



1588

Congratulations on your selection of the 1588 loudspeaker. As the big brother of the 3-way 1584, the 1588 Loudspeaker benefits from the same state-of-the-art design and response characteristics, but with one obvious difference—it has twice the size, with twice the components. This translates into an obvious benefit—much more sound output and power with the same extraordinary response as the smaller version. In fact, there isn't any application that this 800 watt 3-way system can't handle, tackling anything from large clubs to outdoor concerts. Like the smaller 1584, the 1588 gives you what other 3-way loudspeakers don't—studio quality sound in large sound reinforcement applications.

The low frequency subsystem of the 1588 utilizes two heavy-duty 15" woofers, chosen for their extended bass response at high levels. The midrange employs two 8" direct radiating midrange drivers, for their exceptionally smooth and extended frequency response. The high frequency consists of one highly accurate titanium horn driver and lens assembly. All components are integrated with our 3-way C1588 crossover to deliver a system response that is smooth from 34 Hz to 19k Hz. Bi-amping can easily be done by selecting the bi-amp switch and input connectors.

RECEIVING INSPECTION

INSPECT YOUR SPEAKER FOR ANY DAMAGE which may have occurred during shipping. If any damage is found, please notify the shipping company & CARVIN.

SAVE THE CARTON & ALL PACKING MATERIALS. In the event you have to re-ship your unit, always use the original carton and packing material. This will provide the best possible protection during shipment. CARVIN and the shipping company are not liable for any damage caused by improper packing.

SAVE YOUR INVOICE. It will be required for warranty service if needed in the future.

SHIPMENT SHORTAGE. If you find items missing, they may have been shipped separately. Please allow several days for the rest of your order to arrive before inquiring.

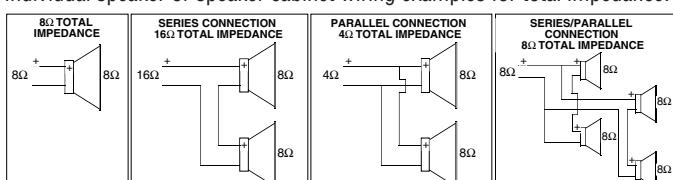
RECORD THE SERIAL NUMBER on the enclosed warranty card. Keep your portion of the card and return the portion with your name and comments to us.

WARRANTY

Parts and labor are covered for 1 year on manufacturer's defects. Warranty does not cover burned out drivers caused by excessive power or distortion, or physical damage caused by general use, moisture or dust. CAUTION: Distortion from power amps can destroy drivers much faster than clean power. Contact Carvin's Customer Service at 800-854-2235 or returnsrepairs@carvin.com. Customer is responsible for shipping charges.

TYPICAL LOUDSPEAKER IMPEDANCE CONFIGURATIONS

Individual speaker or speaker cabinet wiring examples for total impedance.



For your records, you may wish to record the following information.

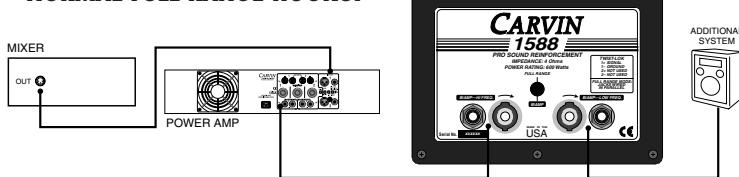
Serial No. _____ Invoice Date _____
76-01588 0902

See other side for SPS™ Powered Speaker operation

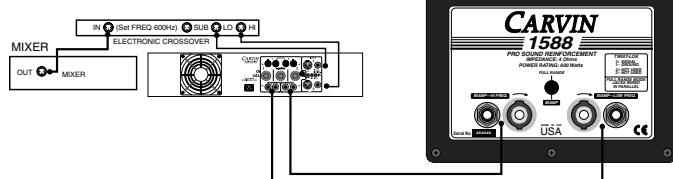
REAR CONNECT PLATE

Two standard 1/4" phone jacks and two Twist Lok™ connectors are featured. See hookup diagrams for full range and biamp options.

NORMAL FULL RANGE HOOKUP



BI-AMP HOOKUP

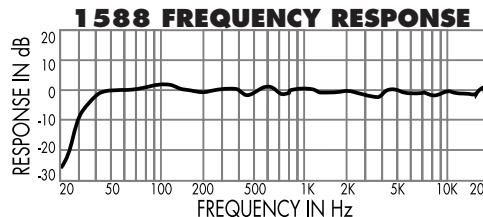


SPEAKER CABLES

Use either 1/4" 16 gauge copper wire speaker cable or high-current Twist-Lok™ cables with heavy 4 conductor 12 gauge copper wire. The Carvin PH50 is adequate for lengths up to 50' under normal use. You can DAISY-CHAIN up to one additional speaker per cable by using the OUTPUT connector. Be sure to note the total impedance to the amp so it is not lower than it's recommended impedance. See *Typical Loudspeaker Impedance Configurations*.

SUGGESTIONS FOR OPTIMAL PERFORMANCE

Raise the enclosure to the ear level of your audience for greater coverage. To help control feedback, keep the speakers in front of the microphone. Never direct the microphone towards the speaker. Use a graphic EQ for further feedback control. For greater coverage, add a second speaker system 20° to 30° off axis.



MODEL 1588 SPEAKER SYSTEM SPECS:

Frequency Response: 45 Hz to 19 kHz ± 3 dB

Useable Low Frequency: 34 Hz (-10 dB)

Power Handling: 800w Continuous Power

Recommended Amp: 100 to 1200 watts

Sensitivity: 103 dB SPL, 1 Watt @ 1 meter

Coverage Angles: 90° Horizontal, 45° Vertical

Nominal Impedance: 4Ω

Crossover Type: C1588 Constant Voltage

Inputs/Outputs: Two 1/4", two Twist-Lok™

Bi-Amp Support: Yes—Panel Switch

Horn Driver Protection: Yes—Relay Dimming

Woofe Enclosure Type: Vented Box

Enclosure Covering: Black Duratuff II™

Dim/Wt: 25" W x 19.25" D x 48.5" H, 124 lbs.

Optional Cables: PH50, SPK25, SPK50, SPK100

Optional Vinyl Cover: CVS1588

CARVIN

12340 World Trade Drive, San Diego, CA 92128

(800) 854-2235

www.carvin.com



1588P POWERED SPEAKER

INSTRUCTIONS



Read general information about the 1588 enclosure for specs, warranty and precautions on the other side.

SPS™ POWERED SPEAKER FEATURES

Carvin's SPS™ SMART POWERED SPEAKERS™ are more than just another "power amp in a cabinet". They offer advanced electronics to perfectly control every speaker component. Woofers are power-managed through active filtering, allowing more low-end punch and preventing over excursion. Midrange drivers reproduce exceptional detail without harshness, and the top-end is crystal clear. The exclusive optoisolator limiter helps keep your peaks under control reducing distortion. Surprising transparency is delivered by pure, uncolored power from ultra-fast slew rate power amps.

The heart of every Carvin SPS™ powered speaker is our exclusive Digital Powered Processing Amplifier (DPPA™), which is fundamentally, a very sophisticated delta-sigma V/A converter. The amplifier's THD is less than .1% from 20-20k Hz. The 1588P SPS™ offers 600 watts direct to the drivers with no cable loss. SPS™ powered speakers have an incredible 91% efficiency allowing you to run more powered speakers from the same 15 or 20 amp AC circuit. They run cool because power is not wasted into the heat sink. This also means you can expect full output 24 hours continuously - not reduced as with other systems when they get hot. Of course, mute and protection circuits are standard to save your gear from any unfriendly stage conditions. The biggest advantage of Carvin powered speakers is rock-solid reliability and convenience while only adding 6 lbs over the weight of our standard enclosures!

SMART POWERED SPEAKERS™ are easy to connect via a 1/4" or XLR balanced inputs. Daisy-chain as many powered speakers as you need for additional coverage. A 12 dB gain switch matches every audio source. A removable AC cord frees the enclosure when transporting.

INPUT

For any distance over 25', use a balanced source. Use the balanced XLR or 1/4" connectors featured on the rear connect plate. You may DAISY-CHAIN as many speakers as you wish. All connectors are wired in parallel.

12dB PAD

To start the initial hook up, be sure the 12dB pad switch is in the "IN" position. This will be the least sensitive position for your input source. If your signal is weak, depress the Pad switch to the "OUT" position, which will raise the level of your powered speaker.

SOFT LIMITING

Unlike other limiters, the SPS™ incorporates an exclusive optoisolator limiter system, which does not add distortion when limiting. Soft limiting starts to occur when you approach the maximum output of your powered speaker allowing you to get more usable power out of your system without severe clipping. However, when you hear distortion, hard clipping or cutting out, reduce the overall level as you have exceeded the system's capacity.

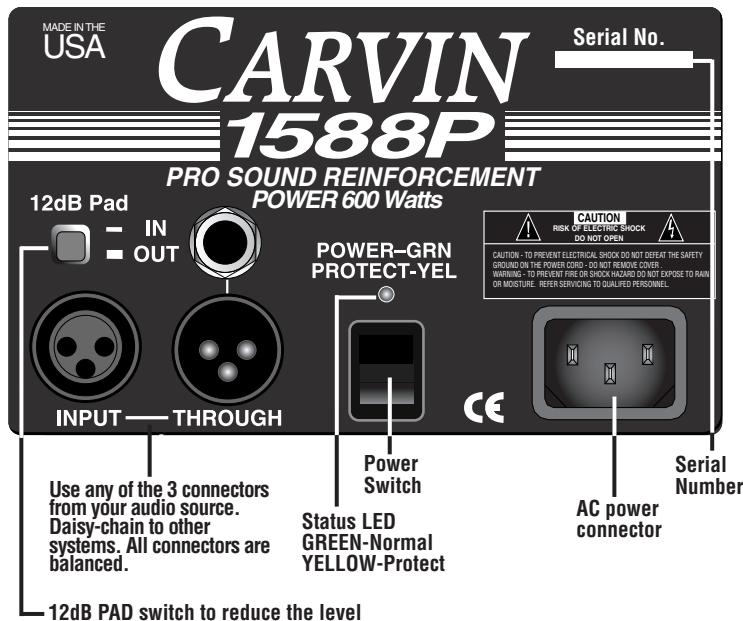
POWER/PROTECT

When the system has been activated by the power switch, the LED will indicate GREEN. If the system should go into protect, the LED will indicate YELLOW which may occur if; a) one of the internal drivers short or b) if the power amp should require service.

AC POWER

The 1588P is available in either 120V or 240V models. Always use dedicated circuits for powered speakers. Every Carvin SPS™ powered speaker is designed to be left on continuously in the case of permanent installations.

REAR POWERED CONNECT PLATE



12dB PAD switch to reduce the level

SPS™ 1588P POWERED AMP SPECS

Frequency Response:	20 Hz to 20 kHz ± 1 dB
THD:	less than .1%
Power:	600 watts @ 4 Ω
Duty Cycle:	Continuous without power reduction circuits
Sensitivity:	.75VAC for full output, 12 dB pad
Input/Through:	XLR & 1/4" Balanced
Input Impedance:	10k Ω , (for 100 to 600 Ω inputs)
Input Common Mode Rejection:	72 dB @ 1 kHz
Overload Protection:	Yes
AC Power Muting:	Yes
Power Supply:	Toroid Design
Power Amp Design:	High Slew Rate Digital DPPA™
Power Amp Efficiency:	91%
AC Voltage, VA:	120 or 240 VAC models, 800VA
Idle VA:	15VA
AC Connection:	3 prong connector (grounded)
AC Power Cable:	16 Ga (heavier for long runs)
Wt:	131 lbs.