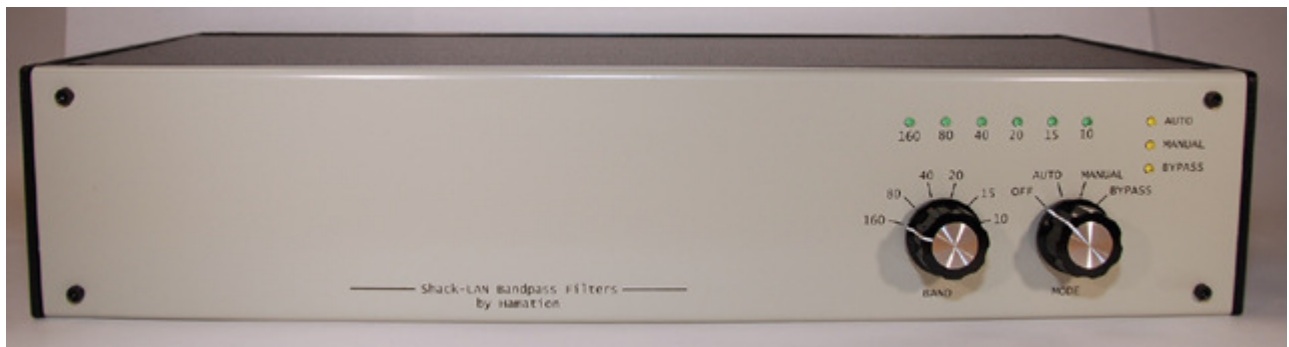




# FilterMax II

*by Hamation*



# Bandpass Filters

## Bandpass Filters - General Information

The ShackLAN Bandpass Filter unit provides bandpass filters for 160, 80, 40, 20, 15, and 10 meters. These filters are almost always required to operate more than one radio from the same location without interference from other stations and to protect receivers from being damaged by excessive signal levels.

The filters can be controlled automatically, manually or remotely. Automatic control is accomplished by selecting Auto with the mode switch. Manual filter selection is enabled by selecting manual with the mode switch. This is the only mode where the BAND switch is activated. Remote control, such as control via a band decoder, can be done using the REMOTE inputs on the rear panel. If you wish to use the remote control feature you must place the MODE switch in the OFF position and apply +12vdc to the REMOTE inputs to select the desired band.

The REMOTE connector can also be used as band decoder outputs for selecting external devices. This type of operation is only available when using the AUTO and MANUAL modes. The connector pin will supply +12vdc for the currently selected band. Pinouts are listed on the installation page.

-0-



# Bandpass Filters - Installation & Configuration

## Power and Network

+12vdc power to the unit is supplied via the 4 pin network connector on the rear panel. The 4 connections, from left to right, are +12, B, A, Ground. Each network device can have its own power supply or all can be powered from a common power source. The data connections, B and A, should be connected to all units on the network. The applied power can be between 12 and 14 volts and the power supply must be able to supply a minimum of 500ma. Power is not required if you plan to only control the unit from a band decoder.

---

## Address

The only configurations required for the Filter unit is to set the Network Address and Radio number. The address is preconfigured at the factory at Address #8. If you need to change the address, set the dip switches to reflect the new address. The switches are weighted 1, 2, 4, 8, 16 for switches 1 to 5, respectively.

| SW1 | SW2 | SW3 | SW4 | Add 16 to address for SW5 = ON |
|-----|-----|-----|-----|--------------------------------|
| 1   | 0   | 0   | 0   | Unit ID #1                     |
| 0   | 1   | 0   | 0   | Unit ID #2                     |
| 1   | 1   | 0   | 0   | Unit ID #3                     |
| 0   | 0   | 1   | 0   | Unit ID #4                     |
| 1   | 0   | 1   | 0   | Unit ID #5                     |
| 0   | 1   | 1   | 0   | Unit ID #6                     |
| 1   | 1   | 1   | 0   | Unit ID #7                     |
| 0   | 0   | 0   | 1   | Unit ID #8                     |
| 1   | 0   | 0   | 1   | Unit ID #9                     |
| 0   | 1   | 0   | 1   | Unit ID #10                    |
| 1   | 1   | 0   | 1   | Unit ID #11                    |
| 0   | 0   | 1   | 1   | Unit ID #12                    |
| 1   | 0   | 1   | 1   | Unit ID #13                    |
| 0   | 1   | 1   | 1   | Unit ID #14                    |
| 1   | 1   | 1   | 1   | Unit ID #15                    |

## Radio Number

The radio number can be set to Radio 1 or Radio 2. This setting is only used when band selection is done via the BandMaster II, 8-Pak software or AntennaMax software. SW6 sets the radio number. OFF = Radio 1 and ON = Radio 2. Factory default is radio 1.

---

## ***Installation***

Connect a length of 50 ohm coax from the antenna jack on your radio to the Input connector on the filters and another length of 50 ohm coax from the Output connector to either your antenna switch or the input of your amplifier.

**WARNING:** The bandpass filters are designed to be installed between your radio and amplifier. If you install the filters on the output of your amplifier, the filters will be destroyed the first time you transmit through them.

---

© Hamation, 2004-2010

Distributed by

**Array Solutions**  
2611 N Belt Line Road  
Suite 109  
Sunnyvale, Texas 75182

214 954 7140  
sales@arraysolutions.com