PF50

TECHNICAL DATA

Passive Filter with BIAS T

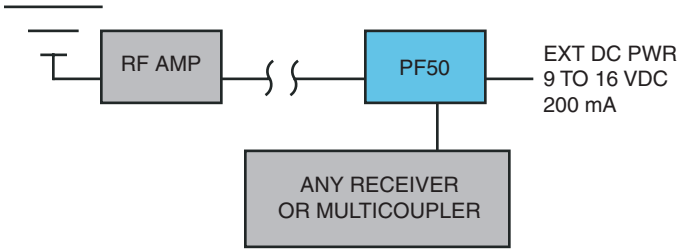
- **Used in high quality receiving antenna systems to suppress interference**
- **Very low loss ceramic resonator filters with 52 MHz BW suppress adjacent RF signals**
- **Passes DC power to antenna amplifier**
- **Blocks DC from entering receiver**
- **Rugged metal housing with standard BNC connectors**

Frequency congestion in today's world has driven wireless manufacturers to develop wideband antenna multicouplers and receivers with broad frequency switching ranges to allow operators to find clear frequencies. This wideband approach, however, also allows more RF noise from nearby channels to enter the receiver, which can reduce operating range significantly.

The PF50 module is a passive filter inserted into a coaxial line ahead of a wideband receiver or multicoupler to suppress noise outside of the desired operating channel. In essence, it provides the same function as front-end filters. The design includes a BIAS T for inserting DC power ("phantom power") onto the coaxial line to power remote antenna amplifiers. DC power can be supplied by an external source connected directly to the filter module or from Lectrosonics Venue Series receivers or the UMC16B multicoupler.

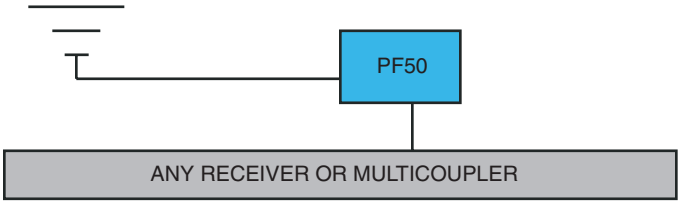
The unit is inserted between a remote antenna and a receiver or multicoupler to provide filtering, with or without DC power.

For long coaxial cable runs using remote antenna amplifiers and any receiver or multicoupler, external DC power is passed on to the remote amp, and blocked from entering the receiver or multicoupler.



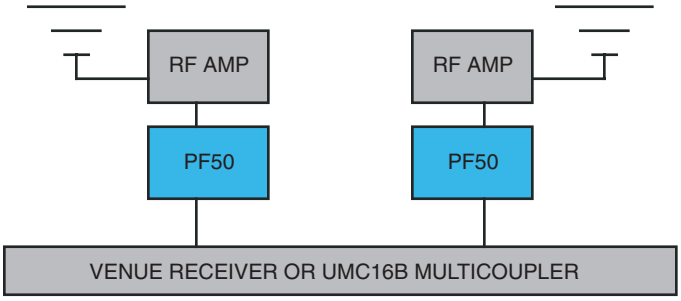
PF50 used for filtering and remote powering

As a basic filter, the unit is simply connected between antenna and receiver.



PF50 used for basic filtering

When used for filtering with a remote antenna RF amp and a Venue Wideband receiver or UMC16B multicoupler, DC power from receiver or multicoupler is passed on to the RF amp. Power is enabled or disabled with jumpers on the receiver and multicoupler circuit boards.



PF50 used for filtering, with remote powering from Lectrosonics Venue or UMC16B

LECTROSONICS®
Rio Rancho, NM, USA
www.lectrosonics.com

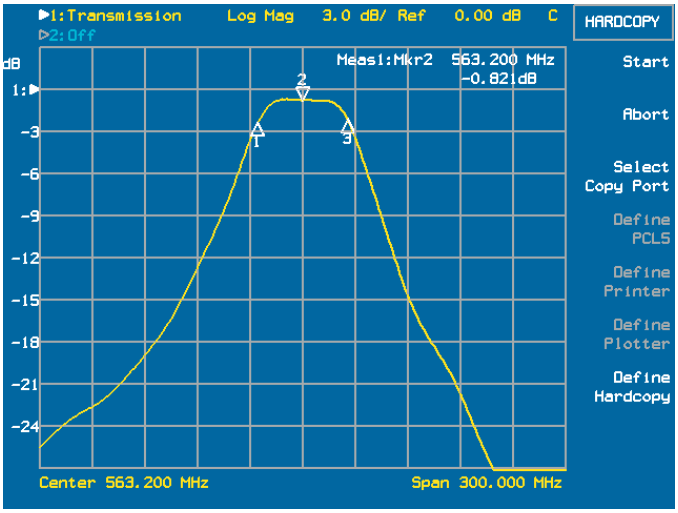
Specifications

Filter type: 2-pole ceramic resonator

Bandwidth: 52 MHz (two Lectrosonics blocks)

Standard frequency blocks:

Block	From	To (MHz)
470-19	470.100	511.900
19-20	486.400	537.500
20-21	512.000	563.100
21-22	537.600	588.700
22-23	563.200	614.300
23-24	588.800	639.900
24-25	614.400	665.500
25-26	640.000	691.100
26-27	665.600	716.700
27-28	691.200	742.300
28-29	716.800	767.900



Filter envelope in UHF TV channel band

BIAS T power capacity: 9 to 16 VDC, 200 mA max.

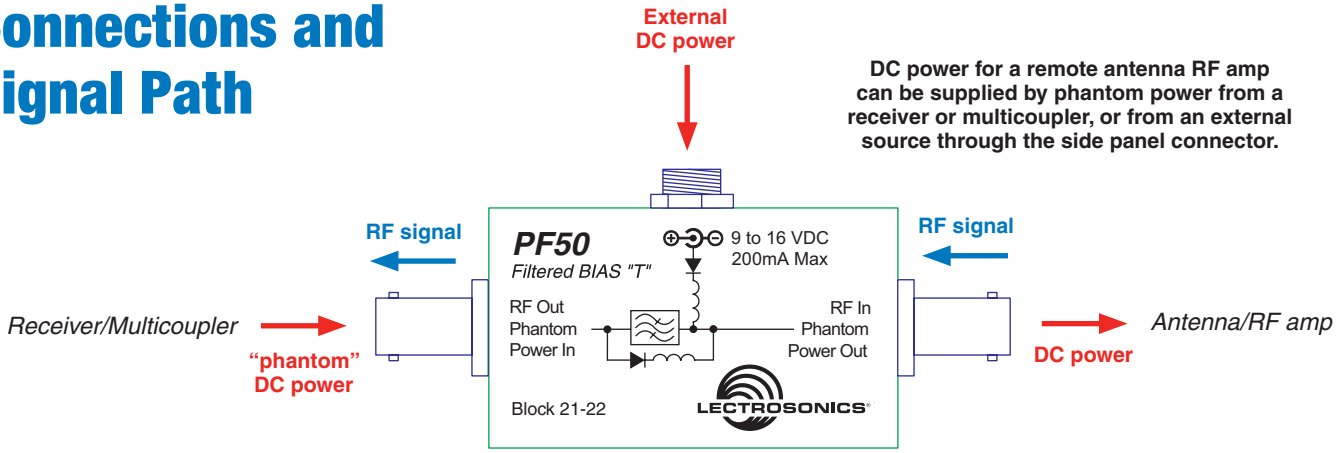
Input: 50 Ohm BNC

Output: 50 Ohm BNC

Dimensions: 3.69 x 1.57 x 1.19 inches
94 x 40 x 30 mm

Weight: 3.6 ozs.
103 grams

Connections and Signal Path



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