Kodak

Thermal 3 Head

Firmware Version 1.04 Release Notes

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Revision History

Revision	Date	Author	Comments
A-B	12 June 2007	Ken Dyck	Created for TH3 firmware V1.04.05
B-A	15 October 2007	Ken Dyck	Updated for V1.04.06

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1. GETTING STARTED

For full details on how to install the firmware, see “Thermal 3 Firmware Installation Procedure”.

Note: This document does not provide specific information about any host platform.

Formatting conventions used in this document:

- All references to monitor commands are in `courier font`. Monitor commands for the exposure head are preceded by the `TH3 >` prompt and monitor commands for the host are preceded by the `>>` prompt.
- All references to NVS parameters are in *italics*.
- All references to scripts are **bold**.

2. LASER SAFETY PRACTICES

To use this document, you *must* have attended an exposure head introductory course given by the Kodak service training department, product specialist, or engineering support team. You must be familiar with the necessary safety precautions when working with a thermal head.

DANGER! Never operate the host device with the write laser beam on and a door open.
Do not use the service bypass jigs to bypass the door interlocks.

3. RELATED RESOURCES

- Thermal 3 Firmware Installation Procedure: **TechPlanet > Output > Heads > Thermal 3 Head > Installation** (http://techplanet.creo.com/output/heads/thermal_3/nav/install.htm)
- Thermal 3 exposure head firmware: **TechPlanet > Output > Heads > Thermal 2 Head > Control/settings > Firmware releases** (http://techplanet.creo.com/firmware/CTP/Head/Thermal3/versions.htm)
- Thermal 3 exposure head controls and settings: **TechPlanet > Output > Heads > Thermal 3 Head > Control/settings** (http://techplanet.creo.com/output/heads/thermal_3/nav/control-set.htm)
- Service Shell: **TechPlanet > Output > Service Tools > Service Shell** (http://techplanet.creo.com/output/service_tools/service_shell/nav/v2-x/index.htm)
- Controlled Releases: **TechPlanet > Output > All CTP Devices > Control/settings** (http://techplanet.creo.com/output/computer_to_plate/all_ctp/nav/control-set.htm)

4. NEW FEATURES

This section lists new features that have been added in the latest thermal 3 firmware version 1.04.xx.

4.1 Support for PBP2 Satellite Board

A new satellite board has been developed for the TH3 head. This board combines the essential functionality of the PBP, DBP, and IBS boards. When this new satellite board starts being used in production, all new heads will require firmware 1.04 or later.

If you have a head with a PBP2 board you can *not* downgrade the firmware below 1.04. While running 1.04 you can verify the satellite installation with the `TH3 > eng` and `TH3 > sat install` commands. See the example below.

```
TH3 > eng
*** Command Success ***
sat install
TH3 > sat install
[ 0] NPE  ---> installed
[ 1] ACT  ---> installed
[ 2] PBP  ---> uninstalled
[ 3] IBS  ---> uninstalled
[ 4] DBP  ---> uninstalled
[ 5] WLC  ---> installed
[ 6] RFE  ---> installed
[ 7] LVDU ---> installed
[ 8] LVDL ---> installed
[ 9] PBP2 ---> installed
*** Command Success ***
```

In this example you can see that the PBP2 is installed and the PBP, DBP, and IBS boards are uninstalled.

CAUTION: If you attempt to run the new hardware with firmware lower than 1.04 you will get numerous initialization errors and will be unable to turn on the laser.

4.2 Media Config Command

A new command `TH3> med config` was added to display all configured media in the head. This monitor command allows users to identify all configured media, the associated media index and several basic media parameters. The monitor command `TH3> set <subsystem> [<copy>] [<parameter>]` can then be used to display all media parameters. An example of the command output is listed below.

```
Index  Name/Colour/Mode      Offset/Width  Power   Speed
-------------------------------------------------------
  0    green                    8/408    41.000   300.000
  1    Creo PTP                 8/408    45.000   300.000
  5    testmedia                8/408    11.000   250.000
```

4.3 Media Command Output

The `TH3> set med` command will now only display the configured media slots rather than all the available slots.

4.4 Remove Automatic Beam Blockers

Support has been removed for automatic beam blockers, with this version of firmware.

4.5 Plot counter

A plot counter has been added for each individual media slot. The plot count can be found using the command `TH3> set med x plotcounter`.

4.6 Reset Information

When a TH3 head resets due to a shutdown or fatal fault, the head will report information to indicate the source or the fault. This should help to debug after a reset has occurred.

5. PROBLEMS FIXED

This section lists problems that have been fixed in latest thermal 3 firmware version 1.04.xx.

5.1 Crash From Laser Command (PR10817)

Under certain circumstances the `TH3> ldd cal` command would cause the head to crash. This was due to a buffer overflow. This has been fixed in TH3 firmware version 1.04.

5.2 Focus Learn Complete Data

At the end of a focus learn the head reports the average lens position if the correct verbosity is selected. In previous versions of firmware the reported value was the current lens position not the average. This has been fixed in TH3 firmware version 1.04.

5.3 Invalid Laser Failures

When the write laser fails to turn on, one of the possible error messages reported is `[04413] The beam-pointing signal level is invalid]`. In some cases this error is due to beam pointing errors rather than a write laser failure. Firmware version 1.04.06 fixes the beam pointing error so that the laser turns on successfully.

6. NVS PARAMETER CHANGES

The following NVS parameters have been changed in thermal 3 firmware version 1.04.xx.

NVS Parameter	Comment	See Section
med plotcounter	new	4.5