

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

ALABAMA

Ack Radio Supply Company
3101 4th Avenue South
Birmingham 5
Phone: FAirfax 2-0588
Attn: E. C. Atkerson

*Beddow Engineering Services
2424 Tenth Avenue South
Birmingham
Phone: ALpine 1-7582
Attn: Dr. C. P. Beddow
SEE ALSO: Atlanta, Georgia (Ack)

ALASKA

Yukon Radio Supply, Inc.
(P. O. Box 406)
645 I Street
Anchorage
Attn: A. E. Peterson

ARIZONA

Elliott Electronics, Inc.
418 N. 4th Avenue
Tucson
Phone: MAin 4-2473
Attn: Jerry Flewelling

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

ARKANSAS

Lavender Supply Company
(P. O. Box 1168)
518-520 E. 4th Street
Texarkana
Phone: 2-4195
Attn: Joe M. Lavender

Ed Moory's Radio & Appliance
12th & Jefferson
DeWitt
Phone: WHitney 6-2820
Attn: Ed Moory

CALIFORNIA

**Amrad Electronics
999 Howard Avenue
Burlingame
Phone: DIamond 2-5757
Attn: J. Steventon

Amrad Supply, Inc.
3425 Balboa Street
San Francisco
Phone: SKYline 1-4661
Attn: David K. Bradley

**Calamar Electronic Co.
2163 A. Fulton Ave.
Sacramento
Phone: 487-0633
Attn: Alex M. Hertz

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

Elmar Electronics
140 11th Street at Madison
Oakland 7
Phone: TE 4-3311
(TXW-OA73)
Attn: Elvin Feige/M. L. Chirone

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

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

8/1/62

*Authorized Service Agency

only
*Authorized Distributor
and Service Agency

Mission Ham Supplies
5474 Mission Blvd.
Riverside
Phone: OV-30523
Attn: Wm. P. Hullquist

Quement Industrial Electronics
(P. O. Box 527)
161 San Fernando
San Jose
Phone: CYpress 4-0464
Attn: Frank Quement

Radio Products Sales, Inc.
1501 S. Hill Street
Los Angeles 15
Phone: RIchmond 8-1271
Attn: Ken Rausin

Scott Radio Supply, Inc.
266 Alamitos Avenue
Long Beach
Phone: HEMlock 6-1452/7-8629
Attn: Evelyn E. Scott

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

COLORADO

Radio Products Sales Co.
1237-18th Street
Denver 2
Phone: CHerry 4-6591
Attn: Walter Nettles/Willard Wright

CONNECTICUT

Corky's Division
Hatry of Hartford
100 High Street
Hartford
Phone: JAckson 7-1881
Attn: Edward C. Gedney

Radio Shack Corp. of Connecticut
230 Crown Street
New Haven 10
Phone: SPruce 7-6871
Attn: E. G. Alberino
SEE ALSO: Boston, Massachusetts

DELAWARE

Willard S. Wilson, Inc.
403-405 Delaware Avenue
Wilmington 9
Phone: OLYmpia 5-4321
Attn: Willard S. Wilson

DISTRICT OF COLUMBIA

Electronic Wholesalers, Inc.
2345 Sherman Ave. NW
Washington 1
Phone: HUDson 3-5200
Attn: Ray Avey

FLORIDA

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

**Electronic Wholesalers, Inc.
9390 NW 27th Avenue
Miami 47
Phone: OXFord 6-1620
Attn: Philip Komter

Grice Electronics, Inc.
(P. O. Box 1911)
300 E. Wright St.
Pensacola
Phone: HEMlock 3-4616
Attn: F. R. Grice, Jr.

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

GEORGIA

Ack Radio Supply Co.
331 Luckie Street NW
Atlanta 13
Phone: JA 4-8477
Attn: T. E. Atkerson

*Southeastern Eng. Service
1356 Carolyn Dr. N. E.
Atlanta 6,
Attn: Harvey Minsk

Specialty Distributing Co., Inc.
763 Juniper St. N. E.
Atlanta 8
Phone: TRinity 3-2521
Attn: J. E. Eaton/Doyle Hurley

HAWAII

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

IDAHO

Robbie's Radio & TV, Inc.
(P. O. Box 5021)
3715 State Street
Boise
Phone: 28892
Attn: W. A. Robinson, Jr.

ILLINOIS

Allied Radio Corp.
100 N. Western Avenue,
Chicago 80
Phone: HAYmarket 1-6800
Attn: Jim Sommerville/Jason Thomas

Klaus Radio & Electric Company
403 E. Lake Street
Peoria
Phone: RH 8-3401
Attn: Clifford Morris
Newark Electronics Corporation
223 W. Madison Street
Chicago 6
Phone: SState 2-2944
Attn: Les Wilkins/A. L. Poncher

INDIANA

Brown Electronics, Inc.
1032 Broadway
Fort Wayne
Phone: ANthony 3382
Attn: A. A. Brown

Graham Electronics Supply, Inc.
122 S. Senate St.
Indianapolis 4
Phone: MELrose 4-8487
Attn: G. M. Graham/D. A. Hilts/
J. F. Simpson

Radio Distributing Co., Inc.
(P. O. Box 1499)
1212 High St.
South Bend 15
Phone: ATLantic 8-4665
Attn: William A. Davidson

IOWA

Radio Trade Supply Co.
1224 Grand Avenue
Des Moines 9
Phone: 288-7237
Attn: Leo Vince Davis/Larry Woolis

World Radio Laboratories, Inc.
(P. O. Box 919)
3415 W. Broadway
Council Bluffs
Phone: 32-81851
Attn: Alan McMillan/Leo Meyerson/
C. H. Williams

LOUISIANA

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

MARYLAND

Uncle George's Radio Ham Shack Division
Electronics Distributors, Inc.
11324 Fern Street
Wheaton
Phone: LOCKwood 5-2262
Attn: George J. Pasquale

MASSACHUSETTS

DeMambro Radio Supply, Inc.
1095 Commonwealth Avenue
Boston 15
Phone: ALgonquin 4-9000
Attn: Frank DeMambro

Graham Radio, Inc.
505 Main Street
Reading
Phone: 944-4000
Attn: Robert T. Graham, Sr.

Radio Shack Corp.
730 Commonwealth Avenue
Boston 17
Phone: REgency 4-1000
Attn: Jack Schneider/Harry Waldman

*Two-Way Radio Engineers, Inc.
115 Ward Street
Boston
Phone: GARRison 7-3511
Attn: Sherman M. Wolf

MICHIGAN

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

M. N. Duffy & Co.
2040 Grand Avenue W.
Detroit 26
Phone: WOODward 3-2270
Attn: M. N. Duffy/Bill Mains

Purchase Radio Supply
327 E. Hoover Avenue
Ann Arbor
Phone: NOrmandy 8-8896/8-8262
Attn: Roy J. Purchase

Radio Supply & Engineering
90 Selden Avenue
Detroit 1
Phone: TEMple 1-317
Attn: C. N. Houser

Warren Radio Company
1710 South Westnedge
Kalamazoo
Phone: FRESide 2-5720/2-7127
Attn: Frank Smith

MINNESOTA

Lew Bonn Company
1211 LaSalle Avenue
Minneapolis 3
Phone: FEderal 9-6351
Attn: Joe Hotch

**Electronic Center, Inc.
107 3rd Avenue North
Minneapolis 1
Phone: FEderal 8-8678
Attn: Ward Jensen

MISSOURI

Walter Ashe Radio Company
1125 Pine Street
St. Louis 1
Phone: CHEstnut 1-1125
Attn: Joe Novak

Burstein-Applebee Co.
1012-1014 McGee Street
Kansas City 6
Phone: BALtimore 1-1155
Attn: R. H. Friesz/Clyde Fritz

Henry Radio Company
211 North Main
Butler
Phone: ORchard 9-3127
Attn: Bob Henry/Helen DeArmond

NEW HAMPSHIRE

Evans Radio
(P. O. Box 312)
Bow Junction, Route 3A
Concord
Phone: CApital 5-3358
Attn: Eddie Andrew

NEW JERSEY

Federated Purchaser, Inc.
1021 U. S. Rt. 22
Mountainside
Phone: ADams 2-8200
Attn: Hal Thorn

Hudson Radio & Television Corp.
35 Williams Street
Newark 2
Phone: MARket 4-5154
Attn: Joseph Prestia

*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	Selectronic Supplies, Inc. 3185 Bellevue Road Toledo 6 Phone: Greenwood 4-5477 Attn: Glenn Ingersoll	SOUTH DAKOTA	**Howard Radio Company 1475 Pine Street Ablene Phone: ORchard 2-9501 Attn: R. L. Howard
*Simms Communications, Inc. 217 Camino Encantado Sante Fe Phone: YUcca 2-9502 Attn: Preston W. Simms	**Universal Service 114 N. Third Street Columbus 15 Phone: CApitol 1-2335 Attn: Francis R. Gibb	Burghardt Radio Supply (P. O. Box 746) 621 4th Street S. E. Watertown Phone: TURNer 6-5749 Attn: Stan Burghardt/AL Hodgins	McNicol, Inc. 811 North Estrella Street El Paso Phone: LO 6-2936 Attn: C. C. McNicol
NEW YORK	OKLAHOMA	TENNESSEE	Radio & Television Parts Co. 1828 N. Saint Mary's St. San Antonio 12 Phone: CApitol 6-5329 Attn: Charlie Hildebrandt
Adirondack Radio Supply (P. O. Box 88) 185-191 W. Main St. Amsterdam Phone: VICTor 2-8350 Attn: Ward Hinkle	Radio, Inc. 1000 South Main Street Tulsa 19 Phone: LU 7-9124 Attn: E. R. Durham/Elbert V. Gunn	Electra Distributing Company 1914 West End Avenue Nashville 4 Phone: ALPine 5-8444 Attn: Richard B. Harris	WASHINGTON
Ft. Orange Radio Distributing Co., Inc. 904-16 Broadway Albany 7 Phone: HEmlock 6-8411 Attn: Harry Miller	OREGON	W. & W. Distributing Company (P. O. Box 436) 644-646 Madison Avenue Memphis Phone: JACKson 7-4628 Attn: Mrs. S. D. Wooten, Jr.	C & G Radio Electronics Co. 2502-6 Jefferson Avenue Tacoma 2 Phone: BRoadway 2-3181 Attn: Lloyd Norberg
Genessee Radio & Parts Co., Inc. 2550 Deleware Avenue Buffalo 16 Phone: TR 3-9661 Attn: Martin Feigenbaum	**Portland Radio Supply Co. 1234 S. W. Stark Street Portland 5 Phone: CApitol 8-8647 Attn: C. B. Lucas	TEXAS	C & G Radio Electronics Co. 2221 Third Avenue Seattle 1 Phone: MAIn 4-4355 Attn: Dennis Ranier
Harrison Radio Corporation 225 Greenwich Street New York 7 Phone: BArcley 7-7777 Attn: W. E. Harrison/Ben Snyder	PENNSYLVANIA	All-State Electronics, Inc. 2411 Ross Avenue Dallas 1 Phone: RI 1-3281 Attn: Walter Clayton/J. Howard Klein/ Paul W. Fain	Northwest Electronics Distributors East 730 First Avenue Spokane 3 Phone: KE 4-2644 Attn: J. P. McGoldrick
Harvey Radio, Inc. 103 W. 43rd Street New York 18 Phone: JUdson 2-1500 Attn: Harvey Sampson/George Zarrin	Cameradio Company 1121 Penn Avenue Pittsburgh 22 Phone: EXpress 1-4000 Attn: Harry Kaplin/James W. Houston	Amateur Electronics, Inc. 2802 Ross Avenue Dallas Phone: RIVERSide 8-9871 Attn: Walter L. Jackson	Pringle Electronic Supply, Inc. 2101 Colby Everett Phone: ALPine 2-6303 Attn: M. U. Baker
NORTH CAROLINA	Radio Electric Service Company of Pa., Inc. N. W. cor. 7th & Arch Sts. Philadelphia 6 Phone: WALnut 5-5840 Attn: Edward Miller	**Busacker Electronic Equipment Company, Inc. (P. O. Box 13204) 1216 W. Clay Street Houston 19 Phone: JACKson 6-2578 Attn: Garth L. Johnson	WISCONSIN
Electronic Wholesalers, Inc. 938 Burke Street Winston-Salem Phone: PArk 5-8711 Attn: Wayne Yelverton	RHODE ISLAND	*Communications Service, Inc. 3209 Canton Street Dallas 26 Phone: RIVERSide 7-1852 Attn: Cecil A. White, Jr.	Amateur Electronic Supply 3832 West Lisbon Avenue Milwaukee 8 Phone: WESt 3-3262 Attn: Steve Potyandy/Terry Sterman
**Freck Radio & Supply Co., Inc. 38 Biltmore Avenue Asheville Phone: ALPine 3-3631 Attn: T. T. Freck	W. H. Edwards Company 116 Hartford Avenue Providence 3 Phone: GASpee 1-6614 Attn: Sal Infantolino	Crabtree's Wholesale Radio 2608 Ross Avenue Dallas Phone: RIVERSide 8-5361 Attn: R. B. Bryan/Clayton Baker	Harris Radio Corporation 289 North Main Street Fond du Lac Phone: WALnut 2-4670 Attn: Terry Sterman/Harris E. Sterman
OHIO	SOUTH CAROLINA	Electronic Equipment & Engineering Co. (P. O. Box 3687) 805 South Staples Street Corpus Christi Phone: TULip 3-9271 Attn: R. N. Douglas	Satterfield Electronics, Inc. 1900 South Park Street Madison 5 Phone: ALPine 7-4801 Attn: A. W. Satterfield/ W. E. Uhalt
Custom Electronics, Inc. 1918 South Brown Street Dayton 9 Phone: BALDwin 3-315 Attn: Richard Sauer/Jim Shupe	Dixie Radio Supply, Inc. 1900 Barnwell Street Columbia Phone: ALPine 3-5333 Attn: B. W. Krell		

Collins Authorized Service Agencies

ALABAMA	*Communication Receiver Service 5016 Maplewood Los Angeles 4 Phone: HOLlywood 2-2429 Attn: Charles C. Messman	GEORGIA	MINNESOTA	OHIO
*Beddow Engineering Services 2424 Tenth Avenue South Birmingham Phone: ALPine 1-7582 Attn: Dr. C. P. Beddow	**Henry Radio, Inc. 931 N. Euclid Anaheim Phone: PR 2-9200 Attn: Mary Silva	*Southeastern Engineering Service 1356 Carolyn Drive N. E. Atlanta 6 Phone: Attn: Harvey Minsk	**Electronic Center, Inc. 107 Third Avenue North Minneapolis 1 Phone: FEderal 8-8678 Attn: Ward Jensen	**Universal Service 114 North Third Street Columbus 15 Phone: CApitol 1-2335 Attn: Francis R. Gibb
ARIZONA	**Henry Radio Co., Inc. (P. O. Box 64398) 11240 W. Olympic Blvd. Los Angeles 64 Phone: GRAnite 7-6701 Attn: Ted Henry	HAWAII	NEW JERSEY	OREGON
**Southwest Electronic Devices (P. O. Box 3647) 140 South 2nd St. Phoenix Phone: ALPine 2-1743 Attn: Herman A. Middleton	FLORIDA	**Honolulu Electronics 819 Keeaumoku Street Honolulu 14 Phone: 995-466 Attn: Thomas Teruya	*Warner Engineering Co., Inc. 239 Lorraine Avenue Upper Montclair Phone: Pioneer 6-7900 Attn: Charles K. Atwater	**Portland Radio Supply Co. 1234 S. W. Stark Street Portland 5 Phone: CApitol 8-8647 Attn: C. B. Lucas
CALIFORNIA	**Amrad Supply, Inc. 999 Howard Avenue Burlingame Phone: DIamond 2-5757 Attn: J. Steventon	MASSACHUSETTS	NEW MEXICO	TEXAS
*Calamar Electronics Co. 2163A Fulton Ave. Sacramento Phone: 487-0693 Attn: Alex M. Hertz	**Amateur Radio Center, Inc. 2805-7 N. E. 2nd Avenue Miami Phone: FRAnklin 4-4101 Attn: Wiley Gilkison	*Two-Way Radio Engineers, Inc. 115 Ward Street Boston (Roxbury 20) Phone: GARRison 7-3511 Attn: Sherman M. Wolf	*Simms Communication, Inc. 217 Camino Encantado Sante Fe Phone: YUcca 2-9502 Attn: Preston W. Simms	**Busacker Electronic Equipment Company, Inc. (P. O. Box 13204) 1216 W. Clay Street Houston 19 Phone: JACKson 6-2578 Attn: Garth L. Johnson
*Authorized Service Agency only	**Electronic Wholesalers, Inc. 9290 N. W. 27th Avenue Miami 47 Phone: OXFord 6-1620 Attn: Philip Konter	MICHIGAN	NORTH CAROLINA	*Communications Service, Inc. 3209 Canton Street Dallas 26 Phone: RIVERSide 7-1852 Attn: Cecil A. White, Jr.
**Authorized Distributor and Service Agency	**Kinkade Radio Supply, Inc. 1719 Grand Central Avenue Tampa Phone: 8-6043 Attn: E. T. Kindade	*Communication Service Company 201 South Lincoln Charlotte Phone: 1770-W Attn: Bart Rypstra	**Freck Radio & Supply Co. 38 Biltmore Avenue Asheville Phone: ALPine 3-3631 Attn: T. T. Freck	**Howard Radio Company 1475 Pine Street Ablene Phone: ORchard 2-9501 Attn: R. L. Howard



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30L-1 R-F Linear Amplifier

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SECTION I
Installation

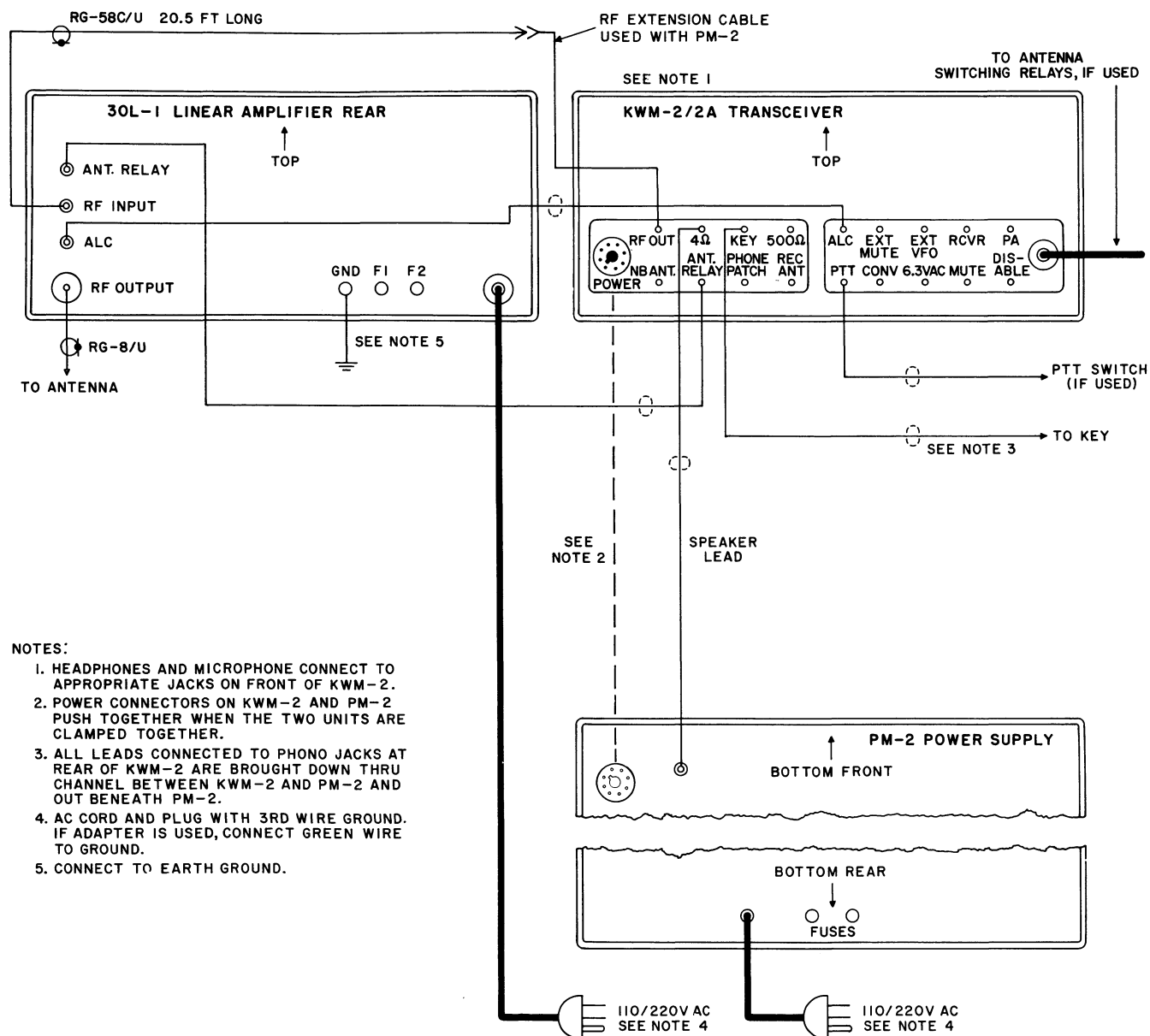


Figure 1-1. Interconnections with KWM-2/2A Traveling Station

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

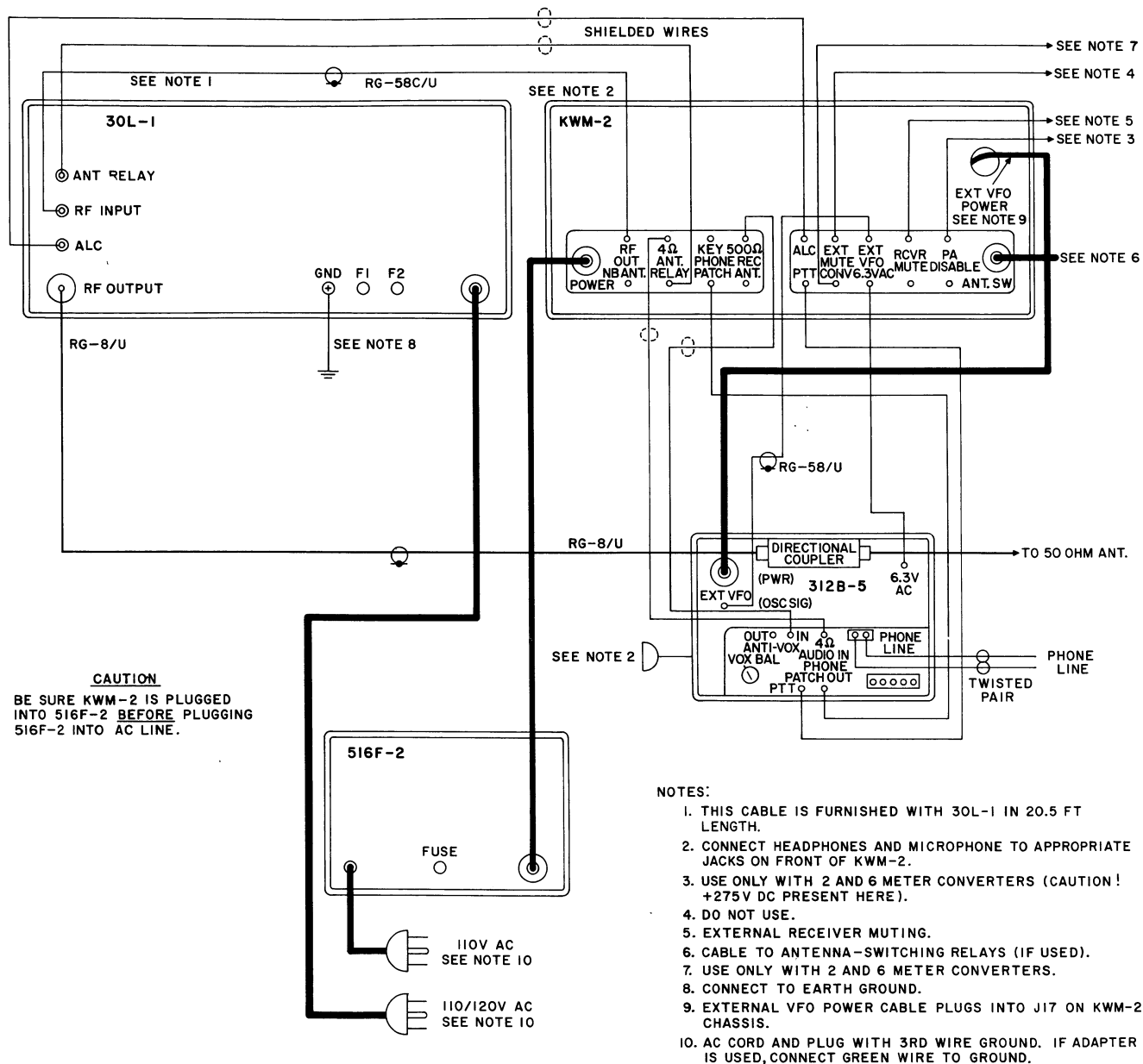


Figure 1-2. Interconnections with KWM-2/2A Home Station

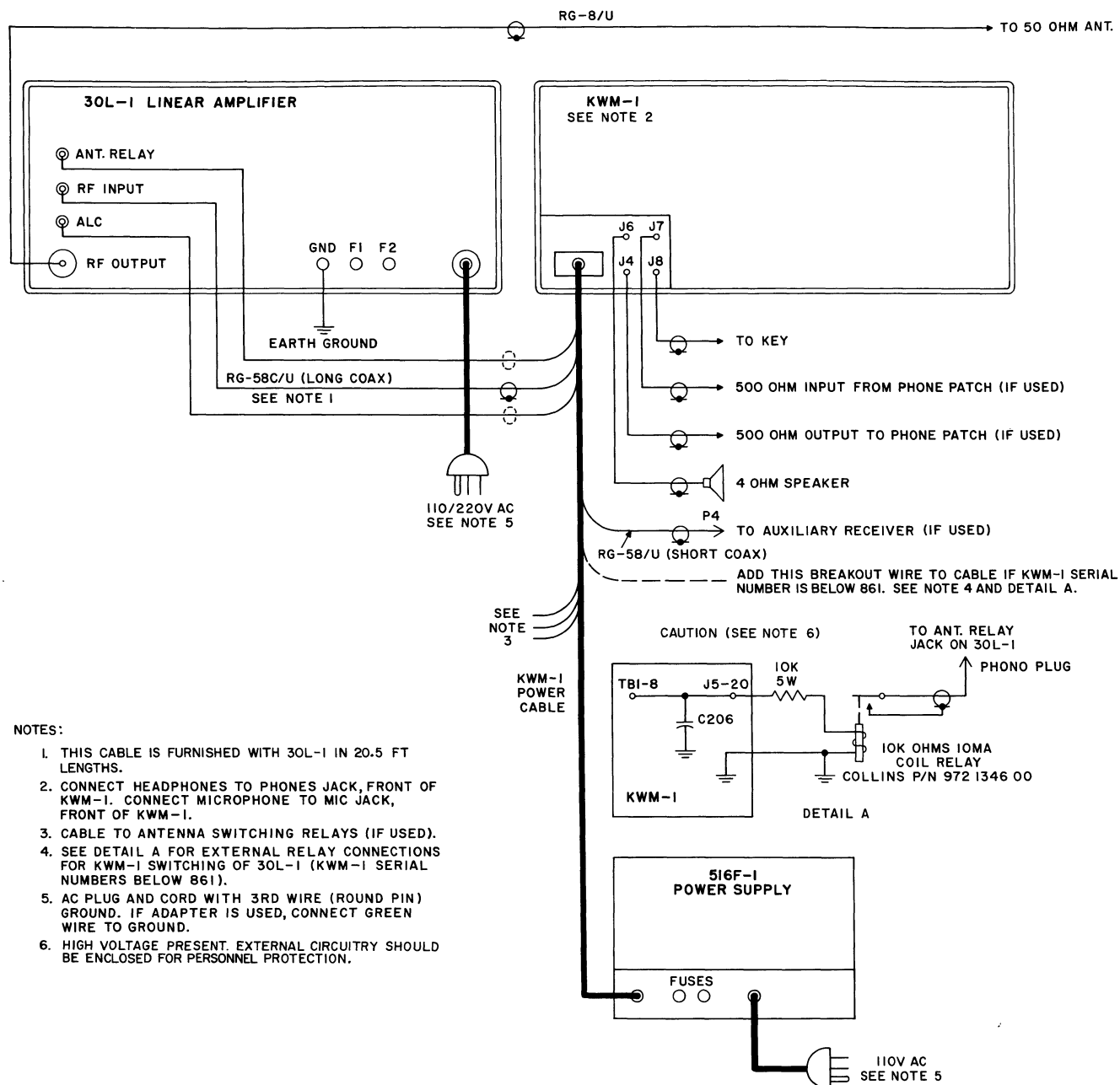


Figure 1-3. Interconnections with KWM-1

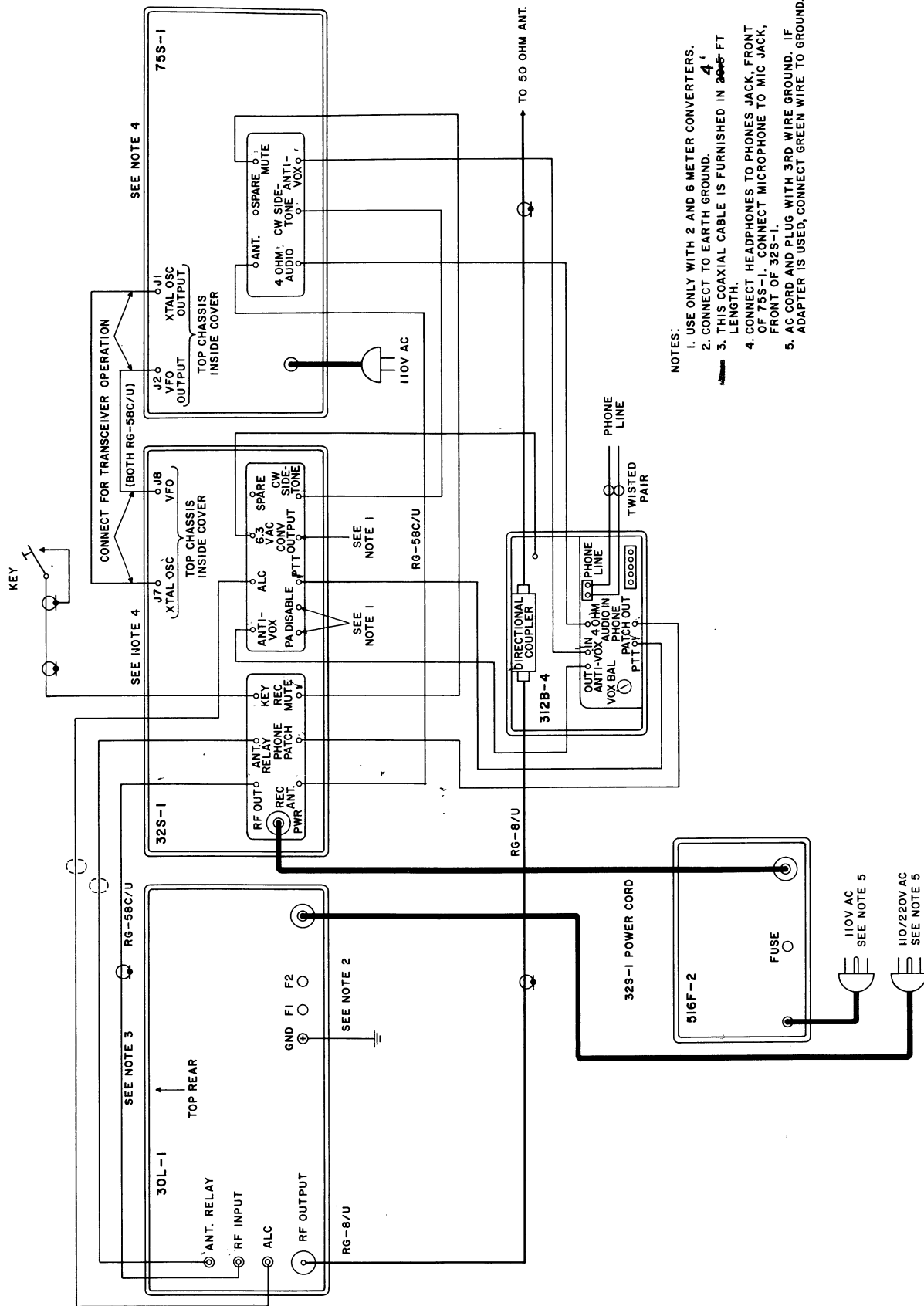


Figure 1-4. Interconnections with S-Line

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.