Version 20 Firmware Upgrade
for
FH Series Index / Tracker Marking Heads
and
Fenix Laser Markers

IMPORTANT INFORMATION: This document contains important details regarding operation of your marking head. SYNRAD highly recommends that customers upgrade to version v20 firmware as significant improvements have been made to the reliability and performance of the marking head.

Version 20 firmware features

Our current production firmware version, v20, for FH Series Index and Tracker marking heads and Fenix Laser Markers is now available as a free download for customers currently running version v8 through v19 firmware in their marking heads.

v20 Features:*

☐   Improved the position estmation algorithm for Tracking mode.

* to obtain best results with v20 firmware, we recommend that users of WinMark Pro v4.0.0.4051 and above download and install the free upgrade to version 4.6.0.4927.

Version 20 Upgrade Procedure

The following numbered steps and illustrations will guide you through the process required to upgrade FH Series marking heads and Fenix Laser Markers to version 20 firmware. In order to perform this upgrade, you must use a PCI-bus Fiber Link Controller Card (FLCC) and you must be running WinMark Pro version 4.0.0.4051 or later.

Note: Please read this procedure in its entirety before proceeding with the upgrade.

Step 1 – Verify your current configuration

1   With your marking head and computer powered-up, open WinMark Pro.

2   Click *Help* and then *About Synrad WinMark…* .

3   Record the WinMark Pro version and build numbers. Verify that the WinMark Pro version is 4.0.0.4051 or later. If not, follow the procedures listed in *Step 4 – Upgrading WinMark Pro* before continuing with the firmware upgrade.

Note: Due to a change in the version algorithm, WinMark Pro software builds prior to version 4.3.3.4528 display firmware versions greater than v10 as "12". WinMark builds 4.3.3.4528 and later display the correct marking head Firmware version.

4   Click the *Head Info* button.

5   Ensure that *Card* type is Fiber Link PCI, that the *Head* is FH Index, FH Tracker, or Fenix and that *Firmware* is 8 or higher. See Figure 1. Marking heads running version 4 or lower do <u>NOT</u> require an upgrade.
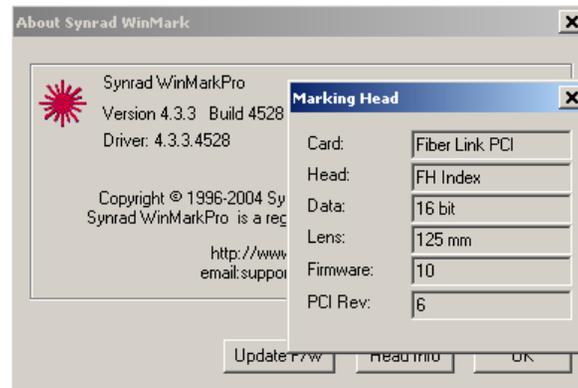

Figure 1 – Head Info dialog box

Step 2 – Download the firmware upgrade

1   Download the firmware upgrade file, *Update_20.asc*, from the WinMark Pro CD-ROM (version 4.6.0.4927) or the WinMark Pro web site at www.winmark.com.

2   Copy the upgrade file, *Update_20.asc* to your hard drive and place it in the *C:\Program Files\WinMark* folder.

Step 3 – Perform the v20 firmware upgrade

1   With your marking head and computer powered-up, open WinMark Pro.

2   Click *Help* and then *About Synrad WinMark…* .

3   In the *About Synrad WinMark* dialog, click the *Update F/W* button.

4   When the *Marking Head Firmware Update* dialog appears, click *Update*.

5   When the *Open* dialog box appears, navigate to the *C:\Program Files\WinMark* folder.

6   Click on the *Update_20.asc* file and then click the *Open* button. A Progress Bar indicates file download progress.

7   When the "Transmission of marking head firmware successful !!!" message appears (after approximately 5-10 seconds), click *OK*.

Note: If an error occurs, close and then restart WinMark Pro. Repeat Steps 2 through 7 above.

8   Remove power from the marking head for a few moments and then re-apply power. This causes the head to restart using the new firmware code.

9   In WinMark Pro, click *Help* and then *About Synrad WinMark…* .

10   Click the *Head Info* button.

11   The marking head dialog box should indicate that the firmware version is 20. See Figure 2.

NOTE: If you are running an installation of WinMark Pro older than version 4.3.3.4528, any firmware update beyond v10 will display as "12". This does <u>not</u> affect the operation of the marking head or WinMark Pro. The correct firmware value is displayed by WinMark builds 4528 and above. To upgrade your version of WinMark Pro, follow the procedures listed in *Step 4 – Upgrading WinMark Pro*.
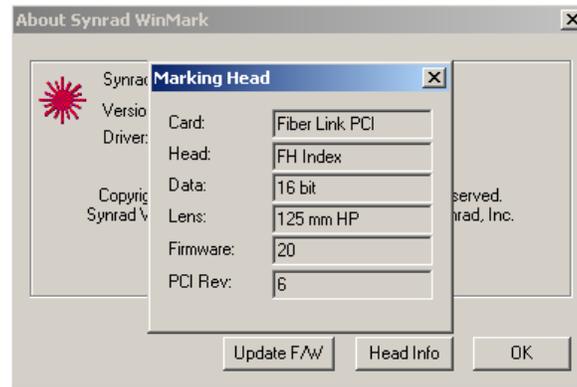

Figure 2 – Head Info dialog after upgrade

Upgrading WinMark Pro to v4.6.0.4927

! Important Note: Some parallel-port Hardlocks may not be compatible with WinMark Pro builds above 4090. If your marking system fails to mark properly after upgrading to WinMark build 4927, then your Hardlock must be replaced. Uninstall build 4927 and re-install the previous version you were running. Contact SYNRAD Customer Service at 1-800-796-7231 about obtaining a replacement Hardlock.

Note: You must have a PCI-bus FLCC in order to drive SYNRAD marking heads using WinMark Pro version 4.X builds. WinMark Pro 4.X versions are not compatible with ISA-bus Fiber Link Controller Cards.

Step 1 – Uninstall WinMark Pro

1   Backup all .mkh mark files on your computer in case you choose to revert back to a previous version of WinMark Pro.

Note: Existing .mkh mark files can always be opened by newer versions of WinMark Pro; however, an .mkh file SAVED in a new version of WinMark cannot be opened by versions having a build number lower than the version used for creation.

2   From the Windows *Start* menu, go to *Synrad WinMark*, choose *Uninstall Synrad WinMark* and follow the uninstall prompts. Alternately, you can navigate to the *C:\Program Files\WinMark* folder and double-click *Unwise.exe*.

Step 2 – Software installation

1   Locate the WinMark Pro 4.6.0.4927 upgrade file, *WinMark_Setup.EXE*, and release notes on the WinMark Pro CD-ROM or WinMark Pro web site (www.winmark.com).

2   Double-click the installation file, *WinMark_Setup.EXE*.

3   You can choose to *Save* this file to your hard drive or *Open* the file and install it directly from the CD-ROM or server.

4   Follow the instructions shown in the installation dialog boxes.

5   During the WinMark Pro installation, you will be prompted to choose whether to keep your existing WinMark Pro Registry Settings or to perform a clean installation. See Figure 3.

! Warning: Typically, you should choose the default selection, "Keep Current Program Settings". Performing a clean install will delete any Custom Date Code formats, Saved Serial Numbers, Shift Codes, or custom application settings that are currently defined in your computer's System Registry.

Figure 3 – Registry Settings dialog

Step 3 – Verify the software installation

1   Double-click the *Shortcut to WinMark Pro* icon on your desktop.

2   If you performed a clean installation, select the appropriate lens and click *OK* when WinMark Pro opens.

3   From the *Tools* menu, click *General Settings… .* On the *Application Settings* tab, locate the *I/O Card Selection* property and verify that the PCI card is properly identified.

4   From the *Help* menu, click *About Synrad WinMark… .* In the dialog box, ensure that the WinMark Pro version is 4.6.0.4927. See Figure 4.

Figure 4 – WinMark Pro version after upgrade

5   Open an existing .mkh mark file and create a mark.

Important Note: If the marking head fails to mark properly, close WinMark Pro, but **DO NOT SAVE** the .mkh file. If you must uninstall version 4.6.0.4927 and reinstall an older WinMark version, the mark file may not open if it has been saved by a newer version of WinMark.

This completes the FH Series/Fenix marking head firmware installation. If you have any questions about the firmware or software upgrade procedure, please contact SYNRAD's Technical Resources Department at 1.425.349.3500 or email us at custservice@synrad.com.