

## TPRD-1454, 1456 BANDPASS / REJECT DUPLEXERS



TPRD-1454



TPRD-1456

The Telewave Model TPRD-1454 and TPRD-1456 duplexers allow simultaneous operation of a transmitter and receiver into a common antenna. These pass-reject duplexers are ideal for systems with very close frequency spacing.

The Telewave TPRD-1454 has two pass-reject cavities in the transmitter and receiver sections. This duplexer is designed for transmitters and receivers with frequency spacing of 600 KHz or more.

The TPRD-1456 has three pass-reject cavities in the transmitter and receiver sections. This duplexer is designed for transmitters and receivers with frequency spacing of 400 KHz or more.

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 next page for typical response curves.)

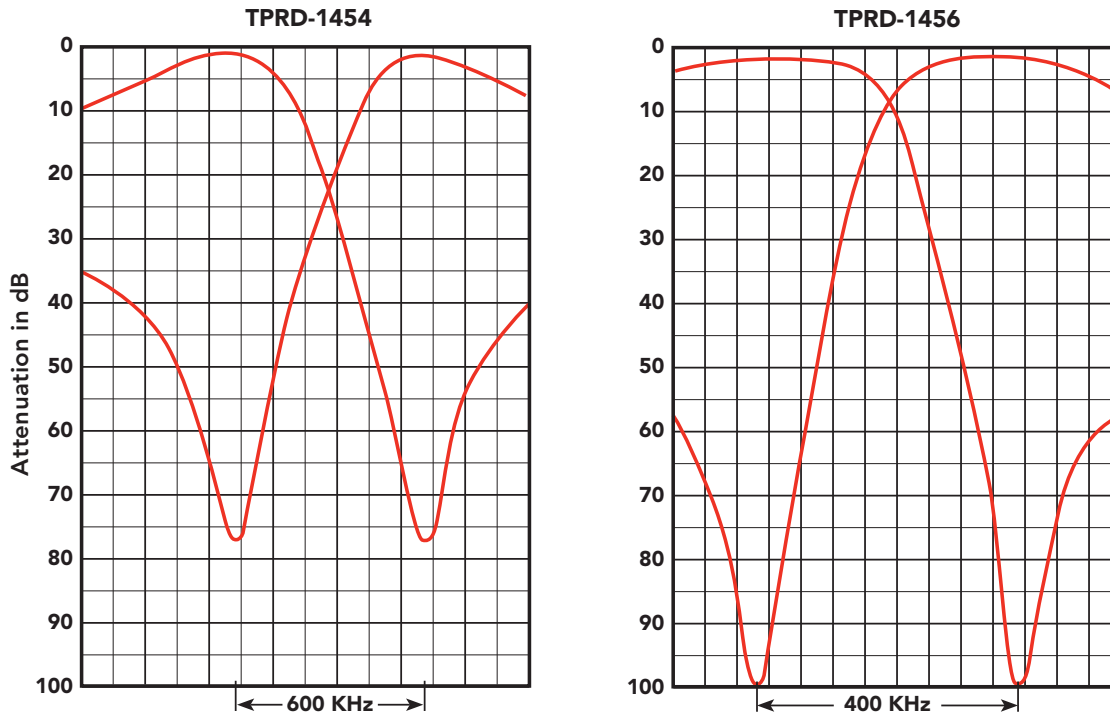
All duplexers are tuned and tested with customer-specified frequencies prior to shipping. If frequency changes are required, the positive locking mechanism allows

for easy field tuning by rotating the threaded Invar rod.

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

# TPRD-1454, 1456

TYPICAL DUPLEX RESPONSE



ELECTRICAL SPECIFICATIONS	TPRD-1454	TPRD-1456
Tuning range	118-148 MHz	
Frequency separation (min)	600 KHz	400 KHz
Maximum input power	350 watts	
VSWR (max)	1.5:1	
Insertion loss: TX/RX to ant.	1.5 dB	2.0 dB
RX isolation at TX frequency	77 dB at 600 KHz	100 dB at 400 KHz
TX noise suppression at RX frequency	77 dB at 600 KHz	100 dB at 400 KHz
Temperature range	-30°C to +70°C	
Cavities	(4) 5"	(6) 5"
MECHANICAL SPECIFICATIONS		
Dimensions (HWD) in. (cm) (Including typical tuner extension)	34 x 19 x 11 (86 x 48 x 28)	34 x 19 x 11 (86 x 48 x 28)
Cavity dimensions	5" dia x 30" L	
Mounting	19" Rack or wall mount	
Connectors	N or UHF female (opt.)	
Finish	Acrylic enamel	
Net weight lb. (kg)	23 (10.4)	35 (15.6)

**NOTES:** Specify model number and exact transmitter and receiver frequencies when ordering.  
All models are built on 19" rails for rack or wall mounting.