

# Radioddity LPFX7 User Manual

Radioddity LPFX7 Low Pass Filter is mainly used to suppress transmitter harmonics during transmission and reception. It also provides some pre-selection filtering on receive.

## Warning

1. The filter is designed for the PAX-100 and achieves the best performance with it.
2. When used with other radios or devices, slight degradation of performance can be expected.
3. Working Voltage: 13.8V | Working Current: 0.1- 0.5A
4. Maximum Input Power: 100W for CW, 200W for SSB. Exceeding the rated power levels may cause damage to the filter.
5. Frequency Range: 10M、15M、20M、40M、80M
6. Harmonic suppression:  
10M & 15M、20M、40M > 30db  
80M > 51db

## Operating Guidance

1. Install the filter using the manual. Connection sequence is: G90 to PAX100 to LPFX7 to Antenna. DC power supply: Set the DC voltage to 13.8V output and the maximum current needs to be 20A. Current draw for the filter is under 500ma.

Note: The power cord of LPFX7 can be directly connected to the power cord of G90. Pay attention to the positive and negative poles. Remember your PTT keying line cord from the G90 to PAX100.

2. Power on in the following order: (PAX100 already connected to DC supply)  
Turn on the DC power supply - Turn on G90 (PAX100 will work automatically) - Turn on LPFX7

3. Power and frequency setting

① Set the output power of G90 from is 2-10W

② Set the transmission and reception frequency of G90

③ Select the working frequency band of LPFX7 according to the G90 frequency.

Note: Please set the filter according to the band used on the G90. A mis-match between the G90 operating band and the filter band selected could cause damage to the filter.

LPFX7 frequency band setting reference:

For frequency of 10-15M, press 10-15M button, indicator LED will light up

For frequency of 20M, press 20M button, indicator LED will light up

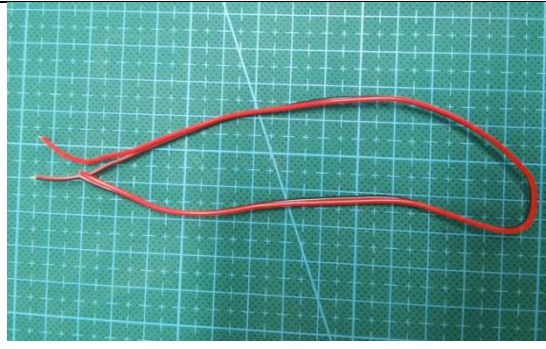
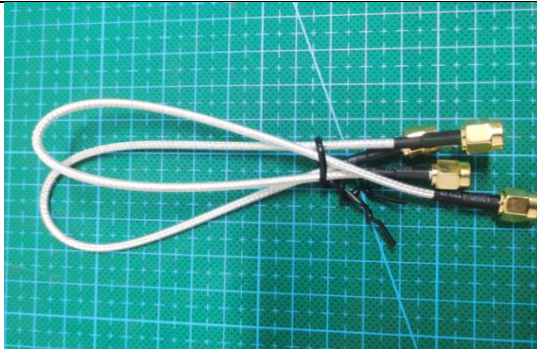
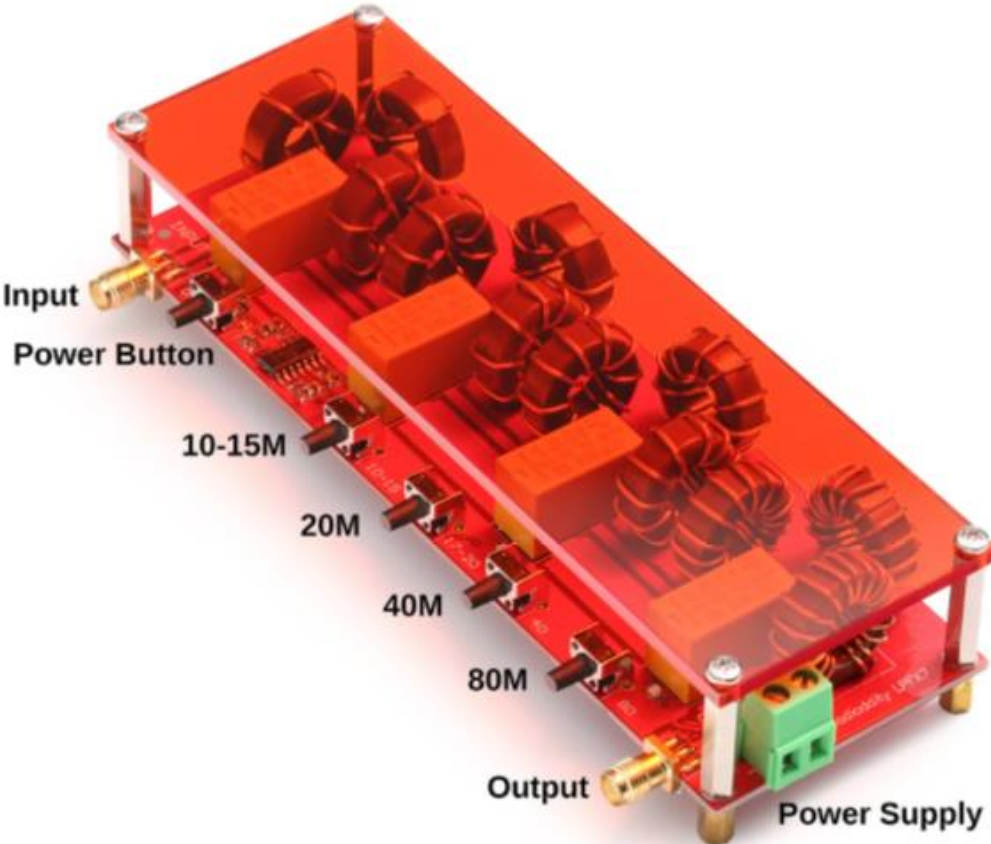
For frequency of 40M, press 40M button, indicator LED will light up

For frequency of 80M, press 80M button, indicator LED will light up

④ When finished setting up as shown above, press the G90 PTT button to transmit.

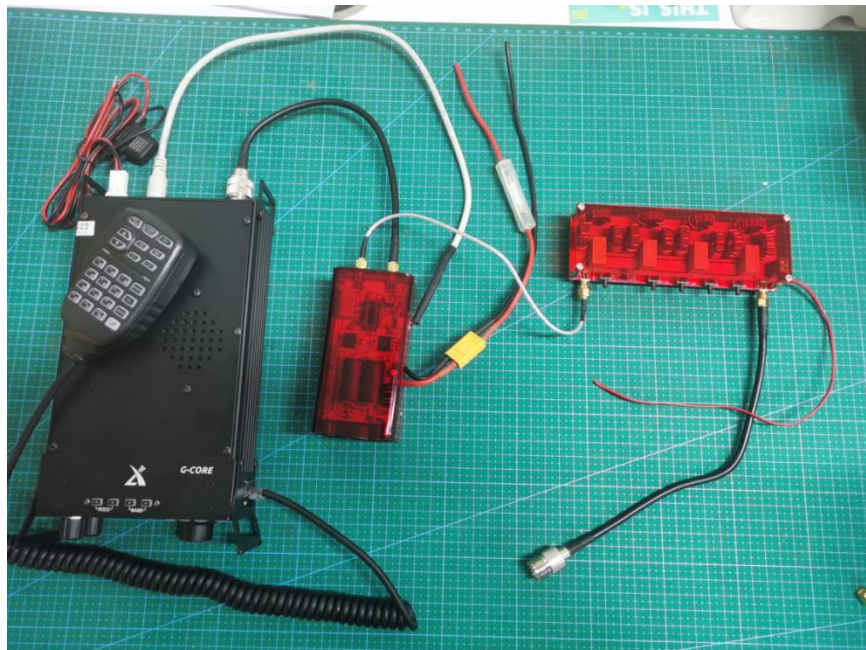
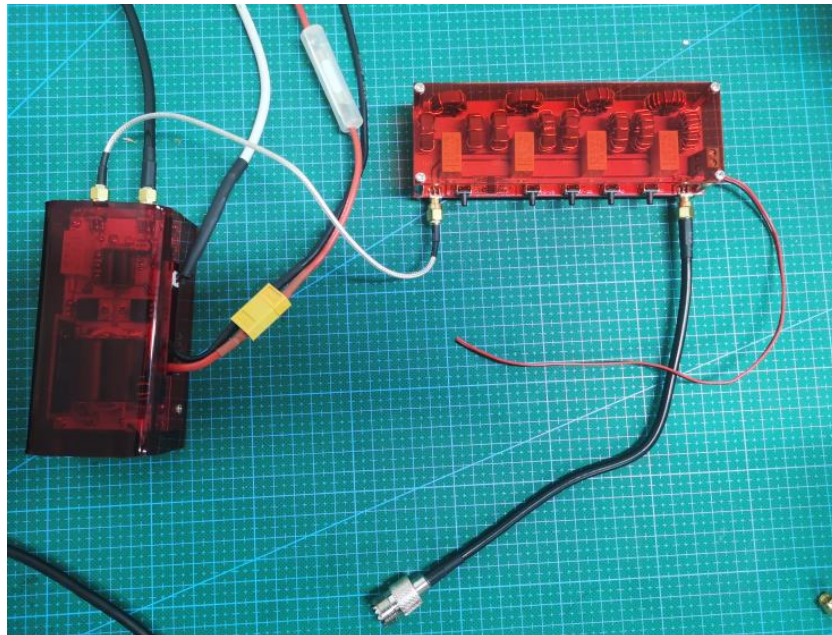
⑤ If you stop using LPFX7, press the power button to turn it off.

## Accessories

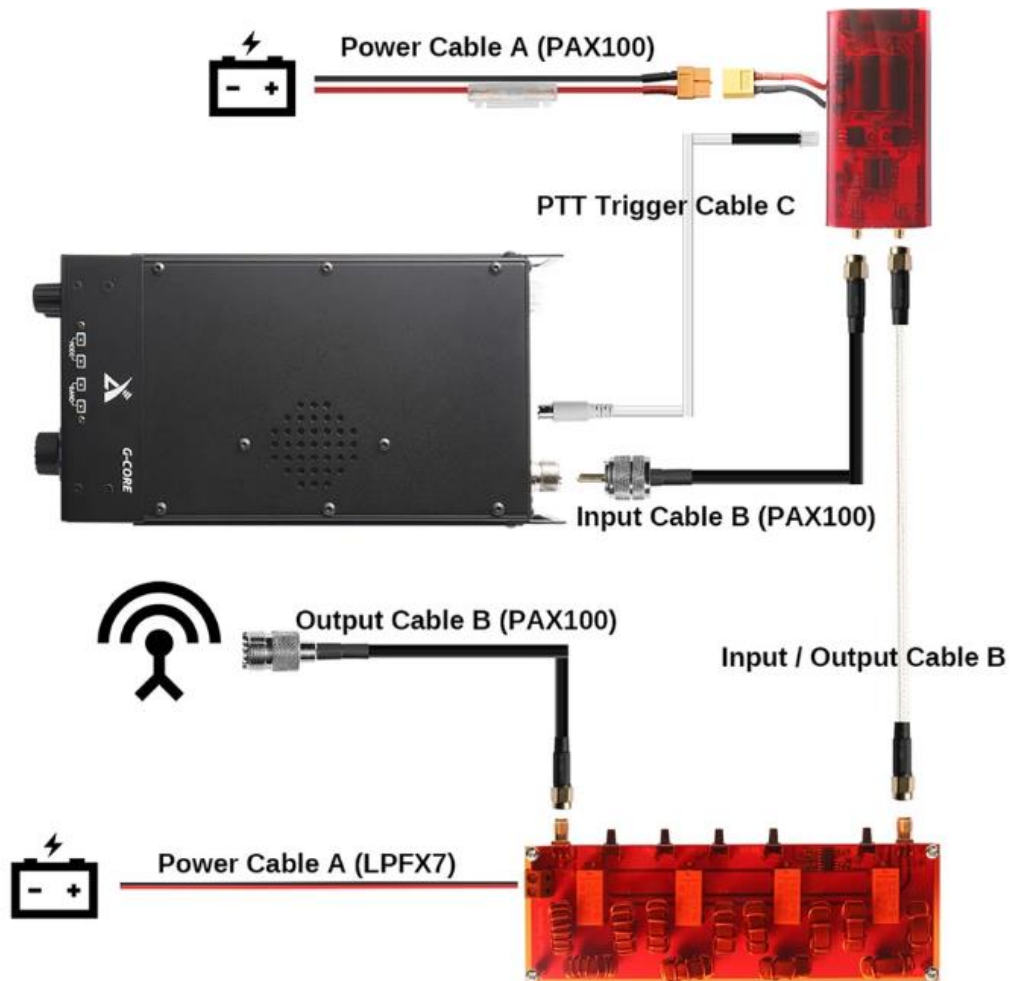
Power Cable A	Input & Output Feeder B
	
Product	
	

## Connecting Guidance

1. The White SMA jumper shown connects the PAX100 Output to the LPFX7 Input
2. The Black jumper with SQ-239 female connector shown is the filter output and is connected to the antenna.
3. The red/black power cable on right is connected to 12VDC.
4. In the lower picture, you can see the longer White PTT control cable connected from the DIN connector on the rear of the G90 to the PTT connection on the PAX-100



## Overall Installation



## Specifications

Frequency Range: 10M, 15M, 20M, 40M, 80M

Input Power: 100W CW, 200W SSB

Filter Structure: Elliptic filter

Filter Order: 7<sup>th</sup> order

Harmonic suppression: >30dB

Input & Output Connectors: SMA-K

Power supply voltage: 12V-16V

Working current: 100ma

Size: L150mm, W50mm, H20mm

Weight: 190G

Working temperature: -15°C ~ 55°C

Storage temperature: -30°C ~ 75°C