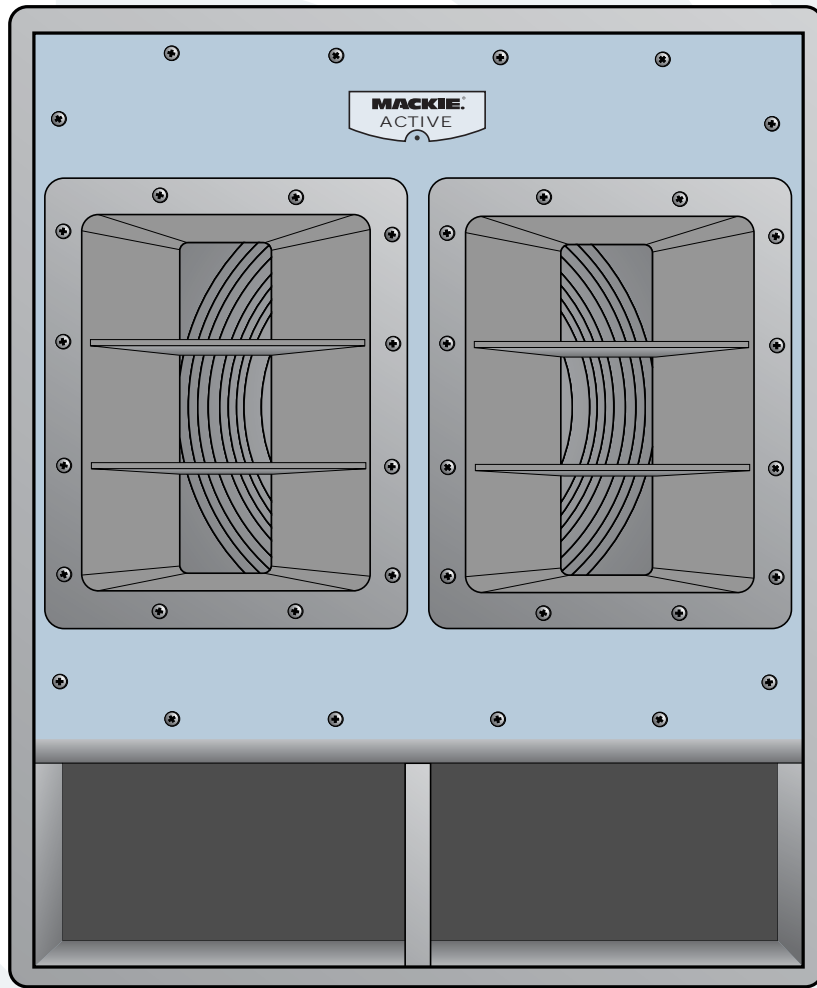




SWA1801z REPAIR MANUAL





These instructions are intended to help restore any ailing SWA1801z Active Subwoofer back to factory working conditions. They show how to remove and replace the woofer and amplifier assembly.

Please contact Mackie Tech Support (1-800-898-3211) to receive a Service Request Number and Order Number for parts needed for this restoration. They will also help you determine the nature of the problem and what parts will repair the unit.

Tools needed:

NOTE: not all tools listed below will be needed for your repair

- Phillips head screwdriver.
- 5mm allen wrench.
- Solid workbench.
- Non-carpeted work area due to static electricity. If available, an ESD mat (Electro-static discharge) is optimal.

Parts needed:

NOTE: not all parts listed below will be needed for your repair

- | | | |
|----------------------|---------------|-----------|
| • Led PCB Assembly | Part #0007334 | pages 3-4 |
| • 18" Woofer | Part #0012184 | pages 5-6 |
| • Amplifier Assembly | Part #0016875 | pages 7-9 |

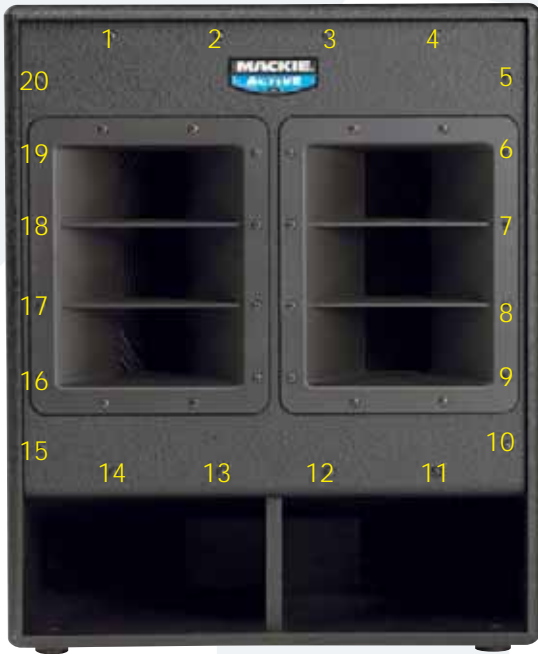
Safety Warnings:

- Make sure that you turn off the unit and disconnect the power cord (and all other cords) before you begin these procedures.
- Always use safety glasses!
- Please try NOT to touch any of the pcb circuitry, capacitors, resistors, etc.
- Take care to read and follow these instructions. It may help to read the instructions prior to the repair to get an idea of what it entails.
- Before beginning the repair, touch metal to discharge any lingering internal static electricity.





Led PCB replacement:



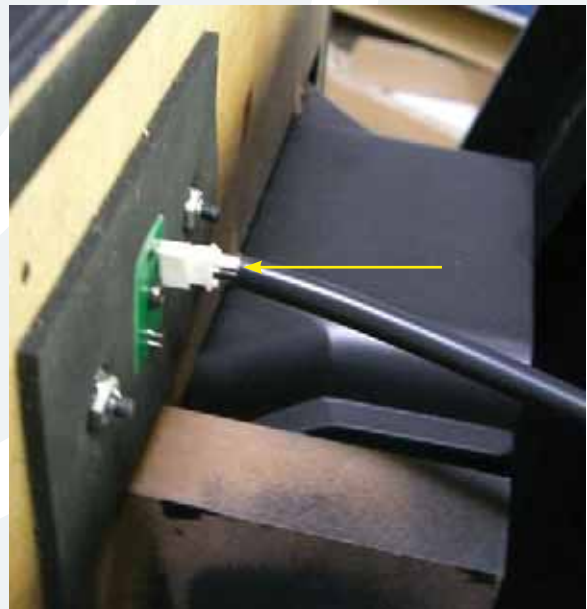
1 Twenty screws need to be removed from the front panel using the phillips head screwdriver.



2 Keep the 20 screws and washers in a safe place.



3 Carefully begin to remove the front panel. The wave guides are a great place to grip for stability and support. Do not fully remove the front panel as the cable is still attached to the led PCB assembly.

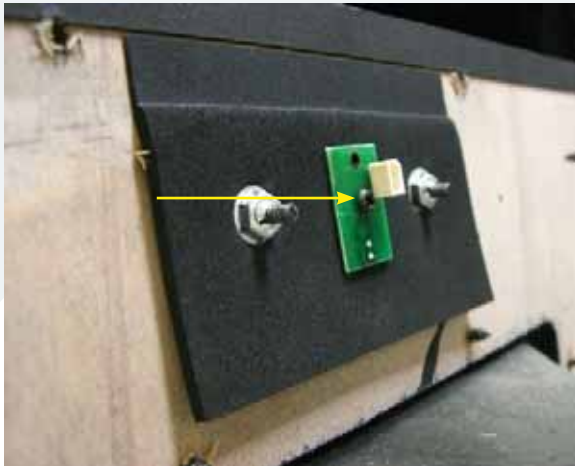


4 Carefully remove the cable attached to the led PCB assembly.





Led PCB replacement continued:



- 5** Use the phillips head screwdriver to remove one screw from the center of the led PCB assembly.



- 6** Carefully remove the led PCB assembly from the back side of the front panel. A flathead screwdriver may aid in removal of the led PCB assembly if it is sticking.

- 7** The hard part is done, the rest is easy! Place new led PCB assembly (part #0007334) where the old one was. Follow the same steps as above, but backwards 6 to 1. Power up the SWA1801z and led should light up. Congratulations, you just replaced an led PCB assembly...now go play some shows!



Woofer replacement:

1 Follow steps 1-4 of led PCB replacement, as the front panel will need to be removed in order to access the woofer.



2 Eight screws need to be removed from the woofer using the 5mm allen wrench.



3 Keep the eight screws in a safe place.



*** 4** Carefully begin to remove the woofer. A flathead screwdriver may aid in removal of woofer if it is sticking.



Caution: The woofer is approximately 27 pounds with weight unevenly distributed.

*This picture was taken during an SWA1501 woofer repair. The same principle applies to the SWA1801z.

The LOUD Technologies Family of Brands





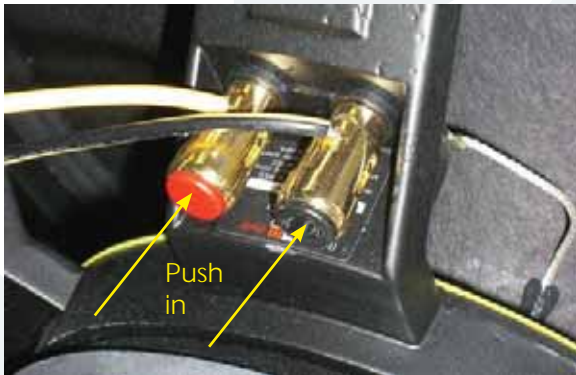
Woofer replacement continued:



*** 5** Positive (solid yellow) and negative (yellow and black) cables are still attached to woofer terminals.



7 This is what it looks like with the front panel and woofer both removed. Place the new woofer (part #0012184) where the old one was. Follow the same steps as above, but backwards 6 to 1, making sure to keep the led PCB assembly cable in front of the woofer. Power up the SWA1801z and the new woofer should now be pumping out glorious lows. Awesome, you just replaced an 18" woofer!



6 Remove cables from terminals simply by pushing down on terminal and pulling out cable.

*This picture was taken during an SWA1501 woofer repair. The same principle applies to the SWA1801z.

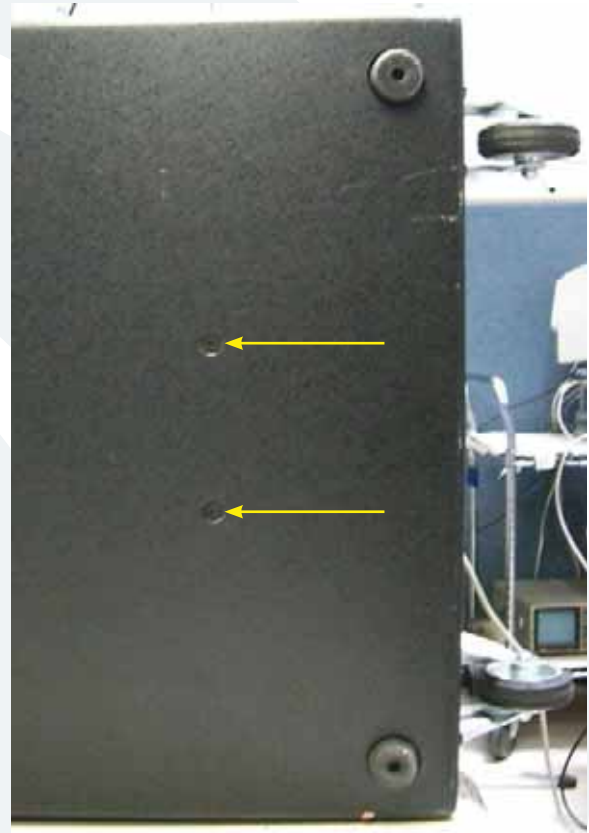




Amp Assembly replacement:



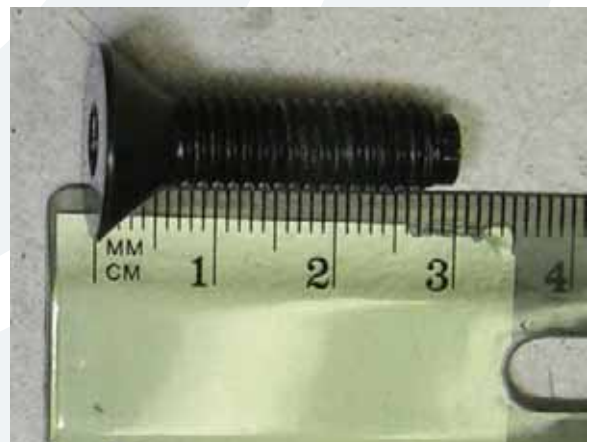
1 Four screws need to be removed from the amplifier assembly using a 5mm allen wrench. The screws are located at the top and bottom of the SWA1801z (see following pictures and further instructions).



3 Last remaining two screws located on the bottom of the SWA1801z.



2 Two screws located on the top of the SWA1801z patiently awaiting removal.

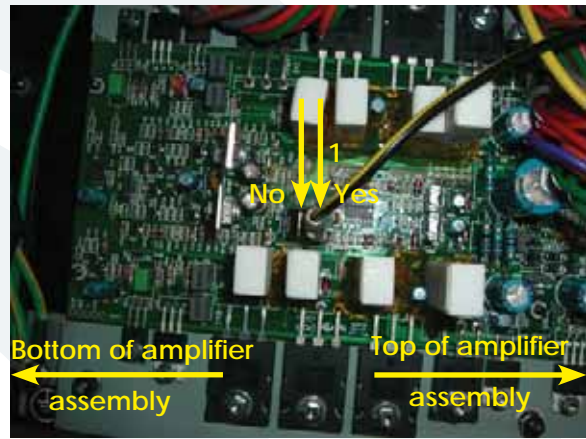
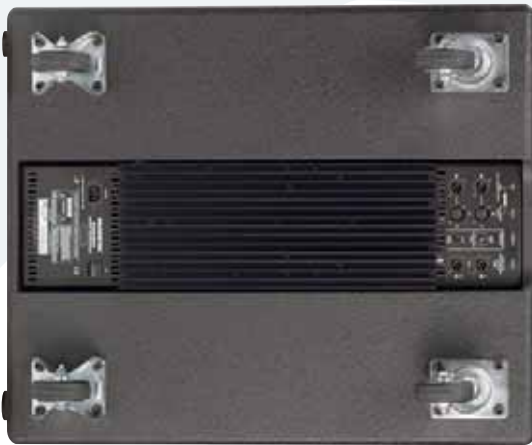


4 Keep the four screws in a safe place.





Amp assembly replacement continued:



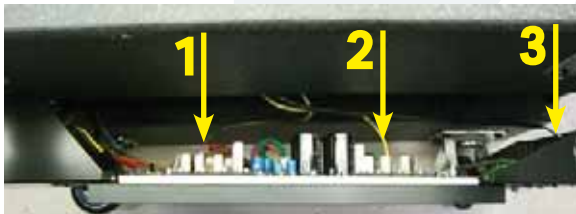
5 It may be easier to remove the amplifier assembly if the cabinet is on its side. Do not completely remove the amplifier assembly yet, as the cables need to be removed first.



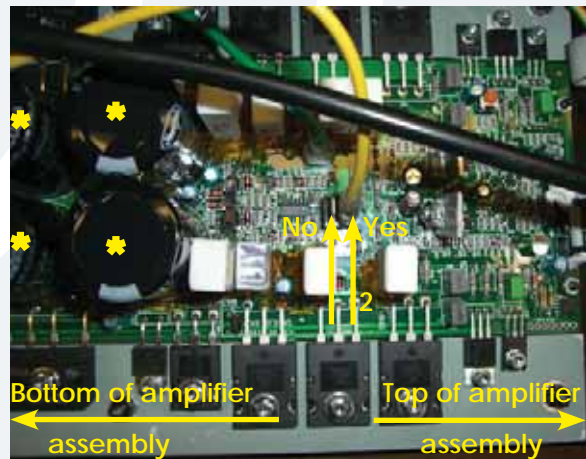
Caution: The amplifier assembly is approximately 23 pounds, so please make sure to grasp it firmly.

6a The terminal for the negative (yellow and black) woofer cable is located towards the bottom of the amplifier assembly, close to the transformer. The cable must be attached to the same terminal it was removed from. Failure to do so will result in greatly reduced power.

Side view



Bottom view



6 Three cables need to be removed from the amplifier assembly: (1) negative (yellow and black) cable, (2) positive (solid yellow) cable, and (3) led PCB cable. Do not force cable removal or connection, although needle-nose pliers may aid in gently removing the woofer cables. Notice their placement, as well (see following 3 pictures).

6b The terminal for the positive (solid yellow) woofer cable is located near the center of the amplifier assembly, just above the four capacitors (dotted above). The cable must be attached to the same terminal it was removed from. Failure to do so will result in greatly reduced power.





Amp assembly replacement continued:



8 Important: The faulty amplifier assembly needs to be returned to LOUD Technologies. The address should be on the return shipping label that was provided with the new amplifier assembly. If not, the return address is at the top of this page. Also, please write the order number and service request number (ex: 1046256-1203935) in big, black, bold numbers on the outside of the box. This helps expedite the return.

6c The led pcb cable attaches to the connector (as shown in picture above) with the white cable closest to the edge of the amplifier assembly.



7 Place the new amplifier assembly (part #0016875) where the old one was. Follow the same steps as above, but backwards 6 to 1. Remove the serial number from the faulty amplifier assembly (as shown in picture above) and place on the new amplifier assembly. Power up the SWA1801z and relish in the fact that you just replaced an amplifier assembly. Hats off to you for a job well done!

