

Replacing the turbo distribution board

(pn 1199100402SP)

The turbo distribution board is used in 20mm, 23mm and 35mm AlphaEclipse Excite signs to supply power and data to the driver boards. There is one turbo distribution board in odd numbered cases along the bottom row of the sign.

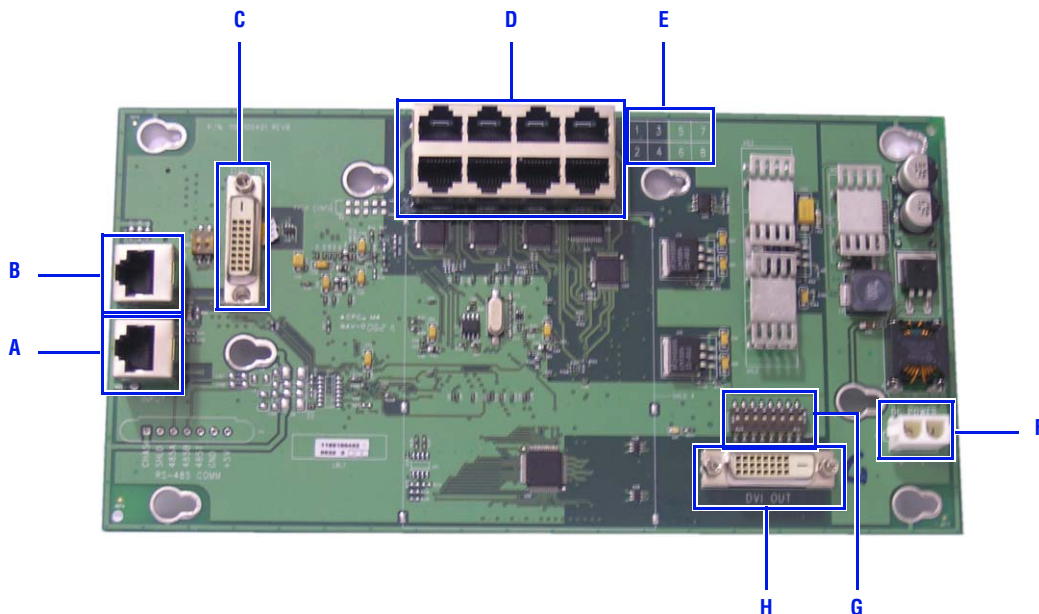


Figure 1: Turbo distribution board.

Item	Name	Description
A	TURBO IN	Receives data from either the controller or the turbo distribution board in the previous odd case.
B	TURBO OUT	Sends data to the turbo distribution board in the next odd numbered case when applicable.
C	DVI IN	In the MX case, receives DVI data from the DVI/fiber connection coming to the sign from the remote control cabinet. In all other odd-numbered cases along the bottom row of the sign, receives DVI data from the previous turbo distribution board.
D	CHANNELS 1 THROUGH 8 OUTPUT	Sends data up each row in the current column and up each row in the column to the immediate right. Think of each driver board as representing a channel. While facing the front of the sign, the first driver on the left would be numbered one and the last one in the case would be numbered four.
E	CHANNEL DIAGRAM	Driver board / channel output cable mapping diagram.
F	DC POWER	Power input from the case's power supply.
G	DIP SWITCHES	Designates the addressing of this case and the case to the immediate right.
H	DVI OUT	Sends DVI data to the turbo distribution board in the next odd numbered case when applicable.

WARNING! Hazardous voltage. Contact with high voltage may cause death or serious injury. Always disconnect power to unit prior to servicing.

Notice: Observe appropriate precautions to prevent electrostatic discharge (ESD) or “static” damage to the replacement part. For safe handling of ESD-sensitive parts, see TechMemo #00-0005.

⇒ **Replacing the turbo distribution board**

1. Disconnect all power to the sign at the source.
2. Locate the section that contains the turbo distribution board you are replacing.
 - Turbo distribution boards are located along the bottom row of the sign in odd numbered sections. Signs with more than six rows contain turbo distribution boards in each odd numbered section along the seventh row (counting up).
3. Locate the door locks in the section door.

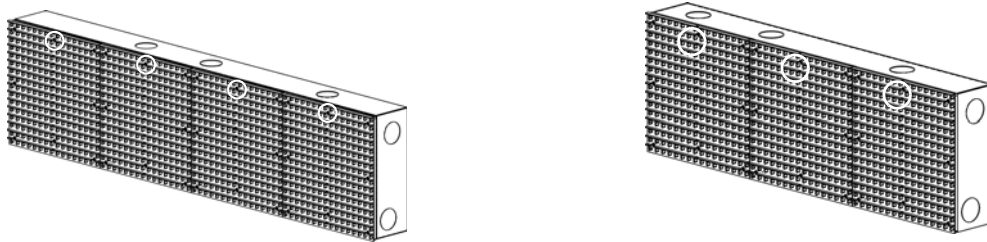


Figure 2: Door lock locations.

4. Open the section door.
 - Using a 5/32-inch hex tool to open the section door lock, turn counterclockwise and then pull the door toward you.

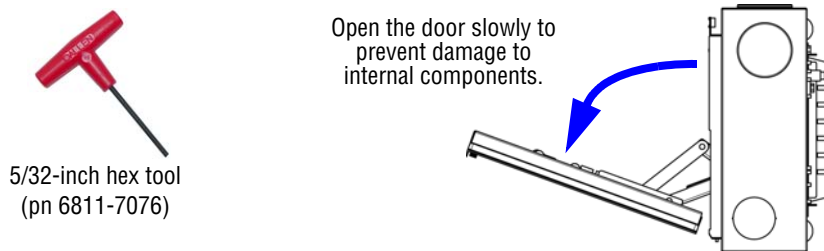
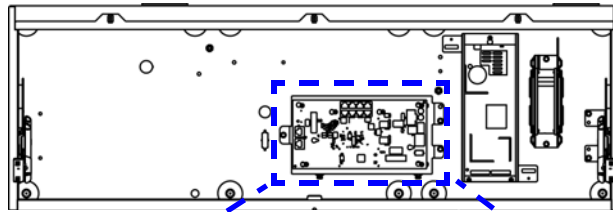


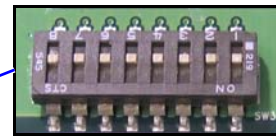
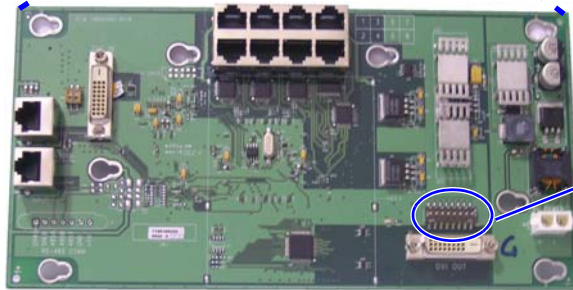
Figure 3: Use a hex tool to open the sign.

5. Set the DIP switches.

Turbo distribution board in the controller section.
The board is in approximately the same location in other sections.



NOTE: Set the DIP switches on the new turbo distribution board to the same positions as the board you are replacing.



NOTE: For more information about setting DIP switches, see the Excite Service Manual.

Figure 4: Set the DIP switches.

6. Disconnect all cables from the turbo distribution board.

Notice: Disconnect the cables in the order shown or damage to the turbo distribution board, driver boards, or other equipment may result.

- Disconnect the cables in the order shown in the following illustration.

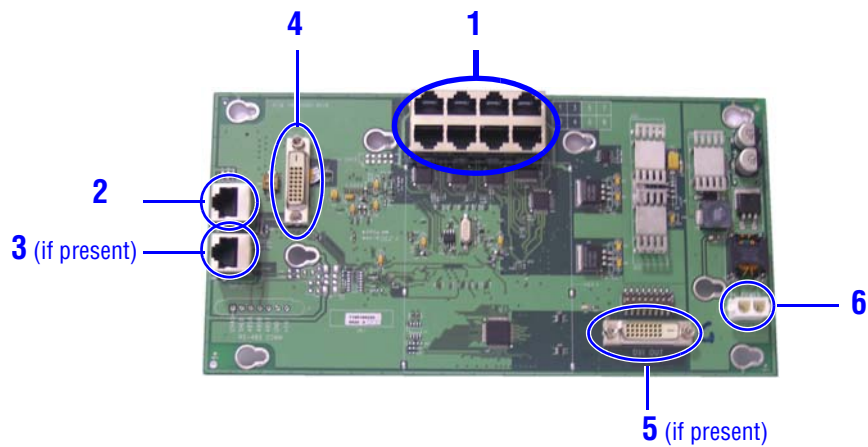


Figure 5: Order for disconnecting the cables.

7. Remove the turbo distribution board.
 - Loosen, but do not remove, the four screws.
 - Slide the board slightly to the right and pull out to remove.

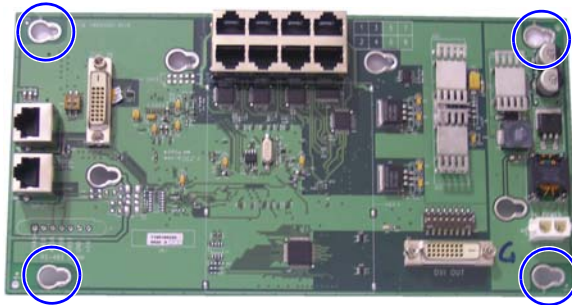


Figure 6: Four screws holding Turbo distribution Board in place.

8. Insert the new turbo distribution board.
 - Insert the new board over the four screws and push in slightly.
 - Gently slide the board to the left.
 - Tighten the screws.
9. Reconnect all the cables to the turbo distribution board.

Notice: Disconnect the cables in the order shown or damage to the turbo distribution board, driver boards, or other equipment may result.

- Connect the cables in the order shown in the following illustration.

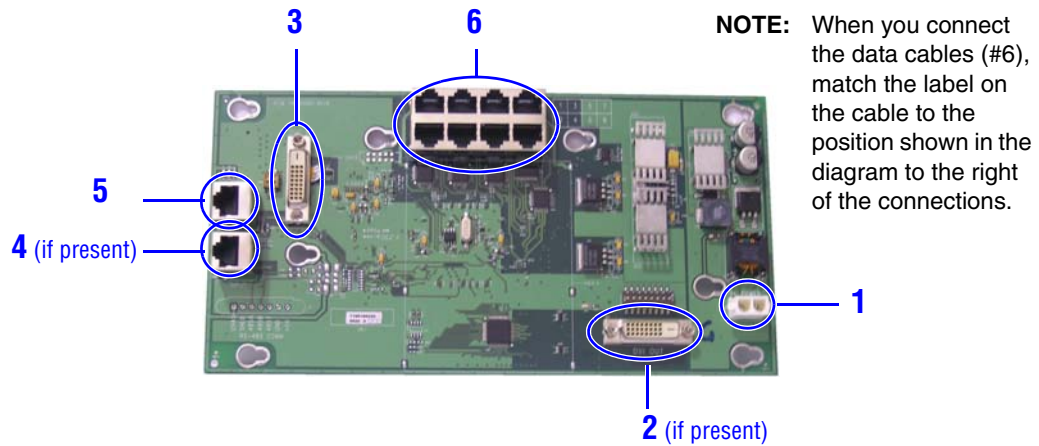


Figure 7: Order for reconnecting the cables.

10. Close the sign section and apply power.