

# L-202/PCB VLF Preamplifier

## Product Warranty

LF Engineering Co. warrants that, at the time of shipment the products manufactured by LF Engineering Co. are free from defects in material and workmanship. LF Engineering Co. obligation under this warranty is limited to replacement or repair of such products within 1 year from the date of shipment.

For sales or return authorization, contact LF Engineering Co. at (860) 526-4759. For technical support call (203) 467-3590.

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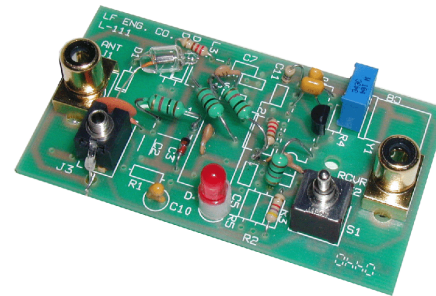
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LF Engineering Co.  
17 Jeffry Road  
East Haven, CT 06513

# L-202/PCB VLF Preamplifier

The L-202/PCB (printed circuit board) fixed tuned preamplifier is a 28 dB gain amplifier and filter combination designed to improve your present receiver or converter's VLF and LF reception.

The unique design with a sharp roll off filter cleans up broadcast inter-modulation, reduces noise, and boosts gain throughout the entire LF spectrum. 10 kHz to 520 kHz broadband coverage with adjustable gain eliminates the need for an external antenna tuner. The L-202 is designed for use with typical 50 foot SWL wire antennas.



## Features

- Broadband coverage, 10 kHz to 520 kHz (no tuning)
- Adjustable gain up to 28 dB (trim pot).
- 8 dBm max. power output.
- LED power indicator.
- Antenna returned to the receiver in the off position.
- External 120 VAC / 12 VDC supply included.
- L-202/PCB easily mounted inside receiver or antenna.

## L-202/PCB Specifications

PC Board Size	3-1/16" L x 1-11/16" W
Filter Rejection	>40 dB in AM BC passband and higher
Gain	28 dB (Adjustable)
Pass Band	10 to 520 kHz $\pm$ 4 dB
Max. (linear) Output Power	10 to 520 kHz $\pm$ 4 dB
Output Impedance	50 - 75 ohms
Input Impedance	2k ohms
Input/Output Jacks	RCA
DC Power (optional)	12 - 15 VDC, 30 - 40 mA
AC Power Supply	120 VAC / 12 VDC power pack with 2.5 mm plug

## Introduction:

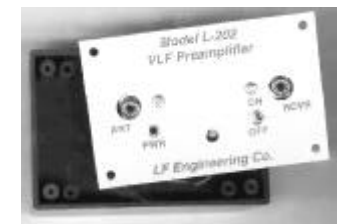
The L-202 broadband VLF preamplifier is designed ideally for SWL long wire antennas between 40 and 70 feet in length. A wide band linear device is used to insure low noise and ample gain throughout the spectrum.

The preamplifier can be used to match long wire antennas to 50 ohm converters and eliminates the need of an LF tuner.

Static discharge protection is provided at the (ANT) input for moderate discharges (short of direct lightning strikes).

## Power

The L-202/PCB is powered by user supplied 12 - 15 VDC power source. Connect power to the 2.5 mm jack located on the PC board. An optional 120 VAC / 12VDC factory power supply may be used.  
*Order Part Number: PS12, \$9.00, post paid.*



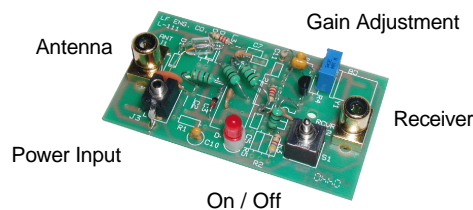
## Optional L-202 Cabinet

Designed specifically for the L-202/PCB, the cabinet kit comes with pre-drilled and printed panel, plus all necessary spacers and mounting hardware. Cabinet Size: 4-1/8" x 3-3/8".  
*Order Part Number: L-202/CBT, \$20.00, post paid.*

## Installation:

Connect the VLF preamplifier (RCVR) RCA jack output to your existing converter or LF receiver's input with coax or shielded cable. Connect your receiving antenna to the (ANT) RCA jack input on the preamplifier.

Gain is factory set nominally at 8 dB. You can adjust this level with the gain control located on the PC board. Use a small screwdriver or alignment tool.



## How to Get the Most Out Of Your VLF Preamplifier:

1. Front end overload and or intermodulation caused by strong low frequency signals, or use of an antenna greater than 100 feet can be controlled by reducing the gain level on the preamplifier and the RF gain control on your receiver. A series tuned LC circuit in series with the antenna at the input of the preamplifier will also help control overload.
2. Noise from light dimmers and other man made EMI will be reduced using the preamplifier. The factory adjusted gain setting is optimum when using a 40 to 70 foot antenna.
3. Connect the antenna directly to the antenna input. Do not use long lengths of grounded coaxial cable (6 feet or less).

