

Description

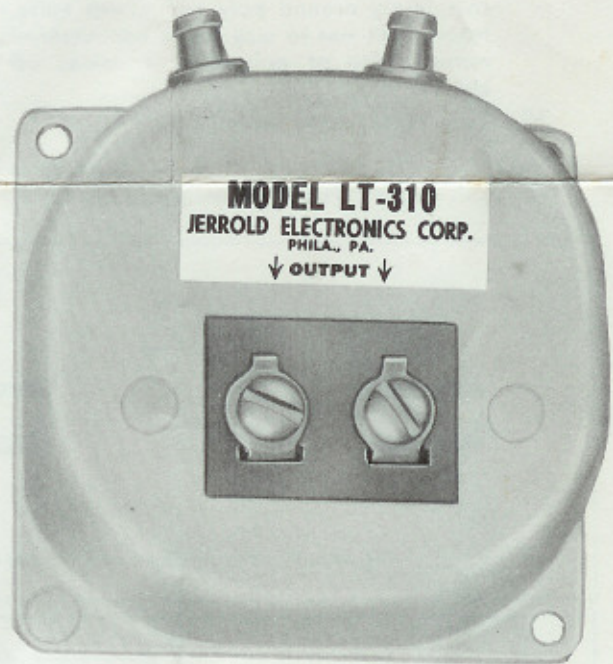
Model LT-310 is a matched television tap-off unit for connection of 300 ohm TV receivers to RG-59/U feeder cables. The circuitry provides the necessary RF isolation to the cable system and between receivers. Complete a-c isolation is also afforded the system from transformerless receivers ("hot chassis").

As the excellent V.S.W.R. specifications below indicate, Model LT-310 presents a close match to 300 ohm twin lead and an even closer match to the 72 ohm feeder. This reduces pick-up problems, mutual interference between sets due to line resonances and makes the length between taps and from tap to receiver non-critical; thereby eliminating ghosting and smearing conditions arising from these sources.

While the excellent matching characteristics of Model LT-310 reduce pick-up problems, Jerrold Model 1477 is recommended for use where particularly strong, unwanted signals are present.

Model LT-310 is color coded (W, R, Y, G, T) for different values of RF isolation which determine the physical location of the unit in any given feeder. The electrical characteristics of each unit, displaying an inverse isolation value with respect to cable attenuation, assures even signal levels at all channels.

Model LT-310T incorporates a 72 ohm terminating resistor for proper feeder line termination. This unit should be used as the last tap on the feeder.



Model LT-310

SPECIFICATIONS

IMPEDANCE:

Feeder (input and output):
75 ohms (V.S.W.R.—1.2)

Tap: 300 ohms (V.S.W.R.—1.5)

BANDWIDTH: Pass Channels 2 through 13.

MOUNTING: Baseboard

FITTINGS: Screw terminals for 300 ohm twin lead tap-off; B-59 bushings for RG-59/U cables at feed-thru connections.

ISOLATION AND FEED THRU: (Chart below)

CHANNEL	MODEL LT-310 COLOR									
	WHITE		RED		YELLOW		GREEN		TERM.	
	ISOLATION	FEED THRU	ISOLATION	FEED THRU	ISOLATION	FEED THRU	ISOLATION	FEED THRU	ISOLATION	FEED THRU
2	33	.1	26	.1	22.5	.2	19.5	.3	15	T
6	31	.2	25	.3	19	.4	15	.4	11	T
7	27	.4	19	.5	17	.6	10	.7	7	T
13	24	.5	19	.7	16	.9	9	1.2	6	T

I N S T R U C T I O N S

1. Connect unit into feeder line. (See Figures 1 and 2)

a. Prepare ends of coaxial cable as follows:

- (1) Strip off $1\frac{1}{8}$ " of outer jacket.
- (2) Cut braid flush with outer jacket and strip off $\frac{3}{16}$ " polyethylene dielectric (make cut completely around poly with sharp knife, taking care not to nick center conductor—rotate piece of poly until it comes off clean).
- (3) Slide ferrule onto cable.

b. Insert the cable into the B-59 coaxial bushing so the shaft enters between the poly and the braid.

- c. Push in until outer jacket butts shoulder of bushing.
 - d. Swing back plate to expose the interior of the unit.
 - e. Wrap center conductor under screw head and tighten.
 - f. Push ferrule over shaft of bushing and crimp tightly to make good connection between cable shield and bushing.
2. Use screws provided to mount on baseboard.
 3. Connect 300 ohm line from antenna terminals of receiver to screw terminals on front of unit.
 4. Special circuitry requires no termination if TV is disconnected.

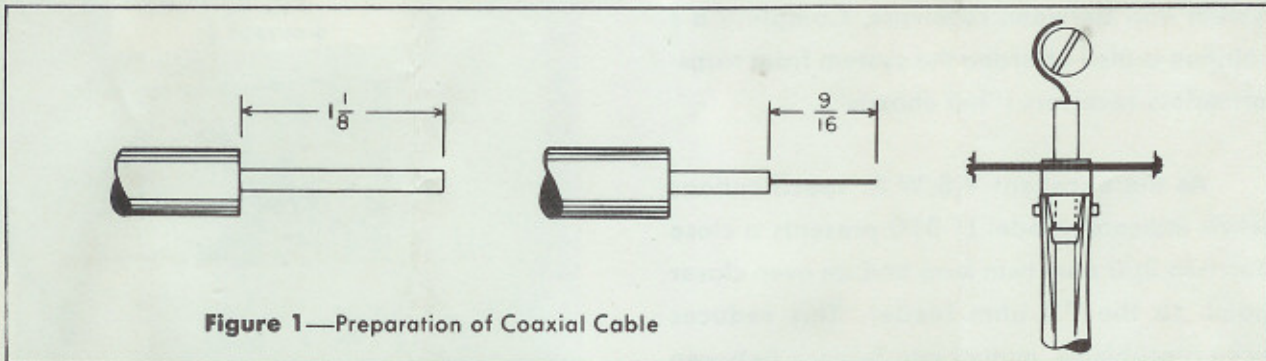


Figure 1—Preparation of Coaxial Cable

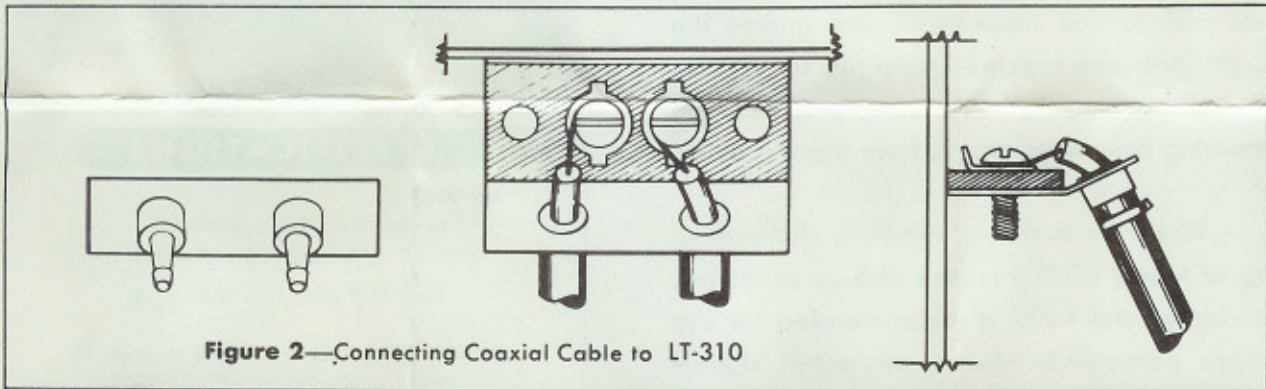


Figure 2—Connecting Coaxial Cable to LT-310

C O L O R D I S T R I B U T I O N C H A R T

SIGNAL LEVEL AT HEAD END OF FEEDER		DISTANCE FROM START OF FEEDER OF LT-310 COLORS				
UV	DBJ	WHITE	RED	YELLOW	GREEN	TERMINATING
500,000	54	0'-278'	278'-317'	317'-337'	337'-376'	376'
354,000	51	0'-250'	250'-289'	289'-309'	309'-351'	351'
250,000	48	0'-222'	222'-261'	261'-284'	284'-323'	323'
177,000	45	0'-194'	194'-233'	233'-256'	256'-295'	295'
125,000	42	0'-166'	166'-208'	208'-228'	228'-267'	267'
88,500	39	0'-138'	138'-180'	180'-200'	200'-239'	239'
62,500	36	0'-85'	85'-140'	140'-160'	160'-199'	199'

NOTE: CHART BASED ON FOLLOWING

1. MINIMUM OF 0.DBJ (1000 UV), AT TAP
2. CHANNEL COVERAGE 2 THRU 13
3. MAXIMUM OF 10 TAPS PER 100'
4. DISTANCE FROM TAP TO RECEIVER CONSIDERED NEGLIGIBLE