOR, 5 AMP, LM338T *NOTE*	2	
....2	402-0005	PRESS CLIP,NYLON W/ADHESIVE BACK	1	
....2	420-4104	SCREW,4-40X.250,S.S. PH	17	
....2	420-4106	SCREW,4-40X.375,S.S. PH	5	
....2	420-4296	SCREW,4-40X.375,PH PAN HD SC	4	
....2	421-4007	4-40 X .187 S.S. HEX NUT	2	
....2	421-6005	6-32 ELASTIC STOP HEX NUT	2	
....2	423-4001	#4 FLAT SS .250 X .125 X .018	2	
....2	423-4002	#4 LOCK S.S. SPLIT	2	
....2	423-6003	#6 LOCK INT TOOTH	8	
....2	500-002	Hex Nut, #4-40 Extra Small Pattern Nickel Plated	2	
....2	500-002-1	Hex Nut, #4-40 Regular Nickel Plated	4	
....2	500-022	Screw, 6-32 x 3/8 phillips pan head M/S nickel plated"	10	
....2	500-055	Lockwasher, #4 internal tooth small pattern zinc plated	10	
....2	500-105	Pop-Rivet, AD42BS Aluminum	18	
....2	500-115	Pop-Rivet, SK42BS counter sunk	12	
....2	500-123	Washer, Switchcraft #S1790-1	2	
....2	500-162	Screw, 4-40 x 7/16 phillips pan head MS zinc plated"	2	
....2	500-180	Screw, 4-40 x 1/4 phillips pan head M/S Black Zinc"	4	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	500-183	Screw, 6-32 x 1/4 phillips pan head Black Zinc"	14	
....2	500-188	Screw, 4-40 x 3/8 phillips,flat head,black oxide"	2	
....2	500-199	Keps nut 4 x 40 zinc 4CNKEOZ	13	
....2	500-245	Lock Washer, 1/4 Internal Tooth L/W Zinc"	2	
....2	510-002	Shrink-Tubing, 3/4 black W3B2 3/4" Sumitomo"	0.08	
....2	510-005	Polytube, Manhatten#AF155A-20-yel	0.55	
....2	510-009	Fuse, 3/4 Amp. 3AG Littlefuse #312.750	1	
....2	510-032	Grommet, 1/2 HHS#2175"	2	
....2	510-072	Fuseholder, Littlefuse #342-004	1	
....2	510-090	Cable Ties, 4 Panduit PANPLT1M-M MS3367-4-9"	7	
....2	510-191	#4 Bracket, Keystone 612	14	
....2	510-192	Connector, AC receptacle, Switchcraft EAC-309	1	
....2	510-210	Brackets, #6 Keystone 634	2	
....2	510-246	Flexible Grommet, (NOTE)	0.125	
....2	512-008	Solder Lug, #4 Concord 707-1404	2	
....2	513-027	Spacer, 4-40 x 1-1/4 hex threaded EFJ 313-6477-040	2	
....2	513-030	SPACER, 6-32 X 15/16 HEX THREADED	4	
....2	550-083	Connector, Tini-Jax Switchcraft 41	2	
....2	550-124	Connector, 5 pin Molex housing 09-50- 8050 *NOTE*	1	
....2	550-155-2	Connector Shell XLR Receptacle DH- NF-BAG-O	1	
....2	580-005	Buss Wire, #22AWG Solid Tinned Copper	0.9	
....2	580-040	Wire, UL1061 22/7 OTC Black	1.8	
....2	580-046	Wire, UL1061 22/7 OTC Green	0.29	
....2	580-134	Wire, UL1061-18/16 #18 Black	0.33	
....2	580-138	Flat Braid, 1/4 #1231"	0.08	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	600-043	STYROFOAM COVER, CONVERTER	1	
....2	700-091-15	Mounting Bracket, RPT-2/15 Meter	2	
....2	700-220-16A	RPT-2/15 Multiplier Heat Sink Assembly	1	
.....3	500-113	Screw, 4-40 x 1/8 slotted pan head M/S zinc plated"	1	
.....3	520-046	Heatsink, Thermalloy 1116B round	1	
.....3	700-220-16	Copper Heatsink, RPT-2/15	1	
....2	800-259A	RPT-15 Microphone Conn. Bd.	1	
.....3	270-102	Cap,monolithic,1000pf 50v 5%KemetC1206C102J5GACTR marked	2	C4,C5
.....3	413-1597	TERM,TURRET,2 SHLDR,.219,GOLD FLASH	3	E1,E2,E3
.....3	550-155-1	Connector, XLR Receptacle Insert Nuetrik#3FD-V-I-O	1	P1
.....3	800-259B	PC Board, Microphone Connector RPT-2/15	1	PCB
....2	DB61024	Washer, TO-220 Shoulder NYL Thermalloy #7721-7PPS	4	
....2	DB68027	Sil Pad TO220 .75x.5" ADHSV Berquist 3223-07AC-58"	2	
..1	700-220-1P	Front Panel, RPT-2 (SBCM)	1	
....2	500-073	Fastener, PEM S-632-1 ZI	2	
....2	500-184	RIVET, 1/8 x .165 SEMI-TUBULAR BLACK 100 CE100732	10	
....2	510-191	#4 Bracket, Keystone 612	2	
....2	530-001	Switch, slide DPDT Switchcraft	1	
....2	530-018	Switch, slide DPIT Switchcraft 46313LDR	2	
....2	530-021	Switch, slide TPTT Switchcraft 11H-1086	1	
....2	700-220-1	Front Panel, RPT-2	1	
.....3	698-220-1	Front Panel, RPT-2 Bare Metal	1	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
.....3	699-220-1	Front Panel, RPT-2 Contract Labor Painting	1	
..1	700-220-2P	Rear Panel, RPT-2/15 (SBCM)	1	
....2	500-073	Fastener, PEM S-632-1 ZI	2	
....2	700-220-2	Rear Panel, RPT-2/15	1	
..1	700-220-3P	Frame, R/H Side RPT-2/15 (SBCM)	1	
....2	500-073	Fastener, PEM S-632-1 ZI	4	
....2	700-220-3	Frame, R/H Side RPT-2/15	1	
..1	700-220-4P	Frame, L/H Side RPT-2/15 (SBCM)	1	
....2	500-073	Fastener, PEM S-632-1 ZI	4	
....2	700-220-4	Frame, L/H Side RPT-2/15	1	
..1	700-220-5P	Top Cover, RPT-2/15 w/feet (SBCM)	1	
....2	500-119	Rivet, CE100 7/32 steel nickel	2	
....2	500-127	Washer, C-126=820W Brass/Nickel Plated	2	
....2	510-205	BUMPER, BRUCE PLASTICS 0772- 0014 BLACK	2	
....2	700-220-5	Top Cover, RPT-2/15	1	
..1	700-220-6P	Bottom Cover, RPT-2/15 w/ft & hand (SBCM)	1	
....2	500-119	Rivet, CE100 7/32 steel nickel	6	
....2	500-127	Washer, C-126=820W Brass/Nickel Plated	8	
....2	500-186	Rivet, 1/8 x .312 semi-tubular standard finish	2	
....2	510-132	Handle Assy., black w/black plated steel hdwe #1879-376-370	1	
....2	510-205	BUMPER, BRUCE PLASTICS 0772- 0014 BLACK	6	
....2	700-220-6	Bottom Cover, RPT-2/15	1	
..1	700-220- 7PB	Partition, RPT-2/15 #1 w/bd	1	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	420-4104	SCREW,4-40X.250,S.S. PH	4	
....2	500-199	Keps nut 4 x 40 zinc 4CNKEOZ	4	
....2	700-220-7	Partition, RPT-2/15 #1	1	
....2	800-254A	RPU/STL-30 Feed-Thru Board	1	
.....3	270-102	Cap,monolithic,1000pf 50v 5%KemetC1206C102J5GACTR marked	10	C1,C2,C3,C4,C 5,C6,C7,C8, C9,C10
.....3	550-156	Connector, 10 pin Molex header 26-48- 4102 *NOTE*	1	P1/P2
.....3	800-254B	PC Board, Feed-thru RPT-2/15/30	1	PCB
..1	700-220-8	Partition, RPT-2/15 #2	1	
..1	700-220-9	Partition, RPT-2 #3	1	
..1	800-160A1	RPU 150/215/300 Modulator Board	1	
....2	100-1041	RES,1K OHM,1/4W,1%	1	R17
....2	101-104	Potentiometer, 100K ohm cermet Bourns 3309P-1-104	2	R1,R2
....2	103-2744	RES,2.74K OHM,1/4W,1%,METAL	1	R9
....2	103-4741	RES,4.75K OHM,1/4W,1%,METAL	1	
....2	103-4755	RES,47.5K OHM,1/4W,1%,METAL	4	R3,R4,R5,R6
....2	104-502	Potentiometer, 5K ohm cermet Spectrol 64Y502 top adjust	1	R8
....2	145-030	RESISTOR, 3.3 OHM 1/4 WATT 1% METAL FILM MEPCO SFR25	2	R10,R16
....2	145-122-1	Resistor, 1.2k ohm 1/4 watt 1% CCF07 1.2K MF TR	1	R13
....2	145-182-1	RESISTOR, 1.8K OHN 1/4 WATT 1% RL07S182G MF	1	R14
....2	145-241-1	RESISTOR, 240 OHM 1/4 WATT 1% SFR55 240 1% TR	2	R7,R12
....2	145-363-1	Resistor, 36k ohm 1/4 watt 1% RL07S363G	2	R11,R18
....2	203-4148	DIODE,1N4148	1	D1
....2	217-103	CAP,0.1UF 250VDC 5%,POLY FILM	3	C3,C4,C11



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	217-104	CAPACITOR, .01 UF 50V GMV DISC	1	C8
....2	219-220	CAPACITOR, ELECTROLYTIC 22uF RADIAL 35V	1	C10
....2	255-161	CAPACITOR, 160 PF 300V 5% SIVLER MICA	1	C6
....2	255-241	Capacitor, 240 pf 500v 5% silver mica CD10FD241J03	1	C7
....2	255-271C	CAPACITOR, 270pF 5% 200V CERAMIC DIPPED	1	C5
....2	299-470	CAP, TANTALUM, 4.7 UF 16V	3	C1,C2,C9
....2	330-007	Inductor, 1 uH Dale IM-2 1UH +/-5%	1	L5
....2	350-025	INDUCTOR, 1.5 - 3 UH WITH SHIELD CAN #47271-021	2	L2,L3
....2	350-037	INDUCTOR, 13 1/2 TURN ORANGE COILCRAFT 143-13J12S	2	L1,L4
....2	411-404	DIODE,MOT. HYPER-ABRUPT TUNING SMV-1732/CRYSTALONICS MV1404	1	
....2	440-245-1	TRANSISTOR, 2N2857	1	Q1
....2	511-038	Terminal, Keystone 1238	1	TP1
....2	520-040	CRYSTAL SOCKET, CS-109-07	2	Y1,Y2
....2	520-041	Clip, transistor, Atlee 100-200-1-2 cad plated	1	Q1
....2	530-051	SWITCH, SIDE ACTION SLIDE DPDT	1	S1
....2	550-136	Connector, 6 pin Molex header (cut from 550-162)	1	P1
.....3	550-162	Connector, 24 pin break-away (straight) Molex 26-48-6248	0.25	
....2	800-160-1A	X-Mitter Freq. Control Module (oven w/diode)	1	IC1/M1/Q2
.....3	120-002	THERMISTOR, 1000 OHM @ 25C 10%	1	
.....3	125-150	Resistor, 15 ohm 5% BWH/SPH	1	
.....3	401-338	IC, SMT, REGULATOR, 5 AMP, LM338T *NOTE*	1	
.....3	450-110	Transistor, SGS TIP-110	1	
.....3	500-130	Screw, #4 x 1/4 slot. hex wash hd type B tapping zinc plate"	2	
.....3	510-235	Caplug, 5/32SCx5/8 230801HB	1	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
.....3	520-045	Oven can	1	
.....3	DB61024	Washer, TO-220 Shoulder NYL Thermalloy #7721-7PPS	2	
.....3	DB68027	Sil Pad TO220 .75x.5" ADHSV Berquist 3223-07AC-58"	2	
....2	800-160B	PC Board, Modulator RPT-2/15	1	PCB
..1	800-163A2	X-Mitter 215 Multiplier	1	
....2	046-0022	CAP,MICA,RF,22PF	1	C24
....2	100-1041	RES,1K OHM,1/4W,1%	2	R1,R17
....2	100-1051	RES,10K OHM,1/4W,1%	3	R8,R11
....2	100-1551	RES,15K OHM,1/4W,1%	1	R5
....2	101-502	POT,5K,SINGLE TURN,HORIZONTAL PCB MOUNT	1	R14
....2	103-2241	RES,2.21K OHM,1/4W,1%,METAL	1	R13
....2	103-2744	RES,2.74K OHM,1/4W,1%,METAL	1	R4
....2	103-3163	RES,316 OHM,1/4W,1%,METAL	1	R50
....2	103-3323	RES,332 OHM,1/4W,1%,METAL	1	R3
....2	103-4741	RES,4.75K OHM,1/4W,1%,METAL	1	R16
....2	103-4755	RES,47.5K OHM,1/4W,1%,METAL	1	R18
....2	103-5623	RES,562 OHM,1/4W,1%,METAL	2	R7,R10
....2	145-680-C	Resistor, 68 ohm 1/4 watt 5% carbon comp 30BJ250	3	R6,R9,R12
....2	210-0120	TSTR,TIP120 NPN SILICON PWR	1	Q50
....2	217-103	CAP,0.1UF 250VDC 5%,POLY FILM	2	C11,C35
....2	217-104	CAPACITOR, .01 UF 50V GMV DISC	4	C2,C4,C9,C16
....2	230-103	CAPACITOR, VARIABLE 1.3-5.4PF	2	C27,C28
....2	241-100	CAPACITOR, UNCASSED MICA 10PF 5% FWM602	1	C32
....2	241-470	CAPACITOR, UNCASSED MICA 47PF 5% FWM602	1	C39
....2	241-680	CAPACITOR, UNCASSED MICA 68PF 5% FWM602	1	C29



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	253-471	CAPACITOR, 470 PF 50V 10% Y5P DISC	1	C31
....2	255-020	Capacitor, 2 pf 5% type QC	1	C6
....2	255-040	Capacitor, 3.9 pf 5% type QC	2	C13,C20
....2	255-050	CAPACITOR, 5 pF 5% NPO DISC	1	C19B
....2	255-241	Capacitor, 240 pf 500v 5% silver mica CD10FD241J03	2	C1,C15
....2	255-270	CAPACITOR, 27 PF, 5%, NPO, DISC	2	C12,C19A
....2	255-390C	Capacitor, 39pF 5% 200V ceramic dipped C322C390J2G5CA	2	C21,C22
....2	255-470C	CAP, 47pF 5% 200V CERAMIC DIPPED	2	C5,C14
....2	256-131	CAPACITOR, 130 pF 5% 50V NPO DISC	1	C8
....2	256-680C	Cap., 68pF 5% 200V ceramic dipped Kemet C317C680J2G5CA	1	C7
....2	268-102	CAPACITOR, .001 uF 50V DISC - 20+80%	7	C10,C18,C23, C25,C30,C34, C38
....2	268-203	CAPACITOR, .02 UF 50V Z5U DISC	1	C3
....2	270-102	Cap,monolithic,1000pf 50v 5%KemetC1206C102J5GACTR marked	1	C26
....2	290-521	CAP, VARIABLE, 5-25 pf	2	C36,C37
....2	299-220	Capacitor, tantalum, 2.2 mf 25v ECS-F1EE225K Panasonic	1	C33
....2	330-021	INDUCTOR, 3.3uH AXIAL LEAD CHOKE	1	L11
....2	350-037	INDUCTOR, 13 1/2 TURN ORANGE COILCRAFT 143-13J12S	2	L1,L2
....2	350-039	INDUCTOR, 2 1/2 TURN RED	2	L5,L6
....2	350-040	INDUCTOR, 6 1/2 TURN BLUE	2	L3,L4
....2	350-121	INDUCTOR, 10 TURN .15 uH	1	L12
....2	350-152	Inductor, 6 turn 22 AWG Red CW 215 Mult.	1	L8
....2	350-154	Inductor, 5 turn 20 AWG Red CW 215 Mult.(SBCM)	2	L9,L10
.....3	580-103	Magnet Wire, #20AWG Single Nyleze (RED)	3.92	
....2	350-157	Inductor, 5 turn 20 AWG Red CCW 215 Mult.	1	L13



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	407-0132	WASH,SHOULDER #4 .215 OD POLY	1	
....2	409-7403	PAD,TSTR MTG,TO-220 CASE	1	
....2	412-494	DIODE, GERMANIUM 1N270 (note)	2	D1,D2
....2	414-007	Diode, General Instruments 1N4007	1	D3
....2	420-4106	SCREW,4-40X.375,S.S. PH	1	
....2	420-629	Transistor, Motorola MRF629	1	Q5
....2	421-4007	4-40 X .187 S.S. HEX NUT	1	
....2	423-4001	#4 FLAT SS .250 X .125 X .018	1	
....2	423-4002	#4 LOCK S.S. SPLIT	1	
....2	424-427	TRANSISTOR, MOTOROLA/SGS/MICRO SEMI 2N4427 SRF944	1	Q4
....2	440-245-1	TRANSISTOR, 2N2857	3	Q1,Q2,Q3
....2	455-7805	HEATSINK,TO-220PKG,LOW PROFILE	1	
....2	520-049	Heatsink, Thermalloy 2260R red or black	1	Q4
....2	550-084	CONNECTOR,PHONO JACK,PCB MOUNT	2	J1,J2
....2	550-197	Header, Breakaway 4x2,0.1 Spacing(Cut from 550-316)"	1	P1
.....3	550-316	HEADER, BREAKAWAY 40x2, 0.1 SPACING"	0.1	
....2	800-163B	PC Board, Multiplier RPT-2/15/30 STL- 10	1	PCB
..1	800-166A	RPU Audio Board	1	
....2	100-1013	RES,1 OHM,1/4W,5%	1	R48
....2	100-1041	RES,1K OHM,1/4W,1%	1	R43
....2	100-1551	RES,15K OHM,1/4W,1%	1	R46
....2	215-102	CAPACITOR, .001 uFD 2.5% 100V POLYPRO	1	C23
....2	800-166CM	Generic RPU Audio Board Assembly (SBCM)	1	
.....3	033-0123	CAPACITOR, .012 MFD 1% 100V POLYPRO	2	C20,C22



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
.....3	100-1041	RES,1K OHM,1/4W,1%	1	R1
.....3	100-1051	RES,10K OHM,1/4W,1%	1	R34
.....3	100-1531	RES,150 OHM,1/4W,1%	1	R5
.....3	101-104	Potentiometer, 100K ohm cermet Bourns 3309P-1-104	2	R26,R33
.....3	101-502	POT,5K,SINGLE TURN,HORIZONTAL PCB MOUNT	1	R22
.....3	103-1007	RES,1 MEG OHM,1/4W,1%,METAL	2	R38,R39
.....3	103-1062	RES,100K OHM,1/4W,1%,METAL	4	R11,R12,R17
.....3	103-1823	RES,182 OHM,1/4W,1%,METAL	1	R3
.....3	103-2211	RES,22.1K OHM,1/4W,1%,METAL	1	R32
.....3	103-2216	RES,221K OHM,1/4W,1%,METAL	1	R31
.....3	103-2241	RES,2.21K OHM,1/4W,1%,METAL	1	R27
.....3	103-2744	RES,2.74K OHM,1/4W,1%,METAL	2	R24,R45
.....3	103-3323	RES,332 OHM,1/4W,1%,METAL	1	R13
.....3	103-3324	RES,3.32K OHM,1/4W,1%,METAL	2	R32
.....3	103-3325	RES,33.2K OHM,1/4W,1%,METAL	1	R16
.....3	103-3924	RES,3.92K OHM,1/4W,1%,METAL	3	R8,R10,R15
.....3	103-4731	RES,475K OHM,1/4W,1%,METAL	3	R20,R35,R36
.....3	103-4741	RES,4.75K OHM,1/4W,1%,METAL	1	R25
.....3	103-4755	RES,47.5K OHM,1/4W,1%,METAL	1	R2
.....3	103-5623	RES,562 OHM,1/4W,1%,METAL	1	R41
.....3	104-105	POTENTIOMETER, 1MEG OHM TOP ADJUST	1	R37
.....3	145-030	RESISTOR, 3.3 OHM 1/4 WATT 1% METAL FILM MEPCO SFR25	1	R9
.....3	145-106	Resistor, 10 meg ohm 1/4 watt 5% metal film Mepco SFR25	1	R29
.....3	145-221	Resistor, 220 ohm 1/4 watt 1% metal film Mepco SFR25	1	R17
.....3	145-225	Resistor, 2.21 meg ohm 1/4 watt 1% metal film (2.21 Meg 1%)	4	R19,R28,R40, R42



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
.....3	145-472	OBSOLETE REPLACE W/103-4741 (NLU-03)	0	
.....3	145-681	RESISTOR, 681 OHM 1/4 WATT 1% METAL FILM MEPCO SFR25	1	R4
.....3	145-822	Resistor, 8.25k ohm 1/4 watt 1% metal film Mepco SFR25	2	R14,R44
.....3	145-825	Resistor, 8.2 meg ohm 1/4 watt 5% carbon film 29SJ250	1	R30
.....3	203-4148	DIODE,1N4148	5	D1,D2,D3,D4, D5
.....3	215-223	Capacitor, .022 mfd 2.5% 100v polypro Seacor PFWAC220HGUE	1	C25
.....3	215-392	Capacitor, .0039 mfd 2.5% polypro	1	C26
.....3	215-822	CAPACITOR, .0082 MFD 2.5% 100V POLYPRO	1	C11
.....3	217-103	CAP,0.1UF 250VDC 5%,POLY FILM	1	C16
.....3	217-104	CAPACITOR, .01 UF 50V GMV DISC	2	C12,C28
.....3	219-106	CAPACITOR, 10UF 50V RADIAL ELECTROLYTIC	2	C3,C18
.....3	219-220	CAPACITOR, ELECTROLYTIC 22uF RADIAL 35V	3	C4,C21,C30
.....3	219-221	CAPACITOR, ELECTROLYTIC 220uF 25V RADIAL	3	C9,C13,C14
.....3	226-274	Cap.,.27 mf 100v 10% polypro CD MTC1P27K OR Bishop C21B274K	2	C7,C31
.....3	253-471	CAPACITOR, 470 PF 50V 10% Y5P DISC	3	C1,C15,C29
.....3	255-470C	CAP, 47pF 5% 200V CERAMIC DIPPED	2	C24,C27
.....3	256-680C	Cap., 68pF 5% 200V ceramic dipped Kemet C317C680J2G5CA	1	C10
.....3	270-102	Cap,monolithic,1000pf 50v 5%KemetC1206C102J5GACTR marked	10	C32,C33,C34, C35,C36,C37, C38,C39,C40, C41
.....3	299-470	CAP, TANTALUM, 4.7 UF 16V	3	C2,C17,C19
.....3	350-032	Inductor, 387-150M 40000-150000 uH	1	L1
.....3	401-054	Integrated Circuit, SGS TDA1054M	1	IC1
.....3	403-900	IC, QUADRUPLE NORTON OP AMP	1	IC2
.....3	414-007	Diode, General Instruments 1N4007	1	D6
.....3	550-123	Connector, 10 pin header (cut from 550-162)	1	P1



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
.....4	550-162	Connector, 24 pin break-away (straight) Molex 26-48-6248	0.417	
.....3	800-166B	PC Board, Audio RPT-2/15/30	1	
..1	800-167A	RPT-2 Power Supply (note)	1	
....2	101-501	Potentiometer, 500 ohm cermet Bourns 3309P-501	1	R9
....2	103-2241	RES,2.21K OHM,1/4W,1%,METAL	1	
....2	103-4741	RES,4.75K OHM,1/4W,1%,METAL	1	
....2	125-100	Resistor, 10 ohm 2 watt BWH/SPH	1	R3
....2	145-221	Resistor, 220 ohm 1/4 watt 1% metal film Mepco SFR25	1	R7
....2	145-241-1	RESISTOR, 240 OHM 1/4 WATT 1% SFR55 240 1% TR	2	R1,R4
....2	145-300	Resistor, 30 ohm 1/4 watt 5% metal film Mepco SFR	1	R5
....2	145-752	Resistor, 7.5k ohm 1/4 watt 5% metal film Mepco SFR25	1	R10
....2	202-0502	RECT,3A,200V,IN5402	2	D10,D13
....2	211-3904	TSTR,2N3904	1	Q1
....2	219-080	Cap,electrolytic 10uF 25V Nichicon TVX1E100MAA	1	C7
....2	219-200	CAPACITOR ELECTROLYTIC 22UF 25V	1	C6
....2	219-472	CAPACITOR, ELECTROLYTIC 4700UF 25V	1	C5
....2	253-471	CAPACITOR, 470 PF 50V 10% Y5P DISC	1	C23
....2	270-102	Cap,monolithic,1000pf 50v 5%KemetC1206C102J5GACTR marked	24	C1,C4,C8,C9, C10,C11,C12, C13,C14,C15, C16,C17,C18, C19,C20,C21, C22,C24,C25, C26,C27,C28, C29,C30
....2	270-103	Cap, Monolithic chip 10000pF 10% XR7 Kemet C1206C103J5RACTR	2	C2,C3
....2	330-018	INDUCTOR, 10 uH, 10%	3	L3,L4,L5
....2	330-019	INDUCTOR, 2.5 TURN, HIGH FREQUENCY SUPPRESSION	1	L1
....2	410-666	Diode, FDH666	1	D8



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	414-007	Diode, General Instruments 1N4007	7	D1,D2,D3,D4, D5,D7,D12
....2	415-244	Diode, Motorola 1N5244B	1	D11
....2	550-125	Connector, 5 pin Molex Header (cut from 550-162) *NOTE*	1	P2
.....3	550-162	Connector, 24 pin break-away (straight) Molex 26-48-6248	0.208	
....2	550-138	Connector, 8 pin Molex header (cut from 550-162)	1	P1
.....3	550-162	Connector, 24 pin break-away (straight) Molex 26-48-6248	0.333	
....2	550-154	CONNECTOR, D-SUB 9 PIN ANGLE	1	J5
....2	800-167B	PC Board, Power Supply RPT-2	1	
..1	800-169A2	RPT-2/215 Amplifier(COMPLETE ASSEMBLY)	1	
....2	145-221	Resistor, 220 ohm 1/4 watt 1% metal film Mepco SFR25	1	R8
....2	145-470-C	Resistor, 47 ohm 1/4 watt 5% carbon comp 30BJ250	1	R2
....2	145-680-C	Resistor, 68 ohm 1/4 watt 5% carbon comp 30BJ250	1	R1
....2	217-103	CAP,0.1UF 250VDC 5%,POLY FILM	1	C1
....2	219-200	CAPACITOR ELECTROLYTIC 22UF 25V	1	C11
....2	236-501	Capacitor, uncased mica, 500 pf 33v 5% FWJ101	3	C2,C3,C8
....2	240-160	Capacitor, uncased mica, 16 pf 33v 5% FWJ101	2	C10,C12
....2	260-300	Capacitor, variable, trimmer 8-45 pf FW C4003/OB	4	C4,C5,C6,C7
....2	330-012	Inductor, 15 uH Coilcraft 90-27	1	L10
....2	330-019	INDUCTOR, 2.5 TURN, HIGH FREQUENCY SUPPRESSION	1	L1
....2	350-109	Inductor, 2 turn 16 AWG Buss Wire (CCW)	1	L5
....2	350-112	Inductor, 3 turn 22 AWG Red (CCW)	1	L2
.....3	555-112	COST, LABOR FOR 350-112	1	
.....3	580-104	Magnet Wire, #22AWG Single Nyleze (RED)	0.001	
....2	350-114	Inductor, 1 turn 16 AWG Buss Wire (CCW)	1	L9



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	350-117	Inductor, 8 turn 22 AWG Red (CCW)	1	L3
.....3	555-117	COST, LABOR FOR 350-117	1	
.....3	580-104	Magnet Wire, #22AWG Single Nyleze (RED)	0.001	
....2	350-140	Inductor, 16 turn 20 AWG Red	1	L12
.....3	555-140	COST, LABOR FOR 350-140	1	
.....3	580-103	Magnet Wire, #20AWG Single Nyleze (RED)	0.001	
....2	350-142	Inductor, 4 turn 20 AWG Red	1	L11
.....3	555-142	COST,LABOR FOR 350-142	1	
.....3	580-103	Magnet Wire, #20AWG Single Nyleze (RED)	0.001	
....2	350-143	Inductor, 2 turn 20 AWG Red	2	L8
.....3	555-143	COST,LABOR FOR 350-143	1	
.....3	580-103	Magnet Wire, #20AWG Single Nyleze (RED)	0.001	
....2	410-1416	LUG,TERM,BENT,11/16	2	
....2	410-305-1	Diode, Motorola MBD101	1	D1
....2	440-312	TRANSISTOR, PHOLIPS BLY87C (REPLACES BLY87A) (NOTE)	1	Q1
....2	500-114	Copper Washer, Seastrom 5716-61-.051	1	
....2	500-121	Rivet, 3 x 8 F metric 101203081 M3X8	6	
....2	510-005	Polytube, Manhatten#AF155A-20-yel	0.06	
....2	550-012	CONN, SO-239A UHF PANEL RECEPTACLE	1	J4
....2	586-094	Cable Assembly, RPT2/15 Amplifier (SBCM)	1	
.....3	550-126	Connector, crimp terminal pin Molex 08-50-0187	3	
.....3	550-159	Connector, 4 pin Molex housing 09-50-8040	1	
.....3	580-040	Wire, UL1061 22/7 OTC Black	0.46	
.....3	580-043	Wire, UL1061 22/7 OTC Red	0.46	
.....3	580-046	Wire, UL1061 22/7 OTC Green	0.5	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	700-220-10	Cover, RPT-2 Amplifier	1	
....2	700-220-20	Amplifier Connector Plate	1	
....2	703-009	Copper Foil, .0014 x .250""	0.001	
....2	800-169B	PC Board, Power Amp. RPT-2	1	PCB
..1	800-270A	STL-10/RPT2/15 Sm. Feed Thru Board	1	
....2	270-103	Cap, Monolithic chip 10000pF 10% XR7 Kemet C1206C103J5RACTR	3	C1,C2,C3
....2	550-172	Connector, 4 pin Molex angle header long (cut from 550-171)	1	P1
.....3	550-171	Connector, 24 pin break-away (Long pins) Molex 26-58-1241	0.167	
....2	800-270B	PC Board, Feedthru RPT-2/15/STL-10	1	PCB



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
0	705-T02-3	RPT-2/300; 120VAC		
..1	320-036L	TRANSFORMER, POWER, RPT2 110V W/LUGS	1	
....2	320-036	TRANSFORMER, POWER, 15905	1	
0	705-T02-32	RPT-2/300; 220VAC		
..1	320-036AL	TRANSFORMER, POWER, RPT2 220V W/LUGS	1	
....2	320-036A	TRANSFORMER, POWER, 15905M 220V	1	
0	705-T02-33	RPT-2/300; 230VAC		
..1	320-036CL	TRANSFORMER, POWER, RPT2 230V W/LUGS	1	
....2	320-036C	TRANSFORMER, POWER, 15905C 230V 50Hz	1	
0	705-T02-34	RPT-2/300; 240VAC		
..1	320-036BL	TRANSFORMER, POWER RPT2 240V W/LUGS	1	
....2	320-036B	TRANSFORMER, POWER, 15905MA 240V	1	
....2	550-126	Connector, crimp terminal pin Molex 08- 50-0187	2	
..1	586-011	Cable Assembly, RPT-2/15 Harness (SBCM)	1	
....2	500-128	Eyelet, GS4-4 brass	1	
....2	550-122	CONNECTOR, 10 PIN MOLEX HOUSING 09-50-8100	1	
....2	550-126	Connector, crimp terminal pin Molex 08- 50-0187	16	
....2	550-133	CONNECTOR, PHONE PLUG 3C1215	1	
....2	550-135	Connector, 6 pin Molex housing 09-50- 8060	1	
....2	580-033	Coax high shield RG-316/U Manhattan M4259	0.44	
....2	580-041	Wire, UL1061 22/7 OTC Brown	0.5	
....2	580-043	Wire, UL1061 22/7 OTC Red	0.46	
....2	580-044	Wire, UL1061 22/7 OTC Yellow	0.54	
....2	580-046	Wire, UL1061 22/7 OTC Green	0.75	
....2	580-047	Wire, UL1061 22/7 OS-1 Orange	0.58	
....2	580-051	Wire, UL1061 22/7 OTC White/Blue	0.57	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	580-088	Shielded Wire, 16-C-22-SPJ White/Red 1 Cond. 22/19x34 pvc	0.61	
....2	580-089	Shielded Wire, 16-C-22-SPJ White/Orange 1 cond 22/19x34 pvc	0.44	
....2	580-091	Shielded Wire, 16-C-22-SPJ White/Green 1 Cond.22/19x34 pvc	0.46	
....2	580-092	Shielded Wire, 16-C-22-SPJ White/Blue 1 Cond.22/19x34 pvc	0.46	
..1	586-057	Cable Assembly, RPT-2/15 14.5 Internal TAC-9720 (SBCM)"	1	
..1	586-068	Cable Assembly, RPT-2 Power Supply (SBCM)	1	
....2	550-080	Connector, 3 pin Molex housing 03-06- 2032	1	
....2	550-081	Connector, pin Molex 02-06-2103 male	3	
....2	550-126	Connector, crimp terminal pin Molex 08- 50-0187	3	
....2	580-040	Wire, UL1061 22/7 OTC Black	0.48	
....2	580-047	Wire, UL1061 22/7 OS-1 Orange	0.48	
....2	580-133	Wire, UL1061-18/16 #18 Red #M370-2	0.48	
..1	586-085	Cable Assembly, RPT-2 #1 (SBCM)	1	
....2	550-122	CONNECTOR, 10 PIN MOLEX HOUSING 09-50-8100	1	
....2	550-126	Connector, crimp terminal pin Molex 08- 50-0187	9	
....2	580-041	Wire, UL1061 22/7 OTC Brown	0.54	
....2	580-043	Wire, UL1061 22/7 OTC Red	0.53	
....2	580-045	Wire, UL1061 22/7 OTC Blue	0.44	
....2	580-046	Wire, UL1061 22/7 OTC Green	0.52	
....2	580-048	Wire, UL1061 22/7 OTC Violet	0.82	
....2	580-050	Wire, UL1061 22/7 OS-1 White/Red	0.61	
....2	580-059	Wire, UL1061 22/7 OTC Yellow/Blue	0.92	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	580-133	Wire, UL1061-18/16 #18 Red #M370-2	0.46	
....2	580-137	Wire, UL1061 18/19 #18 Orange Tinned Copper	0.57	
..1	586-086	Cable Assembly, RPT-2 #2 (SBCM)	1	
....2	550-122	CONNECTOR, 10 PIN MOLEX HOUSING 09-50-8100	1	
....2	550-126	Connector, crimp terminal pin Molex 08- 50-0187	20	
....2	550-137	Connector, 8 pin Molex housing 09-50- 8080	1	
....2	550-159	Connector, 4 pin Molex housing 09-50- 8040	1	
....2	550-205	Connector pins, Molex 16-02-0086	8	
....2	550-222	Connector, 8 dual row housing Molex 22- 55-2081	1	
....2	580-041	Wire, UL1061 22/7 OTC Brown	1	
....2	580-043	Wire, UL1061 22/7 OTC Red	1	
....2	580-045	Wire, UL1061 22/7 OTC Blue	1.42	
....2	580-046	Wire, UL1061 22/7 OTC Green	1.29	
....2	580-048	Wire, UL1061 22/7 OTC Violet	1	
....2	580-050	Wire, UL1061 22/7 OS-1 White/Red	0.42	
....2	580-059	Wire, UL1061 22/7 OTC Yellow/Blue	2	
....2	580-133	Wire, UL1061-18/16 #18 Red #M370-2	1	
....2	580-137	Wire, UL1061 18/19 #18 Orange Tinned Copper	1	
..1	700-220-18	Cover, RPT-2/15/30 Modular .032 aluminum	1	
..1	700-220-1A	RPT-2 Final Assembly	1	
....2	030-034M	Meter, VU	1	
.....3	030-033	200 Micro-Amp Meter	1	
.....3	030-033-1	VU Meter Scales	1	
....2	100-103	POT, 10K OHM TYPE T270D VH4340 EXC.270	2	
....2	100-1551	RES,15K OHM,1/4W,1%	1	
....2	145-431	Resistor, 432 ohm 1/4 watt 1% metal film Mepco SFR25	1	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	236-501	Capacitor, uncased mica, 500 pf 33v 5% FWJ101	2	
....2	253-471	CAPACITOR, 470 PF 50V 10% Y5P DISC	1	
....2	297-222	Cap,.0022mf 400v ceramic disc MURATA DE1007E222M-KH	2	
....2	401-338	IC, SMT, REGULATOR, 5 AMP, LM338T *NOTE*	2	
....2	402-0005	PRESS CLIP,NYLON W/ADHESIVE BACK	1	
....2	420-4104	SCREW,4-40X.250,S.S. PH	17	
....2	420-4106	SCREW,4-40X.375,S.S. PH	5	
....2	420-4296	SCREW,4-40X.375,PH PAN HD SC	4	
....2	421-4007	4-40 X .187 S.S. HEX NUT	2	
....2	421-6005	6-32 ELASTIC STOP HEX NUT	2	
....2	423-4001	#4 FLAT SS .250 X .125 X .018	2	
....2	423-4002	#4 LOCK S.S. SPLIT	2	
....2	423-6003	#6 LOCK INT TOOTH	8	
....2	500-002	Hex Nut, #4-40 Extra Small Pattern Nickel Plated	2	
....2	500-002-1	Hex Nut, #4-40 Regular Nickel Plated	4	
....2	500-022	Screw, 6-32 x 3/8 phillips pan head M/S nickel plated"	10	
....2	500-055	Lockwasher, #4 internal tooth small pattern zinc plated	10	
....2	500-105	Pop-Rivet, AD42BS Aluminum	18	
....2	500-115	Pop-Rivet, SK42BS counter sunk	12	
....2	500-123	Washer, Switchcraft #S1790-1	2	
....2	500-162	Screw, 4-40 x 7/16 phillips pan head MS zinc plated"	2	
....2	500-180	Screw, 4-40 x 1/4 phillips pan head M/S Black Zinc"	4	
....2	500-183	Screw, 6-32 x 1/4 phillips pan head Black Zinc"	14	
....2	500-188	Screw, 4-40 x 3/8 phillips,flat head,black oxide"	2	
....2	500-199	Keps nut 4 x 40 zinc 4CNKEOZ	13	
....2	500-245	Lock Washer, 1/4 Internal Tooth L/W Zinc"	2	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	510-002	Shrink-Tubing, 3/4 black W3B2 3/4" Sumitomo"	0.08	
....2	510-005	Polytube, Manhatten#AF155A-20-yel	0.55	
....2	510-009	Fuse, 3/4 Amp. 3AG Littlefuse #312.750	1	
....2	510-032	Grommet, 1/2 HHS#2175"	2	
....2	510-072	Fuseholder, Littlefuse #342-004	1	
....2	510-090	Cable Ties, 4 Panduit PANPLT1M-M MS3367-4-9"	7	
....2	510-191	#4 Bracket, Keystone 612	14	
....2	510-192	Connector, AC receptacle, Switchcraft EAC-309	1	
....2	510-210	Brackets, #6 Keystone 634	2	
....2	510-246	Flexible Grommet, (NOTE)	0.125	
....2	512-008	Solder Lug, #4 Concord 707-1404	2	
....2	513-027	Spacer, 4-40 x 1-1/4 hex threaded EFJ 313-6477-040	2	
....2	513-030	SPACER, 6-32 X 15/16 HEX THREADED	4	
....2	550-083	Connector, Tini-Jax Switchcraft 41	2	
....2	550-124	Connector, 5 pin Molex housing 09-50- 8050 *NOTE*	1	
....2	550-155-2	Connector Shell XLR Receptacle DH- NF-BAG-O	1	
....2	580-005	Buss Wire, #22AWG Solid Tinned Copper	0.9	
....2	580-040	Wire, UL1061 22/7 OTC Black	1.8	
....2	580-046	Wire, UL1061 22/7 OTC Green	0.29	
....2	580-134	Wire, UL1061-18/16 #18 Black	0.33	
....2	580-138	Flat Braid, 1/4 #1231"	0.08	
....2	600-043	STYROFOAM COVER, CONVERTER	1	
....2	700-091-15	Mounting Bracket, RPT-2/15 Meter	2	
....2	700-220- 16A	RPT-2/15 Multiplier Heat Sink Assembly	1	
.....3	500-113	Screw, 4-40 x 1/8 slotted pan head M/S zinc plated"	1	
.....3	520-046	Heatsink, Thermalloy 1116B round	1	
.....3	700-220-16	Copper Heatsink, RPT-2/15	1	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	800-259A	RPT-15 Microphone Conn. Bd.	1	
.....3	270-102	Cap,monolithic,1000pf 50v 5%KemetC1206C102J5GACTR marked	2	
.....3	413-1597	TERM,TURRET,2 SHLDR,.219,GOLD FLASH	3	C4,C5
.....3	550-155-1	Connector, XLR Receptacle Insert Nuetrik#3FD-V-I-O	1	E1,E2,E3
.....3	800-259B	PC Board, Microphone Connector RPT- 2/15	1	P1
....2	DB61024	Washer, TO-220 Shoulder NYL Thermalloy #7721-7PPS	4	PCB
....2	DB68027	Sil Pad TO220 .75x.5" ADHSV Berquist 3223-07AC-58"	2	
..1	700-220-1P	Front Panel, RPT-2 (SBCM)	1	
....2	500-073	Fastener, PEM S-632-1 ZI	2	
....2	500-184	RIVET, 1/8 x .165 SEMI-TUBULAR BLACK 100 CE100732	10	
....2	510-191	#4 Bracket, Keystone 612	2	
....2	530-001	Switch, slide DPDT Switchcraft	1	
....2	530-018	Switch, slide DPIT Switchcraft 46313LDR	2	
....2	530-021	Switch, slide TPTT Switchcraft 11H-1086	1	
....2	700-220-1	Front Panel, RPT-2	1	
.....3	698-220-1	Front Panel, RPT-2 Bare Metal	1	
.....3	699-220-1	Front Panel, RPT-2 Contract Labor Painting	1	
..1	700-220-2P	Rear Panel, RPT-2/15 (SBCM)	1	
....2	500-073	Fastener, PEM S-632-1 ZI	2	
....2	700-220-2	Rear Panel, RPT-2/15	1	
..1	700-220-3P	Frame, R/H Side RPT-2/15 (SBCM)	1	
....2	500-073	Fastener, PEM S-632-1 ZI	4	
....2	700-220-3	Frame, R/H Side RPT-2/15	1	
..1	700-220-4P	Frame, L/H Side RPT-2/15 (SBCM)	1	
....2	500-073	Fastener, PEM S-632-1 ZI	4	
....2	700-220-4	Frame, L/H Side RPT-2/15	1	
..1	700-220-5P	Top Cover, RPT-2/15 w/feet (SBCM)	1	
....2	500-119	Rivet, CE100 7/32 steel nickel	2	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	500-127	Washer, C-126=820W Brass/Nickel Plated	2	
....2	510-205	BUMPER, BRUCE PLASTICS 0772- 0014 BLACK	2	
....2	700-220-5	Top Cover, RPT-2/15	1	
..1	700-220-6P	Bottom Cover, RPT-2/15 w/ft & hand (SBCM)	1	
....2	500-119	Rivet, CE100 7/32 steel nickel	6	
....2	500-127	Washer, C-126=820W Brass/Nickel Plated	8	
....2	500-186	Rivet, 1/8 x .312 semi-tubular standard finish	2	
....2	510-132	Handle Assy., black w/black plated steel hdwe #1879-376-370	1	
....2	510-205	BUMPER, BRUCE PLASTICS 0772- 0014 BLACK	6	
....2	700-220-6	Bottom Cover, RPT-2/15	1	
..1	700-220- 7PB	Partition, RPT-2/15 #1 w/bd	1	
....2	420-4104	SCREW,4-40X.250,S.S. PH	4	
....2	500-199	Keps nut 4 x 40 zinc 4CNKEOZ	4	
....2	700-220-7	Partition, RPT-2/15 #1	1	
....2	800-254A	RPU/STL-30 Feed-Thru Board	1	
.....3	270-102	Cap,monolithic,1000pf 50v 5%KemetC1206C102J5GACTR marked	10	C1,C2,C3 ,C4,C5, C6,C7,C8 ,C9, C10
.....3	550-156	Connector, 10 pin Molex header 26-48- 4102 *NOTE*	1	P1/P2
.....3	800-254B	PC Board, Feed-thru RPT-2/15/30	1	PCB
..1	700-220-8	Partition, RPT-2/15 #2	1	
..1	700-220-9	Partition, RPT-2 #3	1	
..1	800-160A1	RPU 150/215/300 Modulator Board	1	
....2	100-1041	RES,1K OHM,1/4W,1%	1	R17
....2	101-104	Potentiometer, 100K ohm cermet Bourns 3309P-1-104	2	R1,R2
....2	103-2744	RES,2.74K OHM,1/4W,1%,METAL	1	R9
....2	103-4741	RES,4.75K OHM,1/4W,1%,METAL	1	
....2	103-4755	RES,47.5K OHM,1/4W,1%,METAL	4	R3,R4,R5 R6



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	104-502	Potentiometer, 5K ohm cermet Spectrol 64Y502 top adjust	1	
....2	145-030	RESISTOR, 3.3 OHM 1/4 WATT 1% METAL FILM MEPCO SFR25	2	R8
....2	145-122-1	Resistor, 1.2k ohm 1/4 watt 1% CCF07 1.2K MF TR	1	R10,R16
....2	145-182-1	RESISTOR, 1.8K OHN 1/4 WATT 1% RL07S182G MF	1	R13
....2	145-241-1	RESISTOR, 240 OHM 1/4 WATT 1% SFR55 240 1% TR	2	R14
....2	145-363-1	Resistor, 36k ohm 1/4 watt 1% RL07S363G	2	R7,R12
....2	203-4148	DIODE,1N4148	1	R11,R18
....2	217-103	CAP,0.1UF 250VDC 5%,POLY FILM	3	D1
....2	217-104	CAPACITOR, .01 UF 50V GMV DISC	1	C3,C4, C11
....2	219-220	CAPACITOR, ELECTROLYTIC 22uF RADIAL 35V	1	C8
....2	255-161	CAPACITOR, 160 PF 300V 5% SIVLER MICA	1	C10
....2	255-241	Capacitor, 240 pf 500v 5% silver mica CD10FD241J03	1	C6
....2	255-271C	CAPACITOR, 270pF 5% 200V CERAMIC DIPPED	1	C7
....2	299-470	CAP, TANTALUM, 4.7 UF 16V	3	C5
....2	330-007	Inductor, 1 uH Dale IM-2 1UH +/-5%	1	C1,C2,C9
....2	350-025	INDUCTOR, 1.5 - 3 UH WITH SHIELD CAN #47271-021	2	L5
....2	350-037	INDUCTOR, 13 1/2 TURN ORANGE COILCRAFT 143-13J12S	2	L2,L3
....2	411-404	DIODE,MOT. HYPER-ABRUPT TUNING SMV-1732/CRYSTALONICS MV1404	1	L1,L4
....2	440-245-1	TRANSISTOR, 2N2857	1	Q1
....2	511-038	Terminal, Keystone 1238	1	TP1
....2	520-040	CRYSTAL SOCKET, CS-109-07	2	Y1,Y2
....2	520-041	Clip, transistor, Atlee 100-200-1-2 cad plated	1	Q1



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	530-051	SWITCH, SIDE ACTION SLIDE DPDT	1	S1
....2	550-136	Connector, 6 pin Molex header (cut from 550-162)	1	P1
.....3	550-162	Connector, 24 pin break-away (straight) Molex 26-48-6248	0.25	
....2	800-160-1A	X-Mitter Freq. Control Module (oven w/diode)	1	IC1/M1/Q2
.....3	120-002	THERMISTOR, 1000 OHM @ 25C 10%	1	
.....3	125-150	Resistor, 15 ohm 5% BWH/SPH	1	
.....3	401-338	IC, SMT, REGULATOR, 5 AMP, LM338T *NOTE*	1	
.....3	450-110	Transistor, SGS TIP-110	1	
.....3	500-130	Screw, #4 x 1/4 slot. hex wash hd type B tapping zinc plate"	2	
.....3	510-235	Caplug, 5/32SCx5/8 230801HB	1	
.....3	520-045	Oven can	1	
.....3	DB61024	Washer, TO-220 Shoulder NYL Thermalloy #7721-7PPS	2	
.....3	DB68027	Sil Pad TO220 .75x.5" ADHSV Berquist 3223-07AC-58"	2	
....2	800-160B	PC Board, Modulator RPT-2/15	1	PCB
..1	800-163A3	RPT-2/15 300 Multiplier	1	
....2	046-0022	CAP,MICA,RF,22PF	2	C24,C39
....2	100-1041	RES,1K OHM,1/4W,1%	2	R1,R17
....2	100-1051	RES,10K OHM,1/4W,1%	2	R2,R11
....2	100-1551	RES,15K OHM,1/4W,1%	2	R5,R8
....2	101-502	POT,5K,SINGLE TURN,HORIZONTAL PCB MOUNT	1	
....2	103-2744	RES,2.74K OHM,1/4W,1%,METAL	2	R14
....2	103-3163	RES,316 OHM,1/4W,1%,METAL	1	R4,R7
....2	103-3323	RES,332 OHM,1/4W,1%,METAL	1	R50
....2	103-4741	RES,4.75K OHM,1/4W,1%,METAL	1	R3
....2	103-4755	RES,47.5K OHM,1/4W,1%,METAL	1	R16
....2	103-5623	RES,562 OHM,1/4W,1%,METAL	1	R18
				R10



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	145-030-C	RESISTOR, 3.3 OHM 1/4 WATT 5% CARBON COMP 30BJ250	1	
....2	145-152-C	RESISTOR, 1.5K OHM 1/4 WATT 5% CARBON COMP 30BJ250	1	R12
....2	145-680-C	Resistor, 68 ohm 1/4 watt 5% carbon comp 30BJ250	2	R13
....2	210-0120	TSTR,TIP120 NPN SILICON PWR	1	R6,R9
....2	217-103	CAP,0.1UF 250VDC 5%,POLY FILM	3	Q50
....2	217-104	CAPACITOR, .01 UF 50V GMV DISC	3	C11,C17, C35
....2	230-109	Capacitor, variable, 1.9-15.7 pf	2	C2,C4,C9
....2	241-470	CAPACITOR, UNCASSED MICA 47PF 5% FWM602	1	C27,C28
....2	253-471	CAPACITOR, 470 PF 50V 10% Y5P DISC	1	C29
....2	255-020	Capacitor, 2 pf 5% type QC	1	C31
....2	255-040	Capacitor, 3.9 pf 5% type QC	2	C20
....2	255-241	Capacitor, 240 pf 500v 5% silver mica CD10FD241J03	1	C6,C13
....2	255-270	CAPACITOR, 27 PF, 5%, NPO, DISC	1	C8
....2	255-390C	Capacitor, 39pF 5% 200V ceramic dipped C322C390J2G5CA	1	C19
....2	255-470C	CAP, 47pF 5% 200V CERAMIC DIPPED	1	C22
....2	255-750	CAPACITOR, 75 pF 5% NPO DISC	1	C21
....2	256-131	CAPACITOR, 130 pF 5% 50V NPO DISC	2	C5
....2	256-151	CAPACITOR, 150 pF 5% NPO DISC	1	C14,C15
....2	256-301	CAPACITOR, 300 pF 5% NPO DISC	1	C7
....2	256-680C	Cap., 68pF 5% 200V ceramic dipped Kemet C317C680J2G5CA	1	C1
....2	268-102	CAPACITOR, .001 uF 50V DISC - 20+80%	8	C12 C10,C16, C18,C23, C25,C30, C34,C38
....2	268-203	CAPACITOR, .02 UF 50V Z5U DISC	1	C3



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	270-102	Cap,monolithic,1000pf 50v 5%KemetC1206C102J5GACTR marked	1	C26
....2	290-523	Capacitor, variable, 3.5-36 pf Sprague- Goodman GXA-36000	2	C36,C37
....2	299-220	Capacitor, tantalum, 2.2 mf 25v ECS- F1EE225K Panasonic	1	C33
....2	350-038	INDUCTOR, 1 1/2 TURN BROWN COILCRAFT 144-01J12S	2	L5,L6
....2	350-039	INDUCTOR, 2 1/2 TURN RED	2	L3,L4
....2	350-040	INDUCTOR, 6 1/2 TURN BLUE	2	L1,L2
....2	350-120	Inductor, 1 1/2 turn 14 AWG Buss Wire (CW)	2	L9,L10
.....3	580-142	Buss Wire, 14AWG Solid Tinned Copper	0.198	
....2	350-121	INDUCTOR, 10 TURN .15 uH	1	L12
....2	350-152	Inductor, 6 turn 22 AWG Red CW 215 Mult.	1	L8
....2	350-165	Inductor, 3 turn 16 AWG Buss Wire	1	L13
.....3	580-129	Buss Wire, 16AWG Solid Tinned Copper	0.275	
....2	407-0132	WASH,SHOULDER #4 .215 OD POLY	1	
....2	409-7403	PAD,TSTR MTG,TO-220 CASE	1	
....2	412-494	DIODE, GERMANIUM 1N270 (note)	2	D1,D2
....2	414-007	Diode, General Instruments 1N4007	1	D3
....2	420-4106	SCREW,4-40X.375,S.S. PH	1	
....2	420-629	Transistor, Motorola MRF629	1	Q5
....2	421-4007	4-40 X .187 S.S. HEX NUT	1	
....2	423-4001	#4 FLAT SS .250 X .125 X .018	1	
....2	423-4002	#4 LOCK S.S. SPLIT	1	
....2	424-427	TRANSISTOR, MOTOROLA/SGS/MICRO SEMI 2N4427 SRF944	1	Q4
....2	440-245-1	TRANSISTOR, 2N2857	3	Q1,Q2, Q3
....2	455-7805	HEATSINK,TO-220PKG,LOW PROFILE	1	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	513-016A4	Coil, 4 turn bead #30AWG	1	L11
.....3	513-016	Ferrite Bead, #56-590-65/4B	1	
.....3	580-106	Magnet Wire, #30AWG Single Nyleze	0.004	
....2	520-049	Heatsink, Thermalloy 2260R red or black	1	Q4
....2	550-084	CONNECTOR,PHONO JACK,PCB MOUNT	2	J1,J2
....2	550-197	Header, Breakaway 4x2,0.1 Spacing(Cut from 550-316)"	1	P1
.....3	550-316	HEADER, BREAKAWAY 40x2, 0.1 SPACING"	0.1	
....2	800-163B	PC Board, Multiplier RPT-2/15/30 STL- 10	1	PCB
..1	800-166A	RPU Audio Board	1	
....2	100-1013	RES,1 OHM,1/4W,5%	1	R48
....2	100-1041	RES,1K OHM,1/4W,1%	1	Replaced 145-102 on 02/19/201 0 12:11:23 R43 R46
....2	100-1551	RES,15K OHM,1/4W,1%	1	
....2	215-102	CAPACITOR, .001 uFD 2.5% 100V POLYPRO	1	C23
....2	800-166CM	Generic RPU Audio Board Assembly (SBCM)	1	
.....3	033-0123	CAPACITOR, .012 MFD 1% 100V POLYPRO	2	C20,C22
.....3	100-1041	RES,1K OHM,1/4W,1%	1	R1
.....3	100-1051	RES,10K OHM,1/4W,1%	1	R34
.....3	100-1531	RES,150 OHM,1/4W,1%	1	R5
.....3	101-104	Potentiometer, 100K ohm cermet Bourns 3309P-1-104	2	R26,R33
.....3	101-502	POT,5K,SINGLE TURN,HORIZONTAL PCB MOUNT	1	
.....3	103-1007	RES,1 MEG OHM,1/4W,1%,METAL	2	R22
.....3	103-1062	RES,100K OHM,1/4W,1%,METAL	4	R38,R39 R6,R11, R12,R17
.....3	103-1823	RES,182 OHM,1/4W,1%,METAL	1	
.....3	103-2211	RES,22.1K OHM,1/4W,1%,METAL	1	R3
.....3	103-2216	RES,221K OHM,1/4W,1%,METAL	1	R32
.....3	103-2241	RES,2.21K OHM,1/4W,1%,METAL	1	R31
				R27



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
.....3	103-2744	RES,2.74K OHM,1/4W,1%,METAL	2	R24,R45
.....3	103-3323	RES,332 OHM,1/4W,1%,METAL	1	R13
.....3	103-3324	RES,3.32K OHM,1/4W,1%,METAL	2	R32
.....3	103-3325	RES,33.2K OHM,1/4W,1%,METAL	1	R16
.....3	103-3924	RES,3.92K OHM,1/4W,1%,METAL	3	R8,R10, R15
.....3	103-4731	RES,475K OHM,1/4W,1%,METAL	3	R20,R35, R36
.....3	103-4741	RES,4.75K OHM,1/4W,1%,METAL	1	R25
.....3	103-4755	RES,47.5K OHM,1/4W,1%,METAL	1	R2
.....3	103-5623	RES,562 OHM,1/4W,1%,METAL	1	R41
.....3	104-105	POTENTIOMETER, 1MEG OHM TOP ADJUST	1	R37
.....3	145-030	RESISTOR, 3.3 OHM 1/4 WATT 1% METAL FILM MEPCO SFR25	1	R9
.....3	145-106	Resistor, 10 meg ohm 1/4 watt 5% metal film Mepco SFR25	1	R29
.....3	145-221	Resistor, 220 ohm 1/4 watt 1% metal film Mepco SFR25	1	R17
.....3	145-225	Resistor, 2.21 meg ohm 1/4 watt 1% metal film (2.21 Meg 1%)	4	R19,R28, R40,R42
.....3	145-472	OBSOLETE REPLACE W/103-4741 (NLU-03)	0	
.....3	145-681	RESISTOR, 681 OHM 1/4 WATT 1% METAL FILM MEPCO SFR25	1	R4
.....3	145-822	Resistor, 8.25k ohm 1/4 watt 1% metal film Mepco SFR25	2	R14,R44
.....3	145-825	Resistor, 8.2 meg ohm 1/4 watt 5% carbon film 29SJ250	1	R30
.....3	203-4148	DIODE,1N4148	5	D1,D2,D3 ,D4,D5
.....3	215-223	Capacitor, .022 mfd 2.5% 100v polypro Seacor PFWAC220HGUE	1	C25
.....3	215-392	Capacitor, .0039 mfd 2.5% polypro	1	C26



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
.....3	215-822	CAPACITOR, .0082 MFD 2.5% 100V POLYPRO	1	C11
.....3	217-103	CAP,0.1UF 250VDC 5%,POLY FILM	1	C16
.....3	217-104	CAPACITOR, .01 UF 50V GMV DISC	2	C12,C28
.....3	219-106	CAPACITOR, 10UF 50V RADIAL ELECTROLYTIC	2	C3,C18
.....3	219-220	CAPACITOR, ELECTROLYTIC 22uF RADIAL 35V	3	C4,C21, C30
.....3	219-221	CAPACITOR, ELECTROLYTIC 220uF 25V RADIAL	3	C9,C13,C 14
.....3	226-274	Cap.,.27 mf 100v 10% polypro CD MTC1P27K OR Bishop C21B274K	2	C7,C31
.....3	253-471	CAPACITOR, 470 PF 50V 10% Y5P DISC	3	C1,C15,C 29
.....3	255-470C	CAP, 47pF 5% 200V CERAMIC DIPPED	2	C24,C27
.....3	256-680C	Cap., 68pF 5% 200V ceramic dipped Kemet C317C680J2G5CA	1	C10
.....3	270-102	Cap,monolithic,1000pf 50v 5%KemetC1206C102J5GACTR marked	10	C32,C33, C34,C35, C36,C37, C38,C39, C40,C41
.....3	299-470	CAP, TANTALUM, 4.7 UF 16V	3	C2,C17, C19
.....3	350-032	Inductor, 387-150M 40000-150000 uH	1	L1
.....3	401-054	Integrated Circuit, SGS TDA1054M	1	IC1
.....3	403-900	IC, QUADRUPLE NORTON OP AMP	1	IC2
.....3	414-007	Diode, General Instruments 1N4007	1	D6
.....3	550-123	Connector, 10 pin header (cut from 550- 162)	1	P1
.....4	550-162	Connector, 24 pin break-away (straight) Molex 26-48-6248	0.417	
.....3	800-166B	PC Board, Audio RPT-2/15/30	1	
..1	800-167A	RPT-2 Power Supply (note)	1	
....2	101-501	Potentiometer, 500 ohm cermet Bourns 3309P-501	1	R9
....2	103-2241	RES,2.21K OHM,1/4W,1%,METAL	1	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	103-4741	RES,4.75K OHM,1/4W,1%,METAL	1	
....2	125-100	Resistor, 10 ohm 2 watt BWH/SPH	1	R3
....2	145-221	Resistor, 220 ohm 1/4 watt 1% metal film Mepco SFR25	1	R7
....2	145-241-1	RESISTOR, 240 OHM 1/4 WATT 1% SFR55 240 1% TR	2	R1,R4
....2	145-300	Resistor, 30 ohm 1/4 watt 5% metal film Mepco SFR	1	R5
....2	145-752	Resistor, 7.5k ohm 1/4 watt 5% metal film Mepco SFR25	1	R10
....2	202-0502	RECT,3A,200V,IN5402	2	D10,D13
....2	211-3904	TSTR,2N3904	1	Q1
....2	219-080	Cap,electrolytic 10uF 25V Nichicon TVX1E100MAA	1	C7
....2	219-200	CAPACITOR ELECTROLYTIC 22UF 25V	1	C6
....2	219-472	CAPACITOR, ELECTROLYTIC 4700UF 25V	1	C5
....2	253-471	CAPACITOR, 470 PF 50V 10% Y5P DISC	1	C23
....2	270-102	Cap,monolithic,1000pf 50v 5%KemetC1206C102J5GACTR marked	24	C1,C4,C8 ,C9,C10, C11,C12, C13,C14, C15,C16, C17,C18, C19,C20, C21,C22, C24,C25, C26,C27, C28,C29, C30
....2	270-103	Cap, Monolithic chip 10000pF 10% XR7 Kemet C1206C103J5RACTR	2	
....2	330-018	INDUCTOR, 10 uH, 10%	3	C2,C3
....2	330-019	INDUCTOR, 2.5 TURN, HIGH FREQUENCY SUPPRESSION	1	L3,L4,L5
....2	410-666	Diode, FDH666	1	L1
....2	414-007	Diode, General Instruments 1N4007	7	D8
....2	415-244	Diode, Motorola 1N5244B	1	D1,D2,D3 ,D4,D5,D 7,D12 D11



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	550-125	Connector, 5 pin Molex Header (cut from 550-162) *NOTE*	1	
.....3	550-162	Connector, 24 pin break-away (straight) Molex 26-48-6248	0.208	P2
....2	550-138	Connector, 8 pin Molex header (cut from 550-162)	1	
.....3	550-162	Connector, 24 pin break-away (straight) Molex 26-48-6248	0.333	P1
....2	550-154	CONNECTOR, D-SUB 9 PIN ANGLE	1	
....2	800-167B	PC Board, Power Supply RPT-2	1	J5
..1	800-169A3	RPT-2/300 Amplifier(COMPLETE ASSEMBLY)	1	
....2	145-030-C	RESISTOR, 3.3 OHM 1/4 WATT 5% CARBON COMP 30BJ250	1	
....2	145-470-C	Resistor, 47 ohm 1/4 watt 5% carbon comp 30BJ250	1	R6
....2	145-680-C	Resistor, 68 ohm 1/4 watt 5% carbon comp 30BJ250	1	R2
....2	217-103	CAP,0.1UF 250VDC 5%,POLY FILM	1	R1
....2	219-200	CAPACITOR ELECTROLYTIC 22UF 25V	1	C1
....2	236-501	Capacitor, uncased mica, 500 pf 33v 5% FWJ101	3	C11
....2	240-120	Capacitor, uncased mica, 12 pf 33v 5% FWJ101	3	C2,C3,C8
....2	240-600	Capacitor, variable, trimmer 12-65 pf FW C4004/OXSB Gullwing	1	C9,C10, C12
....2	260-300	Capacitor, variable, trimmer 8-45 pf FW C4003/OB	3	C6
....2	330-012	Inductor, 15 uH Coilcraft 90-27	1	C4,C5,C7
....2	330-019	INDUCTOR, 2.5 TURN, HIGH FREQUENCY SUPPRESSION	1	L10
....2	350-111	Inductor, 3 turn 20 AWG Red (CW)	1	L1
.....3	555-111	COST, LABOR FOR 350-111	1	L8
.....3	580-103	Magnet Wire, #20AWG Single Nyleze (RED)	0.001	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	350-112	Inductor, 3 turn 22 AWG Red (CCW)	1	L4
.....3	555-112	COST, LABOR FOR 350-112	1	
.....3	580-104	Magnet Wire, #22AWG Single Nyleze (RED)	0.001	
....2	350-116	Inductor, 1 turn 20 AWG Red (CCW)	2	L7,L11
.....3	555-116	COST, LABOR FOR 350-116	1	
.....3	580-103	Magnet Wire, #20AWG Single Nyleze (RED)	0.001	
....2	350-117	Inductor, 8 turn 22 AWG Red (CCW)	1	L3
.....3	555-117	COST, LABOR FOR 350-117	1	
.....3	580-104	Magnet Wire, #22AWG Single Nyleze (RED)	0.001	
....2	350-142	Inductor, 4 turn 20 AWG Red	1	L9
.....3	555-142	COST,LABOR FOR 350-142	1	
.....3	580-103	Magnet Wire, #20AWG Single Nyleze (RED)	0.001	
....2	410-1416	LUG,TERM,BENT,11/16	2	
....2	410-305-1	Diode, Motorola MBD101	1	D1
....2	425-945	Transistor, RF Power	1	Q1
....2	500-114	Copper Washer, Seastrom 5716-61-.051	1	
....2	500-121	Rivet, 3 x 8 F metric 101203081 M3X8	6	
....2	510-005	Polytube, Manhatten#AF155A-20-yel	0.06	
....2	550-012	CONN, SO-239A UHF PANEL RECEPTACLE	1	J4
....2	586-094	Cable Assembly, RPT2/15 Amplifier (SBCM)	1	
.....3	550-126	Connector, crimp terminal pin Molex 08-50-0187	3	
.....3	550-159	Connector, 4 pin Molex housing 09-50-8040	1	
.....3	580-040	Wire, UL1061 22/7 OTC Black	0.46	
.....3	580-043	Wire, UL1061 22/7 OTC Red	0.46	
.....3	580-046	Wire, UL1061 22/7 OTC Green	0.5	
....2	700-109-3	Shield, Amplifier	1	
....2	700-220-10	Cover, RPT-2 Amplifier	1	
....2	700-220-19	Shield, RPT-2/300	1	
....2	700-220-20	Amplifier Connector Plate	1	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	703-009	Copper Foil, .0014 x .250"	0.001	
....2	800-169B	PC Board, Power Amp. RPT-2	1	PCB
..1	800-270A	STL-10/RPT2/15 Sm. Feed Thru Board	1	
....2	270-103	Cap, Monolithic chip 10000pF 10% XR7 Kemet C1206C103J5RACTR	3	C1,C2,C3
....2	550-172	Connector, 4 pin Molex angle header long (cut from 550-171)	1	P1
.....3	550-171	Connector, 24 pin break-away (Long pins) Molex 26-58-1241	0.167	
....2	800-270B	PC Board, Feedthru RPT-2/15/STL-10	1	PCB



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
0	705-T02-4	RPT-2/450; 120VAC		
..1	320-036L	TRANSFORMER, POWER, RPT2 110V W/LUGS	1	
....2	320-036	TRANSFORMER, POWER, 15905	1	
0	705-T02-42	RPT-2/450; 220VAC		
..1	320-036AL	TRANSFORMER, POWER, RPT2 220V W/LUGS	1	
....2	320-036A	TRANSFORMER, POWER, 15905M 220V	1	
0	705-T02-43	RPT-2/450; 230VAC		
..1	320-036CL	TRANSFORMER, POWER, RPT2 230V W/LUGS	1	
....2	320-036C	TRANSFORMER, POWER, 15905C 230V 50Hz	1	
0	705-T02-44	RPT-2/450; 240VAC		
..1	320-036BL	TRANSFORMER, POWER RPT2 240V W/LUGS	1	
....2	320-036B	TRANSFORMER, POWER, 15905MA 240V	1	
....2	550-126	Connector, crimp terminal pin Molex 08- 50-0187	2	
..1	586-011	Cable Assembly, RPT-2/15 Harness (SBCM)	1	
....2	500-128	Eyelet, GS4-4 brass	1	
....2	550-122	CONNECTOR, 10 PIN MOLEX HOUSING 09-50-8100	1	
....2	550-126	Connector, crimp terminal pin Molex 08- 50-0187	16	
....2	550-133	CONNECTOR, PHONE PLUG 3C1215	1	
....2	550-135	Connector, 6 pin Molex housing 09-50- 8060	1	
....2	580-033	Coax high shield RG-316/U Manhattan M4259	0.44	
....2	580-041	Wire, UL1061 22/7 OTC Brown	0.5	
....2	580-043	Wire, UL1061 22/7 OTC Red	0.46	
....2	580-044	Wire, UL1061 22/7 OTC Yellow	0.54	
....2	580-046	Wire, UL1061 22/7 OTC Green	0.75	
....2	580-047	Wire, UL1061 22/7 OS-1 Orange	0.58	
....2	580-051	Wire, UL1061 22/7 OTC White/Blue	0.57	
....2	580-088	Shielded Wire, 16-C-22-SPJ White/Red 1 Cond. 22/19x34 pvc	0.61	
....2	580-089	Shielded Wire, 16-C-22-SPJ White/Orange 1 cond 22/19x34 pvc	0.44	
....2	580-091	Shielded Wire, 16-C-22-SPJ White/Green 1 Cond.22/19x34 pvc	0.46	
....2	580-092	Shielded Wire, 16-C-22-SPJ White/Blue 1 Cond.22/19x34 pvc	0.46	
..1	586-057	Cable Assembly, RPT-2/15 14.5 Internal TAC-9720 (SBCM)"	1	
..1	586-068	Cable Assembly, RPT-2 Power Supply (SBCM)	1	
....2	550-080	Connector, 3 pin Molex housing 03-06- 2032	1	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	550-081	Connector, pin Molex 02-06-2103 male	3	
....2	550-126	Connector, crimp terminal pin Molex 08-50-0187	3	
....2	580-040	Wire, UL1061 22/7 OTC Black	0.48	
....2	580-047	Wire, UL1061 22/7 OS-1 Orange	0.48	
....2	580-133	Wire, UL1061-18/16 #18 Red #M370-2	0.48	
..1	586-085	Cable Assembly, RPT-2 #1 (SBCM)	1	
....2	550-122	CONNECTOR, 10 PIN MOLEX HOUSING 09-50-8100	1	
....2	550-126	Connector, crimp terminal pin Molex 08-50-0187	9	
....2	580-041	Wire, UL1061 22/7 OTC Brown	0.54	
....2	580-043	Wire, UL1061 22/7 OTC Red	0.53	
....2	580-045	Wire, UL1061 22/7 OTC Blue	0.44	
....2	580-046	Wire, UL1061 22/7 OTC Green	0.52	
....2	580-048	Wire, UL1061 22/7 OTC Violet	0.82	
....2	580-050	Wire, UL1061 22/7 OS-1 White/Red	0.61	
....2	580-059	Wire, UL1061 22/7 OTC Yellow/Blue	0.92	
....2	580-133	Wire, UL1061-18/16 #18 Red #M370-2	0.46	
....2	580-137	Wire, UL1061 18/19 #18 Orange Tinned Copper	0.57	
..1	586-086	Cable Assembly, RPT-2 #2 (SBCM)	1	
....2	550-122	CONNECTOR, 10 PIN MOLEX HOUSING 09-50-8100	1	
....2	550-126	Connector, crimp terminal pin Molex 08-50-0187	20	
....2	550-137	Connector, 8 pin Molex housing 09-50-8080	1	
....2	550-159	Connector, 4 pin Molex housing 09-50-8040	1	
....2	550-205	Connector pins, Molex 16-02-0086	8	
....2	550-222	Connector, 8 dual row housing Molex 22-55-2081	1	
....2	580-041	Wire, UL1061 22/7 OTC Brown	1	
....2	580-043	Wire, UL1061 22/7 OTC Red	1	
....2	580-045	Wire, UL1061 22/7 OTC Blue	1.42	
....2	580-046	Wire, UL1061 22/7 OTC Green	1.29	
....2	580-048	Wire, UL1061 22/7 OTC Violet	1	
....2	580-050	Wire, UL1061 22/7 OS-1 White/Red	0.42	
....2	580-059	Wire, UL1061 22/7 OTC Yellow/Blue	2	
....2	580-133	Wire, UL1061-18/16 #18 Red #M370-2	1	
....2	580-137	Wire, UL1061 18/19 #18 Orange Tinned Copper	1	
..1	700-220-18	Cover, RPT-2/15/30 Modular .032 aluminum	1	
..1	700-220-1A	RPT-2 Final Assembly	1	
....2	030-034M	Meter, VU	1	
.....3	030-033	200 Micro-Amp Meter	1	
.....3	030-033-1	VU Meter Scales	1	
....2	100-103	POT, 10K OHM TYPE T270D VH4340 EXC.270	2	
....2	100-1551	RES,15K OHM,1/4W,1%	1	
....2	145-431	Resistor, 432 ohm 1/4 watt 1% metal film	1	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
		Mepco SFR25		
....2	236-501	Capacitor, uncased mica, 500 pf 33v 5% FWJ101	2	
....2	253-471	CAPACITOR, 470 PF 50V 10% Y5P DISC	1	
....2	297-222	Cap,.0022mf 400v ceramic disc MURATA DE1007E222M-KH	2	
....2	401-338	IC, SMT, REGULATOR, 5 AMP, LM338T *NOTE*	2	
....2	402-0005	PRESS CLIP,NYLON W/ADHESIVE BACK	1	
....2	420-4104	SCREW,4-40X.250,S.S. PH	17	
....2	420-4106	SCREW,4-40X.375,S.S. PH	5	
....2	420-4296	SCREW,4-40X.375,PH PAN HD SC	4	
....2	421-4007	4-40 X .187 S.S. HEX NUT	2	
....2	421-6005	6-32 ELASTIC STOP HEX NUT	2	
....2	423-4001	#4 FLAT SS .250 X .125 X .018	2	
....2	423-4002	#4 LOCK S.S. SPLIT	2	
....2	423-6003	#6 LOCK INT TOOTH	8	
....2	500-002	Hex Nut, #4-40 Extra Small Pattern Nickel Plated	2	
....2	500-002-1	Hex Nut, #4-40 Regular Nickel Plated	4	
....2	500-022	Screw, 6-32 x 3/8 phillips pan head M/S nickel plated"	10	
....2	500-055	Lockwasher, #4 internal tooth small pattern zinc plated	10	
....2	500-105	Pop-Rivet, AD42BS Aluminum	18	
....2	500-115	Pop-Rivet, SK42BS counter sunk	12	
....2	500-123	Washer, Switchcraft #S1790-1	2	
....2	500-162	Screw, 4-40 x 7/16 phillips pan head MS zinc plated"	2	
....2	500-180	Screw, 4-40 x 1/4 phillips pan head M/S Black Zinc"	4	
....2	500-183	Screw, 6-32 x 1/4 phillips pan head Black Zinc"	14	
....2	500-188	Screw, 4-40 x 3/8 phillips,flat head,black oxide"	2	
....2	500-199	Keps nut 4 x 40 zinc 4CNKEOZ	13	
....2	500-245	Lock Washer, 1/4 Internal Tooth L/W Zinc"	2	
....2	510-002	Shrink-Tubing, 3/4 black W3B2 3/4" Sumitomo"	0.08	
....2	510-005	Polytube, Manhatten#AF155A-20-yel	0.55	
....2	510-009	Fuse, 3/4 Amp. 3AG Littlefuse #312.750	1	
....2	510-032	Grommet, 1/2 HHS#2175"	2	
....2	510-072	Fuseholder, Littlefuse #342-004	1	
....2	510-090	Cable Ties, 4 Panduit PANPLT1M-M MS3367-4-9"	7	
....2	510-191	#4 Bracket, Keystone 612	14	
....2	510-192	Connector, AC receptacle, Switchcraft EAC-309	1	
....2	510-210	Brackets, #6 Keystone 634	2	
....2	510-246	Flexible Grommet, (NOTE)	0.125	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	512-008	Solder Lug, #4 Concord 707-1404	2	
....2	513-027	Spacer, 4-40 x 1-1/4 hex threaded EFJ 313-6477-040	2	
....2	513-030	SPACER, 6-32 X 15/16 HEX THREADED	4	
....2	550-083	Connector, Tini-Jax Switchcraft 41	2	
....2	550-124	Connector, 5 pin Molex housing 09-50- 8050 *NOTE*	1	
....2	550-155-2	Connector Shell XLR Receptacle DH- NF-BAG-O	1	
....2	580-005	Buss Wire, #22AWG Solid Tinned Copper	0.9	
....2	580-040	Wire, UL1061 22/7 OTC Black	1.8	
....2	580-046	Wire, UL1061 22/7 OTC Green	0.29	
....2	580-134	Wire, UL1061-18/16 #18 Black	0.33	
....2	580-138	Flat Braid, 1/4 #1231"	0.08	
....2	600-043	STYROFOAM COVER, CONVERTER	1	
....2	700-091-15	Mounting Bracket, RPT-2/15 Meter	2	
....2	700-220- 16A	RPT-2/15 Multiplier Heat Sink Assembly	1	
.....3	500-113	Screw, 4-40 x 1/8 slotted pan head M/S zinc plated"	1	
.....3	520-046	Heatsink, Thermalloy 1116B round	1	
.....3	700-220-16	Copper Heatsink, RPT-2/15	1	
....2	800-259A	RPT-15 Microphone Conn. Bd.	1	
.....3	270-102	Cap,monolithic,1000pf 50v 5%KemetC1206C102J5GACTR marked	2	C4,C5
.....3	413-1597	TERM,TURRET,2 SHLDR,.219,GOLD FLASH	3	E1,E2,E3
.....3	550-155-1	Connector, XLR Receptacle Insert Nuetrik#3FD-V-I-O	1	P1
.....3	800-259B	PC Board, Microphone Connector RPT- 2/15	1	PCB
....2	DB61024	Washer, TO-220 Shoulder NYL Thermalloy #7721-7PPS	4	
....2	DB68027	Sil Pad TO220 .75x.5" ADHSV Berquist 3223-07AC-58"	2	
..1	700-220-1P	Front Panel, RPT-2 (SBCM)	1	
....2	500-073	Fastener, PEM S-632-1 ZI	2	
....2	500-184	RIVET, 1/8 x .165 SEMI-TUBULAR BLACK 100 CE100732	10	
....2	510-191	#4 Bracket, Keystone 612	2	
....2	530-001	Switch, slide DPDT Switchcraft	1	
....2	530-018	Switch, slide DPIT Switchcraft 46313LDR	2	
....2	530-021	Switch, slide TPTT Switchcraft 11H-1086	1	
....2	700-220-1	Front Panel, RPT-2	1	
.....3	698-220-1	Front Panel, RPT-2 Bare Metal	1	
.....3	699-220-1	Front Panel, RPT-2 Contract Labor Painting	1	
..1	700-220-2P	Rear Panel, RPT-2/15 (SBCM)	1	
....2	500-073	Fastener, PEM S-632-1 ZI	2	
....2	700-220-2	Rear Panel, RPT-2/15	1	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
..1	700-220-3P	Frame, R/H Side RPT-2/15 (SBCM)	1	
....2	500-073	Fastener, PEM S-632-1 ZI	4	
....2	700-220-3	Frame, R/H Side RPT-2/15	1	
..1	700-220-4P	Frame, L/H Side RPT-2/15 (SBCM)	1	
....2	500-073	Fastener, PEM S-632-1 ZI	4	
....2	700-220-4	Frame, L/H Side RPT-2/15	1	
..1	700-220-5P	Top Cover, RPT-2/15 w/feet (SBCM)	1	
....2	500-119	Rivet, CE100 7/32 steel nickel	2	
....2	500-127	Washer, C-126=820W Brass/Nickel Plated	2	
....2	510-205	BUMPER, BRUCE PLASTICS 0772- 0014 BLACK	2	
....2	700-220-5	Top Cover, RPT-2/15	1	
..1	700-220-6P	Bottom Cover, RPT-2/15 w/ft & hand (SBCM)	1	
....2	500-119	Rivet, CE100 7/32 steel nickel	6	
....2	500-127	Washer, C-126=820W Brass/Nickel Plated	8	
....2	500-186	Rivet, 1/8 x .312 semi-tubular standard finish	2	
....2	510-132	Handle Assy., black w/black plated steel hdwe #1879-376-370	1	
....2	510-205	BUMPER, BRUCE PLASTICS 0772- 0014 BLACK	6	
....2	700-220-6	Bottom Cover, RPT-2/15	1	
..1	700-220- 7PB	Partition, RPT-2/15 #1 w/bd	1	
....2	420-4104	SCREW,4-40X.250,S.S. PH	4	
....2	500-199	Keps nut 4 x 40 zinc 4CNKEOZ	4	
....2	700-220-7	Partition, RPT-2/15 #1	1	
....2	800-254A	RPU/STL-30 Feed-Thru Board	1	
.....3	270-102	Cap,monolithic,1000pf 50v 5%KemetC1206C102J5GACTR marked	10	C1,C2,C3,C4,C5, C6,C7,C8,C9, C10
.....3	550-156	Connector, 10 pin Molex header 26-48- 4102 *NOTE*	1	P1/P2
.....3	800-254B	PC Board, Feed-thru RPT-2/15/30	1	PCB
..1	700-220-8	Partition, RPT-2/15 #2	1	
..1	700-220-9	Partition, RPT-2 #3	1	
..1	800-160A2	450/950 RPU MODULATOR BOARD	1	
....2	100-1041	RES,1K OHM,1/4W,1%	1	R17
....2	101-104	Potentiometer, 100K ohm cermet Bourns 3309P-1-104	2	R1,R2
....2	103-2744	RES,2.74K OHM,1/4W,1%,METAL	1	R9
....2	103-4741	RES,4.75K OHM,1/4W,1%,METAL	1	
....2	103-4755	RES,47.5K OHM,1/4W,1%,METAL	4	R3,R4,R5,R6
....2	104-502	Potentiometer, 5K ohm cermet Spectrol 64Y502 top adjust	1	R8
....2	145-030	RESISTOR, 3.3 OHM 1/4 WATT 1% METAL FILM MEPCO SFR25	2	R10,R16
....2	145-122-1	Resistor, 1.2k ohm 1/4 watt 1% CCF07 1.2K MF TR	1	R13
....2	145-182-1	RESISTOR, 1.8K OHN 1/4 WATT 1% RL07S182G MF	1	R14



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	145-241-1	RESISTOR, 240 OHM 1/4 WATT 1% SFR55 240 1% TR	2	R7,R12
....2	145-363-1	Resistor, 36k ohm 1/4 watt 1% RL07S363G	2	R11,R18
....2	203-4148	DIODE,1N4148	1	D1
....2	217-103	CAP,0.1UF 250VDC 5%,POLY FILM	3	C3,C4,C11
....2	217-104	CAPACITOR, .01 UF 50V GMV DISC	1	C8
....2	219-220	CAPACITOR, ELECTROLYTIC 22uF RADIAL 35V	1	C10
....2	255-161	CAPACITOR, 160 PF 300V 5% SIVLER MICA	1	C6
....2	255-180	CAPACITOR, 18 pF 5% NPO DISC	1	C7
....2	255-271C	CAPACITOR, 270pF 5% 200V CERAMIC DIPPED	1	C5
....2	299-470	CAP, TANTALUM, 4.7 UF 16V	3	C1,C2,C9
....2	330-007	Inductor, 1 uH Dale IM-2 1UH +/-5%	1	L5
....2	350-037	INDUCTOR, 13 1/2 TURN ORANGE COILCRAFT 143-13J12S	2	L1,L4
....2	350-044	INDUCTOR, 1.0 - 2 UH W/SHIELD CAN #47271-022	2	L2,L3
....2	411-404	DIODE,MOT. HYPER-ABRUPT TUNING SMV-1732/CRYSTALONICS MV1404	1	
....2	440-245-1	TRANSISTOR, 2N2857	1	Q1
....2	511-038	Terminal, Keystone 1238	1	TP1
....2	520-040	CRYSTAL SOCKET, CS-109-07	2	Y1,Y2
....2	520-041	Clip, transistor, Atlee 100-200-1-2 cad plated	1	Q1
....2	530-051	SWITCH, SIDE ACTION SLIDE DPDT	1	S1
....2	550-136	Connector, 6 pin Molex header (cut from 550-162)	1	P1
.....3	550-162	Connector, 24 pin break-away (straight) Molex 26-48-6248	0.25	
....2	800-160-1A	X-Mitter Freq. Control Module (oven w/diode)	1	IC1/M1/Q2
.....3	120-002	THERMISTOR, 1000 OHM @ 25C 10%	1	
.....3	125-150	Resistor, 15 ohm 5% BWH/SPH	1	
.....3	401-338	IC, SMT, REGULATOR, 5 AMP, LM338T *NOTE*	1	
.....3	450-110	Transistor, SGS TIP-110	1	
.....3	500-130	Screw, #4 x 1/4 slot. hex wash hd type B tapping zinc plate"	2	
.....3	510-235	Caplug, 5/32SCx5/8 230801HB	1	
.....3	520-045	Oven can	1	
.....3	DB61024	Washer, TO-220 Shoulder NYL Thermalloy #7721-7PPS	2	
.....3	DB68027	Sil Pad TO220 .75x.5" ADHSV Berquist 3223-07AC-58"	2	
....2	800-160B	PC Board, Modulator RPT-2/15	1	PCB
..1	800-163A4	X-Mitter 450 Multiplier RPT2/15	1	
....2	100-1041	RES,1K OHM,1/4W,1%	2	R1,R17
....2	100-1051	RES,10K OHM,1/4W,1%	2	R2,R11
....2	100-1531	RES,150 OHM,1/4W,1%	1	R3
....2	100-1551	RES,15K OHM,1/4W,1%	2	R5,R8



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	101-502	POT,5K,SINGLE TURN,HORIZONTAL PCB MOUNT	1	R14
....2	103-2744	RES,2.74K OHM,1/4W,1%,METAL	2	R4,R7
....2	103-3163	RES,316 OHM,1/4W,1%,METAL	1	R50
....2	103-3323	RES,332 OHM,1/4W,1%,METAL	1	R13
....2	103-4741	RES,4.75K OHM,1/4W,1%,METAL	1	R16
....2	103-4755	RES,47.5K OHM,1/4W,1%,METAL	1	R18
....2	103-5623	RES,562 OHM,1/4W,1%,METAL	1	R10
....2	145-030-C	RESISTOR, 3.3 OHM 1/4 WATT 5% CARBON COMP 30BJ250	1	R12
....2	145-680-C	Resistor, 68 ohm 1/4 watt 5% carbon comp 30BJ250	2	R6,R9
....2	210-0120	TSTR,TIP120 NPN SILICON PWR	1	Q50
....2	217-103	CAP,0.1UF 250VDC 5%,POLY FILM	3	C11,C17,C35
....2	217-104	CAPACITOR, .01 UF 50V GMV DISC	3	C2,C4,C9
....2	230-103	CAPACITOR, VARIABLE 1.3-5.4PF	2	C27,C28
....2	230-109	Capacitor, variable, 1.9-15.7 pf	2	C36,C37
....2	241-100	CAPACITOR, UNCASSED MICA 10PF 5% FWM602	1	C24
....2	241-120	CAPACITOR, UNCASSED MICA 12PF 5% FWM602	1	C39
....2	241-330	CAPACITOR, UNCASSED MICA 33PF 5% FWM602	1	C29
....2	253-471	CAPACITOR, 470 PF 50V 10% Y5P DISC	1	C31
....2	255-010	Capacitor, 1 pf 5% type QC	2	C13,C20
....2	255-020	Capacitor, 2 pf 5% type QC	1	C6
....2	255-030-1	CAPACITOR, 3 pF 5% NPO DISC	1	C12B
....2	255-100	CAPACITOR, 10 PF 5% NPO DISC	1	C19
....2	255-150	CAPACITOR, 15 pF 5% NPO DISC	1	C21
....2	255-220	CAPACITOR, 22 pF 5% NPO DISC	1	C1
....2	255-270	CAPACITOR, 27 PF, 5%, NPO, DISC	2	C22,C12A
....2	255-390C	Capacitor, 39pF 5% 200V ceramic dipped C322C390J2G5CA	1	C5
....2	255-470C	CAP, 47pF 5% 200V CERAMIC DIPPED	1	C14
....2	255-750	CAPACITOR, 75 pF 5% NPO DISC	1	C15
....2	256-151	CAPACITOR, 150 pF 5% NPO DISC	1	C8
....2	256-680C	Cap., 68pF 5% 200V ceramic dipped Kemet C317C680J2G5CA	1	C7
....2	268-102	CAPACITOR, .001 uF 50V DISC - 20+80%	8	C10,C16,C18,C23, C25,C30,C34,C38
....2	268-203	CAPACITOR, .02 UF 50V Z5U DISC	1	C3
....2	270-102	Cap,monolithic,1000pf 50v 5%KemetC1206C102J5GACTR marked	1	C26
....2	299-220	Capacitor, tantalum, 2.2 mf 25v ECS- F1EE225K Panasonic	1	C33
....2	350-038	INDUCTOR, 1 1/2 TURN BROWN COILCRAFT 144-01J12S	2	L5,L6
....2	350-039	INDUCTOR, 2 1/2 TURN RED	2	L3,L4
....2	350-040	INDUCTOR, 6 1/2 TURN BLUE	2	L1,L2
....2	350-118	Inductor, 1-1/2 turn 14 AWG Buss Wire (CCW)	1	L13
.....3	580-142	Buss Wire, 14AWG Solid Tinned Copper	0.198	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	350-120	Inductor, 1 1/2 turn 14 AWG Buss Wire (CW)	3	L8,L9,L10
.....3	580-142	Buss Wire, 14AWG Solid Tinned Copper	0.198	
....2	350-121	INDUCTOR, 10 TURN .15 uH	1	L12
....2	407-0132	WASH,SHOULDER #4 .215 OD POLY	1	
....2	409-7403	PAD,TSTR MTG,TO-220 CASE	1	
....2	412-494	DIODE, GERMANIUM 1N270 (note)	2	D1,D2
....2	414-007	Diode, General Instruments 1N4007	1	D3
....2	420-4106	SCREW,4-40X.375,S.S. PH	1	
....2	420-629-1	Transistor, BLX-65ES	1	Q5
....2	421-4007	4-40 X .187 S.S. HEX NUT	1	
....2	422-857	Transistor, Motorola 2N2857	3	Q1,Q2,Q3
....2	423-4001	#4 FLAT SS .250 X .125 X .018	1	
....2	423-4002	#4 LOCK S.S. SPLIT	1	
....2	424-427	TRANSISTOR, MOTOROLA/SGS/MICRO SEMI 2N4427 SRF944	1	Q4
....2	455-7805	HEATSINK,TO-220PKG,LOW PROFILE	1	
....2	513-016A3	Coil, 3 turn Bead #27AWG	1	L11
.....3	513-016	Ferrite Bead, #56-590-65/4B	1	
.....3	580-105	Magnet Wire, #27AWG Single Nyleze	0.004	
....2	520-049	Heatsink, Thermalloy 2260R red or black	1	Q4
....2	550-084	CONNECTOR,PHONO JACK,PCB MOUNT	2	J1,J2
....2	550-197	Header, Breakaway 4x2,0.1 Spacing(Cut from 550-316)"	1	P1
.....3	550-316	HEADER, BREAKAWAY 40x2, 0.1 SPACING"	0.1	
....2	800-163B	PC Board, Multiplier RPT-2/15/30 STL- 10	1	PCB
..1	800-166A	RPU Audio Board	1	
....2	100-1013	RES,1 OHM,1/4W,5%	1	R48
....2	100-1041	RES,1K OHM,1/4W,1%	1	R43
....2	100-1551	RES,15K OHM,1/4W,1%	1	R46
....2	215-102	CAPACITOR, .001 uFD 2.5% 100V POLYPRO	1	C23
....2	800-166CM	Generic RPU Audio Board Assembly (SBCM)	1	
.....3	033-0123	CAPACITOR, .012 MFD 1% 100V POLYPRO	2	C20,C22
.....3	100-1041	RES,1K OHM,1/4W,1%	1	R1
.....3	100-1051	RES,10K OHM,1/4W,1%	1	R34
.....3	100-1531	RES,150 OHM,1/4W,1%	1	R5
.....3	101-104	Potentiometer, 100K ohm cermet Bourns 3309P-1-104	2	R26,R33
.....3	101-502	POT,5K,SINGLE TURN,HORIZONTAL PCB MOUNT	1	R22
.....3	103-1007	RES,1 MEG OHM,1/4W,1%,METAL	2	R38,R39
.....3	103-1062	RES,100K OHM,1/4W,1%,METAL	4	R6,R11,R12,R17
.....3	103-1823	RES,182 OHM,1/4W,1%,METAL	1	R3
.....3	103-2211	RES,22.1K OHM,1/4W,1%,METAL	1	R32
.....3	103-2216	RES,221K OHM,1/4W,1%,METAL	1	R31
.....3	103-2241	RES,2.21K OHM,1/4W,1%,METAL	1	R27



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
.....3	103-2744	RES,2.74K OHM,1/4W,1%,METAL	2	R24,R45
.....3	103-3323	RES,332 OHM,1/4W,1%,METAL	1	R13
.....3	103-3324	RES,3.32K OHM,1/4W,1%,METAL	2	R32
.....3	103-3325	RES,33.2K OHM,1/4W,1%,METAL	1	R16
.....3	103-3924	RES,3.92K OHM,1/4W,1%,METAL	3	R8,R10,R15
.....3	103-4731	RES,475K OHM,1/4W,1%,METAL	3	R20,R35,R36
.....3	103-4741	RES,4.75K OHM,1/4W,1%,METAL	1	R25
.....3	103-4755	RES,47.5K OHM,1/4W,1%,METAL	1	R2
.....3	103-5623	RES,562 OHM,1/4W,1%,METAL	1	R41
.....3	104-105	POTENTIOMETER, 1MEG OHM TOP ADJUST	1	R37
.....3	145-030	RESISTOR, 3.3 OHM 1/4 WATT 1% METAL FILM MEPCO SFR25	1	R9
.....3	145-106	Resistor, 10 meg ohm 1/4 watt 5% metal film Mepco SFR25	1	R29
.....3	145-221	Resistor, 220 ohm 1/4 watt 1% metal film Mepco SFR25	1	R17
.....3	145-225	Resistor, 2.21 meg ohm 1/4 watt 1% metal film (2.21 Meg 1%)	4	R19,R28,R40,R42
.....3	145-472	OBSOLETE REPLACE W/103-4741 (NLU-03)	0	
.....3	145-681	RESISTOR, 681 OHM 1/4 WATT 1% METAL FILM MEPCO SFR25	1	R4
.....3	145-822	Resistor, 8.25k ohm 1/4 watt 1% metal film Mepco SFR25	2	R14,R44
.....3	145-825	Resistor, 8.2 meg ohm 1/4 watt 5% carbon film 29SJ250	1	R30
.....3	203-4148	DIODE,1N4148	5	D1,D2,D3,D4,D5
.....3	215-223	Capacitor, .022 mfd 2.5% 100v polypro Seacor PFWAC220HGUE	1	C25
.....3	215-392	Capacitor, .0039 mfd 2.5% polypro	1	C26
.....3	215-822	CAPACITOR, .0082 MFD 2.5% 100V POLYPRO	1	C11
.....3	217-103	CAP,0.1UF 250VDC 5%,POLY FILM	1	C16
.....3	217-104	CAPACITOR, .01 UF 50V GMV DISC	2	C12,C28
.....3	219-106	CAPACITOR, 10UF 50V RADIAL ELECTROLYTIC	2	C3,C18
.....3	219-220	CAPACITOR, ELECTROLYTIC 22uF RADIAL 35V	3	C4,C21,C30
.....3	219-221	CAPACITOR, ELECTROLYTIC 220uF 25V RADIAL	3	C9,C13,C14
.....3	226-274	Cap.,.27 mf 100v 10% polypro CD MTC1P27K OR Bishop C21B274K	2	C7,C31
.....3	253-471	CAPACITOR, 470 PF 50V 10% Y5P DISC	3	C1,C15,C29
.....3	255-470C	CAP, 47pF 5% 200V CERAMIC DIPPED	2	C24,C27
.....3	256-680C	Cap., 68pF 5% 200V ceramic dipped Kemet C317C680J2G5CA	1	C10
.....3	270-102	Cap,monolithic,1000pf 50v 5%KemetC1206C102J5GACTR marked	10	C32,C33,C34,C35, C36,C37,C38,C39, C40,C41
.....3	299-470	CAP, TANTALUM, 4.7 UF 16V	3	C2,C17,C19
.....3	350-032	Inductor, 387-150M 40000-150000 uH	1	L1
.....3	401-054	Integrated Circuit, SGS TDA1054M	1	IC1



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
.....3	403-900	IC, QUADRUPLE NORTON OP AMP	1	IC2
.....3	414-007	Diode, General Instruments 1N4007	1	D6
.....3	550-123	Connector, 10 pin header (cut from 550-162)	1	P1
.....4	550-162	Connector, 24 pin break-away (straight) Molex 26-48-6248	0.417	
.....3	800-166B	PC Board, Audio RPT-2/15/30	1	
..1	800-166AT	TSL Audio Board	1	
....2	100-1013	RES,1 OHM,1/4W,5%	1	R48
....2	100-1041	RES,1K OHM,1/4W,1%	1	
....2	145-822	Resistor, 8.25k ohm 1/4 watt 1% metal film Mepco SFR25	1	R46
....2	215-223	Capacitor, .022 mfd 2.5% 100v polypro Seacor PFWAC220HGUE	1	C23
....2	421-1113	RIV,CLOSED-END .125 X .316L	2	
....2	800-166CM	Generic RPU Audio Board Assembly (SBCM)	1	
.....3	033-0123	CAPACITOR, .012 MFD 1% 100V POLYPRO	2	C20,C22
.....3	100-1041	RES,1K OHM,1/4W,1%	1	R1
.....3	100-1051	RES,10K OHM,1/4W,1%	1	R34
.....3	100-1531	RES,150 OHM,1/4W,1%	1	R5
.....3	101-104	Potentiometer, 100K ohm cermet Bourns 3309P-1-104	2	R26,R33
.....3	101-502	POT,5K,SINGLE TURN,HORIZONTAL PCB MOUNT	1	R22
.....3	103-1007	RES,1 MEG OHM,1/4W,1%,METAL	2	R38,R39
.....3	103-1062	RES,100K OHM,1/4W,1%,METAL	4	R6,R11,R12,R17
.....3	103-1823	RES,182 OHM,1/4W,1%,METAL	1	R3
.....3	103-2211	RES,22.1K OHM,1/4W,1%,METAL	1	R32
.....3	103-2216	RES,221K OHM,1/4W,1%,METAL	1	R31
.....3	103-2241	RES,2.21K OHM,1/4W,1%,METAL	1	R27
.....3	103-2744	RES,2.74K OHM,1/4W,1%,METAL	2	R24,R45
.....3	103-3323	RES,332 OHM,1/4W,1%,METAL	1	R13
.....3	103-3324	RES,3.32K OHM,1/4W,1%,METAL	2	R32
.....3	103-3325	RES,33.2K OHM,1/4W,1%,METAL	1	R16
.....3	103-3924	RES,3.92K OHM,1/4W,1%,METAL	3	R8,R10,R15
.....3	103-4731	RES,475K OHM,1/4W,1%,METAL	3	R20,R35,R36
.....3	103-4741	RES,4.75K OHM,1/4W,1%,METAL	1	R25
.....3	103-4755	RES,47.5K OHM,1/4W,1%,METAL	1	R2
.....3	103-5623	RES,562 OHM,1/4W,1%,METAL	1	R41
.....3	104-105	POTENTIOMETER, 1MEG OHM TOP ADJUST	1	R37
.....3	145-030	RESISTOR, 3.3 OHM 1/4 WATT 1% METAL FILM MEPCO SFR25	1	R9
.....3	145-106	Resistor, 10 meg ohm 1/4 watt 5% metal film Mepco SFR25	1	R29
.....3	145-221	Resistor, 220 ohm 1/4 watt 1% metal film Mepco SFR25	1	R17
.....3	145-225	Resistor, 2.21 meg ohm 1/4 watt 1% metal film (2.21 Meg 1%)	4	R19,R28,R40,R42
.....3	145-472	OBSOLETE REPLACE W/103-4741 (NLU-03)	0	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
.....3	145-681	RESISTOR, 681 OHM 1/4 WATT 1% METAL FILM MEPCO SFR25	1	R4
.....3	145-822	Resistor, 8.25k ohm 1/4 watt 1% metal film Mepco SFR25	2	R14,R44
.....3	145-825	Resistor, 8.2 meg ohm 1/4 watt 5% carbon film 29SJ250	1	R30
.....3	203-4148	DIODE,1N4148	5	D1,D2,D3,D4,D5
.....3	215-223	Capacitor, .022 mfd 2.5% 100v polypro Seacor PFWAC220HGUE	1	C25
.....3	215-392	Capacitor, .0039 mfd 2.5% polypro	1	C26
.....3	215-822	CAPACITOR, .0082 MFD 2.5% 100V POLYPRO	1	C11
.....3	217-103	CAP,0.1UF 250VDC 5%,POLY FILM	1	C16
.....3	217-104	CAPACITOR, .01 UF 50V GMV DISC	2	C12,C28
.....3	219-106	CAPACITOR, 10UF 50V RADIAL ELECTROLYTIC	2	C3,C18
.....3	219-220	CAPACITOR, ELECTROLYTIC 22uF RADIAL 35V	3	C4,C21,C30
.....3	219-221	CAPACITOR, ELECTROLYTIC 220uF 25V RADIAL	3	C9,C13,C14
.....3	226-274	Cap.,.27 mf 100v 10% polypro CD MTC1P27K OR Bishop C21B274K	2	C7,C31
.....3	253-471	CAPACITOR, 470 PF 50V 10% Y5P DISC	3	C1,C15,C29
.....3	255-470C	CAP, 47pF 5% 200V CERAMIC DIPPED	2	C24,C27
.....3	256-680C	Cap., 68pF 5% 200V ceramic dipped Kemet C317C680J2G5CA	1	C10
.....3	270-102	Cap,monolithic,1000pf 50v 5%KemetC1206C102J5GACTR marked	10	C32,C33,C34,C35, C36,C37,C38,C39, C40,C41
.....3	299-470	CAP, TANTALUM, 4.7 UF 16V	3	C2,C17,C19
.....3	350-032	Inductor, 387-150M 40000-150000 uH	1	L1
.....3	401-054	Integrated Circuit, SGS TDA1054M	1	IC1
.....3	403-900	IC, QUADRUPLE NORTON OP AMP	1	IC2
.....3	414-007	Diode, General Instruments 1N4007	1	D6
.....3	550-123	Connector, 10 pin header (cut from 550- 162)	1	P1
.....4	550-162	Connector, 24 pin break-away (straight) Molex 26-48-6248	0.417	
.....3	800-166B	PC Board, Audio RPT-2/15/30	1	
..1	800-167A	RPT-2 Power Supply (note)	1	
....2	101-501	Potentiometer, 500 ohm cermet Bourns 3309P-501	1	R9
....2	103-2241	RES,2.21K OHM,1/4W,1%,METAL	1	
....2	103-4741	RES,4.75K OHM,1/4W,1%,METAL	1	
....2	125-100	Resistor, 10 ohm 2 watt BWH/SPH	1	R3
....2	145-221	Resistor, 220 ohm 1/4 watt 1% metal film Mepco SFR25	1	R7
....2	145-241-1	RESISTOR, 240 OHM 1/4 WATT 1% SFR55 240 1% TR	2	R1,R4
....2	145-300	Resistor, 30 ohm 1/4 watt 5% metal film Mepco SFR	1	R5
....2	145-752	Resistor, 7.5k ohm 1/4 watt 5% metal film Mepco SFR25	1	R10



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	202-0502	RECT,3A,200V,IN5402	2	D10,D13
....2	211-3904	TSTR,2N3904	1	Q1
....2	219-080	Cap,electrolytic 10uF 25V Nichicon TVX1E100MAA	1	C7
....2	219-200	CAPACITOR ELECTROLYTIC 22UF 25V	1	C6
....2	219-472	CAPACITOR, ELECTROLYTIC 4700UF 25V	1	C5
....2	253-471	CAPACITOR, 470 PF 50V 10% Y5P DISC	1	C23
....2	270-102	Cap,monolithic,1000pf 50v 5%KemetC1206C102J5GACTR marked	24	C1,C4,C8,C9,C10, C11,C12,C13,C14, C15,C16,C17,C18, C19,C20,C21,C22, C24,C25,C26,C27, C28,C29,C30
....2	270-103	Cap, Monolithic chip 10000pF 10% XR7 Kemet C1206C103J5RACTR	2	C2,C3
....2	330-018	INDUCTOR, 10 uH, 10%	3	L3,L4,L5
....2	330-019	INDUCTOR, 2.5 TURN, HIGH FREQUENCY SUPPRESSION	1	L1
....2	410-666	Diode, FDH666	1	D8
....2	414-007	Diode, General Instruments 1N4007	7	D1,D2,D3,D4,D5, D7,D12
....2	415-244	Diode, Motorola 1N5244B	1	D11
....2	550-125	Connector, 5 pin Molex Header (cut from 550-162) *NOTE*	1	P2
.....3	550-162	Connector, 24 pin break-away (straight) Molex 26-48-6248	0.208	
....2	550-138	Connector, 8 pin Molex header (cut from 550-162)	1	P1
.....3	550-162	Connector, 24 pin break-away (straight) Molex 26-48-6248	0.333	
....2	550-154	CONNECTOR, D-SUB 9 PIN ANGLE	1	J5
....2	800-167B	PC Board, Power Supply RPT-2	1	
..1	800-169A4	RPT-2/450 Amplifier(COMPLETE ASSEMBLY)	1	
....2	145-470-C	Resistor, 47 ohm 1/4 watt 5% carbon comp 30BJ250	1	R2
....2	145-680-C	Resistor, 68 ohm 1/4 watt 5% carbon comp 30BJ250	1	R1
....2	217-103	CAP,0.1UF 250VDC 5%,POLY FILM	1	C1
....2	219-200	CAPACITOR ELECTROLYTIC 22UF 25V	1	C11
....2	236-501	Capacitor, uncased mica, 500 pf 33v 5% FWJ101	3	C2,C3,C8
....2	240-802	Capacitor, uncased mica, 8.2 pf 33v 5% FWJ101	2	C10,C12
....2	260-100	Capacitor, variable, trimmer 2.5-7 pf FW C4000/OBSM Gullwing	3	C4,C6,C7
....2	260-200	Cap.,variable, trimmer 4-20 pf FW C4002/OBSM Gullwing	1	C5
....2	330-012	Inductor, 15 uH Coilcraft 90-27	1	L10
....2	330-019	INDUCTOR, 2.5 TURN, HIGH FREQUENCY SUPPRESSION	1	L1



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	350-111	Inductor, 3 turn 20 AWG Red (CW)	1	L9
.....3	555-111	COST, LABOR FOR 350-111	1	
.....3	580-103	Magnet Wire, #20AWG Single Nyleze (RED)	0.001	
....2	350-116	Inductor, 1 turn 20 AWG Red (CCW)	2	L8,L11
.....3	555-116	COST, LABOR FOR 350-116	1	
.....3	580-103	Magnet Wire, #20AWG Single Nyleze (RED)	0.001	
....2	350-117	Inductor, 8 turn 22 AWG Red (CCW)	2	L3,L4
.....3	555-117	COST, LABOR FOR 350-117	1	
.....3	580-104	Magnet Wire, #22AWG Single Nyleze (RED)	0.001	
....2	350-149	Inductor, 10 turn 20 AWG Red	1	L12
.....3	555-149	COST, LABOR FOR 350-149	1	
.....3	580-103	Magnet Wire, #20AWG Single Nyleze (RED)	0.001	
....2	410-1416	LUG,TERM,BENT,11/16	2	
....2	410-305-1	Diode, Motorola MBD101	1	D1
....2	425-945	Transistor, RF Power	1	Q1
....2	500-114	Copper Washer, Seastrom 5716-61-.051	1	
....2	500-121	Rivet, 3 x 8 F metric 101203081 M3X8	6	
....2	510-005	Polytube, Manhattan#AF155A-20-yel	0.06	
....2	550-012	CONN, SO-239A UHF PANEL RECEPTACLE	1	J4
....2	586-094	Cable Assembly, RPT2/15 Amplifier (SBCM)	1	
.....3	550-126	Connector, crimp terminal pin Molex 08-50-0187	3	
.....3	550-159	Connector, 4 pin Molex housing 09-50-8040	1	
.....3	580-040	Wire, UL1061 22/7 OTC Black	0.46	
.....3	580-043	Wire, UL1061 22/7 OTC Red	0.46	
.....3	580-046	Wire, UL1061 22/7 OTC Green	0.5	
....2	700-220-10	Cover, RPT-2 Amplifier	1	
....2	700-220-20	Amplifier Connector Plate	1	
....2	703-009	Copper Foil, .0014 x .250"	0.001	
....2	800-169B	PC Board, Power Amp. RPT-2	1	PCB
..1	800-270A	STL-10/RPT2/15 Sm. Feed Thru Board	1	
....2	270-103	Cap, Monolithic chip 10000pF 10% XR7 Kemet C1206C103J5RACTR	3	C1,C2,C3
....2	550-172	Connector, 4 pin Molex angle header long (cut from 550-171)	1	P1
.....3	550-171	Connector, 24 pin break-away (Long pins) Molex 26-58-1241	0.167	
....2	800-270B	PC Board, Feedthru RPT-2/15/STL-10	1	PCB



14 RPT-15 BILL OF MATERIAL

This bill of material uses an indented structure to show relationships of parts into sub assemblies. Example; all BOM LEVEL 2 parts are contained in the BOM LEVEL 1 part immediately above it. BOM level 0 is the top level.



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
0	705-T15-1	RPT-15/150; 120VAC		
..1	320-037L	TRANSFORMER, POWER, RPT15 110V W/LUGS	1	
....2	320-037	TRANSFORMER, POWER, 15906 W/RPT BRACKETS	1	
0	705-T15-12	RPT-15/150; 220VAC		
..1	320-037AL	TRANSFORMER, POWER, RPT15 220V W/LUGS	1	
....2	320-037A	TRANSFORMER, POWER, 16928 W/RPT BRACKETS 220V	1	
0	705-T15-14	RPT-15/150; 240VAC		
..1	320-037CL	TRANSFORMER, POWER RPT15 240V W/LUGS	1	
....2	320-037BC	TRANSFORMER, POWER, 15906C 240V W/STL BRACKETS	1	
....2	550-126	Connector, crimp terminal pin Molex 08- 50-0187	2	
....2	700-220-14	Bracket, RPT-15 Transformer	2	
..1	586-011	Cable Assembly, RPT-2/15 Harness (SBCM)	1	
....2	500-128	Eyelet, GS4-4 brass	1	
....2	550-122	CONNECTOR, 10 PIN MOLEX HOUSING 09-50-8100	1	
....2	550-126	Connector, crimp terminal pin Molex 08- 50-0187	16	
....2	550-133	CONNECTOR, PHONE PLUG 3C1215	1	
....2	550-135	Connector, 6 pin Molex housing 09-50- 8060	1	
....2	580-033	Coax high shield RG-316/U Manhattan M4259	0.44	
....2	580-041	Wire, UL1061 22/7 OTC Brown	0.5	
....2	580-043	Wire, UL1061 22/7 OTC Red	0.46	
....2	580-044	Wire, UL1061 22/7 OTC Yellow	0.54	
....2	580-046	Wire, UL1061 22/7 OTC Green	0.75	
....2	580-047	Wire, UL1061 22/7 OS-1 Orange	0.58	
....2	580-051	Wire, UL1061 22/7 OTC White/Blue	0.57	
....2	580-088	Shielded Wire, 16-C-22-SPJ White/Red 1 Cond. 22/19x34 pvc	0.61	
....2	580-089	Shielded Wire, 16-C-22-SPJ White/Orange 1 cond 22/19x34 pvc	0.44	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	580-091	Shielded Wire, 16-C-22-SPJ White/Green 1 Cond.22/19x34 pvc	0.46	
....2	580-092	Shielded Wire, 16-C-22-SPJ White/Blue 1 Cond.22/19x34 pvc	0.46	
..1	586-057	Cable Assembly, RPT-2/15 14.5 Internal TAC-9720 (SBCM)"	1	
..1	586-087	Cable Assembly, RPT-15 #1 Altair TAC 9717 (SBCM)	1	
....2	550-122	CONNECTOR, 10 PIN MOLEX HOUSING 09-50-8100	1	
....2	550-126	Connector, crimp terminal pin Molex 08- 50-0187	7	
....2	580-041	Wire, UL1061 22/7 OTC Brown	0.54	
....2	580-045	Wire, UL1061 22/7 OTC Blue	0.44	
....2	580-046	Wire, UL1061 22/7 OTC Green	0.52	
....2	580-048	Wire, UL1061 22/7 OTC Violet	0.82	
....2	580-050	Wire, UL1061 22/7 OS-1 White/Red	0.61	
....2	580-059	Wire, UL1061 22/7 OTC Yellow/Blue	0.92	
....2	580-133	Wire, UL1061-18/16 #18 Red #M370-2	0.46	
....2	580-137	Wire, UL1061 18/19 #18 Orange Tinned Copper	0.47	
..1	586-088	Cable Assembly, RPT-15 #2 Altair TAC 9721 (SBCM)	1	
....2	510-090	Cable Ties, 4 Panduit PANPLT1M-M MS3367-4-9"	3	
....2	550-122	CONNECTOR, 10 PIN MOLEX HOUSING 09-50-8100	1	
....2	550-124	Connector, 5 pin Molex housing 09-50- 8050 *NOTE*	1	
....2	550-126	Connector, crimp terminal pin Molex 08- 50-0187	16	
....2	550-159	Connector, 4 pin Molex housing 09-50- 8040	1	
....2	550-205	Connector pins, Molex 16-02-0086	8	
....2	550-222	Connector, 8 dual row housing Molex 22- 55-2081	1	
....2	580-041	Wire, UL1061 22/7 OTC Brown	0.73	
....2	580-046	Wire, UL1061 22/7 OTC Green	0.94	
....2	580-048	Wire, UL1061 22/7 OTC Violet	0.73	
....2	580-050	Wire, UL1061 22/7 OS-1 White/Red	0.38	
....2	580-059	Wire, UL1061 22/7 OTC Yellow/Blue	1.84	
....2	580-133	Wire, UL1061-18/16 #18 Red #M370-2	1.02	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	580-136	Wire, UL1061-18/16 #18 Blue	0.4	
....2	580-137	Wire, UL1061 18/19 #18 Orange Tinned Copper	0.73	
..1	700-220-13A	RPT-15 Final Assembly	1	
....2	030-034M	Meter, VU	1	
.....3	030-033	200 Micro-Amp Meter	1	
.....3	030-033-1	VU Meter Scales	1	
....2	100-103	POT, 10K OHM TYPE T270D VH4340 EXC.270	2	
....2	100-1551	RES,15K OHM,1/4W,1%	1	
....2	145-431	Resistor, 432 ohm 1/4 watt 1% metal film Mepco SFR25	1	
....2	236-501	Capacitor, uncased mica, 500 pf 33v 5% FWJ101	2	
....2	253-471	CAPACITOR, 470 PF 50V 10% Y5P DISC	1	
....2	297-222	Cap,.0022mf 400v ceramic disc MURATA DE1007E222M-KH	2	
....2	334-0150	FUSE,3AG,1.5 AMP,SLO-BLO	1	
....2	402-0005	PRESS CLIP,NYLON W/ADHESIVE BACK	1	
....2	410-1410	LUG,TERM,1/2	2	
....2	420-4104	SCREW,4-40X.250,S.S. PH	19	
....2	420-4296	SCREW,4-40X.375,PH PAN HD SC	4	
....2	420-4503	SCREW,4-40X.187,S.S. PH UC	2	
....2	420-6108	SCREW,6-32X.500,S.S. PH	4	
....2	421-6005	6-32 ELASTIC STOP HEX NUT	4	
....2	423-6003	#6 LOCK INT TOOTH	6	
....2	500-002	Hex Nut, #4-40 Extra Small Pattern Nickel Plated	2	
....2	500-022	Screw, 6-32 x 3/8 phillips pan head M/S nickel plated"	8	
....2	500-055	Lockwasher, #4 internal tooth small pattern zinc plated	2	
....2	500-105	Pop-Rivet, AD42BS Aluminum	14	
....2	500-115	Pop-Rivet, SK42BS counter sunk	8	
....2	500-121	Rivet, 3 x 8 F metric 101203081 M3X8	4	
....2	500-123	Washer, Switchcraft #S1790-1	2	
....2	500-162	Screw, 4-40 x 7/16 phillips pan head MS zinc plated"	2	
....2	500-180	Screw, 4-40 x 1/4 phillips pan head M/S Black Zinc"	4	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	500-181	Screw, #4 x 1/4 phillips pan head S/M Black Zinc"	2	
....2	500-183	Screw, 6-32 x 1/4 phillips pan head Black Zinc"	14	
....2	500-188	Screw, 4-40 x 3/8 phillips,flat head,black oxide"	2	
....2	500-199	Keps nut 4 x 40 zinc 4CNKEOZ	13	
....2	500-245	Lock Washer, 1/4 Internal Tooth L/W Zinc"	2	
....2	510-002	Shrink-Tubing, 3/4 black W3B2 3/4" Sumitomo"	0.06	
....2	510-005	Polytube, Manhatten#AF155A-20-yel	0.54	
....2	510-072	Fuseholder, Littlefuse #342-004	1	
....2	510-090	Cable Ties, 4 Panduit PANPLT1M-M MS3367-4-9"	10	
....2	510-191	#4 Bracket, Keystone 612	12	
....2	510-192	Connector, AC receptacle, Switchcraft EAC-309	1	
....2	510-210	Brackets, #6 Keystone 634	2	
....2	510-246	Flexible Grommet, (NOTE)	0.01	
....2	512-008	Solder Lug, #4 Concord 707-1404	2	
....2	513-027	Spacer, 4-40 x 1-1/4 hex threaded EFJ 313-6477-040	2	
....2	513-030	SPACER, 6-32 X 15/16 HEX THREADED	4	
....2	520-046	Heatsink, Thermalloy 1116B round	1	
....2	550-083	Connector, Tini-Jax Switchcraft 41	2	
....2	550-155-2	Connector Shell XLR Receptacle DH- NF-BAG-O	1	
....2	580-005	Buss Wire, #22AWG Solid Tinned Copper	0.79	
....2	580-040	Wire, UL1061 22/7 OTC Black	0.75	
....2	580-130	Wire, Stranded UL1015-20/10 Black Tinned Copper	0.38	
....2	580-138	Flat Braid, 1/4 #1231"	0.08	
....2	700-091-15	Mounting Bracket, RPT-2/15 Meter	2	
....2	700-220-16A	RPT-2/15 Multiplier Heat Sink Assembly	1	
.....3	500-113	Screw, 4-40 x 1/8 slotted pan head M/S zinc plated"	1	
.....3	520-046	Heatsink, Thermalloy 1116B round	1	
.....3	700-220-16	Copper Heatsink, RPT-2/15	1	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	700-260	Fingerstock,Angle Chomerics 81-01-11817-2000-24 No Adhesive	0.07	
....2	DB61024	Washer, TO-220 Shoulder NYL Thermalloy #7721-7PPS	2	
..1	700-220-13P	Front Panel, RPT-15 (SBCM)	1	
....2	500-073	Fastener, PEM S-632-1 ZI	2	
....2	500-184	RIVET, 1/8 x .165 SEMI-TUBULAR BLACK 100 CE100732	8	
....2	510-191	#4 Bracket, Keystone 612	2	
....2	530-001	Switch, slide DPDT Switchcraft	1	
....2	530-018	Switch, slide DPIT Switchcraft 46313LDR	1	
....2	530-021	Switch, slide TPTT Switchcraft 11H-1086	1	
....2	700-220-13	Front Panel, RPT-15	1	
.....3	698-220-13	Front Panel, RPT-15 Bare Metal	1	
.....3	699-220-13	Front Panel, RPT-15 Contract Labor Painting	1	
..1	700-220-18	Cover, RPT-2/15/30 Modular .032 aluminum	1	
..1	700-220-2P	Rear Panel, RPT-2/15 (SBCM)	1	
....2	500-073	Fastener, PEM S-632-1 ZI	2	
....2	700-220-2	Rear Panel, RPT-2/15	1	
..1	700-220-3P	Frame, R/H Side RPT-2/15 (SBCM)	1	
....2	500-073	Fastener, PEM S-632-1 ZI	4	
....2	700-220-3	Frame, R/H Side RPT-2/15	1	
..1	700-220-4P	Frame, L/H Side RPT-2/15 (SBCM)	1	
....2	500-073	Fastener, PEM S-632-1 ZI	4	
....2	700-220-4	Frame, L/H Side RPT-2/15	1	
..1	700-220-5P	Top Cover, RPT-2/15 w/feet (SBCM)	1	
....2	500-119	Rivet, CE100 7/32 steel nickel	2	
....2	500-127	Washer, C-126=820W Brass/Nickel Plated	2	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	510-205	BUMPER, BRUCE PLASTICS 0772-0014 BLACK	2	
....2	700-220-5	Top Cover, RPT-2/15	1	
..1	700-220-6P	Bottom Cover, RPT-2/15 w/ft & hand (SBCM)	1	
....2	500-119	Rivet, CE100 7/32 steel nickel	6	
....2	500-127	Washer, C-126=820W Brass/Nickel Plated	8	
....2	500-186	Rivet, 1/8 x .312 semi-tubular standard finish	2	
....2	510-132	Handle Assy., black w/black plated steel hdwe #1879-376-370	1	
....2	510-205	BUMPER, BRUCE PLASTICS 0772-0014 BLACK	6	
....2	700-220-6	Bottom Cover, RPT-2/15	1	
..1	700-220-7PB	Partition, RPT-2/15 #1 w/bd	1	
....2	420-4104	SCREW,4-40X.250,S.S. PH	4	
....2	500-199	Keps nut 4 x 40 zinc 4CNKEOZ	4	
....2	700-220-7	Partition, RPT-2/15 #1	1	
....2	800-254A	RPU/STL-30 Feed-Thru Board	1	
.....3	270-102	Cap,monolithic,1000pf 50v 5%KemetC1206C102J5GACTR marked	10	C1,C2,C3,C4, C5,C6,C7,C8, C9,C10
.....3	550-156	Connector, 10 pin Molex header 26-48-4102 *NOTE*	1	P1/P2
.....3	800-254B	PC Board, Feed-thru RPT-2/15/30	1	PCB
..1	700-220-8	Partition, RPT-2/15 #2	1	
..1	800-160A1	RPU 150/215/300 Modulator Board	1	
....2	100-1041	RES,1K OHM,1/4W,1%	1	R17
....2	101-104	Potentiometer, 100K ohm cermet Bourns 3309P-1-104	2	R1,R2
....2	103-2744	RES,2.74K OHM,1/4W,1%,METAL	1	R9



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	103-4741	RES,4.75K OHM,1/4W,1%,METAL	1	
....2	103-4755	RES,47.5K OHM,1/4W,1%,METAL	4	R3,R4,R5,R6
....2	104-502	Potentiometer, 5K ohm cermet Spectrol 64Y502 top adjust	1	R8
....2	145-030	RESISTOR, 3.3 OHM 1/4 WATT 1% METAL FILM MEPCO SFR25	2	R10,R16
....2	145-122-1	Resistor, 1.2k ohm 1/4 watt 1% CCF07 1.2K MF TR	1	R13
....2	145-182-1	RESISTOR, 1.8K OHN 1/4 WATT 1% RL07S182G MF	1	R14
....2	145-241-1	RESISTOR, 240 OHM 1/4 WATT 1% SFR55 240 1% TR	2	R7,R12
....2	145-363-1	Resistor, 36k ohm 1/4 watt 1% RL07S363G	2	R11,R18
....2	203-4148	DIODE,1N4148	1	D1
....2	217-103	CAP,0.1UF 250VDC 5%,POLY FILM	3	C3,C4,C11
....2	217-104	CAPACITOR, .01 UF 50V GMV DISC	1	C8
....2	219-220	CAPACITOR, ELECTROLYTIC 22uF RADIAL 35V	1	C10
....2	255-161	CAPACITOR, 160 PF 300V 5% SIVLER MICA	1	C6
....2	255-241	Capacitor, 240 pf 500v 5% silver mica CD10FD241J03	1	C7
....2	255-271C	CAPACITOR, 270pF 5% 200V CERAMIC DIPPED	1	C5
....2	299-470	CAP, TANTALUM, 4.7 UF 16V	3	C1,C2,C9
....2	330-007	Inductor, 1 uH Dale IM-2 1UH 5%	1	L5
....2	350-025	INDUCTOR, 1.5 - 3 UH WITH SHIELD CAN #47271-021	2	L2,L3
....2	350-037	INDUCTOR, 13 1/2 TURN ORANGE COILCRAFT 143-13J12S	2	L1,L4



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	411-404	DIODE,MOT. HYPER-ABRUPT TUNING SMV-1732/CRYSTALONICS MV1404	1	
....2	440-245-1	TRANSISTOR, 2N2857	1	Q1
....2	511-038	Terminal, Keystone 1238	1	TP1
....2	520-040	CRYSTAL SOCKET, CS-109-07	2	Y1,Y2
....2	520-041	Clip, transistor, Atlee 100-200-1-2 cad plated	1	Q1
....2	530-051	SWITCH, SIDE ACTION SLIDE DPDT	1	S1
....2	550-136	Connector, 6 pin Molex header (cut from 550-162)	1	P1
.....3	550-162	Connector, 24 pin break-away (straight) Molex 26-48-6248	0.25	
....2	800-160-1A	X-Mitter Freq. Control Module (oven w/diode)	1	IC1/M1/Q2
.....3	120-002	THERMISTOR, 1000 OHM @ 25C 10%	1	
.....3	125-150	Resistor, 15 ohm 5% BWH/SPH	1	
.....3	401-338	IC, SMT, REGULATOR, 5 AMP, LM338T *NOTE*	1	
.....3	450-110	Transistor, SGS TIP-110	1	
.....3	500-130	Screw, #4 x 1/4 slot. hex wash hd type B tapping zinc plate"	2	
.....3	510-235	Caplug, 5/32SCx5/8 230801HB	1	
.....3	520-045	Oven can	1	
.....3	DB61024	Washer, TO-220 Shoulder NYL Thermalloy #7721-7PPS	2	
.....3	DB68027	Sil Pad TO220 .75x.5" ADHSV Berquist 3223-07AC-58"	2	
....2	800-160B	PC Board, Modulator RPT-2/15	1	PCB
..1	800-163A1	X-mitter 150 Multiplier	1	
....2	046-0022	CAP,MICA,RF,22PF	2	C24,C39
....2	100-1041	RES,1K OHM,1/4W,1%	2	R1,R17
....2	100-1051	RES,10K OHM,1/4W,1%	2	R2,R11



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	100-1551	RES,15K OHM,1/4W,1%	1	R5
....2	101-502	POT,5K,SINGLE TURN,HORIZONTAL PCB MOUNT	1	R14
....2	103-2744	RES,2.74K OHM,1/4W,1%,METAL	1	R4
....2	103-3163	RES,316 OHM,1/4W,1%,METAL	1	R50
....2	103-3323	RES,332 OHM,1/4W,1%,METAL	1	R10
....2	103-4753	RES,475 OHM,1/4W,1%,METAL	2	R13,R16
....2	103-4755	RES,47.5K OHM,1/4W,1%,METAL	1	R18
....2	145-030	RESISTOR, 3.3 OHM 1/4 WATT 1% METAL FILM MEPCO SFR25	1	R12
....2	145-101	RESISTOR, 100 OHM 1/4 WATT 1% METAL FILM MEPCO SFR25	1	R3
....2	145-680-C	Resistor, 68 ohm 1/4 watt 5% carbon comp 30BJ250	1	R6
....2	210-0120	TSTR,TIP120 NPN SILICON PWR	1	Q50
....2	217-103	CAP,0.1UF 250VDC 5%,POLY FILM	2	C11,C35
....2	217-104	CAPACITOR, .01 UF 50V GMV DISC	3	C2,C4,C9
....2	230-109	Capacitor, variable, 1.9-15.7 pf	2	C27,C28
....2	241-470	CAPACITOR, UNCASED MICA 47PF 5% FWM602	1	C29
....2	253-471	CAPACITOR, 470 PF 50V 10% Y5P DISC	1	C31
....2	255-020	Capacitor, 2 pf 5% type QC	2	C6,C13
....2	255-241	Capacitor, 240 pf 500v 5% silver mica CD10FD241J03	2	C1,C8
....2	255-750	CAPACITOR, 75 pF 5% NPO DISC	1	C5
....2	256-131	CAPACITOR, 130 pF 5% 50V NPO DISC	1	C22
....2	256-151	CAPACITOR, 150 pF 5% NPO DISC	1	C7



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	256-680C	Cap., 68pF 5% 200V ceramic dipped Kemet C317C680J2G5CA	2	C12,C14
....2	268-102	CAPACITOR, .001 uF 50V DISC -20%	6	C10,C23,C25, C30,C34,C38
....2	268-203	CAPACITOR, .02 UF 50V Z5U DISC	1	C3
....2	270-102	Cap,monolithic,1000pf 50v 5%KemetC1206C102J5GACTR marked	1	C26
....2	290-521	CAP, VARIABLE, 5-25 pf	2	C36,C37
....2	299-220	Capacitor, tantalum, 2.2 mf 25v ECS- F1EE225K Panasonic	1	C33
....2	330-020	Inductor, .33 uH Coilcraft 90-07	1	L12
....2	330-021	INDUCTOR, 3.3uH AXIAL LEAD CHOKE	1	L11
....2	350-039	INDUCTOR, 2 1/2 TURN RED	2	L3,L4
....2	350-040	INDUCTOR, 6 1/2 TURN BLUE	2	L1,L2
....2	350-152	Inductor, 6 turn 22 AWG Red CW 215 Mult.	1	L8
....2	350-153	Inductor, 4 turn 20 AWG Buss Wire CW	1	L10
....2	350-156	Inductor, 6 turn 20 AWG Red CCW	1	L13
.....3	580-103	Magnet Wire, #20AWG Single Nyleze (RED)	0.012	
....2	350-164	Inductor, 4 turn 22 AWG Red	1	L9
....2	407-0132	WASH,SHOULDER #4 .215 OD POLY	1	
....2	409-7403	PAD,TSTR MTG,TO-220 CASE	1	
....2	412-494	DIODE, GERMANIUM 1N270 (note)	2	D1,D2
....2	414-007	Diode, General Instruments 1N4007	1	D3
....2	420-237	Transistor, Micro Semi SD1127	1	Q5
....2	420-4106	SCREW,4-40X.375,S.S. PH	1	
....2	421-4007	4-40 X .187 S.S. HEX NUT	1	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	423-4001	#4 FLAT SS .250 X .125 X .018	1	
....2	423-4002	#4 LOCK S.S. SPLIT	1	
....2	424-427	TRANSISTOR, MOTOROLA/SGS/MICRO SEMI 2N4427 SRF944	1	Q4
....2	440-245-1	TRANSISTOR, 2N2857	2	Q1,Q2
....2	455-7805	HEATSINK,TO-220PKG,LOW PROFILE	1	
....2	520-049	Heatsink, Thermalloy 2260R red or black	1	Q4
....2	550-084	CONNECTOR,PHONO JACK,PCB MOUNT	2	J1,J2
....2	550-197	Header, Breakaway 4x2,0.1 Spacing(Cut from 550-316)"	1	P1
.....3	550-316	HEADER, BREAKAWAY 40x2, 0.1 SPACING"	0.1	
....2	580-046	Wire, UL1061 22/7 OTC Green	0.105	
....2	800-163B	PC Board, Multiplier RPT-2/15/30 STL- 10	1	PCB
..1	800-166A	RPU Audio Board	1	
....2	100-1013	RES,1 OHM,1/4W,5%	1	R48
....2	100-1041	RES,1K OHM,1/4W,1%	1	R43
....2	100-1551	RES,15K OHM,1/4W,1%	1	R46
....2	215-102	CAPACITOR, .001 uFD 2.5% 100V POLYPRO	1	C23
....2	800-166CM	Generic RPU Audio Board Assembly (SBCM)	1	
.....3	033-0123	CAPACITOR, .012 MFD 1% 100V POLYPRO	2	C20,C22
.....3	100-1041	RES,1K OHM,1/4W,1%	1	R1
.....3	100-1051	RES,10K OHM,1/4W,1%	1	R34
.....3	100-1531	RES,150 OHM,1/4W,1%	1	R5
.....3	101-104	Potentiometer, 100K ohm cermet Bourns 3309P-1-104	2	R26,R33



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
.....3	101-502	POT,5K,SINGLE TURN,HORIZONTAL PCB MOUNT	1	R22
.....3	103-1007	RES,1 MEG OHM,1/4W,1%,METAL	2	R38,R39
.....3	103-1062	RES,100K OHM,1/4W,1%,METAL	4	R6,R11,R12,R 17
.....3	103-1823	RES,182 OHM,1/4W,1%,METAL	1	R3
.....3	103-2211	RES,22.1K OHM,1/4W,1%,METAL	1	R32
.....3	103-2216	RES,221K OHM,1/4W,1%,METAL	1	R31
.....3	103-2241	RES,2.21K OHM,1/4W,1%,METAL	1	R27
.....3	103-2744	RES,2.74K OHM,1/4W,1%,METAL	2	R24,R45
.....3	103-3323	RES,332 OHM,1/4W,1%,METAL	1	R13
.....3	103-3324	RES,3.32K OHM,1/4W,1%,METAL	2	R32
.....3	103-3325	RES,33.2K OHM,1/4W,1%,METAL	1	R16
.....3	103-3924	RES,3.92K OHM,1/4W,1%,METAL	3	R8,R10,R15
.....3	103-4731	RES,475K OHM,1/4W,1%,METAL	3	R20,R35,R36
.....3	103-4741	RES,4.75K OHM,1/4W,1%,METAL	1	R25
.....3	103-4755	RES,47.5K OHM,1/4W,1%,METAL	1	R2
.....3	103-5623	RES,562 OHM,1/4W,1%,METAL	1	R41
.....3	104-105	POTENTIOMETER, 1MEG OHM TOP ADJUST	1	R37
.....3	145-030	RESISTOR, 3.3 OHM 1/4 WATT 1% METAL FILM MEPCO SFR25	1	R9
.....3	145-106	Resistor, 10 meg ohm 1/4 watt 5% metal film Mepco SFR25	1	R29
.....3	145-221	Resistor, 220 ohm 1/4 watt 1% metal film Mepco SFR25	1	R17
.....3	145-225	Resistor, 2.21 meg ohm 1/4 watt 1% metal film (2.21 Meg 1%)	4	R19,R28,R40, R42
.....3	145-472	OBSOLETE REPLACE W/103-4741 (NLU-03)	0	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
.....3	145-681	RESISTOR, 681 OHM 1/4 WATT 1% METAL FILM MEPCO SFR25	1	R4
.....3	145-822	Resistor, 8.25k ohm 1/4 watt 1% metal film Mepco SFR25	2	R14,R44
.....3	145-825	Resistor, 8.2 meg ohm 1/4 watt 5% carbon film 29SJ250	1	R30
.....3	203-4148	DIODE,1N4148	5	D1,D2,D3,D4, D5
.....3	215-223	Capacitor, .022 mfd 2.5% 100v polypro Seacor PFWAC220HGUE	1	C25
.....3	215-392	Capacitor, .0039 mfd 2.5% polypro	1	C26
.....3	215-822	CAPACITOR, .0082 MFD 2.5% 100V POLYPRO	1	C11
.....3	217-103	CAP,0.1UF 250VDC 5%,POLY FILM	1	C16
.....3	217-104	CAPACITOR, .01 UF 50V GMV DISC	2	C12,C28
.....3	219-106	CAPACITOR, 10UF 50V RADIAL ELECTROLYTIC	2	C3,C18
.....3	219-220	CAPACITOR, ELECTROLYTIC 22uF RADIAL 35V	3	C4,C21,C30
.....3	219-221	CAPACITOR, ELECTROLYTIC 220uF 25V RADIAL	3	C9,C13,C14
.....3	226-274	Cap.,.27 mf 100v 10% polypro CD MTC1P27K OR Bishop C21B274K	2	C7,C31
.....3	253-471	CAPACITOR, 470 PF 50V 10% Y5P DISC	3	C1,C15,C29
.....3	255-470C	CAP, 47pF 5% 200V CERAMIC DIPPED	2	C24,C27
.....3	256-680C	Cap., 68pF 5% 200V ceramic dipped Kemet C317C680J2G5CA	1	C10
.....3	270-102	Cap,monolithic,1000pf 50v 5%KemetC1206C102J5GACTR marked	10	C32,C33,C34, C35,C36,C37, C38,C39,C40, C41
.....3	299-470	CAP, TANTALUM, 4.7 UF 16V	3	C2,C17,C19
.....3	350-032	Inductor, 387-150M 40000-150000 uH	1	L1



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
.....3	401-054	Integrated Circuit, SGS TDA1054M	1	IC1
.....3	403-900	IC, QUADRUPLER NORTON OP AMP	1	IC2
.....3	414-007	Diode, General Instruments 1N4007	1	D6
.....3	550-123	Connector, 10 pin header (cut from 550-162)	1	P1
.....4	550-162	Connector, 24 pin break-away (straight) Molex 26-48-6248	0.417	
.....3	800-166B	PC Board, Audio RPT-2/15/30	1	
..1	800-168-1AR	RPT-15 Power Supply Regulator	1	
....2	145-241-1	RESISTOR, 240 OHM 1/4 WATT 1% SFR55 240 1% TR	1	R3
....2	219-200	CAPACITOR ELECTROLYTIC 22UF 25V	2	C7,C8
....2	268-102	CAPACITOR, .001 uF 50V DISC -20%	2	C10,C11
....2	400-338	IC, 5 AMP ADJUSTABLE REGULATOR	1	IC1
....2	418-0010	INSULATOR,MICA,TSTR,TO-3PKG	1	
....2	500-025	Screw, 6-32 x 5/8 phillips pan head M/S nickel plated"	2	
....2	500-055	Lockwasher, #4 internal tooth small pattern zinc plated	1	
....2	500-152	Screw, #6 x 5/8 phillips flat head type F metal tappin zinc"	1	
....2	500-162	Screw, 4-40 x 7/16 phillips pan head MS zinc plated"	2	
....2	510-081	Shrink-Tubing, 1/4 GPO135-1/4 black"	0.17	
....2	510-230	Socket, power transistor Samtec TO-340-T	1	
....2	512-008	Solder Lug, #4 Concord 707-1404	1	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	513-027	Spacer, 4-40 x 1-1/4 hex threaded EFJ 313-6477-040	2	
....2	520-044D	Heatsink, drilled RPT-15 Supply	1	
.....3	520-044	HEATSINK, THERMALLOY 14494UX 2.75 DEBURRED,NATURAL FINISH	1	
.....3	699-520- 044D	Labor only for Heatsink for RPT-15 Power Supply Rev A	1	
....2	550-126	Connector, crimp terminal pin Molex 08- 50-0187	4	
....2	550-137	Connector, 8 pin Molex housing 09-50- 8080	1	
....2	580-047	Wire, UL1061 22/7 OS-1 Orange	0.792	
....2	580-133	Wire, UL1061-18/16 #18 Red #M370-2	0.775	
....2	580-134	Wire, UL1061-18/16 #18 Black	0.875	
....2	580-136	Wire, UL1061-18/16 #18 Blue	0.792	
..1	800-168AR	RPT-15 POWER SUPPLY (UE)	1	
....2	100-2041	RES,2K OHM,1/4W,1%	1	R1
....2	101-501	Potentiometer, 500 ohm cermet Bourns 3309P-501	1	R2
....2	101-502	POT,5K,SINGLE TURN,HORIZONTAL PCB MOUNT	1	R4
....2	202-0502	RECT,3A,200V,IN5402	5	D1,D2,D3,D4, D7
....2	219-153	Cap,electrolytic 15000uF 25V Illinois Cap. 159LBA025M2CG	1	C5
....2	268-102	CAPACITOR, .001 uF 50V DISC -20%	4	C2,C3,C4,C11 B
....2	270-102	Cap,monolithic,1000pf 50v 5%KemetC1206C102J5GACTR marked	18	C1,C7,C8,C9, C10,C10B,C11, C12,C13,C14, C15,C16,C17, C18,C19,C20, C21,C22
....2	270-103	Cap, Monolithic chip 10000pF 10% XR7 Kemet C1206C103J5RACTR	1	C6



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	330-018	INDUCTOR, 10 uH, 10%	3	L2,L4,L5
....2	330-019	INDUCTOR, 2.5 TURN, HIGH FREQUENCY SUPPRESSION	2	L1,L6
....2	414-007	Diode, General Instruments 1N4007	2	D5,D6
....2	500-148	EYELET, GS3-12 GM	10	
....2	550-125	Connector, 5 pin Molex Header (cut from 550-162) *NOTE*	1	P2
.....3	550-162	Connector, 24 pin break-away (straight) Molex 26-48-6248	0.208	
....2	550-138	Connector, 8 pin Molex header (cut from 550-162)	1	P1
.....3	550-162	Connector, 24 pin break-away (straight) Molex 26-48-6248	0.333	
....2	550-154	CONNECTOR, D-SUB 9 PIN ANGLE	1	
....2	800-168B	PC Board, Power Supply RPT-15 STL- 10	1	PCB
..1	800-170A11	RPT-15/150 Amplifier (COMPLETE ASSEMBLY)	1	
....2	100-1531	RES,150 OHM,1/4W,1%	1	R1
....2	105-471	Resistor, 470 ohm 1/2 watt 5% carbon comp 30BJ500	1	L3
....2	145-100-C	RESISTOR, 10 OHM 1/4 WATT 5% CARBON COMP 30BJ250	1	R5
....2	145-220	Resistor, 22 ohm 1/4 watt 5% metal film Mepco SFR25	1	R4
....2	145-470-C	Resistor, 47 ohm 1/4 watt 5% carbon comp 30BJ250	1	R2
....2	145-681	RESISTOR, 681 OHM 1/4 WATT 1% METAL FILM MEPCO SFR25	1	R8
....2	217-103	CAP,0.1UF 250VDC 5%,POLY FILM	2	C12
....2	219-200	CAPACITOR ELECTROLYTIC 22UF 25V	2	C8,C11



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	236-501	Capacitor, uncased mica, 500 pf 33v 5% FWJ101	3	C7,C10,C23
....2	240-220	Capacitor, uncased mica, 22 pf 33v 5% FWJ101	3	C6,C20,C21
....2	240-600	Capacitor, variable, trimmer 12-65 pf FW C4004/OXSB Gullwing	3	C2,C15,C19
....2	240-602	Cap., variable, trimmer 25-115 pf FW C4006/OXSB Gullwing	3	C1,C4,C5
....2	330-012	Inductor, 15 uH Coilcraft 90-27	2	L12,L13
....2	330-019	INDUCTOR, 2.5 TURN, HIGH FREQUENCY SUPPRESSION	1	L4
....2	350-109	Inductor, 2 turn 16 AWG Buss Wire (CCW)	1	L9
....2	350-110	Inductor, 6 turn AWG (CW)	1	L17
.....3	555-110	COST, LABOR FOR 350-110	1	
.....3	580-103	Magnet Wire, #20AWG Single Nyleze (RED)	0.001	
....2	350-111	Inductor, 3 turn 20 AWG Red (CW)	2	L16,L18
.....3	555-111	COST, LABOR FOR 350-111	1	
.....3	580-103	Magnet Wire, #20AWG Single Nyleze (RED)	0.001	
....2	350-112	Inductor, 3 turn 22 AWG Red (CCW)	1	L2
.....3	555-112	COST, LABOR FOR 350-112	1	
.....3	580-104	Magnet Wire, #22AWG Single Nyleze (RED)	0.001	
....2	350-114	Inductor, 1 turn 16 AWG Buss Wire (CCW)	1	L1
....2	350-117	Inductor, 8 turn 22 AWG Red (CCW)	2	L6
.....3	555-117	COST, LABOR FOR 350-117	1	
.....3	580-104	Magnet Wire, #22AWG Single Nyleze (RED)	0.001	
....2	350-140	Inductor, 16 turn 20 AWG Red	1	L22



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
.....3	555-140	COST, LABOR FOR 350-140	1	
.....3	580-103	Magnet Wire, #20AWG Single Nyleze (RED)	0.001	
....2	350-150	Inductor, 1/2 turn 16 AWG Buss Wire	1	L5
....2	410-1416	LUG,TERM,BENT,11/16	2	
....2	412-494	DIODE, GERMANIUM 1N270 (note)	1	D1
....2	420-246	TRANSISTOR, PHILIPS BLY89C	1	Q2
....2	425-945	Transistor, RF Power	1	Q1
....2	500-121	Rivet, 3 x 8 F metric 101203081 M3X8	6	
....2	500-124	Pop-Rivet, SD44BS Long Steel	4	
....2	510-005	Polytube, Manhatten#AF155A-20-yel	0.25	
....2	520-042D1	Heatsink, drilled RPT-15/150 amp	1	
.....3	520-042	Heatsink, Aavid 2-7/8 642253UO2875	1	
.....3	699-520-042D1	Labor Only for Heatsink for RPT-15/150 Amp Rev A	1	
....2	550-012	CONN, SO-239A UHF PANEL RECEPTACLE	1	J1
....2	580-105	Magnet Wire, #27AWG Single Nyleze	0.006	L03/10"
....2	586-094	Cable Assembly, RPT2/15 Amplifier (SBCM)	1	
.....3	550-126	Connector, crimp terminal pin Molex 08-50-0187	3	
.....3	550-159	Connector, 4 pin Molex housing 09-50-8040	1	
.....3	580-040	Wire, UL1061 22/7 OTC Black	0.46	
.....3	580-043	Wire, UL1061 22/7 OTC Red	0.46	
.....3	580-046	Wire, UL1061 22/7 OTC Green	0.5	
....2	700-220-11	Heatsink Enclosure, RPT-15	2	
....2	700-220-20	Amplifier Connector Plate	1	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	700-246	Fingerstock, LH-55-51500 X 24 or 81-02-11836-2000	0.08	
....2	703-009	Copper Foil, .0014 x .250""	0.001	
....2	800-170-1B	PC Board, Power Amp. RPT-15 STL-10/150	1	PCB
..1	800-259A	RPT-15 Microphone Conn. Bd.	1	
....2	270-102	Cap,monolithic,1000pf 50v 5%KemetC1206C102J5GACTR marked	2	C4,C5
....2	413-1597	TERM,TURRET,2 SHLDR,.219,GOLD FLASH	3	E1,E2,E3
....2	550-155-1	Connector, XLR Receptacle Insert Nuetrik#3FD-V-I-O	1	P1
....2	800-259B	PC Board, Microphone Connector RPT-2/15	1	PCB
..1	800-270A	STL-10/RPT2/15 Sm. Feed Thru Board	1	
....2	270-103	Cap, Monolithic chip 10000pF 10% XR7 Kemet C1206C103J5RACTR	3	C1,C2,C3
....2	550-172	Connector, 4 pin Molex angle header long (cut from 550-171)	1	P1
.....3	550-171	Connector, 24 pin break-away (Long pins) Molex 26-58-1241	0.167	
....2	800-270B	PC Board, Feedthru RPT-2/15/STL-10	1	PCB



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
0	705-T15-2	RPT-15/215; 120VAC		
..1	320-037L	TRANSFORMER, POWER, RPT15 110V W/LUGS	1	
....2	320-037	TRANSFORMER, POWER, 15906 W/RPT BRACKETS	1	
0	705-T15-22	RPT-15/215; 220VAC		
..1	320-037AL	TRANSFORMER, POWER, RPT15 220V W/LUGS	1	
....2	320-037A	TRANSFORMER, POWER, 16928 W/RPT BRACKETS 220V	1	
0	705-T15-24	RPT-15/215; 240VAC		
..1	320-037CL	TRANSFORMER, POWER RPT15 240V W/LUGS	1	
....2	320-037BC	TRANSFORMER, POWER, 15906C 240V W/STL BRACKETS	1	
....2	550-126	Connector, crimp terminal pin Molex 08- 50-0187	2	
....2	700-220-14	Bracket, RPT-15 Transformer	2	
..1	586-011	Cable Assembly, RPT-2/15 Harness (SBCM)	1	
....2	500-128	Eyelet, GS4-4 brass	1	
....2	550-122	CONNECTOR, 10 PIN MOLEX HOUSING 09-50-8100	1	
....2	550-126	Connector, crimp terminal pin Molex 08- 50-0187	16	
....2	550-133	CONNECTOR, PHONE PLUG 3C1215	1	
....2	550-135	Connector, 6 pin Molex housing 09-50- 8060	1	
....2	580-033	Coax high shield RG-316/U Manhattan M4259	0.44	
....2	580-041	Wire, UL1061 22/7 OTC Brown	0.5	
....2	580-043	Wire, UL1061 22/7 OTC Red	0.46	
....2	580-044	Wire, UL1061 22/7 OTC Yellow	0.54	
....2	580-046	Wire, UL1061 22/7 OTC Green	0.75	
....2	580-047	Wire, UL1061 22/7 OS-1 Orange	0.58	
....2	580-051	Wire, UL1061 22/7 OTC White/Blue	0.57	
....2	580-088	Shielded Wire, 16-C-22-SPJ White/Red 1 Cond. 22/19x34 pvc	0.61	
....2	580-089	Shielded Wire, 16-C-22-SPJ White/Orange 1 cond 22/19x34 pvc	0.44	
....2	580-091	Shielded Wire, 16-C-22-SPJ White/Green 1 Cond.22/19x34 pvc	0.46	
....2	580-092	Shielded Wire, 16-C-22-SPJ White/Blue 1 Cond.22/19x34 pvc	0.46	
..1	586-057	Cable Assembly, RPT-2/15 14.5 Internal TAC-9720 (SBCM)"	1	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
..1	586-087	Cable Assembly, RPT-15 #1 Altair TAC 9717 (SBCM)	1	
....2	550-122	CONNECTOR, 10 PIN MOLEX HOUSING 09-50-8100	1	
....2	550-126	Connector, crimp terminal pin Molex 08-50-0187	7	
....2	580-041	Wire, UL1061 22/7 OTC Brown	0.54	
....2	580-045	Wire, UL1061 22/7 OTC Blue	0.44	
....2	580-046	Wire, UL1061 22/7 OTC Green	0.52	
....2	580-048	Wire, UL1061 22/7 OTC Violet	0.82	
....2	580-050	Wire, UL1061 22/7 OS-1 White/Red	0.61	
....2	580-059	Wire, UL1061 22/7 OTC Yellow/Blue	0.92	
....2	580-133	Wire, UL1061-18/16 #18 Red #M370-2	0.46	
....2	580-137	Wire, UL1061 18/19 #18 Orange Tinned Copper	0.47	
..1	586-088	Cable Assembly, RPT-15 #2 Altair TAC 9721 (SBCM)	1	
....2	510-090	Cable Ties, 4 Panduit PANPLT1M-M MS3367-4-9"	3	
....2	550-122	CONNECTOR, 10 PIN MOLEX HOUSING 09-50-8100	1	
....2	550-124	Connector, 5 pin Molex housing 09-50-8050 *NOTE*	1	
....2	550-126	Connector, crimp terminal pin Molex 08-50-0187	16	
....2	550-159	Connector, 4 pin Molex housing 09-50-8040	1	
....2	550-205	Connector pins, Molex 16-02-0086	8	
....2	550-222	Connector, 8 dual row housing Molex 22-55-2081	1	
....2	580-041	Wire, UL1061 22/7 OTC Brown	0.73	
....2	580-046	Wire, UL1061 22/7 OTC Green	0.94	
....2	580-048	Wire, UL1061 22/7 OTC Violet	0.73	
....2	580-050	Wire, UL1061 22/7 OS-1 White/Red	0.38	
....2	580-059	Wire, UL1061 22/7 OTC Yellow/Blue	1.84	
....2	580-133	Wire, UL1061-18/16 #18 Red #M370-2	1.02	
....2	580-136	Wire, UL1061-18/16 #18 Blue	0.4	
....2	580-137	Wire, UL1061 18/19 #18 Orange Tinned Copper	0.73	
..1	700-220-13A	RPT-15 Final Assembly	1	
....2	030-034M	Meter, VU	1	
.....3	030-033	200 Micro-Amp Meter	1	
.....3	030-033-1	VU Meter Scales	1	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	100-103	POT, 10K OHM TYPE T270D VH4340 EXC.270	2	
....2	100-1551	RES,15K OHM,1/4W,1%	1	
....2	145-431	Resistor, 432 ohm 1/4 watt 1% metal film Mepco SFR25	1	
....2	236-501	Capacitor, uncased mica, 500 pf 33v 5% FWJ101	2	
....2	253-471	CAPACITOR, 470 PF 50V 10% Y5P DISC	1	
....2	297-222	Cap,.0022mf 400v ceramic disc MURATA DE1007E222M-KH	2	
....2	334-0150	FUSE,3AG,1.5 AMP,SLO-BLO	1	
....2	402-0005	PRESS CLIP,NYLON W/ADHESIVE BACK	1	
....2	410-1410	LUG,TERM,1/2	2	
....2	420-4104	SCREW,4-40X.250,S.S. PH	19	
....2	420-4296	SCREW,4-40X.375,PH PAN HD SC	4	
....2	420-4503	SCREW,4-40X.187,S.S. PH UC	2	
....2	420-6108	SCREW,6-32X.500,S.S. PH	4	
....2	421-6005	6-32 ELASTIC STOP HEX NUT	4	
....2	423-6003	#6 LOCK INT TOOTH	6	
....2	500-002	Hex Nut, #4-40 Extra Small Pattern Nickel Plated	2	
....2	500-022	Screw, 6-32 x 3/8 phillips pan head M/S nickel plated"	8	
....2	500-055	Lockwasher, #4 internal tooth small pattern zinc plated	2	
....2	500-105	Pop-Rivet, AD42BS Aluminum	14	
....2	500-115	Pop-Rivet, SK42BS counter sunk	8	
....2	500-121	Rivet, 3 x 8 F metric 101203081 M3X8	4	
....2	500-123	Washer, Switchcraft #S1790-1	2	
....2	500-162	Screw, 4-40 x 7/16 phillips pan head MS zinc plated"	2	
....2	500-180	Screw, 4-40 x 1/4 phillips pan head M/S Black Zinc"	4	
....2	500-181	Screw, #4 x 1/4 phillips pan head S/M Black Zinc"	2	
....2	500-183	Screw, 6-32 x 1/4 phillips pan head Black Zinc"	14	
....2	500-188	Screw, 4-40 x 3/8 phillips,flat head,black oxide"	2	
....2	500-199	Keps nut 4 x 40 zinc 4CNKEOZ	13	
....2	500-245	Lock Washer, 1/4 Internal Tooth L/W Zinc"	2	
....2	510-002	Shrink-Tubing, 3/4 black W3B2 3/4" Sumitomo"	0.06	
....2	510-005	Polytube, Manhatten#AF155A-20-yel	0.54	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	510-072	Fuseholder, Littlefuse #342-004	1	
....2	510-090	Cable Ties, 4 Panduit PANPLT1M-M MS3367-4-9"	10	
....2	510-191	#4 Bracket, Keystone 612	12	
....2	510-192	Connector, AC receptacle, Switchcraft EAC-309	1	
....2	510-210	Brackets, #6 Keystone 634	2	
....2	510-246	Flexible Grommet, (NOTE)	0.01	
....2	512-008	Solder Lug, #4 Concord 707-1404	2	
....2	513-027	Spacer, 4-40 x 1-1/4 hex threaded EFJ 313-6477-040	2	
....2	513-030	SPACER, 6-32 X 15/16 HEX THREADED	4	
....2	520-046	Heatsink, Thermalloy 1116B round	1	
....2	550-083	Connector, Tini-Jax Switchcraft 41	2	
....2	550-155-2	Connector Shell XLR Receptacle DH-NF- BAG-O	1	
....2	580-005	Buss Wire, #22AWG Solid Tinned Copper	0.79	
....2	580-040	Wire, UL1061 22/7 OTC Black	0.75	
....2	580-130	Wire, Stranded UL1015-20/10 Black Tinned Copper	0.38	
....2	580-138	Flat Braid, 1/4 #1231"	0.08	
....2	700-091-15	Mounting Bracket, RPT-2/15 Meter	2	
....2	700-220- 16A	RPT-2/15 Multiplier Heat Sink Assembly	1	
.....3	500-113	Screw, 4-40 x 1/8 slotted pan head M/S zinc plated"	1	
.....3	520-046	Heatsink, Thermalloy 1116B round	1	
.....3	700-220-16	Copper Heatsink, RPT-2/15	1	
....2	700-260	Fingerstock, Angle Chomerics 81-01- 11817-2000-24 No Adhesive	0.07	
....2	DB61024	Washer, TO-220 Shoulder NYL Thermalloy #7721-7PPS	2	
..1	700-220- 13P	Front Panel, RPT-15 (SBCM)	1	
....2	500-073	Fastener, PEM S-632-1 ZI	2	
....2	500-184	RIVET, 1/8 x .165 SEMI-TUBULAR BLACK 100 CE100732	8	
....2	510-191	#4 Bracket, Keystone 612	2	
....2	530-001	Switch, slide DPDT Switchcraft	1	
....2	530-018	Switch, slide DPIT Switchcraft 46313LDR	1	
....2	530-021	Switch, slide TPTT Switchcraft 11H-1086	1	
....2	700-220-13	Front Panel, RPT-15	1	
.....3	698-220-13	Front Panel, RPT-15 Bare Metal	1	
.....3	699-220-13	Front Panel, RPT-15 Contract Labor Painting	1	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
..1	700-220-18	Cover, RPT-2/15/30 Modular .032 aluminum	1	
..1	700-220-2P	Rear Panel, RPT-2/15 (SBCM)	1	
....2	500-073	Fastener, PEM S-632-1 ZI	2	
....2	700-220-2	Rear Panel, RPT-2/15	1	
..1	700-220-3P	Frame, R/H Side RPT-2/15 (SBCM)	1	
....2	500-073	Fastener, PEM S-632-1 ZI	4	
....2	700-220-3	Frame, R/H Side RPT-2/15	1	
..1	700-220-4P	Frame, L/H Side RPT-2/15 (SBCM)	1	
....2	500-073	Fastener, PEM S-632-1 ZI	4	
....2	700-220-4	Frame, L/H Side RPT-2/15	1	
..1	700-220-5P	Top Cover, RPT-2/15 w/feet (SBCM)	1	
....2	500-119	Rivet, CE100 7/32 steel nickel	2	
....2	500-127	Washer, C-126=820W Brass/Nickel Plated	2	
....2	510-205	BUMPER, BRUCE PLASTICS 0772-0014 BLACK	2	
....2	700-220-5	Top Cover, RPT-2/15	1	
..1	700-220-6P	Bottom Cover, RPT-2/15 w/ft & hand (SBCM)	1	
....2	500-119	Rivet, CE100 7/32 steel nickel	6	
....2	500-127	Washer, C-126=820W Brass/Nickel Plated	8	
....2	500-186	Rivet, 1/8 x .312 semi-tubular standard finish	2	
....2	510-132	Handle Assy., black w/black plated steel hdwe #1879-376-370	1	
....2	510-205	BUMPER, BRUCE PLASTICS 0772-0014 BLACK	6	
....2	700-220-6	Bottom Cover, RPT-2/15	1	
..1	700-220- 7PB	Partition, RPT-2/15 #1 w/bd	1	
....2	420-4104	SCREW,4-40X.250,S.S. PH	4	
....2	500-199	Keps nut 4 x 40 zinc 4CNKEOZ	4	
....2	700-220-7	Partition, RPT-2/15 #1	1	
....2	800-254A	RPU/STL-30 Feed-Thru Board	1	
.....3	270-102	Cap,monolithic,1000pf 50v 5%KemetC1206C102J5GACTR marked	10	C1,C2,C3,C4, C5,C6,C7,C8, C9,C10
.....3	550-156	Connector, 10 pin Molex header 26-48- 4102 *NOTE*	1	P1/P2
.....3	800-254B	PC Board, Feed-thru RPT-2/15/30	1	PCB
..1	700-220-8	Partition, RPT-2/15 #2	1	
..1	800-160A1	RPU 150/215/300 Modulator Board	1	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	100-1041	RES,1K OHM,1/4W,1%	1	R17
....2	101-104	Potentiometer, 100K ohm cermet Bourns 3309P-1-104	2	R1,R2
....2	103-2744	RES,2.74K OHM,1/4W,1%,METAL	1	R9
....2	103-4741	RES,4.75K OHM,1/4W,1%,METAL	1	
....2	103-4755	RES,47.5K OHM,1/4W,1%,METAL	4	R3,R4,R5,R6
....2	104-502	Potentiometer, 5K ohm cermet Spectrol 64Y502 top adjust	1	R8
....2	145-030	RESISTOR, 3.3 OHM 1/4 WATT 1% METAL FILM MEPCO SFR25	2	R10,R16
....2	145-122-1	Resistor, 1.2k ohm 1/4 watt 1% CCF07 1.2K MF TR	1	R13
....2	145-182-1	RESISTOR, 1.8K OHN 1/4 WATT 1% RL07S182G MF	1	R14
....2	145-241-1	RESISTOR, 240 OHM 1/4 WATT 1% SFR55 240 1% TR	2	R7,R12
....2	145-363-1	Resistor, 36k ohm 1/4 watt 1% RL07S363G	2	R11,R18
....2	203-4148	DIODE,1N4148	1	D1
....2	217-103	CAP,0.1UF 250VDC 5%,POLY FILM	3	C3,C4,C11
....2	217-104	CAPACITOR, .01 UF 50V GMV DISC	1	C8
....2	219-220	CAPACITOR, ELECTROLYTIC 22uF RADIAL 35V	1	C10
....2	255-161	CAPACITOR, 160 PF 300V 5% SIVLER MICA	1	C6
....2	255-241	Capacitor, 240 pf 500v 5% silver mica CD10FD241J03	1	C7
....2	255-271C	CAPACITOR, 270pF 5% 200V CERAMIC DIPPED	1	C5
....2	299-470	CAP, TANTALUM, 4.7 UF 16V	3	C1,C2,C9
....2	330-007	Inductor, 1 uH Dale IM-2 1UH 5%	1	L5
....2	350-025	INDUCTOR, 1.5 - 3 UH WITH SHIELD CAN #47271-021	2	L2,L3
....2	350-037	INDUCTOR, 13 1/2 TURN ORANGE COILCRAFT 143-13J12S	2	L1,L4
....2	411-404	DIODE,MOT. HYPER-ABRUPT TUNING SMV-1732/CRYSTALONICS MV1404	1	
....2	440-245-1	TRANSISTOR, 2N2857	1	Q1
....2	511-038	Terminal, Keystone 1238	1	TP1
....2	520-040	CRYSTAL SOCKET, CS-109-07	2	Y1,Y2
....2	520-041	Clip, transistor, Atlee 100-200-1-2 cad plated	1	Q1



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	530-051	SWITCH, SIDE ACTION SLIDE DPDT	1	S1
....2	550-136	Connector, 6 pin Molex header (cut from 550-162)	1	P1
.....3	550-162	Connector, 24 pin break-away (straight) Molex 26-48-6248	0.25	
....2	800-160-1A	X-Mitter Freq. Control Module (oven w/diode)	1	IC1/M1/Q2
.....3	120-002	THERMISTOR, 1000 OHM @ 25C 10%	1	
.....3	125-150	Resistor, 15 ohm 5% BWH/SPH	1	
.....3	401-338	IC, SMT, REGULATOR, 5 AMP, LM338T *NOTE*	1	
.....3	450-110	Transistor, SGS TIP-110	1	
.....3	500-130	Screw, #4 x 1/4 slot. hex wash hd type B tapping zinc plate"	2	
.....3	510-235	Caplug, 5/32SCx5/8 230801HB	1	
.....3	520-045	Oven can	1	
.....3	DB61024	Washer, TO-220 Shoulder NYL Thermalloy #7721-7PPS	2	
.....3	DB68027	Sil Pad TO220 .75x.5" ADHSV Berquist 3223-07AC-58"	2	
....2	800-160B	PC Board, Modulator RPT-2/15	1	PCB
..1	800-163A2	X-Mitter 215 Multiplier	1	
....2	046-0022	CAP,MICA,RF,22PF	1	C24
....2	100-1041	RES,1K OHM,1/4W,1%	2	R1,R17
....2	100-1051	RES,10K OHM,1/4W,1%	3	R2,R8,R11
....2	100-1551	RES,15K OHM,1/4W,1%	1	R5
....2	101-502	POT,5K,SINGLE TURN,HORIZONTAL PCB MOUNT	1	R14
....2	103-2241	RES,2.21K OHM,1/4W,1%,METAL	1	R13
....2	103-2744	RES,2.74K OHM,1/4W,1%,METAL	1	R4
....2	103-3163	RES,316 OHM,1/4W,1%,METAL	1	R50
....2	103-3323	RES,332 OHM,1/4W,1%,METAL	1	R3
....2	103-4741	RES,4.75K OHM,1/4W,1%,METAL	1	R16
....2	103-4755	RES,47.5K OHM,1/4W,1%,METAL	1	R18
....2	103-5623	RES,562 OHM,1/4W,1%,METAL	2	R7,R10
....2	145-680-C	Resistor, 68 ohm 1/4 watt 5% carbon comp 30BJ250	3	R6,R9,R12
....2	210-0120	TSTR,TIP120 NPN SILICON PWR	1	Q50
....2	217-103	CAP,0.1UF 250VDC 5%,POLY FILM	2	C11,C35
....2	217-104	CAPACITOR, .01 UF 50V GMV DISC	4	C2,C4,C9,C16
....2	230-103	CAPACITOR, VARIABLE 1.3-5.4PF	2	C27,C28



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	241-100	CAPACITOR, UNCASSED MICA 10PF 5% FWM602	1	C32
....2	241-470	CAPACITOR, UNCASSED MICA 47PF 5% FWM602	1	C39
....2	241-680	CAPACITOR, UNCASSED MICA 68PF 5% FWM602	1	C29
....2	253-471	CAPACITOR, 470 PF 50V 10% Y5P DISC	1	C31
....2	255-020	Capacitor, 2 pf 5% type QC	1	C6
....2	255-040	Capacitor, 3.9 pf 5% type QC	2	C13,C20
....2	255-050	CAPACITOR, 5 pF 5% NPO DISC	1	C19B
....2	255-241	Capacitor, 240 pf 500v 5% silver mica CD10FD241J03	2	C1,C15
....2	255-270	CAPACITOR, 27 PF, 5%, NPO, DISC	2	C12,C19A
....2	255-390C	Capacitor, 39pF 5% 200V ceramic dipped C322C390J2G5CA	2	C21,C22
....2	255-470C	CAP, 47pF 5% 200V CERAMIC DIPPED	2	C5,C14
....2	256-131	CAPACITOR, 130 pF 5% 50V NPO DISC	1	C8
....2	256-680C	Cap., 68pF 5% 200V ceramic dipped Kemet C317C680J2G5CA	1	C7
....2	268-102	CAPACITOR, .001 uF 50V DISC -20%	7	C10,C18,C23, C25,C30,C34, C38
....2	268-203	CAPACITOR, .02 UF 50V Z5U DISC	1	C3
....2	270-102	Cap,monolithic,1000pf 50v 5%KemetC1206C102J5GACTR marked	1	C26
....2	290-521	CAP, VARIABLE, 5-25 pf	2	C36,C37
....2	299-220	Capacitor, tantalum, 2.2 mf 25v ECS- F1EE225K Panasonic	1	C33
....2	330-021	INDUCTOR, 3.3uH AXIAL LEAD CHOKE	1	L11
....2	350-037	INDUCTOR, 13 1/2 TURN ORANGE COILCRAFT 143-13J12S	2	L1,L2
....2	350-039	INDUCTOR, 2 1/2 TURN RED	2	L5,L6
....2	350-040	INDUCTOR, 6 1/2 TURN BLUE	2	L3,L4
....2	350-121	INDUCTOR, 10 TURN .15 uH	1	L12
....2	350-152	Inductor, 6 turn 22 AWG Red CW 215 Mult.	1	L8
....2	350-154	Inductor, 5 turn 20 AWG Red CW 215 Mult.(SBCM)	2	L9,L10
.....3	580-103	Magnet Wire, #20AWG Single Nyleze (RED)	3.92	
....2	350-157	Inductor, 5 turn 20 AWG Red CCW 215 Mult.	1	L13



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	407-0132	WASH,SHOULDER #4 .215 OD POLY	1	
....2	409-7403	PAD,TSTR MTG,TO-220 CASE	1	
....2	412-494	DIODE, GERMANIUM 1N270 (note)	2	D1,D2
....2	414-007	Diode, General Instruments 1N4007	1	D3
....2	420-4106	SCREW,4-40X.375,S.S. PH	1	
....2	420-629	Transistor, Motorola MRF629	1	Q5
....2	421-4007	4-40 X .187 S.S. HEX NUT	1	
....2	423-4001	#4 FLAT SS .250 X .125 X .018	1	
....2	423-4002	#4 LOCK S.S. SPLIT	1	
....2	424-427	TRANSISTOR, MOTOROLA/SGS/MICRO SEMI 2N4427 SRF944	1	Q4
....2	440-245-1	TRANSISTOR, 2N2857	3	Q1,Q2,Q3
....2	455-7805	HEATSINK,TO-220PKG,LOW PROFILE	1	
....2	520-049	Heatsink, Thermalloy 2260R red or black	1	Q4
....2	550-084	CONNECTOR,PHONO JACK,PCB MOUNT	2	J1,J2
....2	550-197	Header, Breakaway 4x2,0.1 Spacing(Cut from 550-316)"	1	P1
.....3	550-316	HEADER, BREAKAWAY 40x2, 0.1 SPACING"	0.1	
....2	800-163B	PC Board, Multiplier RPT-2/15/30 STL-10	1	PCB
..1	800-166A	RPU Audio Board	1	
....2	100-1013	RES,1 OHM,1/4W,5%	1	R48
....2	100-1041	RES,1K OHM,1/4W,1%	1	R43
....2	100-1551	RES,15K OHM,1/4W,1%	1	R46
....2	215-102	CAPACITOR, .001 uFD 2.5% 100V POLYPRO	1	C23
....2	800-166CM	Generic RPU Audio Board Assembly (SBCM)	1	
.....3	033-0123	CAPACITOR, .012 MFD 1% 100V POLYPRO	2	C20,C22
.....3	100-1041	RES,1K OHM,1/4W,1%	1	R1
.....3	100-1051	RES,10K OHM,1/4W,1%	1	R34
.....3	100-1531	RES,150 OHM,1/4W,1%	1	R5
.....3	101-104	Potentiometer, 100K ohm cermet Bourns 3309P-1-104	2	R26,R33
.....3	101-502	POT,5K,SINGLE TURN,HORIZONTAL PCB MOUNT	1	R22
.....3	103-1007	RES,1 MEG OHM,1/4W,1%,METAL	2	R38,R39
.....3	103-1062	RES,100K OHM,1/4W,1%,METAL	4	R6,R11,R12,R17
.....3	103-1823	RES,182 OHM,1/4W,1%,METAL	1	R3



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
.....3	103-2211	RES,22.1K OHM,1/4W,1%,METAL	1	R32
.....3	103-2216	RES,221K OHM,1/4W,1%,METAL	1	R31
.....3	103-2241	RES,2.21K OHM,1/4W,1%,METAL	1	R27
.....3	103-2744	RES,2.74K OHM,1/4W,1%,METAL	2	R24,R45
.....3	103-3323	RES,332 OHM,1/4W,1%,METAL	1	R13
.....3	103-3324	RES,3.32K OHM,1/4W,1%,METAL	2	R32
.....3	103-3325	RES,33.2K OHM,1/4W,1%,METAL	1	R16
.....3	103-3924	RES,3.92K OHM,1/4W,1%,METAL	3	R8,R10,R15
.....3	103-4731	RES,475K OHM,1/4W,1%,METAL	3	R20,R35,R36
.....3	103-4741	RES,4.75K OHM,1/4W,1%,METAL	1	R25
.....3	103-4755	RES,47.5K OHM,1/4W,1%,METAL	1	R2
.....3	103-5623	RES,562 OHM,1/4W,1%,METAL	1	R41
.....3	104-105	POTENTIOMETER, 1MEG OHM TOP ADJUST	1	R37
.....3	145-030	RESISTOR, 3.3 OHM 1/4 WATT 1% METAL FILM MEPCO SFR25	1	R9
.....3	145-106	Resistor, 10 meg ohm 1/4 watt 5% metal film Mepco SFR25	1	R29
.....3	145-221	Resistor, 220 ohm 1/4 watt 1% metal film Mepco SFR25	1	R17
.....3	145-225	Resistor, 2.21 meg ohm 1/4 watt 1% metal film (2.21 Meg 1%)	4	R19,R28,R40, R42
.....3	145-472	OBSOLETE REPLACE W/103-4741 (NLU-03)	0	
.....3	145-681	RESISTOR, 681 OHM 1/4 WATT 1% METAL FILM MEPCO SFR25	1	R4
.....3	145-822	Resistor, 8.25k ohm 1/4 watt 1% metal film Mepco SFR25	2	R14,R44
.....3	145-825	Resistor, 8.2 meg ohm 1/4 watt 5% carbon film 29SJ250	1	R30
.....3	203-4148	DIODE,1N4148	5	D1,D2,D3,D4,D5
.....3	215-223	Capacitor, .022 mfd 2.5% 100v polypro Seacor PFWAC220HGUE	1	C25
.....3	215-392	Capacitor, .0039 mfd 2.5% polypro	1	C26
.....3	215-822	CAPACITOR, .0082 MFD 2.5% 100V POLYPRO	1	C11
.....3	217-103	CAP,0.1UF 250VDC 5%,POLY FILM	1	C16
.....3	217-104	CAPACITOR, .01 UF 50V GMV DISC	2	C12,C28



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
.....3	219-106	CAPACITOR, 10UF 50V RADIAL ELECTROLYTIC	2	C3,C18
.....3	219-220	CAPACITOR, ELECTROLYTIC 22uF RADIAL 35V	3	C4,C21,C30
.....3	219-221	CAPACITOR, ELECTROLYTIC 220uF 25V RADIAL	3	C9,C13,C14
.....3	226-274	Cap.,.27 mf 100v 10% polypro CD MTC1P27K OR Bishop C21B274K	2	C7,C31
.....3	253-471	CAPACITOR, 470 PF 50V 10% Y5P DISC	3	C1,C15,C29
.....3	255-470C	CAP, 47pF 5% 200V CERAMIC DIPPED	2	C24,C27
.....3	256-680C	Cap., 68pF 5% 200V ceramic dipped Kemet C317C680J2G5CA	1	C10
.....3	270-102	Cap,monolithic,1000pf 50v 5%KemetC1206C102J5GACTR marked	10	C32,C33,C34, C35,C36,C37, C38,C39,C40, C41
.....3	299-470	CAP, TANTALUM, 4.7 UF 16V	3	C2,C17,C19
.....3	350-032	Inductor, 387-150M 40000-150000 uH	1	L1
.....3	401-054	Integrated Circuit, SGS TDA1054M	1	IC1
.....3	403-900	IC, QUADRUPLE NORTON OP AMP	1	IC2
.....3	414-007	Diode, General Instruments 1N4007	1	D6
.....3	550-123	Connector, 10 pin header (cut from 550- 162)	1	P1
.....4	550-162	Connector, 24 pin break-away (straight) Molex 26-48-6248	0.41 7	
.....3	800-166B	PC Board, Audio RPT-2/15/30	1	
..1	800-168- 1AR	RPT-15 Power Supply Regulator	1	
....2	145-241-1	RESISTOR, 240 OHM 1/4 WATT 1% SFR55 240 1% TR	1	R3
....2	219-200	CAPACITOR ELECTROLYTIC 22UF 25V	2	C7,C8
....2	268-102	CAPACITOR, .001 uF 50V DISC -20%	2	C10,C11
....2	400-338	IC, 5 AMP ADJUSTABLE REGULATOR	1	IC1
....2	418-0010	INSULATOR,MICA,TSTR,TO-3PKG	1	
....2	500-025	Screw, 6-32 x 5/8 phillips pan head M/S nickel plated"	2	
....2	500-055	Lockwasher, #4 internal tooth small pattern zinc plated	1	
....2	500-152	Screw, #6 x 5/8 phillips flat head type F metal tappin zinc"	1	
....2	500-162	Screw, 4-40 x 7/16 phillips pan head MS zinc plated"	2	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	510-081	Shrink-Tubing, 1/4 GPO135-1/4 black"	0.17	
....2	510-230	Socket, power transistor Samtec TO-340-T	1	
....2	512-008	Solder Lug, #4 Concord 707-1404	1	
....2	513-027	Spacer, 4-40 x 1-1/4 hex threaded EFJ 313-6477-040	2	
....2	520-044D	Heatsink, drilled RPT-15 Supply	1	
.....3	520-044	HEATSINK, THERMALLOY 14494UX 2.75 DEBURRED,NATURAL FINISH	1	
.....3	699-520-044D	Labor only for Heatsink for RPT-15 Power Supply Rev A	1	
....2	550-126	Connector, crimp terminal pin Molex 08-50-0187	4	
....2	550-137	Connector, 8 pin Molex housing 09-50-8080	1	
....2	580-047	Wire, UL1061 22/7 OS-1 Orange	0.79 2	
....2	580-133	Wire, UL1061-18/16 #18 Red #M370-2	0.77 5	
....2	580-134	Wire, UL1061-18/16 #18 Black	0.87 5	
....2	580-136	Wire, UL1061-18/16 #18 Blue	0.79 2	
..1	800-168AR	RPT-15 POWER SUPPLY (UE)	1	
....2	100-2041	RES,2K OHM,1/4W,1%	1	R1
....2	101-501	Potentiometer, 500 ohm cermet Bourns 3309P-501	1	R2
....2	101-502	POT,5K,SINGLE TURN,HORIZONTAL PCB MOUNT	1	R4
....2	202-0502	RECT,3A,200V,IN5402	5	D1,D2,D3,D4,D7
....2	219-153	Cap,electrolytic 15000uF 25V Illinois Cap. 159LBA025M2CG	1	C5
....2	268-102	CAPACITOR, .001 uF 50V DISC -20%	4	C2,C3,C4,C11B
....2	270-102	Cap,monolithic,1000pf 50v 5%KemetC1206C102J5GACTR marked	18	C1,C7,C8,C9, C10,C10B,C11, C12,C13,C14, C15,C16,C17, C18,C19,C20, C21,C22
....2	270-103	Cap, Monolithic chip 10000pF 10% XR7 Kemet C1206C103J5RACTR	1	C6
....2	330-018	INDUCTOR, 10 uH, 10%	3	L2,L4,L5
....2	330-019	INDUCTOR, 2.5 TURN, HIGH FREQUENCY SUPPRESSION	2	L1,L6
....2	414-007	Diode, General Instruments 1N4007	2	D5,D6
....2	500-148	EYELET, GS3-12 GM	10	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	550-125	Connector, 5 pin Molex Header (cut from 550-162) *NOTE*	1	P2
.....3	550-162	Connector, 24 pin break-away (straight) Molex 26-48-6248	0.20 8	
....2	550-138	Connector, 8 pin Molex header (cut from 550-162)	1	P1
.....3	550-162	Connector, 24 pin break-away (straight) Molex 26-48-6248	0.33 3	
....2	550-154	CONNECTOR, D-SUB 9 PIN ANGLE	1	
....2	800-168B	PC Board, Power Supply RPT-15 STL-10	1	PCB
..1	800-170A21	RPT-15/215 Amplifier(COMPLETE ASSEMBLY)	1	
....2	145-030-C	RESISTOR, 3.3 OHM 1/4 WATT 5% CARBON COMP 30BJ250	1	R6
....2	145-220	Resistor, 22 ohm 1/4 watt 5% metal film Mepco SFR25	1	R7
....2	145-470-C	Resistor, 47 ohm 1/4 watt 5% carbon comp 30BJ250	2	R1,R2
....2	145-562	RESISTOR, 5.6K OHM 1/4 WATT 5% METAL FILM	1	R8
....2	217-103	CAP,0.1UF 250VDC 5%,POLY FILM	2	C9,C12
....2	219-200	CAPACITOR ELECTROLYTIC 22UF 25V	2	C8,C11
....2	236-501	Capacitor, uncased mica, 500 pf 33v 5% FWJ101	3	C7,C10,C23
....2	240-101	Capacitor, uncased mica, 100 pf 33v 5% FWJ101	1	C6
....2	240-160	Capacitor, uncased mica, 16 pf 33v 5% FWJ101	3	C20,C21,C22
....2	240-602	Cap., variable, trimmer 25-115 pf FW C4006/OXSB Gullwing	1	C19
....2	260-100	Capacitor, variable, trimmer 2.5-7 pf FW C4000/OBSM Gullwing	1	C4
....2	260-300	Capacitor, variable, trimmer 8-45 pf FW C4003/OB	4	C1,C2,C5,C15
....2	330-012	Inductor, 15 uH Coilcraft 90-27	2	L12,L13
....2	330-019	INDUCTOR, 2.5 TURN, HIGH FREQUENCY SUPPRESSION	1	L4
....2	350-112	Inductor, 3 turn 22 AWG Red (CCW)	1	L2
.....3	555-112	COST, LABOR FOR 350-112	1	
.....3	580-104	Magnet Wire, #22AWG Single Nyleze (RED)	0.00 1	
....2	350-117	Inductor, 8 turn 22 AWG Red (CCW)	3	L3,L6,L7
.....3	555-117	COST, LABOR FOR 350-117	1	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
.....3	580-104	Magnet Wire, #22AWG Single Nyleze (RED)	0.00 1	
....2	350-142	Inductor, 4 turn 20 AWG Red	2	L17,L18
.....3	555-142	COST,LABOR FOR 350-142	1	
.....3	580-103	Magnet Wire, #20AWG Single Nyleze (RED)	0.00 1	
....2	350-143	Inductor, 2 turn 20 AWG Red	2	L16,L19
.....3	555-143	COST,LABOR FOR 350-143	1	
.....3	580-103	Magnet Wire, #20AWG Single Nyleze (RED)	0.00 1	
....2	350-150	Inductor, 1/2 turn 16 AWG Buss Wire	2	L5,L9
....2	410-1416	LUG,TERM,BENT,11/16	2	
....2	410-305	Diode, Motorola MMBD101L chip	1	D1
....2	425-945	Transistor, RF Power	1	Q1
....2	443-032	TRANSISTOR, 470MHZ, 12.5 VOLTS, COMMON EMITTER, SD1422(NOTE)	1	
....2	500-011	Screw, 4-40 x 1/2 phillips pan head M/S nickel plated"	2	
....2	500-121	Rivet, 3 x 8 F metric 101203081 M3X8	6	
....2	500-124	Pop-Rivet, SD44BS Long Steel	4	
....2	500-199	Keps nut 4 x 40 zinc 4CNKEOZ	2	
....2	510-005	Polytube, Manhattan#AF155A-20-yel	0.25	
....2	520-042D	Heatsink, drilled RPT-15/215/300/450 Amp.	1	
.....3	520-042	Heatsink, Aavid 2-7/8 642253UO2875	1	
.....3	699-520-042D	Labor Only for Heatsink for RPT15/215/300/450 Amp. Rev A	1	
....2	550-012	CONN, SO-239A UHF PANEL RECEPTACLE	1	J1
....2	586-094	Cable Assembly, RPT2/15 Amplifier (SBCM)	1	
.....3	550-126	Connector, crimp terminal pin Molex 08-50-0187	3	
.....3	550-159	Connector, 4 pin Molex housing 09-50-8040	1	
.....3	580-040	Wire, UL1061 22/7 OTC Black	0.46	
.....3	580-043	Wire, UL1061 22/7 OTC Red	0.46	
.....3	580-046	Wire, UL1061 22/7 OTC Green	0.5	
....2	700-109-3	Shield, Amplifier	1	
....2	700-220-11	Heatsink Enclosure, RPT-15	2	
....2	700-220-20	Amplifier Connector Plate	1	
....2	700-246	Fingerstock, LH-55-51500 X 24 or 81-02-11836-2000	0.08	
....2	703-009	Copper Foil, .0014 x .250"	0.00 1	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	800-170-2B	PC Board, Power Amp. RPT-15 STL-10/15	1	PCB
..1	800-259A	RPT-15 Microphone Conn. Bd.	1	
....2	270-102	Cap,monolithic,1000pf 50v 5%KemetC1206C102J5GACTR marked	2	C4,C5
....2	413-1597	TERM,TURRET,2 SHLDR,.219,GOLD FLASH	3	E1,E2,E3
....2	550-155-1	Connector, XLR Receptacle Insert Nuetrik#3FD-V-I-O	1	P1
....2	800-259B	PC Board, Microphone Connector RPT-2/15	1	PCB
..1	800-270A	STL-10/RPT2/15 Sm. Feed Thru Board	1	
....2	270-103	Cap, Monolithic chip 10000pF 10% XR7 Kemet C1206C103J5RACTR	3	C1,C2,C3
....2	550-172	Connector, 4 pin Molex angle header long (cut from 550-171)	1	P1
.....3	550-171	Connector, 24 pin break-away (Long pins) Molex 26-58-1241	0.16 7	
....2	800-270B	PC Board, Feedthru RPT-2/15/STL-10	1	PCB



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
0	705-T15-3	RPT-15/300; 120VAC		
..1	320-037L	TRANSFORMER, POWER, RPT15 110V W/LUGS	1	
....2	320-037	TRANSFORMER, POWER, 15906 W/RPT BRACKETS	1	
0	705-T15-32	RPT-15/300; 220VAC		
..1	320-037AL	TRANSFORMER, POWER, RPT15 220V W/LUGS	1	
....2	320-037A	TRANSFORMER, POWER, 16928 W/RPT BRACKETS 220V	1	
0	705-T15-34	RPT-15/300; 240VAC		
..1	320-037CL	TRANSFORMER, POWER RPT15 240V W/LUGS	1	
....2	320-037BC	TRANSFORMER, POWER, 15906C 240V W/STL BRACKETS	1	
....2	550-126	Connector, crimp terminal pin Molex 08- 50-0187	2	
....2	700-220-14	Bracket, RPT-15 Transformer	2	
..1	586-011	Cable Assembly, RPT-2/15 Harness (SBCM)	1	
....2	500-128	Eyelet, GS4-4 brass	1	
....2	550-122	CONNECTOR, 10 PIN MOLEX HOUSING 09-50-8100	1	
....2	550-126	Connector, crimp terminal pin Molex 08- 50-0187	16	
....2	550-133	CONNECTOR, PHONE PLUG 3C1215	1	
....2	550-135	Connector, 6 pin Molex housing 09-50- 8060	1	
....2	580-033	Coax high shield RG-316/U Manhattan M4259	0.44	
....2	580-041	Wire, UL1061 22/7 OTC Brown	0.5	
....2	580-043	Wire, UL1061 22/7 OTC Red	0.46	
....2	580-044	Wire, UL1061 22/7 OTC Yellow	0.54	
....2	580-046	Wire, UL1061 22/7 OTC Green	0.75	
....2	580-047	Wire, UL1061 22/7 OS-1 Orange	0.58	
....2	580-051	Wire, UL1061 22/7 OTC White/Blue	0.57	
....2	580-088	Shielded Wire, 16-C-22-SPJ White/Red 1 Cond. 22/19x34 pvc	0.61	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	580-089	Shielded Wire, 16-C-22-SPJ White/Orange 1 cond 22/19x34 pvc	0.44	
....2	580-091	Shielded Wire, 16-C-22-SPJ White/Green 1 Cond.22/19x34 pvc	0.46	
....2	580-092	Shielded Wire, 16-C-22-SPJ White/Blue 1 Cond.22/19x34 pvc	0.46	
..1	586-057	Cable Assembly, RPT-2/15 14.5 Internal TAC-9720 (SBCM)"	1	
..1	586-087	Cable Assembly, RPT-15 #1 Altair TAC 9717 (SBCM)	1	
....2	550-122	CONNECTOR, 10 PIN MOLEX HOUSING 09-50-8100	1	
....2	550-126	Connector, crimp terminal pin Molex 08- 50-0187	7	
....2	580-041	Wire, UL1061 22/7 OTC Brown	0.54	
....2	580-045	Wire, UL1061 22/7 OTC Blue	0.44	
....2	580-046	Wire, UL1061 22/7 OTC Green	0.52	
....2	580-048	Wire, UL1061 22/7 OTC Violet	0.82	
....2	580-050	Wire, UL1061 22/7 OS-1 White/Red	0.61	
....2	580-059	Wire, UL1061 22/7 OTC Yellow/Blue	0.92	
....2	580-133	Wire, UL1061-18/16 #18 Red #M370-2	0.46	
....2	580-137	Wire, UL1061 18/19 #18 Orange Tinned Copper	0.47	
..1	586-088	Cable Assembly, RPT-15 #2 Altair TAC 9721 (SBCM)	1	
....2	510-090	Cable Ties, 4 Panduit PANPLT1M-M MS3367-4-9"	3	
....2	550-122	CONNECTOR, 10 PIN MOLEX HOUSING 09-50-8100	1	
....2	550-124	Connector, 5 pin Molex housing 09-50- 8050 *NOTE*	1	
....2	550-126	Connector, crimp terminal pin Molex 08- 50-0187	16	
....2	550-159	Connector, 4 pin Molex housing 09-50- 8040	1	
....2	550-205	Connector pins, Molex 16-02-0086	8	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	550-222	Connector, 8 dual row housing Molex 22-55-2081	1	
....2	580-041	Wire, UL1061 22/7 OTC Brown	0.73	
....2	580-046	Wire, UL1061 22/7 OTC Green	0.94	
....2	580-048	Wire, UL1061 22/7 OTC Violet	0.73	
....2	580-050	Wire, UL1061 22/7 OS-1 White/Red	0.38	
....2	580-059	Wire, UL1061 22/7 OTC Yellow/Blue	1.84	
....2	580-133	Wire, UL1061-18/16 #18 Red #M370-2	1.02	
....2	580-136	Wire, UL1061-18/16 #18 Blue	0.4	
....2	580-137	Wire, UL1061 18/19 #18 Orange Tinned Copper	0.73	
..1	700-220-13A	RPT-15 Final Assembly	1	
....2	030-034M	Meter, VU	1	
.....3	030-033	200 Micro-Amp Meter	1	
.....3	030-033-1	VU Meter Scales	1	
....2	100-103	POT, 10K OHM TYPE T270D VH4340 EXC.270	2	
....2	100-1551	RES,15K OHM,1/4W,1%	1	
....2	145-431	Resistor, 432 ohm 1/4 watt 1% metal film Mepco SFR25	1	
....2	236-501	Capacitor, uncased mica, 500 pf 33v 5% FWJ101	2	
....2	253-471	CAPACITOR, 470 PF 50V 10% Y5P DISC	1	
....2	297-222	Cap,.0022mf 400v ceramic disc MURATA DE1007E222M-KH	2	
....2	334-0150	FUSE,3AG,1.5 AMP,SLO-BLO	1	
....2	402-0005	PRESS CLIP,NYLON W/ADHESIVE BACK	1	
....2	410-1410	LUG,TERM,1/2	2	
....2	420-4104	SCREW,4-40X.250,S.S. PH	19	
....2	420-4296	SCREW,4-40X.375,PH PAN HD SC	4	
....2	420-4503	SCREW,4-40X.187,S.S. PH UC	2	
....2	420-6108	SCREW,6-32X.500,S.S. PH	4	
....2	421-6005	6-32 ELASTIC STOP HEX NUT	4	
....2	423-6003	#6 LOCK INT TOOTH	6	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	500-002	Hex Nut, #4-40 Extra Small Pattern Nickel Plated	2	
....2	500-022	Screw, 6-32 x 3/8 phillips pan head M/S nickel plated"	8	
....2	500-055	Lockwasher, #4 internal tooth small pattern zinc plated	2	
....2	500-105	Pop-Rivet, AD42BS Aluminum	14	
....2	500-115	Pop-Rivet, SK42BS counter sunk	8	
....2	500-121	Rivet, 3 x 8 F metric 101203081 M3X8	4	
....2	500-123	Washer, Switchcraft #S1790-1	2	
....2	500-162	Screw, 4-40 x 7/16 phillips pan head MS zinc plated"	2	
....2	500-180	Screw, 4-40 x 1/4 phillips pan head M/S Black Zinc"	4	
....2	500-181	Screw, #4 x 1/4 phillips pan head S/M Black Zinc"	2	
....2	500-183	Screw, 6-32 x 1/4 phillips pan head Black Zinc"	14	
....2	500-188	Screw, 4-40 x 3/8 phillips,flat head,black oxide"	2	
....2	500-199	Keps nut 4 x 40 zinc 4CNKEOZ	13	
....2	500-245	Lock Washer, 1/4 Internal Tooth L/W Zinc"	2	
....2	510-002	Shrink-Tubing, 3/4 black W3B2 3/4" Sumitomo"	0.06	
....2	510-005	Polytube, Manhatten#AF155A-20-yel	0.54	
....2	510-072	Fuseholder, Littlefuse #342-004	1	
....2	510-090	Cable Ties, 4 Panduit PANPLT1M-M MS3367-4-9"	10	
....2	510-191	#4 Bracket, Keystone 612	12	
....2	510-192	Connector, AC receptacle, Switchcraft EAC-309	1	
....2	510-210	Brackets, #6 Keystone 634	2	
....2	510-246	Flexible Grommet, (NOTE)	0.01	
....2	512-008	Solder Lug, #4 Concord 707-1404	2	
....2	513-027	Spacer, 4-40 x 1-1/4 hex threaded EFJ 313-6477-040	2	
....2	513-030	SPACER, 6-32 X 15/16 HEX THREADED	4	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	520-046	Heatsink, Thermalloy 1116B round	1	
....2	550-083	Connector, Tini-Jax Switchcraft 41	2	
....2	550-155-2	Connector Shell XLR Receptacle DH- NF-BAG-O	1	
....2	580-005	Buss Wire, #22AWG Solid Tinned Copper	0.79	
....2	580-040	Wire, UL1061 22/7 OTC Black	0.75	
....2	580-130	Wire, Stranded UL1015-20/10 Black Tinned Copper	0.38	
....2	580-138	Flat Braid, 1/4 #1231"	0.08	
....2	700-091-15	Mounting Bracket, RPT-2/15 Meter	2	
....2	700-220- 16A	RPT-2/15 Multiplier Heat Sink Assembly	1	
.....3	500-113	Screw, 4-40 x 1/8 slotted pan head M/S zinc plated"	1	
.....3	520-046	Heatsink, Thermalloy 1116B round	1	
.....3	700-220-16	Copper Heatsink, RPT-2/15	1	
....2	700-260	Fingerstock, Angle Chomerics 81-01- 11817-2000-24 No Adhesive	0.07	
....2	DB61024	Washer, TO-220 Shoulder NYL Thermalloy #7721-7PPS	2	
..1	700-220- 13P	Front Panel, RPT-15 (SBCM)	1	
....2	500-073	Fastener, PEM S-632-1 ZI	2	
....2	500-184	RIVET, 1/8 x .165 SEMI-TUBULAR BLACK 100 CE100732	8	
....2	510-191	#4 Bracket, Keystone 612	2	
....2	530-001	Switch, slide DPDT Switchcraft	1	
....2	530-018	Switch, slide DPIT Switchcraft 46313LDR	1	
....2	530-021	Switch, slide TPTT Switchcraft 11H-1086	1	
....2	700-220-13	Front Panel, RPT-15	1	
.....3	698-220-13	Front Panel, RPT-15 Bare Metal	1	
.....3	699-220-13	Front Panel, RPT-15 Contract Labor Painting	1	
..1	700-220-18	Cover, RPT-2/15/30 Modular .032 aluminum	1	
..1	700-220-2P	Rear Panel, RPT-2/15 (SBCM)	1	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	500-073	Fastener, PEM S-632-1 ZI	2	
....2	700-220-2	Rear Panel, RPT-2/15	1	
..1	700-220-3P	Frame, R/H Side RPT-2/15 (SBCM)	1	
....2	500-073	Fastener, PEM S-632-1 ZI	4	
....2	700-220-3	Frame, R/H Side RPT-2/15	1	
..1	700-220-4P	Frame, L/H Side RPT-2/15 (SBCM)	1	
....2	500-073	Fastener, PEM S-632-1 ZI	4	
....2	700-220-4	Frame, L/H Side RPT-2/15	1	
..1	700-220-5P	Top Cover, RPT-2/15 w/feet (SBCM)	1	
....2	500-119	Rivet, CE100 7/32 steel nickel	2	
....2	500-127	Washer, C-126=820W Brass/Nickel Plated	2	
....2	510-205	BUMPER, BRUCE PLASTICS 0772- 0014 BLACK	2	
....2	700-220-5	Top Cover, RPT-2/15	1	
..1	700-220-6P	Bottom Cover, RPT-2/15 w/ft & hand (SBCM)	1	
....2	500-119	Rivet, CE100 7/32 steel nickel	6	
....2	500-127	Washer, C-126=820W Brass/Nickel Plated	8	
....2	500-186	Rivet, 1/8 x .312 semi-tubular standard finish	2	
....2	510-132	Handle Assy., black w/black plated steel hdwe #1879-376-370	1	
....2	510-205	BUMPER, BRUCE PLASTICS 0772- 0014 BLACK	6	
....2	700-220-6	Bottom Cover, RPT-2/15	1	
..1	700-220- 7PB	Partition, RPT-2/15 #1 w/bd	1	
....2	420-4104	SCREW,4-40X.250,S.S. PH	4	
....2	500-199	Keps nut 4 x 40 zinc 4CNKEOZ	4	
....2	700-220-7	Partition, RPT-2/15 #1	1	
....2	800-254A	RPU/STL-30 Feed-Thru Board	1	
.....3	270-102	Cap,monolithic,1000pf 50v 5%KemetC1206C102J5GACTR marked	10	C1,C2,C3,C4, C5,C6,C7,C8, C9,C10
.....3	550-156	Connector, 10 pin Molex header 26-48- 4102 *NOTE*	1	P1/P2
.....3	800-254B	PC Board, Feed-thru RPT-2/15/30	1	PCB



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
..1	700-220-8	Partition, RPT-2/15 #2	1	
..1	800-160A1	RPU 150/215/300 Modulator Board	1	
....2	100-1041	RES,1K OHM,1/4W,1%	1	R17
....2	101-104	Potentiometer, 100K ohm cermet Bourns 3309P-1-104	2	R1,R2
....2	103-2744	RES,2.74K OHM,1/4W,1%,METAL	1	R9
....2	103-4741	RES,4.75K OHM,1/4W,1%,METAL	1	
....2	103-4755	RES,47.5K OHM,1/4W,1%,METAL	4	R3,R4,R5,R6
....2	104-502	Potentiometer, 5K ohm cermet Spectrol 64Y502 top adjust	1	R8
....2	145-030	RESISTOR, 3.3 OHM 1/4 WATT 1% METAL FILM MEPCO SFR25	2	R10,R16
....2	145-122-1	Resistor, 1.2k ohm 1/4 watt 1% CCF07 1.2K MF TR	1	R13
....2	145-182-1	RESISTOR, 1.8K OHN 1/4 WATT 1% RL07S182G MF	1	R14
....2	145-241-1	RESISTOR, 240 OHM 1/4 WATT 1% SFR55 240 1% TR	2	R7,R12
....2	145-363-1	Resistor, 36k ohm 1/4 watt 1% RL07S363G	2	R11,R18
....2	203-4148	DIODE,1N4148	1	D1
....2	217-103	CAP,0.1UF 250VDC 5%,POLY FILM	3	C3,C4,C11
....2	217-104	CAPACITOR, .01 UF 50V GMV DISC	1	C8
....2	219-220	CAPACITOR, ELECTROLYTIC 22uF RADIAL 35V	1	C10
....2	255-161	CAPACITOR, 160 PF 300V 5% SIVLER MICA	1	C6
....2	255-241	Capacitor, 240 pf 500v 5% silver mica CD10FD241J03	1	C7
....2	255-271C	CAPACITOR, 270pF 5% 200V CERAMIC DIPPED	1	C5
....2	299-470	CAP, TANTALUM, 4.7 UF 16V	3	C1,C2,C9
....2	330-007	Inductor, 1 uH Dale IM-2 1UH 5%	1	L5
....2	350-025	INDUCTOR, 1.5 - 3 UH WITH SHIELD CAN #47271-021	2	L2,L3



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	350-037	INDUCTOR, 13 1/2 TURN ORANGE COILCRAFT 143-13J12S	2	L1,L4
....2	411-404	DIODE,MOT. HYPER-ABRUPT TUNING SMV-1732/CRYSTALONICS MV1404	1	
....2	440-245-1	TRANSISTOR, 2N2857	1	Q1
....2	511-038	Terminal, Keystone 1238	1	TP1
....2	520-040	CRYSTAL SOCKET, CS-109-07	2	Y1,Y2
....2	520-041	Clip, transistor, Atlee 100-200-1-2 cad plated	1	Q1
....2	530-051	SWITCH, SIDE ACTION SLIDE DPDT	1	S1
....2	550-136	Connector, 6 pin Molex header (cut from 550-162)	1	P1
.....3	550-162	Connector, 24 pin break-away (straight) Molex 26-48-6248	0.25	
....2	800-160-1A	X-Mitter Freq. Control Module (oven w/diode)	1	IC1/M1/Q2
.....3	120-002	THERMISTOR, 1000 OHM @ 25C 10%	1	
.....3	125-150	Resistor, 15 ohm 5% BWH/SPH	1	
.....3	401-338	IC, SMT, REGULATOR, 5 AMP, LM338T *NOTE*	1	
.....3	450-110	Transistor, SGS TIP-110	1	
.....3	500-130	Screw, #4 x 1/4 slot. hex wash hd type B tapping zinc plate"	2	
.....3	510-235	Caplug, 5/32SCx5/8 230801HB	1	
.....3	520-045	Oven can	1	
.....3	DB61024	Washer, TO-220 Shoulder NYL Thermalloy #7721-7PPS	2	
.....3	DB68027	Sil Pad TO220 .75x.5" ADHSV Berquist 3223-07AC-58"	2	
....2	800-160B	PC Board, Modulator RPT-2/15	1	PCB
..1	800-163A3	RPT-2/15 300 Multiplier	1	
....2	046-0022	CAP,MICA,RF,22PF	2	C24,C39
....2	100-1041	RES,1K OHM,1/4W,1%	2	R1,R17
....2	100-1051	RES,10K OHM,1/4W,1%	2	R2,R11
....2	100-1551	RES,15K OHM,1/4W,1%	2	R5,R8



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	101-502	POT,5K,SINGLE TURN,HORIZONTAL PCB MOUNT	1	R14
....2	103-2744	RES,2.74K OHM,1/4W,1%,METAL	2	R4,R7
....2	103-3163	RES,316 OHM,1/4W,1%,METAL	1	R50
....2	103-3323	RES,332 OHM,1/4W,1%,METAL	1	R3
....2	103-4741	RES,4.75K OHM,1/4W,1%,METAL	1	R16
....2	103-4755	RES,47.5K OHM,1/4W,1%,METAL	1	R18
....2	103-5623	RES,562 OHM,1/4W,1%,METAL	1	R10
....2	145-030-C	RESISTOR, 3.3 OHM 1/4 WATT 5% CARBON COMP 30BJ250	1	R12
....2	145-152-C	RESISTOR, 1.5K OHM 1/4 WATT 5% CARBON COMP 30BJ250	1	R13
....2	145-680-C	Resistor, 68 ohm 1/4 watt 5% carbon comp 30BJ250	2	R6,R9
....2	210-0120	TSTR,TIP120 NPN SILICON PWR	1	Q50
....2	217-103	CAP,0.1UF 250VDC 5%,POLY FILM	3	C11,C17,C35
....2	217-104	CAPACITOR, .01 UF 50V GMV DISC	3	C2,C4,C9
....2	230-109	Capacitor, variable, 1.9-15.7 pf	2	C27,C28
....2	241-470	CAPACITOR, UNCASED MICA 47PF 5% FWM602	1	C29
....2	253-471	CAPACITOR, 470 PF 50V 10% Y5P DISC	1	C31
....2	255-020	Capacitor, 2 pf 5% type QC	1	C20
....2	255-040	Capacitor, 3.9 pf 5% type QC	2	C6,C13
....2	255-241	Capacitor, 240 pf 500v 5% silver mica CD10FD241J03	1	C8
....2	255-270	CAPACITOR, 27 PF, 5%, NPO, DISC	1	C19
....2	255-390C	Capacitor, 39pF 5% 200V ceramic dipped C322C390J2G5CA	1	C22
....2	255-470C	CAP, 47pF 5% 200V CERAMIC DIPPED	1	C21
....2	255-750	CAPACITOR, 75 pF 5% NPO DISC	1	C5



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	256-131	CAPACITOR, 130 pF 5% 50V NPO DISC	2	C14,C15
....2	256-151	CAPACITOR, 150 pF 5% NPO DISC	1	C7
....2	256-301	CAPACITOR, 300 pF 5% NPO DISC	1	C1
....2	256-680C	Cap., 68pF 5% 200V ceramic dipped Kemet C317C680J2G5CA	1	C12
....2	268-102	CAPACITOR, .001 uF 50V DISC -20%	8	C10,C16,C18, C23,C25,C30, C34,C38
....2	268-203	CAPACITOR, .02 UF 50V Z5U DISC	1	C3
....2	270-102	Cap,monolithic,1000pf 50v 5%KemetC1206C102J5GACTR marked	1	C26
....2	290-523	Capacitor, variable, 3.5-36 pf Sprague- Goodman GXA-36000	2	C36,C37
....2	299-220	Capacitor, tantalum, 2.2 mf 25v ECS- F1EE225K Panasonic	1	C33
....2	350-038	INDUCTOR, 1 1/2 TURN BROWN COILCRAFT 144-01J12S	2	L5,L6
....2	350-039	INDUCTOR, 2 1/2 TURN RED	2	L3,L4
....2	350-040	INDUCTOR, 6 1/2 TURN BLUE	2	L1,L2
....2	350-120	Inductor, 1 1/2 turn 14 AWG Buss Wire (CW)	2	L9,L10
.....3	580-142	Buss Wire, 14AWG Solid Tinned Copper	0.198	
....2	350-121	INDUCTOR, 10 TURN .15 uH	1	L12
....2	350-152	Inductor, 6 turn 22 AWG Red CW 215 Mult.	1	L8
....2	350-165	Inductor, 3 turn 16 AWG Buss Wire	1	L13
.....3	580-129	Buss Wire, 16AWG Solid Tinned Copper	0.275	
....2	407-0132	WASH,SHOULDER #4 .215 OD POLY	1	
....2	409-7403	PAD,TSTR MTG,TO-220 CASE	1	
....2	412-494	DIODE, GERMANIUM 1N270 (note)	2	D1,D2
....2	414-007	Diode, General Instruments 1N4007	1	D3
....2	420-4106	SCREW,4-40X.375,S.S. PH	1	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	420-629	Transistor, Motorola MRF629	1	Q5
....2	421-4007	4-40 X .187 S.S. HEX NUT	1	
....2	423-4001	#4 FLAT SS .250 X .125 X .018	1	
....2	423-4002	#4 LOCK S.S. SPLIT	1	
....2	424-427	TRANSISTOR, MOTOROLA/SGS/MICRO SEMI 2N4427 SRF944	1	Q4
....2	440-245-1	TRANSISTOR, 2N2857	3	Q1,Q2,Q3
....2	455-7805	HEATSINK,TO-220PKG,LOW PROFILE	1	
....2	513-016A4	Coil, 4 turn bead #30AWG	1	L11
.....3	513-016	Ferrite Bead, #56-590-65/4B	1	
.....3	580-106	Magnet Wire, #30AWG Single Nyleze	0.004	
....2	520-049	Heatsink, Thermalloy 2260R red or black	1	Q4
....2	550-084	CONNECTOR,PHONO JACK,PCB MOUNT	2	J1,J2
....2	550-197	Header, Breakaway 4x2,0.1 Spacing(Cut from 550-316)"	1	P1
.....3	550-316	HEADER, BREAKAWAY 40x2, 0.1 SPACING"	0.1	
....2	800-163B	PC Board, Multiplier RPT-2/15/30 STL- 10	1	PCB
..1	800-166A	RPU Audio Board	1	
....2	100-1013	RES,1 OHM,1/4W,5%	1	R48
....2	100-1041	RES,1K OHM,1/4W,1%	1	R43
....2	100-1551	RES,15K OHM,1/4W,1%	1	R46
....2	215-102	CAPACITOR, .001 uFD 2.5% 100V POLYPRO	1	C23
....2	800-166CM	Generic RPU Audio Board Assembly (SBCM)	1	
.....3	033-0123	CAPACITOR, .012 MFD 1% 100V POLYPRO	2	C20,C22
.....3	100-1041	RES,1K OHM,1/4W,1%	1	R1
.....3	100-1051	RES,10K OHM,1/4W,1%	1	R34
.....3	100-1531	RES,150 OHM,1/4W,1%	1	R5
.....3	101-104	Potentiometer, 100K ohm cermet Bourns 3309P-1-104	2	R26,R33
.....3	101-502	POT,5K,SINGLE TURN,HORIZONTAL PCB MOUNT	1	R22
.....3	103-1007	RES,1 MEG OHM,1/4W,1%,METAL	2	R38,R39
.....3	103-1062	RES,100K OHM,1/4W,1%,METAL	4	R6,R11,R12, R17
.....3	103-1823	RES,182 OHM,1/4W,1%,METAL	1	R3



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
.....3	103-2211	RES,22.1K OHM,1/4W,1%,METAL	1	R32
.....3	103-2216	RES,221K OHM,1/4W,1%,METAL	1	R31
.....3	103-2241	RES,2.21K OHM,1/4W,1%,METAL	1	R27
.....3	103-2744	RES,2.74K OHM,1/4W,1%,METAL	2	R24,R45
.....3	103-3323	RES,332 OHM,1/4W,1%,METAL	1	R13
.....3	103-3324	RES,3.32K OHM,1/4W,1%,METAL	2	R32
.....3	103-3325	RES,33.2K OHM,1/4W,1%,METAL	1	R16
.....3	103-3924	RES,3.92K OHM,1/4W,1%,METAL	3	R8,R10,R15
.....3	103-4731	RES,475K OHM,1/4W,1%,METAL	3	R20,R35,R36
.....3	103-4741	RES,4.75K OHM,1/4W,1%,METAL	1	R25
.....3	103-4755	RES,47.5K OHM,1/4W,1%,METAL	1	R2
.....3	103-5623	RES,562 OHM,1/4W,1%,METAL	1	R41
.....3	104-105	POTENTIOMETER, 1MEG OHM TOP ADJUST	1	R37
.....3	145-030	RESISTOR, 3.3 OHM 1/4 WATT 1% METAL FILM MEPCO SFR25	1	R9
.....3	145-106	Resistor, 10 meg ohm 1/4 watt 5% metal film Mepco SFR25	1	R29
.....3	145-221	Resistor, 220 ohm 1/4 watt 1% metal film Mepco SFR25	1	R17
.....3	145-225	Resistor, 2.21 meg ohm 1/4 watt 1% metal film (2.21 Meg 1%)	4	R19,R28,R40, R42
.....3	145-472	OBSOLETE REPLACE W/103-4741 (NLU-03)	0	
.....3	145-681	RESISTOR, 681 OHM 1/4 WATT 1% METAL FILM MEPCO SFR25	1	R4
.....3	145-822	Resistor, 8.25k ohm 1/4 watt 1% metal film Mepco SFR25	2	R14,R44
.....3	145-825	Resistor, 8.2 meg ohm 1/4 watt 5% carbon film 29SJ250	1	R30
.....3	203-4148	DIODE,1N4148	5	D1,D2,D3,D4, D5



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
.....3	215-223	Capacitor, .022 mfd 2.5% 100v polypro Seacor PFWAC220HGUE	1	C25
.....3	215-392	Capacitor, .0039 mfd 2.5% polypro	1	C26
.....3	215-822	CAPACITOR, .0082 MFD 2.5% 100V POLYPRO	1	C11
.....3	217-103	CAP,0.1UF 250VDC 5%,POLY FILM	1	C16
.....3	217-104	CAPACITOR, .01 UF 50V GMV DISC	2	C12,C28
.....3	219-106	CAPACITOR, 10UF 50V RADIAL ELECTROLYTIC	2	C3,C18
.....3	219-220	CAPACITOR, ELECTROLYTIC 22uF RADIAL 35V	3	C4,C21,C30
.....3	219-221	CAPACITOR, ELECTROLYTIC 220uF 25V RADIAL	3	C9,C13,C14
.....3	226-274	Cap.,.27 mf 100v 10% polypro CD MTC1P27K OR Bishop C21B274K	2	C7,C31
.....3	253-471	CAPACITOR, 470 PF 50V 10% Y5P DISC	3	C1,C15,C29
.....3	255-470C	CAP, 47pF 5% 200V CERAMIC DIPPED	2	C24,C27
.....3	256-680C	Cap., 68pF 5% 200V ceramic dipped Kemet C317C680J2G5CA	1	C10
.....3	270-102	Cap,monolithic,1000pf 50v 5%KemetC1206C102J5GACTR marked	10	C32,C33,C34, C35,C36,C37, C38,C39,C40, C41
.....3	299-470	CAP, TANTALUM, 4.7 UF 16V	3	C2,C17,C19
.....3	350-032	Inductor, 387-150M 40000-150000 uH	1	L1
.....3	401-054	Integrated Circuit, SGS TDA1054M	1	IC1
.....3	403-900	IC, QUADRUPLE NORTON OP AMP	1	IC2
.....3	414-007	Diode, General Instruments 1N4007	1	D6
.....3	550-123	Connector, 10 pin header (cut from 550- 162)	1	P1
.....4	550-162	Connector, 24 pin break-away (straight) Molex 26-48-6248	0.417	
.....3	800-166B	PC Board, Audio RPT-2/15/30	1	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
..1	800-168-1AR	RPT-15 Power Supply Regulator	1	
....2	145-241-1	RESISTOR, 240 OHM 1/4 WATT 1% SFR55 240 1% TR	1	R3
....2	219-200	CAPACITOR ELECTROLYTIC 22UF 25V	2	C7,C8
....2	268-102	CAPACITOR, .001 uF 50V DISC -20%	2	C10,C11
....2	400-338	IC, 5 AMP ADJUSTABLE REGULATOR	1	IC1
....2	418-0010	INSULATOR,MICA,TSTR,TO-3PKG	1	
....2	500-025	Screw, 6-32 x 5/8 phillips pan head M/S nickel plated"	2	
....2	500-055	Lockwasher, #4 internal tooth small pattern zinc plated	1	
....2	500-152	Screw, #6 x 5/8 phillips flat head type F metal tappin zinc"	1	
....2	500-162	Screw, 4-40 x 7/16 phillips pan head MS zinc plated"	2	
....2	510-081	Shrink-Tubing, 1/4 GPO135-1/4 black"	0.17	
....2	510-230	Socket, power transistor Samtec TO- 340-T	1	
....2	512-008	Solder Lug, #4 Concord 707-1404	1	
....2	513-027	Spacer, 4-40 x 1-1/4 hex threaded EFJ 313-6477-040	2	
....2	520-044D	Heatsink, drilled RPT-15 Supply	1	
.....3	520-044	HEATSINK, THERMALLOY 14494UX 2.75 DEBURRED,NATURAL FINISH	1	
.....3	699-520-044D	Labor only for Heatsink for RPT-15 Power Supply Rev A	1	
....2	550-126	Connector, crimp terminal pin Molex 08- 50-0187	4	
....2	550-137	Connector, 8 pin Molex housing 09-50- 8080	1	
....2	580-047	Wire, UL1061 22/7 OS-1 Orange	0.792	
....2	580-133	Wire, UL1061-18/16 #18 Red #M370-2	0.775	
....2	580-134	Wire, UL1061-18/16 #18 Black	0.875	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	580-136	Wire, UL1061-18/16 #18 Blue	0.792	
..1	800-168AR	RPT-15 POWER SUPPLY (UE)	1	
....2	100-2041	RES,2K OHM,1/4W,1%	1	R1
....2	101-501	Potentiometer, 500 ohm cermet Bourns 3309P-501	1	R2
....2	101-502	POT,5K,SINGLE TURN,HORIZONTAL PCB MOUNT	1	R4
....2	202-0502	RECT,3A,200V,IN5402	5	D1,D2,D3,D4, D7
....2	219-153	Cap,electrolytic 15000uF 25V Illinois Cap. 159LBA025M2CG	1	C5
....2	268-102	CAPACITOR, .001 uF 50V DISC -20%	4	C2,C3,C4,C11 B
....2	270-102	Cap,monolithic,1000pf 50v 5%KemetC1206C102J5GACTR marked	18	C1,C7,C8,C9, C10,C10B,C11, C12,C13,C14, C15,C16,C17, C18,C19,C20, C21,C22
....2	270-103	Cap, Monolithic chip 10000pF 10% XR7 Kemet C1206C103J5RACTR	1	C6
....2	330-018	INDUCTOR, 10 uH, 10%	3	L2,L4,L5
....2	330-019	INDUCTOR, 2.5 TURN, HIGH FREQUENCY SUPPRESSION	2	L1,L6
....2	414-007	Diode, General Instruments 1N4007	2	D5,D6
....2	500-148	EYELET, GS3-12 GM	10	
....2	550-125	Connector, 5 pin Molex Header (cut from 550-162) *NOTE*	1	P2
.....3	550-162	Connector, 24 pin break-away (straight) Molex 26-48-6248	0.208	
....2	550-138	Connector, 8 pin Molex header (cut from 550-162)	1	P1
.....3	550-162	Connector, 24 pin break-away (straight) Molex 26-48-6248	0.333	
....2	550-154	CONNECTOR, D-SUB 9 PIN ANGLE	1	
....2	800-168B	PC Board, Power Supply RPT-15 STL- 10	1	PCB



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
..1	800-170A31	RPT-15/300 Amplifier(COMPLETE ASSEMBLY)	1	
....2	145-030-C	RESISTOR, 3.3 OHM 1/4 WATT 5% CARBON COMP 30BJ250	1	R6
....2	145-470-C	Resistor, 47 ohm 1/4 watt 5% carbon comp 30BJ250	2	R1,R2
....2	145-681	RESISTOR, 681 OHM 1/4 WATT 1% METAL FILM MEPCO SFR25	1	R8
....2	217-103	CAP,0.1UF 250VDC 5%,POLY FILM	2	C9,C12
....2	219-200	CAPACITOR ELECTROLYTIC 22UF 25V	2	C8,C11
....2	236-501	Capacitor, uncased mica, 500 pf 33v 5% FWJ101	3	C7,C10,C23
....2	240-120	Capacitor, uncased mica, 12 pf 33v 5% FWJ101	3	C20,C21,C22
....2	240-220	Capacitor, uncased mica, 22 pf 33v 5% FWJ101	1	C14
....2	240-330	Capacitor, uncased mica, 33 pf 33v 5% FWJ101	1	C6
....2	240-602	Cap., variable, trimmer 25-115 pf FW C4006/OXSB Gullwing	1	C19
....2	240-680	Capacitor, uncased mica, 68 pf 33v 5% FWJ101	1	C13
....2	260-100	Capacitor, variable, trimmer 2.5-7 pf FW C4000/OBSM Gullwing	2	C1,C2
....2	260-200	Cap.,variable, trimmer 4-20 pf FW C4002/OBSM Gullwing	4	C3,C5,C15, C16
....2	330-012	Inductor, 15 uH Coilcraft 90-27	2	L12,L13
....2	330-019	INDUCTOR, 2.5 TURN, HIGH FREQUENCY SUPPRESSION	1	L4
....2	350-112	Inductor, 3 turn 22 AWG Red (CCW)	1	L2
.....3	555-112	COST, LABOR FOR 350-112	1	
.....3	580-104	Magnet Wire, #22AWG Single Nyleze (RED)	0.001	
....2	350-116	Inductor, 1 turn 20 AWG Red (CCW)	2	L16,L19
.....3	555-116	COST, LABOR FOR 350-116	1	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
.....3	580-103	Magnet Wire, #20AWG Single Nyleze (RED)	0.001	
....2	350-117	Inductor, 8 turn 22 AWG Red (CCW)	3	L3,L6,L7
.....3	555-117	COST, LABOR FOR 350-117	1	
.....3	580-104	Magnet Wire, #22AWG Single Nyleze (RED)	0.001	
....2	350-142	Inductor, 4 turn 20 AWG Red	2	L17,L18
.....3	555-142	COST,LABOR FOR 350-142	1	
.....3	580-103	Magnet Wire, #20AWG Single Nyleze (RED)	0.001	
....2	350-150	Inductor, 1/2 turn 16 AWG Buss Wire	1	L5
....2	410-1416	LUG,TERM,BENT,11/16	2	
....2	412-494	DIODE, GERMANIUM 1N270 (note)	1	D1
....2	425-945	Transistor, RF Power	1	Q1
....2	443-032	TRANSISTOR, 470MHZ, 12.5 VOLTS, COMMON EMITTER, SD1422(NOTE)	1	Q2
....2	500-011	Screw, 4-40 x 1/2 phillips pan head M/S nickel plated"	2	
....2	500-121	Rivet, 3 x 8 F metric 101203081 M3X8	6	
....2	500-124	Pop-Rivet, SD44BS Long Steel	4	
....2	500-199	Keps nut 4 x 40 zinc 4CNKEOZ	2	
....2	510-005	Polytube, Manhatten#AF155A-20-yel	0.25	
....2	520-042D	Heatsink, drilled RPT-15/215/300/450 Amp.	1	
.....3	520-042	Heatsink, Aavid 2-7/8 642253UO2875	1	
.....3	699-520-042D	Labor Only for Heatsink for RPT15/215/300/450 Amp. Rev A	1	
....2	550-012	CONN, SO-239A UHF PANEL RECEPTACLE	1	J1
....2	586-094	Cable Assembly, RPT2/15 Amplifier (SBCM)	1	
.....3	550-126	Connector, crimp terminal pin Molex 08-50-0187	3	
.....3	550-159	Connector, 4 pin Molex housing 09-50-8040	1	
.....3	580-040	Wire, UL1061 22/7 OTC Black	0.46	
.....3	580-043	Wire, UL1061 22/7 OTC Red	0.46	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
.....3	580-046	Wire, UL1061 22/7 OTC Green	0.5	
....2	700-109-3	Shield, Amplifier	1	
....2	700-220-11	Heatsink Enclosure, RPT-15	2	
....2	700-220-20	Amplifier Connector Plate	1	
....2	700-246	Fingerstock, LH-55-51500 X 24 or 81-02-11836-2000	0.08	
....2	703-009	Copper Foil, .0014 x .250"	0.001	
....2	800-170-2B	PC Board, Power Amp. RPT-15 STL-10/15	1	PCB
..1	800-259A	RPT-15 Microphone Conn. Bd.	1	
....2	270-102	Cap,monolithic,1000pf 50v 5%KemetC1206C102J5GACTR marked	2	C4,C5
....2	413-1597	TERM,TURRET,2 SHLDR,.219,GOLD FLASH	3	E1,E2,E3
....2	550-155-1	Connector, XLR Receptacle Insert Nuetrik#3FD-V-I-O	1	P1
....2	800-259B	PC Board, Microphone Connector RPT-2/15	1	PCB
..1	800-270A	STL-10/RPT2/15 Sm. Feed Thru Board	1	
....2	270-103	Cap, Monolithic chip 10000pF 10% XR7 Kemet C1206C103J5RACTR	3	C1,C2,C3
....2	550-172	Connector, 4 pin Molex angle header long (cut from 550-171)	1	P1
.....3	550-171	Connector, 24 pin break-away (Long pins) Molex 26-58-1241	0.167	
....2	800-270B	PC Board, Feedthru RPT-2/15/STL-10	1	PCB



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
0	705-T15-4	RPT-15/450; 120VAC		
..1	320-037L	TRANSFORMER, POWER, RPT15 110V W/LUGS	1	
....2	320-037	TRANSFORMER, POWER, 15906 W/RPT BRACKETS	1	
0	705-T15-42	RPT-15/450; 220VAC		
..1	320-037AL	TRANSFORMER, POWER, RPT15 220V W/LUGS	1	
....2	320-037A	TRANSFORMER, POWER, 16928 W/RPT BRACKETS 220V	1	
0	705-T15-44	RPT-15/450; 240VAC		
..1	320-037CL	TRANSFORMER, POWER RPT15 240V W/LUGS	1	
....2	320-037BC	TRANSFORMER, POWER, 15906C 240V W/STL BRACKETS	1	
....2	550-126	Connector, crimp terminal pin Molex 08- 50-0187	2	
....2	700-220-14	Bracket, RPT-15 Transformer	2	
..1	586-011	Cable Assembly, RPT-2/15 Harness (SBCM)	1	
....2	500-128	Eyelet, GS4-4 brass	1	
....2	550-122	CONNECTOR, 10 PIN MOLEX HOUSING 09-50-8100	1	
....2	550-126	Connector, crimp terminal pin Molex 08- 50-0187	16	
....2	550-133	CONNECTOR, PHONE PLUG 3C1215	1	
....2	550-135	Connector, 6 pin Molex housing 09-50- 8060	1	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	580-033	Coax high shield RG-316/U Manhattan M4259	0.44	
....2	580-041	Wire, UL1061 22/7 OTC Brown	0.5	
....2	580-043	Wire, UL1061 22/7 OTC Red	0.46	
....2	580-044	Wire, UL1061 22/7 OTC Yellow	0.54	
....2	580-046	Wire, UL1061 22/7 OTC Green	0.75	
....2	580-047	Wire, UL1061 22/7 OS-1 Orange	0.58	
....2	580-051	Wire, UL1061 22/7 OTC White/Blue	0.57	
....2	580-088	Shielded Wire, 16-C-22-SPJ White/Red 1 Cond. 22/19x34 pvc	0.61	
....2	580-089	Shielded Wire, 16-C-22-SPJ White/Orange 1 cond 22/19x34 pvc	0.44	
....2	580-091	Shielded Wire, 16-C-22-SPJ White/Green 1 Cond.22/19x34 pvc	0.46	
....2	580-092	Shielded Wire, 16-C-22-SPJ White/Blue 1 Cond.22/19x34 pvc	0.46	
..1	586-057	Cable Assembly, RPT-2/15 14.5 Internal TAC-9720 (SBCM)"	1	
..1	586-087	Cable Assembly, RPT-15 #1 Altair TAC 9717 (SBCM)	1	
....2	550-122	CONNECTOR, 10 PIN MOLEX HOUSING 09-50-8100	1	
....2	550-126	Connector, crimp terminal pin Molex 08-50-0187	7	
....2	580-041	Wire, UL1061 22/7 OTC Brown	0.54	
....2	580-045	Wire, UL1061 22/7 OTC Blue	0.44	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	580-046	Wire, UL1061 22/7 OTC Green	0.52	
....2	580-048	Wire, UL1061 22/7 OTC Violet	0.82	
....2	580-050	Wire, UL1061 22/7 OS-1 White/Red	0.61	
....2	580-059	Wire, UL1061 22/7 OTC Yellow/Blue	0.92	
....2	580-133	Wire, UL1061-18/16 #18 Red #M370-2	0.46	
....2	580-137	Wire, UL1061 18/19 #18 Orange Tinned Copper	0.47	
..1	586-088	Cable Assembly, RPT-15 #2 Altair TAC 9721 (SBCM)	1	
....2	510-090	Cable Ties, 4 Panduit PANPLT1M-M MS3367-4-9"	3	
....2	550-122	CONNECTOR, 10 PIN MOLEX HOUSING 09-50-8100	1	
....2	550-124	Connector, 5 pin Molex housing 09-50- 8050 *NOTE*	1	
....2	550-126	Connector, crimp terminal pin Molex 08- 50-0187	16	
....2	550-159	Connector, 4 pin Molex housing 09-50- 8040	1	
....2	550-205	Connector pins, Molex 16-02-0086	8	
....2	550-222	Connector, 8 dual row housing Molex 22- 55-2081	1	
....2	580-041	Wire, UL1061 22/7 OTC Brown	0.73	
....2	580-046	Wire, UL1061 22/7 OTC Green	0.94	
....2	580-048	Wire, UL1061 22/7 OTC Violet	0.73	
....2	580-050	Wire, UL1061 22/7 OS-1 White/Red	0.38	
....2	580-059	Wire, UL1061 22/7 OTC Yellow/Blue	1.84	
....2	580-133	Wire, UL1061-18/16 #18 Red #M370-2	1.02	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	580-136	Wire, UL1061-18/16 #18 Blue	0.4	
....2	580-137	Wire, UL1061 18/19 #18 Orange Tinned Copper	0.73	
..1	700-220-13A	RPT-15 Final Assembly	1	
....2	030-034M	Meter, VU	1	
.....3	030-033	200 Micro-Amp Meter	1	
.....3	030-033-1	VU Meter Scales	1	
....2	100-103	POT, 10K OHM TYPE T270D VH4340 EXC.270	2	
....2	100-1551	RES,15K OHM,1/4W,1%	1	
....2	145-431	Resistor, 432 ohm 1/4 watt 1% metal film Mepco SFR25	1	
....2	236-501	Capacitor, uncased mica, 500 pf 33v 5% FWJ101	2	
....2	253-471	CAPACITOR, 470 PF 50V 10% Y5P DISC	1	
....2	297-222	Cap,.0022mf 400v ceramic disc MURATA DE1007E222M-KH	2	
....2	334-0150	FUSE,3AG,1.5 AMP,SLO-BLO	1	
....2	402-0005	PRESS CLIP,NYLON W/ADHESIVE BACK	1	
....2	410-1410	LUG,TERM,1/2	2	
....2	420-4104	SCREW,4-40X.250,S.S. PH	19	
....2	420-4296	SCREW,4-40X.375,PH PAN HD SC	4	
....2	420-4503	SCREW,4-40X.187,S.S. PH UC	2	
....2	420-6108	SCREW,6-32X.500,S.S. PH	4	
....2	421-6005	6-32 ELASTIC STOP HEX NUT	4	
....2	423-6003	#6 LOCK INT TOOTH	6	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	500-002	Hex Nut, #4-40 Extra Small Pattern Nickel Plated	2	
....2	500-022	Screw, 6-32 x 3/8 phillips pan head M/S nickel plated"	8	
....2	500-055	Lockwasher, #4 internal tooth small pattern zinc plated	2	
....2	500-105	Pop-Rivet, AD42BS Aluminum	14	
....2	500-115	Pop-Rivet, SK42BS counter sunk	8	
....2	500-121	Rivet, 3 x 8 F metric 101203081 M3X8	4	
....2	500-123	Washer, Switchcraft #S1790-1	2	
....2	500-162	Screw, 4-40 x 7/16 phillips pan head MS zinc plated"	2	
....2	500-180	Screw, 4-40 x 1/4 phillips pan head M/S Black Zinc"	4	
....2	500-181	Screw, #4 x 1/4 phillips pan head S/M Black Zinc"	2	
....2	500-183	Screw, 6-32 x 1/4 phillips pan head Black Zinc"	14	
....2	500-188	Screw, 4-40 x 3/8 phillips,flat head,black oxide"	2	
....2	500-199	Keps nut 4 x 40 zinc 4CNKEOZ	13	
....2	500-245	Lock Washer, 1/4 Internal Tooth L/W Zinc"	2	
....2	510-002	Shrink-Tubing, 3/4 black W3B2 3/4" Sumitomo"	0.06	
....2	510-005	Polytube, Manhatten#AF155A-20-yel	0.54	
....2	510-072	Fuseholder, Littlefuse #342-004	1	
....2	510-090	Cable Ties, 4 Panduit PANPLT1M-M MS3367-4-9"	10	
....2	510-191	#4 Bracket, Keystone 612	12	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	510-192	Connector, AC receptacle, Switchcraft EAC-309	1	
....2	510-210	Brackets, #6 Keystone 634	2	
....2	510-246	Flexible Grommet, (NOTE)	0.01	
....2	512-008	Solder Lug, #4 Concord 707-1404	2	
....2	513-027	Spacer, 4-40 x 1-1/4 hex threaded EFJ 313-6477-040	2	
....2	513-030	SPACER, 6-32 X 15/16 HEX THREADED	4	
....2	520-046	Heatsink, Thermalloy 1116B round	1	
....2	550-083	Connector, Tini-Jax Switchcraft 41	2	
....2	550-155-2	Connector Shell XLR Receptacle DH-NF-BAG-O	1	
....2	580-005	Buss Wire, #22AWG Solid Tinned Copper	0.79	
....2	580-040	Wire, UL1061 22/7 OTC Black	0.75	
....2	580-130	Wire, Stranded UL1015-20/10 Black Tinned Copper	0.38	
....2	580-138	Flat Braid, 1/4 #1231"	0.08	
....2	700-091-15	Mounting Bracket, RPT-2/15 Meter	2	
....2	700-220-16A	RPT-2/15 Multiplier Heat Sink Assembly	1	
.....3	500-113	Screw, 4-40 x 1/8 slotted pan head M/S zinc plated"	1	
.....3	520-046	Heatsink, Thermalloy 1116B round	1	
.....3	700-220-16	Copper Heatsink, RPT-2/15	1	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	700-260	Fingerstock,Angle Chomerics 81-01-11817-2000-24 No Adhesive	0.07	
....2	DB61024	Washer, TO-220 Shoulder NYL Thermalloy #7721-7PPS	2	
..1	700-220-13P	Front Panel, RPT-15 (SBCM)	1	
....2	500-073	Fastener, PEM S-632-1 ZI	2	
....2	500-184	RIVET, 1/8 x .165 SEMI-TUBULAR BLACK 100 CE100732	8	
....2	510-191	#4 Bracket, Keystone 612	2	
....2	530-001	Switch, slide DPDT Switchcraft	1	
....2	530-018	Switch, slide DPIT Switchcraft 46313LDR	1	
....2	530-021	Switch, slide TPTT Switchcraft 11H-1086	1	
....2	700-220-13	Front Panel, RPT-15	1	
.....3	698-220-13	Front Panel, RPT-15 Bare Metal	1	
.....3	699-220-13	Front Panel, RPT-15 Contract Labor Painting	1	
..1	700-220-18	Cover, RPT-2/15/30 Modular .032 aluminum	1	
..1	700-220-2P	Rear Panel, RPT-2/15 (SBCM)	1	
....2	500-073	Fastener, PEM S-632-1 ZI	2	
....2	700-220-2	Rear Panel, RPT-2/15	1	
..1	700-220-3P	Frame, R/H Side RPT-2/15 (SBCM)	1	
....2	500-073	Fastener, PEM S-632-1 ZI	4	
....2	700-220-3	Frame, R/H Side RPT-2/15	1	
..1	700-220-4P	Frame, L/H Side RPT-2/15 (SBCM)	1	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	500-073	Fastener, PEM S-632-1 ZI	4	
....2	700-220-4	Frame, L/H Side RPT-2/15	1	
..1	700-220-5P	Top Cover, RPT-2/15 w/feet (SBCM)	1	
....2	500-119	Rivet, CE100 7/32 steel nickel	2	
....2	500-127	Washer, C-126=820W Brass/Nickel Plated	2	
....2	510-205	BUMPER, BRUCE PLASTICS 0772- 0014 BLACK	2	
....2	700-220-5	Top Cover, RPT-2/15	1	
..1	700-220-6P	Bottom Cover, RPT-2/15 w/ft & hand (SBCM)	1	
....2	500-119	Rivet, CE100 7/32 steel nickel	6	
....2	500-127	Washer, C-126=820W Brass/Nickel Plated	8	
....2	500-186	Rivet, 1/8 x .312 semi-tubular standard finish	2	
....2	510-132	Handle Assy., black w/black plated steel hdwe #1879-376-370	1	
....2	510-205	BUMPER, BRUCE PLASTICS 0772- 0014 BLACK	6	
....2	700-220-6	Bottom Cover, RPT-2/15	1	
..1	700-220-7PB	Partition, RPT-2/15 #1 w/bd	1	
....2	420-4104	SCREW,4-40X.250,S.S. PH	4	
....2	500-199	Keps nut 4 x 40 zinc 4CNKEOZ	4	
....2	700-220-7	Partition, RPT-2/15 #1	1	
....2	800-254A	RPU/STL-30 Feed-Thru Board	1	
.....3	270-102	Cap,monolithic,1000pf 50v 5%KemetC1206C102J5GACTR marked	10	C1,C2,C3,C4,C 5,C6,C7,C8,C9 ,C10



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
.....3	550-156	Connector, 10 pin Molex header 26-48-4102 *NOTE*	1	P1/P2
.....3	800-254B	PC Board, Feed-thru RPT-2/15/30	1	PCB
..1	700-220-8	Partition, RPT-2/15 #2	1	
..1	800-160A2	450/950 RPU MODULATOR BOARD	1	
....2	100-1041	RES,1K OHM,1/4W,1%	1	R17
....2	101-104	Potentiometer, 100K ohm cermet Bourns 3309P-1-104	2	R1,R2
....2	103-2744	RES,2.74K OHM,1/4W,1%,METAL	1	R9
....2	103-4741	RES,4.75K OHM,1/4W,1%,METAL	1	
....2	103-4755	RES,47.5K OHM,1/4W,1%,METAL	4	R3,R4,R5,R6
....2	104-502	Potentiometer, 5K ohm cermet Spectrol 64Y502 top adjust	1	R8
....2	145-030	RESISTOR, 3.3 OHM 1/4 WATT 1% METAL FILM MEPCO SFR25	2	R10,R16
....2	145-122-1	Resistor, 1.2k ohm 1/4 watt 1% CCF07 1.2K MF TR	1	R13
....2	145-182-1	RESISTOR, 1.8K OHN 1/4 WATT 1% RL07S182G MF	1	R14
....2	145-241-1	RESISTOR, 240 OHM 1/4 WATT 1% SFR55 240 1% TR	2	R7,R12
....2	145-363-1	Resistor, 36k ohm 1/4 watt 1% RL07S363G	2	R11,R18
....2	203-4148	DIODE,1N4148	1	D1
....2	217-103	CAP,0.1UF 250VDC 5%,POLY FILM	3	C3,C4,C11



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	217-104	CAPACITOR, .01 UF 50V GMV DISC	1	C8
....2	219-220	CAPACITOR, ELECTROLYTIC 22uF RADIAL 35V	1	C10
....2	255-161	CAPACITOR, 160 PF 300V 5% SIVLER MICA	1	C6
....2	255-180	CAPACITOR, 18 pF 5% NPO DISC	1	C7
....2	255-271C	CAPACITOR, 270pF 5% 200V CERAMIC DIPPED	1	C5
....2	299-470	CAP, TANTALUM, 4.7 UF 16V	3	C1,C2,C9
....2	330-007	Inductor, 1 uH Dale IM-2 1UH 5%	1	L5
....2	350-037	INDUCTOR, 13 1/2 TURN ORANGE COILCRAFT 143-13J12S	2	L1,L4
....2	350-044	INDUCTOR, 1.0 - 2 UH W/SHIELD CAN #47271-022	2	L2,L3
....2	411-404	DIODE,MOT. HYPER-ABRUPT TUNING SMV-1732/CRYSTALONICS MV1404	1	
....2	440-245-1	TRANSISTOR, 2N2857	1	Q1
....2	511-038	Terminal, Keystone 1238	1	TP1
....2	520-040	CRYSTAL SOCKET, CS-109-07	2	Y1,Y2
....2	520-041	Clip, transistor, Atlee 100-200-1-2 cad plated	1	Q1
....2	530-051	SWITCH, SIDE ACTION SLIDE DPDT	1	S1
....2	550-136	Connector, 6 pin Molex header (cut from 550-162)	1	P1
.....3	550-162	Connector, 24 pin break-away (straight) Molex 26-48-6248	0.25	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	800-160-1A	X-Mitter Freq. Control Module (oven w/diode)	1	IC1/M1/Q2
.....3	120-002	THERMISTOR, 1000 OHM @ 25C 10%	1	
.....3	125-150	Resistor, 15 ohm 5% BWH/SPH	1	
.....3	401-338	IC, SMT, REGULATOR, 5 AMP, LM338T *NOTE*	1	
.....3	450-110	Transistor, SGS TIP-110	1	
.....3	500-130	Screw, #4 x 1/4 slot. hex wash hd type B tapping zinc plate"	2	
.....3	510-235	Caplug, 5/32SCx5/8 230801HB	1	
.....3	520-045	Oven can	1	
.....3	DB61024	Washer, TO-220 Shoulder NYL Thermalloy #7721-7PPS	2	
.....3	DB68027	Sil Pad TO220 .75x.5" ADHSV Berquist 3223-07AC-58"	2	
....2	800-160B	PC Board, Modulator RPT-2/15	1	PCB
..1	800-163A4	X-Mitter 450 Multiplier RPT2/15	1	
....2	100-1041	RES,1K OHM,1/4W,1%	2	R1,R17
....2	100-1051	RES,10K OHM,1/4W,1%	2	R2,R11
....2	100-1531	RES,150 OHM,1/4W,1%	1	R3
....2	100-1551	RES,15K OHM,1/4W,1%	2	R5,R8
....2	101-502	POT,5K,SINGLE TURN,HORIZONTAL PCB MOUNT	1	R14
....2	103-2744	RES,2.74K OHM,1/4W,1%,METAL	2	R4,R7
....2	103-3163	RES,316 OHM,1/4W,1%,METAL	1	R50



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	103-3323	RES,332 OHM,1/4W,1%,METAL	1	R13
....2	103-4741	RES,4.75K OHM,1/4W,1%,METAL	1	R16
....2	103-4755	RES,47.5K OHM,1/4W,1%,METAL	1	R18
....2	103-5623	RES,562 OHM,1/4W,1%,METAL	1	R10
....2	145-030-C	RESISTOR, 3.3 OHM 1/4 WATT 5% CARBON COMP 30BJ250	1	R12
....2	145-680-C	Resistor, 68 ohm 1/4 watt 5% carbon comp 30BJ250	2	R6,R9
....2	210-0120	TSTR,TIP120 NPN SILICON PWR	1	Q50
....2	217-103	CAP,0.1UF 250VDC 5%,POLY FILM	3	C11,C17,C35
....2	217-104	CAPACITOR, .01 UF 50V GMV DISC	3	C2,C4,C9
....2	230-103	CAPACITOR, VARIABLE 1.3-5.4PF	2	C27,C28
....2	230-109	Capacitor, variable, 1.9-15.7 pf	2	C36,C37
....2	241-100	CAPACITOR, UNCASSED MICA 10PF 5% FWM602	1	C24
....2	241-120	CAPACITOR, UNCASSED MICA 12PF 5% FWM602	1	C39
....2	241-330	CAPACITOR, UNCASSED MICA 33PF 5% FWM602	1	C29
....2	253-471	CAPACITOR, 470 PF 50V 10% Y5P DISC	1	C31
....2	255-010	Capacitor, 1 pf 5% type QC	2	C13,C20
....2	255-020	Capacitor, 2 pf 5% type QC	1	C6
....2	255-030-1	CAPACITOR, 3 pF 5% NPO DISC	1	C12B



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	255-100	CAPACITOR, 10 PF 5% NPO DISC	1	C19
....2	255-150	CAPACITOR, 15 pF 5% NPO DISC	1	C21
....2	255-220	CAPACITOR, 22 pF 5% NPO DISC	1	C1
....2	255-270	CAPACITOR, 27 PF, 5%, NPO, DISC	2	C22,C12A
....2	255-390C	Capacitor, 39pF 5% 200V ceramic dipped C322C390J2G5CA	1	C5
....2	255-470C	CAP, 47pF 5% 200V CERAMIC DIPPED	1	C14
....2	255-750	CAPACITOR, 75 pF 5% NPO DISC	1	C15
....2	256-151	CAPACITOR, 150 pF 5% NPO DISC	1	C8
....2	256-680C	Cap., 68pF 5% 200V ceramic dipped Kemet C317C680J2G5CA	1	C7
....2	268-102	CAPACITOR, .001 uF 50V DISC -20%	8	C10,C16,C18, C23,C25,C30, C34,C38
....2	268-203	CAPACITOR, .02 UF 50V Z5U DISC	1	C3
....2	270-102	Cap,monolithic,1000pf 50v 5%KemetC1206C102J5GACTR marked	1	C26
....2	299-220	Capacitor, tantalum, 2.2 mf 25v ECS- F1EE225K Panasonic	1	C33
....2	350-038	INDUCTOR, 1 1/2 TURN BROWN COILCRAFT 144-01J12S	2	L5,L6
....2	350-039	INDUCTOR, 2 1/2 TURN RED	2	L3,L4
....2	350-040	INDUCTOR, 6 1/2 TURN BLUE	2	L1,L2
....2	350-118	Inductor, 1-1/2 turn 14 AWG Buss Wire (CCW)	1	L13
.....3	580-142	Buss Wire, 14AWG Solid Tinned Copper	0.198	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	350-120	Inductor, 1 1/2 turn 14 AWG Buss Wire (CW)	3	L8,L9,L10
.....3	580-142	Buss Wire, 14AWG Solid Tinned Copper	0.198	
....2	350-121	INDUCTOR, 10 TURN .15 uH	1	L12
....2	407-0132	WASH,SHOULDER #4 .215 OD POLY	1	
....2	409-7403	PAD,TSTR MTG,TO-220 CASE	1	
....2	412-494	DIODE, GERMANIUM 1N270 (note)	2	D1,D2
....2	414-007	Diode, General Instruments 1N4007	1	D3
....2	420-4106	SCREW,4-40X.375,S.S. PH	1	
....2	420-629-1	Transistor, BLX-65ES	1	Q5
....2	421-4007	4-40 X .187 S.S. HEX NUT	1	
....2	422-857	Transistor, Motorola 2N2857	3	Q1,Q2,Q3
....2	423-4001	#4 FLAT SS .250 X .125 X .018	1	
....2	423-4002	#4 LOCK S.S. SPLIT	1	
....2	424-427	TRANSISTOR, MOTOROLA/SGS/MICRO SEMI 2N4427 SRF944	1	Q4
....2	455-7805	HEATSINK,TO-220PKG,LOW PROFILE	1	
....2	513-016A3	Coil, 3 turn Bead #27AWG	1	L11
.....3	513-016	Ferrite Bead, #56-590-65/4B	1	
.....3	580-105	Magnet Wire, #27AWG Single Nyleze	0.004	
....2	520-049	Heatsink, Thermalloy 2260R red or black	1	Q4
....2	550-084	CONNECTOR,PHONO JACK,PCB MOUNT	2	J1,J2



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	550-197	Header, Breakaway 4x2,0.1 Spacing(Cut from 550-316)"	1	P1
.....3	550-316	HEADER, BREAKAWAY 40x2, 0.1 SPACING"	0.1	
....2	800-163B	PC Board, Multiplier RPT-2/15/30 STL-10	1	PCB
..1	800-166A	RPU Audio Board	1	
....2	100-1013	RES,1 OHM,1/4W,5%	1	R48
....2	100-1041	RES,1K OHM,1/4W,1%	1	R43
....2	100-1551	RES,15K OHM,1/4W,1%	1	R46
....2	215-102	CAPACITOR, .001 uFD 2.5% 100V POLYPRO	1	C23
....2	800-166CM	Generic RPU Audio Board Assembly (SBCM)	1	
.....3	033-0123	CAPACITOR, .012 MFD 1% 100V POLYPRO	2	C20,C22
.....3	100-1041	RES,1K OHM,1/4W,1%	1	R1
.....3	100-1051	RES,10K OHM,1/4W,1%	1	R34
.....3	100-1531	RES,150 OHM,1/4W,1%	1	R5
.....3	101-104	Potentiometer, 100K ohm cermet Bourns 3309P-1-104	2	R26,R33
.....3	101-502	POT,5K,SINGLE TURN,HORIZONTAL PCB MOUNT	1	R22
.....3	103-1007	RES,1 MEG OHM,1/4W,1%,METAL	2	R38,R39
.....3	103-1062	RES,100K OHM,1/4W,1%,METAL	4	R6,R11,R12, R17
.....3	103-1823	RES,182 OHM,1/4W,1%,METAL	1	R3



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
.....3	103-2211	RES,22.1K OHM,1/4W,1%,METAL	1	R32
.....3	103-2216	RES,221K OHM,1/4W,1%,METAL	1	R31
.....3	103-2241	RES,2.21K OHM,1/4W,1%,METAL	1	R27
.....3	103-2744	RES,2.74K OHM,1/4W,1%,METAL	2	R24,R45
.....3	103-3323	RES,332 OHM,1/4W,1%,METAL	1	R13
.....3	103-3324	RES,3.32K OHM,1/4W,1%,METAL	2	R32
.....3	103-3325	RES,33.2K OHM,1/4W,1%,METAL	1	R16
.....3	103-3924	RES,3.92K OHM,1/4W,1%,METAL	3	R8,R10,R15
.....3	103-4731	RES,475K OHM,1/4W,1%,METAL	3	R20,R35,R36
.....3	103-4741	RES,4.75K OHM,1/4W,1%,METAL	1	R25
.....3	103-4755	RES,47.5K OHM,1/4W,1%,METAL	1	R2
.....3	103-5623	RES,562 OHM,1/4W,1%,METAL	1	R41
.....3	104-105	POTENTIOMETER, 1MEG OHM TOP ADJUST	1	R37
.....3	145-030	RESISTOR, 3.3 OHM 1/4 WATT 1% METAL FILM MEPCO SFR25	1	R9
.....3	145-106	Resistor, 10 meg ohm 1/4 watt 5% metal film Mepco SFR25	1	R29
.....3	145-221	Resistor, 220 ohm 1/4 watt 1% metal film Mepco SFR25	1	R17



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
.....3	145-225	Resistor, 2.21 meg ohm 1/4 watt 1% metal film (2.21 Meg 1%)	4	R19,R28,R40, R42
.....3	145-472	OBSOLETE REPLACE W/103-4741 (NLU-03)	0	
.....3	145-681	RESISTOR, 681 OHM 1/4 WATT 1% METAL FILM MEPCO SFR25	1	R4
.....3	145-822	Resistor, 8.25k ohm 1/4 watt 1% metal film Mepco SFR25	2	R14,R44
.....3	145-825	Resistor, 8.2 meg ohm 1/4 watt 5% carbon film 29SJ250	1	R30
.....3	203-4148	DIODE,1N4148	5	D1,D2,D3,D4, D5
.....3	215-223	Capacitor, .022 mfd 2.5% 100v polypro Seacor PFWAC220HGUE	1	C25
.....3	215-392	Capacitor, .0039 mfd 2.5% polypro	1	C26
.....3	215-822	CAPACITOR, .0082 MFD 2.5% 100V POLYPRO	1	C11
.....3	217-103	CAP,0.1UF 250VDC 5%,POLY FILM	1	C16
.....3	217-104	CAPACITOR, .01 UF 50V GMV DISC	2	C12,C28
.....3	219-106	CAPACITOR, 10UF 50V RADIAL ELECTROLYTIC	2	C3,C18
.....3	219-220	CAPACITOR, ELECTROLYTIC 22uF RADIAL 35V	3	C4,C21,C30
.....3	219-221	CAPACITOR, ELECTROLYTIC 220uF 25V RADIAL	3	C9,C13,C14
.....3	226-274	Cap.,.27 mf 100v 10% polypro CD MTC1P27K OR Bishop C21B274K	2	C7,C31
.....3	253-471	CAPACITOR, 470 PF 50V 10% Y5P DISC	3	C1,C15,C29



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
.....3	255-470C	CAP, 47pF 5% 200V CERAMIC DIPPED	2	C24,C27
.....3	256-680C	Cap., 68pF 5% 200V ceramic dipped Kemet C317C680J2G5CA	1	C10
.....3	270-102	Cap,monolithic,1000pf 50v 5%KemetC1206C102J5GACTR marked	10	C32,C33,C34, C35,C36,C37, C38,C39,C40, C41
.....3	299-470	CAP, TANTALUM, 4.7 UF 16V	3	C2,C17,C19
.....3	350-032	Inductor, 387-150M 40000-150000 uH	1	L1
.....3	401-054	Integrated Circuit, SGS TDA1054M	1	IC1
.....3	403-900	IC, QUADRUPLE NORTON OP AMP	1	IC2
.....3	414-007	Diode, General Instruments 1N4007	1	D6
.....3	550-123	Connector, 10 pin header (cut from 550-162)	1	P1
.....4	550-162	Connector, 24 pin break-away (straight) Molex 26-48-6248	0.417	
.....3	800-166B	PC Board, Audio RPT-2/15/30	1	
..1	800-166AT	TSL Audio Board	1	
....2	100-1013	RES,1 OHM,1/4W,5%	1	R48
....2	100-1041	RES,1K OHM,1/4W,1%	1	
....2	145-822	Resistor, 8.25k ohm 1/4 watt 1% metal film Mepco SFR25	1	R46
....2	215-223	Capacitor, .022 mfd 2.5% 100v polypro Seacor PFWAC220HGUE	1	C23
....2	421-1113	RIV,CLOSED-END .125 X .316L	2	
....2	800-166CM	Generic RPU Audio Board Assembly (SBCM)	1	
.....3	033-0123	CAPACITOR, .012 MFD 1% 100V POLYPRO	2	C20,C22



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
.....3	100-1041	RES,1K OHM,1/4W,1%	1	R1
.....3	100-1051	RES,10K OHM,1/4W,1%	1	R34
.....3	100-1531	RES,150 OHM,1/4W,1%	1	R5
.....3	101-104	Potentiometer, 100K ohm cermet Bourns 3309P-1-104	2	R26,R33
.....3	101-502	POT,5K,SINGLE TURN,HORIZONTAL PCB MOUNT	1	R22
.....3	103-1007	RES,1 MEG OHM,1/4W,1%,METAL	2	R38,R39
.....3	103-1062	RES,100K OHM,1/4W,1%,METAL	4	R6,R11,R12, R17
.....3	103-1823	RES,182 OHM,1/4W,1%,METAL	1	R3
.....3	103-2211	RES,22.1K OHM,1/4W,1%,METAL	1	R32
.....3	103-2216	RES,221K OHM,1/4W,1%,METAL	1	R31
.....3	103-2241	RES,2.21K OHM,1/4W,1%,METAL	1	R27
.....3	103-2744	RES,2.74K OHM,1/4W,1%,METAL	2	R24,R45
.....3	103-3323	RES,332 OHM,1/4W,1%,METAL	1	R13
.....3	103-3324	RES,3.32K OHM,1/4W,1%,METAL	2	R32
.....3	103-3325	RES,33.2K OHM,1/4W,1%,METAL	1	R16
.....3	103-3924	RES,3.92K OHM,1/4W,1%,METAL	3	R8,R10,R15
.....3	103-4731	RES,475K OHM,1/4W,1%,METAL	3	R20,R35,R36



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
.....3	103-4741	RES,4.75K OHM,1/4W,1%,METAL	1	R25
.....3	103-4755	RES,47.5K OHM,1/4W,1%,METAL	1	R2
.....3	103-5623	RES,562 OHM,1/4W,1%,METAL	1	R41
.....3	104-105	POTENTIOMETER, 1MEG OHM TOP ADJUST	1	R37
.....3	145-030	RESISTOR, 3.3 OHM 1/4 WATT 1% METAL FILM MEPCO SFR25	1	R9
.....3	145-106	Resistor, 10 meg ohm 1/4 watt 5% metal film Mepco SFR25	1	R29
.....3	145-221	Resistor, 220 ohm 1/4 watt 1% metal film Mepco SFR25	1	R17
.....3	145-225	Resistor, 2.21 meg ohm 1/4 watt 1% metal film (2.21 Meg 1%)	4	R19,R28,R40, R42
.....3	145-472	OBSOLETE REPLACE W/103-4741 (NLU-03)	0	
.....3	145-681	RESISTOR, 681 OHM 1/4 WATT 1% METAL FILM MEPCO SFR25	1	R4
.....3	145-822	Resistor, 8.25k ohm 1/4 watt 1% metal film Mepco SFR25	2	R14,R44
.....3	145-825	Resistor, 8.2 meg ohm 1/4 watt 5% carbon film 29SJ250	1	R30
.....3	203-4148	DIODE,1N4148	5	D1,D2,D3,D4,D 5
.....3	215-223	Capacitor, .022 mfd 2.5% 100v polypro Seacor PFWAC220HGUE	1	C25
.....3	215-392	Capacitor, .0039 mfd 2.5% polypro	1	C26



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
.....3	215-822	CAPACITOR, .0082 MFD 2.5% 100V POLYPRO	1	C11
.....3	217-103	CAP,0.1UF 250VDC 5%,POLY FILM	1	C16
.....3	217-104	CAPACITOR, .01 UF 50V GMV DISC	2	C12,C28
.....3	219-106	CAPACITOR, 10UF 50V RADIAL ELECTROLYTIC	2	C3,C18
.....3	219-220	CAPACITOR, ELECTROLYTIC 22uF RADIAL 35V	3	C4,C21,C30
.....3	219-221	CAPACITOR, ELECTROLYTIC 220uF 25V RADIAL	3	C9,C13,C14
.....3	226-274	Cap.,.27 mf 100v 10% polypro CD MTC1P27K OR Bishop C21B274K	2	C7,C31
.....3	253-471	CAPACITOR, 470 PF 50V 10% Y5P DISC	3	C1,C15,C29
.....3	255-470C	CAP, 47pF 5% 200V CERAMIC DIPPED	2	C24,C27
.....3	256-680C	Cap., 68pF 5% 200V ceramic dipped Kemet C317C680J2G5CA	1	C10
.....3	270-102	Cap,monolithic,1000pf 50v 5%KemetC1206C102J5GACTR marked	10	C32,C33,C34, C35,C36,C37, C38,C39,C40, C41
.....3	299-470	CAP, TANTALUM, 4.7 UF 16V	3	C2,C17,C19
.....3	350-032	Inductor, 387-150M 40000-150000 uH	1	L1
.....3	401-054	Integrated Circuit, SGS TDA1054M	1	IC1
.....3	403-900	IC, QUADRUPLE NORTON OP AMP	1	IC2
.....3	414-007	Diode, General Instruments 1N4007	1	D6
.....3	550-123	Connector, 10 pin header (cut from 550- 162)	1	P1



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
.....4	550-162	Connector, 24 pin break-away (straight) Molex 26-48-6248	0.417	
.....3	800-166B	PC Board, Audio RPT-2/15/30	1	
..1	800-168-1AR	RPT-15 Power Supply Regulator	1	
....2	145-241-1	RESISTOR, 240 OHM 1/4 WATT 1% SFR55 240 1% TR	1	R3
....2	219-200	CAPACITOR ELECTROLYTIC 22UF 25V	2	C7,C8
....2	268-102	CAPACITOR, .001 uF 50V DISC -20%	2	C10,C11
....2	400-338	IC, 5 AMP ADJUSTABLE REGULATOR	1	IC1
....2	418-0010	INSULATOR,MICA,TSTR,TO-3PKG	1	
....2	500-025	Screw, 6-32 x 5/8 phillips pan head M/S nickel plated"	2	
....2	500-055	Lockwasher, #4 internal tooth small pattern zinc plated	1	
....2	500-152	Screw, #6 x 5/8 phillips flat head type F metal tappin zinc"	1	
....2	500-162	Screw, 4-40 x 7/16 phillips pan head MS zinc plated"	2	
....2	510-081	Shrink-Tubing, 1/4 GPO135-1/4 black"	0.17	
....2	510-230	Socket, power transistor Samtec TO- 340-T	1	
....2	512-008	Solder Lug, #4 Concord 707-1404	1	
....2	513-027	Spacer, 4-40 x 1-1/4 hex threaded EFJ 313-6477-040	2	
....2	520-044D	Heatsink, drilled RPT-15 Supply	1	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
.....3	520-044	HEATSINK, THERMALLOY 14494UX 2.75 DEBURRED,NATURAL FINISH	1	
.....3	699-520- 044D	Labor only for Heatsink for RPT-15 Power Supply Rev A	1	
....2	550-126	Connector, crimp terminal pin Molex 08- 50-0187	4	
....2	550-137	Connector, 8 pin Molex housing 09-50- 8080	1	
....2	580-047	Wire, UL1061 22/7 OS-1 Orange	0.792	
....2	580-133	Wire, UL1061-18/16 #18 Red #M370-2	0.775	
....2	580-134	Wire, UL1061-18/16 #18 Black	0.875	
....2	580-136	Wire, UL1061-18/16 #18 Blue	0.792	
..1	800-168AR	RPT-15 POWER SUPPLY (UE)	1	
....2	100-2041	RES,2K OHM,1/4W,1%	1	R1
....2	101-501	Potentiometer, 500 ohm cermet Bourns 3309P-501	1	R2
....2	101-502	POT,5K,SINGLE TURN,HORIZONTAL PCB MOUNT	1	R4
....2	202-0502	RECT,3A,200V,IN5402	5	D1,D2,D3,D4, D7
....2	219-153	Cap,electrolytic 15000uF 25V Illinois Cap. 159LBA025M2CG	1	C5
....2	268-102	CAPACITOR, .001 uF 50V DISC -20%	4	C2,C3,C4,C11 B
....2	270-102	Cap,monolithic,1000pf 50v 5%KemetC1206C102J5GACTR marked	18	C1,C7,C8,C9, C10,C10B,C11, C12,C13,C14, C15,C16,C17, C18,C19,C20, C21,C22



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	270-103	Cap, Monolithic chip 10000pF 10% XR7 Kemet C1206C103J5RACTR	1	C6
....2	330-018	INDUCTOR, 10 uH, 10%	3	L2,L4,L5
....2	330-019	INDUCTOR, 2.5 TURN, HIGH FREQUENCY SUPPRESSION	2	L1,L6
....2	414-007	Diode, General Instruments 1N4007	2	D5,D6
....2	500-148	EYELET, GS3-12 GM	10	
....2	550-125	Connector, 5 pin Molex Header (cut from 550-162) *NOTE*	1	P2
.....3	550-162	Connector, 24 pin break-away (straight) Molex 26-48-6248	0.208	
....2	550-138	Connector, 8 pin Molex header (cut from 550-162)	1	P1
.....3	550-162	Connector, 24 pin break-away (straight) Molex 26-48-6248	0.333	
....2	550-154	CONNECTOR, D-SUB 9 PIN ANGLE	1	
....2	800-168B	PC Board, Power Supply RPT-15 STL- 10	1	PCB
..1	800-170A41	RPT-15/450 Amplifier(COMPLETE ASSEMBLY)	1	
....2	145-470-C	Resistor, 47 ohm 1/4 watt 5% carbon comp 30BJ250	2	R1,R2
....2	145-562	RESISTOR, 5.6K OHM 1/4 WATT 5% METAL FILM	1	R8
....2	217-103	CAP,0.1UF 250VDC 5%,POLY FILM	2	C9,C12
....2	219-200	CAPACITOR ELECTROLYTIC 22UF 25V	2	C8,C11



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	236-501	Capacitor, uncased mica, 500 pf 33v 5% FWJ101	3	C7,C10,C23
....2	240-220	Capacitor, uncased mica, 22 pf 33v 5% FWJ101	1	C13
....2	240-330	Capacitor, uncased mica, 33 pf 33v 5% FWJ101	1	C14
....2	240-602	Cap., variable, trimmer 25-115 pf FW C4006/OXSB Gullwing	1	C19
....2	240-802	Capacitor, uncased mica, 8.2 pf 33v 5% FWJ101	3	C2,C20,C21
....2	260-100	Capacitor, variable, trimmer 2.5-7 pf FW C4000/OBSM Gullwing	1	C1
....2	260-200	Cap.,variable, trimmer 4-20 pf FW C4002/OBSM Gullwing	4	C3,C5,C15,C16
....2	330-012	Inductor, 15 uH Coilcraft 90-27	2	L12,L13
....2	330-019	INDUCTOR, 2.5 TURN, HIGH FREQUENCY SUPPRESSION	1	L4
....2	350-111	Inductor, 3 turn 20 AWG Red (CW)	1	L17
.....3	555-111	COST, LABOR FOR 350-111	1	
.....3	580-103	Magnet Wire, #20AWG Single Nyleze (RED)	0.001	
....2	350-116	Inductor, 1 turn 20 AWG Red (CCW)	2	L16,L18
.....3	555-116	COST, LABOR FOR 350-116	1	
.....3	580-103	Magnet Wire, #20AWG Single Nyleze (RED)	0.001	
....2	350-117	Inductor, 8 turn 22 AWG Red (CCW)	4	L2,L3,L6,L7
.....3	555-117	COST, LABOR FOR 350-117	1	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
.....3	580-104	Magnet Wire, #22AWG Single Nyleze (RED)	0.001	
....2	350-149	Inductor, 10 turn 20 AWG Red	1	L22
.....3	555-149	COST,LABOR FOR 350-149	1	
.....3	580-103	Magnet Wire, #20AWG Single Nyleze (RED)	0.001	
....2	410-1416	LUG,TERM,BENT,11/16	2	
....2	410-305	Diode, Motorola MMBD101L chip	1	D1
....2	425-945	Transistor, RF Power	1	Q1
....2	443-032	TRANSISTOR, 470MHZ, 12.5 VOLTS, COMMON EMITTER, SD1422(NOTE)	1	
....2	500-011	Screw, 4-40 x 1/2 phillips pan head M/S nickel plated"	2	
....2	500-121	Rivet, 3 x 8 F metric 101203081 M3X8	6	
....2	500-124	Pop-Rivet, SD44BS Long Steel	4	
....2	500-199	Keps nut 4 x 40 zinc 4CNKEOZ	2	
....2	510-005	Polytube, Manhatten#AF155A-20-yel	0.25	
....2	520-042D	Heatsink, drilled RPT-15/215/300/450 Amp.	1	
.....3	520-042	Heatsink, Aavid 2-7/8 642253UO2875	1	
.....3	699-520-042D	Labor Only for Heatsink for RPT15/215/300/450 Amp. Rev A	1	
....2	550-012	CONN, SO-239A UHF PANEL RECEPTACLE	1	J1
....2	586-094	Cable Assembly, RPT2/15 Amplifier (SBCM)	1	



BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
.....3	550-126	Connector, crimp terminal pin Molex 08-50-0187	3	
.....3	550-159	Connector, 4 pin Molex housing 09-50-8040	1	
.....3	580-040	Wire, UL1061 22/7 OTC Black	0.46	
.....3	580-043	Wire, UL1061 22/7 OTC Red	0.46	
.....3	580-046	Wire, UL1061 22/7 OTC Green	0.5	
....2	700-220-11	Heatsink Enclosure, RPT-15	2	
....2	700-220-20	Amplifier Connector Plate	1	
....2	700-246	Fingerstock, LH-55-51500 X 24 or 81-02-11836-2000	0.08	
....2	703-009	Copper Foil, .0014 x .250"	0.001	
....2	800-170-2B	PC Board, Power Amp. RPT-15 STL-10/15	1	PCB
..1	800-259A	RPT-15 Microphone Conn. Bd.	1	
....2	270-102	Cap,monolithic,1000pf 50v 5%KemetC1206C102J5GACTR marked	2	C4,C5
....2	413-1597	TERM,TURRET,2 SHLDR,.219,GOLD FLASH	3	E1,E2,E3
....2	550-155-1	Connector, XLR Receptacle Insert Nuetrik#3FD-V-I-O	1	P1
....2	800-259B	PC Board, Microphone Connector RPT-2/15	1	PCB
..1	800-270A	STL-10/RPT2/15 Sm. Feed Thru Board	1	
....2	270-103	Cap, Monolithic chip 10000pF 10% XR7 Kemet C1206C103J5RACTR	3	C1,C2,C3

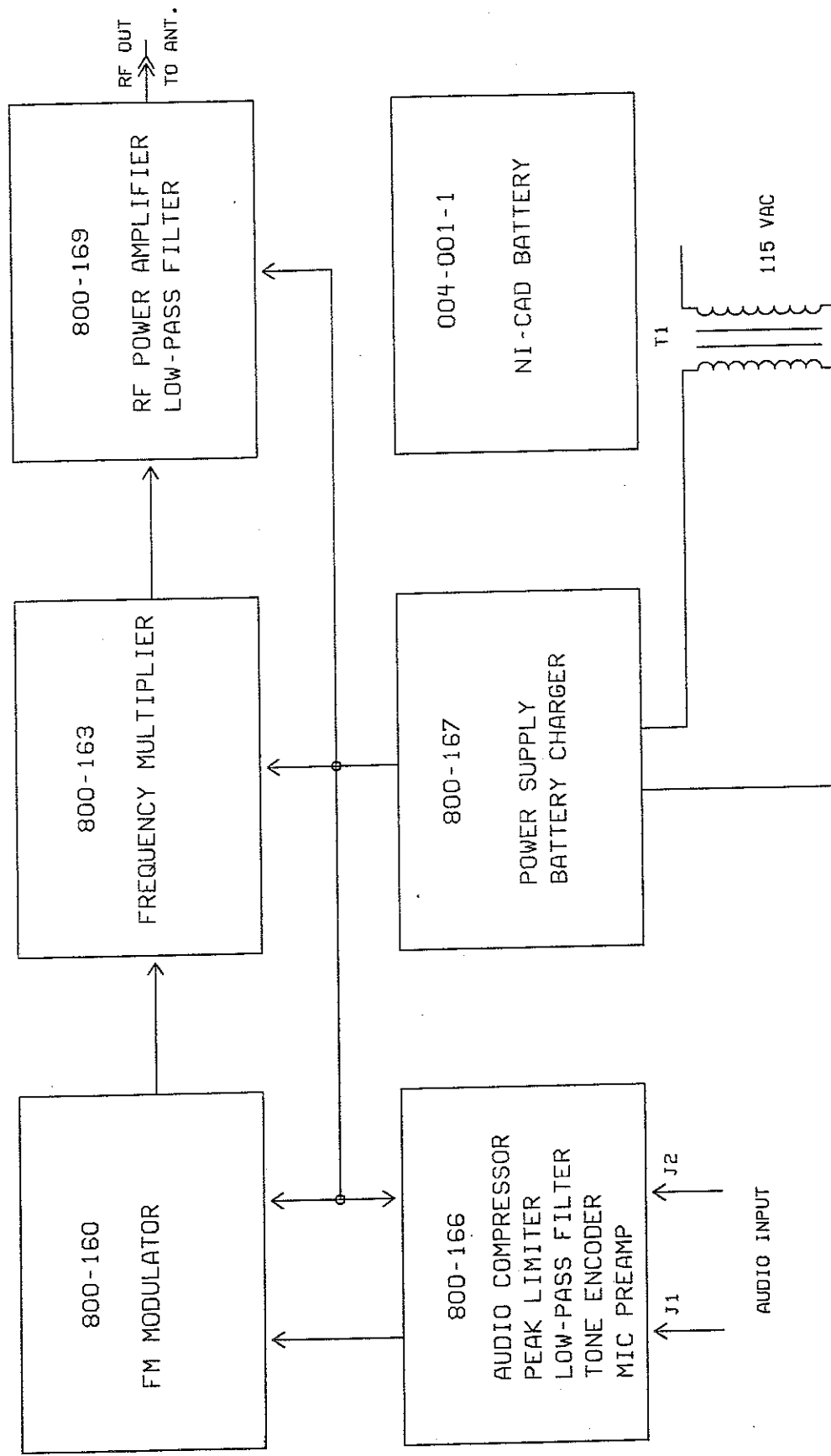


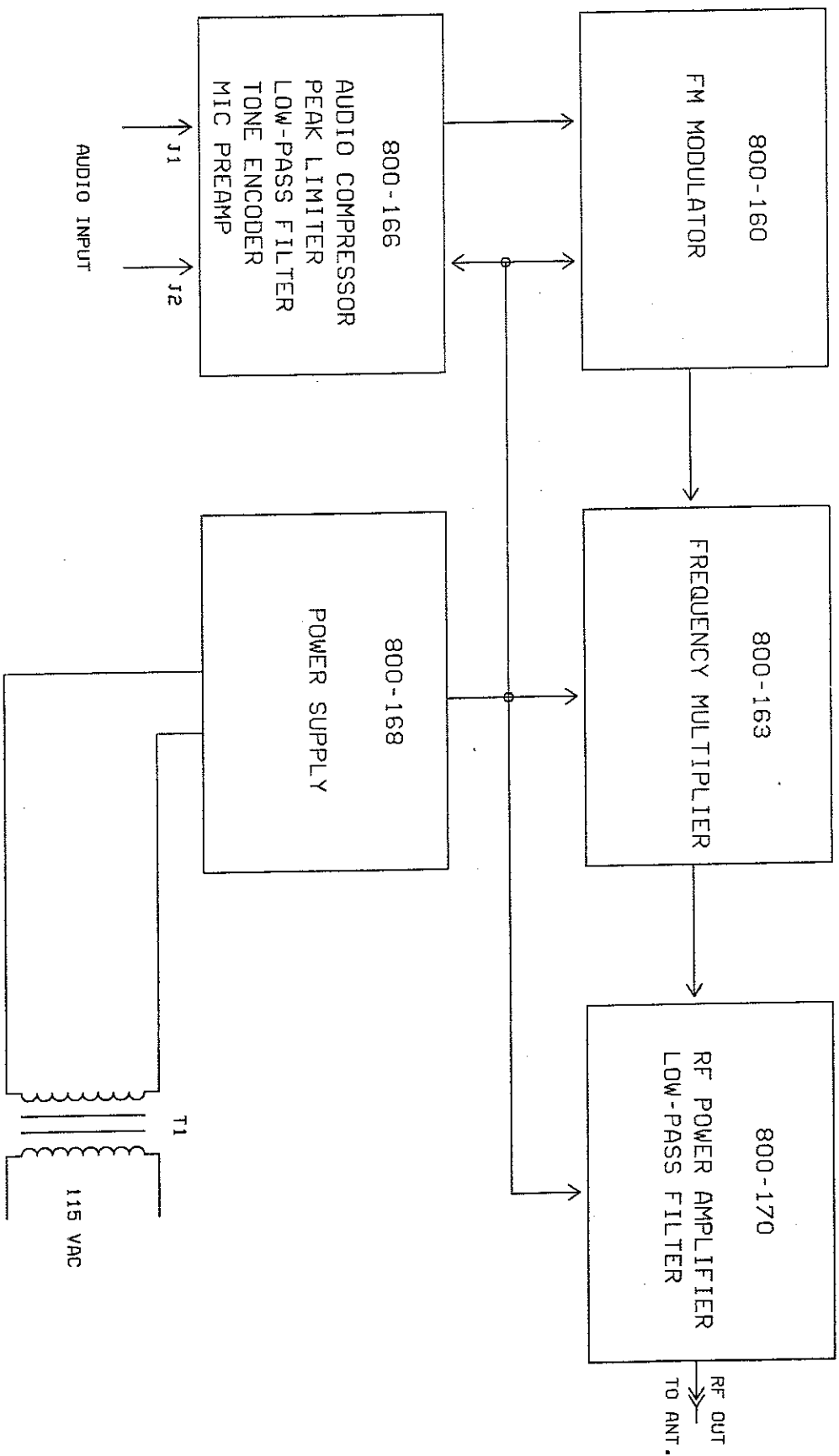
BOM LEVEL	PART NO.	DESCRIPTION	QTY	REF. DES.
....2	550-172	Connector, 4 pin Molex angle header long (cut from 550-171)	1	P1
.....3	550-171	Connector, 24 pin break-away (Long pins) Molex 26-58-1241	0.167	
....2	800-270B	PC Board, Feedthru RPT-2/15/STL-10	1	PCB



15 SCHEMATICS





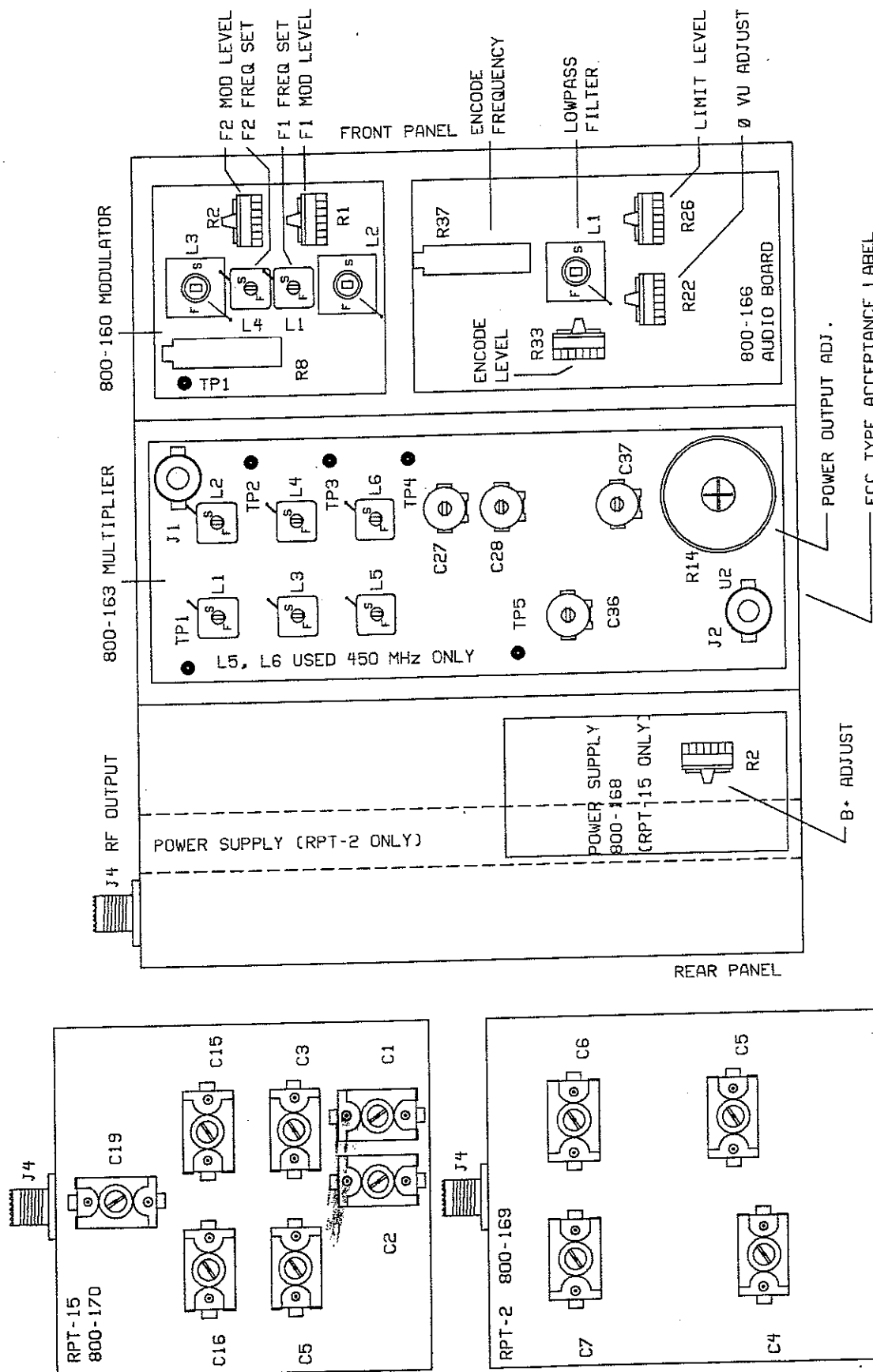


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CLEBURNE, TX 76033-0661

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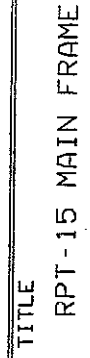
702-006

TITLE
RPT-15 BLOCK DIAGRAM



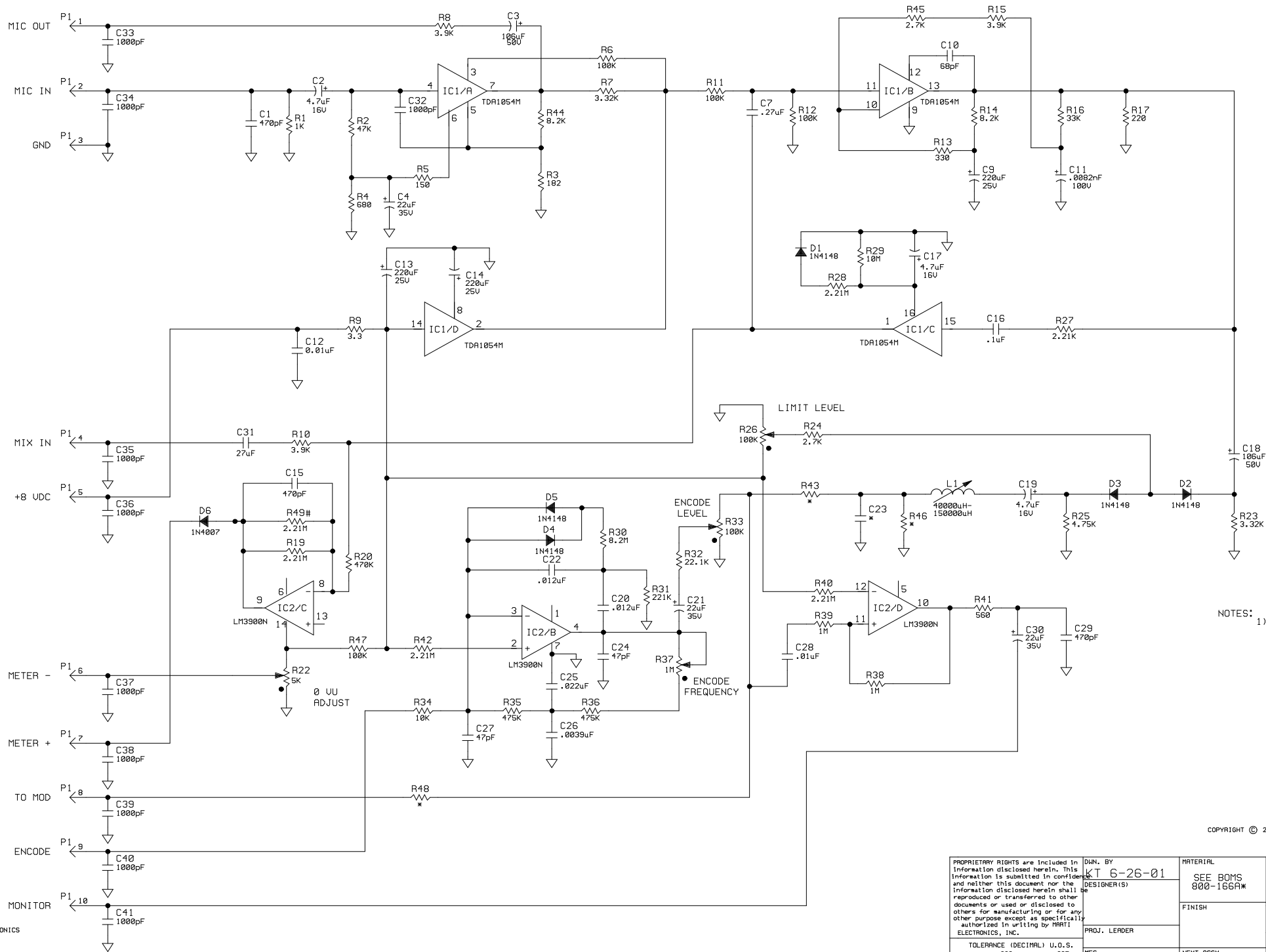
MARTI ELECTRONICS CLEBURNE, TX 75033-0661	DRAWING NO. 702-007 COPYRIGHT 20-DEC-93	TITLE LOCATION OF ADJUSTMENTS
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PART	800-166A	800-166AE	800-166AS	800-166A	800-166A40A	800-166A40ATSL
C23	215-102	215-102	215-242	215-223	215-242	215-223
R43	NOT USED	145-333	145-102	145-102	103-2744	145-102
R46	NOT USED	145-153	145-153	145-822	145-153	145-822
R48	100-1013	100-1013	145-472	100-1013	145-472	100-1013
R49	NOT USED	NOT USED	NOT USED	NOT USED	145-225	145-225

REVISIONS						
REV	DATE	DESCRIPTION	DRAFTER	APPROVED	ECN	
2	6-26-01	REDRAWN IN CAD	KT			
A	8-13-01	UPDATED TO MATCH BOMS	KT	EJ	10504	
B	10-9-01	ADDED R43 AND ASSEMBLY 800-166A40A	KT	EJ	10549	
C	5-23-03	ADDED 800-166A40ATSL ASSEMBLY & CHGD NOTES	KT	EJ	10975	
D	5-5-04	CHGD R43 ON 800-166A40A	KT		11126	



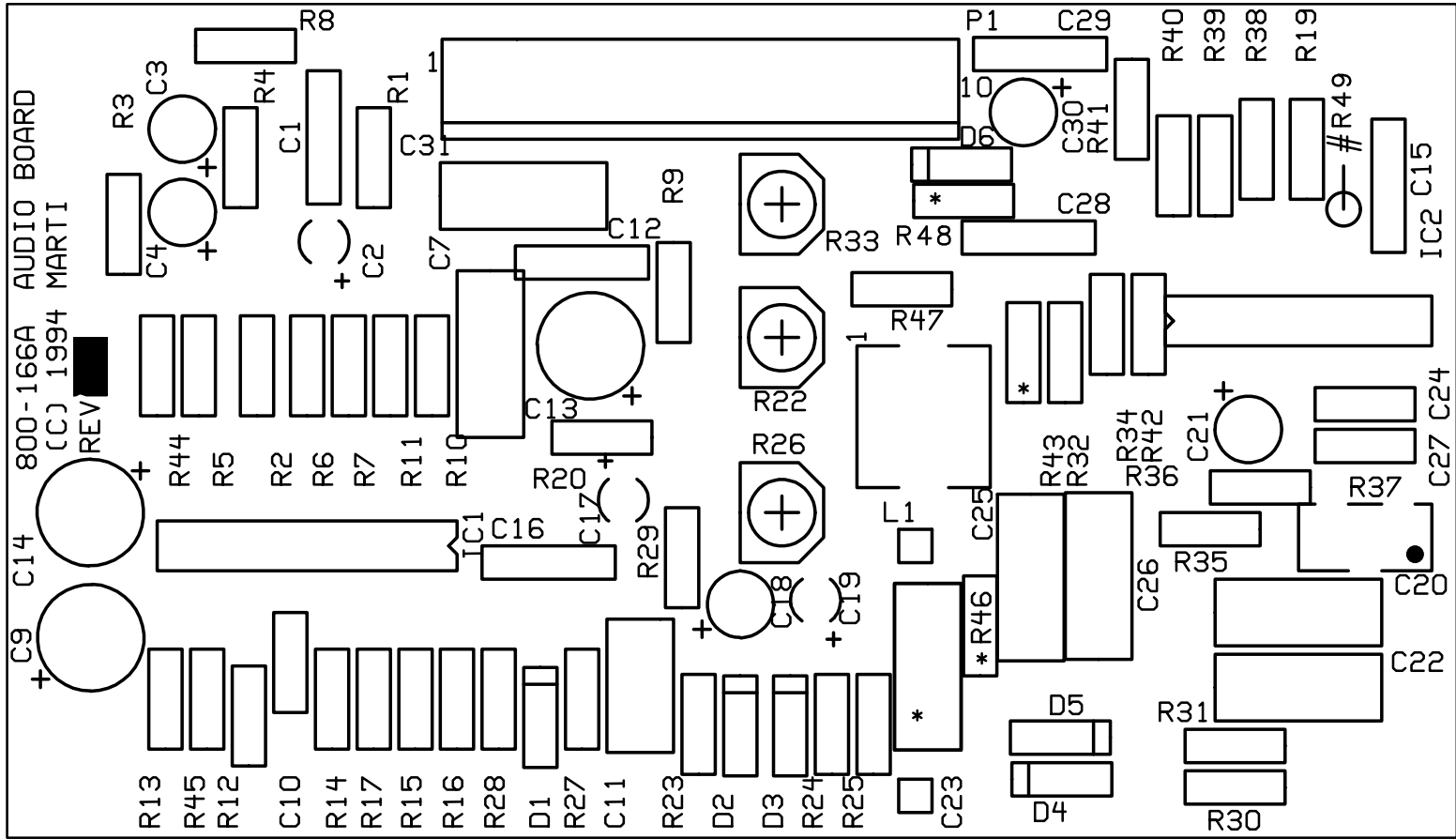
NOTES:
1) * PARTS NOT STUFFED ON 800-166CM,
SEE TABLE FOR WERE USED

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		PROJ. LEADER		FINISH		TITLE AUDIO BOARD	
TOLERANCE (DECIMAL) U.O.S. .x ± .030 .xxx ± .005 .xx ± .015 ANGLES ± 1°		MFG.		NEXT ASSY.		TYPE SIZE DWS. NO. 800-166A/RE/AT/AS/CM REV S D 800-166A40A/40ATSL D	
						MODEL SRPT-40 SCALE NONE SHEET 1 OF 1	
						RPT-2/15/30	

REV	DATE	DESCRIPTION	DRAFTER	ECN	APPROVED
A	8-28-01	CHGD HOLE SIZES &SOLDERMASK: ADDED R48	KT	10504	EJ
B	10-9-01	ADDED R49 AND ASSEMBLY 800-166A40A.	KT	10549	EJ
C	12-5-01	ADDED NOTE 3 & ADDED R43 TO 800-166A	KT	10584	EJ
D	3-28-02	UPDATED BOM TO INCLUDE D6	KT	10651	EJ
E	11-26-02	REMOVED 421-1113 & 510-210 FROM BOM	KT	10838	EJ
F	5-23-03	ADDED 800-166-A40ATSL, CHANGED NOTES	KT	10975	EJ
G	5-5-04	CHGD R43 ON 800-166A40A	KT	11126	LF
H	12-22-04	MADE R49 STAND UP	KT	11202	LF
J	7-28-08	MADE C20,C22 (033-0123)	JTB	11601	

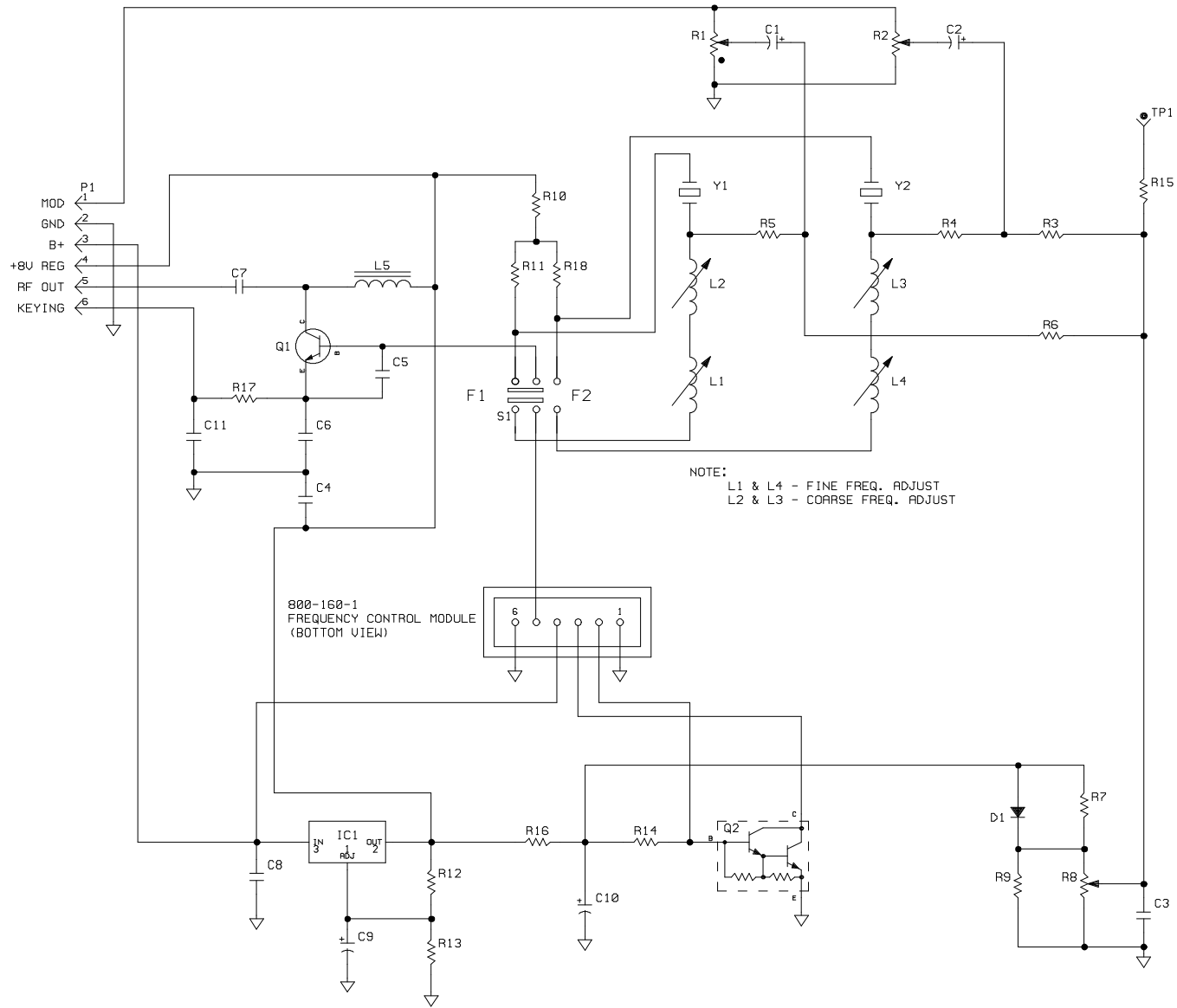


PART	800-166A	800-166AE	800-166AS	800-166AT	800-166A40A	800-166A40ATSL
C23	215-102	215-102	215-242	215-223	215-242	215-223
R43	145-102	145-333	145-102	145-102	103-2744	145-102
R46	NOT USED	145-153	145-153	145-822	145-153	145-822
R48	100-1013	100-1013	145-472	100-1013	145-472	100-1013
R49	NOT USED	NOT USED	NOT USED	NOT USED	145-225	145-225

NOTES:

- 1) * INDICATES COMPONENT NOT STUFFED ON 800-166CM, SEE TABLE FOR PARTS STUFFED ON ASSEMBLIES 800-166A/AE/AS/AT/A40A.
- 2) MASK HOLES FOR C23,R43,R46, R48 & R49 BEFORE FLOW SOLDER.

MOD
GND
B+
+8V REG
RF OUT
KEYING



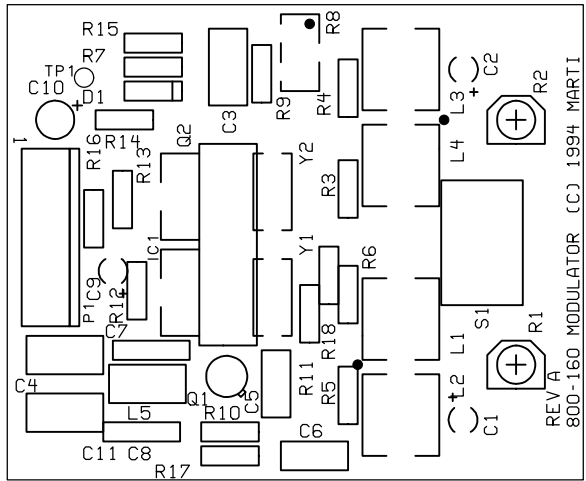
NOTE:
L1 & L4 - FINE FREQ. ADJUST
L2 & L3 - COARSE FREQ. ADJUST

800-160-1
FREQUENCY CONTROL MODULE
(BOTTOM VIEW)

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	DESIGNER(S)	FINISH	TITLE DUAL FREQUENCY MODULATOR	
PROJ. LEADER			TYPE SIZE DWG. NO.	REV
			S D 800-160	2
TOLENANCE (DECIMAL) U.O.S. .x ± .030 .xxx ± .005 .xx ± .015 ANGLES ± 1	MFG.	NEXT ASSY.	MODEL	SCALE NONE SHEET 1 OF 1

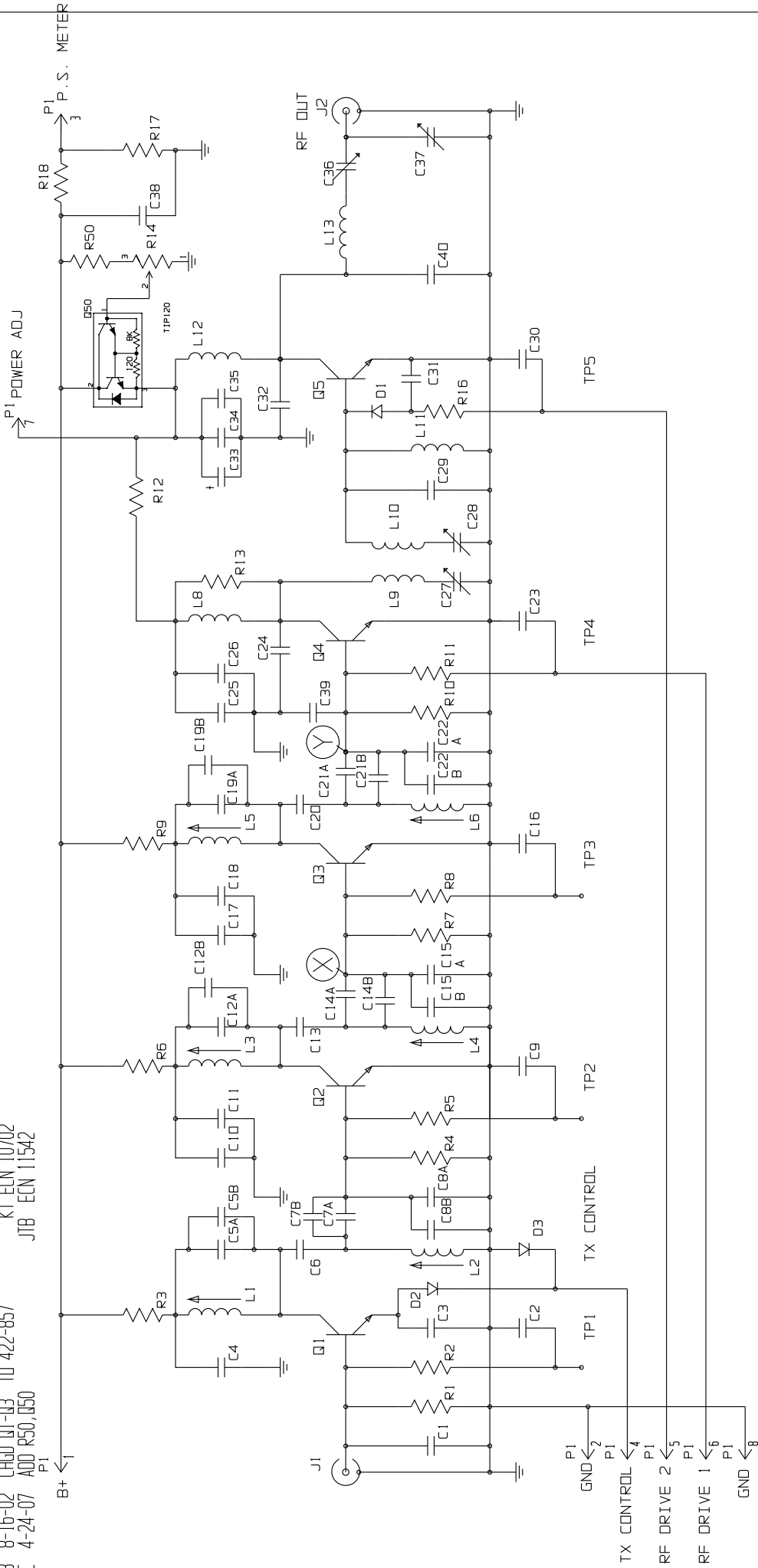


MARTI ELECTRONICS

800-160A REV A

DUAL FREQUENCY MODULATOR

REV A 2-13-02 CH60 C19 TO 10pF & C21 TO 14pF KT ECN 10633
 REV B 8-16-02 CH60 Q1-Q3 TO 422-857 KT ECN 10702
 REV C 4-24-07 ADD R50,Q50 JTB ECN 11542



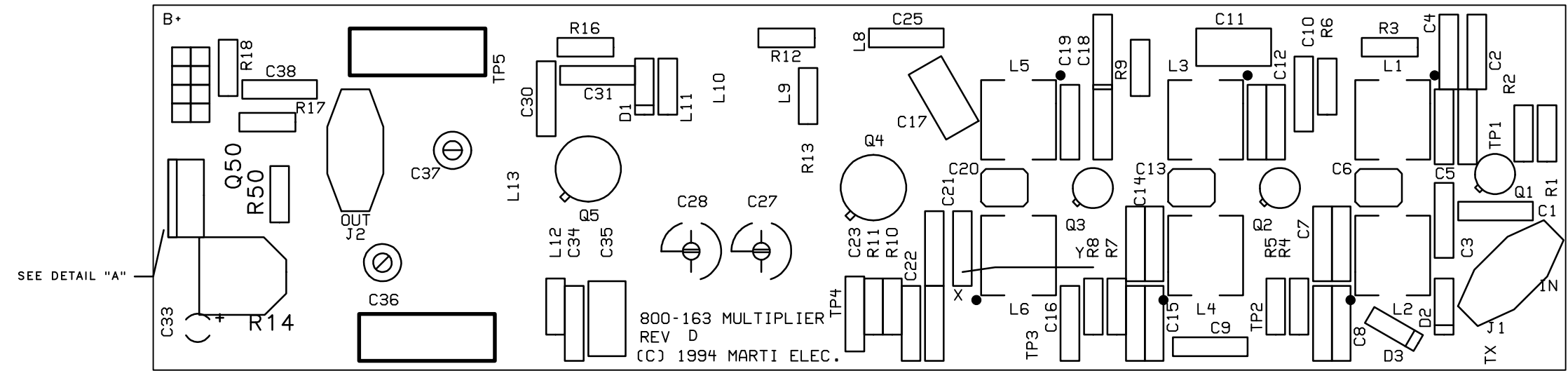
NOTE: FOR OPERATING FREQUENCIES BELOW 300 MHZ Q3 IS OMITTED AND A WIRE
 IS CONNECTED BETWEEN POINTS "X" AND "Y".
 R19 IS USED ON 150 MHZ ONLY.

DRAWING NO. 800-163 COPYRIGHT <9-21-00>	TITLE MULTIPLIER BOARD
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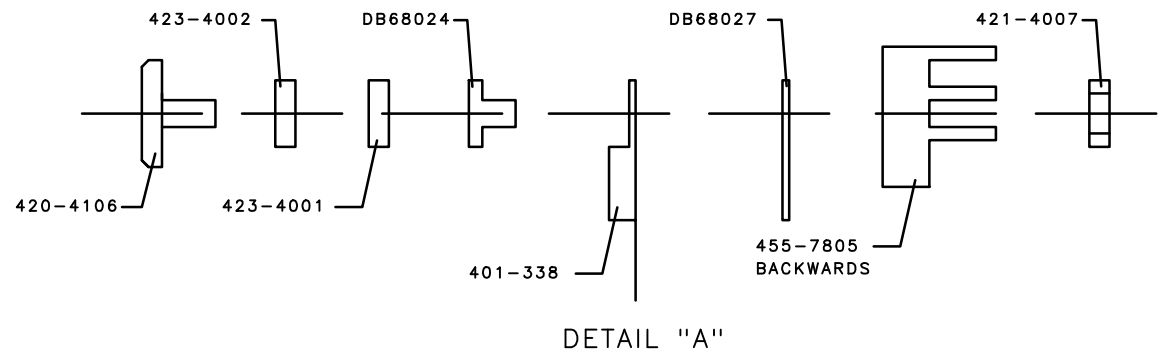
REV A 2-13-02 CHGD C19 TO 255-100 & C21 TO 255-150 KT ECN 10633
REV B 8-16-02 CHGD Q1-Q3 FROM 440-245-1 TO 422-857 KT ECN 10702
REV C 4-24-07 CHGD R14: ADD R50,Q50 JTB ECN 11542
REV D 2-2-08 ADD DETAIL A JTB ECN 11623

EJ



NOTES:
1) SEE TABLE FOR FREQUENCY DEPENDENT PARTS.

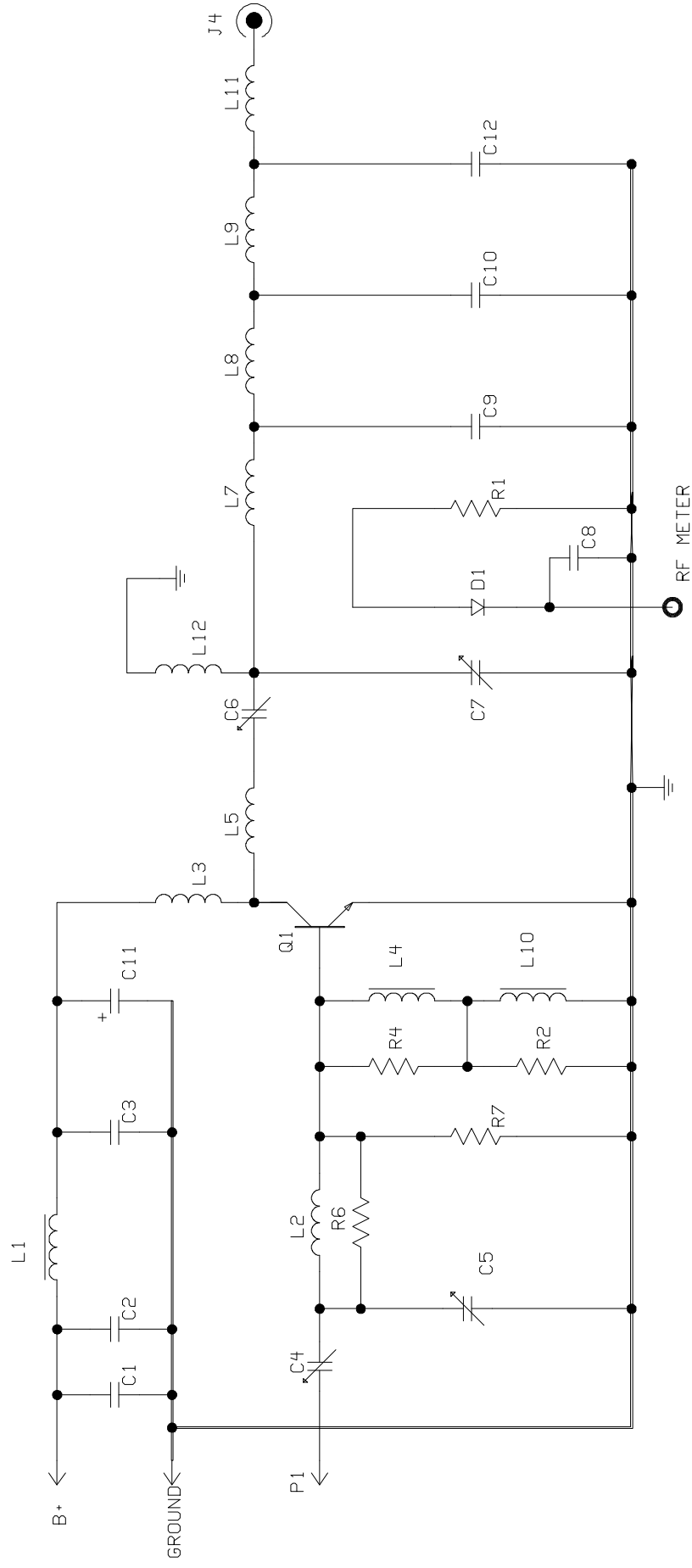
PART	800-163A4	800-163A4R	800-163A4S
R14	100-101	NOT USED	100-101
R12	145-030-C	145-680-C	145-030-C
R1,R17	145-102	NOT USED	145-102
R2,R11	145-103	NOT USED	145-103
R3	145-151	NOT USED	145-151
R5,R8	145-153	NOT USED	145-153
R4,R7	145-272	NOT USED	145-272
R13	145-331	NOT USED	145-331
R16	145-472	NOT USED	145-472
C24,C39	241-100	241-120	241-120
C29	241-330		241-390
Q5	420-629-1	420-629	420-629
Q4	424-427	420-837	424-427
XQ4	520-049	NOT USED	520-049



MARTI ELECTRONICS

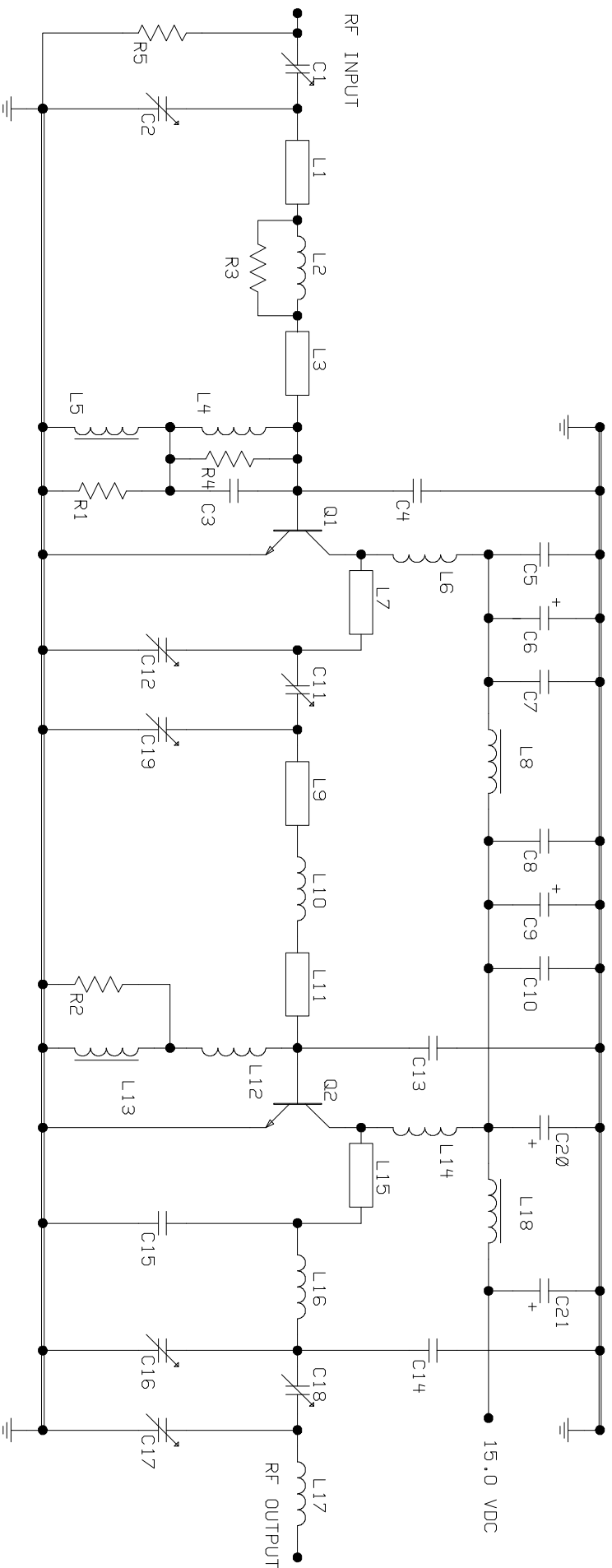
MULTIPLIER

800-163A* REV D



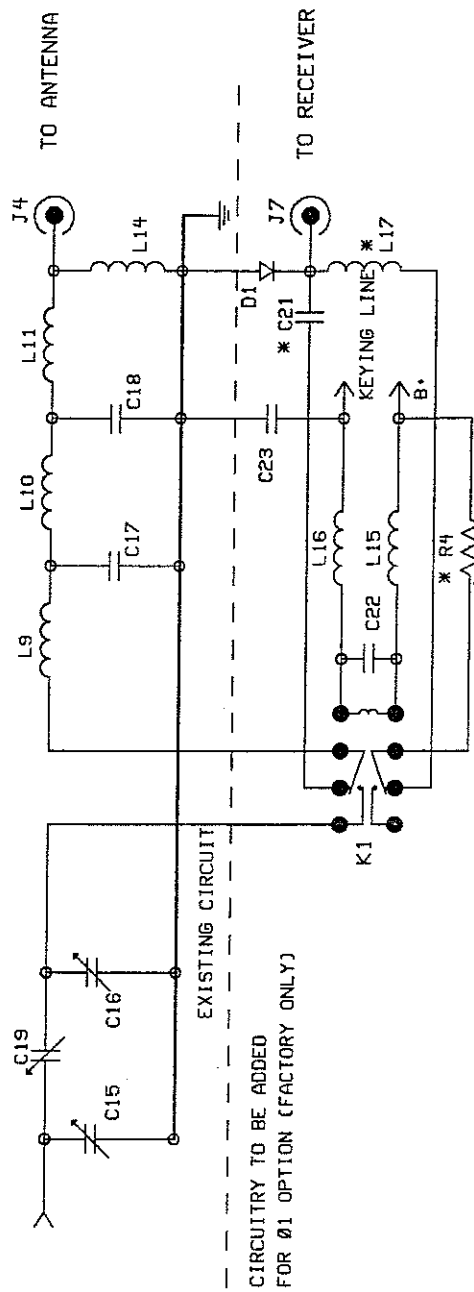
DRAWING NO. COPYRIGHT 24-MAY-**	TITLE 800-169 2.5 WATT RF POWER AMPLIFIER
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MARTI ELECTRONICS
CLEBURNE, TX 76033-0661



CAUTION : THESE TRANSISTORS USE BERYLLIUM OXIDE CERAMICS IN THEIR CONSTRUCTION.
 ANY MECHANICAL OR CHEMICAL TREATMENT OF THESE CERAMICS WHICH
 PRODUCES DUST OR FUMES, EVEN IN MINUTE AMOUNTS, CAN BE DEADLY!

MARTI ELECTRONICS CLEBURNE, TX 76033-0661	DRAWING NO. COPYRIGHT 24-MAY-** 800-170	TITLE RF POWER AMPLIFIER BOARD
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* C21, L17 & R4 ARE USED IN MOBILE SITUATIONS ONLY. C21 IS REPLACED BY A DIRECT CONNECTION TO J7 IN BASE STATION & AUTOMATIC RELAY STATIONS.

NOTE: FOR 150 MHZ.
L15, L16 & L17 CHANGE TO Z-144
MARTI PART NO. 330-003

ITEM	PART NO.	DESCRIPTION
C21	253-471	CAPACITOR, 470 PF 10X Z5U TYPE B
C22	253-471	CAPACITOR, 470 PF 10X Z5U TYPE B
C23	236-501	CAPACITOR, 500 PF 350 V
D2	410-666	DIODE, FDH 666
K1	570-034	RELAY, 12 VOLT
L15	330-002	CHOKE, Z-460
L16	330-002	CHOKE, Z-460
L17	330-002	CHOKE, Z-460
R4	115-030	RESISTOR, 3.3 OHM 1 WATT

MARTI ELECTRONICS
CLEBURNE, TX 76033-0661

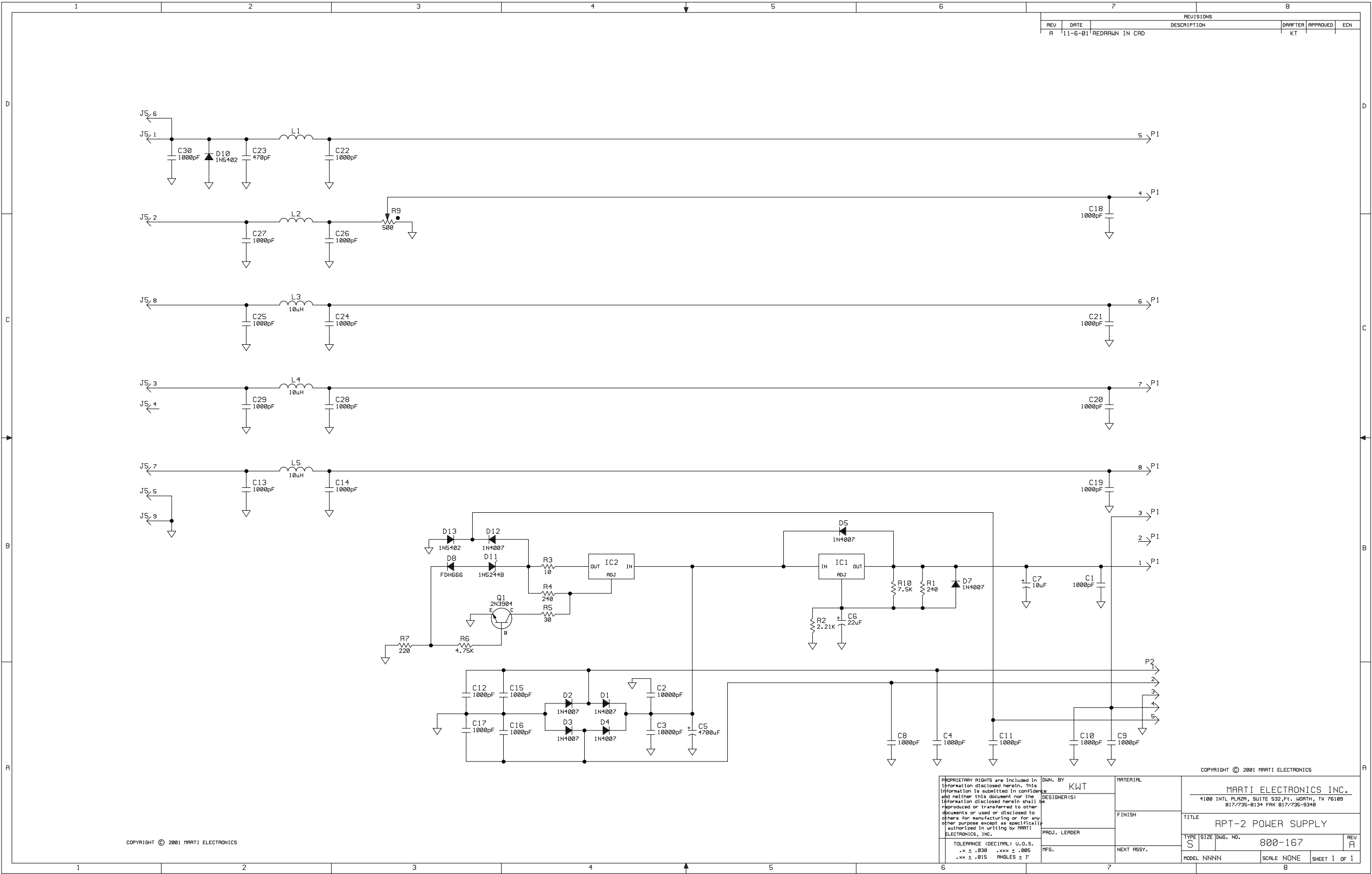
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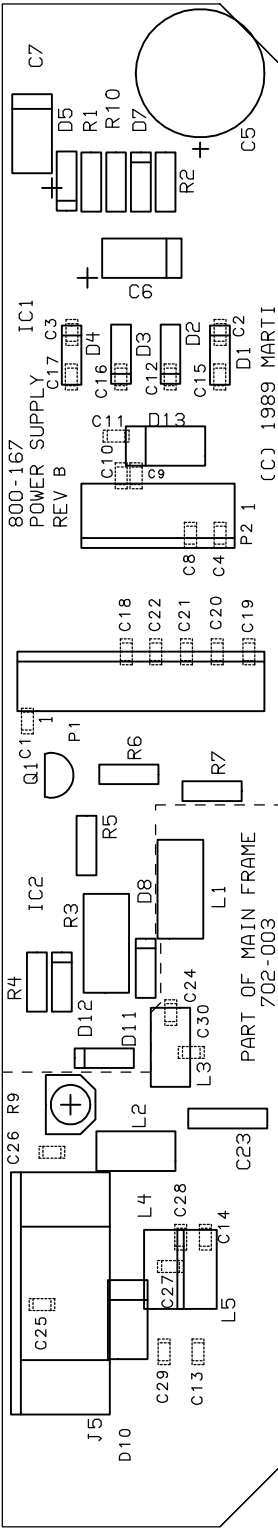
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TITLE

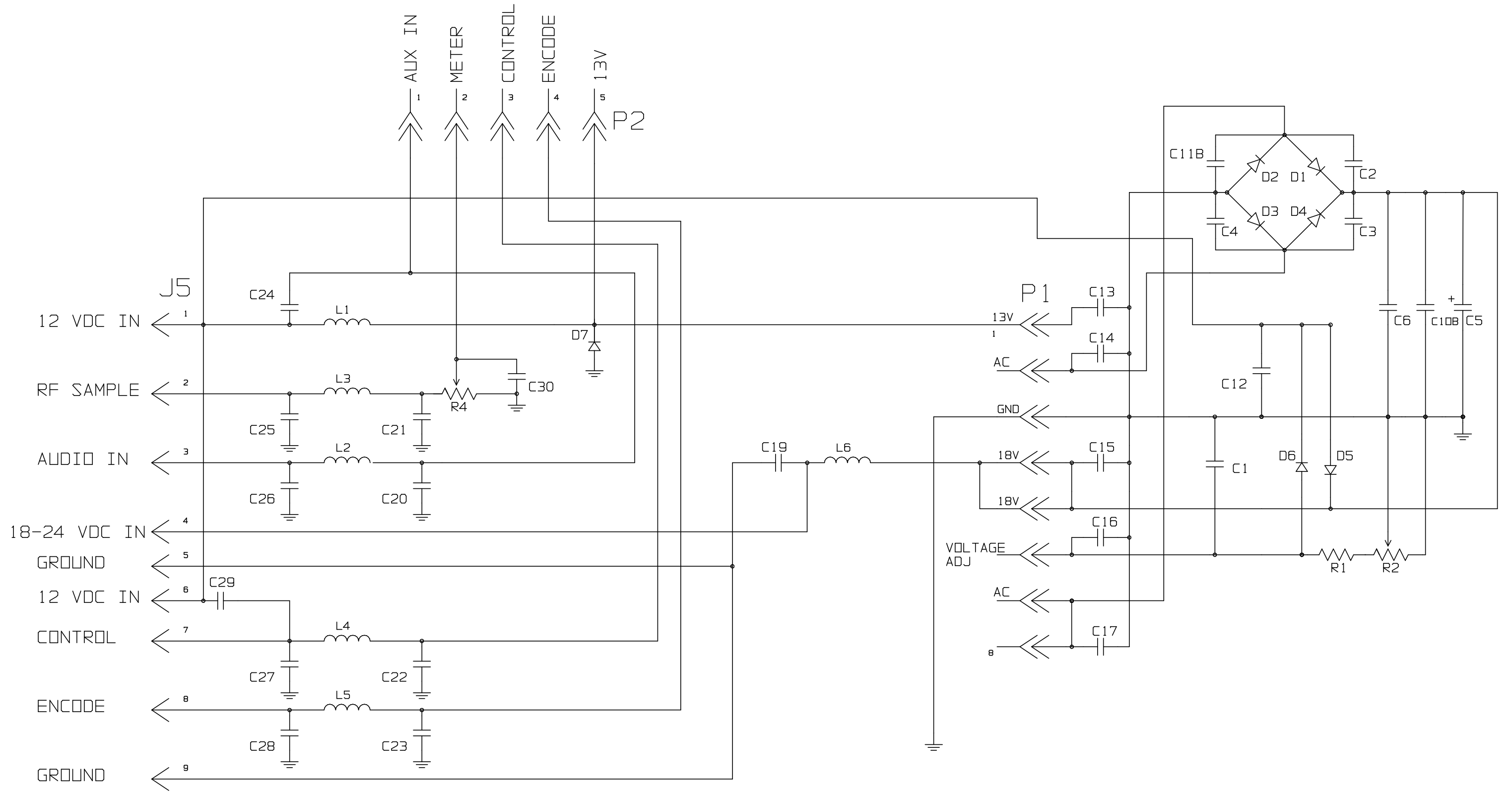
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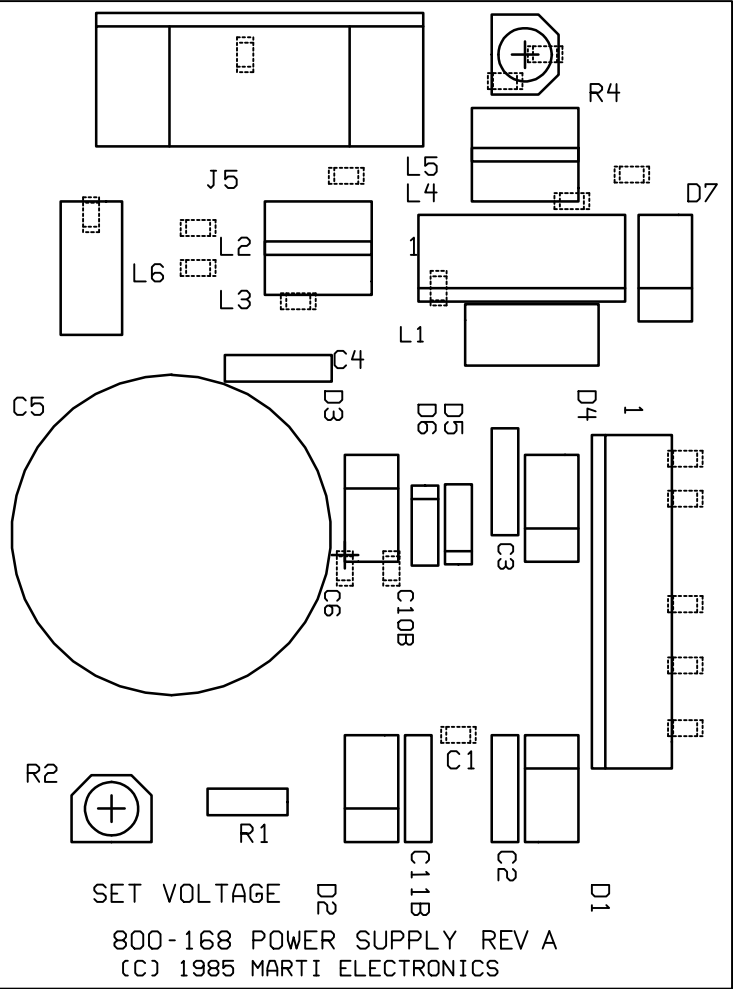
MARTI ELECTRONICS
800-167A REV B
POWER SUPPLY



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CLEBURNE, TX 76033-0661

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TITLE
POWER SUPPLY & REGULATOR



MARTI ELECTRONICS

POWER SUPPLY

800-168 REV A