



AMP1-16V Universal LCD Replacement Instructions

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LOUDNESS

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This document is intended to be printed on a duplex printer, such that the copy appears on both sides of each page. This ensures that all new chapters start on a right-facing page.

This document looks best when printed on a color printer since some images may be indistinct when printed on a black and white printer.

Last Update

August 22, 2013

AMP1-16V Series Universal LCD Replacement Instructions

Introduction

Overview

This document details the instructions for replacing existing OLED or LCD displays and their accompanying bezel with a new bezel containing LCDs.

Important: You must remove the AMP1-16V from the rack to perform this procedure since you will need to remove the top cover to replace the bezel.

You must also upgrade the AMP1-16V Series monitor to software version V3.10 (or later) **before** performing this procedure. [See the AMP1-16 Series User Guide (821697) and the readme.txt (part of the down loaded files) for installation instructions.] The software update is available on our web site at www.wohler.com.

Topics

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Safety Instructions

1. Read, keep, and follow all of these instructions; heed all warnings.
2. Do not use this equipment near water.
3. Use only a dry cloth to clean the equipment.
4. Do not block any ventilation openings.
5. Do not install near any heat source such as a radiator, heat register, amplifier, or stove.
6. Do not expose the equipment to rain or moisture.
7. Do not attempt to plug the unit into a two-blade outlet (with only two prongs of equal width).

IMPORTANT: By design, this monitor will only plug into a three-prong outlet for your safety. If the plug does not fit into your outlet, contact an electrician to replace the obsolete outlet.

8. Protect the power cord from being walked on or pinched, particularly at plug's source on the equipment and at the socket.
9. Use only the attachments/accessories specified by the manufacturer.
10. Unplug the equipment during lightning storms or when unused for long periods of time.
11. Refer all servicing to qualified service personnel. Servicing will be required under all of the following conditions:
 - The equipment has been damaged in any way, such as when the power-supply cord or plug is damaged.
 - Liquid had been spilled or objects have fallen onto the equipment.
 - The equipment has been exposed to rain or moisture.
 - The equipment does not operate normally.
 - The equipment has been dropped.

Requirements

For this section, you will need the following:

Tools and Supplies

- Phillips screw driver
- Blocks on which to rest the existing front panel (See Step 9.)
- 858004 AMP1-16V Software Upgrade package V3.05 (installed.)

Important: You must install the V3.10 (or later) software upgrade and it must be functioning correctly before you can replace the OLED or LCD display bezel. The LCDs will only work with V3.10 and later versions. The software update is available on our web site at www.wohler.com.

Parts

Table 1-1 Required Items: One of the following:

Part Number	Description	Qty	Units
720733	BEZEL ASSY 1U AMP1-16 SERIES LCD	1	each

Note: Be careful not to lose any of the screws or nylon washers as you disassemble the monitor. All mounting hardware will be re-used.

Procedure

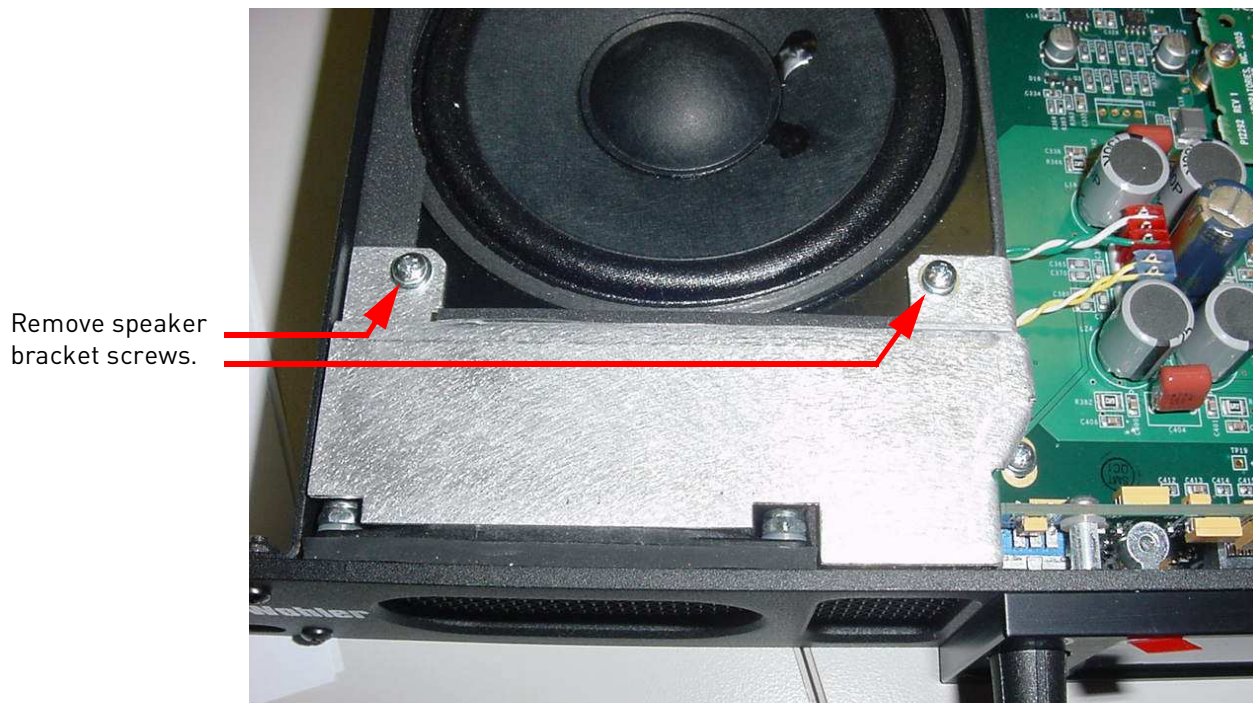
1. You must remove the AMP1- 16 from any rack mounting environment. Place the monitor on a solid surface with enough space for you to access both the front and rear panels easily.

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2. Remove the top cover. Be careful that you don't lose the eight flat head and six pan head screws.
3. Remove the left speaker bracket by unscrewing the two semi screws. See [Figure 1-1 on Page 4](#).

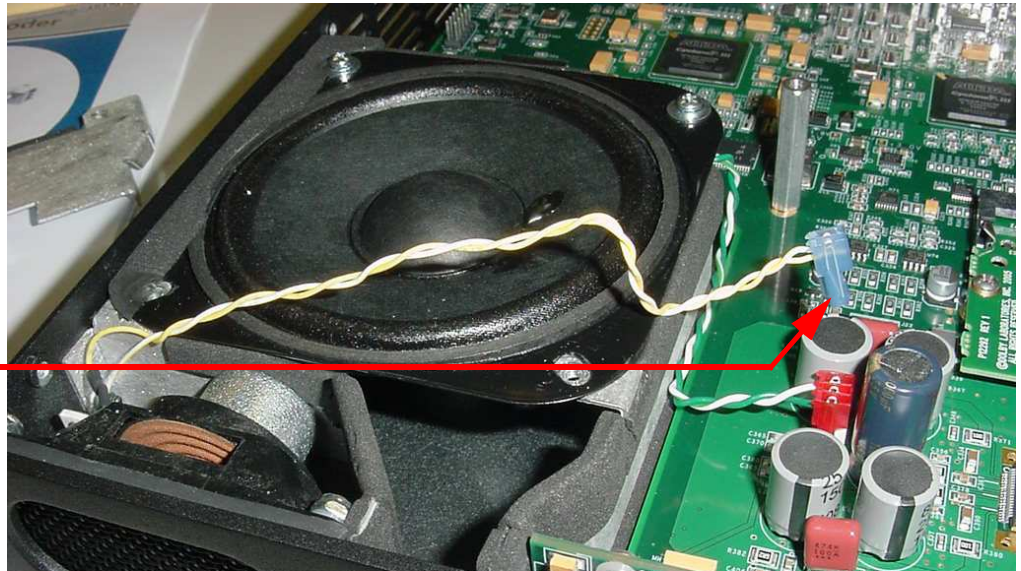
Figure 1-1 Remove Left Speaker Bracket



4. Unplug the left speaker from motherboard (yellow/white wire with blue connector) See [Figure 1-2](#) below.

Figure 1-2 Disconnect the Left Speaker Wire

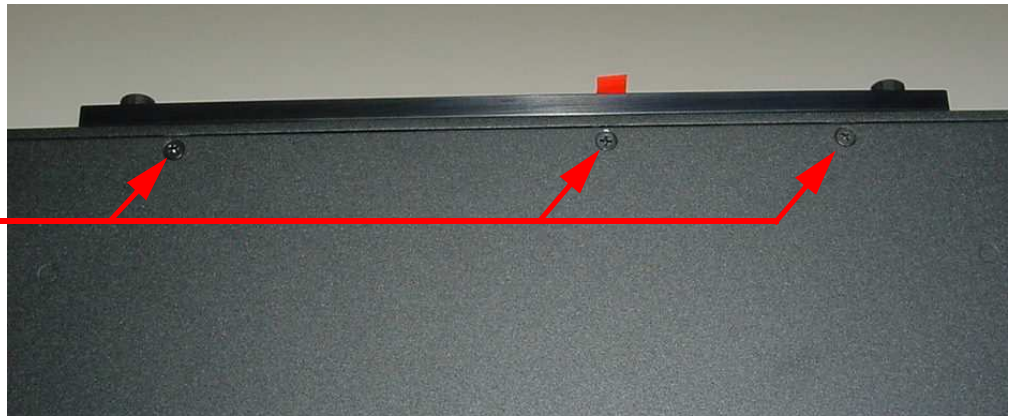
Disconnect the yellow and white speaker wire.



5. Repeat Steps 3 and 4 above for the right speaker.
6. From the bottom front side of the chassis, remove the three flat head screws holding front panel to the chassis. See [Figure 1-3](#) below.

Figure 1-3 Remove Bottom Front Screws

Unscrew the bottom front screws.

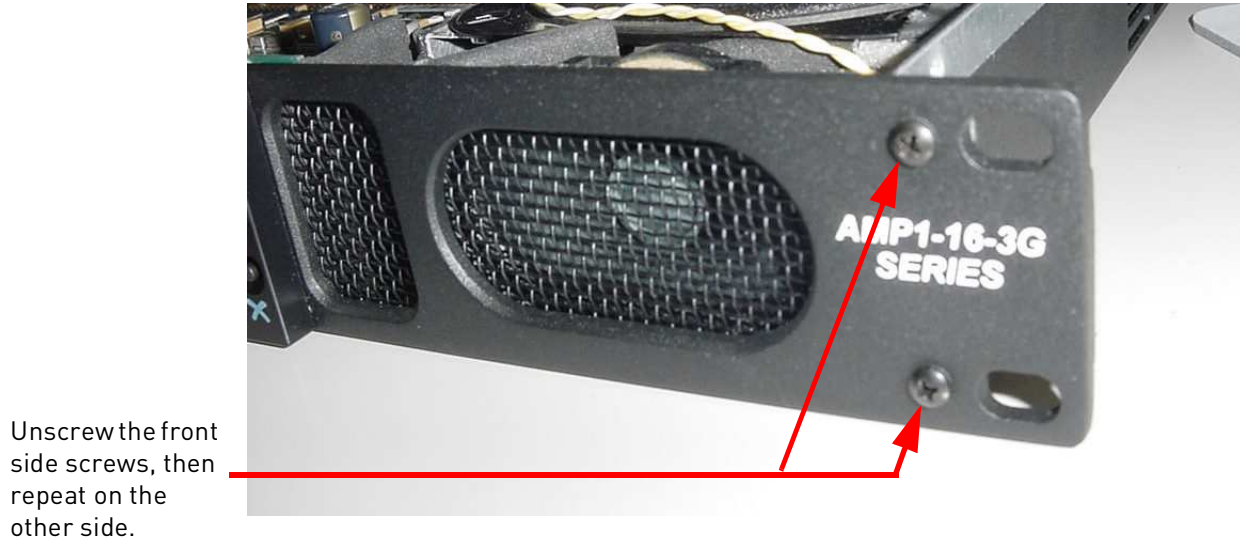


7. Remove the remaining four pan head screws (two on each side) securing the front panel to the chassis. See [Figure 1-4](#) below.

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Figure 1–4 Remove Front Side Screws

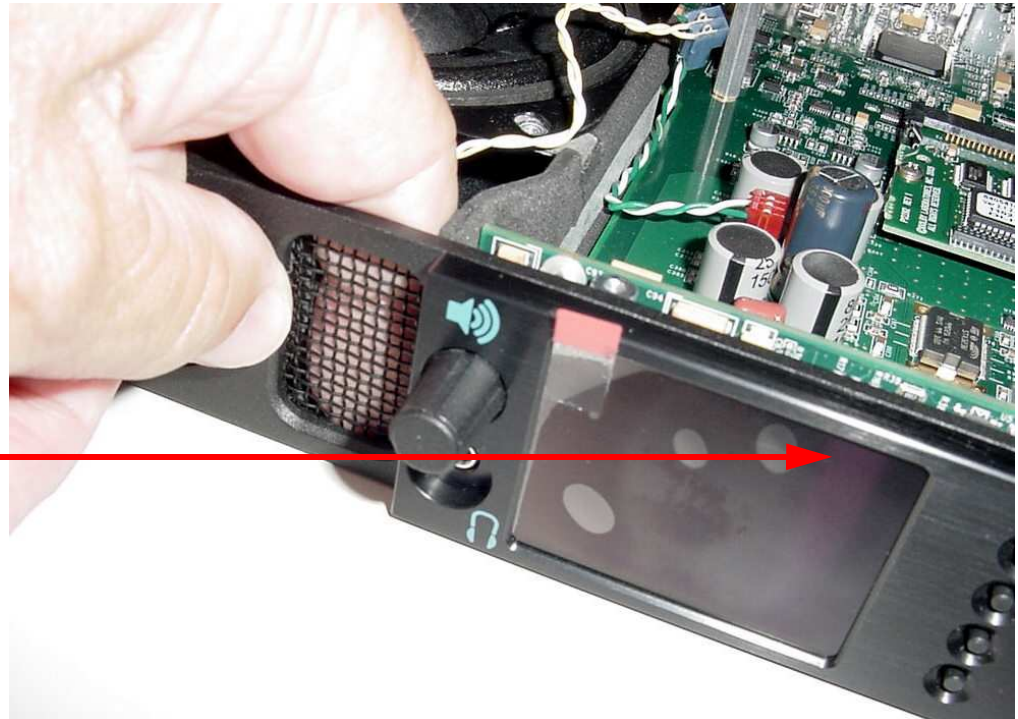


8. The front panel is still connected to the motherboard by two connectors. Place your finger in the speaker openings near each end of the front panel board and pull the front panel assembly toward the front to remove it. See [Figure 1–5](#) below.

Figure 1–5 **Removing the Front Panel Assembly**

Pull the front panel assembly towards you to disconnect it from the motherboard.

Be careful not to lose the nylon washers on top of the standoffs.



9. Remove the two encoder knobs from the front panel by pulling them toward you. Place the panel face down on blocks high enough to clear two encoder shafts.
10. Remove the four pan head screws that secure the front panel driver board. Unplug the board from the three connectors on the bezel assembly by pulling the driver board assembly straight up. Make sure to collect the four nylon washers that are between the board underside and the four standoffs. See [Figure 1–6 on Page 8](#).

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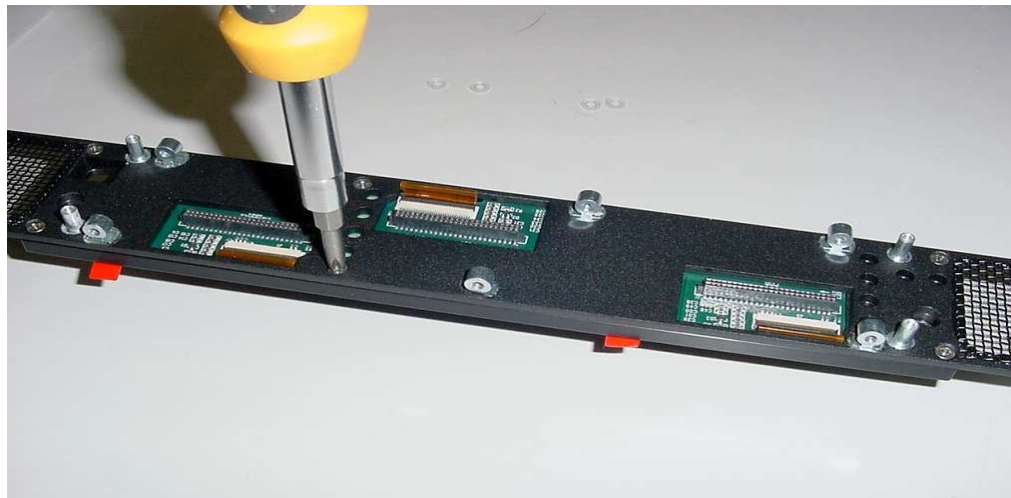
Procedure

Figure 1-6 **Removing the Front Panel Assembly**



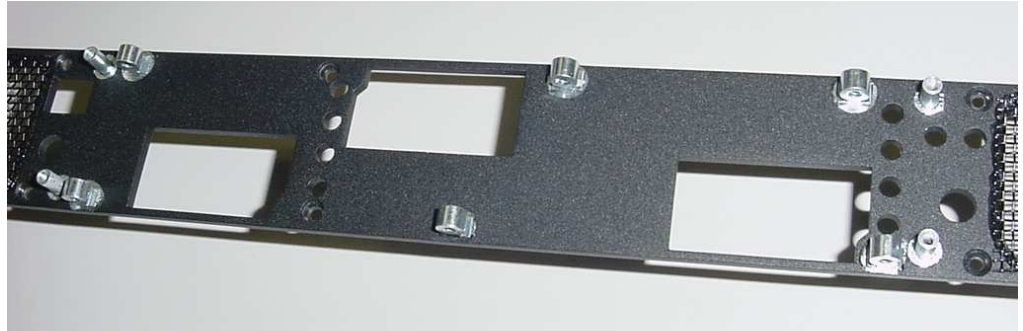
11. Remove the six flat head screws holding the front panel bezel to the front panel metal. See [Figure 1-7](#) below.

Figure 1-7 **Remove the OLED or LCD Bezel from the Front Panel**



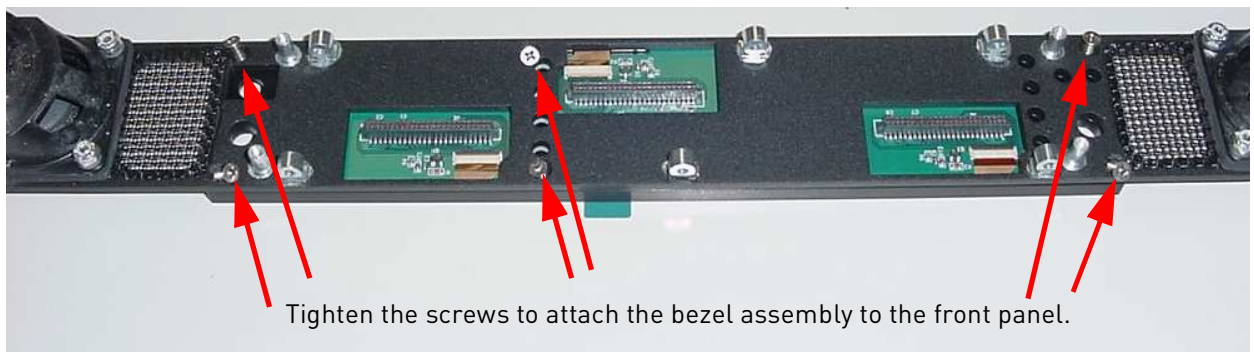
12. Remove the OLED or LCD bezel assembly as shown in [Figure 1-8](#) below.

Figure 1-8 OLED or LCD Bezel Removed



13. Attach the new LCD bezel assembly using the six flat head screws. For proper alignment install all screws loosely, and then tighten. See [Figure 1-9](#) below.

Figure 1-9 Attach LCD Bezel Assembly

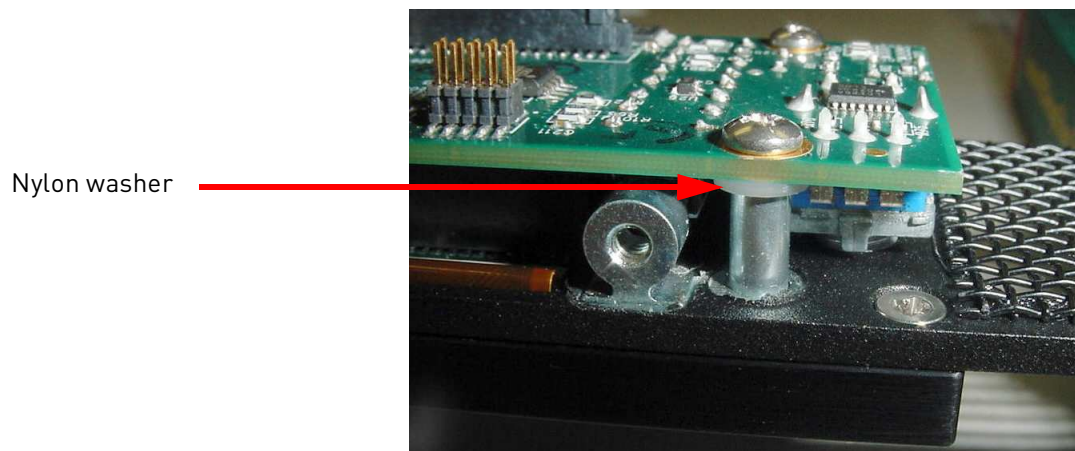


14. Take the driver board and slide into place on the front panel by using the encoder shafts as guide pins. Press firmly to ensure complete engagement with the three connectors on the bezel assembly.
15. Take a nylon washer and slide it into place between the board underside and one of the panel standoffs. When properly aligned, insert a pan head screw and tighten loosely. Proceed until all four nylon washers are in place. Finally, tighten all the screws. Refer to [Figure 1-10 on Page 10](#).

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Figure 1-10 Install Nylon Washers and Screws



16. Reattach the front panel assembly to the chassis. Concentrate on engaging the two front panel connectors with their mates on the motherboard.

Note: It helps to stand the chassis on end to manipulate the panel until the three countersunk screw holes in the chassis line up with their right angled PEM nuts. Once they are aligned, insert the three flat head screws that you removed in Step 6 and tighten. See [Figure 1-11](#) below and [Figure 1-12 on Page 11](#).

Figure 1-11 Engage the Motherboard Connectors

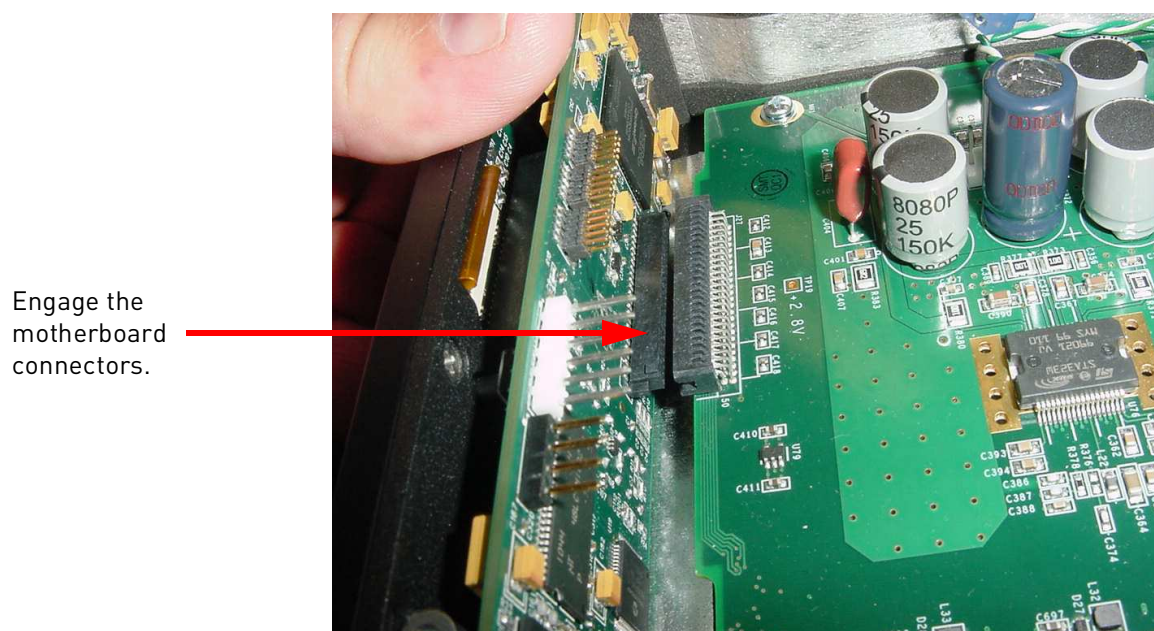


Figure 1-12 Align the Bottom Screws

Align the bottom
screws.



17. Re-insert the four pan head screws you removed in Step 7 to secure the front panel to the chassis. Loosely tighten all four before final tightening.
18. Reinstall the two encoder knobs.
19. Take the left speaker wire and route it along the front edge of the speaker making sure that the wire remains tucked into the slots provided and reconnect to motherboard. The blue connector will only install one way.

Figure 1-13 Route Speaker Wire



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20. Reinstall speaker bracket. Make sure the speaker wire is not pinched, especially where it exits the enclosure. See [Figure 1-14](#) below.
21. Secure the bracket with the two SEMS screws you removed in Step 3. See [Figure 1-14](#) below.

Figure 1-14 **Reconnect the Speaker Wires**



22. Repeat for right hand speaker.
23. Reconnect the power cord and at least one signal source to verify that the new LCD display is working. If everything is working correctly, replace the top cover with the screws you removed in Step 2.

Important This concludes the procedure for swapping the front panel bezels.