SSD Replacement

TouchDrive SSD Replacement

The drive in the TouchDrive control panel can be replaced in the event of a failure.

Important: *Contact Ross Video Technical support for a replacement SSD before attempting to replace the existing drive. Your new drive will come pre-configured with the required OS and software installed.*

The location of the SSD in the control panel depends on the hardware revision or model of control panel you have. You can identify your control panel by the part number **PN** on the label on the bottom of the unit.

Panel	Part Number (Type)	SSD Location
TD 1C	4880AR-211-03 (HW Rev 3)	Access the SSD by removing the panel top.
	4882AR-211-xx (4882AR)	Access the SSD through the panel top by removing a module.
TD 1	4880AR-201-03 (HW Rev 3)	Access the SSD by removing a metal cover located on the bottom of the panel tub.
	4882AR-201-xx (4882AR)	Access the SSD through the panel top by removing a module.
TD 2	4880AR-202-03 (HW Rev 3)	Access the SSD by removing a metal cover located on the bottom of the panel tub.
	4882AR-202-xx (4882AR)	Access the SSD through the panel top by removing a module.
TD 2S	4880AR-212-03 (HW Rev 3)	Access the SSD by removing a metal cover located on the bottom of the panel tub.
	4882AR-212-xx (4882AR)	Access the SSD through the panel top by removing a module.
TD 3S	4880AR-203-03 (HW Rev 3)	Access the SSD by removing a metal cover located on the bottom of the panel tub.
	4882AR-203-xx (4882AR)	Access the SSD through the panel top by removing a module.

Replacing the SSD in a HWRev 3 Panel

The SSD on the TD 1 to 3S is located under a cover on the bottom of the panel. To complete this procedure you must invert the control panel and remove a metal cover from the bottom.

Note: *Refer to Replacing the SSD in a HWRev 3 TD-1C Panel on page 2 for information on replacing the SSD from a 1C control panel.*

To Replace the SSD in a HW Rev 3 Panel

To replace the SSD you will need the following:

- Philips Head Screwdriver
- Replacement M.2 SATA SSD from Ross Video

Warning Hazardous Voltages: *Hazardous voltages are present in this device as long as any of the power supplies are connected to the AC power.*

ESD Susceptibility: *Static discharge can cause serious damage to sensitive semiconductor devices. Avoid handling the circuit boards in high static environments such as carpeted areas and when synthetic fiber clothing is worn. Touch the metal frame to dissipate static charge before removing boards and exercise proper grounding precautions when working on circuit boards.*

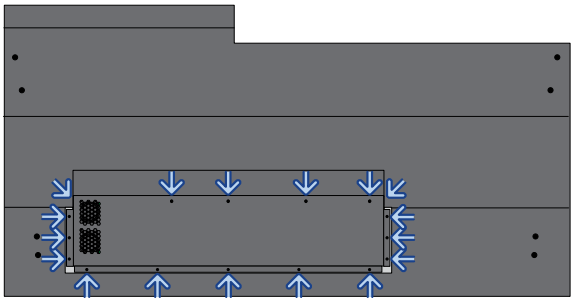
1. Power off the control panel and disconnect the all power connections.
2. Prepare a large clean surface to place the control panel on. A static mat or cardboard may be used to protect the top of the control panel top.
3. Place the control panel upside-down on the surface. The label text on the bottom of the

panel should not be upside-down and the ports facing away from you.

Notice: *Larger control panels are heavy and difficult to maneuver. Two people may be required to lift and invert the panel safely.*

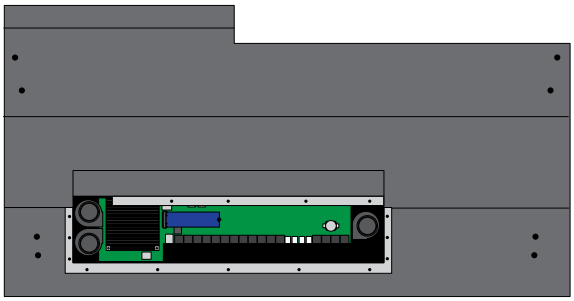
4. Remove the 17 screws from the CPU cover and put them is a safe place.

Tip: *If the legs are installed on your panel there is a hole in the leg support to access the screw on the side of the cover. You may need a longer screwdriver to reach.*

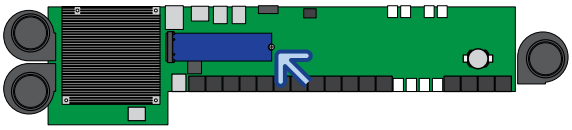


5. Gently remove the cover to access the CPU.

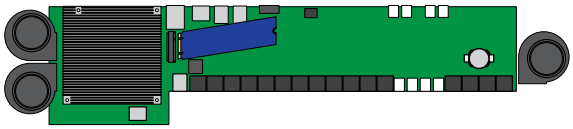
Tip: *If the legs are installed on your panel you may have to lift and slide the cover towards you before it is clear of the leg support.*



6. Carefully remove the retaining screw from the SSD drive. If the CPU is on an angle the screw may fall into the panel when it is removed.



7. Pivot the SSD up and pull it out of the port.



8. Insert the new M.2 SATA SSD into the port and use the retaining screw to secure it into position.
9. Replace the cover and re-install all 17 screws.

Note: *Ensure that you do not pinch any wires between the cover and panel tub when re-installing the cover.*

With the new SSD installed you can re-install the panel and cabling for normal operation.

Replacing the SSD in a HWRev 3 TD-1C Panel

The 1C control panel has the SSD located inside the tub of the panel. To complete this procedure you must remove the top from the control panel.

To Replace the SSD in a HW Rev 3 TD-1C Panel

To replace the SSD you will need the following:

- Philips Head Screwdriver
- Replacement M.2 SATA SSD from Ross Video

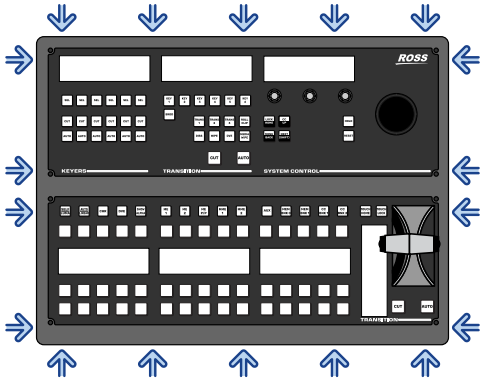
Note: *You will need a second person to hold the panel top while you replace the SSD in this procedure.*

Warning Hazardous Voltages: *Hazardous voltages are present in this device as long as any of the power supplies are connected to the AC power.*

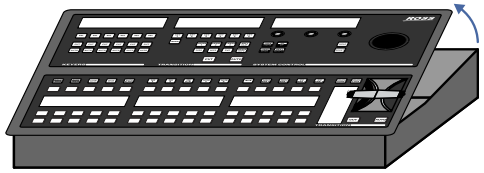
ESD Susceptibility: *Static discharge can cause serious damage to sensitive semiconductor devices. Avoid handling the circuit boards in high static environments such as carpeted areas and when synthetic fiber clothing is worn. Touch the metal frame to dissipate static charge before removing boards and exercise proper grounding precautions when working on circuit boards.*

1. Power off the control panel and disconnect the all power connections.
2. Prepare a clean surface to place the control panel on.

3. Remove the 18 screws from the sides of the control panel.

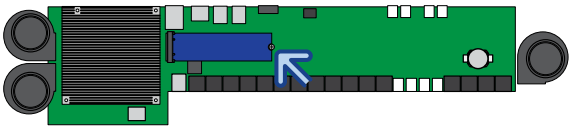


4. With the panel facing you and the positioner in the upper right corner, gently lift the panel top to separate it from the tub and pivot the top towards you so that the end towards you is resting on the tub and the opposite end it straight up. There are a number of cables connecting the panel top to the CPU in the tub that will prevent the panel top from being completely removed.

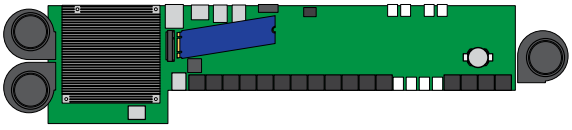


Note: *Have a second person hold the panel top while you proceed with the procedure.*

5. Carefully remove the retaining screw from the SSD drive. If the CPU is on an angle the screw may fall into the panel when it is removed.



6. Pivot the SSD up and pull it out of the port.



7. Insert the new M.2 SATA SSD into the port and use the retaining screw to secure it into position.
8. Replace the panel top and re-install all 18 screws.

With the new SSD installed you can re-install the panel and cabling for normal operation.

Replacing the SSD in a 4882AR Panel

The SSD is located under a crosspoint module on top of the panel. To complete this procedure you must remove the module, locate and replace the SSD, and then replace the module.

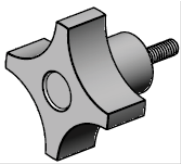
To Remove the Module

Warning Hazardous Voltages: *Hazardous voltages are present in this device as long as any of the power supplies are connected to the AC power.*

ESD Susceptibility: *Static discharge can cause serious damage to sensitive semiconductor devices. Avoid handling the circuit boards in high static environments such as carpeted areas and when synthetic fiber clothing is worn. Touch the metal frame to dissipate static charge before removing boards and exercise proper grounding precautions when working on circuit boards.*

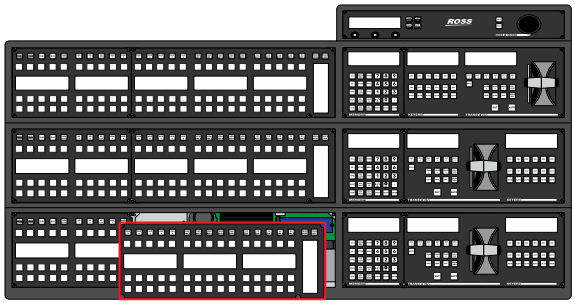
Important: *Do not touch the ribbon cables located on the bottom of the module. These ribbon cables are very delicate and the latches that secure them can easily be opened. If the latch is opened the ribbon cable will lose electrical connection and the module will not work properly.*

1. Power off the control panel and disconnect the all power connections.
2. Locate the set of **Module Extraction Tool**s that came in the Desk Mounting Kit of your control panel.

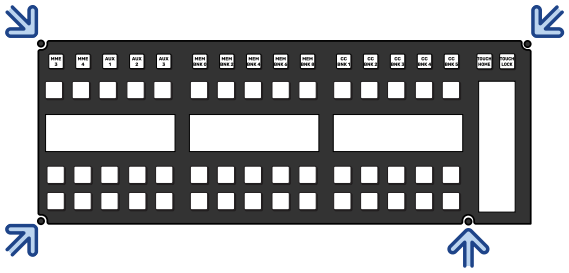


Tip: *If you cannot locate the Module Extraction Tools, a #8-32UNC bolt can be used instead.*

3. Locate a panel module you need to remove to access the inside of the panel. The module depends on the size of the control panel.
   - **TD 1C** — Remove the top module from the panel.
   - **TD 1 and Larger** — Remove the right-most crosspoint module from the lowest panel row.

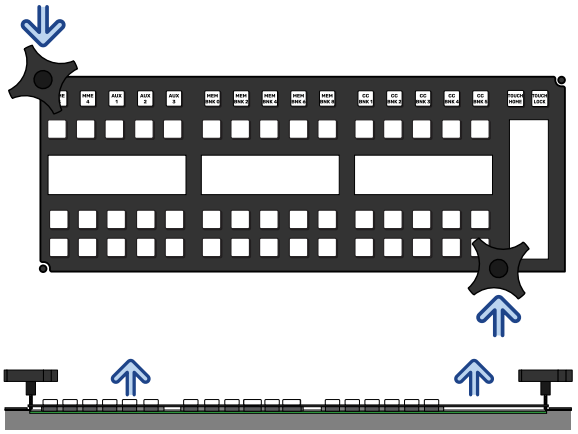


4. Use a Torx® T10 screwdriver to remove the screws securing the module into the panel.

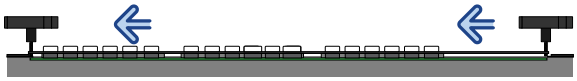


5. Screw the **Module Extraction Tool** into the holes at either end of the module to unseat it from the panel.

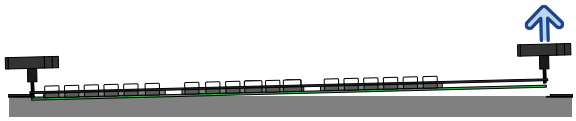
> ***Notice:*** *Only insert the **Module Extraction Tool** a couple turns into the holes on the mode. Screwing the **Module Extraction Tool** too far into the holes can bind the circuit board and damage the module.*



6. Use the **Module Extraction Tool** to lift the module slowly until you feel some resistance. The metal top of the module should just clear the surface of the panel.
7. Shift the module slightly to the left. The metal top of the module should just slightly overlap the surface of the panel.



8. Lift up on the opposite side of the module to pivot that end up until the circuit board is clear of the panel surface.



9. Shift the module back so that it is free of the panel surface and pivot the module away from you until you can access the cables connected to the bottom of the module.
10. Remove the cables from the bottom of the module and place the module on a clean, dry, static-free surface.

With the module removed you can access the SSD.

To Replace the SSD in a 4882AR Panel

To replace the SSD you will need the following:

- Set of Module Extraction Tools located in the Desk Mounting Kit of your control panel.
- Torx® T10 screwdriver.

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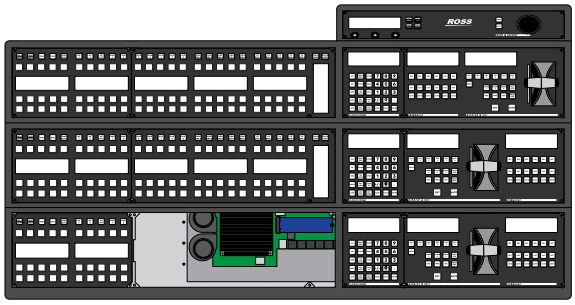
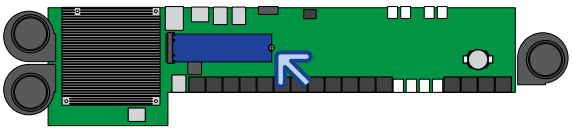
ESD Susceptibility: *Static discharge can cause serious damage to sensitive semiconductor devices. Avoid handling the circuit boards in high static environments such as carpeted areas and when synthetic fiber clothing is worn. Touch the metal frame to dissipate static charge before removing boards and exercise proper grounding precautions when working on circuit boards.*

Important: *Do not touch the ribbon cables located on the bottom of the module. These ribbon cables are very delicate and the latches that secure them can easily be opened. If the latch is opened the ribbon cable will lose electrical connection and the module will not work properly.*

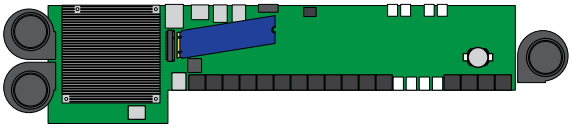
1. With the module removed you can access the SSD.



2. Carefully remove the retaining screw from the SSD drive. If the CPU is on an angle the screw may fall into the panel when it is removed.



3. Pivot the SSD up and pull it out of the port.



4. Insert the new M.2 SATA SSD into the port and use the retaining screw to secure it into position.
5. Replace the crosspoint module. Refer to *To Install a Module* for instructions on installing this module.

With the new SSD installed you can re-install the panel and cabling for normal operation.

To Install a Module

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Important: *Do not touch the ribbon cables located on the bottom of the module. These ribbon cables are very delicate and the latches that secure them can easily be opened. If the latch is opened the ribbon cable will lose electrical connection and the module will not work properly.*

1. Screw the **Module Extraction Tool** into the holes at either end of the module.

Notice: *Only insert the **Module Extraction Tool** a couple turns into the holes on the mode. Screwing the **Module Extraction Tool** too far into the holes can bind the circuit board and damage the module.*

2. Identify the power and communications cables for the module you are installing.

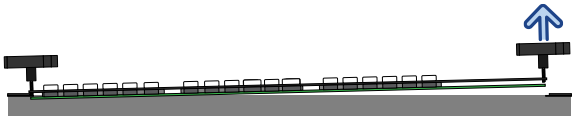
	Two-wire power connector. Depending on the location of the module in the panel, this connector may be on the end of the power cable, or at some intermediate location.

	Standard RJ45, network connector. Depending on the location of the module in the panel, the cable may be connected directly to the Panel Communications Hub (PCH), or to the Panel Module Controller (PMC) on the module next to it.

3. Connect the power cable to the 2-pin connector on the bottom of the module.

> ***Notice:*** *The power connecter is designed to fit onto the 2-pin receptacle on the module in one way, but it can't be forced on incorrectly. Ensure that the two tabs on one side of the connector align to either side of the latch on the receptacle.*

4. Connect the communications cable into the **PREV** port on the module.
5. Slowly angle the module into the opening in the control panel and shift the module slightly to the *left*. The metal top of the module should just slightly overlap the surface of the panel.



6. Lower the opposite end of the module into the opening. You may have the shift the module over more or less the get the opposite end to fit into the opening.
7. Seat the module into the opening and remove the **Module Extraction Tool**.
8. Use a Torx® T10 screwdriver to install the screws securing the module into the panel.