BOSE®

PANARAY®

SOUND SYSTEM

CVT-5 CONSTANT

**VOLTAGE** 

**TRANSFORMER** 



OWNER'S GUIDE

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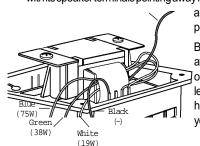
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# CVT-5 Constant Voltage Transformer For The Panaray 502 A Controlled Array

Thankyou for purchasing the Bose \* CVT-5 Constant Voltage Transformer for the Panaray 502A Controlled Array. The CVT-5 is an integral, factory-designed 70/100V transformer engineered for quick installation on the 502A array. The transformer handles up to 150W of power (infour different taps) to accommodate a variety of distributed voice-only application requirements. The compact, custom molded enclosure of the CVT-5 attaches flush to the rear of the 502A array. This provides an aesthetic advantage and a good fit when you use the CVT-5 transformer in conjunction with Bose Panaray mounting accessories.

# Before You Begin...

The transformer's symmetrical housing allows you to attach the CVT-5 with its speaker terminals pointing away from or toward the 502A

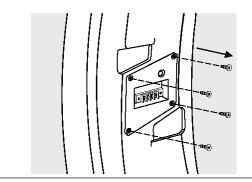


array's four rear attachment points (Figure 1).

Before making the attachment, consider which orientation requires the least speaker cable. That may help you decide the orientation you prefer.

# Attaching The CVT-5 Transformer To The 502°A Array

- Use a Phillips head screwdriver to remove the four screws that secure the connector plate to the rear of the 502A array (Figure 2).
- Use a small slot screwdriver to carefully pry the connector away from the rear baffle. Pull it out a short distance (Figure 3).
- Use wire cutters to cut the two wires near the solder terminals on the inside of the connector panel (Figure 3). Put the panel aside.
- Strip ½" (12 mm) of insulation from the end of the two wires inside the 502A array.





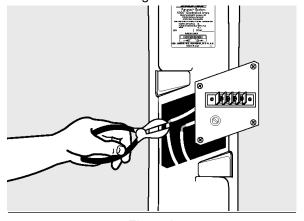


Figure 3

 A Identify the positive output lead from the trans-former according to the system's power require-ments (see table below). That lead's power rating indicates where you will "tap" the transformer.

Red	150W
Blue	75W
Green	38W
White	19W

- B. Pull the cutaway tip of the insulation off that lead.
- C. Clip the three unused leads off at the transformer windings (Figure 4a).
- D. Connect the positive lead, which is hanging loose, to the red wire inside the array (Figure 4b).
- E. Connect the black wire on the CVT-5 transformer to the black wire inside the array.

**Note:** Soldering and insulating with electrical tape is the method Bose\* recommends for connecting wires. Using a small crimp-type butt splicer is also acceptable.

We do not recommend wire nuts, terminal blocks, or similar solderless devices, which could rattle inside the 502°A array or touch the rear of one of the driver cones during use of the system.

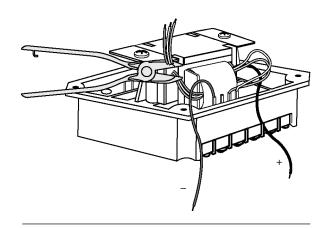


Figure 4a

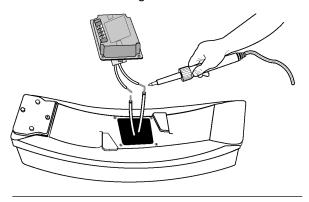


Figure 4b

- 6. Press the CVT-5 transformer housing down into the flange in the orientation you prefer.
- Use the four screws removed from the connector plate to secure the CVT-5 to the array (Figure 5).

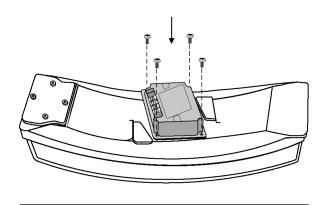


Figure 5

#### **Electrical Connections**

Notice the arrangement of terminals on the back of the CVT-5 transformer housing (Figure 6).

 For 70V systems, connect the positive or hot speaker lead coming from the amplifier to the terminal labeled +70V. For100V systems, connect the positive lead to the terminal labeled +100V.





Figure 6

- Connect the ground or negative lead to the terminal labeled GND. Do not use the terminal marked N/C, which has no function.
- For parallel connections in a chain, connect the next array's cable to the same terminals used above.

Note: Bose\* recommends using solder-type spade lugs on the ends of the speaker cables. To make parallel connections efficiently, you can attach the ends of the incoming and outgoing cables to a single pair of spade lugs, which then attach to the selected terminals.

If you do not use spade lugs, make sure that the incoming and outgoing cables are of the same diameter. That will ensure an equal force on them from the terminal strip flanges.

# Note On Painting

If you plan to paint the 502°A arrays, Bose° recommends installing each CVT-5 transformer first, so you can paint the 502A/CVT-5 assemblies all at once.

Before painting, mask off the label on the rear of the transformer housing to preserve identification of the input terminals.

For full instructions on painting the Panaray components and accessories, please consult the Bose Panaray Installation Guide.

# Note On Replacement Parts

If you have trouble installing or operating the CVT-5 Constant Voltage Transformer, contact Bose Technical Service. Call (800) 367-4008 or (508) 366-9896. Or refer to the "For Information" listing on page 12.

#### For Information

USA

1-800-444-BOSE(2673)8:30 a.m. to 9 p.m. ET

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