



Downstream Keyer Card (DSK)

- I. Electrostatic Discharge Precautions*
- II. Setting the Power Jumper*
- III. Installing the DSK Card into a Studio4000/8000 unit*

I. Electrostatic Discharge Precautions

First and foremost! Before installing any card into your GlobeCaster, you must take a moment and read about preventing electrostatic discharge (ESD). While this may seem redundant to some, for others, this may be an important step.

Almost everyone is aware of static electricity and its effect when you rub your feet on the carpet and touch another object. But did you know how damaging static electricity can be to computer components?

For a human being to feel a static shock, the voltage must be around 1,500 volts. Really nasty shocks can be over 30,000 volts! Electronic components can be damaged by much lower voltages, about 20-30 volts. Therefore, the static electricity your body accumulates is enough to damage circuit boards by merely touching them.

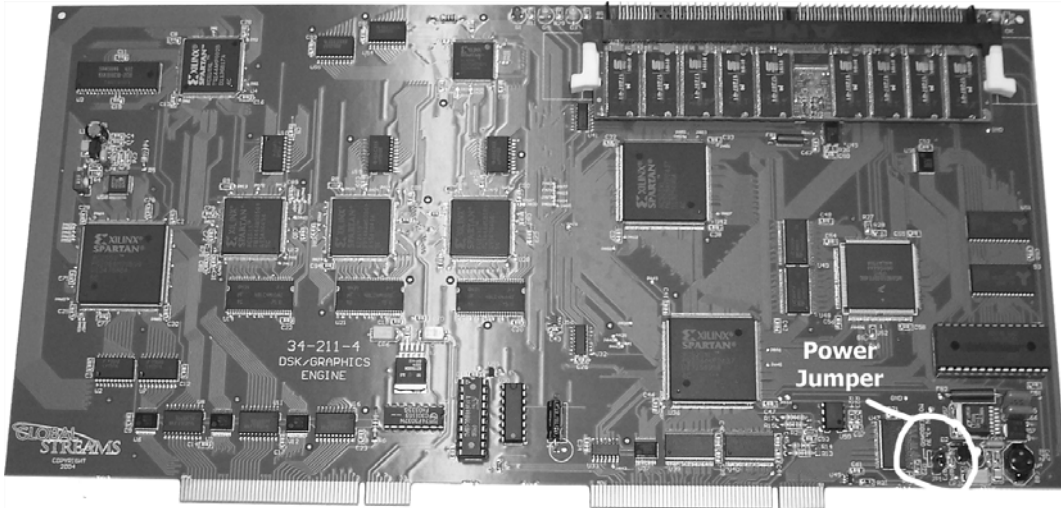
Sometimes ESD damage is not readily apparent, and can cause a board to fail months after it was improperly handled. To avoid this type of failure, please take the following steps when working inside your GlobeCaster:

1. Remove any articles of clothing that gather static electricity. Wool sweaters are especially prone to this.
2. Work on the GlobeCaster in a reasonably ESD-free area. Don't work on the unit if it's sitting on a shag carpet.
3. When working on the GlobeCaster, keep it turned off and unplugged.
4. Before touching any boards inside GlobeCaster, touch the edges of the chassis lightly to discharge any static buildup you may have.
5. Handle only the boards you need to handle.

An ESD wrist strap can be found at most electronic supply houses, and ensures that your body does not have any static charge. Having an ESD wrist strap is recommended, but not required. Attach the alligator clip of the wrist strap cord to the GlobeCaster chassis or another common ground point.

II. Setting the Power Jumper

Locate power jumper on DSK card. See picture.

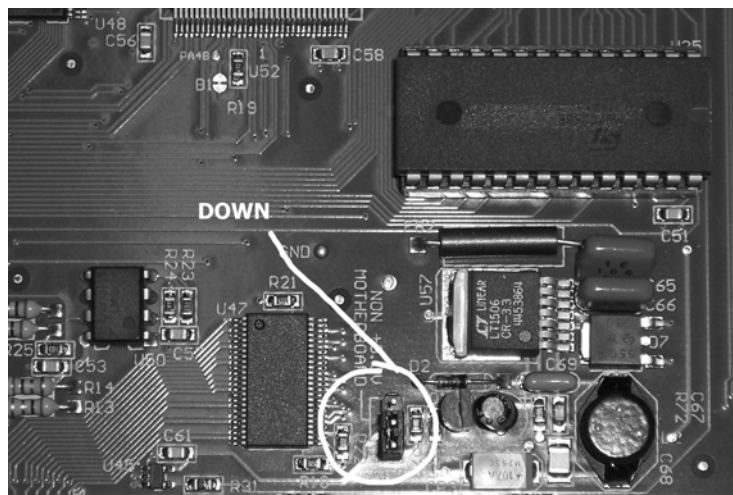


To correctly set the jumper you will need to determine which style of power connector is being used on the motherboard. Once you have located the power connection header on the motherboard, note whether it is black or white in color. Be sure you are looking at the connection header on the motherboard and not the connectors from the power supply since those are always white.

The jumper must be in the **UP** position for GlobeCaster's using the older AT style power connector (black) on the motherboard. This sets the power to non 3.3 volts.

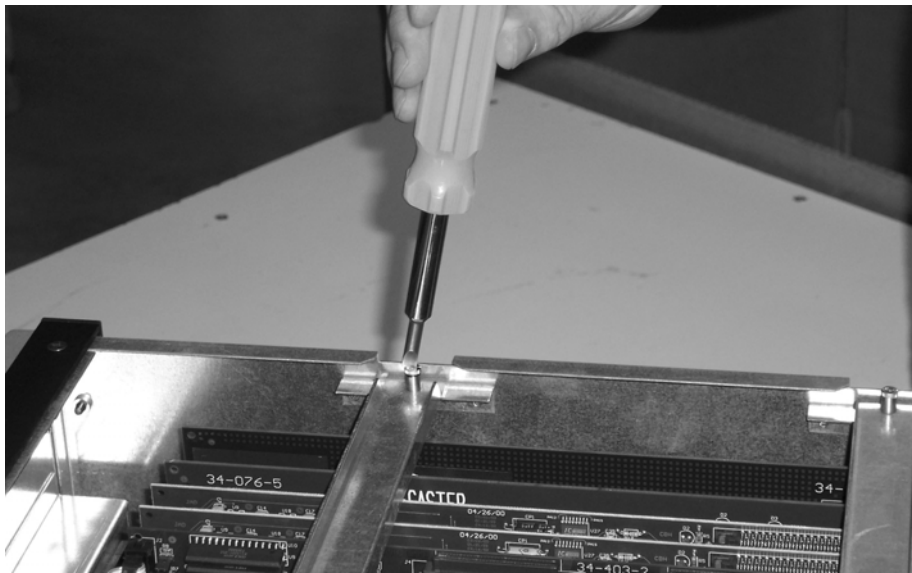
The jumper must be in the **DOWN** position for GlobeCaster's using the newer ATX style power connector (white) on the motherboard.

The jumper is in the DOWN position from the factory. See picture below:

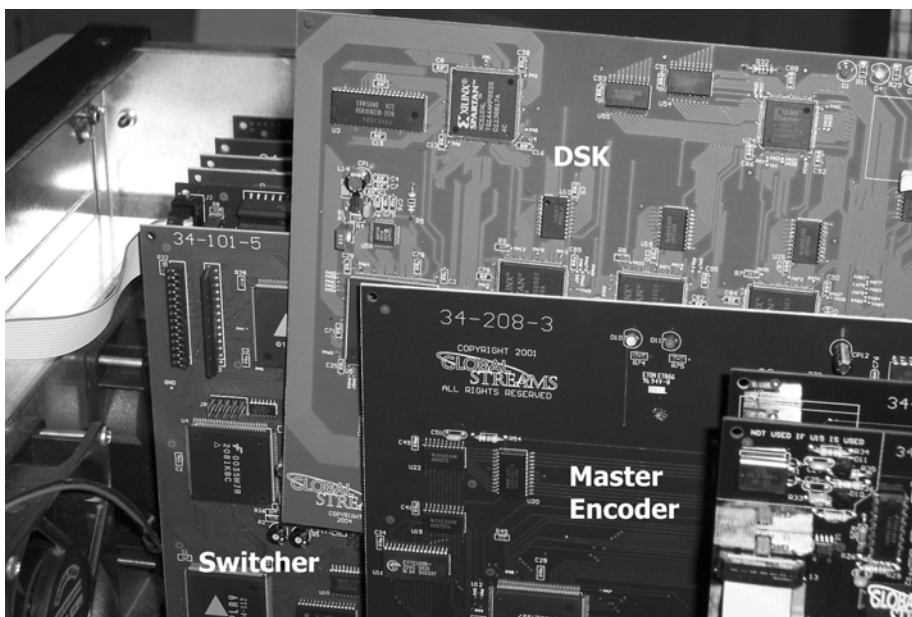


III. Installing the DSK into a Studio 4000/8000

1. Turn off the power to the GlobeCaster.
2. Unscrew the three thumbscrews along the edge of the top cover.
3. Slide the top cover approximately one inch toward the back, and lift off.
4. Unscrew the thumbscrews on the retaining bars running across the GlobeCaster
5. Remove the retaining bars.



6. You must locate the Switcher card and the Master Encoder card. The Switcher card is located in the socket labeled Switcher and the Master Encoder card is located in the socket called DNSTREAM 1. The DSK card must be placed in between the Switcher and Master Encoder card.





7. If you look at the motherboard, you'll notice that there are three other sockets labeled, DNSTREAM2, DNSTREAM3, and DNSTREAM4. In this scenario, the Master Encoder card would move to the DNSTREAM2 socket and the new DSK card would be inserted into the socket labeled DNSTREAM1.

For adding additional DSK cards, repeat this process of moving the Master Encoder card up one socket. For example, having two DSK cards would put the Master Encoder card in the socket labeled DNSTREAM3. Up to three DSK cards can be inserted into your GlobeCaster.

8. Line up the DSK card in the socket. Since the DSK card fits into more than one socket, make sure the card is lined up in both of the sockets it plugs into.

9. Push down lightly on the card BUT DO NOT PUSH THE CARD IN YET! Double-check a second time to make sure the card is properly aligned and not binding within the socket.

10. Using equal pressure, push the card into the sockets. Make sure the card is in the slots evenly.

11. Re-attach the retaining bars and screw them into place.

12. Place the top cover back on the GlobeCaster.

13. If you are using a software version earlier than 3.0, you must obtain and install version 3.0.2 or later version of the GlobeCaster software to support this DSK card. Visit <http://www.globalstreams.com> to download the latest software.