RAPT Device Boot Loop Troubleshooting guide

Symptoms

If your RAPT device boots up but continually 'loops' back to the start up logo, this indicates that the device is stuck in a 'boot loop'

The typical cause for a boot loop is a partially installed or corrupted firmware.

This can happen for several reasons including but not limited to a failed firmware download, power interruption during install, poor network strength.

A Boot Loop can occur on any RAPT device with a screen – including but not limited to RAPT Fermentation Chambers, RAPT Temperature Controllers, Gen 4 RAPT BrewZillas.

A Boot Loop issue is quite easily rectified.

Fixing a Boot Loop by resetting Volatile Memory

Generally, a Boot Loop can be resolved by resetting Volatile Memory

A Volatile Memory reset is performed using the following steps.

You may require assistance, as you need to unplug the device and re-plug it while accessing the control panel.

1: Unplug the RAPT device that is boot-looping.

2: Hold down the Up and the Down buttons on the RAPT device

3: While **holding the buttons down,** plug the RAPT device back in. Keep the two buttons held down while the unit boots up. Note – it is quite helpful to have another person assist with this.

4: The device will reboot, and also clear volatile memory. This will reset the unit (so it will forget the current WiFi config unfortunately) but it will also restore it to the last stable firmware condition.

5: Once rebooted, you can go through the initial steps required to connect the device to your WiFi network. (See Users Manual for step by step instructions if required)

6: One connected to WiFi, please navigate to **Check for OTA Update** in the **Settings** menu and select this. This will download and install the current firmware. Please ensure you have a decent, stable WiFi signal before updating, as dropouts during this can cause 'boot loop' issues as experienced.

7: This operation may need to be performed a couple of times to be successful. A successful Volatile Memory reset will display a **Connect this device to the Internet** message after booting up. If this does not appear please perform the reset operation again.

In the unlikely event that a Volatile Memory reset does not fix a boot loop issue, we can perform a full reset into recovery mode. This will reset the device back to factory defaults, and restore it to the last verified firmware.

Fixing a Boot Loop by resetting into Recovery Mode

This involves entering Recovery Mode, then reconnecting the RAPT device to WiFi and updating the firmware manually.

Only try this if resetting Volatile Memory does not fix the boot loop error.

1: Enter Recovery Mode

To do this, unplug the RAPT device, then plug it back in *while holding all 4 buttons down (Up, Down, Select, Return)*.

Once it boots up, you will see a screen called **Recovery Mode Main Menu**

2: Select option [0] **Rollback last OTA update and reset.** Use the Up and Down arrow keys to select the required option [0] then select **Enter** to do this.

If successful, the message **Rollback to previous firmware worked** will be displayed, and the RAPT device will reboot. You may then need to reconnect the RAPT device to your WiFi network and perform an OTA firmware update, then re-register the device to your RAPT account.

If unsuccessful, the message **Rollback is not possible** will be displayed, and the unit will stay in Recovery Mode.

You will need to manually connect the RAPT device to WiFi and update the firmware manually while in Recovery Mode.

As there is no on screen keyboard, the easiest way to do this is to setup a HotSpot on your phone with a super simple network name and password – such as all capital 'A's for the name and password.

Thus create a HotSpot network name of AA and a password of AAAAAAAA.

Use the Up or Down buttons to select option [1] **Connect To Wifi**.

Follow the onscreen instructions to enter the SSID and Password on the controller.

Otherwise use the navigation keys to enter your home WiFi Network SSID and Password manually

Once connected to the network, the RAPT device will go back to the main Recovery Mode menu. This time, select option [2] **Do OTA Update.**

This will update the RAPT device firmware. Once this is down, please unplug the RAPT device then plug it back in after 30 seconds. It will now start up properly.

If you used a custom mobile phone hotspot to connect you will now need to connect the RAPT device to your home WiFi network. Please refer to the online user manual for step by step instructions. The RAPT device will also need to be re-registered to your RAPT account after this.

In the unlikely event that resetting Volatile Memory and entering Recovery Mode does not fix a boot loop issue, please contact KegLand at beer@kegland.com.au or your local retailer for warranty support.