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# LINEAR POWER

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**MODEL 992IQ**  
**(1995-MSRP \$349.00)**

## **OWNER'S MANUAL AND INSTALLATION GUIDE**

### **INTRODUCTION**

Latest technology, high sound quality, powerful delivery, and **LINEAR POWER** reliability all describe **LINEAR POWER** low profile amplifiers. With new "IQ" circuitry, their value increases. Versatile capabilities such as stereo, mono or mixed stereo/mono operation and 2 ohm capability make these amplifiers extremely desirable as the foundation of a multi-amplifier system.

### **TECHNICAL DESCRIPTION**

The "IQ" series amplifiers are low profile inverted channel ("I") amplifiers. A quiet turn on circuit ("Q") has been added for improved performance. The amplifier design incorporates an unregulated power supply for increased dynamic headroom efficiency. The output stages of the **992IQ** amplifier will deliver a significant increase in power into 2-ohm stereo loads. Amplifier reliability is accomplished by the amplifier operation level being set at approximately 50% of output transistors' rated power handling, even at this lower impedance load.

### **WIRING**

Disconnect battery ground cable before making any power connections.

**RED WIRE:** +12 volts. Connect directly to battery positive terminal and should be fused within 18 inches of battery and another fuse where the connection to the amplifier is made. Remember to use the proper size fuses. **WARNING: USING OVERSIZED FUSES IS DANGEROUS AND WILL VOID THE WARRANTY!** See specifications for proper fuse size.

**BLACK WIRE:** negative ground. Connect to clean, unpainted metal surface on car chassis.

**RED/WHITE WIRE:** Remote turn on lead requires 12 volts; connect to power antenna lead from radio. When this not available, you may connect to a +12 volts wire that is on with the ignition on or in the accessory position.

**RCA CONNECTIONS:** Connect with quality-shielded patch cords from source, crossover, or any other sound processor.

**SPEAKER CONNECTIONS:** Slide wire into plug, with wires going down from plug connections should be as follows: (From Left to Right): first slot Left (-), second slot Left (+), Third slot Right (-) and fourth slot Right (+). For mono operation use Left (+) and Right (-). These amplifiers are capable of 2-ohm operation in stereo or 4 ohms in mono.

**OPERATING THE AMPLIFIER AT LESS THAN THESE RATINGS WILL CAUSE AMPLIFIER FAILURE AND VOID YOUR WARRANTY.**

### **BRIDGED MONO OPERATION**

The **Model 992IQ** is built with the right channel inverted. This allows the amplifier to be used in a bridged mono configuration, as well as, a mixed mono/stereo operation.

These amplifiers are capable of driving 2-ohm mono loads (**\*\*4 ohm speaker impedance\*\***). To use these amplifiers in that configuration, the internal taps **must** be changed. Removing the faceplate and changing the spade connectors from the '4' setting to the '2' setting accomplish this.

#### **The wiring for the bridged mono mode is as follows:**

With the connector end of the amplifier facing you, top side up, the speaker terminal block is arranged: **LEFT (-); LEFT (+); RIGHT (-); RIGHT (+)**. The mono mode uses the **LEFT (+)** and **RIGHT (-)** connections. An electronic crossover, such as the **XO3**, should be used to limit the frequency range to the input of the amplifier for best results.

### **TWO-OHM CAPABILITY**

Unplug the two jumper wires near the four large filter capacitors from the lugs marked 4 ohm and press them firmly back onto lugs marked 2 ohm. This will allow the amplifier to operate into a 2-ohm load on each channel, or a 4-ohm load when used in bridged mono mode (**\*\*see statement above\*\***). The lugs are marked "**2**" for 2-ohm stereo or 4 ohm bridged, and marked "**4**" for 4-ohm stereo and 8 ohm bridged.

## **GAIN ADJUSTMENT**

Set the amp gain to minimum, turn the source up until it just starts to distort, then back down slightly. This is the point where the output of the source is cleanest. Now adjust the amplifier gain up until it just starts to distort and back down slightly. This will allow the source and amp to reach maximum usable output at the same time.

## **MOUNTING**

1. The amplifier will work best if it is kept as cool as possible. Mount in a position that allows air to flow freely through the fins. Be sure there is ample space above the amplifier to avoid trapping heated air rising from the amplifier. The amplifier should not be mounted upside down. Avoid mounting any amplifier in the dash or on the firewall to avoid noises being radiated directly into the case.

2. The case of your amplifier is designed to act as a noise shield. To maintain this protection, be sure the metal case of the amp does not touch the metal of the car. Do not remove or damage the rubber grommets, which provide electrical insulation and vibration isolation.

## **GENERAL TROUBLESHOOTING**

### **NO SOUND**

Check all connections. Check main power fuse. Check accessory fuse of your vehicle. Check to see that +12Vdc is present at the amplifier on the power wire, and on the red/white remote turn-on wire. Check for a solid ground connection. Check that the main music source is putting out signal.

### **BLOWS FUSES**

Check all connections to be sure no wires are touching each other or the chassis of the vehicle or any other equipment in your install. Check that your speakers are in proper working order.

### **SHUTS OFF**

These amplifiers are equipped with a Thermal Shutdown System. If the amplifier becomes too hot during operation, it will shutdown until it cools to proper operating temperature. This can be caused by lack of proper air circulation to the amp, or too low of speaker impedance.

# Specifications

## 992IQ

	992IQ
<b>Power output @ 4 ohms RMS @ 12.5 volts</b>	<b>50X2</b>
<b>THD @ full output 20-20KHz</b>	<b>.08%</b>
<b>Slew Rate volts/microsecond</b>	<b>8Vms</b>
<b>Damping factor @ 4 ohms</b>	<b>&gt;100</b>
<b>Channel separation</b>	<b>70dB</b>
<b>Maximum current</b>	
4 ohms	<b>12A</b>
2 ohms	<b>16A</b>
Idle	<b>.7A</b>
<b>Fuse rating (12 Volt Power Feed)</b>	<b>20A</b>
<b>Dimensions</b>	<b>2x7.7x7.5</b>