

# L-202B 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.  
LF Engineering E-mail address: sales@lfengineering.com

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

# L-202B VLF Preamplifier

The L-202B fixed tuned preamplifier is an 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-202B is designed for use with typical 50 foot SWL wire antennas.



## Features

- Broadband coverage, 10 kHz to 520 kHz (no tuning necessary)
- Adjustable gain 28 dB max.
- 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-202B Specifications

Size:	4.19"L x 2.74"W x 1.57"H
Filter Rejection:	>40 dB in AM BC passband and higher
Gain:	28 dB maximum (adjustable)
Pass Band:	10 to 520 kHz $\pm$ 4 dB
Max. (linear) Output Power:	8 dBm
Output Impedance:	50 - 75 ohms
Input Impedance:	2k ohms
Input/Output Jacks:	RCA
DC Power:	12 - 15 vdc, 30 - 40 mA.
AC Power:	120 vac / 12 vdc external power pack with 2.5 mm plug

## Introduction:

The L-202B 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 L-202B can be used to match long wire antennas to 50 ohm converters and eliminates the need of an LF tuner.

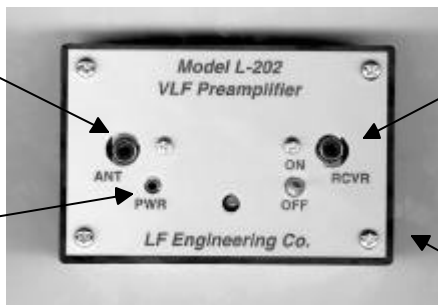
Static discharge protection is provided at the (ANT) input for moderate discharges (short of direct lightning strikes).



The 120 vac / 12 vdc power supply plugs into the 2.5 mm jack located on the front panel.

RCA 2k ohm  
Antenna Input

2.5 mm  
mono jack  
12-15 vdc



RCA 50 ohm  
Output to  
Receiver

Trim Pot  
adjustment  
on PC board  
(inside)

## 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 L-202B VLF Preamplifier:

1. Front end overload and or inter-modulation 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 L-202 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 L-202B. 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).

