

Instruction Manual
MODEL CR-10
MODEL AR-10
BROADCAST REMOTE
PICKUP RECEIVERS

MARTI

WARNING

THIS EQUIPMENT *MUST* BE OPERATED WITH A 3-PRONG GROUNDED OUTLET RECEPTACLE. FAILURE TO USE A PROPERLY GROUNDED OUTLET MAY RESULT IN IMPROPER OPERATION OR SAFETY HAZARD!

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c. This warranty does not apply to equipment which has been altered, improperly handled, or damaged in any way.

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INTRODUCTION



CR-10 RACK MOUNT RECEIVER

The Marti AR-10 and CR-10 Series Receivers are high-quality, dual-frequency, crystal-controlled, super-heterodynes designed for broadcast remote pickup and ENG service. The Model AR-10 is designed for portable/mobile service and the Model CR-10 is designed for rack mounted base station service. They are engineered to deliver top performance on today's congested RPU frequency bands, in contrast to modern land-mobile equipment in which bandwidth, distortion, noise, and audio response have been sacrificed for interference rejection. Carefully tailored IF band-width, skirt selectivity, bandpass ripple, and audio lowpass



AR-10 MOBILE RECEIVER

filtering, produce optimum frequency response, noise, distortion, and interference rejection, for each of the broadcast remote pickup channels now available. This requires the best computer designed ten-pole IF filters, active high-pass, and multi-pole lowpass audio filters, complemented by Marti's exclusive automatic noise reduction circuitry.

The dramatic difference between two-way audio quality and Marti audio quality has been the key to Marti's dominance of the broadcast remote pickup market for over two decades.

Unique Applications of the Model AR-10

The Marti AR-10 is a compact portable VHF-UHF FM broadcast-quality receiver. For mobile repeater applications, this receiver contains a subaudible decoder which, when activated by the encoded signal from an RPT-2 hand carried portable transmitter, will automatically turn on a Marti RPT-15 or RPT-30 transmitter. The remote broadcast is thus relayed from the hand carried portable to a distant radio station by way of the mobile repeater.

This receiver, with the RPT-2 transmitter, can provide a radio link from a remote broadcast site to the nearest available telephone. The system then functions as a powerful wireless broadcast microphone which can feed a telephone line, audio mixer, recorder, or transmitter.

Features of these receivers include:

- Squelch relay with contacts available for external switching.
- Subaudible tone decoder available for signaling, automation control, or automatic repeater.
- Low-pass filters designed to eliminate overshoot on complex audio waveforms.
- Double-balanced mixer.
- Four IF bandwidths available to meet domestic and international requirements

- Computer designed bandpass filter for high selectivity with low distortion.
- Test meter on AR-10 front panel indicates Signal Level, Audio Level, Subaudible Tone Level, with additional test points inside receiver.
- Test meter on CR-10 front panel indicates Signal Level, Audio Level, Subaudible Tone Level, Power Supply Voltage, Local Oscillator Level, and Mixer Level, with additional test points inside receiver.
- Dual-frequency capability built in.
- Automatic noise reduction circuit.
- Built in monitor speaker with front panel level control.
- Accessory plug for external DC power, remote control, remote metering, etc.
- Low power consumption for operation on AC, solar cell, battery or other single polarity DC source.
- Terminal strip for balanced 600 ohm audio output.

AR-10, CR-10 SPECIFICATIONS

Frequency Range..... 140-180, 200-260, 280-340, 400-480, 500-960 MHz.

Dual Frequency..... Provision for dual-frequency. Separation 2% max.

Sensitivity..... 0.5 microvolts for 20 dB S+N/N.

Input Impedance..... 50 ohms. UG-58 A/U connector.

Frequency stability..... $\pm 0.00025\%$ $-10^{\circ}\text{C. to } +50^{\circ}\text{C.}$

Selectivity.....	Filter	3 dB	60 dB
	F200	200 KHz.	570 KHz.
	F85	85 KHz.	145 KHz.
	F50	50 KHz.	100 KHz.
	F36	36 KHz.	60 KHz.
	F25	25 KHz.	42 KHz.
	F8	8 KHz.	15 KHz.

Spurious Response..... -90 dB

Audio Output, AR-10..... Balanced 600 ohms. -9 dBm. Barrier strip. Unbalanced 600 ohms, +4 dBm at 15 pin connector.

Audio Output, CR-10..... Balanced 600 ohms, +10 dBm. Barrier strip.

Monitor Output..... Built-in 0.5 watt monitor amplifier, monitor speaker and level control. Headset monitor jack mutes speaker on AR-10 only.

Subaudible Tone Decoder..... 800-229 Decode Board provides relay closure upon receipt of 27 Hz. tone (± 0.1 Hz.)
(option on CR-10)

Front Panel Controls.....	Frequency Select Switch, Line Level Adjust, Meter Switch, Squelch Adjust, Monitor Speaker Level, (Power Switch, Headset Jack - AR-10 only)
Power Requirements.....	120/220 VAC, 50/60 Hz. (200 VAC, 50 Hz. upon request). 10 Watts, 13.5 VDC, 300 ma.
AC Power Supply.....	Precision, electronically regulated with current limiting.
AR-10 Metering.....	RF Signal Level, Audio Output Level, Decode Level
CR-10 Metering.....	RF Signal Level, Audio Output Level, Sub. Level, +13 VDC Supply, L.O. Level, Mixer Level, LED indicators for Power and Open Squelch.
Dimensions (AR-10).....	3.5 in. high x 9 in. wide x 13.5 in. deep.
Dimensions (CR-10).....	3.5 in. high x 19 in. wide x 12 in. deep.
Weight (AR-10).....	Net 5.5 pounds, Domestic packed 10 pounds.
Weight (CR-10).....	Net 10 pounds, Domestic packed 17 pounds.

Specifications subject to change without notice

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, cease 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.

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 the same RF ground potential.

Receiver Connections

1. Program audio output is connected to TB-1. Program audio level available is +10 dBm, 600 ohms balanced and isolated from ground on the CR-10. Program audio level available on the AR-10 is -9 dBm, 600 ohms balanced and isolated from ground. Balanced audio output is also available at pins 4 and 5 of accessory connector J4 on CR-10. Pins 4 and 1 of J4 on AR-10, provide unbalanced audio.

2. Accessory connector J4 has several uses such as receiver muting, automatic repeater, remote signaling or switching by subaudible tone and external DC power. Connection instructions are furnished with these accessories.

3. Connect receiving antenna coax to J6 with a type "N" male connector. A short flexible jumper, 20 inches maximum, may be used between J6 and Heliax. Marti Part No. 585-017 Double-Shielded, Low-Loss RG-214/U jumper is recommended.

4. Connect AC Line receptacle on rear panel to 115 volt AC power source with special cord set supplied. Use only 3 prong grounded outlet receptacles for safety.

AR-10 Mobile Repeater Connections

Mobile repeater installation requires one of the following Receiver to Transmitter cables:

For RPT-15 Transmitter, use Cable No. 585-037-2 with 4 Amp fuse.

For RPT-30 Transmitter, use Cable No. 585-037-2 with 8 Amp fuse.

Mobile repeater installation requires Mounting Brackets:

For AR-10 Receiver, use Mobile Mounting Bracket 700-252

For RPT-15 Transmitter, use Mobile Mounting Bracket 700-252

For RPT-30 Transmitter, use Mobile Mounting Bracket 700-251

1. Locate the AR-10 Receiver and RPT-Series Transmitter in the vehicle and secure with appropriate mounting brackets.

2. Transmitter and Receiver must have individual ground (black wire) connection to bare metal of vehicle body. Scrape paint from body at point of connection, drill hole and secure ground terminals with metal screws. Connect red fused wire to appropriate 12 volt DC source on vehicle.

3. Install vehicle antennas per their instructions.

4. Connect receiving and transmitting antennas, then connect receiver to transmitter cable listed above between accessory connector of transmitter and receiver.

5. With system operating, adjust line level input gain pot on transmitter (Input 4 of RPT-30 or AUX pot of RPT-15) for about 3 dB compression with program material.

This completes installation of your mobile repeater.

ANTENNAS

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.

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.

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.

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 by 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.

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.

System Grounding

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

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 INSTALLING ANTENNAS. KEEP AWAY FROM POWER LINES.



CAUTION HIGH LEVEL RF RADIATION

Personnel must not be near 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."

OPERATION

PROGRAM LEVEL ADJUST

Audio output level is set in the CR-10, by means of a small screwdriver through the front panel opening marked PGM. LEVEL ADJ. Position test meter switch to "PGM LEVEL" while making adjustment. 0 VU on the Pgm Level Test Meter is approximately +10 dBm at the output terminals of TB-1. On AR-10 adjust LINE LEVEL pot. 0 VU on meter is approximately -9 dBm at TB-1 terminals.

SQUELCH ADJUST

The receiver SQUELCH ADJUST pot is factory set to operate at a received signal level of approximately 0.5 microvolts. This level can be changed by increasing or decreasing the pot setting. Very sensitive settings of the pot should be avoided, since noise or other signals could open the squelch. The "Squelch Open" panel lamp provides a visual indication of the squelch operation in the CR-10.

F1-F2 SWITCH

Either frequency of a dual-frequency receiver may be selected by the F1-F2 switch.

Caution: Single frequency receivers must be switched to F1 at all times.

POWER ON

The "Power On" lamp glows when the 13.5 volt DC regulated power supply is operating in the CR-10. On Model AR-10 meter illumination indicates power on.

TEST METER

The "Test Meter", with its selector switch, allows monitoring important receiver parameters. The CR-10 has a six position rotary switch while the AR-10 uses a three position slide switch. The following parameters may be measured on the AR-10 and CR-10:

a) SIG LEVEL

The RF signal level at the receiver input J6 is displayed in this switch position. The following table gives typical signal levels in microvolts for various VU values.

Meter Reading	Signal Strength
-15 VU	1 microvolt
-3 VU	10 microvolts
0 VU	100 microvolts
+2 VU	250 microvolts

b) PGM LEVEL

The audio level at the 600 ohm balanced output terminals is displayed in this position. 0 VU on the CR-10 is approximately +10 dBm at TB-1. 0 VU on the AR-10 is approximately -9 dBm. Peak values of 0 VU should not be exceeded with program audio.

c) SUB LEVEL (ON CR-10) DECODE LEVEL (ON AR-10)

This is the received subaudible tone level. A transmitter with 1 KHz tone deviation will indicate approximately 0 VU on the meter.

THE FOLLOWING METER SWITCH POSITIONS ARE AVAILABLE ONLY ON THE CR-10!

d) 13 V. SUPPLY

Meter reads + 1.5 VU for the internal 13.5 volt regulated supply.

e) L.O. LEVEL

Local oscillator level at TP-1 of the converter.

f) MIXER

Same as TP-2 in the converter local oscillator chain nearest the double-balanced mixer.

NOTE: For nominal meter values for your particular receiver, see the **RECEIVER TEST DATA SHEET** included in this manual.

THEORY OF OPERATION

Refer to Block Diagram Drawing No. 702-062 and Schematic Diagrams.

Converter 800-212, 800-213, 800-211

The received RF signal is applied to the converter module. After passing through a three-section pre-selector, the signal is coupled to a dual-gate FET RF amplifier. The output of this amplifier is impedance matched to double-balanced mixer X1. The output of the local oscillator frequency multiplier is also impedance matched to the local oscillator port of mixer X1. The third port of the double-balanced mixer X1 is the converter output.

74 MHz 2nd Converter, 800-216

Receivers operating from 500-960 MHz are double conversion. A second converter board is added to these receivers which is tuned to the 74 MHz IF output of the first CONVERTER, 800-211. The 74 MHz SECOND CONVERTER then converts the 74 MHz signal down to 10.7 MHz. Referring to Schematic Diagram 800-216, the 74 MHz signal passes through a double-tuned pre-selector, then to Gate No.1 of dual-gate MOSFET Q1. The drain circuit of this amplifier is impedance matched to the RF port of Double-Balanced Mixer X-1. Second Local Oscillator Q2 operates as a frequency doubler, the output of which is impedance matched to the Local Oscillator port of Mixer X-1. The IF port of this Mixer is 10.7 MHz. J2, which is connected to IF BANDPASS FILTER, 800-207.

IF Bandpass Filter, 800-207

The IF signal output of the converter is impedance matched to the IF bandpass filter which provides the selectivity or channel bandwidth of the receiver. Several IF filters are available for various bandwidth requirements. The output of the bandpass filter is impedance matched to the following stage.

IF Amplifier/Detector, 800-208

The IF amplifier chain consists of two discrete transistor stages coupled by ceramic filters to an integrated circuit. IC-1 contains high-gain FM limiters, quadrature detection, audio preamplification and wide range signal level metering. IF symmetry at the IC input is compensated by L1 and C19. The IF amplifier/detector board has outputs to the audio

amplifier, decode, metering and power supply/squelch boards.

Audio Amplifier, 800-228

Audio from the FM detector first passes through notch filter IC1B, to remove the subaudible encoding tone. This signal is then fed into the IC1A de-emphasis circuit. The feedback circuit of this op-amp has a fixed 75 microsecond loop with an additional 75 microseconds selected by Q1 to provide noise-reduction on weak signals of 1.5 microvolts or less. Q1 is switched on by the output of comparator IC2A on Power Supply/Squelch Board, 800-219. Following the de-emphasis circuit the signal passes through two stages of Butterworth low-pass filtering (IC2A and IC2B), then to a dual op-amp for the audio output (IC3A and IC3B). Diodes D1 and D2 rectify the output audio for level metering. A 600/600 ohm transformer isolates the output op-amp from the line. One op-amp of IC3 drives the line output, the other drives the monitor speaker.

Tone Decoder, 800-229

Pre-emphasized audio from the FM detector at connector pin 5 is fed into the inverting input of IC1A, which functions as a low-pass filter/amplifier. Since subaudible tones in the band of 25-29 Hz are to be selected from the wide-band audio, the low-pass filter/amplifier attenuates the higher frequencies at a slope of about 6 dB/octave. The output of the low-pass filter/amplifier feeds a second order positive feedback bandpass filter consisting of IC1B and IC1C. This is a very narrow-band filter having a 3 dB bandwidth of ± 0.1 Hz. and is tuned to the exact subaudible tone frequency by potentiometer R7. The subaudible tone selected by these filters is rectified by diodes D4 and D5. This rectified tone is filtered by C7 and applied to voltage comparator IC2. When this voltage exceeds the reference voltage setting of R16 the comparator output goes high, turning on transistor Q1 and pulling in relay K1. Relay contacts are available at accessory connector J4 for low current switching and signaling.

Power Supply/Squelch, 800-219

The power supply consists of a bridge rectifier (D1-D4) filtered by C5 and regulator IC3. R8 and R9 set the output voltage and D5 and D6 protect IC3

from reverse voltage. Zener diode D7 provides a shunt regulated reference voltage for the comparators (IC2) for instances when the receiver is operated from external unregulated DC supplies. Both the signal squelch (IC2B) and the noise-reduction (IC2A) comparators have the signal level metering voltage applied to the appropriate input. Signal squelch comparator IC2B output is connected to relay driver Q2. The collector of Q2 also operates the "Squelch Open" LED on the front panel. Squelch adjustment is provided by potentiometer R5 located on Meter/Control Board, 800-192, which divides the

comparator reference voltage through R11 and R12. Signal level voltage is also connected to meter driver amplifier IC1. "Signal Level" position of the test meter is calibrated by R2.

Input/Output Filters

All input/output circuits connected to the accessory connector as well as the AC line input have radio-frequency filters. AR-10 circuitry is on Main Frame Schematic, 702-065. CR-10 circuitry is on I/O Filter Schematic, 800-193A.

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
Oscilloscope	Tektronix Model 2215

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"

RECEIVER TEST DATA

Customer: _____

Address: _____

☐ AR-10 Serial#: _____ Frequency 1: _____

☐ CR-10 Serial#: _____ Frequency 2: _____

TEST METER READINGS

☐ Signal Level: _____
 1 microvolt _____
 10 microvolts _____
 100 microvolts _____

☐ Sub. Level - 0 VU: _____

☐ +13 volt DC Supply : _____

☐ Local Oscillator Level: _____

☐ Mixer Level: _____

☐ Response OK: _____

☐ Distortion OK: _____

☐ Noise Level: _____

☐ Squelch set at: _____

Signature: _____

Date: _____

TUNE-UP and ADJUSTMENTS

Notice: This equipment was thoroughly tested and inspected at the factory prior to shipment. The actual equipment performance was recorded on the *RECEIVER TEST DATA* sheet. Adjustments should rarely be necessary in the field and should only be attempted by highly trained technicians familiar with this type of equipment. Laboratory grade test equipment is required and is listed under *TEST EQUIPMENT AND TOOLS* (page 10). For location of adjustments and test points in the CR-10 Receiver, refer to Drawing No. 702-063, Adjustment Location Diagram. For the AR-10 Receiver refer to Drawing No. 702-066, Adjustment Location Diagram. The AR-10 does not have all the metering capabilities of the CR-10. During the tune-up procedure, where the AR-10 internal metering capabilities do not exist, use a 0-3 volt DC Multimeter at the indicated test point (TP).

Converter, 800-212, 800-213, 800-211

1. Set local oscillator on exact frequencies by adjusting L1 (and L3 if it is a dual-frequency model) while observing the frequency on a 225 MHz counter plugged into J1. See table on following page to calculate correct frequency at J1.

FOR 800-211 CONVERTER ONLY!!

2. UNPLUG THE COUNTER FROM J1 BEFORE CONTINUING! Tune L2 and L4 for maximum negative voltage at TP-1. Use the 3 volt DC scale of a sensitive multimeter. Do NOT tune C7, C8, C13, C14 - they are factory adjustments!

3. Tune L5 and L6 for maximum voltage at TP-2.

4. Tune C18 for maximum voltage at TP-3.

5. Reduce received signal level at J6 for a 1/3 scale reading on SIG. LEVEL METER. Tune C23, C29, C33, C34, C35 for maximum signal level.

FOR 800-212 AND 800-213 CONVERTERS ONLY!!

2. UNPLUG COUNTER FROM J1 BEFORE GOING FURTHER. Switch meter to "L.O. LEVEL". (On AR-10 use Multimeter at TP-1). Tune L5 and L6 for maximum reading. Do NOT tune trimmer capacitors—they are **FACTORY ADJUSTMENTS!**

3. Switch meter to "MIXER" and tune L7 and L8 for maximum reading. (On AR-10 use Multimeter at TP-2).

4. Switch meter to "SIG. LEVEL", reduce received signal level at J6 for a 1/3 scale reading on meter. Tune the three gold capacitors on top of Pre-Selector for maximum signal level. On 800-213 board tune C27 and C32 for maximum signal level. On 800-212 board tune L9 for maximum signal level.

2nd Converter, 800-216 (500-960 MHz. only.)

1. Set local oscillator on exact frequency by adjusting L4 while observing the frequency on a 100 MHz counter plugged into J3. For receivers in the 500-930 MHz band, the correct frequency at J3 is:

$$F = 74 - 10.7 = 63.3 \text{ MHz.}$$

For receivers in the 930-960 MHz band, the correct frequency at J3 is:

$$F = 74 + 10.7 = 84.7 \text{ MHz.}$$

The 2nd converter overtone crystal frequency is one-half that measured at J3.

IF Filter, 800-207

CAUTION! L1 and L2 are **FACTORY ADJUSTED** for minimum distortion and should not be tuned in the field. These adjustments do NOT drift.

IF Amplifier/Detector, 800-208

1. With a received signal of 1/3 scale on "SIG. LEVEL" meter, tune L1 and C19 for maximum signal.
2. Check transmitter and receiver frequency. Make adjustments if necessary.
3. Modulate transmitter 100% at 400 Hz using ultra low-distortion audio generator.
4. Set receiver "PGM LEVEL ADJ." for +8 dBm output (-8 dBm, AR-10) across a 600 ohm load.
5. Tune primary of T1 (slug nearest IC) for maximum audio output level. Tune secondary slug of T1 for a dip (minimum) audio output level. Repeat several times since adjustments interact.
6. Connect automatic nulling distortion meter to receiver output. Attenuate RF signal level at J6 for a signal level of 100 microvolts (0 VU on the receiver test meter scale, "SIG LEVEL" position). With transmitter modulated as before, slightly re-tune T1 primary and secondary for minimum distortion.

Power Supply Board, 800-219A

1. Place test meter switch in "+13 V SUPPLY" position. The meter should read +1 VU which is 13.5 volts plus or minus .25 volts. On AR-10, use Multimeter to measure 13.5 volts between chassis and red wire in any board connector.

2. Feed output from an RF signal generator into J6 and set to exact receiver frequency at 100 microvolt level. Adjust R1 for a reading of 0 VU on the test meter in "SIG LEVEL" position.

3. Set RF signal generator modulation to correct FM deviation at 1000 Hz. Adjust PGM. LEVEL for 0 VU on "PGM LEVEL" meter. Reduce RF signal level to 1.5 microvolts. Adjust R17 to the setting that produces a sudden drop of 2 VU on the "PGM LEVEL" meter.

Decode Board, 800-229

1. Using an encoded Marti transmitter adjusted for proper encode frequency and modulation level as an encode signal source, place CR-10 meter switch in "SUB LEVEL" ("DECODE" on AR-10) position. Adjust "Sensitivity" pot, R1, for a reading of 0 VU on the meter.

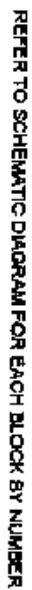
2. Adjust "Decode Frequency" pot, R7, for maximum reading on "SUB LEVEL" meter.

3. Set "Sensitivity" pot, R1, to -5 VU on the meter. Adjust pot R16 so that relay K1 just closes at this level.

4. Re-adjust R1 for reading of 0 VU on the meter.

Operating Frequency (F)	Converter Type	Measured Frequency at J1	Overtone Crystal Formula
140-180 MHz.	800-212	$F-10.7$	$(F-10.7)/3$
200-234.65 MHz.	800-212	$(F-10.7)/2$	$(F-10.7)/4$
234.65-280 MHz.	800-212	$(F-10.7)/2$	$(F+10.7)/6$
280-340 MHz.	800-213	$(F-10.7)/2$	$(F-10.7)/8$
400-466.65 MHz.	800-213	$(F-10.7)/2$	$(F-10.7)/8$
466.65-538 MHz.	800-211		$(F-74)/8$
538-650 MHz.	800-211		$(F+74)/16$
650-784 MHz.	800-211		$(F+74)/16$ or $(F-74)/16$
784-950 MHz.	800-211	$(F-74)/4$	$(F-74)/16$

Table for calculating correct frequency at J1 (Step 1 on previous page)

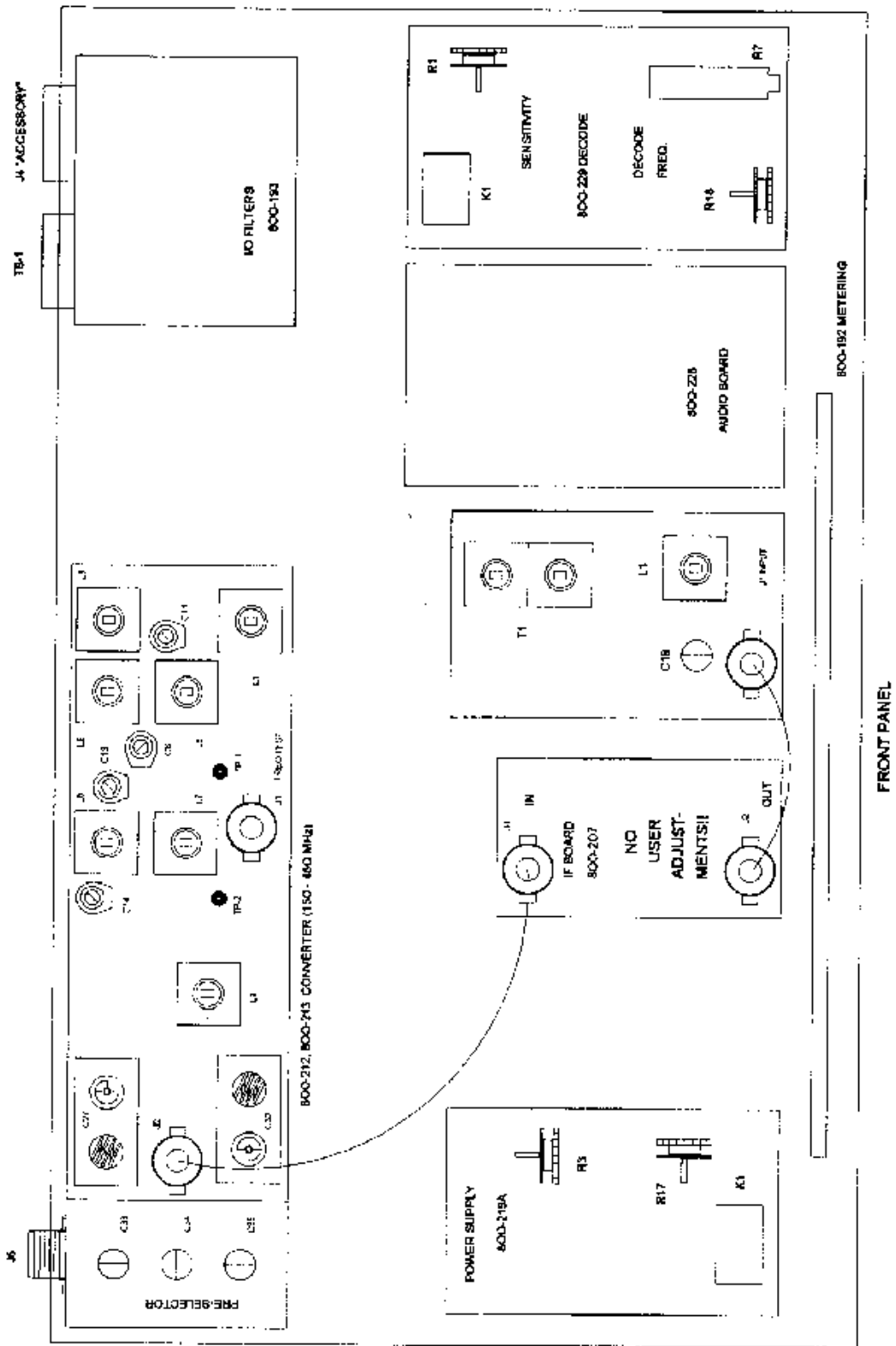


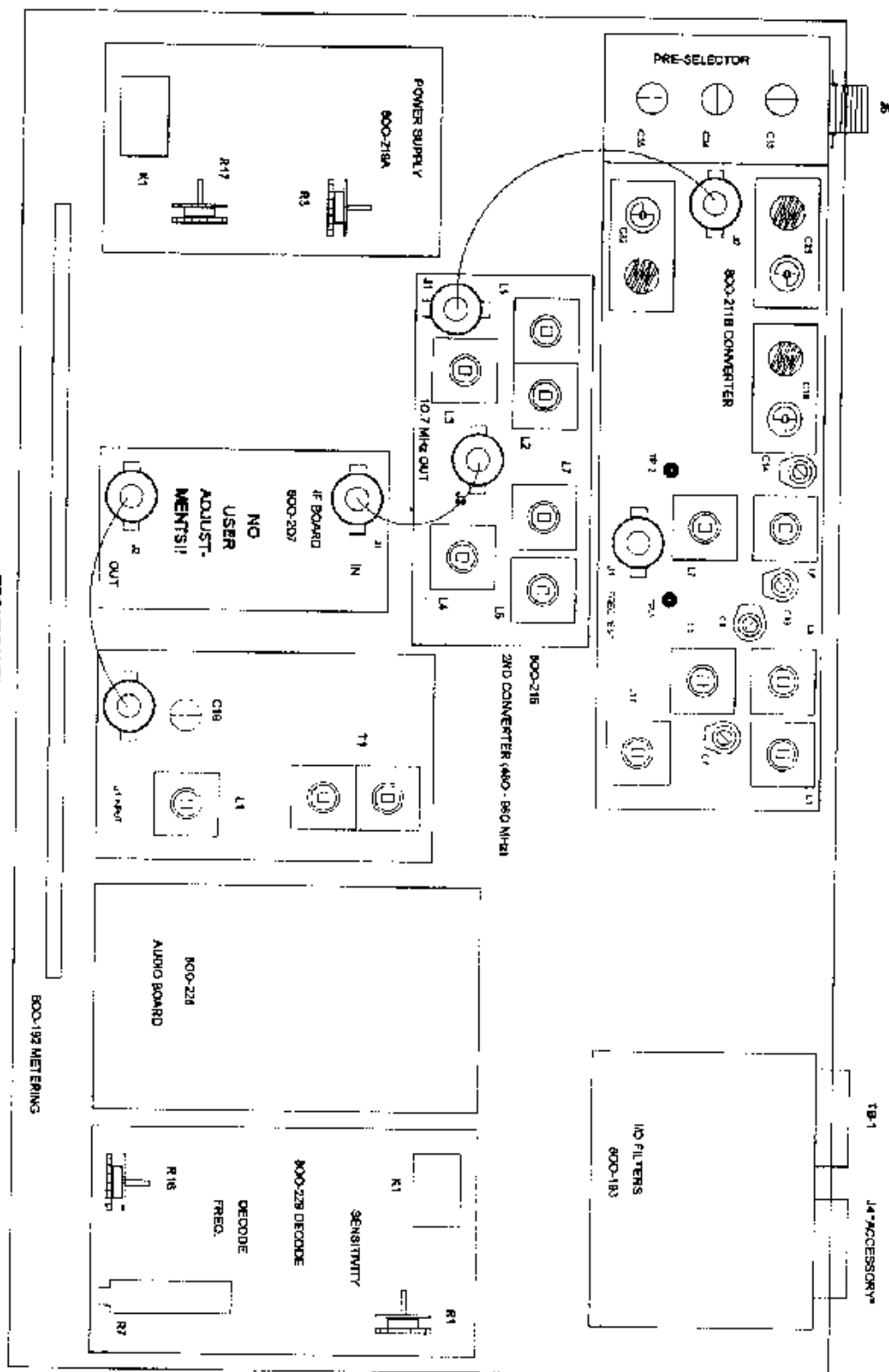
CLEBURNE, TX 76033-0561

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AR-10, BR-10, CR-10
BLOCK DIAGRAM

AR-10, BR-10, CR-10
BLOCK DIAGRAM





MARTI ELECTRONICS

CLEBURNE, TX 76033-0861

DRAWING NO.

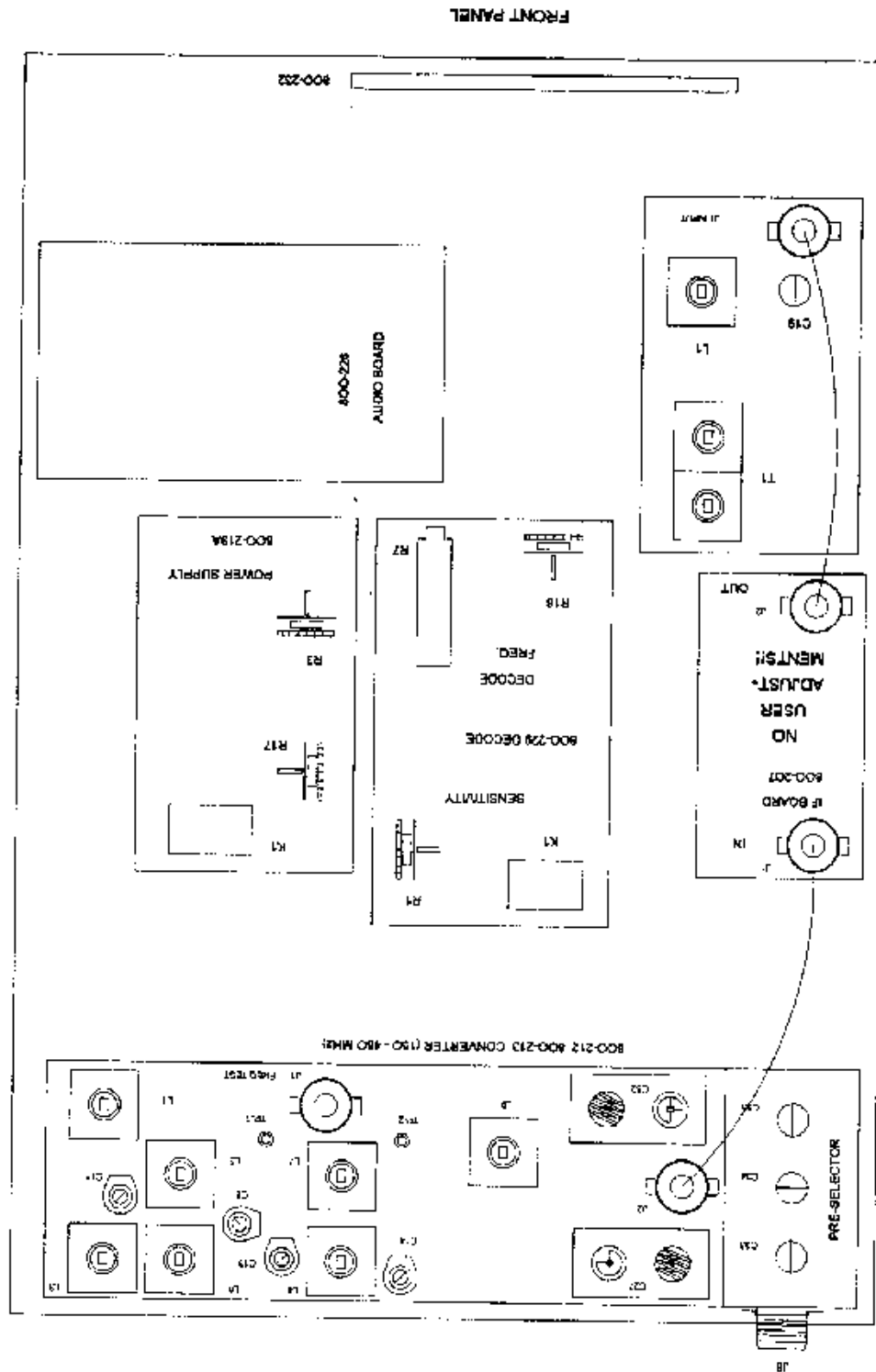
CONTRIBUT

702-091

TITLE

CR-10 500 - 960 MHz

ADJUSTMENT LOCATION DIAGRAM



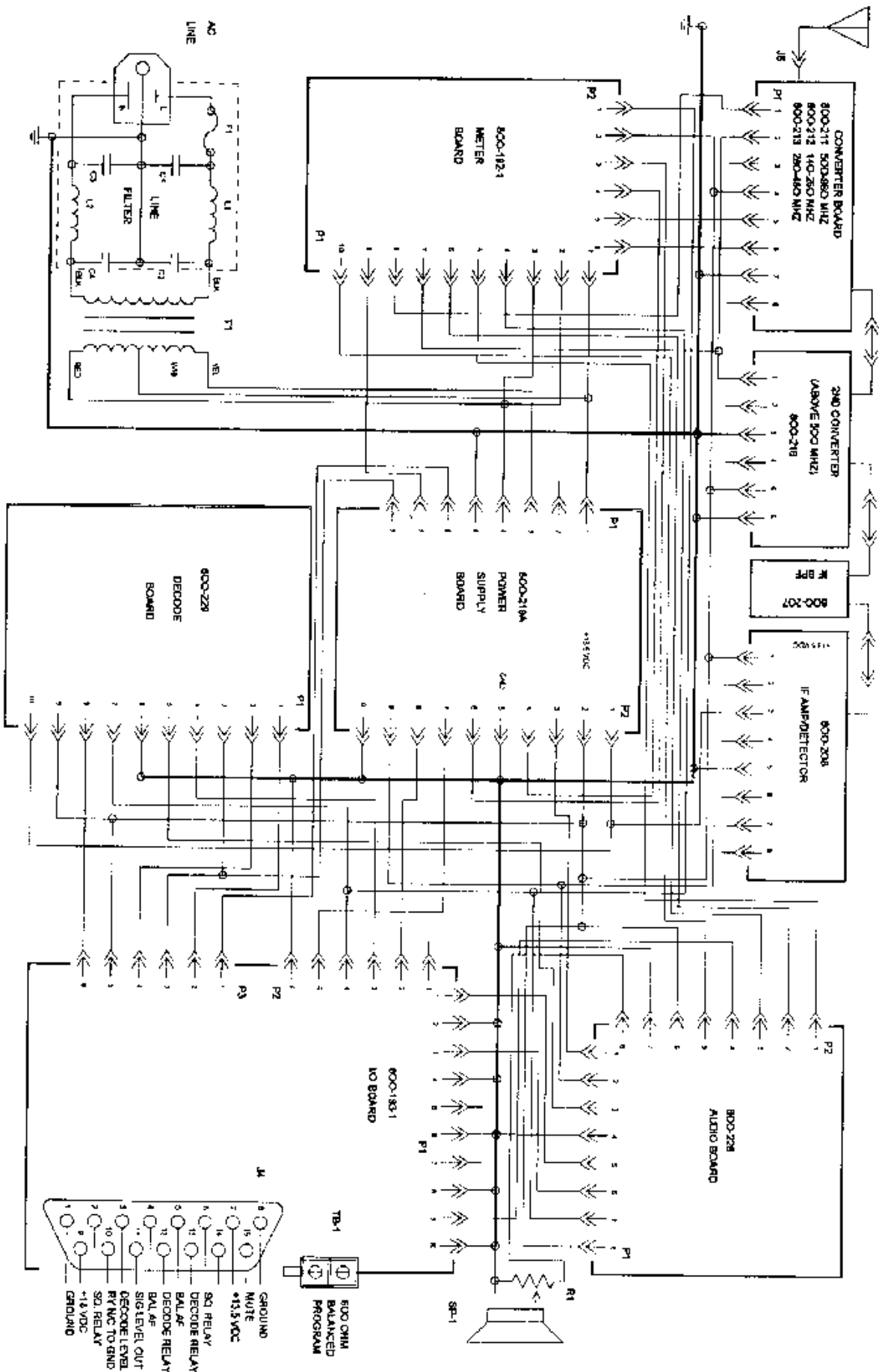
MARTI ELECTRONICS

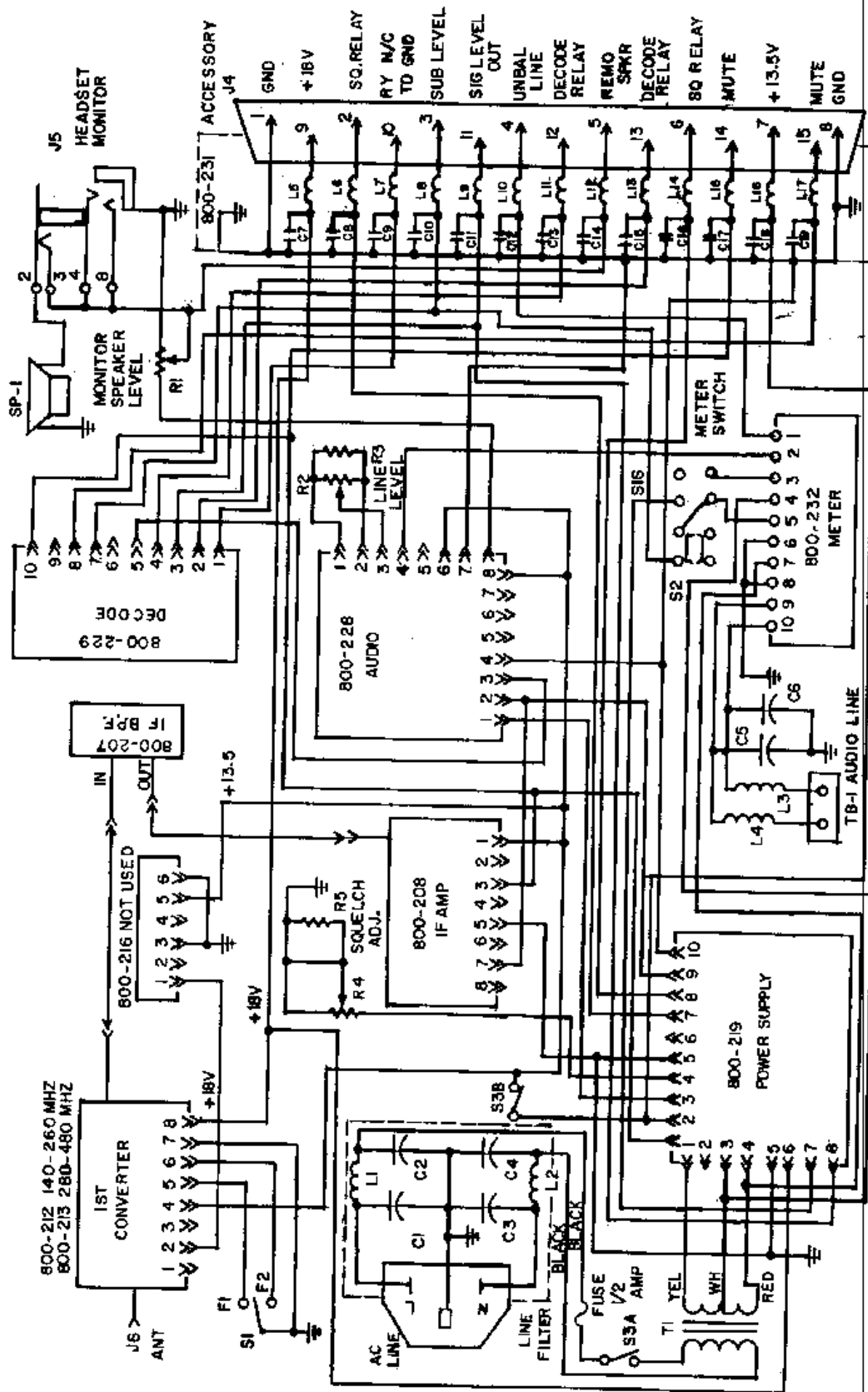
CLEBURNE, TX 76033-0881

DRAWING NO
COPYRIGHT

702-Q66

TITLE	AR-10 150-480 MHz
ADJUSTMENT LOCATION DIAGRAM	





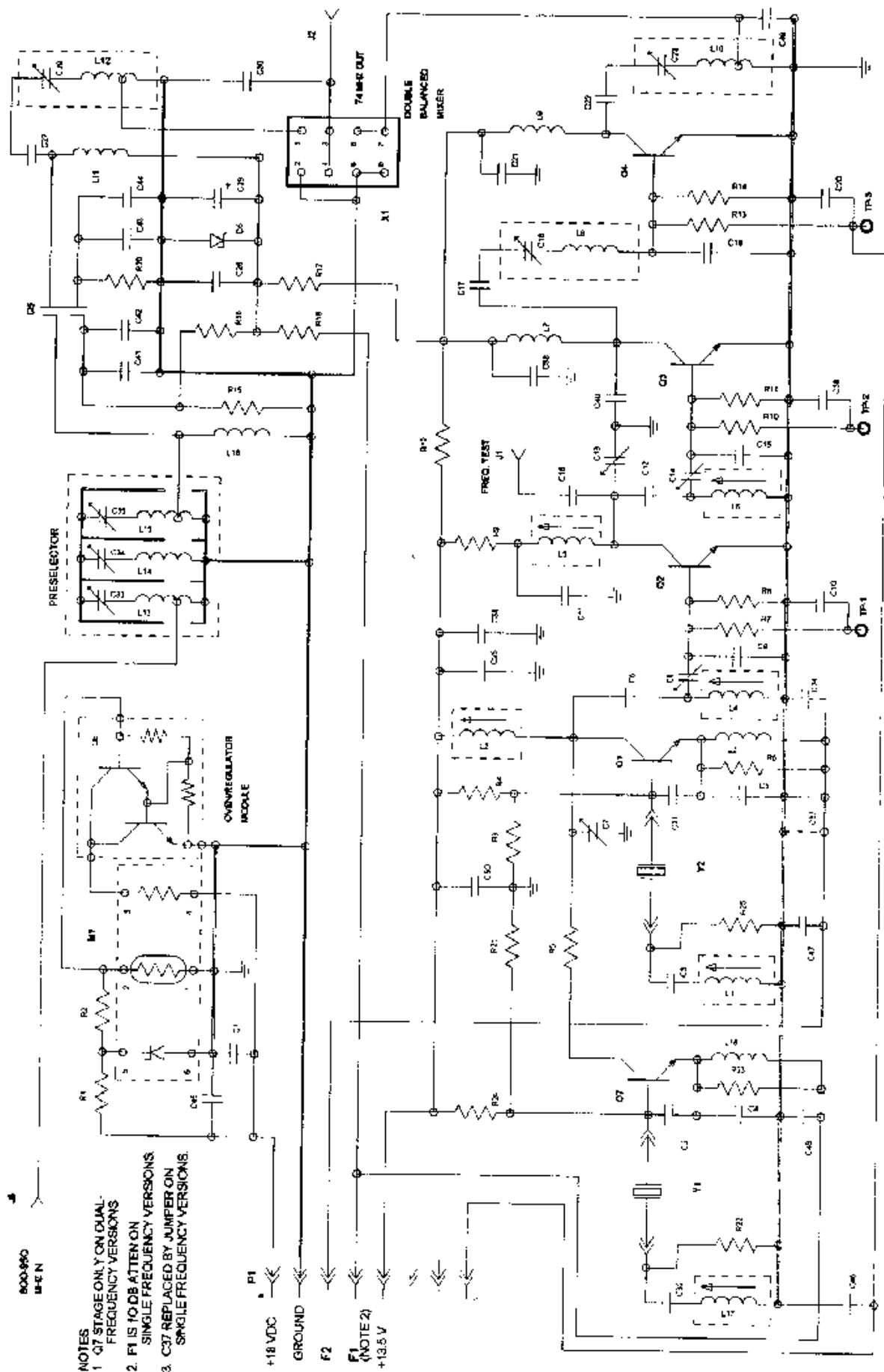
MARTI Electronics, Inc. PO BOX 441 CLEBURNE, TX 76031	DRAWING NO 702-065	REV. 1/17/85	APPROVED 	USED ON AR-10	TITLE MAIN FRAME AR-10 RECEIVER
	918-004				

Parts List
 CR-10 Main Frame
 MARTI 702-061 3/14/94

Item	Marti No.	Description
C01	297-222	Capacitor, .0022 mf 400v 20% Type AU disc
C02	297-222	Capacitor, .0022 mf 400v 20% Type AU disc
C03	297-222	Capacitor, .0022 mf 400v 20% Type AU disc
C04	297-222	Capacitor, .0022 mf 400v 20% Type AU disc
F1	510-217	Fuse, 1/2 Amp 3AG
L1	330-019	Inductor, VK20010-3B
L2	330-019	Inductor, VK20010-3B
R1	100-534	Potentiometer, 500 ohm linear taper
SP1	560-018	Speaker, 8 ohm
T1	320-041	Transformer, Power, #16219 (115 VAC)
	320-041A	Transformer, Power, (220 VAC)

Parts List
 AR-10 Main Frame
 MARTI 702-065 3/14/94

Item	Marti No.	Description
C1-C4	297-222	Capacitor, .0022 mf 400v 20% Type AU disc
C5-C6	256-471	Capacitor, 470 pf 50v 10% X5F disc
C7-C19	253-471	Capacitor, 470 pf 50v 5% Y5P disc
F1	510-217	Fuse, 1/2 Amp 3AG
J4	550-031	Connector, DA-15P
J5	550-142	Stereo 1/4 phone jack
L1-L2	330-019	Inductor, VK20010-3B
L3-L17	330-018	Inductor, 10 uH
R1	100-534	Potentiometer, 500 ohm linear taper
R2	100-103	Potentiometer, 10K ohm
R3	145-103	Resistor, 10K ohm 1/4 watt 5%
R4	100-103	Potentiometer, 10K ohm
R5	145-152	Resistor, 1.5K 1/4 watt 5%
S1	530-001	Switch, DPDT #11A-1255
S2	530-018	Switch, DPTT #11D-1049
S3	530-001	Switch, DPDT #11A-1255
SP1	560-018	Speaker, 8 ohm
T1	320-041	Transformer, Power, #16219 (115 VAC)
	320-041A	Transformer, Power, (220 VAC)
TB1	511-040	Terminal Block #72202



MARTI ELECTRONICS
CLEBURNE, TX 76033-0811

DRAWING NO.
CORRECTION
19 MAR 94

800-211B

TITLE

852-962 MHz CONVERTER

Parts List
CR-10/950 DF Converter Board
MARTI 800-211 03-16-94

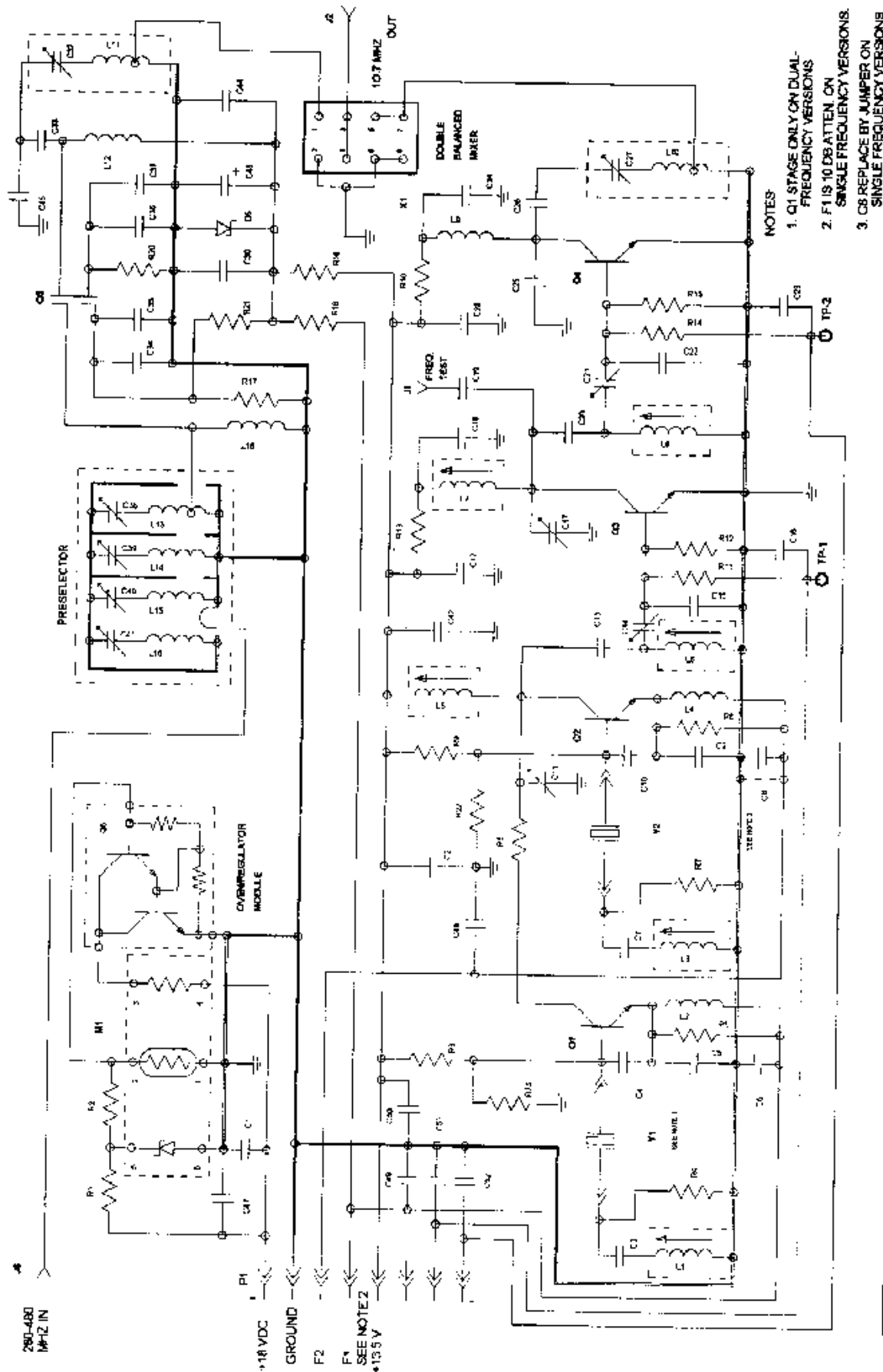
Item	Marti No.	Description
C01	217-104	Capacitor, .01 mf 50v GMV disc
C02	255-150	Capacitor, 15 pf 5% NPO disc
C03	255-150	Capacitor, 15 pf 5% NPO disc
C04	255-750	Capacitor, 75 pf 5% NPO disc
C05	255-750	Capacitor, 75 pf 5% NPO disc
C06	255-010	Capacitor, 1 pf 5% type QC
C07	290-521	Capacitor, variable, 5-25 pf GKU-25000
C08	290-521	Capacitor, variable, 5-25 pf GKU-25000
C09	255-470C	Capacitor, 47pF 5% 200V ceramic dipped
C10	268-102	Capacitor, .001 mf 50v Z5U disc -20+80%
C11	268-102	Capacitor, .001 mf 50v Z5U disc -20+80%
C12	255-003	Capacitor, .27 pf 5% type QC
C13	290-522	Capacitor, variable, 2.8-10 pf GKU-10000
C14	290-522	Capacitor, variable, 2.8-10 pf GKU-10000
C15	255-150	Capacitor, 15 pf 5% NPO disc
C16	255-050	Capacitor, 5 pf 5% NPO disc
C17	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C18	230-103	Capacitor, variable, vertical 1.3-5.4 pf T
C19	255-100	Capacitor, 10 pf 5% NPO disc
C20	268-102	Capacitor, .001 mf 50v Z5U disc -20+80%
C21	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C22	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C23	230-103	Capacitor, variable, vertical 1.3-5.4 pf T
C24	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C25	268-102	Capacitor, .001 mf 50v Z5U disc -20+80%
C26	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C27	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C28	219-200	Capacitor, electrolytic 22uF 25V
C29	230-103	Capacitor, variable, vertical 1.3-5.4 pf T
C30	270-407	Capacitor, monolithic chip, 4.7 pf 50v 5%
C31	255-150	Capacitor, 15 pf 5% NPO disc
C32	255-150	Capacitor, 15 pf 5% NPO disc
C33	230-100	Capacitor, variable, trimmer 8-8 pf JMC#52
C34	230-100	Capacitor, variable, trimmer 8-8 pf JMC#52
C35	230-100	Capacitor, variable, trimmer 8-8 pf JMC#52
C36	217-103	Capacitor, .1 mf 100v 10% mylar
C37	217-104	Capacitor, .01 mf 50v GMV disc
C38	268-102	Capacitor, .001 mf 50v Z5U disc -20+80%
C39	268-102	Capacitor, .001 mf 50v Z5U disc -20+80%
C40	270-407	Capacitor, monolithic chip, 4.7 pf 50v 5%
C41	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C42	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C43	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C44	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C45	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C46	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C47	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C48	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C49	270-407	Capacitor, monolithic chip, 4.7 pf 50v 5%
C50	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
D1	NOT USED	
D2	NOT USED	

Parts List
CR-10/950 DF Converter Board
MARTI 800-211 03-16-94

Item	Marti No.	Description
D3	NOT USED	
D4	NOT USED	
D5	410-754	Diode, zener Motorola 1N754A 6.3v
J1	550-084	Connector, Phono Jack, Molex 15-24-0503
J2	550-084	Connector, Phono Jack, Molex 15-24-0503
L01	350-044	Inductor, 1.0 - 2 uH w/shield can #47271
L02	350-040	Inductor, 6 1/2 turn blue #144-06J12S
L03	330-007	Inductor, 1 uH Delevan #1840-10
L04	350-040	Inductor, 6 1/2 turn blue #144-06J12S
L05	350-039	Inductor, 2 1/2 turn red #144-02J12S
L06	350-039	Inductor, 2 1/2 turn red #144-02J12S
L07	350-121	Inductor, 10 turn .15 uH #70-03
L08	350-163	Inductor, 3 turn 18AWG
L09	350-121	Inductor, 10 turn .15 uH #70-03
L10	350-139P	Inductor, 16 AWG 950 MHz silver
L11	350-121	Inductor, 10 turn .15 uH #70-03
L12	350-139P	Inductor, 16 AWG 950 MHz silver
L13	700-238	Inductor, 950 MHz Stripline
L14	700-238	Inductor, 950 MHz Stripline
L15	700-238	Inductor, 950 MHz Stripline
L16	350-121	Inductor, 10 turn .15 uH #70-03
L17	350-044	Inductor, 1.0 - 2 uH w/shield can #47271
L18	330-007	Inductor, 1 uH Delevan #1840-10
M1	520-052A	Receiver Converter Oven
Q1	440-245	Transistor, SRF3017
Q2	420-090	Transistor, BFY90
Q3	420-090	Transistor, BFY90
Q4	420-090	Transistor, BFY90
Q5	420-966	Transistor, CF300A Telefunken GaAs FET
Q6	PART OF M1	
Q7	440-245	Transistor, SRF3017
R01	145-681	Resistor, 680 ohm 1/4 watt 5% metal film
R02	145-332-1	Resistor, 3.3k ohm 1/4 watt 2% RL07S332G
R03	145-683	Resistor, 68k ohm 1/4 watt 5% metal film
R04	145-683	Resistor, 68k ohm 1/4 watt 5% metal film
R05	145-030-C	Resistor, 3.3 ohm 1/4 watt 5% carbon comp
R06	145-331	Resistor, 330 ohm 1/4 watt 5% metal film
R07	145-103	Resistor, 10k ohm 1/4 watt 5% metal film
R08	145-102	Resistor, 1k ohm 1/4 watt 5% metal film
R09	145-331	Resistor, 330 ohm 1/4 watt 5% metal film
R10	145-103	Resistor, 10k ohm 1/4 watt 5% metal film
R11	145-102	Resistor, 1k ohm 1/4 watt 5% metal film
R12	145-220	Resistor, 22 ohm 1/4 watt 5% metal film
R13	145-562-1	Resistor, 5.6k ohm 1/4 watt 2% RL07S562G
R14	145-102	Resistor, 1k ohm 1/4 watt 5% metal film
R15	145-752	Resistor, 7.5k ohm 1/4 watt 5% metal film
R16	145-123	Resistor, 12k ohm 1/4 watt 5% metal film
R17	145-271	Resistor, 270 ohm 1/4 watt 5% metal film
R18	145-470	Resistor, 47 ohm 1/4 watt 5% metal film
R19	NOT USED	
R20	145-101	Resistor, 100 ohm 1/4 watt 5% metal film
R21	145-683	Resistor, 68k ohm 1/4 watt 5% metal film

Parts List
 CR-10/950 DF Converter Board
 MARTI 800-211 03-16-94

Item	Marti No.	Description
R22	145-152	Resistor, 1.5k ohm 1/4 ohm 5% metal film
R23	145-331	Resistor, 330 ohm 1/4 watt 5% metal film
R24	145-683	Resistor, 68k ohm 1/4 watt 5% metal film
R25	145-152	Resistor, 1.5k ohm 1/4 ohm 5% metal film
X1	350-125	Mixer, SBL-1X
Y1	520-040	Crystal socket, CS-109-07
Y2	520-040	Crystal socket, CS-109-07
	350-046	Coil Cans 20k #47271-012
	550-125	Connector, 5 pin Molex Header
	800-211B	PC Board, Converter R Receiver
	520-041	Clip, transistor, Atlee 100-200-1-2 cad pl



MARTI ELECTRONICS CLEBURNE, TX 76033-0661	DRAWING NO. 800-213	TITLE 280-480 MHz CONVERTER
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Parts List
300 MHz DF Converter Board
MARTI 800-213 03-16-94

Item	Marti No.	Description
C01	217-104	Capacitor, .01 mf 50v GMV disc
C02	217-103	Capacitor, .1 mf 100v 10% mylar
C03	255-220	Capacitor, 22 pf 5% NPO disc
C04	255-100	Capacitor, 10 pf 5% NPO disc
C05	255-750	Capacitor, 75 pf 5% NPO disc
C06	217-104	Capacitor, .01 mf 50v GMV disc
C07	255-220	Capacitor, 22 pf 5% NPO disc
C08	217-104	Capacitor, .01 mf 50v GMV disc
C09	255-750	Capacitor, 75 pf 5% NPO disc
C10	255-100	Capacitor, 10 pf 5% NPO disc
C11	290-521	Capacitor, variable, 5-25 pf GKU-25000
C12	217-103	Capacitor, .1 mf 100v 10% mylar
C13	255-020	Capacitor, 2 pf 5% type QC
C14	290-521	Capacitor, variable, 5-25 pf GKU-25000
C15	255-470C	Capacitor, 47pF 5% 200V ceramic dipped
C16	268-102	Capacitor, .001 mf 50v Z5U disc -20+80%
C17	290-521	Capacitor, variable, 5-25 pf GKU-25000
C18	268-102	Capacitor, .001 mf 50v Z5U disc -20+80%
C19	255-050	Capacitor, 5 pf 5% NPO disc
C20	255-010	Capacitor, 1 pf 5% type QC
C21	290-521	Capacitor, variable, 5-25 pf GKU-25000
C22	255-220	Capacitor, 22 pf 5% NPO disc
C23	268-102	Capacitor, .001 mf 50v Z5U disc -20+80%
C24	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C25	270-407	Capacitor, monolithic chip, 4.7 pf 50v 5%
C26	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C27	290-522	Capacitor, variable, 2.8-10 pf GKU-10000
C28	268-102	Capacitor, .001 mf 50v Z5U disc -20+80%
C29	270-407	Capacitor, monolithic chip, 4.7 pf 50v 5%
C30	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C31	NOT USED	
C32	290-521	Capacitor, variable, 5-25 pf GKU-25000
C33	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C34	270-407	Capacitor, monolithic chip, 4.7 pf 50v 5%
C35	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C36	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C37	290-521	Capacitor, variable, 5-25 pf GKU-25000
C38	230-100	Capacitor, variable, trimmer 8-8 pf JMC#52
C39	230-100	Capacitor, variable, trimmer 8-8 pf JMC#52
C40	230-100	Capacitor, variable, trimmer 8-8 pf JMC#52
C41	230-100	Capacitor, variable, trimmer 8-8 pf JMC#52
C42	268-102	Capacitor, .001 mf 50v Z5U disc -20+80%
C43	219-200	Capacitor, electrolytic 22uF 25V
C44	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C45	270-407	Capacitor, monolithic chip, 4.7 pf 50v 5%
C46	NOT USED	
C47	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C48	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C49	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C50	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C51	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C52	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%

Parts List
300 MHz DF Converter Board
MARTI 800-213 03-16-94

Item	Marti No.	Description
D1	NOT USED	
D2	NOT USED	
D3	NOT USED	
D4	NOT USED	
D5	410-470	Diode, zener, Motorola 1N4732 4.7v
J1	550-084	Connector, Phono Jack, Molex 15-24-0503
J2	550-084	Connector, Phono Jack, Molex 15-24-0503
L01	350-044	Inductor, 1.0 - 2 uH w/shield can #47271
L02	330-007	Inductor, 1 uH Delevan #1840-10
L03	350-044	Inductor, 1.0 - 2 uH w/shield can #47271
L04	330-007	Inductor, 1 uH Delevan #1840-10
L05	350-039	Inductor, 2 1/2 turn red #144-02J12S
L06	350-039	Inductor, 2 1/2 turn red #144-02J12S
L07	330-020	Inductor, .33 uH
L08	350-121	Inductor, 10 turn .15 uH #70-03
L09	330-018	Inductor, 10 uH 43LQ105-1
L10	350-162	Inductor, 5 turn 18 AWG
L11	350-161	Inductor, 4 turn 18 AWG
L12	330-020	Inductor, .33 uH
L13	700-232	Strip Line, Brass (straight)
L14	700-239	Strip Line, R-10/300 Pre-Selector
L15	700-232	Strip Line, Brass (straight)
L16	350-136	Inductor, 14 AWG 450 MHz
L17	350-135	Inductor, 16 AWG 450 MHz
L18	350-121	Inductor, 10 turn .15 uH #70-03
M1	520-052A	Receiver Converter Oven
Q1	440-245	Transistor, SRF3017
Q2	440-245	Transistor, SRF3017
Q3	440-245	Transistor, SRF3017
Q4	440-245	Transistor, SRF3017
Q5	441-137	Transistor, NE25337 FET K-205
Q6	PART OF M1	
R01	145-681	Resistor, 680 ohm 1/4 watt 5% metal film
R02	145-332-1	Resistor, 3.3k ohm 1/4 watt 2% RL07S332G
R03	145-683	Resistor, 68k ohm 1/4 watt 5% metal film
R04	145-152	Resistor, 1.5k ohm 1/4 ohm 5% metal film
R05	145-331	Resistor, 330 ohm 1/4 watt 5% metal film
R06	145-030-C	Resistor, 3.3 ohm 1/4 watt 5% carbon comp
R07	145-152	Resistor, 1.5k ohm 1/4 ohm 5% metal film
R08	145-331	Resistor, 330 ohm 1/4 watt 5% metal film
R09	145-683	Resistor, 68k ohm 1/4 watt 5% metal film
R10	145-331	Resistor, 330 ohm 1/4 watt 5% metal film
R11	145-103	Resistor, 10k ohm 1/4 watt 5% metal film
R12	145-102	Resistor, 1k ohm 1/4 watt 5% metal film
R13	145-331	Resistor, 330 ohm 1/4 watt 5% metal film
R14	145-103	Resistor, 10k ohm 1/4 watt 5% metal film
R15	145-272	Resistor, 2.7k ohm 1/4 watt 5% metal film
R16	145-431	Resistor, 430 ohm 1/4 watt 5% metal film
R17	145-562	Resistor, 5.6k ohm 1/4 watt 5% metal film
R18	NOT USED	
R19	NOT USED	
R20	145-101	Resistor, 100 ohm 1/4 watt 5% metal film

Parts List
 300 MHz DF Converter Board
 MARTI 800-213 03-16-94

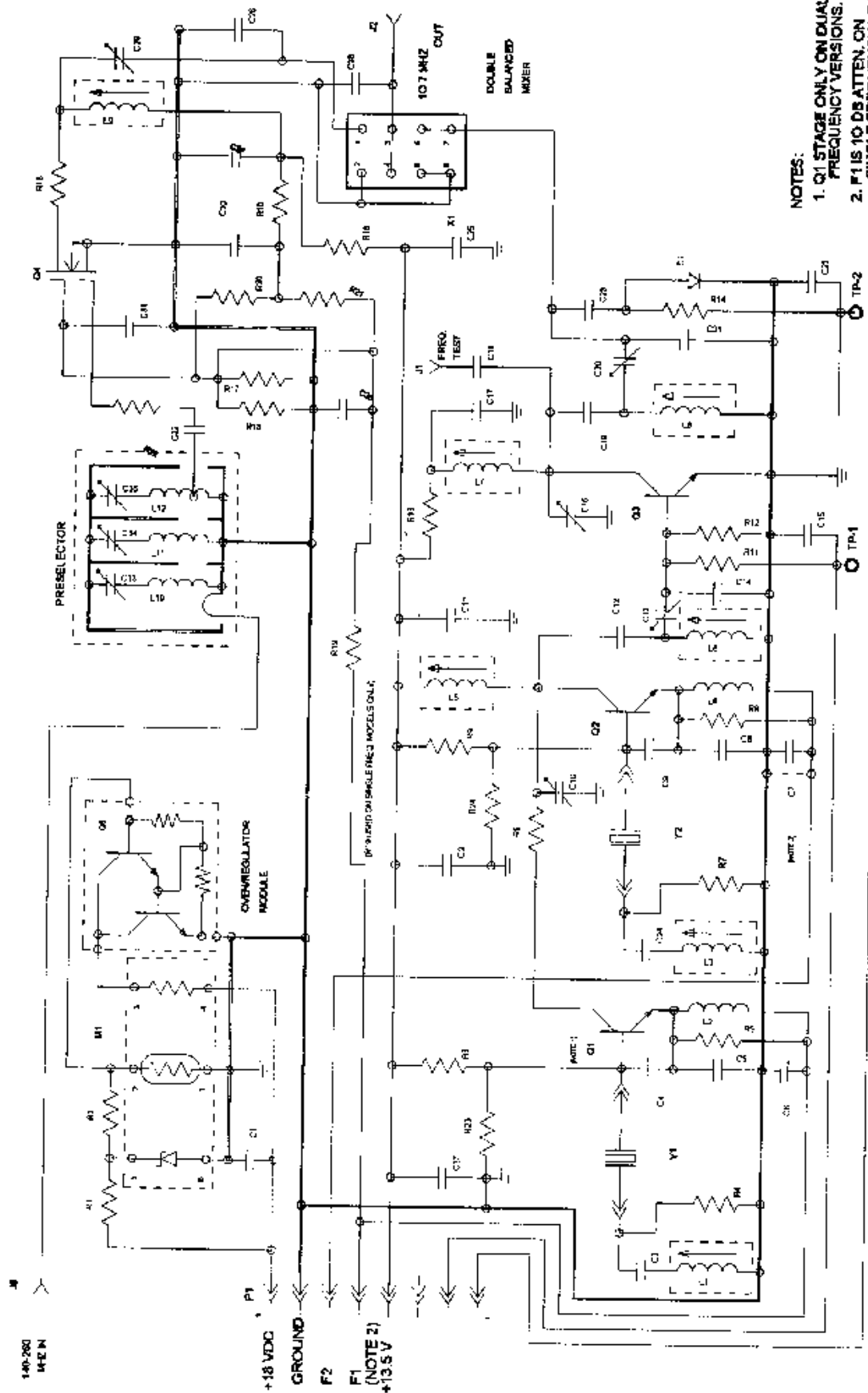
Item	Marti No.	Description
R21	145-123-C	Resistor, 12k ohm 1/4 watt 5% carbon comp
R22	145-683	Resistor, 68k ohm 1/4 watt 5% metal film
R23	145-683	Resistor, 68k ohm 1/4 watt 5% metal film
X1	350-124	Mixer, SBL-1
Y1	520-040	Crystal socket, CS-109-07
Y2	520-040	Crystal socket, CS-109-07
	800-213B	PC Board, Converter R Receiver
	550-165	Connector, 4 pin Molex Header
	700-246	Fingerstock, adhesive backed #97-515-02
	350-046	Coil Cans 20k #47271-012
	520-041	Clip, transistor, Atlee 100-200-1-2 cad pl

Parts List
450 MHz DF Converter Board
MARTI 800-213 03-16-94

Item	Marti No.	Description
C01	217-104	Capacitor, .01 mf 50v GMV disc
C02	217-103	Capacitor, .1 mf 100v 10% mylar
C03	255-150	Capacitor, 15 pf 5% NPO disc
C04	255-150	Capacitor, 15 pf 5% NPO disc
C05	255-750	Capacitor, 75 pf 5% NPO disc
C06	217-104	Capacitor, .01 mf 50v GMV disc
C07	255-150	Capacitor, 15 pf 5% NPO disc
C08	217-104	Capacitor, .01 mf 50v GMV disc
C09	255-750	Capacitor, 75 pf 5% NPO disc
C10	255-150	Capacitor, 15 pf 5% NPO disc
C11	290-522	Capacitor, variable, 2.8-10 pf GKU-10000
C12	217-103	Capacitor, .1 mf 100v 10% mylar
C13	255-010	Capacitor, 1 pf 5% type QC
C14	290-522	Capacitor, variable, 2.8-10 pf GKU-10000
C15	255-470C	Capacitor, 47pF 5% 200V ceramic dipped
C16	268-102	Capacitor, .001 mf 50v Z5U disc -20+80%
C17	290-522	Capacitor, variable, 2.8-10 pf GKU-10000
C18	268-102	Capacitor, .001 mf 50v Z5U disc -20+80%
C19	255-050	Capacitor, 5 pf 5% NPO disc
C20	255-010	Capacitor, 1 pf 5% type QC
C21	290-522	Capacitor, variable, 2.8-10 pf GKU-10000
C22	255-150	Capacitor, 15 pf 5% NPO disc
C23	268-102	Capacitor, .001 mf 50v Z5U disc -20+80%
C24	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C25	270-407	Capacitor, monolithic chip, 4.7 pf 50v 5%
C26	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C27	290-521	Capacitor, variable, 5-25 pf GKU-25000
C28	268-102	Capacitor, .001 mf 50v Z5U disc -20+80%
C29	270-407	Capacitor, monolithic chip, 4.7 pf 50v 5%
C30	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C31	NOT USED	
C32	290-521	Capacitor, variable, 5-25 pf GKU-25000
C33	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C34	270-407	Capacitor, monolithic chip, 4.7 pf 50v 5%
C35	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C36	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C37	270-407	Capacitor, monolithic chip, 4.7 pf 50v 5%
C38	230-100	Capacitor, variable, trimmer 8-8 pf JMC#52
C39	230-100	Capacitor, variable, trimmer 8-8 pf JMC#52
C40	230-100	Capacitor, variable, trimmer 8-8 pf JMC#52
C41	230-100	Capacitor, variable, trimmer 8-8 pf JMC#52
C42	268-102	Capacitor, .001 mf 50v Z5U disc -20+80%
C43	219-200	Capacitor, electrolytic 22uF 25V
D1	NOT USED	
D2	NOT USED	
D3	NOT USED	
D4	NOT USED	
D5	410-754	Diode, zener Motorola 1N754A 6.3v
J1	550-084	Connector, Phono Jack, Molex 15-24-0503
J2	550-084	Connector, Phono Jack, Molex 15-24-0503
L01	350-044	Inductor, 1.0 - 2 uH w/shield can #47271
L02	330-007	Inductor, 1 uH Delevan #1840-10

Parts List
450 MHz DF Converter Board
MARTI 800-213 03-16-94

Item	Marti No.	Description
L03	350-044	Inductor, 1.0 - 2 uH w/shield can #47271
L04	330-007	Inductor, 1 uH Delevan #1840-10
L05	350-040	Inductor, 6 1/2 turn blue #144-06J12S
L06	350-040	Inductor, 6 1/2 turn blue #144-06J12S
L07	350-039	Inductor, 2 1/2 turn red #144-02J12S
L08	350-039	Inductor, 2 1/2 turn red #144-02J12S
L09	350-121	Inductor, 10 turn .15 uH #70-03
L10	350-127	Inductor, 3 turn 16 AWG 3/16 ID
L11	350-127	Inductor, 3 turn 16 AWG 3/16 ID
L12	350-121	Inductor, 10 turn .15 uH #70-03
L13	700-239	Strip Line, R-10/300 Pre-Selector
L14	700-232	Strip Line, Brass (straight)
L15	700-239	Strip Line, R-10/300 Pre-Selector
L16	350-136	Inductor, 14 AWG 450 MHz
L17	350-135	Inductor, 16 AWG 450 MHz
L18	350-121	Inductor, 10 turn .15 uH #70-03
M1	520-052A	Receiver Converter Oven
Q1	440-245	Transistor, SRF3017
Q2	440-245	Transistor, SRF3017
Q3	440-245	Transistor, SRF3017
Q4	440-245	Transistor, SRF3017
Q5	420-966	Transistor, CF300A Telefunken GaAs FET
Q6	PART OF M1	
R01	145-681	Resistor, 680 ohm 1/4 watt 5% metal film
R02	145-332-1	Resistor, 3.3k ohm 1/4 watt 2% RL07S332G
R03	145-683	Resistor, 68k ohm 1/4 watt 5% metal film
R04	145-152	Resistor, 1.5k ohm 1/4 ohm 5% metal film
R05	145-331	Resistor, 330 ohm 1/4 watt 5% metal film
R06	145-030-C	Resistor, 3.3 ohm 1/4 watt 5% carbon comp
R07	145-152	Resistor, 1.5k ohm 1/4 ohm 5% metal film
R08	145-331	Resistor, 330 ohm 1/4 watt 5% metal film
R09	145-683	Resistor, 68k ohm 1/4 watt 5% metal film
R10	145-331	Resistor, 330 ohm 1/4 watt 5% metal film
R11	145-103	Resistor, 10k ohm 1/4 watt 5% metal film
R12	145-102	Resistor, 1k ohm 1/4 watt 5% metal film
R13	145-331	Resistor, 330 ohm 1/4 watt 5% metal film
R14	145-223	Resistor, 22k ohm 1/4 watt 5% metal film
R15	145-272	Resistor, 2.7k ohm 1/4 watt 5% metal film
R16	145-221	Resistor, 220 ohm 1/4 watt 5% metal film
R17	145-752	Resistor, 7.5k ohm 1/4 watt 5% metal film
R18	NOT USED	
R19	NOT USED	
R20	145-101	Resistor, 100 ohm 1/4 watt 5% metal film
R21	145-123	Resistor, 12k ohm 1/4 watt 5% metal film
R22	145-683	Resistor, 68k ohm 1/4 watt 5% metal film
R23	145-683	Resistor, 68k ohm 1/4 watt 5% metal film
X1	350-124	Mixer, SBL-1
Y1	520-040	Crystal socket, CS-109-07
Y2	520-040	Crystal socket, CS-109-07
	350-046	Coil Cans 20k #47271-012
	550-165	Connector, 4 pin Molex Header
	700-246	Fingerstock, adhesive backed #97-515-02



- NOTES:
1. Q1 STAGE ONLY ON DUAL-FREQUENCY VERSIONS.
 2. F1 IS 10 DB ATTEN. ON SINGLE FREQUENCY VERSIONS.
 3. C7 REPLACED BY JUMPER ON SINGLE FREQUENCY VERSIONS.

MARTI ELECTRONICS CLEBURNE, TX 76033-0881	DRAWING NO. 800-212	TITLE 140-360 MHz CONVERTER	COPYRIGHT 11 APR 84
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Parts List
AR/CR-10/150 DF Converter Board
MARTI 800-212 03-16-94

Item	Marti No.	Description
C01	217-104	Capacitor, .01 mf 50v GMV disc
C02	217-103	Capacitor, .1 mf 100v 10% mylar
C03	255-120	Capacitor, 12 pf 5% NPO disc
C04	255-150	Capacitor, 15 pf 5% NPO disc
C05	255-750	Capacitor, 75 pf 5% NPO disc
C06	217-104	Capacitor, .01 mf 50v GMV disc
C07	217-104	Capacitor, .01 mf 50v GMV disc
C08	255-750	Capacitor, 75 pf 5% NPO disc
C09	255-150	Capacitor, 15 pf 5% NPO disc
C10	290-522	Capacitor, variable, 2.8-10 pf GKU-10000
C11	217-103	Capacitor, .1 mf 100v 10% mylar
C12	255-030	Capacitor, 3 pf 5% type QC
C13	290-521	Capacitor, variable, 5-25 pf GKU-25000
C14	255-180	Capacitor, 18 pf 5% NPO disc
C15	268-102	Capacitor, .001 mf 50v Z5U disc -20+80%
C16	290-522	Capacitor, variable, 2.8-10 pf GKU-10000
C17	268-102	Capacitor, .001 mf 50v Z5U disc -20+80%
C18	255-050	Capacitor, 5 pf 5% NPO disc
C19	255-010	Capacitor, 1 pf 5% type QC
C20	290-522	Capacitor, variable, 2.8-10 pf GKU-10000
C21	255-030-1	Capacitor, 3 pf 5% NPO disc
C22	268-102	Capacitor, .001 mf 50v Z5U disc -20+80%
C23	255-100	Capacitor, 10 pf 5% NPO disc
C24	255-120	Capacitor, 12 pf 5% NPO disc
C25	268-102	Capacitor, .001 mf 50v Z5U disc -20+80%
C26	255-180	Capacitor, 18 pf 5% NPO disc
C27	268-102	Capacitor, .001 mf 50v Z5U disc -20+80%
C28	NOT USED	
C29	290-522	Capacitor, variable, 2.8-10 pf GKU-10000
C30	268-102	Capacitor, .001 mf 50v Z5U disc -20+80%
C31	268-102	Capacitor, .001 mf 50v Z5U disc -20+80%
C32	268-102	Capacitor, .001 mf 50v Z5U disc -20+80%
C33	230-100	Capacitor, variable, trimmer 8-8 pf JMC#52
C34	230-100	Capacitor, variable, trimmer 8-8 pf JMC#52
C35	230-100	Capacitor, variable, trimmer 8-8 pf JMC#52
C36	268-102	Capacitor, .001 mf 50v Z5U disc -20+80%
C37	268-102	Capacitor, .001 mf 50v Z5U disc -20+80%
C38	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C39	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C40	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C41	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C42	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C43	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
D1	412-494	Diode, Germanium, 1N270
J1	550-084	Connector, Phono Jack, Molex 15-24-0503
J2	550-084	Connector, Phono Jack, Molex 15-24-0503
L01	350-044	Inductor, 1.0 - 2 uH w/shield can #47271
L02	330-007	Inductor, 1 uH Delevan #1840-10
L03	350-044	Inductor, 1.0 - 2 uH w/shield can #47271
L04	330-007	Inductor, 1 uH Delevan #1840-10
L05	350-043	Inductor, 4 1/2 turn yellow
L06	350-043	Inductor, 4 1/2 turn yellow

Parts List
AR/CR-10/150 DF Converter Board
MARTI 800-212 03-16-94

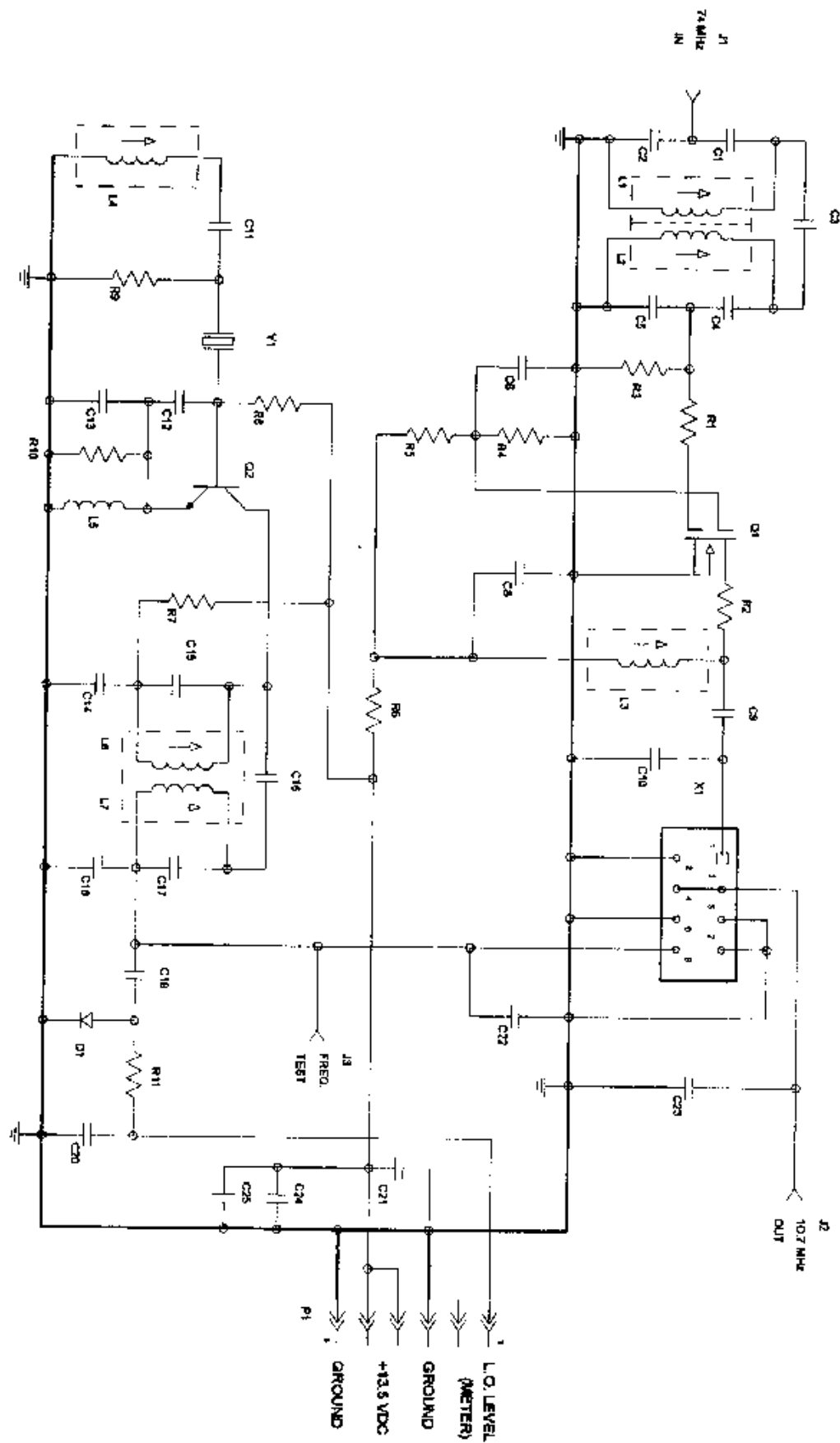
Item	Marti No.	Description
L07	350-043	Inductor, 4 1/2 turn yellow
L08	350-043	Inductor, 4 1/2 turn yellow
L09	350-043	Inductor, 4 1/2 turn yellow
L10	350-129	Inductor, 8 turn 16 AWG 5/16 ID
L11	350-129	Inductor, 8 turn 16 AWG 5/16 ID
L12	350-129	Inductor, 8 turn 16 AWG 5/16 ID
L13	350-132	Inductor, 20 AWG 3/8 ID 150 & 215 MHz
M1	520-052A	Receiver Converter Oven
Q1	440-245	Transistor, SRF3017
Q2	440-245	Transistor, SRF3017
Q3	440-245	Transistor, SRF3017
Q4	NOT USED	
Q5	428-837	Transistor, BF966S 3SK88
R01	145-681	Resistor, 680 ohm 1/4 watt 5% metal film
R02	145-332-1	Resistor, 3.3k ohm 1/4 watt 2% RL07S332G
R03	145-683	Resistor, 68k ohm 1/4 watt 5% metal film
R04	145-152	Resistor, 1.5k ohm 1/4 ohm 5% metal film
R05	145-331	Resistor, 330 ohm 1/4 watt 5% metal film
R06	145-030-C	Resistor, 3.3 ohm 1/4 watt 5% carbon comp
R07	145-152	Resistor, 1.5k ohm 1/4 ohm 5% metal film
R08	145-331	Resistor, 330 ohm 1/4 watt 5% metal film
R09	145-683	Resistor, 68k ohm 1/4 watt 5% metal film
R10	145-470-C	Resistor, 47 ohm 1/4 watt 5% carbon comp
R11	145-272	Resistor, 2.7k ohm 1/4 watt 5% metal film
R12	145-102	Resistor, 1k ohm 1/4 watt 5% metal film
R13	145-331	Resistor, 330 ohm 1/4 watt 5% metal film
R14	145-562	Resistor, 5.6k ohm 1/4 watt 5% metal film
R15	145-300	Resistor, 30 ohm 1/4 watt 5% metal film
R16	145-470-C	Resistor, 47 ohm 1/4 watt 5% carbon comp
R17	145-562	Resistor, 5.6k ohm 1/4 watt 5% metal film
R18	145-223	Resistor, 22k ohm 1/4 watt 5% metal film
R19	NOT USED	
R20	145-474	Resistor, 470k ohm 1/4 watt 5% metal film
R21	145-682-1	Resistor, 6.8k ohm 1/4 watt 2% RL07S682G
R22	145-030-C	Resistor, 3.3 ohm 1/4 watt 5% carbon comp
R23	145-683	Resistor, 68k ohm 1/4 watt 5% metal film
R24	145-683	Resistor, 68k ohm 1/4 watt 5% metal film
X1	350-124	Mixer, SBL-1
Y1	520-040	Crystal socket, CS-109-07
Y2	520-040	Crystal socket, CS-109-07
	800-212B	PC Board, Converter R Receiver
	550-173	Connector, 2 pin Molex Header

Parts List
AR/CR-10/215 DF Converter Board
MARTI 800-212 03-16-94

Item	Marti No.	Description
C01	217-104	Capacitor, .01 mf 50v GMV disc
C02	217-103	Capacitor, .1 mf 100v 10% mylar
C03	255-220	Capacitor, 22 pf 5% NPO disc
C04	255-150	Capacitor, 15 pf 5% NPO disc
C05	255-750	Capacitor, 75 pf 5% NPO disc
C06	217-104	Capacitor, .01 mf 50v GMV disc
C07	217-104	Capacitor, .01 mf 50v GMV disc
C08	255-750	Capacitor, 75 pf 5% NPO disc
C09	255-150	Capacitor, 15 pf 5% NPO disc
C10	290-521	Capacitor, variable, 5-25 pf GKU-25000
C11	217-103	Capacitor, .1 mf 100v 10% mylar
C12	255-010	Capacitor, 1 pf 5% type QC
C13	290-521	Capacitor, variable, 5-25 pf GKU-25000
C14	255-470C	Capacitor, 47pF 5% 200V ceramic dipped
C15	268-102	Capacitor, .001 mf 50v Z5U disc -20+80%
C16	290-522	Capacitor, variable, 2.8-10 pf GKU-10000
C17	268-102	Capacitor, .001 mf 50v Z5U disc -20+80%
C18	255-050	Capacitor, 5 pf 5% NPO disc
C19	255-010	Capacitor, 1 pf 5% type QC
C20	290-522	Capacitor, variable, 2.8-10 pf GKU-10000
C21	255-030-1	Capacitor, 3 pf 5% NPO disc
C22	268-102	Capacitor, .001 mf 50v Z5U disc -20+80%
C23	255-100	Capacitor, 10 pf 5% NPO disc
C24	255-220	Capacitor, 22 pf 5% NPO disc
C25	268-102	Capacitor, .001 mf 50v Z5U disc -20+80%
C26	255-180	Capacitor, 18 pf 5% NPO disc
C27	268-102	Capacitor, .001 mf 50v Z5U disc -20+80%
C28	NOT USED	
C29	290-522	Capacitor, variable, 2.8-10 pf GKU-10000
C30	268-102	Capacitor, .001 mf 50v Z5U disc -20+80%
C31	268-102	Capacitor, .001 mf 50v Z5U disc -20+80%
C32	268-102	Capacitor, .001 mf 50v Z5U disc -20+80%
C33	230-100	Capacitor, variable, trimmer 8-8 pf JMC#52
C34	230-100	Capacitor, variable, trimmer 8-8 pf JMC#52
C35	230-100	Capacitor, variable, trimmer 8-8 pf JMC#52
C36	268-102	Capacitor, .001 mf 50v Z5U disc -20+80%
C37	268-102	Capacitor, .001 mf 50v Z5U disc -20+80%
C38	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C39	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C40	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C41	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C42	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C43	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
D1	412-494	Diode, Germanium, 1N270
J1	550-084	Connector, Phono Jack, Molex 15-24-0503
J2	550-084	Connector, Phono Jack, Molex 15-24-0503
L01	350-044	Inductor, 1.0 - 2 uH w/shield can #47271
L02	330-007	Inductor, 1 uH Delevan #1840-10
L03	350-044	Inductor, 1.0 - 2 uH w/shield can #47271
L04	330-007	Inductor, 1 uH Delevan #1840-10
L05	350-040	Inductor, 6 1/2 turn blue #144-06J12S
L06	350-040	Inductor, 6 1/2 turn blue #144-06J12S

Parts List
 AR/CR-10/215 DF Converter Board
 MARTI 800-212 03-16-94

Item	Marti No.	Description
L07	350-039	Inductor, 2 1/2 turn red #144-02J12S
L08	350-039	Inductor, 2 1/2 turn red #144-02J12S
L09	350-039	Inductor, 2 1/2 turn red #144-02J12S
L10	350-130	Inductor, 5 turn 14 AWG 9/16 ID
L11	350-130	Inductor, 5 turn 14 AWG 9/16 ID
L12	350-130	Inductor, 5 turn 14 AWG 9/16 ID
L13	350-132	Inductor, 20 AWG 3/8 ID 150 & 215 MHz
M1	520-052A	Receiver Converter Oven
Q1	440-245	Transistor, SRF3017
Q2	440-245	Transistor, SRF3017
Q3	420-090	Transistor, BPF90
Q4	NOT USED	
Q5	428-837	Transistor, BPF966S 3SK88
R01	145-681	Resistor, 680 ohm 1/4 watt 5% metal film
R02	145-332-1	Resistor, 3.3k ohm 1/4 watt 2% RL07S332G
R03	145-683	Resistor, 68k ohm 1/4 watt 5% metal film
R04	145-392	Resistor, 3.9k ohm 1/4 watt 5% metal film
R05	145-331	Resistor, 330 ohm 1/4 watt 5% metal film
R06	145-030-C	Resistor, 3.3 ohm 1/4 watt 5% carbon comp
R07	145-392	Resistor, 3.9k ohm 1/4 watt 5% metal film
R08	145-331	Resistor, 330 ohm 1/4 watt 5% metal film
R09	145-683	Resistor, 68k ohm 1/4 watt 5% metal film
R10	145-470-C	Resistor, 47 ohm 1/4 watt 5% carbon comp
R11	145-103	Resistor, 10k ohm 1/4 watt 5% metal film
R12	145-102	Resistor, 1k ohm 1/4 watt 5% metal film
R13	145-470-C	Resistor, 47 ohm 1/4 watt 5% carbon comp
R14	145-272	Resistor, 2.7k ohm 1/4 watt 5% metal film
R15	145-300	Resistor, 30 ohm 1/4 watt 5% metal film
R16	145-470-C	Resistor, 47 ohm 1/4 watt 5% carbon comp
R17	145-562	Resistor, 5.6k ohm 1/4 watt 5% metal film
R18	145-223	Resistor, 22k ohm 1/4 watt 5% metal film
R19	NOT USED	
R20	145-474	Resistor, 470k ohm 1/4 watt 5% metal film
R21	145-682-1	Resistor, 6.8k ohm 1/4 watt 2% RL07S682G
R22	145-030-C	Resistor, 3.3 ohm 1/4 watt 5% carbon comp
R23	145-683	Resistor, 68k ohm 1/4 watt 5% metal film
R24	145-683	Resistor, 68k ohm 1/4 watt 5% metal film
X1	350-124	Mixer, SBL-1
Y1	520-040	Crystal socket, CS-109-07
Y2	520-040	Crystal socket, CS-109-07
	550-173	Connector, 2 pin Molex Header
	520-052A	Receiver Converter Oven
	800-212B	PC Board, Converter R Receiver



MARTI ELECTRONICS

DESIGNER: TX 77033-0961

DRAWING NO.

COMPONENT

10-MAR-84

800-216

TITLE

74 MHz CONVERTER

Parts List
R-10 F+10.7 Second Converter Domestic
MARTI 800-216 03-15-94

Item	Marti No.	Description
C01	255-270	Capacitor, 27 pf 5% NPO disc
C02	255-750	Capacitor, 75 pf 5% NPO disc
C03	255-010	Capacitor, 1 pf 5% type QC
C04	295-390	Capacitor, 39 pf 5% NPO disc
C05	255-470C	Capacitor, 47pF 5% 200V ceramic dipped
C06	217-104	Capacitor, .01 mf 50v GMV disc
C07	NOT USED	
C08	217-104	Capacitor, .01 mf 50v GMV disc
C09	255-270	Capacitor, 27 pf 5% NPO disc
C10	256-131	Capacitor, 130 pf 5% 50V NPO disc
C11	255-100	Capacitor, 10 pf 5% NPO disc
C12	255-100	Capacitor, 10 pf 5% NPO disc
C13	256-750	Capacitor, 75 pf 300v 5% silver mica
C14	270-103	Capacitor, monolithic chip 10000pF 10% XR7
C15	255-150	Capacitor, 15 pf 5% NPO disc
C16	255-010	Capacitor, 1 pf 5% type QC
C17	255-220	Capacitor, 22 pf 5% NPO disc
C18	256-680C	Capacitor, 68pF 5% 200V ceramic dipped
C19	255-180	Capacitor, 18 pf 5% NPO disc
C20	270-103	Capacitor, monolithic chip 10000pF 10% XR7
C21	217-103	Capacitor, .1 mf 100v 10% mylar
C22	255-050	Capacitor, 5 pf 5% NPO disc
C23	255-270	Capacitor, 27 pf 5% NPO disc
C24	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C25	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
D1	412-494	Diode, Germanium, 1N270
J1	550-084	Connector, Phono Jack, Molex 15-24-0503
J2	550-084	Connector, Phono Jack, Molex 15-24-0503
J3	550-084	Connector, Phono Jack, Molex 15-24-0503
L1	350-040	Inductor, 6 1/2 turn blue #144-06J12S
L2	350-040	Inductor, 6 1/2 turn blue #144-06J12S
L3	350-040	Inductor, 6 1/2 turn blue #144-06J12S
L4	350-025	Inductor, 1.5 - 3 uH w/shield can #47271-0
L5	330-007	Inductor, 1 uH Delevan #1840-10
L6	350-040	Inductor, 6 1/2 turn blue #144-06J12S
L7	350-040	Inductor, 6 1/2 turn blue #144-06J12S
P1	550-136	Connector, 6 pin Molex Header
Q1	430-211	Transistor, MFE211
Q2	440-245	Transistor, SRF3017
R01	145-300	Resistor, 30 ohm 1/4 watt 5% metal film
R02	145-300	Resistor, 30 ohm 1/4 watt 5% metal film
R03	145-104	Resistor, 100k ohm 1/4 watt 5% metal film
R04	145-183	Resistor, 18k ohm 1/4 watt 5% metal film
R05	145-333	Resistor, 33k ohm 1/4 watt 5% metal film
R06	145-470	Resistor, 47 ohm 1/4 watt 5% metal film
R07	145-470	Resistor, 47 ohm 1/4 watt 5% metal film
R08	145-104	Resistor, 100k ohm 1/4 watt 5% metal film
R09	145-102	Resistor, 1k ohm 1/4 watt 5% metal film
R10	145-331	Resistor, 330 ohm 1/4 watt 5% metal film
R11	145-222	Resistor, 2.2k ohm 1/4 watt 5% metal film
X1	350-124	Mixer, SBL-1
Y1	520-040	Crystal socket, CS-109-07

Parts List
R-10 F-10.7 Second Converter Export
MARTI 800-216 03-15-94

Item	Marti No.	Description
C01	255-270	Capacitor, 27 pf 5% NPO disc
C02	255-750	Capacitor, 75 pf 5% NPO disc
C03	255-010	Capacitor, 1 pf 5% type QC
C04	295-390	Capacitor, 39 pf 5% NPO disc
C05	255-470C	Capacitor, 47pF 5% 200V ceramic dipped
C06	217-104	Capacitor, .01 mf 50v GMV disc
C07	NOT USED	
C08	217-104	Capacitor, .01 mf 50v GMV disc
C09	255-270	Capacitor, 27 pf 5% NPO disc
C10	256-131	Capacitor, 130 pf 5% 50V NPO disc
C11	255-100	Capacitor, 10 pf 5% NPO disc
C12	255-100	Capacitor, 10 pf 5% NPO disc
C13	256-750	Capacitor, 75 pf 300v 5% silver mica
C14	270-103	Capacitor, monolithic chip 10000pF 10% XR7
C15	255-270	Capacitor, 27 pf 5% NPO disc
C16	255-010	Capacitor, 1 pf 5% type QC
C17	255-470C	Capacitor, 47pF 5% 200V ceramic dipped
C18	256-131	Capacitor, 130 pf 5% 50V NPO disc
C19	255-180	Capacitor, 18 pf 5% NPO disc
C20	270-103	Capacitor, monolithic chip 10000pF 10% XR7
C21	217-103	Capacitor, .1 mf 100v 10% mylar
C22	255-050	Capacitor, 5 pf 5% NPO disc
C23	255-270	Capacitor, 27 pf 5% NPO disc
C24	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C25	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
D1	412-494	Diode, Germanium, 1N270
J1	550-084	Connector, Phono Jack, Molex 15-24-0503
J2	550-084	Connector, Phono Jack, Molex 15-24-0503
J3	550-084	Connector, Phono Jack, Molex 15-24-0503
L1	350-040	Inductor, 6 1/2 turn blue #144-06J12S
L2	350-040	Inductor, 6 1/2 turn blue #144-06J12S
L3	350-040	Inductor, 6 1/2 turn blue #144-06J12S
L4	350-025	Inductor, 1.5 - 3 uH w/shield can #47271-0
L5	330-007	Inductor, 1 uH Delevan #1840-10
L6	350-040	Inductor, 6 1/2 turn blue #144-06J12S
L7	350-040	Inductor, 6 1/2 turn blue #144-06J12S
P1	550-136	Connector, 6 pin Molex Header
Q1	430-211	Transistor, MFE211
Q2	440-245	Transistor, SRF3017
R01	145-300	Resistor, 30 ohm 1/4 watt 5% metal film
R02	145-300	Resistor, 30 ohm 1/4 watt 5% metal film
R03	145-104	Resistor, 100k ohm 1/4 watt 5% metal film
R04	145-183	Resistor, 18k ohm 1/4 watt 5% metal film
R05	145-333	Resistor, 33k ohm 1/4 watt 5% metal film
R06	145-470-C	Resistor, 47 ohm 1/4 watt 5% carbon comp
R07	145-470-C	Resistor, 47 ohm 1/4 watt 5% carbon comp
R08	145-104	Resistor, 100k ohm 1/4 watt 5% metal film
R09	145-102	Resistor, 1k ohm 1/4 watt 5% metal film
R10	145-331	Resistor, 330 ohm 1/4 watt 5% metal film
R11	145-222	Resistor, 2.2k ohm 1/4 watt 5% metal film
X1	350-124	Mixer, SBL-1
Y1	520-040	Crystal socket, CS-109-07

Parts List
I.F. Bandpass Filter Board
MARTI NO. 800-207

PART # DESCRIPTION

F8 Filter 8 KHz Bandwidth

C1	255-101	Capacitor, 100 pf 300v 5% Silver Mica
C1	255-470-1	Capacitor, 47 pf 300v 5% Silver Mica
C2	255-361	Capacitor, 360 pf 300v 5% Silver Mica
C3	255-271	Capacitor, 270 pf 300v 5% Silver Mica
C3	255-470-1	Capacitor, 47 pf 300v 5% Silver Mica
FL1	360-029	8 KHz Crystal Filter
L1	350-025	Inductor, 1.5-3uH #387-3
L2	350-025	Inductor, 1.5-3uH #387-3

F25 Filter 25 KHz Bandwidth

C1	215-151	Capacitor, 150 pf 33v 2.5% polystyrene
C2	215-101	Capacitor, 1000 pf 33v 2.5% polystyrene
C3	255-471	Capacitor, 470 pf 300v 5% Silver Mica
C4	255-050	Capacitor, 5 pf 50v 5% NPO disc
C4	255-161	Capacitor, 160 pf 300v 5% Silver Mica
FL1	360-028	25 KHz Crystal Filter
L1	350-025	Inductor, 1.5-3 uH #387-3
L2	350-025	Inductor, 1.5-3 uH #387-3

F36 Filter 36 KHz Bandwidth

C1	255-750	Capacitor, 75 pf 300v 5% Silver Mica
C2	255-241	Capacitor, 240 pf 300v 5% Silver Mica
C2	255-161	Capacitor, 160 pf 300v 5% Silver Mica
C3	255-270	Capacitor, 27 pf 300v 5% NPO disc
C4	255-361	Capacitor, 360 pf 300v 5% Silver Mica
FL1	360-024	36 KHz Crystal Filter
L1	350-030	Inductor, 3-7 uH #387-7
L2	350-025	Inductor, 1.5-3 uH #387-3

F50 Filter 50 KHz Bandwidth

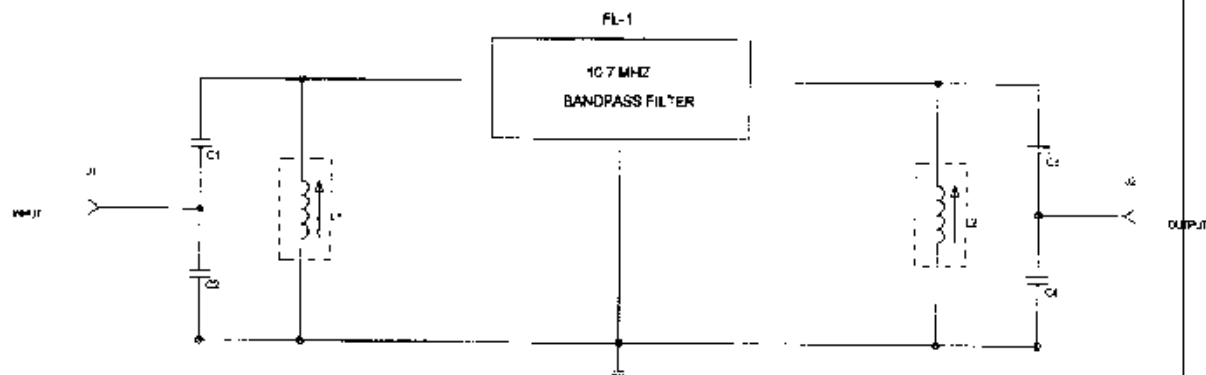
C1	255-101	Capacitor, 100 pf 300v 5% Silver Mica
C2	215-301	Capacitor, 300 pf 33v 2.5% polystyrene
C2	215-301	Capacitor, 300 pf 33v 2.5% polystyrene
C3	255-100	Capacitor, 10 pf 50v 5% NPO disc
C3	255-750	Capacitor, 75 pf 300v 5% Silver Mica
C4	255-161	Capacitor, 160 pf 300v 5% Silver Mica
FL1	360-027	50 KHz Crystal Filter
L1	350-030	Inductor, 3-7 uH #387-7
L2	350-030	Inductor, 3-7 uH #387-7

F85 Filter 85 KHz Bandwidth

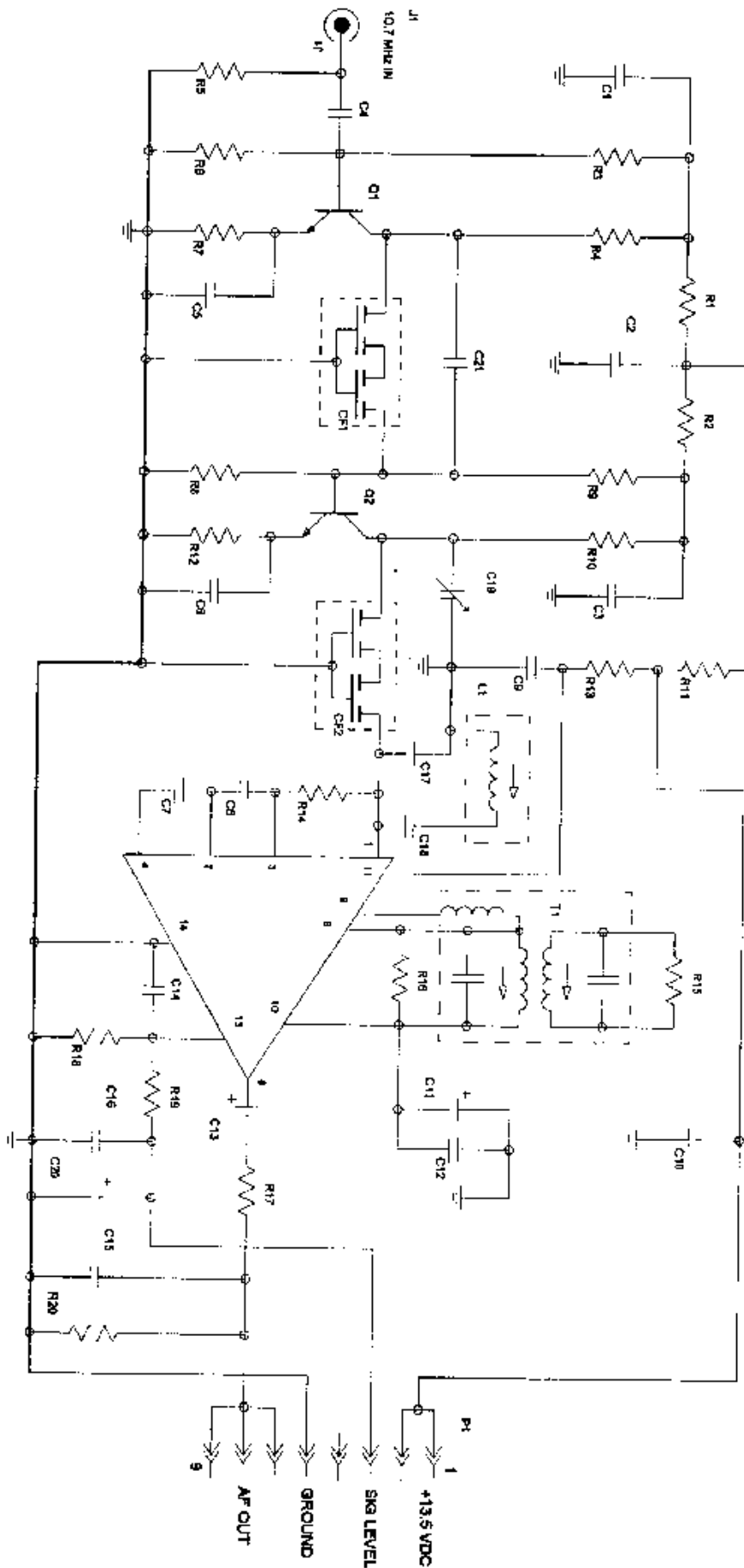
C1	255-161	Capacitor, 160 pf 50v 5% Silver mica
C1	290-151	Capacitor, variable 5.0-25 pf
C2	255-151	Capacitor, 150 pf 50v 5% NOP disc
C2	290-521	Capacitor, variable 5.0-25 pf
C3	255-361	Capacitor, 360 pf 30v 5% Silver Mica
C3	290-521	Capacitor, variable 5.0-25 pf
C4	255-271	Capacitor, 270 pf 300v 5% Silver Mica
C4	290-521	Capacitor, variable 5.0-25 pf
C5	255-470-1	Capacitor, 47 pf 300v 5% Silver Mica
C6	255-131	Capacitor, 130 pf 50v 5% NPO disc
FL1	360-025B	85 KHz Crystal Filter
L1	350-025	Inductor, 1.5-3 uH #387-3
L2	350-025	Inductor, 1.5-3 uH #387-3
L3	350-025	Inductor, 1.5-3 uH #387-3

F200 Filter 200 KHz Bandwidth

C1	255-131	Capacitor, 130 pf 50v 5% NPO disc
C2	255-301	Capacitor, 300 pf 50v 5% NPO disc
C3	255-241	Capacitor, 240 pf 300v 5% Silver Mica
C4	255-241	Capacitor, 240 pf 300v 5% Silver Mica
FL1	360-016-1	200 KHz Filter
L1	350-025	Inductor, 1.5-3 uH #387-3
L2	350-025	Inductor, 1.5-3 uH #387-3



MARTI ELECTRONICS CLEBURNE, TX 76031-0881	DRAWING NO. 800-207	TITLE IF FILTER BOARD
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MARTI ELECTRONICS

CLEBURNE, TX 76033-0881

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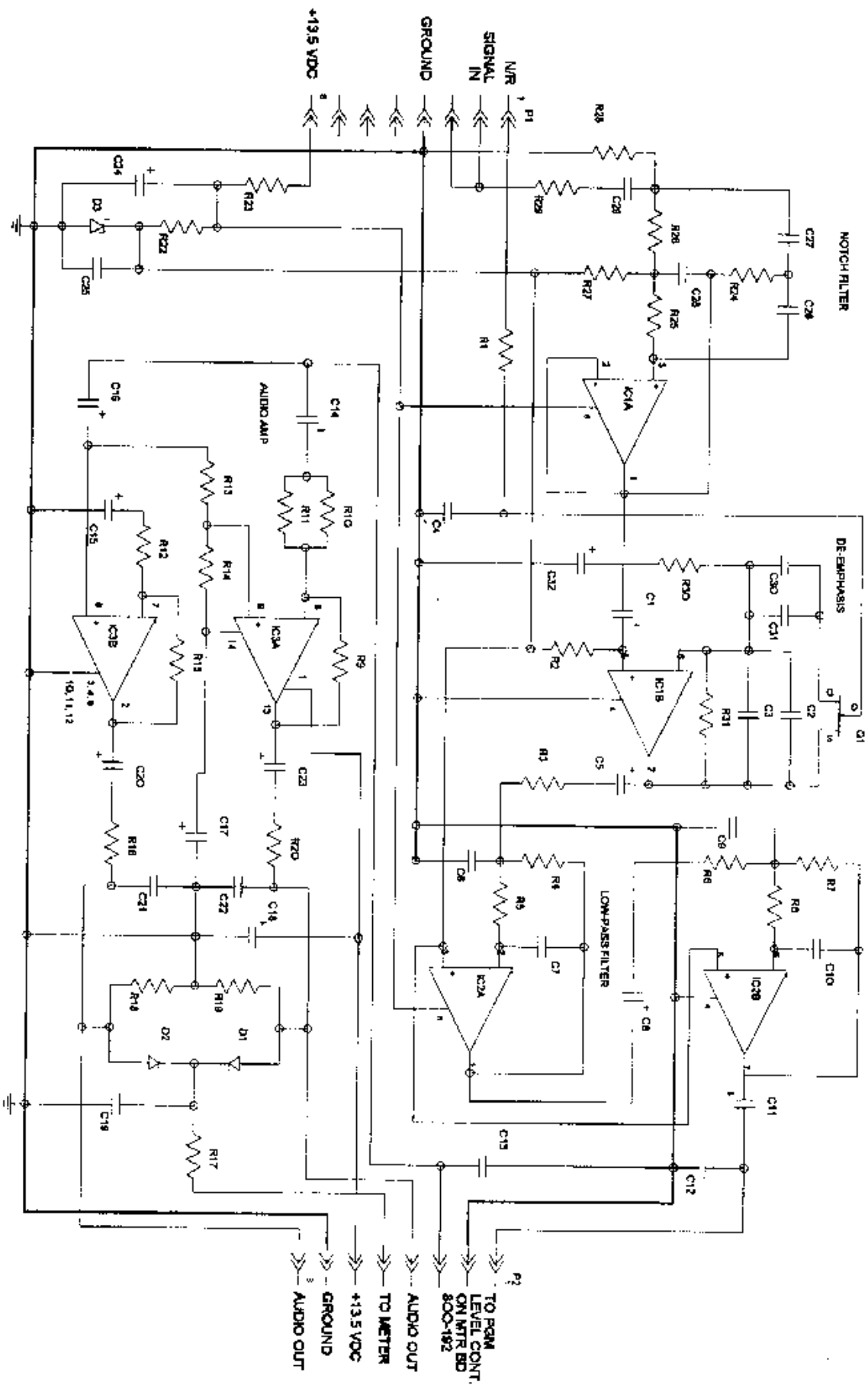
800-208

TITLE

10.7 MHz IF AMPLIFIER/DETECTOR

Parts List
 IF Amplifier AR/CR
 MARTI 800-208 03-14-94

Item	Marti No.	Description
C01	217-104	Capacitor, .01 mf 50v GMV disc
C02	217-104	Capacitor, .01 mf 50v GMV disc
C03	217-104	Capacitor, .01 mf 50v GMV disc
C04	217-104	Capacitor, .01 mf 50v GMV disc
C05	217-104	Capacitor, .01 mf 50v GMV disc
C06	217-104	Capacitor, .01 mf 50v GMV disc
C07	217-104	Capacitor, .01 mf 50v GMV disc
C08	217-104	Capacitor, .01 mf 50v GMV disc
C09	217-103	Capacitor, .1 mf 100v 10% mylar
C10	217-104	Capacitor, .01 mf 50v GMV disc
C11	219-121	Capacitor, electrolytic 150uF 25V
C12	217-103	Capacitor, .1 mf 100v 10% mylar
C13	219-200	Capacitor, electrolytic 22uF 25V
C14	217-103	Capacitor, .1 mf 100v 10% mylar
C15	295-390	Capacitor, 39 pf 5% NPO disc
C16	217-104	Capacitor, .01 mf 50v GMV disc
C17	256-131	Capacitor, 130 pf 5% 50V NPO disc
C18	255-470C	Capacitor, 47pF 5% 200V ceramic dipped
C19	290-521	Capacitor, variable, 5-25 pf GUK-25000
C20	299-470	Capacitor, tantalum, 4.7 mf 16v ECS-F1CE47
CF1	360-032	Filter, ceramic SFE10.7MJA10-A
CF2	360-032	Filter, ceramic SFE10.7MJA10-A
IC1	401-235	Integrated Circuit, Sanyo LA1235
J1	550-084	Connector, Phono Jack, Molex 15-24-0503
L1	350-030-1	Inductor, 3uH-7uH (Joshy)
Q1	440-245	Transistor, SRF3017
Q2	440-245	Transistor, SRF3017
R01	145-151	Resistor, 150 ohm 1/4 watt 5% metal film
R02	145-151	Resistor, 150 ohm 1/4 watt 5% metal film
R03	145-332	Resistor, 3.3k ohm 1/4 watt 5% metal film
R04	145-431	Resistor, 430 ohm 1/4 watt 5% metal film
R05	145-102	Resistor, 1k ohm 1/4 watt 5% metal film
R06	145-222	Resistor, 2.2k ohm 1/4 watt 5% metal film
R07	145-471	Resistor, 470 ohm 1/4 watt 5% metal film
R08	145-222	Resistor, 2.2k ohm 1/4 watt 5% metal film
R09	145-332	Resistor, 3.3k ohm 1/4 watt 5% metal film
R10	145-431	Resistor, 430 ohm 1/4 watt 5% metal film
R11	145-470	Resistor, 47 ohm 1/4 watt 5% metal film
R12	145-471	Resistor, 470 ohm 1/4 watt 5% metal film
R13	145-470	Resistor, 47 ohm 1/4 watt 5% metal film
R14	145-431	Resistor, 430 ohm 1/4 watt 5% metal film
R15	145-222	Resistor, 2.2k ohm 1/4 watt 5% metal film
R16	145-472	Resistor, 4.7k ohm 1/4 watt 5% metal film
R17	145-470	Resistor, 47 ohm 1/4 watt 5% metal film
R18	145-473	Resistor, 47k ohm 1/4 watt 5% metal film
R19	145-103	Resistor, 10k ohm 1/4 watt 5% metal film
R20	145-103	Resistor, 10k ohm 1/4 watt 5% metal film
T1	350-123	Detector, SNY-074-1919A (235SU1)
	550-068	IC Socket, 16 pin
	550-173	Connector, 2 pin Molex Header
	800-208B	PC Board, IF 10.7 MHz R Receiver



MARTI ELECTRONICS

CLEBURNE, TX 76033-0881

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800-228

TITLE

CR-10 AUDIO BOARD

Parts List
AR-10/CR-10 3000 Hz Audio Board
MARTI 800-228 03-14-94

Item	Marti No.	Description
C01	299-470	Capacitor, tantalum, 4.7 mf 16v ECS-F1CE47
C02	215-102	Capacitor, .001 mfd 2.5% 100v polypropylen
C03	215-202	Capacitor, .002 mfd 2.5% 100v polypropylen
C04	217-104	Capacitor, .01 mf 50v GMV disc
C05	219-200	Capacitor, electrolytic 22uF 25V
C06	215-202	Capacitor, .002 mfd 2.5% 100v polypropylen
C07	215-151C	Capacitor, 150pF 5% 200V ceramic dipped
C08	219-200	Capacitor, electrolytic 22uF 25V
C09	215-202	Capacitor, .002 mfd 2.5% 100v polypropylen
C10	215-151C	Capacitor, 150pF 5% 200V ceramic dipped
C11	219-200	Capacitor, electrolytic 22uF 25V
C12	253-471	Capacitor, 470 pf 50v 10% Y5P disc
C13	253-471	Capacitor, 470 pf 50v 10% Y5P disc
C14	219-200	Capacitor, electrolytic 22uF 25V
C15	219-080	Capacitor, electrolytic 10uF 25V
C16	219-200	Capacitor, electrolytic 22uF 25V
C17	219-121	Capacitor, electrolytic 150uF 25V
C18	219-251	Capacitor, electrolytic 220uF 25V
C19	253-471	Capacitor, 470 pf 50v 10% Y5P disc
C20	219-251	Capacitor, electrolytic 220uF 25V
C21	268-203	Capacitor, .02 mf 50v 25U disc
C22	268-203	Capacitor, .02 mf 50v 25U disc
C23	219-251	Capacitor, electrolytic 220uF 25V
C24	219-121	Capacitor, electrolytic 150uF 25V
C25	219-121	Capacitor, electrolytic 150uF 25V
C26	215-502	Capacitor, .005 mfd 2.5% 100v polypropylen
C27	215-502	Capacitor, .005 mfd 2.5% 100v polypropylen
C28	215-103	Capacitor, .01 mfd 2.5% 100v polypropylene
C29	215-392	Capacitor, .0039 mfd 2.5% 100v polypropyle
C30	215-102	Capacitor, .001 mfd 2.5% 100v polypropylen
C31	215-202	Capacitor, .002 mfd 2.5% 100v polypropylen
D1	410-914	Diode, 1N4148
D2	410-914	Diode, 1N4148
D3	410-754	Diode, zener Motorola 1N754A 6.3v
IC1	400-072	Integrated Circuit, TI TL072CP
IC2	400-072	Integrated Circuit, TI TL072CP
IC3	401-877	Integrated Circuit, National LM1877N-9
Q1	423-822	Transistor, 2N3822
R01	145-473	Resistor, 47k ohm 1/4 watt 5% metal film
R02	145-104	Resistor, 100k ohm 1/4 watt 5% metal film
R03	145-683	Resistor, 68k ohm 1/4 watt 5% metal film
R04	145-204	Resistor, 200k ohm 1/4 watt 5% carbon film
R05	145-513	Resistor, 51k ohm 1/4 watt 5% carbon film
R06	145-683	Resistor, 68k ohm 1/4 watt 5% metal film
R07	145-204	Resistor, 200k ohm 1/4 watt 5% carbon film
R08	145-513	Resistor, 51k ohm 1/4 watt 5% carbon film
R09	145-104-1	Resistor, 100k ohm 1/4 watt 2% RL07S104G
R10	145-223-1	Resistor, 22k ohm 1/4 watt 2% RL07S223G
R11	145-104	Resistor, 100k ohm 1/4 watt 5% metal film
R12	145-223-1	Resistor, 22k ohm 1/4 watt 2% RL07S223G
R13	145-104	Resistor, 100k ohm 1/4 watt 5% metal film
R14	145-030	Resistor, 3.3 ohm 1/4 watt 5% metal film

Parts List
AR-10/CR-10 3000 Hz Audio Board
MARTI 800-228 03-14-94

Item	Marti No.	Description
R15	145-104-1	Resistor, 100k ohm 1/4 watt 2% RL07S104G
R16	145-100	Resistor, 10 ohm 1/4 watt 5% metal film
R17	145-123	Resistor, 12k ohm 1/4 watt 5% metal film
R18	145-122-1	Resistor, 1.2k ohm 1/4 watt 2% RLO7S122G
R19	145-182-1	Resistor, 1.8k ohm 1/4 watt 2% RL07S182G
R20	145-100	Resistor, 10 ohm 1/4 watt 5% metal film
R21	NOT USED	
R22	145-102	Resistor, 1k ohm 1/4 watt 5% metal film
R23	145-470	Resistor, 47 ohm 1/4 watt 5% metal film
R24	145-474-1	Resistor, 475k ohm 1/4 watt 1% RN55D4753F
R25	145-105-1	Resistor, 1 meg ohm 1/4 watt 2% RLO7S105G
R26	145-105-1	Resistor, 1 meg ohm 1/4 watt 2% RLO7S105G
R27	145-105-1	Resistor, 1 meg ohm 1/4 watt 2% RLO7S105G
R28	145-474-1	Resistor, 475k ohm 1/4 watt 1% RN55D4753F
R29	145-472	Resistor, 4.7k ohm 1/4 watt 5% metal film
R30	145-102	Resistor, 1k ohm 1/4 watt 5% metal film
R31	145-249-1	Resistor, 24.9k ohm 1/4 watt 1% RLR07C2492
	520-053	Heatsink, slide-on Aavid 580200B00000
	550-069	IC Socket, 14 pin
	550-070	IC Socket, 8 pin
	550-165	Connector, 4 pin Molex Header
	800-228B	PC Board, Audio RPU Receiver

Parts List
AR/CR-10 5000 Hz Audio Board
MARTI 800-228 03-14-94

Item	Marti No.	Description
C01	299-470	Capacitor, tantalum, 4.7 mf 16v ECS-F1CE47
C02	215-102	Capacitor, .001 mfd 2.5% 100v polypropylen
C03	215-202	Capacitor, .002 mfd 2.5% 100v polypropylen
C04	217-104	Capacitor, .01 mf 50v GMV disc
C05	219-200	Capacitor, electrolytic 22uF 25V
C06	215-122	Capacitor, .0012 mfd 2.5% 100v polypropyle
C07	215-151	Capacitor, 150 pf 2% silver mica
C08	219-200	Capacitor, electrolytic 22uF 25V
C09	215-122	Capacitor, .0012 mfd 2.5% 100v polypropyle
C10	215-151	Capacitor, 150 pf 2% silver mica
C11	219-200	Capacitor, electrolytic 22uF 25V
C12	253-471	Capacitor, 470 pf 50v 10% Y5P disc
C13	253-471	Capacitor, 470 pf 50v 10% Y5P disc
C14	219-200	Capacitor, electrolytic 22uF 25V
C15	219-080	Capacitor, electrolytic 10uF 25V
C16	219-200	Capacitor, electrolytic 22uF 25V
C17	219-121	Capacitor, electrolytic 150uF 25V
C18	219-251	Capacitor, electrolytic 220uF 25V
C19	253-471	Capacitor, 470 pf 50v 10% Y5P disc
C20	219-251	Capacitor, electrolytic 220uF 25V
C21	268-203	Capacitor, .02 mf 50v Z5U disc
C22	268-203	Capacitor, .02 mf 50v Z5U disc
C23	219-251	Capacitor, electrolytic 220uF 25V
C24	219-121	Capacitor, electrolytic 150uF 25V
C25	219-121	Capacitor, electrolytic 150uF 25V
C26	215-502	Capacitor, .005 mfd 2.5% 100v polypropylen
C27	215-502	Capacitor, .005 mfd 2.5% 100v polypropylen
C28	215-103	Capacitor, .01 mfd 2.5% 100v polypropylene
C29	215-392	Capacitor, .0039 mfd 2.5% 100v polypropyle
C30	215-102	Capacitor, .001 mfd 2.5% 100v polypropylen
C31	215-202	Capacitor, .002 mfd 2.5% 100v polypropylen
C32	219-121	Capacitor, electrolytic 150uF 25V
D1	410-914	Diode, 1N4148
D2	410-914	Diode, 1N4148
IC1	400-072	Integrated Circuit, TI TL072CP
IC1	550-070	IC Socket, 8 pin
IC2	400-072	Integrated Circuit, TI TL072CP
IC2	550-070	IC Socket, 8 pin
IC3	401-877	Integrated Circuit, National LM1877N-9
IC3	520-053	Heatsink, slide-on Aavid 580200B00000
IC3	550-069	IC Socket, 14 pin
Q1	423-822	Transistor, 2N3822
R01	145-473	Resistor, 47k ohm 1/4 watt 5% metal film
R02	145-104	Resistor, 100k ohm 1/4 watt 5% metal film
R03	145-563	Resistor, 56k ohm 1/4 watt 5% carbon film
R04	145-753	Resistor, 75k ohm 1/4 watt 5% carbon film
R05	145-363-1	Resistor, 36k ohm 1/4 watt 2% RL07S363G
R06	145-563	Resistor, 56k ohm 1/4 watt 5% carbon film
R07	145-124	Resistor, 120k ohm 1/4 watt 2% carbon comp
R08	145-393	Resistor, 39k ohm 1/4 watt 5% carbon film
R09	145-104-1	Resistor, 100k ohm 1/4 watt 2% RL07S104G
R10	145-223-1	Resistor, 22k ohm 1/4 watt 2% RL07S223G

Parts List
AR/CR-10 5000 Hz Audio Board
MARTI 800-228 03-14-94

Item	Marti No.	Description
R11	145-104	Resistor, 100k ohm 1/4 watt 5% metal film
R12	145-223-1	Resistor, 22k ohm 1/4 watt 2% RLO7S223G
R13	145-104	Resistor, 100k ohm 1/4 watt 5% metal film
R14	145-030	Resistor, 3.3 ohm 1/4 watt 5% metal film
R15	145-104-1	Resistor, 100k ohm 1/4 watt 2% RLO7S104G
R16	145-100	Resistor, 10 ohm 1/4 watt 5% metal film
R17	145-123	Resistor, 12k ohm 1/4 watt 5% metal film
R18	145-122-1	Resistor, 1.2k ohm 1/4 watt 2% RLO7S122G
R19	145-182-1	Resistor, 1.8k ohm 1/4 watt 2% RLO7S182G
R20	145-100	Resistor, 10 ohm 1/4 watt 5% metal film
R21	410-754	Diode, zener Motorola 1N754A 6.3v
R22	145-102	Resistor, 1k ohm 1/4 watt 5% metal film
R23	145-470	Resistor, 47 ohm 1/4 watt 5% metal film
R24	145-474-1	Resistor, 475k ohm 1/4 watt 1% RN55D4753F
R25	145-105-1	Resistor, 1 meg ohm 1/4 watt 2% RLO7S105G
R26	145-105-1	Resistor, 1 meg ohm 1/4 watt 2% RLO7S105G
R27	145-105-1	Resistor, 1 meg ohm 1/4 watt 2% RLO7S105G
R28	145-474-1	Resistor, 475k ohm 1/4 watt 1% RN55D4753F
R29	145-472	Resistor, 4.7k ohm 1/4 watt 5% metal film
R30	145-102	Resistor, 1k ohm 1/4 watt 5% metal film
R31	145-249-1	Resistor, 24.9k ohm 1/4 watt 1% RLR07C2492
	550-165	Connector, 4 pin Molex Header
	550-165	Connector, 4 pin Molex Header
	550-165	Connector, 4 pin Molex Header
	550-165	Connector, 4 pin Molex Header
	800-228B	PC Board, Audio RPU Receiver

Parts List
AR-10/CR-10 8000 Hz Audio Board
MARTI 800-228 03-14-94

Item	Marti No.	Description
C01	299-470	Capacitor, tantalum, 4.7 mf 16v ECS-F1CE47
C02	215-102	Capacitor, .001 mfd 2.5% 100v polypropylen
C03	215-202	Capacitor, .002 mfd 2.5% 100v polypropylen
C04	217-104	Capacitor, .01 mf 50v GMV disc
C05	219-200	Capacitor, electrolytic 22uF 25V
C06	215-122	Capacitor, .0012 mfd 2.5% 100v polypropyle
C07	215-151C	Capacitor, 150pF 5% 200V ceramic dipped
C08	219-200	Capacitor, electrolytic 22uF 25V
C09	215-122	Capacitor, .0012 mfd 2.5% 100v polypropyle
C10	215-151C	Capacitor, 150pF 5% 200V ceramic dipped
C11	219-200	Capacitor, electrolytic 22uF 25V
C12	253-471	Capacitor, 470 pf 50v 10% Y5P disc
C13	253-471	Capacitor, 470 pf 50v 10% Y5P disc
C14	219-200	Capacitor, electrolytic 22uF 25V
C15	219-080	Capacitor, electrolytic 10uF 25V
C16	219-200	Capacitor, electrolytic 22uF 25V
C17	219-121	Capacitor, electrolytic 150uF 25V
C18	219-251	Capacitor, electrolytic 220uF 25V
C19	253-471	Capacitor, 470 pf 50v 10% Y5P disc
C20	219-251	Capacitor, electrolytic 220uF 25V
C21	268-203	Capacitor, .02 mf 50v Z5U disc
C22	268-203	Capacitor, .02 mf 50v Z5U disc
C23	219-251	Capacitor, electrolytic 220uF 25V
C24	219-121	Capacitor, electrolytic 150uF 25V
C25	219-121	Capacitor, electrolytic 150uF 25V
C26	215-502	Capacitor, .005 mfd 2.5% 100v polypropylen
C27	215-502	Capacitor, .005 mfd 2.5% 100v polypropylen
C28	215-103	Capacitor, .01 mfd 2.5% 100v polypropylene
C29	215-392	Capacitor, .0039 mfd 2.5% 100v polypropyle
C30	215-102	Capacitor, .001 mfd 2.5% 100v polypropylen
C31	215-202	Capacitor, .002 mfd 2.5% 100v polypropylen
C32	219-121	Capacitor, electrolytic 150uF 25V
D1	410-914	Diode, 1N4148
D2	410-914	Diode, 1N4148
D3	410-754	Diode, zener Motorola 1N754A 6.3v
IC1	400-072	Integrated Circuit, TI TL072CP
IC2	400-072	Integrated Circuit, TI TL072CP
IC3	401-877	Integrated Circuit, National LM1877N-9
Q1	423-822	Transistor, 2N3822
R01	145-473	Resistor, 47k ohm 1/4 watt 5% metal film
R02	145-104	Resistor, 100k ohm 1/4 watt 5% metal film
R03	145-433	Resistor, 43k ohm 1/4 watt 5% carbon film
R04	145-753	Resistor, 75k ohm 1/4 watt 5% carbon film
R05	145-273	Resistor, 27k ohm 1/4 watt 5% carbon film
R06	145-433	Resistor, 43k ohm 1/4 watt 5% carbon film
R07	145-753	Resistor, 75k ohm 1/4 watt 5% carbon film
R08	145-273	Resistor, 27k ohm 1/4 watt 5% carbon film
R09	145-104-1	Resistor, 100k ohm 1/4 watt 2% RL07S104G
R10	145-223-1	Resistor, 22k ohm 1/4 watt 2% RL07S223G
R11	145-104	Resistor, 100k ohm 1/4 watt 5% metal film
R12	145-223-1	Resistor, 22k ohm 1/4 watt 2% RL07S223G
R13	145-104	Resistor, 100k ohm 1/4 watt 5% metal film

Parts List

AR-10/CR-10 8000 Hz Audio Board

MARTI 800-228 03-14-94

Item	Marti No.	Description
R14	145-030	Resistor, 3.3 ohm 1/4 watt 5% metal film
R15	145-104-1	Resistor, 100k ohm 1/4 watt 2% RLO7S104G
R16	145-100	Resistor, 10 ohm 1/4 watt 5% metal film
R17	145-123	Resistor, 12k ohm 1/4 watt 5% metal film
R18	145-122-1	Resistor, 1.2k ohm 1/4 watt 2% RLO7S122G
R19	145-182-1	Resistor, 1.8k ohm 1/4 watt 2% RLO7S182G
R20	145-100	Resistor, 10 ohm 1/4 watt 5% metal film
R21	NOT USED	
R22	145-102	Resistor, 1k ohm 1/4 watt 5% metal film
R23	145-470	Resistor, 47 ohm 1/4 watt 5% metal film
R24	145-474-1	Resistor, 475k ohm 1/4 watt 1% RN55D4753F
R25	145-105-1	Resistor, 1 meg ohm 1/4 watt 2% RLO7S105G
R26	145-105-1	Resistor, 1 meg ohm 1/4 watt 2% RLO7S105G
R27	145-105-1	Resistor, 1 meg ohm 1/4 watt 2% RLO7S105G
R28	145-474-1	Resistor, 475k ohm 1/4 watt 1% RN55D4753F
R29	145-472	Resistor, 4.7k ohm 1/4 watt 5% metal film
R30	145-102	Resistor, 1k ohm 1/4 watt 5% metal film
R31	145-249-1	Resistor, 24.9k ohm 1/4 watt 1% RLR07C2492
	520-053	Heatsink, slide-on Aavid 580200B00000
	550-069	IC Socket, 14 pin
	550-070	IC Socket, 8 pin
	550-165	Connector, 4 pin Molex Header
	800-228B	PC Board, Audio RPU Receiver

Parts List
AR-10/CR-10 10500 Hz Audio Board
MARTI 800-228 03-14-94

Item	Marti No.	Description
C01	299-470	Capacitor, tantalum, 4.7 mf 16v ECS-F1CE47
C02	215-102	Capacitor, .001 mfd 2.5% 100v polypropylen
C03	215-202	Capacitor, .002 mfd 2.5% 100v polypropylen
C04	217-104	Capacitor, .01 mf 50v GMV disc
C05	219-200	Capacitor, electrolytic 22uF 25V
C06	215-102	Capacitor, .001 mfd 2.5% 100v polypropylen
C07	215-151C	Capacitor, 150pF 5% 200V ceramic dipped
C08	219-100	Capacitor, electrolytic 10uF 25V radial
C09	215-102	Capacitor, .001 mfd 2.5% 100v polypropylen
C10	215-151C	Capacitor, 150pF 5% 200V ceramic dipped
C11	219-200	Capacitor, electrolytic 22uF 25V
C12	253-471	Capacitor, 470 pf 50v 10% Y5P disc
C13	253-471	Capacitor, 470 pf 50v 10% Y5P disc
C14	219-200	Capacitor, electrolytic 22uF 25V
C15	219-080	Capacitor, electrolytic 10uF 25V
C16	219-200	Capacitor, electrolytic 22uF 25V
C17	219-121	Capacitor, electrolytic 150uF 25V
C18	219-251	Capacitor, electrolytic 220uF 25V
C19	253-471	Capacitor, 470 pf 50v 10% Y5P disc
C20	219-251	Capacitor, electrolytic 220uF 25V
C21	268-203	Capacitor, .02 mf 50v Z5U disc
C22	268-203	Capacitor, .02 mf 50v Z5U disc
C23	219-251	Capacitor, electrolytic 220uF 25V
C24	219-121	Capacitor, electrolytic 150uF 25V
C25	219-121	Capacitor, electrolytic 150uF 25V
C26	215-502	Capacitor, .005 mfd 2.5% 100v polypropylen
C27	215-502	Capacitor, .005 mfd 2.5% 100v polypropylen
C28	215-103	Capacitor, .01 mfd 2.5% 100v polypropylene
C29	215-392	Capacitor, .0039 mfd 2.5% 100v polypropyle
C30	215-102	Capacitor, .001 mfd 2.5% 100v polypropylen
C31	215-202	Capacitor, .002 mfd 2.5% 100v polypropylen
C32	219-121	Capacitor, electrolytic 150uF 25V
D1	410-914	Diode, 1N4148
D2	410-914	Diode, 1N4148
D3	410-754	Diode, zener Motorola 1N754A 6.3v
IC1	400-072	Integrated Circuit, TI TL072CP
IC2	400-072	Integrated Circuit, TI TL072CP
IC3	401-877	Integrated Circuit, National LM1877N-9
Q1	423-822	Transistor, 2N3822
R01	145-473	Resistor, 47k ohm 1/4 watt 5% metal film
R02	145-104	Resistor, 100k ohm 1/4 watt 5% metal film
R03	145-433	Resistor, 43k ohm 1/4 watt 5% carbon film
R04	145-563	Resistor, 56k ohm 1/4 watt 5% carbon film
R05	145-249-1	Resistor, 24.9k ohm 1/4 watt 1% RLR07C2492
R06	145-433	Resistor, 43k ohm 1/4 watt 5% carbon film
R07	145-563	Resistor, 56k ohm 1/4 watt 5% carbon film
R08	145-249-1	Resistor, 24.9k ohm 1/4 watt 1% RLR07C2492
R09	145-104-1	Resistor, 100k ohm 1/4 watt 2% RL07S104G
R10	145-223-1	Resistor, 22k ohm 1/4 watt 2% RL07S223G
R11	145-104	Resistor, 100k ohm 1/4 watt 5% metal film
R12	145-223-1	Resistor, 22k ohm 1/4 watt 2% RL07S223G
R13	145-104	Resistor, 100k ohm 1/4 watt 5% metal film

Parts List
 AR-10/CR-10 10500 Hz Audio Board
 MARTI 800-228 03-14-94

Item	Marti No.	Description
R14	145-030	Resistor, 3.3 ohm 1/4 watt 5% metal film
R15	145-104-1	Resistor, 100k ohm 1/4 watt 2% RLO7S104G
R16	145-100	Resistor, 10 ohm 1/4 watt 5% metal film
R17	145-123	Resistor, 12k ohm 1/4 watt 5% metal film
R18	145-122-1	Resistor, 1.2k ohm 1/4 watt 2% RLO7S122G
R19	145-182-1	Resistor, 1.8k ohm 1/4 watt 2% RLO7S182G
R20	145-100	Resistor, 10 ohm 1/4 watt 5% metal film
R21	NOT USED	
R22	145-102	Resistor, 1k ohm 1/4 watt 5% metal film
R23	145-470	Resistor, 47 ohm 1/4 watt 5% metal film
R24	145-474-1	Resistor, 475k ohm 1/4 watt 1% RN55D4753F
R25	145-105-1	Resistor, 1 meg ohm 1/4 watt 2% RLO7S105G
R26	145-105-1	Resistor, 1 meg ohm 1/4 watt 2% RLO7S105G
R27	145-105-1	Resistor, 1 meg ohm 1/4 watt 2% RLO7S105G
R28	145-474-1	Resistor, 475k ohm 1/4 watt 1% RN55D4753F
R29	145-472	Resistor, 4.7k ohm 1/4 watt 5% metal film
R30	145-102	Resistor, 1k ohm 1/4 watt 5% metal film
R31	145-249-1	Resistor, 24.9k ohm 1/4 watt 1% RLR07C2492
	520-053	Heatsink; slide-on Aavid 580200B00000
	550-069	IC Socket, 14 pin
	550-070	IC Socket, 8 pin
	550-165	Connector, 4 pin Molex Header
	800-228B	PC Board, Audio RPU Receiver

Parts List
AR-10/CR-10 12500 Hz Audio Board
MARTI 800-228 03-14-94

Item	Marti No.	Description
C01	299-470	Capacitor, tantalum, 4.7 mf 16v ECS-F1CE47
C02	215-102	Capacitor, .001 mfd 2.5% 100v polypropylen
C03	215-202	Capacitor, .002 mfd 2.5% 100v polypropylen
C04	217-104	Capacitor, .01 mf 50v GMV disc
C05	219-200	Capacitor, electrolytic 22uF 25V
C06	215-102	Capacitor, .001 mfd 2.5% 100v polypropylen
C07	215-151C	Capacitor, 150pF 5% 200V ceramic dipped
C08	219-200	Capacitor, electrolytic 22uF 25V
C09	215-102	Capacitor, .001 mfd 2.5% 100v polypropylen
C10	215-151C	Capacitor, 150pF 5% 200V ceramic dipped
C11	219-200	Capacitor, electrolytic 22uF 25V
C12	253-471	Capacitor, 470 pf 50v 10% Y5P disc
C13	253-471	Capacitor, 470 pf 50v 10% Y5P disc
C14	219-200	Capacitor, electrolytic 22uF 25V
C15	219-080	Capacitor, electrolytic 10uF 25V
C16	219-200	Capacitor, electrolytic 22uF 25V
C17	219-121	Capacitor, electrolytic 150uF 25V
C18	219-251	Capacitor, electrolytic 220uF 25V
C19	253-471	Capacitor, 470 pf 50v 10% Y5P disc
C20	219-251	Capacitor, electrolytic 220uF 25V
C21	268-203	Capacitor, .02 mf 50v Z5U disc
C22	268-203	Capacitor, .02 mf 50v Z5U disc
C23	219-251	Capacitor, electrolytic 220uF 25V
C24	219-121	Capacitor, electrolytic 150uF 25V
C25	219-121	Capacitor, electrolytic 150uF 25V
C26	215-502	Capacitor, .005 mfd 2.5% 100v polypropylen
C27	215-502	Capacitor, .005 mfd 2.5% 100v polypropylen
C28	215-103	Capacitor, .01 mfd 2.5% 100v polypropylene
C29	215-392	Capacitor, .0039 mfd 2.5% 100v polypropyle
C30	215-102	Capacitor, .001 mfd 2.5% 100v polypropylen
C31	215-202	Capacitor, .002 mfd 2.5% 100v polypropylen
C32	219-121	Capacitor, electrolytic 150uF 25V
D1	410-914	Diode, 1N4148
D2	410-914	Diode, 1N4148
D3	410-754	Diode, zener Motorola 1N754A 6.3v
IC1	400-072	Integrated Circuit, TI TL072CP
IC2	400-072	Integrated Circuit, TI TL072CP
IC3	401-877	Integrated Circuit, National LM1877N-9
Q1	423-822	Transistor, 2N3822
R01	145-473	Resistor, 47k ohm 1/4 watt 5% metal film
R02	145-104	Resistor, 100k ohm 1/4 watt 5% metal film
R03	145-393	Resistor, 39k ohm 1/4 watt 5% carbon film
R04	145-473	Resistor, 47k ohm 1/4 watt 5% metal film
R05	145-223	Resistor, 22k ohm 1/4 watt 5% metal film
R06	145-393	Resistor, 39k ohm 1/4 watt 5% carbon film
R07	145-473	Resistor, 47k ohm 1/4 watt 5% metal film
R08	145-223	Resistor, 22k ohm 1/4 watt 5% metal film
R09	145-104-1	Resistor, 100k ohm 1/4 watt 2% RL07S104G
R10	145-223-1	Resistor, 22k ohm 1/4 watt 2% RL07S223G
R11	145-104	Resistor, 100k ohm 1/4 watt 5% metal film
R12	145-223-1	Resistor, 22k ohm 1/4 watt 2% RL07S223G
R13	145-104	Resistor, 100k ohm 1/4 watt 5% metal film

Parts List
 AR-10/CR-10 12500 Hz Audio Board
 MARTI 800-228 03-14-94

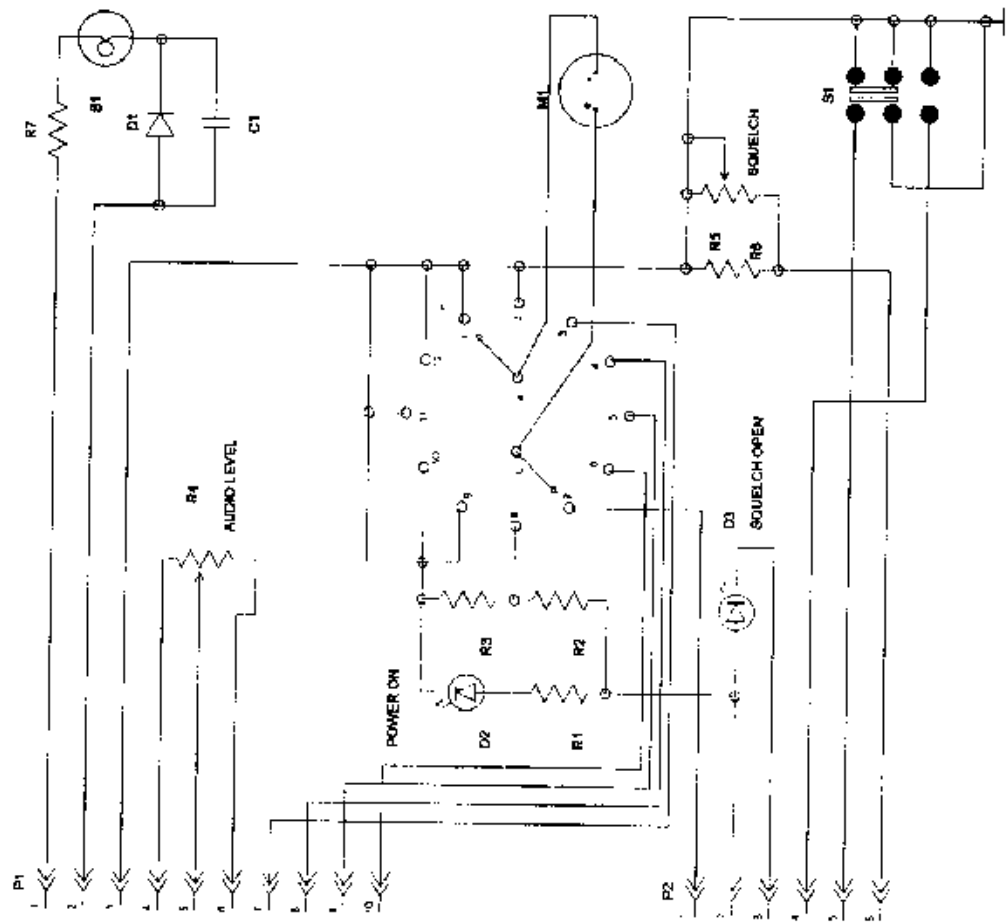
Item	Marti No.	Description
R14	145-030	Resistor, 3.3 ohm 1/4 watt 5% metal film
R15	145-104-1	Resistor, 100k ohm 1/4 watt 2% RLO7S104G
R16	145-100	Resistor, 10 ohm 1/4 watt 5% metal film
R17	145-123	Resistor, 12k ohm 1/4 watt 5% metal film
R18	145-122-1	Resistor, 1.2k ohm 1/4 watt 2% RLO7S122G
R19	145-182-1	Resistor, 1.8k ohm 1/4 watt 2% RLO7S182G
R20	145-100	Resistor, 10 ohm 1/4 watt 5% metal film
R21	NOT USED	
R22	145-102	Resistor, 1k ohm 1/4 watt 5% metal film
R23	145-470	Resistor, 47 ohm 1/4 watt 5% metal film
R24	145-474-1	Resistor, 475k ohm 1/4 watt 1% RN55D4753F
R25	145-105-1	Resistor, 1 meg ohm 1/4 watt 2% RLO7S105G
R26	145-105-1	Resistor, 1 meg ohm 1/4 watt 2% RLO7S105G
R27	145-105-1	Resistor, 1 meg ohm 1/4 watt 2% RLO7S105G
R28	145-474-1	Resistor, 475k ohm 1/4 watt 1% RN55D4753F
R29	145-472	Resistor, 4.7k ohm 1/4 watt 5% metal film
R30	145-102	Resistor, 1k ohm 1/4 watt 5% metal film
R31	145-249-1	Resistor, 24.9k ohm 1/4 watt 1% RLR07C2492
	520-053	Heatsink; slide-on Aavid 580200B00000
	550-069	IC Socket, 14 pin
	550-070	IC Socket, 8 pin
	550-165	Connector, 4 pin Molex Header
	800-228B	PC Board, Audio RPU Receiver

Parts List
 AR-10/CR-10 15000 Hz Audio Board
 MARTI 800-228 03-14-94

Item	Marti No.	Description
C01	299-470	Capacitor, tantalum, 4.7 mf 16v ECS-F1CE47
C02	215-102	Capacitor, .001 mfd 2.5% 100v polypropylen
C03	215-202	Capacitor, .002 mfd 2.5% 100v polypropylen
C04	217-104	Capacitor, .01 mf 50v GMV disc
C05	219-200	Capacitor, electrolytic 22uF 25V
C06	215-102	Capacitor, .001 mfd 2.5% 100v polypropylen
C07	215-151C	Capacitor, 150pF 5% 200V ceramic dipped
C08	219-200	Capacitor, electrolytic 22uF 25V
C09	215-102	Capacitor, .001 mfd 2.5% 100v polypropylen
C10	215-151C	Capacitor, 150pF 5% 200V ceramic dipped
C11	219-200	Capacitor, electrolytic 22uF 25V
C12	253-471	Capacitor, 470 pf 50v 10% Y5P disc
C13	253-471	Capacitor, 470 pf 50v 10% Y5P disc
C14	219-200	Capacitor, electrolytic 22uF 25V
C15	219-080	Capacitor, electrolytic 10uF 25V
C16	219-200	Capacitor, electrolytic 22uF 25V
C17	219-121	Capacitor, electrolytic 150uF 25V
C18	219-251	Capacitor, electrolytic 220uF 25V
C19	253-471	Capacitor, 470 pf 50v 10% Y5P disc
C20	219-251	Capacitor, electrolytic 220uF 25V
C21	268-203	Capacitor, .02 mf 50v Z5U disc
C22	268-203	Capacitor, .02 mf 50v Z5U disc
C23	219-251	Capacitor, electrolytic 220uF 25V
C24	219-121	Capacitor, electrolytic 150uF 25V
C25	219-121	Capacitor, electrolytic 150uF 25V
C26	215-502	Capacitor, .005 mfd 2.5% 100v polypropylen
C27	215-502	Capacitor, .005 mfd 2.5% 100v polypropylen
C28	215-103	Capacitor, .01 mfd 2.5% 100v polypropylene
C29	215-392	Capacitor, .0039 mfd 2.5% 100v polypropyle
C30	215-102	Capacitor, .001 mfd 2.5% 100v polypropylen
C31	215-202	Capacitor, .002 mfd 2.5% 100v polypropylen
C32	219-121	Capacitor, electrolytic 150uF 25V
D1	410-914	Diode, 1N4148
D2	410-914	Diode, 1N4148
D3	410-754	Diode, zener Motorola 1N754A 6.3v
IC1	400-072	Integrated Circuit, TI TL072CP
IC2	400-072	Integrated Circuit, TI TL072CP
IC3	401-877	Integrated Circuit, National LM1877N-9
Q1	423-822	Transistor, 2N3822
R01	145-473	Resistor, 47k ohm 1/4 watt 5% metal film
R02	145-104	Resistor, 100k ohm 1/4 watt 5% metal film
R03	145-333	Resistor, 33k ohm 1/4 watt 5% metal film
R04	145-393	Resistor, 39k ohm 1/4 watt 5% carbon film
R05	145-183-1	Resistor, 18k ohm 1/4 watt 2% RL07S183G
R06	145-333	Resistor, 33k ohm 1/4 watt 5% metal film
R07	145-393	Resistor, 39k ohm 1/4 watt 5% carbon film
R08	145-183-1	Resistor, 18k ohm 1/4 watt 2% RL07S183G
R09	145-104-1	Resistor, 100k ohm 1/4 watt 2% RL07S104G
R10	145-223-1	Resistor, 22k ohm 1/4 watt 2% RL07S223G
R11	145-104	Resistor, 100k ohm 1/4 watt 5% metal film
R12	145-223-1	Resistor, 22k ohm 1/4 watt 2% RL07S223G
R13	145-104	Resistor, 100k ohm 1/4 watt 5% metal film

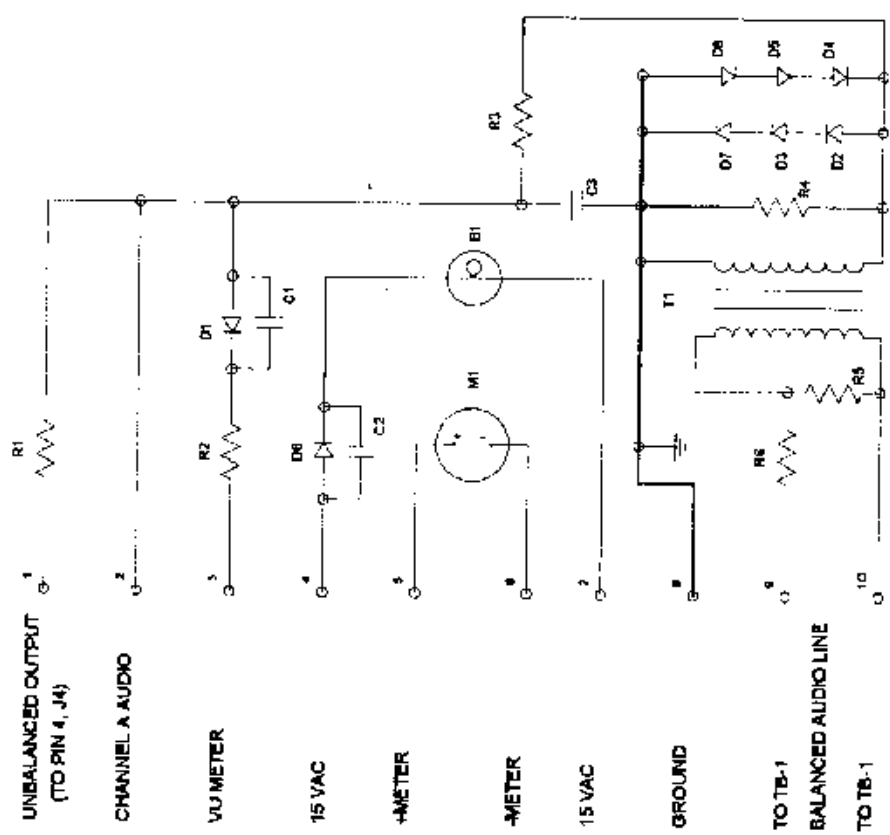
Parts List
AR-10/CR-10 15000 Hz Audio Board
MARTI 800-228 03-14-94

Item	Marti No.	Description
R14	145-030	Resistor, 3.3 ohm 1/4 watt 5% metal film
R15	145-104-1	Resistor, 100k ohm 1/4 watt 2% RLO7S104G
R16	145-100	Resistor, 10 ohm 1/4 watt 5% metal film
R17	145-123	Resistor, 12k ohm 1/4 watt 5% metal film
R18	145-122-1	Resistor, 1.2k ohm 1/4 watt 2% RLO7S122G
R19	145-182-1	Resistor, 1.8k ohm 1/4 watt 2% RLO7S182G
R20	145-100	Resistor, 10 ohm 1/4 watt 5% metal film
R21	NOT USED	
R22	145-102	Resistor, 1k ohm 1/4 watt 5% metal film
R23	145-470	Resistor, 47 ohm 1/4 watt 5% metal film
R24	145-474-1	Resistor, 475k ohm 1/4 watt 1% RN55D4753F
R25	145-105-1	Resistor, 1 meg ohm 1/4 watt 2% RLO7S105G
R26	145-105-1	Resistor, 1 meg ohm 1/4 watt 2% RLO7S105G
R27	145-105-1	Resistor, 1 meg ohm 1/4 watt 2% RLO7S105G
R28	145-474-1	Resistor, 475k ohm 1/4 watt 1% RN55D4753F
R29	145-472	Resistor, 4.7k ohm 1/4 watt 5% metal film
R30	145-102	Resistor, 1k ohm 1/4 watt 5% metal film
R31	145-249-1	Resistor, 24.9k ohm 1/4 watt 1% RLR07C2492
	520-053	Heatsink, slide-on Aavid 580200B00000
	550-069	IC Socket, 14 pin
	550-070	IC Socket, 8 pin
	550-165	Connector, 4 pin Molex Header
	800-228B	PC Board, Audio RPU Receiver



Parts List
R-10/CR-10 Meter Board
MARTI 800-192 03-14-94

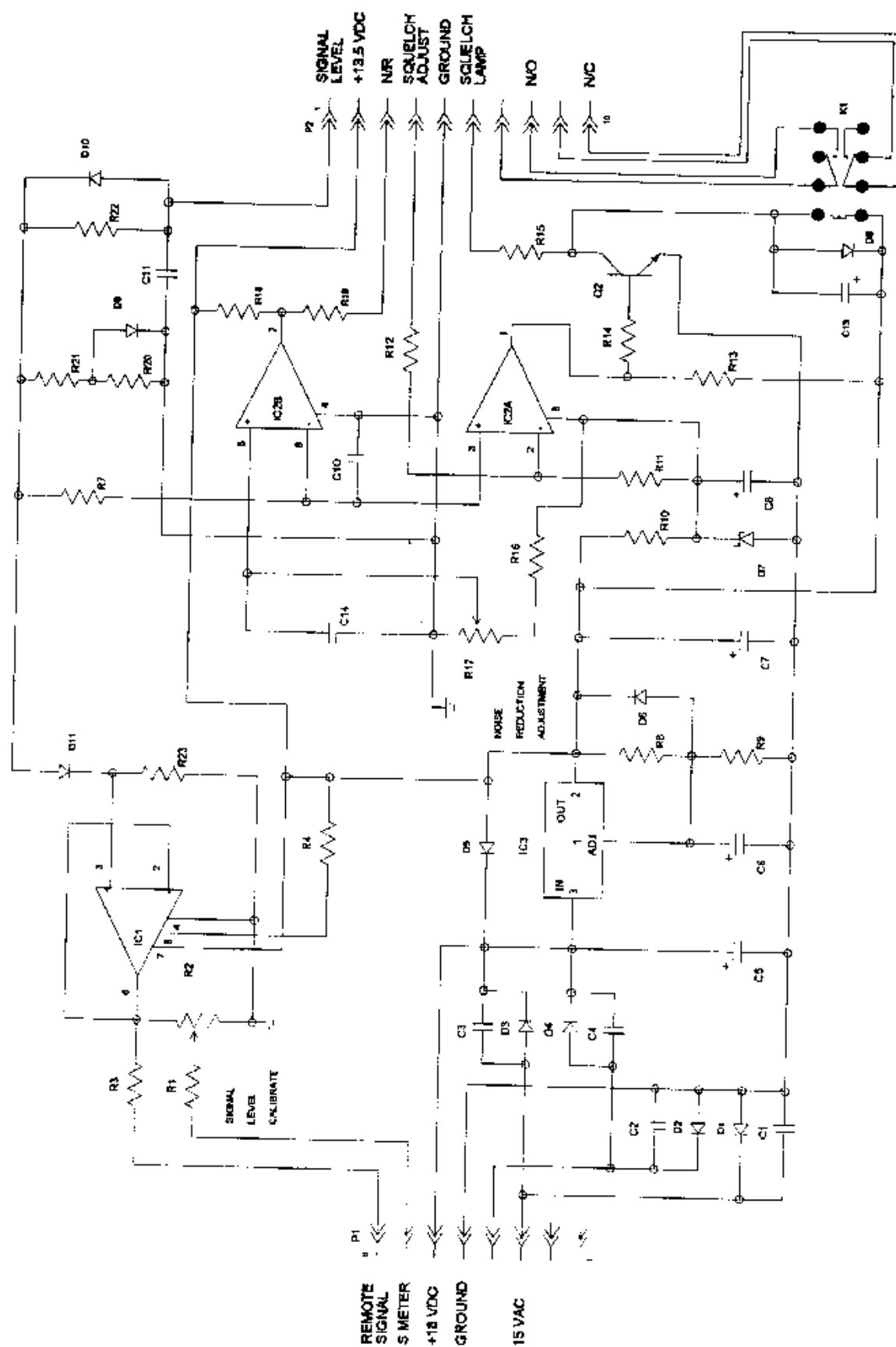
Item	Marti No.	Description
B1	510-196	Subminiature Lamp, #IFL-LX2162-16T
C1	217-104	Capacitor, .01 mf 50v GMV disc
D1	414-007	Diode, Fagor 1N4007
M1	030-039M	Meter, Model HS-10 VU
P1	550-175	Connector, 5 pin Molex Angle Header
P2	550-149	Connector, 6 pin Molex Angle Header
R1	145-471	Resistor, 470 ohm 1/4 watt 5% metal film
R2	145-473	Resistor, 47k ohm 1/4 watt 5% metal film
R3	145-431	Resistor, 430 ohm 1/4 watt 5% metal film
R4	100-523	Potentiometer, 5k ohm cermet trimmer
R5	100-523	Potentiometer, 5k ohm cermet trimmer
R6	145-222	Resistor, 2.2k ohm 1/4 watt 5% metal film
R7	145-100	Resistor, 10 ohm 1/4 watt 5% metal film
S1	530-058	Switch, slide DPDT Switchcraft 11A1871
S2	530-059	Switch, rotary #10WA135
	500-004	Screw, 4-40 x 1/4" phillips pan head M/S n
	511-038	Terminal, #1238
	513-033	Spacer, 4-40 x 13/16" hex threaded Concord
	800-192B	PC Board; Meter R receiver



MARTI ELECTRONICS CLEBURNE, TX 76033-0681	DRAWING NO 800-232 COPYRIGHT 10 MAR 94	TITLE AR-10 METER BOARD
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Parts List
 AR-10 Meter Board
 MARTI 800-232 03-14-94

Item	Marti No.	Description
B1	510-196	Subminiature Lamp, #IFL-LX2162-16T
C1	268-102	Capacitor, .001 mf 50v Z5U disc -20+80%
C2	268-102	Capacitor, .001 mf 50v Z5U disc -20+80%
C3	268-203	Capacitor, .02 mf 50v Z5U disc
D1	410-914	Diode, 1N4148
D2	414-007	Diode, Fagor 1N4007
D3	414-007	Diode, Fagor 1N4007
D4	414-007	Diode, Fagor 1N4007
D5	414-007	Diode, Fagor 1N4007
D6	414-007	Diode, Fagor 1N4007
D7	414-007	Diode, Fagor 1N4007
D8	414-007	Diode, Fagor 1N4007
M1	030-034M	Meter, VU
R1	145-102	Resistor, 1k ohm 1/4 watt 5% metal film
R2	145-272	Resistor, 2.7k ohm 1/4 watt 5% metal film
R3	145-122-1	Resistor, 1.2k ohm 1/4 watt 2% RLO7S122G
R4	145-272	Resistor, 2.7k ohm 1/4 watt 5% metal film
R5	145-680	Resistor, 68 ohm 1/4 watt 5% metal film
R6	145-272	Resistor, 2.7k ohm 1/4 watt 5% metal film
T1	310-013	Transformer, audio, 42TU016 600CT-600CT .4
	511-038	Terminal, #1238
	513-033	Spacer, 4-40 x 13/16" hex threaded Concord
	800-232B	PC Board, Meter AR Receiver



MARTI ELECTRONICS

CLEBURNE, TX 76033-0681

DRAWING NO

800-219A

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TITLE

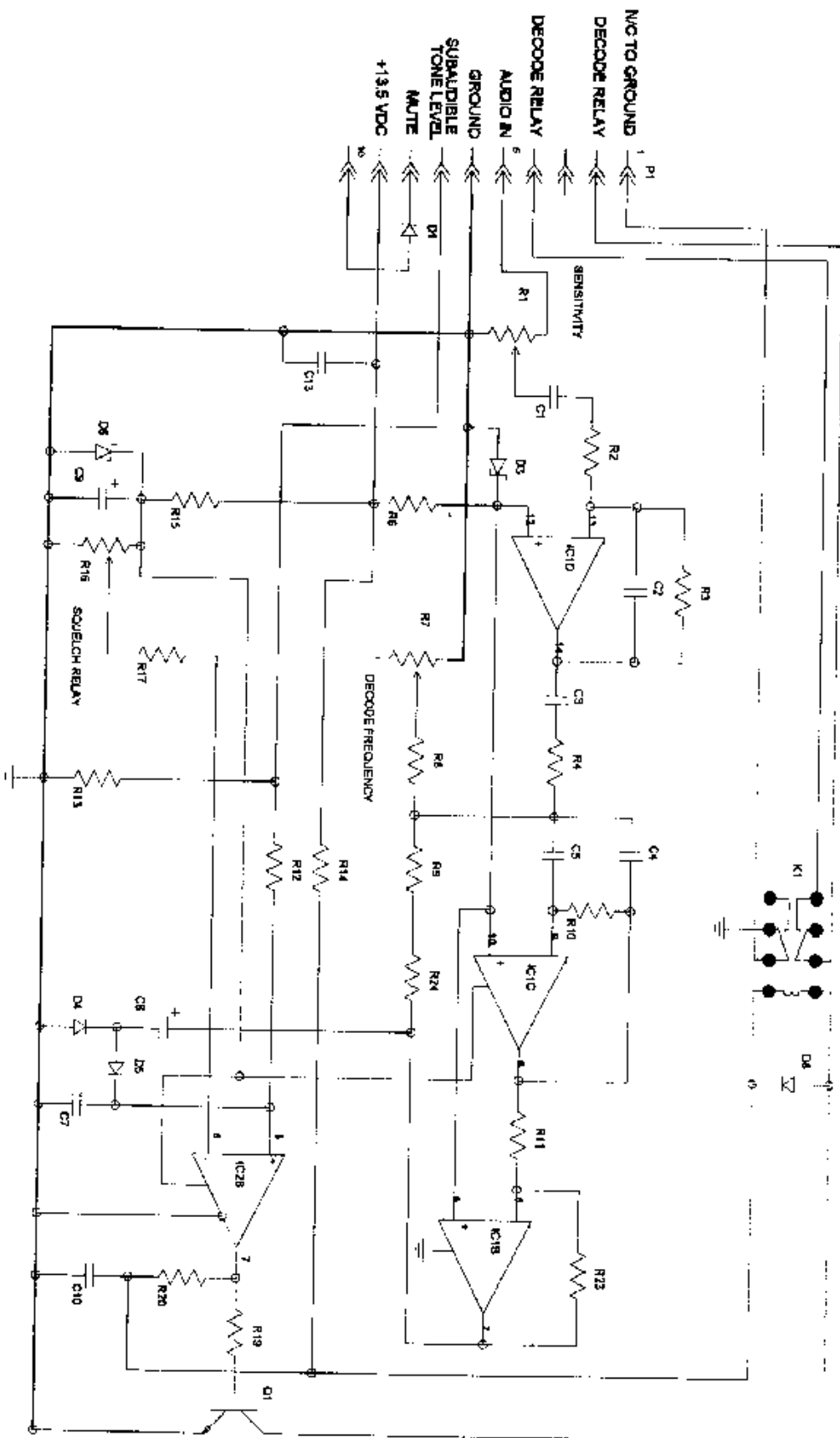
POWER SUPPLY/SQUELCH BOARD

Parts List
Receiver Power Supply
MARTI 800-219 03-14-94

Item	Marti No.	Description
C01	268-102	Capacitor, .001 mf 50v Z5U disc -20+80%
C02	268-102	Capacitor, .001 mf 50v Z5U disc -20+80%
C03	268-102	Capacitor, .001 mf 50v Z5U disc -20+80%
C04	268-102	Capacitor, .001 mf 50v Z5U disc -20+80%
C05	219-472	Capacitor, electrolytic 4700uF 25V
C06	219-200	Capacitor, electrolytic 22uF 25V
C07	219-200	Capacitor, electrolytic 22uF 25V
C08	219-200	Capacitor, electrolytic 22uF 25V
C09	NOT USED	
C10	217-103	Capacitor, .1 mf 100v 10% mylar
C11	217-103	Capacitor, .1 mf 100v 10% mylar
C12	NOT USED	
C13	219-080	Capacitor, electrolytic 10uF 25V
C14	217-104	Capacitor, .01 mf 50v GMV disc
D01	414-007	Diode, Fagor 1N4007
D02	414-007	Diode, Fagor 1N4007
D03	414-007	Diode, Fagor 1N4007
D04	414-007	Diode, Fagor 1N4007
D05	414-007	Diode, Fagor 1N4007
D06	414-007	Diode, Fagor 1N4007
D07	410-110	Diode, zener, 1N4741A 11v 5% Motorola
D08	414-007	Diode, Fagor 1N4007
D09	410-914	Diode, 1N4148
D10	410-914	Diode, 1N4148
D11	410-914	Diode, 1N4148
IC1	400-091A	Integrated Circuit, TI TLC271CP
IC2	400-293	Integrated Circuit, TI LM393P
IC3	400-317	Integrated Circuit, National LM317T
J1	550-165	Connector, 4 pin Molex Header
J2	550-125	Connector, 5 pin Molex Header
K1	570-035-1	Relay, Aromat HB2E-DC12V
Q1	NOT USED	
Q2	425-301	Transistor, Motorola 2N3904
R01	145-472	Resistor, 4.7k ohm 1/4 watt 5% metal film
R02	100-501	Potentiometer, 500 ohm cermet trimmer
R03	145-472	Resistor, 4.7k ohm 1/4 watt 5% metal film
R04	145-433	Resistor, 43k ohm 1/4 watt 5% carbon film
R05	NOT USED	
R06	NOT USED	
R07	145-102	Resistor, 1k ohm 1/4 watt 5% metal film
R08	145-241-1	Resistor, 240 ohm 1/4 watt 2% RL07S241G
R09	145-232	Resistor, 2.32k ohm 1/4 watt 1% metal film
R10	145-101	Resistor, 100 ohm 1/4 watt 5% metal film
R11	145-103	Resistor, 10k ohm 1/4 watt 5% metal film
R12	145-331	Resistor, 330 ohm 1/4 watt 5% metal film
R13	145-472	Resistor, 4.7k ohm 1/4 watt 5% metal film
R14	145-472	Resistor, 4.7k ohm 1/4 watt 5% metal film
R15	145-471	Resistor, 470 ohm 1/4 watt 5% metal film
R16	145-103	Resistor, 10k ohm 1/4 watt 5% metal film
R17	100-522	Potentiometer, 5k ohm cermet trimmer
R18	145-472	Resistor, 4.7k ohm 1/4 watt 5% metal film
R19	145-472	Resistor, 4.7k ohm 1/4 watt 5% metal film

Parts List
Receiver Power Supply
MARTI 800-219 03-14-94

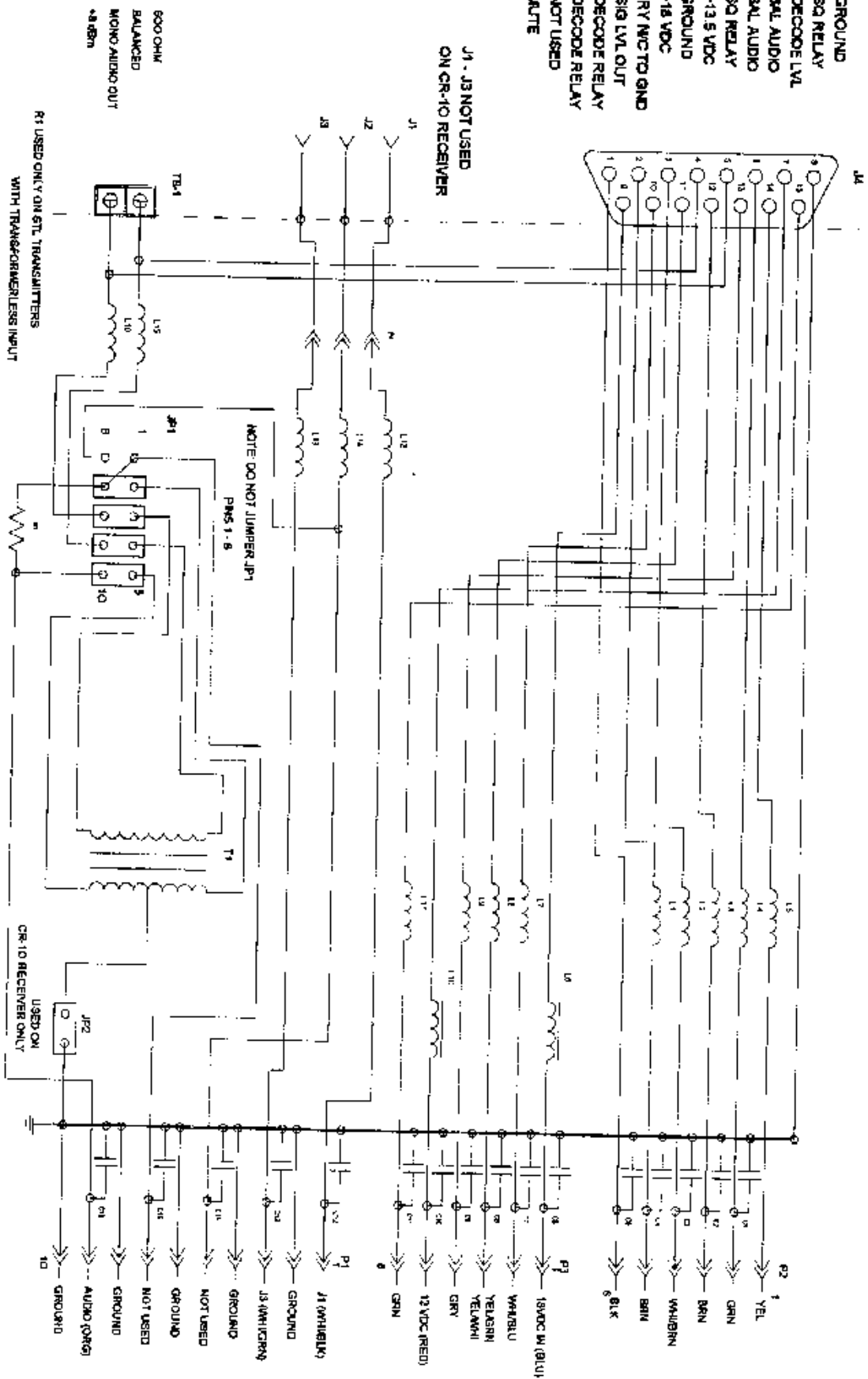
Item	Marti No.	Description
R20	145-472	Resistor, 4.7k ohm 1/4 watt 5% metal film
R21	145-333	Resistor, 33k ohm 1/4 watt 5% metal film
R22	145-472	Resistor, 4.7k ohm 1/4 watt 5% metal film
R23	145-223	Resistor, 22k ohm 1/4 watt 5% metal film
	520-051	Heatsink, Thermalloy 6030B-TT
	550-070	IC Socket, 8 pin
	550-161	IC Socket, 16 pin Aromat #AXS-1016137
	800-219B	PC Board, Power Supply R Receiver



Parts List
AR-10/CR-10 Decode Board
MARTI 800-229 03-14-94

Item	Marti No.	Description
C01	226-274	Capacitor, .27 mf 100v 10% polycarbonate
C02	215-103	Capacitor, .01 mfd 2.5% 100v polypropylene
C03	219-200	Capacitor, electrolytic 22uF 25V
C04	215-473	Capacitor, .047 mfd 2.5% 100v polypropylene
C05	215-473	Capacitor, .047 mfd 2.5% 100v polypropylene
C06	219-200	Capacitor, electrolytic 22uF 25V
C07	219-200	Capacitor, electrolytic 22uF 25V
C08	FACT SELEC	
C09	219-200	Capacitor, electrolytic 22uF 25V
C10	219-200	Capacitor, electrolytic 22uF 25V
C11	NOT USED	
C12	NOT USED	
C13	219-251	Capacitor, electrolytic 220uF 25V
D1	412-494	Diode, Germanium, 1N270
D2	NOT USED	
D3	410-754	Diode, zener Motorola 1N754A 6.3v
D4	410-914	Diode, 1N4148
D5	410-914	Diode, 1N4148
D6	410-914	Diode, 1N4148
D7	NOT USED	
D8	414-007	Diode, Fagor 1N4007
IC1	400-740	Integrated Circuit, TL084CN
IC2	400-293	Integrated Circuit, TI LM393P
K1	570-035	Relay, Aromat HB2-DC12V
Q1	425-301	Transistor, Motorola 2N3904
R01	100-104-1	Potentiometer, 100k ohm cermet trimmer w/t
R02	145-104-1	Resistor, 100k ohm 1/4 watt 2% RL07S104G
R03	145-225	Resistor, 2.2 meg ohm 1/4 watt 5% metal fi
R04	145-104-1	Resistor, 100k ohm 1/4 watt 2% RL07S104G
R05	NOT USED	
R06	145-102	Resistor, 1k ohm 1/4 watt 5% metal film
R07	100-203	Potentiometer, 20k ohm Cermet
R08	145-223-1	Resistor, 22k ohm 1/4 watt 2% RL07S223G
R09	145-683-1	Resistor, 68k ohm 1/4 watt 2% RL07S683G
R10	145-684-1	Resistor, 681K ohm 1/4 watt 1% RN55D6813F
R11	145-474-1	Resistor, 475k ohm 1/4 watt 1% RN55D4753F
R12	145-822	Resistor, 8.2k ohm 1/4 watt 5% metal film
R13	145-103	Resistor, 10k ohm 1/4 watt 5% metal film
R14	145-470	Resistor, 47 ohm 1/4 watt 5% metal film
R15	145-181	Resistor, 180 ohm 1/4 watt 5% metal film
R16	100-522	Potentiometer, 5k ohm cermet trimmer
R17	145-104	Resistor, 100k ohm 1/4 watt 5% metal film
R18	NOT USED	
R19	145-472	Resistor, 4.7k ohm 1/4 watt 5% metal film
R20	145-472	Resistor, 4.7k ohm 1/4 watt 5% metal film
R21	NOT USED	
R22	NOT USED	
R23	145-105-1	Resistor, 1 meg ohm 1/4 watt 2% RLO7S105G
R24	145-684-1	Resistor, 681K ohm 1/4 watt 1% RN55D6813F
	550-069	IC Socket, 14 pin
	800-229B	PC Board, Decode RPU Receiver
	550-070	IC Socket, 8 pin

- 1 GROUND
- 2 SQ RELAY
- 3 DECODE LVL
- 4 BAL AUDIO
- 5 BAL AUDIO
- 6 SQ RELAY
- 7 +13.5 VDC
- 8 GROUND
- 9 +18 VDC
- 10 RY N/C TO GND
- 11 SIG LVL OUT
- 12 DECODE RELAY
- 13 DECODE RELAY
- 14 NOT USED
- 15 MUTE



MARTI ELECTRONICS

CLEBURNE, TX 76033-0661

DRAWING NO.

CR-10-193A

TITLE

CR-10 INPUT/OUTPUT BOARD

Parts List
CR-10 Input Filter Board
MARTI 800-193 03-14-94

Item	Marti No.	Description
C01	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C02	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C03	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C04	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C05	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C06	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C07	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C08	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C09	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C10	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C11	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C12	270-220	Capacitor, monolithic chip, 22 pf 50v 5%
C13	270-220	Capacitor, monolithic chip, 22 pf 50v 5%
C14	270-220	Capacitor, monolithic chip, 22 pf 50v 5%
C15	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
C16	270-102	Capacitor, monolithic chip, 1000 pf 50v 5%
J4	550-170	Connector, D-Sub 15 pin Angle DN15P-R
L01	330-018	Inductor, 10 uH 43LQ105-1
L02	330-018	Inductor, 10 uH 43LQ105-1
L03	330-018	Inductor, 10 uH 43LQ105-1
L04	330-018	Inductor, 10 uH 43LQ105-1
L05	330-018	Inductor, 10 uH 43LQ105-1
L06	330-019	Inductor, #2961666671
L07	330-018	Inductor, 10 uH 43LQ105-1
L08	330-018	Inductor, 10 uH 43LQ105-1
L09	330-018	Inductor, 10 uH 43LQ105-1
L10	330-019	Inductor, #2961666671
L11	330-018	Inductor, 10 uH 43LQ105-1
L12	330-018	Inductor, 10 uH 43LQ105-1
L13	330-018	Inductor, 10 uH 43LQ105-1
L14	330-018	Inductor, 10 uH 43LQ105-1
L15	330-018	Inductor, 10 uH 43LQ105-1
L16	330-018	Inductor, 10 uH 43LQ105-1
P1	550-125	Connector, 5 pin Molex Header
P2	550-136	Connector, 6 pin Molex Header
P3	550-136	Connector, 6 pin Molex Header
R1	NOT USED	
T1	310-014M	Transformer, audio, #671-9041
TB1	511-043B	Terminal, 2 point w/brackets
	500-004	Screw, 4-40 x 1/4" phillips pan head M/S n
	550-191	Connector, 2 Dual Pin Header
	550-184	Connector, 1 Dual Pin Header
	800-193B	PC Board, I/O Filter STL-10 R-10
	500-004	Screw, 4-40 x 1/4" phillips pan head M/S n
	550-182	Open Top Two Circuit Shunt Molex #15-38-10
	550-186	Connector, 3 Pin Molex Header
	500-004	Screw, 4-40 x 1/4" phillips pan head M/S n
	550-192	Connector, 3 Dual Pin Header
	500-004	Screw, 4-40 x 1/4" phillips pan head M/S n
	500-004	Screw, 4-40 x 1/4" phillips pan head M/S n