

**TPRD-1454, 1554, 1556  
BANDPASS/REJECT DUPLEXERS****TBC-40**  
40" H x 22" W x 17.5" D**TPRD-1454, 1554****TPRD-1556**

The Telewave Models TPRD-1454, TPRD-1554, and TPRD-1556 allow simultaneous operation of a transmitter and receiver into a common antenna. These bandpass duplexers are ideal in frequency congested areas where protection is needed from surrounding transmitters, and where maximum transmitter side-band filtering is necessary.

Because of their superior construction, these Telewave 5" cavity duplexers achieve greater rejection of transmitter spurious and noise radiation, providing excellent receiver protection. Telewave duplexers have 1/4" aluminum top plates which are fully welded to the aluminum outer conductor. Silver-plated tuners, beryllium copper finger stock contactors and threaded invar rods assure maximum temperature stability, higher "Q", and many years of trouble free operation.

Selectivity and insertion loss may be adjusted by rotating the calibrated connector loops. (See reverse side for typical response curves.)

The Telewave TPRD-1454/1554 have two pass/reject cavities in both the transmitter and receiver sections. These duplexers are designed for transmitters and receivers with frequency spacing of 600 KHz or more.

The Telewave TPRD-1556 has three pass/reject cavities in both the transmitter and receiver sections. This duplexer is designed for transmitters and receivers with frequency spacing of 600 KHz or more.

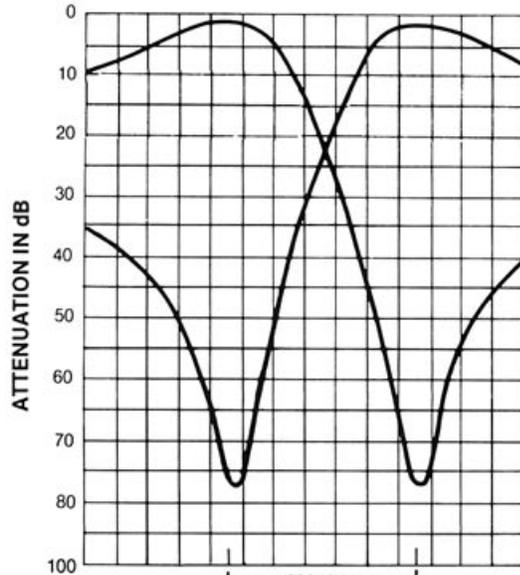
All duplexers are tuned prior to shipping when frequencies are specified, no further adjustments should be necessary. If frequency changes are required, the positive locking mechanism allows for easy field tuning by rotating the threaded Invar rod.

The optional TBC-40 indoor cabinet totally encloses the duplexer, and protects it from dust, dirt and tampering. All connections are accessible from the top of the cabinet.

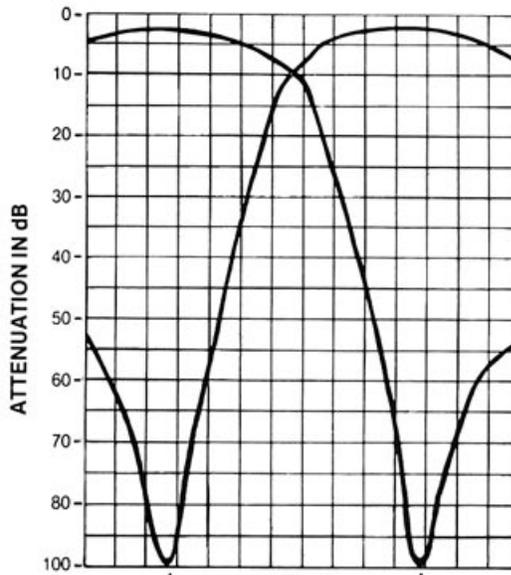
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# TPRD-1454, 1554, 1556

TYPICAL DUPLEX RESPONSE CURVES



FREQUENCY  
TPRD 1554 and TPRD 1454



FREQUENCY  
TPRD 1556

## ELECTRICAL DATA

Model	TPRD-1454	TPRD-1554	TPRD-1556
Number of Cavities	4	4	6
Tuning Range	118-148 MHz*	148-174 MHz*	148-174 MHz*
Frequency Separation (min)	600 KHz	600 KHz	400 KHz
Power Input (max)	350 Watts	350 Watts	350 Watts
VSWR (max)	1.5:1	1.5:1	1.5:1
Insertion Loss:			
TX to Ant	1.5 dB	1.5 dB	2.0 dB
RX to Ant	1.5 dB	1.5 dB	2.0 dB
RX Isolation:			
at TX frequency	77 dB @ 600 KHz	77 dB @ 600 KHz	100 dB @ 400 KHz
TX Noise Suppression:			
at RX frequency	77 dB @ 600 KHz	77 dB @ 600 KHz	100 dB @ 400 KHz
Temperature Range	-30 C to +70 C	-30 C to +70 C	-30 C to +70 C

## MECHANICAL DATA

Dimensions (H x W x D)** with tuning rods fully extended			
in	34 x 19 x 11	28 x 19 x 11	28 x 19 x 11
cm	86 x 48 x 28	71 x 48 x 28	71 x 48 x 28
Connectors	N or UHF female	N or UHF female	N or UHF female
Finish	Acrylic Enamel	Acrylic Enamel	Acrylic Enamel
Net Weight lbs (kg)	25 (11)	20 (9)	29 (13)

\*Specify model number and EXACT transmitter and receiver frequencies when ordering.

\*\*All models are designed to mount on a 19" rack.

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