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

Contact Information:

Phone: 503-397-2918

Email: sales@dunestar.com

Web Page: www.dunestar.com

U.S. Mail: Dunestar Systems
P.O. Box 37
St. Helens, OR 97051

OTHER PRODUCTS

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

DUNESTAR

DUNESTAR

RF Filter Manual

Model 400-HPF

High Pass Filter

400-HPF

Highpass Filter

BC (Broadcast) band attenuation

Thank you for choosing the Dunestar Model 400-HPF High Pass Filter. With just a few steps your new filter system can be placed in operation.

Description:

The 400-HPF is designed to substantially reduce or eliminate interference and front end overload from Broadcast stations in the AM band (500-1600 KHz) to 160M and 80M HF receiver or transceiver. Below 1.8MHz attenuation increases rapidly. Above 1.8MHz insertion losses and attenuation are very small. Frequencies above 4MHz are generally not as severely impacted by BC station overload .

General Information:

The filter is best placed in the receiver antenna path, since there is no need to apply the the filter to the transmitter. Many transceivers have this feature built in. In others, the equipment would require internal modification. The 400-HPF *will* handle transceiver (200W-PEP) output power so it is not strictly required to create a receiver bypass.

Installation:

Installation is straight forward. The coax fittings can be used interchangeably for Input or Output. Depending on your station cables you may note better apparent VSWR one direction or the other. Some variation is expected due to component tolerances and the electrical lengths of the coax lines in the system.

If you have a separate receive path available, use short coax jumpers fit with PL-259 UHF male connectors to mate with the HPF on one end and mates for your transceiver bypass on the other. If you are using the main antenna path and transmiting through the filter you will need a short jumper (with UHF male connectors on each end) to go from the transceiver antenna jack to the filter and the antenna connects to the other filter connector. Hand tighten connectors. Use of pliers is not recommended.

Check VSWR at minimum power levels to be sure that connections are secure before applying full power.

Be sure to provide a good ground system for your station. *It not only helps reduce IMD (intermodulation distortion) problems in your system, it is important for safety.*

Additional data:

The 400-HPF is a 7-pole filter design using high-Q capacitors and inductors in the tuned circuits. The roll off is very steep below 1.8MHz. Minimum attenuation below 1.6MHz is 40dB at 1.0MHz. Insertion loss is typically 0.7-0.9dB above 1.8MHz. Filters are constructed on glass-epoxy PC boards. Standard connectors are UHF female. Other types of connectors are available at additional cost. The enclosure is all aluminum and RF tight.

Dimensions: HWD 2.0 X 6.0 X 2.125 Inches (including mounting flange).

(Note: *If you are interested in IMD control for multi-transmitter operations, such as contesting and Field Day, you may be interested in our multi-band and single-band bandpass filters and other related devices.*)

CAUTION:

The 400-HPF *cannot* be used on high power amplifier outputs.

USE TRANSCEIVER LEVELS ONLY.