

Model 600

HF Remote Switchable

Multiband Bandpass Filter



Thank you for choosing a Dunestar Multi-Band Bandpass Filter. With just a few simple connections your new filter system can be placed in operation. The Model 600 operates on 12VDC and requires less than 100-ma maximum. Either positive or negative keying may be used to activate the Model 600. The unit is normally configured for positive keying but is easily changed to negative keying. Keying mode is selected by jumpers on the relay board. Please refer to the accompanying schematic and instructions.

The 600 can be left in-line full time and by-passed when not in use by removing the +12VDC from the unit. A relay automatically by-passes the filter when the power is removed or if a band is NOT selected. This 'failsafe' feature allows use of WARC bands or listening on frequencies outside the available bandpass without swapping coax cables.

Band switching can be accomplished in several ways, depending on your usage: (1) Tracking with your transceiver can be piggy-backed with one of the interface devices currently on the market. (2) Tracking with your remote antenna system switching scheme. (3) A separate rotary switch dedicated to the Model 600. Examples are included which can be adapted to your individual circumstance.

General Specifications:

Insertion : Typical, 0.5-.7db

Rejection: Typical, 40db band-to-band

Bandwidth: VSWR <1.5/1 typical

160M 1.8 - 1.93

80M 3.5 - 3.85

40M 7.0 - 7.30

20M 14.0 - 14.35

15M 21.0 - 21.50

10M 28.0 - 28.70

50 Ohm In and Out , Connectors: UHF

POWER RATINGS:

These filters are intended for use with 200-watt PEP SSB/CW transceivers. This is not to imply a 100% duty cycle. For example, if you were to operate RTTY for two minutes (continuous carrier, 100% duty) as much heating would occur as if you had run SSB speech (without compression, 50% duty) at the same power for roughly twice that length of time, as the average power is less with speech than with a continuous carrier. With speech compression, the average power increases with the amount of compression (60-80% duty) in use. CW average power is roughly comparable to speech.

VSWR CONSIDERATIONS:

VSWR can have a profound effect on the RF voltages and currents appearing in the bandpass filter. Excessive RF voltages and currents lead to component failures. Please remember that automatic antenna tuners correct the mismatch at the TRANSCIVER - not at the load or output end of the filter. The automatic tuner can actually make the stress on the bandpass filter worse. Before applying transmitter power to the filter check the VSWR to the amplifier or antenna(s) on each band and correct any excessive VSWR before transmitting through the filter. In general, the lower the SWR, the less likely you will be to experience difficulties. Every effort should be made to maintain minimum VSWR.

TECHNICAL ASSISTANCE:

If you have difficulty or need additional information please feel free to contact us. Most installation questions can be handled via email or phone call.

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DUNESTAR



OTHER PRODUCTS

Dunestar manufactures several types of RF filters, portable antennas, switching devices and accessories. Please contact us for further information.

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