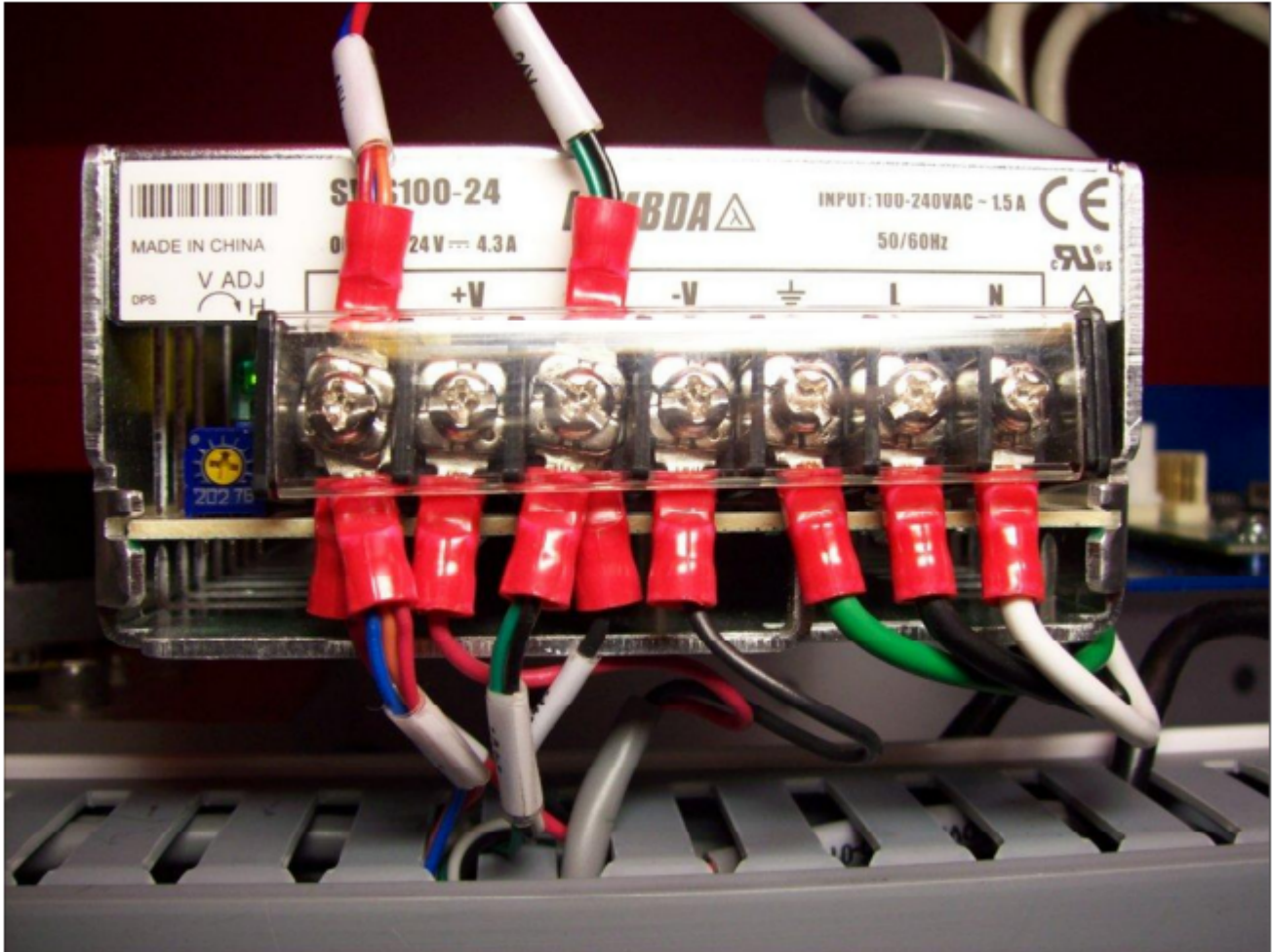# TSB-24V-Power-Supply-Replacement

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Best Practice Engineer

<u>Description</u>: This TSB outlines the steps to properly replace the 24V Power Supply.

1.Getting Started: Safety

This is a very important step because we are dealing with live AC.

First, be sure to completely power down the kiosk to ensure no power is running through the 24V Power Supply. In the pictures to the left, you will see the location of each Power Button on the APC
(top) and the Tripplite (bottom). When the APC is turned off, all 4 lights will be off. When the Tripplite is turned off, the LED screen will go blank.

As an added safety measure, be sure to unplug the UPS. The plug location should be at the bottom of the kiosk on the left hand side. It will either be a mounted plug to the wall of the kiosk
or a power strip mounted on the floor of the kiosk. By unplugging this, you ensure that no power is flowing to the 24V Power Supply. You can quickly verify you have no power by checking the Green LED on the 24V Power Supply and making sure there are no lights on any boards, the PC, or the UPS.

2. Location of 24V Power Supply

The 24V Power Supply is located at the top of the kiosk sandwiched between the encoder and the Arcus Board. It is outlined in 'Red' in the picture to the left. It is plugged directly into the UPS and
provides power to the Serial, Aux, Picker Controller and Arcus Boards.

3. Removal of the 24V Power Supply

The 24V Power Supply has 11 separate wires with spade clips that are held onto the face of the unit by 7 Philips head screws. Loosen all 7 screws and you should be able to slide them off their respective terminals.
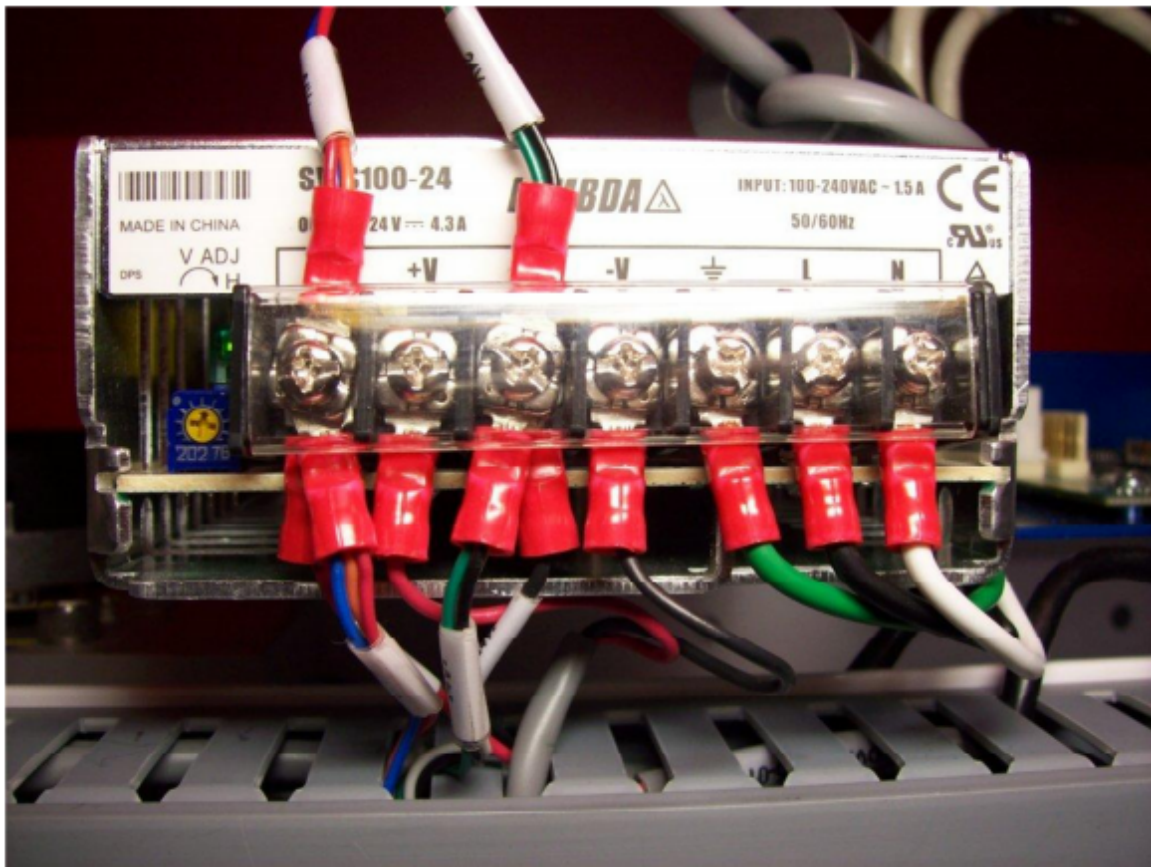
Beside is a picture of what the 24V Power Supply looks like when out of the kiosk. Notice the white mounting bracket and the 2 screw holes outlined in 'Red'. The bracket mounts to the back of the top rail with 2 -- 1/8" hex screws.
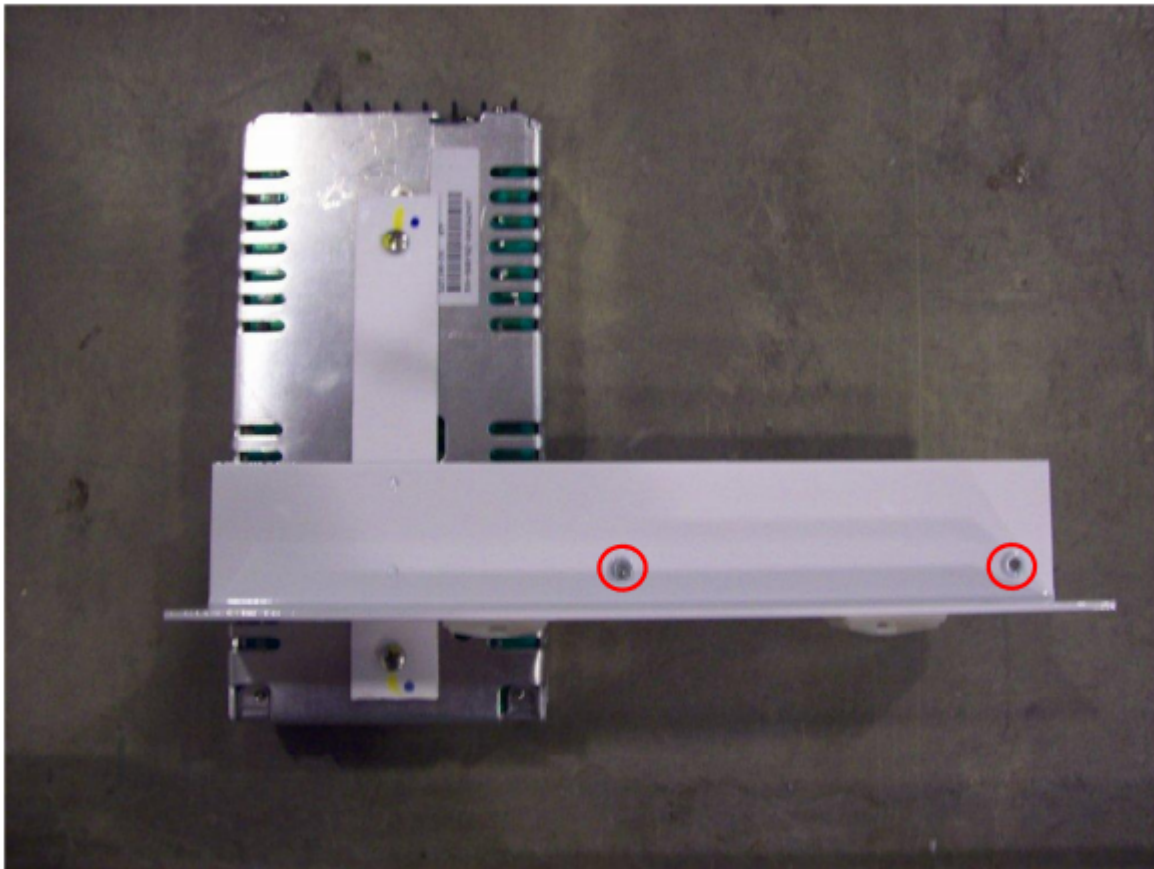
This is what the 24V Power Supply looks like when mounted inside of the kiosk. This is a picture with the back of the kiosk taken off. You can see the Blue Arcus board on the left and the 24V Power Supply to the right of it.

The removal of the 24V Power Supply can be done from the front of the kiosk by feeling along the back of the top rail and locating the 2 – 1/8" hex screws and removing them. If you find it difficult, you can remove the rear panel of the kiosk to gain easier access.

Also, note that the wiring is mounted and wire-tied to the back of the white mounting bracket that the 24V Power Supply sits on. You need cut both wire ties so that the cabling is free from the mounting bracket and ready for removal. Be extra careful to not cut any of the wires when freeing them from their wire ties.

You also may need to remove the Arcus Board to more easily remove the 24V Power Supply. Do this at your discretion.
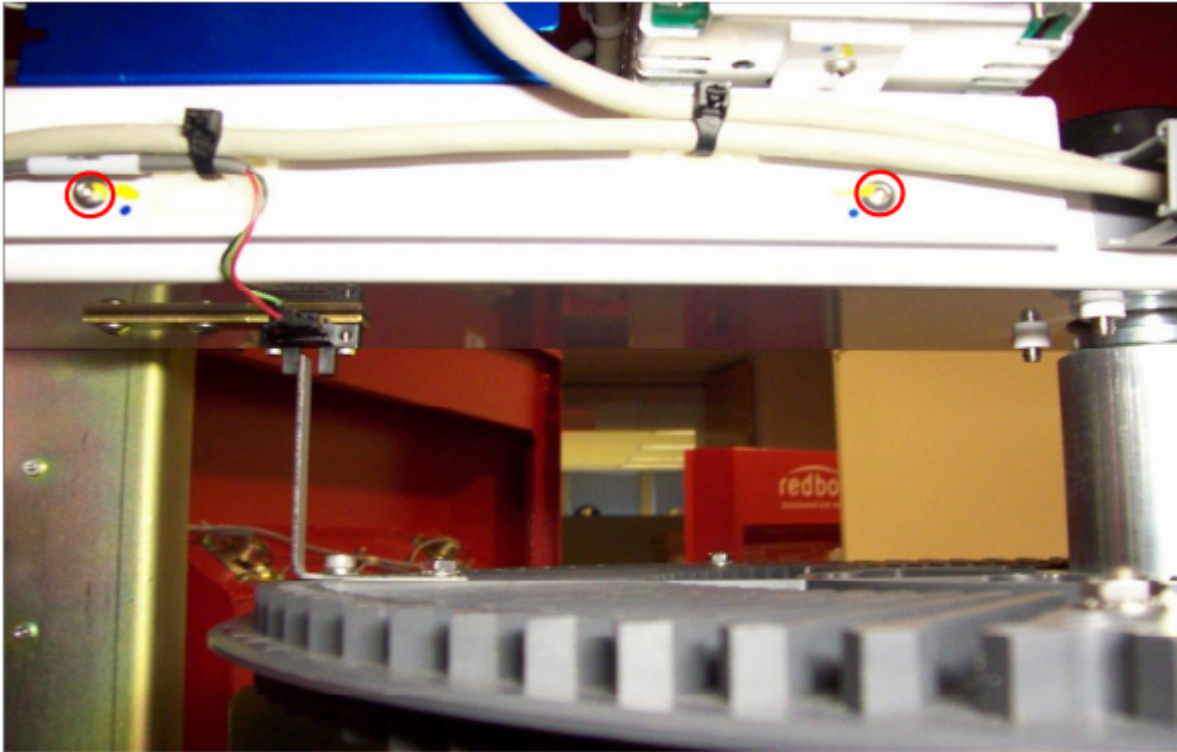
3. Mounting the 24V Power Supply

To make mounting easier, I would suggest placing the adhesive pads with wire ties already attached using the old mounting bracket as a guide before mounting the 24V Power Supply inside the kiosk.

Next, place the 24V Power Supply inside the kiosk with the bracket's lip flush against the rear of the top rail. Secure it using the 2 – 1/8" hex screws you removed earlier.

Reattach the 11 cables on the front of the 24V Power Supply Unit by referencing the pictures below. Each wire is labeled with +24V or -24V indicating positive or negative terminal. It doesn't matter which terminal you attach them to as long as you respect + or - . Also, note the last three wires which are Green/Yellow, Black and White. Keep them in that order.

Next, be sure to reattach the wires behind the top rail using the wire ties you attached to the white mounting bracket. Clip off any excess from the wire ties to tidy it up.

Lastly, plug the UPS back in and power it on. Verify all boards have power. The Aux and Picker Controller boards will have a yellow LED (19) on them indicating 24V from the Power Supply. The Serial board will have 2 yellow LED's (5 and 7) indicating 24V from the Power Supply.

Tools/Parts Needed:	Quantity:	Parts Catalog Number:

Phillips or flathead screwdriver	1	
1/8" Hex Head Driver	1	
Zip Ties	2	
Adhesive Mounts for Zip ties	2	
24V Power Supply	1	

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