

LIGHTER SUITE 7.3.2 – RELEASE NOTES

This document describes the SW Release **LIGHTER 7.3.2** for **Laser Marking** devices.

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MODELS SUPPORTED

LIGHTER 7.3.2 is generally compatible with the following LM devices:

- AREX XXX-X65, AREX XXX-X64
- AREX XXX-X55, AREX XXX-X54
- AREX XX00-1X42
- AREX A200-1X53
- UNIQ 1150-1X41, UNIQ 1150-1X40
- VLASE XXXX-1X43, VLASE XXXX-1X42
- EOX 6X02-1X41, EOX 6X02-1X40
- ULYXE 1066-1XXX (*)

(*) see [IMPORTANT REMARKS – NOTE ON WINDOWS 10 and ULYXE](#)

SUPPORT FOR PROFINET IO

The embedded PROFINET IO interface in 7.3.2 (N.B. SW license 93ACC1919 required) is fully qualified for the following LM devices:

- AREX XXX-X65, AREX XXX-X64
- AREX XXX-X55, AREX XXX-X54
- AREX XX00-1X42
- AREX A200-1X53
- UNIQ 1150-1X41, UNIQ 1150-1X40
- VLASE XXXX-1X43, VLASE XXXX-1X42
- EOX 6X02-1X41, EOX 6X02-1X40

SUPPORT FOR MARVIS™ FUNCTIONALITIES

The MARVIS™ DPM code grading functionalities in 7.3.2 (N.B. SW license 93ACC1918 required) are fully qualified for the following LM devices:

- AREX XXX-X65, AREX XXX-X64
- AREX XXX-X55, AREX XXX-X54
- AREX XX00-1X42
- AREX A200-1X53
- UNIQ 1150-1X41, UNIQ 1150-1X40
- VLASE XXXX-1X43, VLASE XXXX-1X42

and for the following MATRIX family devices :

- MATRIX 120 X1X-01X
- MATRIX 210N 2XX-X1X (DPM illuminator and YAG filter recommended)
- MATRIX 220 3XX-010 (DPM illuminator and YAG filter recommended)
- MATRIX 300N 4XX-01X (DPM illuminator and YAG filter recommended)
- MATRIX 410N XXX-X1X (DPM illuminator and YAG filter recommended)

Installed FW package is **1.6.3.50** for MATRIX 220 and **1.5.1.606** for the remaining MATRIX models.

SOFTWARE DISTRIBUTED

This software distribution includes **LIGHTER 732_RTM_237 installer *.EXE** (approx. 190 MB) and some utilities and docs.

MATRIX™ firmware packages: for MATRIX™ 220 version **1.6.3.50**, for other compatible MATRIX™ devices version **1.5.1.606**

EDS file: **EDS_1.3_S5000_v1**

GSDML file: **GSDML-V2.33-Datalogic-Laser-Marker-20190402-000001**

IMPORTANT REMARKS

NOTE ON FIREWALL RULES FOR ETHERNET/IP AND PROFINET

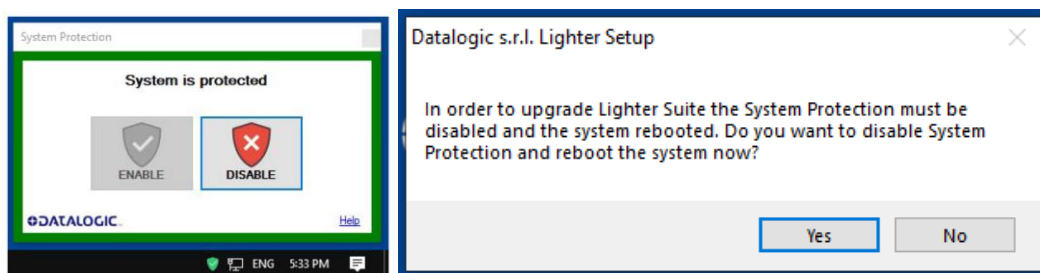
After a LIGHTER upgrade, it is recommended to verify the **Windows Firewall inbound/outbound rules** that are necessary for applications using **EtherNet/IP** or **Profinet/IO**.

Consult EtherNet/IP or Profinet/IO User Manuals for information on how to check and allow in/out traffic for the **LaserEngine.exe** application. The filepath is *C:\Program Files (x86)\Lighter\X.x\LaserEngine.exe* for Windows 10 systems and *C:\Program Files\Lighter\X.x\LaserEngine.exe* for Windows Embedded Standard 7 systems.

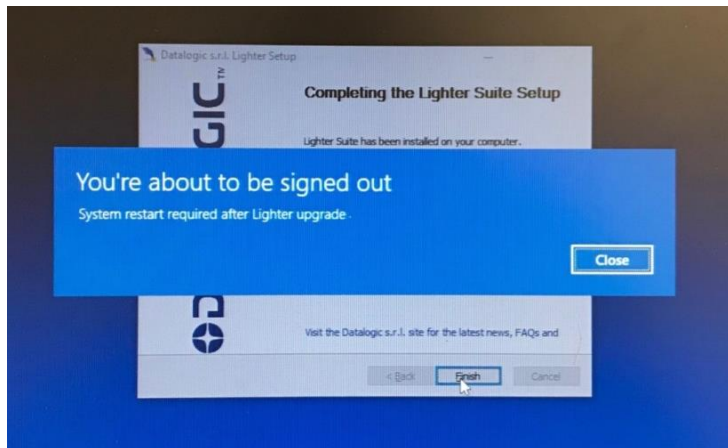
X.x indicate the major and the minor release numbers of LIGHTER installed, ex. 7.2 or 7.3.

NOTE ON SYSTEM PROTECTION IN EMBEDDED WINDOWS 10 LASER MARKERS

The **C partition** of all embedded-PC **Windows 10 IOT** laser markers is write-protected by the **System Protection** app; see the User Manual of the specific product for details. Before launching the 7.3.2 installer, it is necessary to disable *System Protection* and restart the system. A popup will warn the user if *System Protection* is not disabled, and will allow the user to disable & reboot automatically. After restart, the installer must be re-launched.



At the end of the 7.3.2 installer, the system will restart automatically:



After restart, *System Protection* will be automatically enabled.

NOTE ON IMARK2 DRIVER v. 1.0.4.

In LIGHTER 7.3.2 there are some known issues in the installation of **Imark2 driver v. 1.0.4** for product families **AREX 400**, **AREX 20 MW** and **UNIQ**.

In **WES7** systems AREX XXX-X64, AREX XXX-X54, AREX A200-1X53 and UNIQ 1150-1X40, the Imark2 driver v. 1.0.4 is not digitally signed (#63370), but can be installed anyway.

In **Windows 10** systems AREX XXX-X65, AREX XXX-X55, UNIQ 1150-1X41, installation of LIGHTER 7.3.2 will not automatically install the Imark2 driver v. 1.0.4 due to digital signature recognition (Known Issue #111743). The driver, however, can be installed manually; contact DATALOGIC Technical Support if assistance is required.

NOTE ON MARVIS ('MARK & READ') LICENSE

Due to some improvements in MARVIS™ license protection, **on some devices where LIGHTER 7.0.1 or 7.0.0 were manually installed as upgrades of existing versions, the existing MARVIS™ FULL / EVAL licenses may be disabled after installing LIGHTER 7.3.2. Laser machines shipped with LIGHTER 7.0.2 or newer pre-installed in factory by DATALOGIC (see laser unit's datasheet) will not be affected.** For more info, contact Technical Support with the device serial number and SW version at hand (*LaserEditor > Help > About*) before starting the upgrade. Installation of 7.3.2 on 7.0.0 / 7.0.1 devices where MARVIS™ is not used or already expired will not affect general LIGHTER functionalities. Installation of 7.3.2 on versions 6.4.0 or older will grant 30 days MARVIS™ evaluation period.

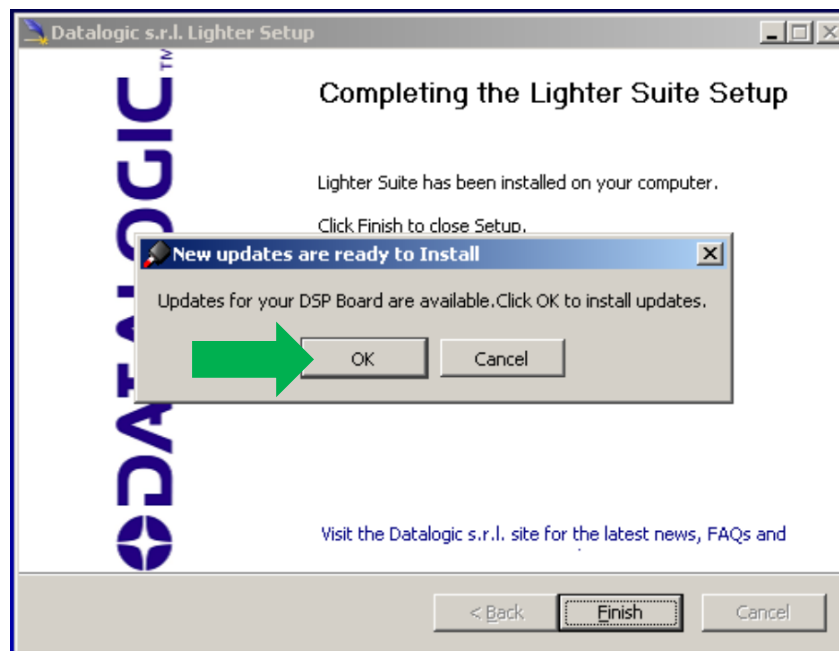
NOTE ON NEW FPGA FOR IMARK EMBEDDED SYSTEMS

If installed on LIGHTER versions 7.0.2 or lower, LIGHTER 7.3.2 will bring new **FPGA software** for the following LM models:

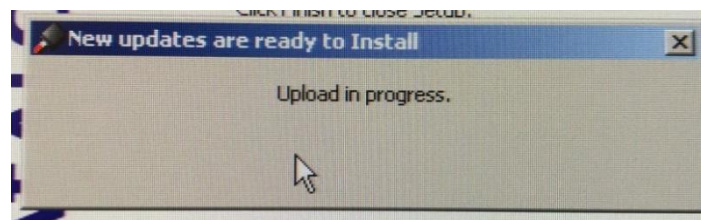
- AREX XX00-1X42
- VLASE XXXX-1X42
- EOX 6X02-1X40

This upgrade fixes some problems related to slow PCI bus communication, unresponsive mouse/keyboard, slow operative system, unstable communication with *Fiber Configurator* (for AREX) serial app.

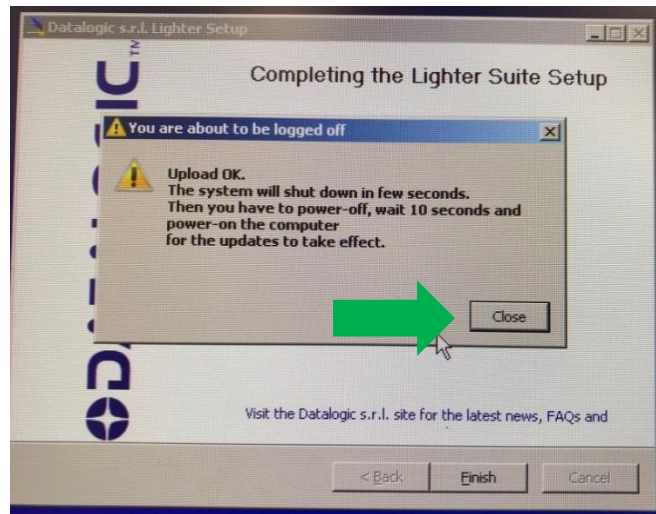
During LIGHTER upgrade, when prompted by a message box “**Updates for your DSP Board are available**”, click **OK** to install the updates:



Wait for the process to finish:

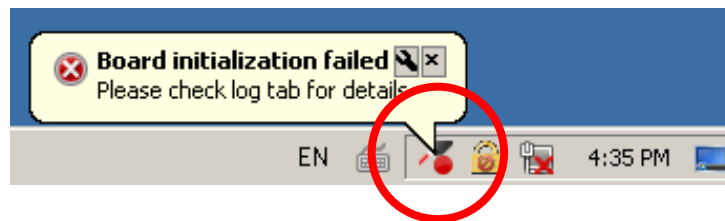


After DSP upgrade, the installer will finish normally and the PC will shut down automatically after a message box “**Upload OK**”. Click *Close*, or wait:

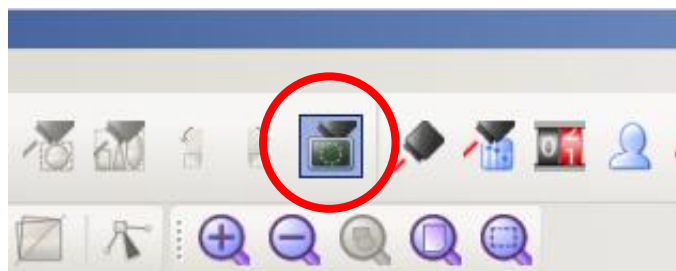


At the next power-on after upgrade, *LaserEngine* will go in “Simulation mode”. Check the following clues:

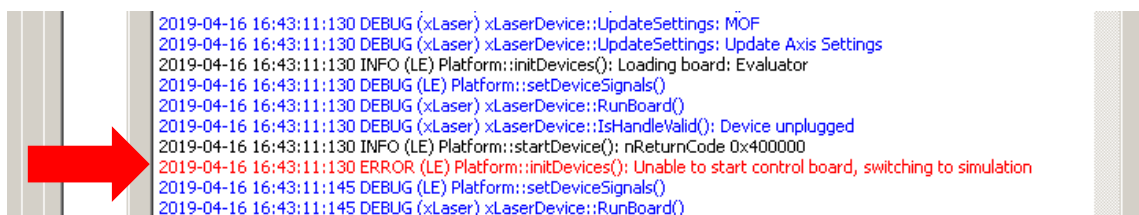
- A. Red *LaserEngine* icon, even when KEY=0 and ENABLE=0.
 Popup “**Board initialization failed. Check log tab for details**”.



- B. Simulator active.

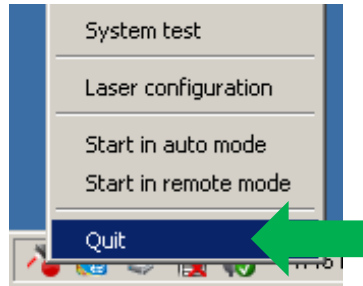


- C. Entry in *LaserEngine* log “**ERROR(LE) Platform::initDevices(): Unable to start control board, switching to simulation**”.

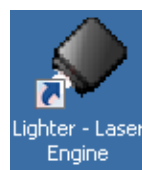


PROCEDURE TO FINISH FPGA UPGRADE

1. Right-click on *LaserEngine* icon in tray bar and **Quit** *LaserEngine*.



2. Re-launch *LaserEngine* (double-click) from desktop.



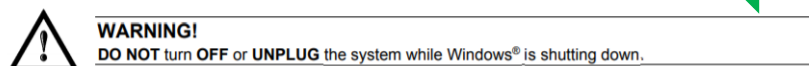
3. The *LaserEngine* icon should turn green (if KEY=0 and ENABLE=0) and the laser will be usable.



4. Double click on “**save-data**” batch file on desktop. A message box informs to restart or shutdown the system in order to permanently save data. Press OK.



5. **Shut down** the system in order to save the new settings



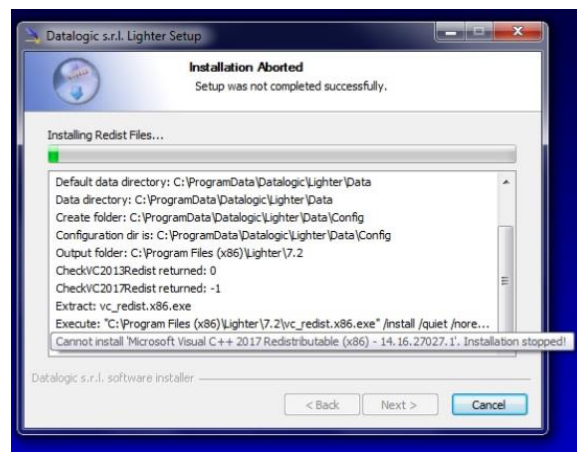
6. WAIT until the system shuts down automatically (black screen).
7. **Power off** the system to complete installation.
8. At following restart, *LaserEngine* icon will be green steady (with KEY=0 and ENABLE=0) and the system will not be in simulation mode anymore.

NOTE ON MS VISUAL C++ REDISTRIBUTABLES

LIGHTER 7.3.2 installer will install the following SW:

- Microsoft Visual C++ 2010 x86 Redistributable Setup
File: vc100redist_x86.exe
Version: 10.0.40219.1
- Microsoft Visual C++ 2013 Redistributable Setup
File: vcredist_x86.exe
Version: 12.0.30501.0
- Microsoft Visual C++ 2017 Redistributable (x86)
File: vc_redist.x86.exe
Version: 14.16.27027.1

If newer versions of redistributables are found installed ex. on a laptop, LIGHTER Suite installer will abort with “*Cannot install ‘Microsoft Visual C++ [...] Redistributable [...] Installation stopped!’*”.



You can apply the workaround of uninstalling the newer redistributables, launch and finish LIGHTER Suite installer, and finally reinstalling your redistributables.

NOTE ON WINDOWS XP

Windows XP or Windows XP PRO on non-embedded computers are not supported anymore.

NOTE ON ADMINISTRATOR ACCOUNTS

LIGHTER 7.3.2 must be run as Administrator on Windows 10 laptops, otherwise you may experience some problems in accessing/writing to the Data folder (ex. known issue #95906).

NOTE ON WINDOWS 10 and ULYXE

Starting **Windows 10** version 1607, the **USB driver SW of ULYXE 1066-1XXX** may not be recognized. It is thus not recommended to install LIGHTER 7.3.2 on such OS versions. The recommended last stable version for those systems is **6.2.2_13893**. Contact DATALOGIC Technical Support for inquiries or specific installers.

NEW FEATURES & IMPROVEMENTS

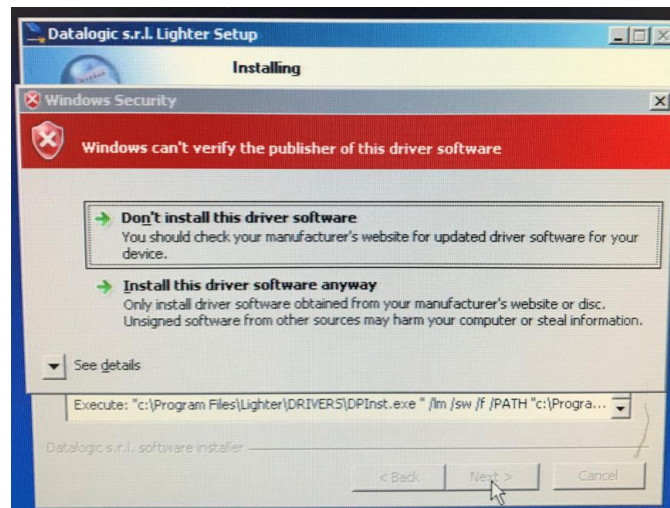
- Two single-line fonts and relative EULA distributed in standard installation (*OLFComputerOC-Regular* and *OLFMonospaceOC-Regular*).

CHANGES & FIXES

- (115121) [Win10] With UWF enabled, the Lighter Suite Installer shall provide to disable the system protection and reboot
- (116185) [DRV lmarkII] [AREX400] [UNIQ][AREX 20 MW] Installing v. 731 over v. 720 (or lower) on WES7 systems, the lmarkII driver v. 104 is not installed automatically (must be installed manually).

KNOWN ISSUES

- (46973) EDITOR: AIMING BEAM rest position with CLONES property doesn't work correctly
- (47430) ENGINE: by REMOTE MODE and in WAIT FOR START state, if I press EXTERNAL START, the system begins the marking.
- (48420) ENGINE: in MoF mode, when set some values of DISTANCE parameter, the system doesn't work correctly (or even crashes)
- (48652) EDITOR - Datamatrix with Contour + Pocketing + Angle is not filled correctly
- (48980) EDITOR: 'Send marking on selection' command disables the objects after mark all enabled objects, in addition to selected object.
- (49232) VLASE-20IR - Lighter 6.2.3 15944 - "Bad marking error" in MOF for scale X > 101.8
- (49236) Lighter 6.3.1 16272 - Material DB changes not transferred to XLPs in Engine
- (49417) Lighter 6.3.1 16272 - DXF rescaled after importing
- (61766) When 'Set I/O port' command is sent to turn on only OUTPUT 1 (or only OUTPUT 12), also OUTPUT 12 (or OUTPUT 1) is turned on at the same time
- (62750) ENGINE: When the wrong 'Move and rotate document' command is sent, no command can be sent
- (63370) During Lighter installer on WES7 systems, a iMarkII driver installation message appears > select 'Install anyway'.



- (63634) If the photocell doesn't have the reflector in front (and no signal goes back to it from reflector), by pressing and releasing the Stop from the Command Box, the marking doesn't stop and starts again
- (65815) [JULYXE] ENGINE: no status refresh after pressing STOP button with external CBOX
- (67437) Disconnection is caused from Supervisor to Laser Marker when Supervisor requests to open a XLP file not present in LaserEngine

- (70599) Ulyxe USB driver digital signature not recognized on some Win10 PCs (starting Windows 10 version 1607).
- (71759) import filter AI (Adobe Illustrator) & PDF does not respect scale
- (76351) [LaserEditor][LaserEngine] With %V[], multiple global counters values in XLP are permuted randomly. Use %v[] (lowercase) instead.
- (77433) [Lighter][Std-RS232] NULL config.txt file blocks the execution of the Std-RS232 script (*Result of expression 'value' [undefined] is not an object*)
- (79730) [Axis] [Laser Engine] [AREX-20MW] Script Axis.move() function call generates a delayed Axis movement
- (79741) [LaserEditor][PRJ import] Wobble parameter is applied incorrectly when importing Smartist 4.1 files
- (80013) [MARVIS][QualityGradeTraning] In QGT, if the symbol contains references to local/global variables or time strings, code match will fail because the variables are not updated.
- (81322) [Rotor axis] Some vectorial graphics with holes are marked with extra lines on a rotor device when Sector Size >0.
- (86375) [UNIQ] [End signal] : The End signal changes state, after starting a marking, but before the Busy signal
- (87390) [VLasell] [Lighter Suite] [Driver PCI] : After upgrade to 712, the installation of the new driver ends after the Laser Engine is started.
- (87885) [AREX3] [Lighter Suite] [Driver PCI] : After upgrade to 712, the initialization of the control board isn't successful the first time
- (88046) [Lighter Suite] [iMark platform] [Start marking signal] : By releasing the external Stop command from the Cbox, a start event will be notified in the System test window
- (88238) [ActiveX] When connected via ActiveX to Laser Engine with an external application, it is impossible to reconnect after a physical disconnection of the cable unless you exit and re-enter 'Remote Mode'
- (88426) If INCREASING MOTOR STEPS is set in Axis configuration, the DIRECTION of generic movement must be reversed compare to DECREASING MOTOR STEPS
- (88789) [Ulyxe DSP] [Laser Engine window] [Statistics tab] : By turning the KEY of the Cbox from 1 to 0, the Marking OK event is notified
- (90181) [Profinet] Freeze Engine Arex 3 in Laser Warning/WarmUp condition
- (90299) [MARVIS] [MATRIX 220] [Ext illuminator] If "Internal Lighting = Disabled", external illuminator is not activated [ref. #85956]
- (91762): [TcpServer] If an object is BLOCKED, the command 'Move and Rotate Document' does not move the document starting from its origin
- (92779) [Product with iMarkI] After changing the correction parameters in Laser Configuration, the limits don't work the first time they are started
- (92781) [Product with iMarkI] After changing the parameters in Laser Configuration, the Laser Test doesn't work the first time it is started
- (93586) [AREX400] [Axes] If the board is started with DISABLE_Z HIGH, the axis won't move when DISABLE_Z is removed.

- (94342) [EIP] [PNIO] Bits "MARVIS Status" not activated (address 38 Input Memory Map)
- (94407) [Laser Editor] [Import Script button] By opening the script, the .png files, in the .zip folder, aren't imported (manual import will work)
- (94853)(95214)(98579)(99676) *WinSAT* Windows scheduled task can produce errors/disconnections in TCP-IP / PNIO / EIP and should be disabled manually.
- (95695) [Profinet] Protocol error 2 occurred with "Stop axis command " when "Reset axis" command is performing
- (95520) [Editor] IMPORTED type objects cannot be cloned
- (95906) Impossible to create new Global String (or generally write in the Data folder) in Windows 10 where the application LaserEngine is not launched "as administrator"
- (95935) [Supervisor] In REMOTE MODE, match/grade messages in Status Bar of Remote Engine are not shown
- (95944) [EthernetIP] [Profinet] Reset Z Axis fails in LaserEngine GUI visualization if system is already in home
- (96306) [Ulyxe DSP] [Lighter Suite] [Limits on selection] By selecting a second object, with the limits of a first object projected, the limits of the second object aren't projected
- (96595) [Profinet] [Ethernet] MARVIS "Validation" window not updated in Remote Mode
- (97133) [ProfiNet] [Axis Movement bit] : By performing a movement of the X axis, the bit relative to the R Axis Movement (in the Input area) changes from 0 to 1
- (97183) [ProfiNet] [Axis Movement bit] : Forcing an Interlock error during the movement of the X axis, the bit relative to the X Axis Movement (in the Input area) remains at 1
- (97205) [ProfiNet] [Ready to mark bit] : With the laser marker in WAIT FOR START state, the Ready to mark bit (in the Input area) changes from 0 to 1 instead of remaining at 0
- (98142) [EthernetIP] "Stop axis" fails the second time it is sent
- (98182) [Editor] Rectangular Datamatrix is physically 12x36 cells, but labeled incorrectly (12x32) in field "Size"
- (98318) [Laser Engine] [Ring document] [Limits] : With the MARVIS enabled (but not used), the movement of the R axis to project the limits of a document isn't realized
- (98323) [Profinet] "Set autofocus" command fails via fieldbus; it works via Engine GUI.
- (98463) [LaserEngine] [TCP/IP-EIP-PNIO] [Open Document From Device] [Preview] : Reopening the same document, after changing the content via TCP, the preview isn't updated
- (99664) [Profinet] When in Auto mode, commands which change the loaded layout provoke a misalignment between the Laser Engine Preview and what will be marked
- (101401) [AREX 20 MW] [Laser.inz] C_off and C_jump unexpectedly altered to 3000 us
- (101752) [Engine][Profinet] External Start Marking crashes LaserEngine when connected via PNIO and Engine is in Auto Mode

- (101760) [Engine][Profinet][Marvis] After generating a Reader Error with Engine in Auto Mode, the following marking does not make an acquisition and reports 'Unknown Code Type', while the 'Reader Error' state persists
- (102610) [AREX400] [AREX400][Axes][Sequences] 'Set out' before 'Move axis' makes the axis lose steps
- (104310) [Profinet] PNIO stack will crash after a random time from connection with an ABB Master Node
- (106556) [LaserEditor] [Global variables] Mutiple global counters in Editor are incremented by 1, whereas in Engine by the # of counters
- (107501) [Laser Engine][Axis] When moving the Z Axis by pressing instantly the directional key, the height displayed is changed, but the phisical position is not changed
- (107695) [Profinet] [EIP] [TCP] After 'Load document' command, document list in Engine is not updated. Marking preview is updated and file marked correctly.
- (108182) [LaserEditor] Reversed datamatrix codes with Filling='Dot' are misplaced
- (108805) [Engine] [Profinet] When renaming the LAN boards on Arex400 PRO it is no longer possible to connect to the PLC via Profinet
- (109863) [Laser Dashboard] [Script] Two 'onTextChanged' events instead of one are fired by a LineEdit widget when signal re-connected within a callback
- (109997) [Laser Editor] [Sequence document] [MARVIS] : After an axis move, the execution of a sequence containing MARVIS validation is interrupted
- (110154) [Win 10 IoT Image] [EIP] Occasional Laser Engine crash when document preview is enabled.
- (111743) [DRV ImarkII] [AREX400] [UNIQ] On Win10 systems, Imark2 driver version 1.0.3 is installed instead of version 1.0.4 due to missing digital signature.
- (112202) [ActiveX][Engine] Global counter is incremented by twice the 'Step' parameter.
- (116995) [EIP][Laser Engine] The Request Data Field is limited to address 127 instead of offering up to address 255.
- (117598) [UNIQ] With document or ring in 'Auto mode' and LaserEngine GUI start, END is raised before BUSY.
- (118947) [Win10 IoT] [Laser Engine icon] Occasionally and not reproducibly, right-clicking on LaserEngine tray icon the configuration menu is not shown. Open LaserEngine and right-cilck on Status Bar icon as workaround.
- (119400) [EIP][Network] Impossibility of the PLC to connect to LE via EIP if the EIP Sockets are created while there is no network presence

TOOLS & DOCUMENTATION

The relevant support files and documentation are installed along with the LIGHTER SUITE applications (*Barcode Reference*, *EtherNet IP User Guide*, *Laser Dashboard Script Manual*, *Project Editor User Guide*, *StdRS232 Protocol manual*, *LIGHTER TCP Server Manual*, *LIGHTER Suite User Guide*, *Profinet IO User Guide*, *LIGHTER EULA*) in “C:\Program Files ... \Lighter\7.3\Docs”.

LIGHTER 7.3.2 installer will be published on DATALOGIC website.

RELEASE HISTORY

- **LIGHTER 7.3.2**

Suite for AREX XX00-1X42, AREX A200-1X53, UNIQ 1150-1X4X, VLASE XXXX-1X4X, EOX 6X02-1X4X, ULYXE 1066-1XXX, AREX XXX-X5X, AREX XXX-X6X.

- **LIGHTER 7.3.1**

Suite for AREX XX00-1X42, AREX A200-1X53, UNIQ 1150-1X4X, VLASE XXXX-1X4X, EOX 6X02-1X4X, ULYXE 1066-1XXX, AREX XXX-X5X, AREX XXX-X6X.

- **LIGHTER 7.3.0**

First release compatible (only) with embedded Windows 10 IOT laser markers. Suite for UNIQ 1150-1X41, VLASE XXXX-1X43, EOX 6X02-1X41, AREX XXX-XX5.

- **LIGHTER 7.2.1**

Release for AREX XX00-1X42, AREX A200-1X53, UNIQ 1150-1X40, VLASE XXXX-1X42, EOX 6X02-1X40, ULYXE 1066-1XXX, AREX XXX-XX4.

- **LIGHTER 7.2.0**

First suite with embedded PROFINET IO. Suite for AREX XX00-1X42, AREX A200-1X53, UNIQ 1150-1X40, VLASE XXXX-1X42, EOX 6X02-1X40, ULYXE 1066-1XXX, AREX XXX-XX4.

- **LIGHTER 7.1.3**

First suite with MARVIS™ support for MATRIX 220. Suite for AREX XX00-1X42, AREX A200-1X53, UNIQ 1150-1X40, VLASE XXXX-1X42, EOX 6X02-1X40, ULYXE 1066-1XXX, AREX XXX-XX4.

- **LIGHTER 7.1.2**

Suite for AREX XX00-1X42, AREX A200-1X53, UNIQ 1150-1X40, VLASE XXXX-1X42, EOX 6X02-1X40, ULYXE 1066-1XXX, AREX XXX-XX4.

- **LIGHTER 7.1.1**

Suite for AREX400 models only (AREX XXX-X64, AREX XXX-X54).

- **LIGHTER 7.1.0**

Suite for AREX400 models only (AREX XXX-X64, AREX XXX-X54).

- **LIGHTER 7.0.2**

Suite for AREX XX00-1X42, AREX A200-1X53, UNIQ 1150-1X40, VLASE XXXX-1X42, EOX 6X02-1X40, ULYXE 1066-1XXX.

- **LIGHTER 7.0.1**

Suite for AREX XX00-1X42, AREX A200-1X53, UNIQ 1150-1X40, VLASE XXXX-1X42, EOX 6X02-1X40, ULYXE 1066-1XXX.

- **LIGHTER 7.0.0**

First suite with MARVIS™ DPM code grading functionalities, for AREX XX00-1X42, AREX A200-1X53, UNIQ 1150-1X40, VLASE 1X09-1X42.