

## TPRD-1454, 1456 BANDPASS / REJECT DUPLEXERS

**TPRD-1454****TPRD-1456**

Telewave.io 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.io 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 noise and spurious radiation, providing excellent receiver protection.

Telewave.io duplexers have ¼" 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.)

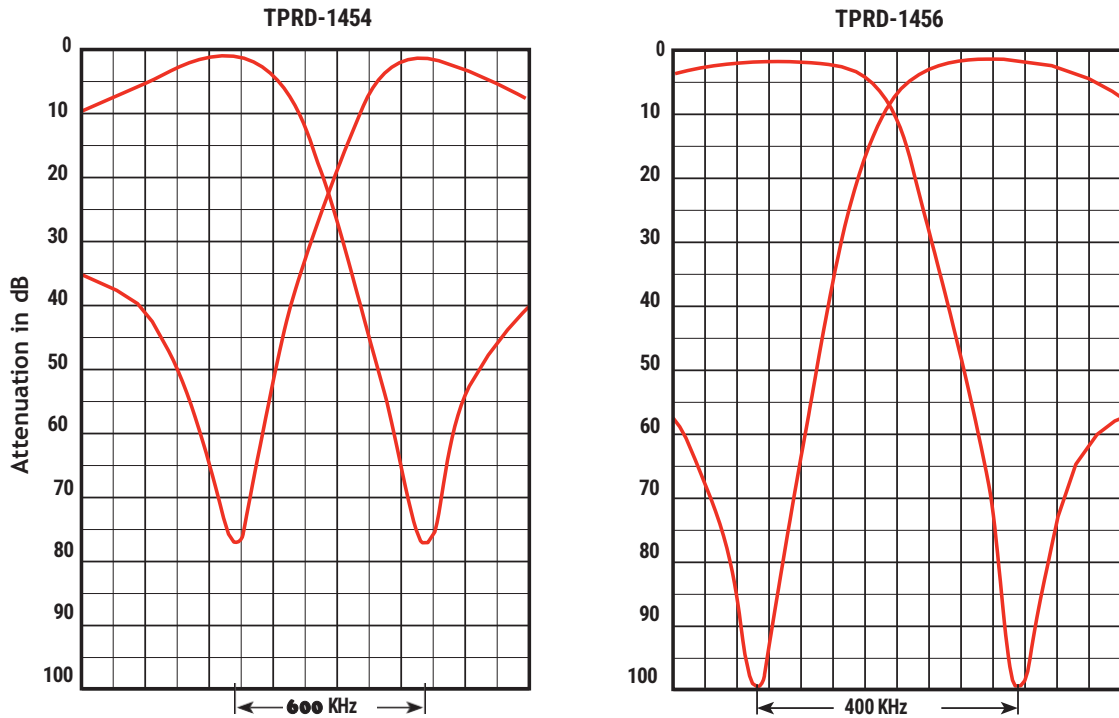
All duplexers are tuned and tested with customer-specified frequencies prior to shipping. If frequency changes are required, the positive locking mechanism allows

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