

P3 Panadapter loaded with incorrect version of Firmware

January 12, 2011

We recently discovered that P3s shipped in approximately the first half of December, 2010, may have been loaded with an early engineering version of our firmware boot loader. (This was due to a computer crash and its subsequent recovery in our production area.) The only part of the P3 that is affected by the incorrect boot loader firmware is the display during the serial port firmware update process. When you load a new version of the P3 firmware, the “progress” screen displayed on the P3 will be upside down. When the firmware update is complete, the screen returns to a normal display. No other operation of the P3 is affected. The display is correct for all panadapter displays etc. *(The boot loader firmware is only programmed at the factory and is not overwritten or corrected when you load new firmware into the P3 via the serial cable.)*

No other part of the functionality of the P3 is affected by this boot loader problem.

Although the error does not affect the regular operation or performance of the P3, we feel that it is important to offer you a couple of options:

1. **You may leave the firmware as is.** The only time the upside down status screen will display is during a new firmware download to the P3. Regular P3 displays after the download will still be correct.
2. **You may remove and send in just the front panel section of your P3** for us to reprogram for you. This is easy to do. (Smaller shipping package, less postage etc.) *Note: RSA needed.*
3. **Or you may send in the complete P3** for us to reprogram for you. *Note: RSA needed.*

If you chose to return the P3 Front Panel, or complete P3, for reprogramming, please contact Madelyn, madelyn@elecraft.com (831-763-4211) for a Return Service Authorization number (RSA) and shipping information, address etc.

We apologize for this issue and will work with you to quickly resolve it to your satisfaction.

If you choose to send us just the front panel section, you may remove it using the following steps.

1. First, remove the top of the P3 by removing the six Phillips screws around the perimeter of the top.
2. Then, disconnect the 40 pin ribbon cable from the front panel PCB connector by gently tugging it using a very, *very* slight rocking motion.
3. Next, remove the black TMP coax cable from the front panel PCB TMP connector by gently pulling on the silver “wings” of the TMP cable.
4. Finally, detach the front panel section from the rest of the P3 by unscrewing the two flat head Phillips screws on the top front section of the P3, and unscrewing the two round head Phillips screws on the bottom front section of the P3.

5. Gently pull the front panel section from the main body of the P3 and place it in a shipping container that will allow for a suitable amount of packing material to protect the front panel during shipping. (This consists of the front panel PCB and the attached front panel sheet metal.)

When your reprogrammed front panel is returned to you, follow these steps to restore your P3.

1. Remount the front panel assembly to the P3 main chassis and reinsert the two flat head 4-40 screws on top and the two round head 4-40 screws on the bottom.
2. Reconnect the TMP cable to the silver connector on the top edge of the front panel PCB.
3. Reinsert the 40 pin ribbon cable onto the connector on the left side of the PCB as you look down into the P3 with the front facing you. Note that while the connector is keyed to prevent misalignment up or down, you must ensure the two vertical rows of pins both seat inside the connector.
4. Connect the P3 to power and your rig as you would normally. Power on the P3 and test it for proper operation. (If you see or smell smoke, power down the P3 immediately and check all wiring inside the P3 for misaligned connectors.)
5. If everything about the P3 seems to work as before, replace the top cover and secure it to the chassis using the six 4-40 flat head screws.

This completes the process for replacing the P3 front panel.

If you choose to send us the complete P3, please use a shipping container that will allow for a suitable amount of packing material to protect the case during shipping.

How to tell if your P3 has this issue:

With your P3 powered off and hooked up with all the proper cables, press **and hold down** the “Power” button on the front panel of the P3. As the P3 comes on, look carefully at the screen. If you see any text at the bottom of the screen as in the example below, then your P3 has the incorrect version of firmware.



P3 programmed with the wrong firmware boot code

If the power-on procedure described above shows a screen like the one below with text appearing only in the upper portion of the screen, then your P3 is not affected.



P3 programmed with the correct firmware boot code

Release the power button, or remove power from the rear of your P3, to get out of this boot loader test mode and return to normal P3 operation.