

instruction book

Cedar Rapids Division | Collins Radio Company, Cedar Rapids, Iowa

30L-1
R-F Linear Amplifier

Collins Amateur Equipment Guarantee

The Collins Amateur Equipment described herein is sold under the following guarantee:

Collins agrees to repair or replace, without charge, any equipment, parts, or accessories which are defective as to workmanship or materials and which are returned to Collins at its factory or its designated Service Agency, transportation prepaid, provided:

- (a) Buyer presents properly executed Warranty Verification Certificate.
- (b) Notice of the claimed defect is given Collins or an authorized Service Agency, or an authorized Distributor, in writing, within 180 days from the date of purchase and goods are returned in accordance with Collins instructions.
- (c) Equipment, accessories, tubes, and batteries not manufactured by Collins or from Collins designs are subject to only such adjustments as Collins may obtain from the supplier thereof.
- (d) Any failure due to use of equipment for purposes other than those contemplated in normal amateur operations or in violation of Collins applicable Instruction Book shall not be deemed a defect within the meaning of these provisions.

This Warranty is void with respect to equipment which is altered, modified or repaired by other than Collins or Collins Authorized Service Agencies. However, alteration or modification in accordance with Collins Service Bulletins shall not affect this Warranty.

Collins reserves the right to make any change in design or to make additions to, or improvements in, Collins products without imposing any obligations upon Collins to install them in previously manufactured Collins products.

No other warranties, expressed or implied, shall be applicable to said equipment, and the foregoing shall constitute the Buyer's sole right and remedy under the agreements contained in these paragraphs. In no event shall Collins have any liability for consequential damages, or for loss, damage or expense directly or indirectly arising from the use of the products, or any inability to use them either separately or in combination with other equipment or materials or from any other cause.

NOTICE: With each equipment or set of equipments purchased, the distributor should furnish a Warranty Verification Certificate. It is necessary that this certificate accompany the equipment when it is returned for warranty repairs. Be sure that you get it from your distributor.

Warranty Repairs

On the opposite page are listed the Service Agencies authorized to perform warranty repair on Collins Amateur Equipments.

If you should wish to return material or equipment direct to Collins under the guarantee, you should notify Collins, giving full particulars including the details listed below, insofar as applicable. If the item is thought to be defective, such notice must give full information as to nature of defect and identification (including part number if possible) of part considered defective. Upon receipt of such notice, Collins will promptly advise you respecting the return. Failure to secure our advice prior to the forwarding of the goods or failure to provide full particulars may cause unnecessary delay in handling of your returned merchandise.

ADDRESS:

Collins Radio Company
Amateur Product Office
Cedar Rapids, Iowa

INFORMATION NEEDED:

- (A) Type number, name and serial number of equipment
- (B) Date of delivery of equipment
- (C) Date placed in service
- (D) Number of hours of service
- (E) Nature of trouble
- (F) Cause of trouble if known
- (G) Name of distributor from whom the equipment was purchased.

Equipment returned to the Service Agency or Collins for warranty repair must be accompanied with the Warranty Verification Certificate.

Out-of-warranty Repair, Modifications, Addition of Accessories, Alignment, etc.:

For information on service of this type write to the address shown below. If you wish to return your equipment for repairs, etc., without prior correspondence, be sure to include the following information attached to the equipment inside the packing carton:

- (1) Complete instructions detailing work to be performed.
- (2) Your return address.
- (3) Method of shipment by which the equipment should be returned.
- (4) Special instructions.

DIRECT YOUR CORRESPONDENCE TO:

Collins Radio Company
Service Repair Department
Third Street Building
Cedar Rapids, Iowa

HOW TO ORDER REPLACEMENT PARTS:

When ordering replacement parts, you should direct your order to one of the listed Collins distributors.

Please furnish the following information insofar as applicable:

INFORMATION NEEDED:

- (A) Quantity required
- (B) Collins part number (9 or 10 digit number) and description
- (C) Item or symbol number obtained from parts list or schematic
- (D) Collins type number, name and serial number of principal equipment
- (E) Unit subassembly number (where applicable)

NOTE: See Distributor List.

Collins Authorized Amateur Distributors and Service Agencies

<p>ALABAMA</p> <p>Ack Radio Supply Company 3101 4th Avenue South Birmingham 5 Phone: FAirfax 2-0588 Attn: E. C. Atkerson</p> <p>*Beddow Engineering Services 2424 Tenth Avenue South Birmingham Phone: ALpine 1-7582 Attn: Dr. C. P. Beddow SEE ALSO: Atlanta, Georgia (Ack)</p> <p>ALASKA</p> <p>Yukon Radio Supply, Inc. (P. O. Box 406) 645 I Street Anchorage Attn: A. E. Peterson</p> <p>ARIZONA</p> <p>Elliott Electronics, Inc. 418 N. 4th Avenue Tucson Phone: MAin 4-2473 Attn: Jerry Flewelling</p> <p>**Southwest Electronic Devices (P. O. Box 3647) 140 S. 2nd Street Phoenix Phone: ALpine 2-1743 Attn: Herman A. Middleton</p> <p>ARKANSAS</p> <p>Lavender Supply Company (P. O. Box 1168) 518-520 E. 4th Street Texarkana Phone: 2-4195 Attn: Joe M. Lavender</p> <p>Ed Moory's Radio & Appliance 12th & Jefferson DeWitt Phone: WHitney 6-2820 Attn: Ed Moory</p> <p>CALIFORNIA</p> <p>**Amrad Electronics 999 Howard Avenue Burlingame Phone: DIamond 2-5757 Attn: J. Steventon</p> <p>Amrad Supply, Inc. 3425 Balboa Street San Francisco Phone: SKYline 1-4661 Attn: David K. Bradley</p> <p>**Calamar Electronic Co. 2163 A. Fulton Ave. Sacramento Phone: 487-0633 Attn: Alex M. Hertz</p> <p>*Communication Receiver Service 5016 Maplewood Los Angeles 4 Phone: HOLlywood 2-2429 Attn: Charles C. Messman</p> <p>Elmar Electronics 140 11th Street at Madison Oakland 7 Phone: TE 4-3311 (TXW-OA73) Attn: Elvin Feige/M. L. Chirone</p> <p>**Henry Radio Company, Inc. (P. O. Box 64398) 11240 W. Olympic Blvd. Los Angeles 64 Phone: GRANite 7-6701 Attn: Ted Henry</p> <p>**Henry Radio, Inc. 931 N. Euclid Anaheim Phone: PR 2-9200 Attn: Mary Silva</p>	<p>Mission Ham Supplies 5474 Mission Blvd. Riverside Phone: OV-30523 Attn: Wm. P. Hullquist</p> <p>Quement Industrial Electronics (P. O. Box 527) 161 San Fernando San Jose Phone: CYpress 4-0464 Attn: Frank Quement</p> <p>Radio Products Sales, Inc. 1501 S. Hill Street Los Angeles 15 Phone: RIchmond 8-1271 Attn: Ken Rausin</p> <p>Scott Radio Supply, Inc. 266 Alamitos Avenue Long Beach Phone: HEMlock 6-1452/7-8629 Attn: Evelyn E. Scott</p> <p>Western Radio & TV Supply Company (P. O. Box 1728) 1415 India Street San Diego 1 Phone: BElmont 9-0361 Attn: A. W. Prather/Art Stewart</p> <p>COLORADO</p> <p>Radio Products Sales Co. 1237-18th Street Denver 2 Phone: CHerry 4-6591 Attn: Walter Nettles/Willard Wright</p> <p>CONNECTICUT</p> <p>Corky's Division Hatry of Hartford 100 High Street Hartford Phone: JAckson 7-1881 Attn: Edward C. Gedney</p> <p>Radio Shack Corp. of Connecticut 230 Crown Street New Haven 10 Phone: SPRuce 7-6871 Attn: E. G. Alberino SEE ALSO: Boston, Massachusetts</p> <p>DELAWARE</p> <p>Willard S. Wilson, Inc. 403-405 Delaware Avenue Wilmington 9 Phone: OLYmpia 5-4321 Attn: Willard S. Wilson</p> <p>DISTRICT OF COLUMBIA</p> <p>Electronic Wholesalers, Inc. 2345 Sherman Ave. NW Washington 1 Phone: HUdson 3-5200 Attn: Ray Avey</p> <p>FLORIDA</p> <p>**Amateur Radio Center, Inc. 2805-7 N. E. 2nd Avenue Miami Phone: FRanklin 4-4101 Attn: Wiley Gilkison</p> <p>**Electronic Wholesalers, Inc. 9390 NW 27th Avenue Miami 47 Phone: OXFord 6-1620 Attn: Philip Kontor</p> <p>Grice Electronics, Inc. (P. O. Box 1911) 300 E. Wright St. Pensacola Phone: HEMlock 3-4616 Attn: F. R. Grice, Jr.</p> <p>**Kinkade Radio Supply, Inc. 1719 Grand Central Avenue Tampa Phone: 8-6043 Attn: E. T. Kinkade</p> <p>GEORGIA</p> <p>Ack Radio Supply Co. 331 Luckie Street NW Atlanta 13 Phone: JA 4-8477 Attn: T. E. Atkerson</p> <p>*Southeastern Eng. Service 1356 Carolyn Dr. N. E. Atlanta 6, Attn: Harvey Minsk</p>	<p>Specialty Distributing Co., Inc. 763 Juniper St. N. E. Atlanta 8 Phone: TRinity 3-2521 Attn: J. E. Eaton/Doyle Hurley</p> <p>HAWAII</p> <p>**Honolulu Electronics 819 Keeaumoku Street Honolulu 14 Phone: 995-466 Attn: Thomas Teruya</p> <p>IDAHO</p> <p>Robbie's Radio & TV, Inc. (P. O. Box 5021) 3715 State Street Boise Phone: 28892 Attn: W. A. Robinson, Jr.</p> <p>ILLINOIS</p> <p>Allied Radio Corp. 100 N. Western Avenue, Chicago 80 Phone: HAymarket 1-8800 Attn: Jim Sommerville/Jason Thomas</p> <p>Klaus Radio & Electric Company 403 E. Lake Street Peoria Phone: RH 8-3401 Attn: Clifford Morris</p> <p>Newark Electronics Corporation 223 W. Madison Street Chicago 6 Phone: STate 2-2944 Attn: Les Wilkins/A. L. Poncher</p> <p>INDIANA</p> <p>Brown Electronics, Inc. 1032 Broadway Fort Wayne Phone: ANThony 3382 Attn: A. A. Brown</p> <p>Graham Electronics Supply, Inc. 122 S. Senate St. Indianapolis 4 Phone: MELrose 4-8487 Attn: G. M. Graham/D. A. Hiltz/ J. F. Simpson</p> <p>Radio Distributing Co., Inc. (P. O. Box 1499) 1212 High St. South Bend 15 Phone: ATLantic 8-4665 Attn: William A. Davidson</p> <p>IOWA</p> <p>Radio Trade Supply Co. 1224 Grand Avenue Des Moines 9 Phone: 288-7237 Attn: Leo Vince Davis/Larry Woolis</p> <p>World Radio Laboratories, Inc. (P. O. Box 919) 3415 W. Broadway Council Bluffs Phone: 32-81851 Attn: Alan McMillan/Leo Meyerson/ C. H. Williams</p> <p>LOUISIANA</p> <p>**Radio Parts Inc. 1112 Magazine Street New Orleans 13 Phone: 522-0217 Attn: Irvine J. Levi</p> <p>MARYLAND</p> <p>Uncle George's Radio Ham Shack Division Electronics Distributors, Inc. 11324 Fern Street Wheaton Phone: LOCKwood 5-2262 Attn: George J. Pasquale</p> <p>MASSACHUSETTS</p> <p>DeMambro Radio Supply, Inc. 1095 Commonwealth Avenue Boston 15 Phone: ALgonquin 4-9000 Attn: Frank DeMambro</p>	<p>Graham Radio, Inc. 505 Main Street Reading Phone: 944-4000 Attn: Robert T. Graham, Sr.</p> <p>Radio Shack Corp. 730 Commonwealth Avenue Boston 17 Phone: REgency 4-1000 Attn: Jack Schneider/Harry Waldman</p> <p>*Two-Way Radio Engineers, Inc. 115 Ward Street Boston Phone: GARRison 7-3511 Attn: Sherman M. Wolf</p> <p>MICHIGAN</p> <p>*Communication Service Company 201 South Lincoln Charlotte Phone: 1770-W Attn: Bart Rypstra</p> <p>M. N. Duffy & Co. 2040 Grand Avenue W. Detroit 26 Phone: WOODward 3-2270 Attn: M. N. Duffy/Bill Mains</p> <p>Purchase Radio Supply 327 E. Hoover Avenue Ann Arbor Phone: NOrmandy 8-8696/8-8262 Attn: Roy J. Purchase</p> <p>Radio Supply & Engineering 90 Selden Avenue Detroit 1 Phone: TEMple 1-317 Attn: C. N. Houser</p> <p>Warren Radio Company 1710 South Westnedge Kalamazoo Phone: FReside 2-5720/2-7127 Attn: Frank Smith</p> <p>MINNESOTA</p> <p>Lew Bonn Company 1211 LaSalle Avenue Minneapolis 3 Phone: FEderal 9-6351 Attn: Joe Hotch</p> <p>**Electronic Center, Inc. 107 3rd Avenue North Minneapolis 1 Phone: FEderal 8-8678 Attn: Ward Jensen</p> <p>MISSOURI</p> <p>Walter Ashe Radio Company 1125 Pine Street St. Louis 1 Phone: CHEstnut 1-1125 Attn: Joe Novak</p> <p>Burstein-Applebee Co. 1012-1014 McGee Street Kansas City 6 Phone: BALTimore 1-1155 Attn: R. H. Friesz/Clyde Fritz</p> <p>Henry Radio Company 211 North Main Butler Phone: ORchard 9-3127 Attn: Bob Henry/Helen DeArmond</p> <p>NEW HAMPSHIRE</p> <p>Evans Radio (P. O. Box 312) Bow Junction, Route 3A Concord Phone: CAPItal 5-3358 Attn: Eddie Andrew</p> <p>NEW JERSEY</p> <p>Federated Purchaser, Inc. 1021 U. S. Rt. 22 Mountainside Phone: ADams 2-8200 Attn: Hal Thorn</p> <p>Hudson Radio & Television Corp. 35 Williams Street Newark 2 Phone: MARket 4-5154 Attn: Joseph Prestia</p>
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8/1/62

***Authorized Service Agency only**

****Authorized Distributor and Service Agency**

***Warner Engineering Co., Inc.**
239 Lorraine Avenue
Upper Montclair
Phone: Pioneer 6-7900
Attn: Charles K. Atwater

Pioneer Electronic Supply Co.
5403 Prospect Avenue
Cleveland 3
Phone: 432-0010
Attn: J. Fred Ohman/Herb Farr

Wholesale Radio Supply Co.
(P. O. Box 2223)
515 East Bay St.
Charleston
Phone: RA 22634
Attn: Irving Sonenshine

Hargis-Austin, Inc.
(P. O. Box 716)
410 Baylor Street
Austin
Phone: Greenwood 8-6618
Attn: Mrs. Paul Hargis/Joe Fooshe

NEW MEXICO

***Simms Communications, Inc.**
217 Camino Encantado
Sante Fe
Phone: Yucca 2-9502
Attn: Preston W. Simms

Selectronic Supplies, Inc.
3185 Bellevue Road
Toledo 6
Phone: GRenwood 4-5477
Attn: Glenn Ingersoll

SOUTH DAKOTA

Burghardt Radio Supply
(P. O. Box 746)
621 4th Street S. E.
Watertown
Phone: TUrner 6-5749
Attn: Stan Burghardt/AL Hodgkin

****Howard Radio Company**
1475 Pine Street
Ablene
Phone: ORchard 2-9501
Attn: R. L. Howard

NEW YORK

Adirondack Radio Supply
(P. O. Box 88)
185-191 W. Main St.
Amsterdam
Phone: VICTOR 2-8350
Attn: Ward Hinkle

McNicol, Inc.
811 North Estrella Street
El Paso
Phone: LO 6-2936
Attn: C. C. McNicol

Ft. Orange Radio Distributing Co., Inc.
904-16 Broadway
Albany 7
Phone: HEmlock 6-8411
Attn: Harry Miller

TENNESSEE

Electra Distributing Company
1914 West End Avenue
Nashville 4
Phone: ALpine 5-8444
Attn: Richard B. Harris

Radio & Television Parts Co.
1828 N. Saint Mary's St.
San Antonio 12
Phone: CApitol 6-5329
Attn: Charlie Hildebrandt

WASHINGTON

C & G Radio Electronics Co.
2502-6 Jefferson Avenue
Tacoma 2
Phone: BRoadway 2-3181
Attn: Lloyd Norberg

Genesee Radio & Parts Co., Inc.
2550 Delaware Avenue
Buffalo 16
Phone: TR 3-9661
Attn: Martin Feigenbaum

Harrison Radio Corporation
225 Greenwich Street
New York 7
Phone: BArcley 7-7777
Attn: W. E. Harrison/Ben Snyder

Harvey Radio, Inc.
103 W. 43rd Street
New York 18
Phone: JUdson 2-1500
Attn: Harvey Sampson/George Zarrin

TEXAS

All-State Electronics, Inc.
2411 Ross Avenue
Dallas 1
Phone: RI 1-3281
Attn: Walter Clayton/J. Howard Klein/
Paul W. Fain

Amateur Electronics, Inc.
2802 Ross Avenue
Dallas
Phone: RIVERSIDE 8-9871
Attn: Walter L. Jackson

****Busacker Electronic Equipment Company, Inc.**
(P. O. Box 13204)
1216 W. Clay Street
Houston 19
Phone: JACkson 6-2578
Attn: Garth L. Johnson

***Communications Service, Inc.**
3209 Canton Street
Dallas 26
Phone: RIVERSIDE 7-1852
Attn: Cecil A. White, Jr.

Crabtree's Wholesale Radio
2608 Ross Avenue
Dallas
Phone: RIVERSIDE 8-5361
Attn: R. B. Bryan/Clayton Baker

Electronic Equipment & Engineering Co.
(P. O. Box 3687)
805 South Staples Street
Corpus Christi
Phone: TULIP 3-9271
Attn: R. N. Douglas

AMATEUR ELECTRONIC SUPPLY, INC.
2101 Colby
Everett
Phone: ALpine 2-6303
Attn: M. U. Baker

WISCONSIN

Amateur Electronic Supply
3832 West Lisbon Avenue
Milwaukee 8
Phone: WESt 3-3262
Attn: Steve Potyandy/Terry Sterman

Harris Radio Corporation
289 North Main Street
Fond du Lac
Phone: WALnut 2-4670
Attn: Terry Sterman/Harris E. Sterman

Satterfield Electronics, Inc.
1900 South Park Street
Madison 5
Phone: ALpine 7-4801
Attn: A. W. Satterfield/ W. E. Uhalt

OKLAHOMA

Radio, Inc.
1000 South Main Street
Tulsa 19
Phone: LU 7-9124
Attn: E. R. Durham/Elbert V. Gunn

OREGON

****Portland Radio Supply Co.**
1234 S. W. Stark Street
Portland 5
Phone: CApitol 8-8647
Attn: C. B. Lucas

PENNSYLVANIA

Cameradio Company
1121 Penn Avenue
Pittsburgh 22
Phone: EXpress 1-4000
Attn: Harry Kaplin/James W. Houston

Radio Electric Service Company of Pa., Inc.
N. W. cor. 7th & Arch Sts.
Philadelphia 6
Phone: WALnut 5-5840
Attn: Edward Miller

RHODE ISLAND

W. H. Edwards Company
116 Hartford Avenue
Providence 3
Phone: GASpee 1-6614
Attn: Sal Infantolino

SOUTH CAROLINA

Dixie Radio Supply, Inc.
1900 Barnwell Street
Columbia
Phone: ALpine 3-5333
Attn: B. W. Krell

OHIO

Custom Electronics, Inc.
1918 South Brown Street
Dayton 9
Phone: BAldwin 3-315
Attn: Richard Sauer/Jim Shupe

Collins Authorized Service Agencies

ALABAMA

***Beddo Engineering Services**
2424 Tenth Avenue South
Birmingham
Phone: ALpine 1-7582
Attn: Dr. C. P. Beddo

ARIZONA

****Southwest Electronic Devices**
(P. O. Box 3647)
140 South 2nd St.
Phoenix
Phone: ALpine 2-1743
Attn: Herman A. Middleton

CALIFORNIA

****Amrad Supply, Inc.**
999 Howard Avenue
Burlingame
Phone: DIAMOND 2-5757
Attn: J. Steventon

***Calamar Electronics Co.**
2163A Fulton Ave.
Sacramento
Phone: 487-0693
Attn: Alex M. Hertz

***Authorized Service Agency only**

****Authorized Distributor and Service Agency**

***Communication Receiver Service**
5016 Maplewood
Los Angeles 4
Phone: HOLLYWOOD 2-2429
Attn: Charles C. Messman

****Henry Radio, Inc.**
931 N. Euclid
Anaheim
Phone: PR 2-9200
Attn: Mary Silva

****Henry Radio Co., Inc.**
(P. O. Box 64398)
11240 W. Olympic Blvd.
Los Angeles 64
Phone: GRANite 7-6701
Attn: Ted Henry

FLORIDA

***Amateur Radio Center, Inc.**
2805-7 N. E. 2nd Avenue
Miami
Phone: FRanklin 4-4101
Attn: Wiley Gilkison

****Electronic Wholesalers, Inc.**
9290 N. W. 27th Avenue
Miami 47
Phone: OXFord 6-1620
Attn: Philip Konter

***Kinkade Radio Supply, Inc.**
1719 Grand Central Avenue
Tampa
Phone: 8-6043
Attn: E. T. Kindade

GEORGIA

***Southeastern Engineering Service**
1356 Carolyn Drive N. E.
Atlanta 6
Phone:
Attn: Harvey Minsk

HAWAII

****Honolulu Electronics**
819 Keeaumoku Street
Honolulu 14
Phone: 995-466
Attn: Thomas Teruya

LOUISIANA

****Radio Parts, Inc.**
1112 Magazine Street
New Orleans 13
Phone: 522-0217
Attn: Irvine J. Levi

MASSACHUSETTS

***Two-Way Radio Engineers, Inc.**
115 Ward Street
Boston (Roxbury 20)
Phone: GARRISON 7-3511
Attn: Sherman M. Wolf

MICHIGAN

***Communication Service Company**
201 South Lincoln
Charlotte
Phone: 1770-W
Attn: Bart Rypstra

MINNESOTA

****Electronic Center, Inc.**
107 Third Avenue North
Minneapolis 1
Phone: FEderal 8-8678
Attn: Ward Jensen

NEW JERSEY

***Warner Engineering Co., Inc.**
239 Lorraine Avenue
Upper Montclair
Phone: Pioneer 6-7900
Attn: Charles K. Atwater

NEW MEXICO

***Simms Communication, Inc.**
217 Camino Encantado
Sante Fe
Phone: YUCCA 2-9502
Attn: Preston W. Simms

NORTH CAROLINA

****Freck Radio & Supply Co.**
38 Biltmore Avenue
Asheville
Phone: ALpine 3-3631
Attn: T. T. Freck

OHIO

****Universal Service**
114 North Third Street
Columbus 15
Phone: CApitol 1-2335
Attn: Francis R. Gibb

OREGON

****Portland Radio Supply Co.**
1234 S. W. Stark Street
Portland 5
Phone: CApitol 8-8647
Attn: C. B. Lucas

TEXAS

****Busacker Electronic Equipment Company, Inc.**
(P. O. Box 13204)
1216 W. Clay Street
Houston 19
Phone: JACkson 6-2578
Attn: Garth L. Johnson

***Communications Service, Inc.**
3209 Canton Street
Dallas 26
Phone: RIVERSIDE 7-1852
Attn: Cecil A. White, Jr.



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SECTION I
Installation

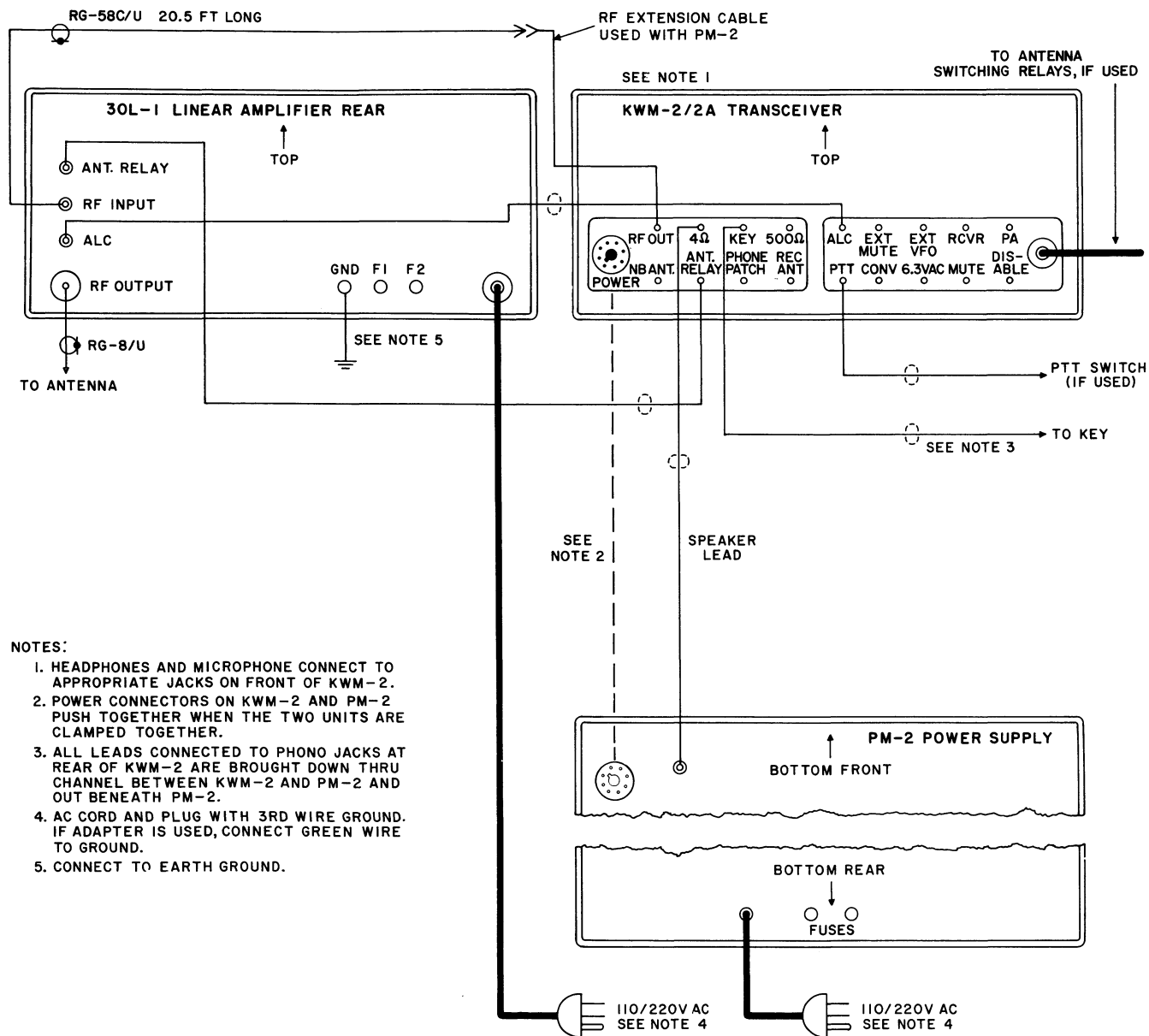


Figure 1-1. Interconnections with KWM-2/2A Traveling Station

SECTION I INSTALLATION

1.1 UNPACKING.

Carefully lift the amplifier out of the packing material. Examine for visible damage. If the amplifier has been damaged in shipment, save box and packing material and notify the transportation company. Fill out and mail the equipment registration card. Check tuning controls and switches for freedom of action. Check

the equipment included with the amplifier against table 1-1.

Lift the amplifier cabinet lid. Loosen the ten screws in the r-f compartment cover, slide it forward, and lift off. Remove the packing material around the tubes. Replace the cover and tighten screws. Lower the lid.

TABLE 1-1. EQUIPMENT FURNISHED WITH 30L-1

QUANTITY	DESCRIPTION	FUNCTION	PART NUMBER
2	Shielded cables, 4 feet long, with phono plug on each end	Alc and antenna relay cables	426-2027-00
1	RG-58C/U cable, 20.5 feet long, with phono plug on each end	R-f input cable <i>9 feet.</i>	426-5079-00
6	Fuses, 8-ampere	Spares	264-4110-00
1	A-c power plug adapter	A-c power	368-0138-00
1	UG-21D/U coaxial plug	R-f output connector	357-9261-00
1	Number 6 Bristo wrench	Knob removal	024-9730-00
1	Number 8 Bristo wrench	Knob removal	024-0019-00
1	Coaxial plug (Amphenol type 82-835)	Right-angle cable plug	357-9113-00

1.2 POWER TRANSFORMER CONNECTIONS.

The 30L-1 is shipped with the transformer primary connected for 115 volts a-c. If 230-volt a-c operation is planned, the primary connections must be changed on terminal board TB1. Refer to figure 7-2. This board is located at the bottom of the power supply compartment. The a-c power cord is connected to this board. To obtain access, refer to paragraph 4.2.

WARNING

DO NOT BLOCK INTERLOCK SWITCHES. Dangerous voltages are present in this equipment. The high voltage is interlocked with the amplifier covers. Make no attempt to put the amplifier into service until all compartment covers are in place.

1.3 CABLING.

Interconnections with other station equipments are described in the following paragraphs. Assembly instructions for type N connectors, such as the UG-21D/U, are shown in figure 7-1.

1.3.1 TRAVELING STATION.

The 30L-1 is particularly applicable to traveling station use in conjunction with portable transceivers such as the KWM-2/2A. Refer to figure 1-1. IN THIS SERVICE, MAKE SURE THE TRANSFORMER PRIMARY IS CONNECTED FOR PROPER LINE VOLTAGE.

1.3.2 HOME STATION.

Connect to KWM-2/2A, KWM-1, or S-Line as shown in figures 1-2, 1-3, and 1-4.

SECTION I
Installation

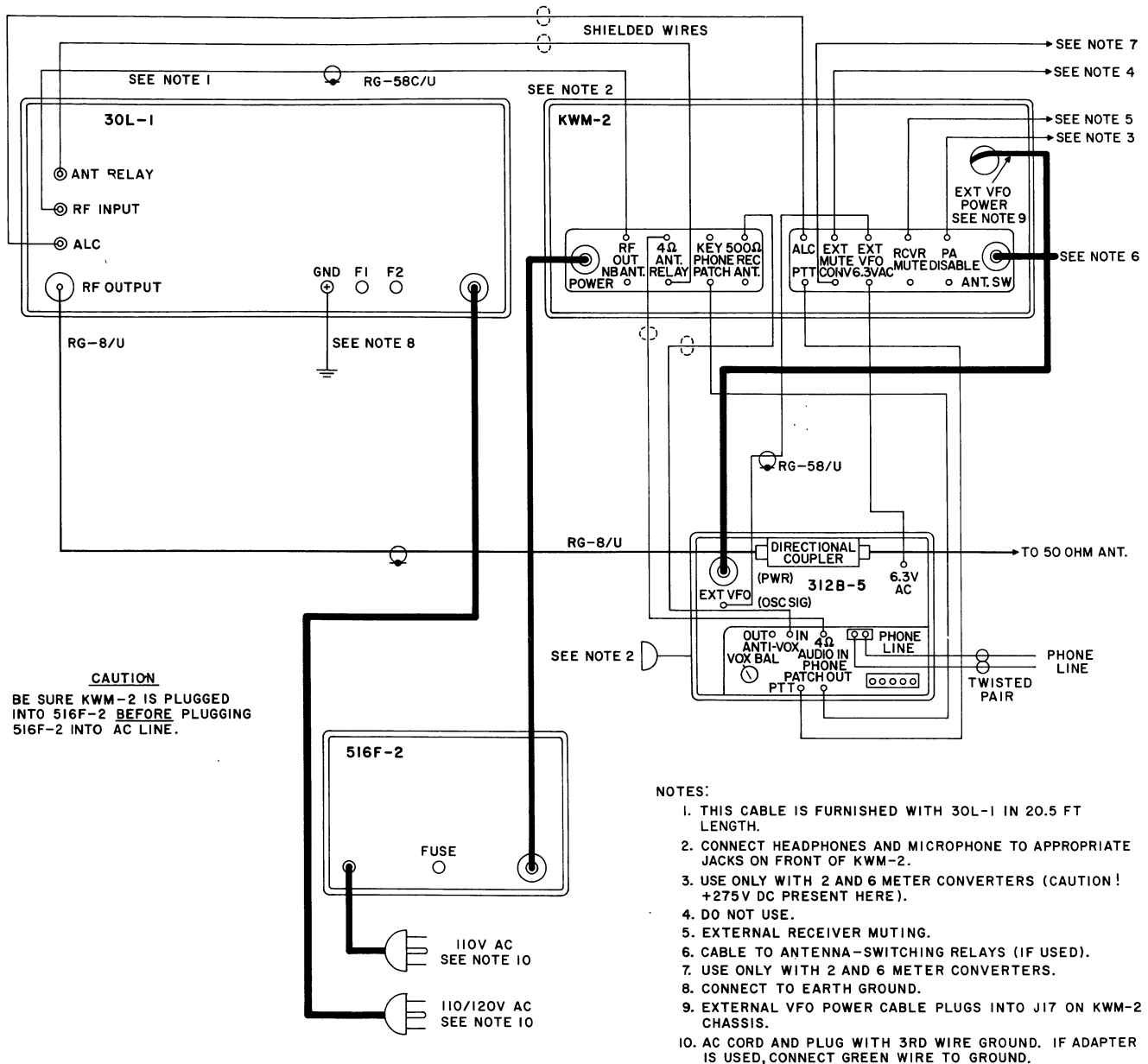


Figure 1-2. Interconnections with KWM-2/2A Home Station

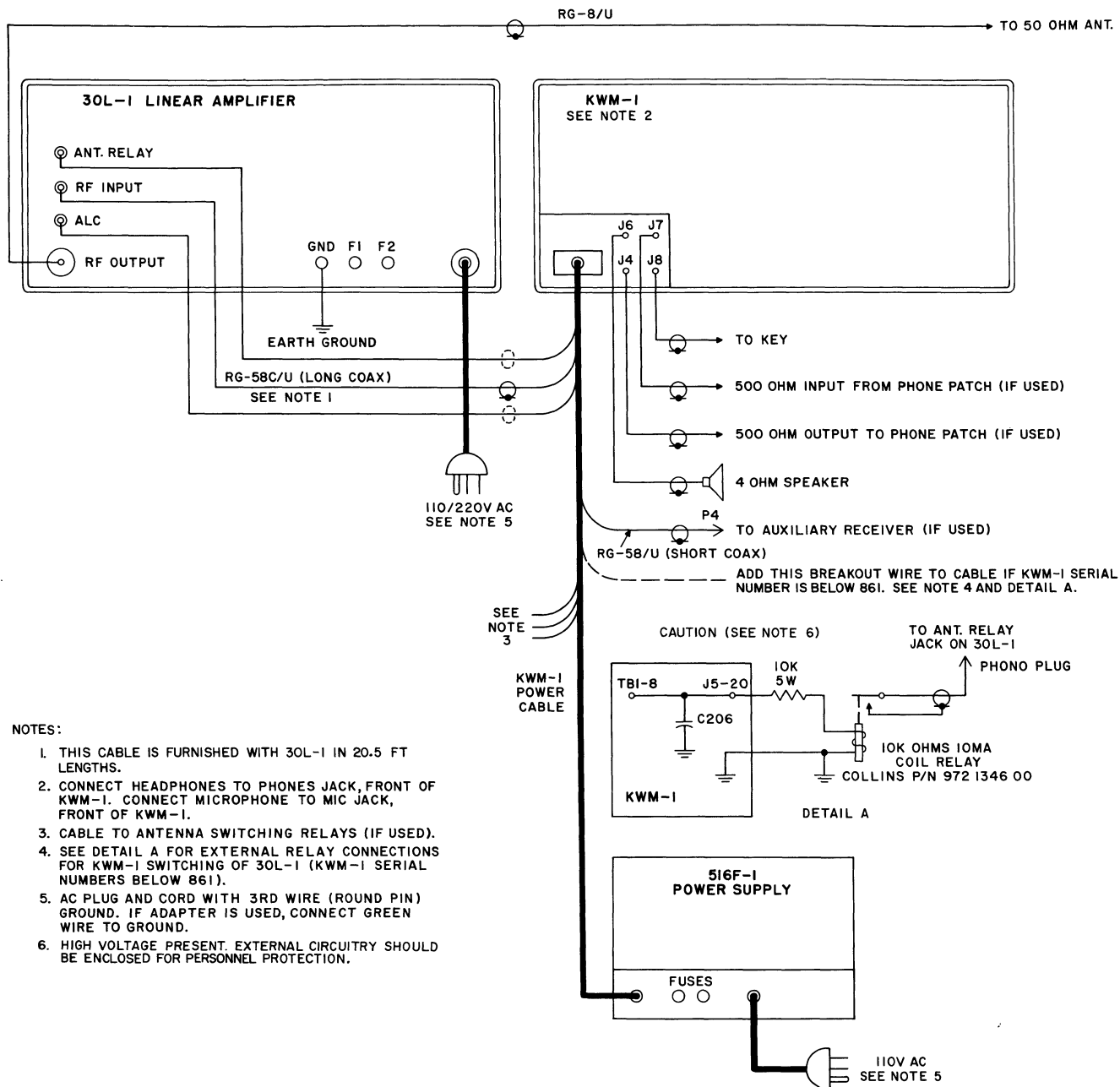


Figure 1-3. Interconnections with KWM-1

1.3.3 KWM-1 SERIAL NUMBERS ABOVE 861.

If KWM-1 models above serial number 861 are used with the 30L-1, it will be necessary to bring out alc and "ground-on-transmit" connections from the 516F-1 power cable plug, P-1, as shown in figure 1-3. Make the alc connection to terminal 19, and the "ground-on-transmit" connection to terminal 20. Use a shielded wire, and connect to 30L-1 ALC and ANT. RELAY jacks with phono plugs.

1.3.4 KWM-1 SERIAL NUMBERS BELOW 861.

If models below serial number 861 are used with the 30L-1, it is necessary to make connections inside the KWM-1 for alc and antenna relay control.

- a. Use an ohmmeter to locate the feedthrough capacitor, C169, which is connected to pin 19 of J5.
- b. Connect a wire from this feedthrough capacitor to pin 7 of tube socket XV10.
- c. Using an ohmmeter to trace the wiring, locate the feedthrough capacitor, C206, which is connected to terminal 20 of J5 in KWM-1.
- d. Connect a wire from terminal 8 of TB1 in KWM-1 to C206.
- e. Make corresponding breakout connection to P1 terminal 19 with shielded wire, and connect to the 30L-1 ALC jack with a phono plug.
- f. Refer to figure 1-3, Detail A. External to the KWM-1, connect a 10,000-ohm, 5-watt resistor and a relay coil in series from J5 terminal 20 to a ground on the rear of the KWM-1 chassis. Use a relay, such as Collins part number 972-1346-00, with a 10,000-ohm, 10-ma coil, and a set of normally open contacts.

- g. Connect the normally open contacts through a piece of shielded wire and a phono plug to the 30L-1 ANT. RELAY jack.

WARNING

BE CAREFUL to protect the operator from the 260-B+ present on the relay coil and resistor connections. It is recommended that this circuitry be enclosed in a suitable shield box.

NOTE

The r-f cable supplied for connecting the 32S-1, KWM-2/2A, or KWM-1 to the 30L-1 is 20.5 feet long. This length results in slightly lower system distortion than normally is obtained with other lengths of cable; however, a shorter length can be used for convenience.

1.4 INSTALLATION WITH OTHER MAKES OF EXCITERS.

Connect the r-f output of the exciter to the RF INPUT jack on the 30L-1. Existing antenna switching equipment between receiver and exciter may be left intact. To transmit, a ground must be supplied to the ANT. RELAY jack on the 30L-1. This removes blocking bias from the 811A tubes and energizes the internal antenna relay. Due to the variety of circuits involved, specific instructions for use of alc cannot be given. A detailed study of paragraph 3.7 will be helpful if it is desired to utilize the alc provisions in the 30L-1.