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# Software Release Notes

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## Christie Laser Module Main Software v1.4.1

Christie Laser Module Main Software v1.4.1 replaces Christie Laser Module Main Software v1.3.1.

### Affected products

- Christie LM-1
- Christie LM-L-MP
- Christie LM-R-MP
- Christie D4KLH

### Prerequisites

- Christie Laser Module Main Software v1.2.0 or later
- Ethernet cable
- A computer provided by Christie and pre-configured with the Christie Laser Bank Manager application v1.3.0 or later

### Upgrade the laser module software

For instructions for installing previous versions of the software, see the previous release notes.

1. Download the Christie Laser Module Main Software (001-112480-08) to the computer that you will use to load the software.
2. Extract the software to the C: drive.
3. Connect one end of an Ethernet cable to the Ethernet port on the Christie supplied computer and the other end of the Ethernet cable to the Ethernet port on the laser module.
4. Turn the computer on then double-click the **Christie Laser Bank Manager** icon on the desktop.
5. In the left pane, click **Connect** and select the laser module.
6. Log in with Service permissions:
  - a. In the right pane, click the **Change** tab.
  - b. In the New Access list, select **Service**.
  - c. In the Password field, type a password.
  - d. Click **Accept**.

7. In the left pane, expand the **Screens** list.
8. Click **Firmware**.
9. In the right pane, click **Boot** or **Upgrade Main**.
10. Browse to the location of the file you downloaded in step 1.
11. Click **Open**.

The firmware is automatically uploaded and the Laser Bank Manager application reconnects with the laser modules when the upgrade finishes.

## New features and enhancements

- Made logs more human readable. Now decodes areas of functionality and logs real values, for example 31.7C versus the scaled value.
- Created separate Dew point alarms (was previously showing as lower TEC alarms).
- Added method for retrieving the datastore.
- Added Module SN and Module Type into logs when module is DC power cycled.
- Added feature that clearly indicates the type of interlock tripped in logs (HW/IR).
- Added BIST command to allow functional test to be run more effectively.
- Added feature to auto assign an IP address if the DHCP server fails to assign one.
- Added support to report memory usage within the LM.

## Corrected issues

- Software no longer continues to report TEC alarms when device is marked out of service.
- Dewpoint warnings and alarms are now based on lowest TEC temperature and lowest TEC setpoint.
- Fixed an issue with Chiller not starting until the temperature was one degree above the setpoint.
- Fixed the Red Stack Voltage upper alarm when disabling lasers.
- Fixed an issue with defaults not loading early enough. This caused unexpected alarms and warnings at startup. (Issue only occurs if the datastore on the SD card is empty.)

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