

## MODEL XO-4©/XO-4T© (1995-MSRP \$275.00)

# OWNER'S MANUAL AND INSTALLATION GUIDE

With the increasing popularity of four channel head units that use digital signal processing for concert hall effects, there is a greater need than ever for a single crossover unit to process front and rear channel signals independently. The **XO-4**<sup>©</sup> meets this need as a two-way, four channel crossover with fade-thru capability. One of the main benefits achieved by using the **XO-4**<sup>©</sup> in place of multiple two way crossovers for front and rear is that with the **XO-4**<sup>©</sup>, the subwoofer level remains constant regardless of where the fader control on the head unit is set. In simple terms, this means that you won't lose your subwoofer if you want to fade between front and rear. The unit is switchable for either four channel, or two channel operation for use with head units that have only one pair of low level outputs. The subwoofer outputs are also switchable for stereo or bridged mono operation. The crossover points for all channels are continuously variable and the output levels for front, rear, and sub channels can be set independently. Each crossover point control is recessed behind the front panel, thus avoiding accidental adjustments that would mean potential damage to individual drivers. Each output is buffered so that signal losses are extremely low. This unit is available in a I/2 DIN dash mount chassis as well as in a low profile trunk mount unit.

1. **2 Channel - 4 Channel Switch:** May be switched depending on outputs available from head unit. Will accept both front and rear inputs in 4 channel position or if only one pair of stereo inputs are available the switch can be set in the 2 channel position and the **XO-4**<sup>©</sup> will still have all outputs.

2. Stereo - Mono Switch: Inverts the low pass right channel output for use as a bridging module when switch is in the Mono position (for current LINEAR POWER™ amplifiers use stereo position).

3. Red wire: +12 volt constant source (battery).

4. **Black wire:** Ground should be connected to either where source is grounded or where amplifiers are mounted depending on mounting.

5. **Red/white wire:** Remote turn on lead from radio (or power antenna lead) +12 volts.

6. Set crossover frequency where it sounds best for each output.

7. **Inputs from source:** If you only have one input select either front or rear inputs and set 2 channel - 4 channel switch to the 2 channel position. With front and rear inputs select 4 channel position and use the correct inputs.

8. Front output- high pass to front channel amplifier.

9. Rear output- high pass to rear channel amplifier.

10. Sub output- low pass to subwoofer amplifier.

11. Each output has a control labeled "level" and is used to attenuate the signal for a more balanced sound.

#### TROUBLESHOOTING

- 1. Check all connections.
- 2. Check level settings.
- 3. Check switch positions.

**No Sound:** Check all signal connections. Check that the power indicator is on. Check for +12Vdc on **bat** and **rem** wires. Check the **gnd** wire connection. Bypass the **XO-4**<sup>©</sup> and check for signal output.

**Blows Fuses:** Check all connections to be sure all power wires do not touch ground or each other.

**Noise Problems:** Be sure the metal sleeve on the RCA (phono) jacks does not touch the metal chassis of the vehicle, the chassis of the **XO-4**©, or the chassis of any other components in your installation. Route signal cables away from power wires, power connectors, speaker wires, engine alternator, and vehicle firewall.

#### SERVICE OR REPAIR

To obtain modification, service or repair, please contact our ONLY Authorized LINEAR POWER™ Product Service Center:

**T.I.P.S. INC.** 3455 Lanell lane, Pearl, MS 39208 (601) 932-8477 E-mail: <u>ray@tipsinc.net</u>

# **Specifications**

### Model XO-4©/XO-4T©

Crossover Type- 12dB/Octave Butterworth

Frequency Response- 10/100KHz

Signal to Noise- >100dB 'A' Weighted

Maximum Voltage Gain- 2dB

THD- .005%

Channel Separation- >70dB w/10k Source Impedance (typ.)

Rise Time- 10V/microsec

Input Impedance- 100k ohms

Output Impedance- 180 ohms

