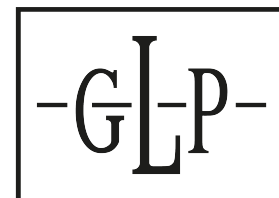


GLP Firmware Change Log



impression X5 (X5-19) / GLP impression X5 Firmware Log V1.4.4 / 07/04/2024

Below you will find the history of all fixture firmware versions since the release of the device. Please note the respective information on functional changes, extensions, optimizations, etc. Even if it is our goal to develop firmware updates without relevant performance changes, it can always happen that optimizations or bug fixes can affect the device performance. Please read the note on "INFO" as a matter of urgency.

We strongly advise that firmware updates be carried out on individual replacement devices first.

Likewise, updates should never be carried out shortly before an important use of the device. If in doubt, speak to your GLP Service Team.

04 Jul 2024 / Main changes from V1.4.3 to V1.4.4	
NEW FEATURES & IMPROVEMENTS	<ul style="list-style-type: none">• n/a
BUG FIXES	<ul style="list-style-type: none">• Removed red error messages that appear by mistake randomly across all fixtures.• Display the used Art-Net Universe in the Main Screen when input portocol is set to Art-Net
UPDATE PROCESS	<p>All Fixtures need 1 update, if the bootloader that comes with version 1.4.3 has been installed already. Then proceed with step 2.</p> <p>If you are updating fixtures from version 1.1.3, two updates has to be done one after the other via D3Prog / RS485/ DMX</p> <p>As these files are very big you have to change the DProg type with the PA Application to the 4-storage -version. (Prog.Update > Set DProg type > Number of files = 4). The transfer of the bootloader from PC to the programmer takes about 3 minutes. The transfer of the main software from PC to programmer takes about 10 - 15 minutes.</p> <ol style="list-style-type: none">1. Update the Main Bootloader V1.4.4 package via DMX/RS485 via D3Prog (impression-X5_1.4.4_BOOTDMX.bin) (Consists of Main Bootloader Version 1.1.0)2. Update the Main Application V1.4.4 package via DMX/RS485 via D3Prog (impression-X5_1.4.4_DMX.bin) <div><p>⚠ Please make sure that no other DMX receivers or consoles are active on the line and fixtures Control Protocol is set to DMX and not to loose power during the complete update process! As the 2 files for the upload are very big, please allow the PA transfer App a little time for the transfer and all responses.</p></div> <div><p>⚠ During and after transfer of the Bootloader to the fixtures, some fixtures may have their displays off. Please give them another 5 minutes after the transfer from the D3Prog to the fixtures for the internal transfer of the bootloaders to the PCBs and then start with the main application update. After then main application update is transferred to the fixtures they will need another ten minutes to update all drivers internally. After this is done, the fixtures will perform a reset, show a red error message and then update/ restore the color calibration.</p></div>

GLP Firmware Change Log

impression X5 (X5-19) / GLP impression X5 Firmware Log V1.4.4 / 07/04/2024



WARNING	<p>⚠ A CRITICAL BUG WAS FIXED IN BOOTLOADER package 1.4.3 (Main BL 1.1.0)! Make sure all slave bootloaders are updated to version 2.2.1 (BL package 1.4.3 or BL package 1.4.4) before attempting any further update. If this is not obeyed, the Network Interface can be bricked and requires opening of the fixture!</p>
INFO	<p>⚠ This update is show critical as the tilt direction of bar fixtures is changed (when updating from V 1.1.6) . And motor drivers are optimized in general. As the main bootloader is updated, the fixtures could be on factory settings after the update.</p> <p>⚠ After updating to V1.4.4, it is not advisable to downgrade as this can lead to problems. For this reason, this is not recommended.</p> <p>Fixtures on V1.4.3 are stable, You can mute the error message via control channel setting display off if needed.</p> <p>For devices without a network module (first GLP impression X5 production batches up to SN 11198****), this must be retrofitted first in order to obtain the ethernet functionality.</p>
VERSION PACKAGES	<p>impression-X5_1.4.4_BOOTDMX.bin , consist of Main BL V1.1.0 (provided via website as download)</p> <p>impression-X5_1.4.4_DMx.bin (provided via website as download)</p>

GLP Firmware Change Log

impression X5 (X5-19) / GLP impression X5 Firmware Log V1.4.4 / 07/04/2024






20 Jun 2024 / **Main changes from V1.1.3 to V1.4.3**

NEW FEATURES & IMPROVEMENTS	<ul style="list-style-type: none">• Added Art-Net functionality• Add Performance Mode for Beamshaper accessory. (→ GLP impression X5 only) The X5 will detect added accessory automatically and change performance setting for Pan/Tilt speed.
BUG FIXES	<ul style="list-style-type: none">• Corrected Tilt direction for X5 Bar 1000 and X5 IP Bar. (→ GLP impression X5 Bars only) > Tilt will move towards front (away from display) when increasing DMX values.• optimization of the SW of the motor driver boards
UPDATE PROCESS	<p>All Fixtures need 2 updates. One after the other. Via D3Prog / RS485/ DMX As these files are very big you have to change the DProg type with the PA Application to the 4-storage -version. (Prog.Update > Set DProg type > Number of files = 4). The transfer of the bootloader from PC to the programmer takes about 3 minutes. The transfer of the main software from PC to programmer takes about 10 - 15 minutes.</p> <ol style="list-style-type: none">1. Update the Main Bootloader V1.4.3 package via DMX/RS485 via D3Prog (impression-X5_1.4.3_BOOTDMX.bin)2. Update the Main Application V1.4.3 package via DMX/RS485 via D3Prog (impression-X5_1.4.3_DMX.bin) <div><p>⚠ Please make sure that no other DMX receivers or consoles are active on the line and fixtures Control Protocol is set to DMX and not to loose power during the complete update process!</p><p>As the 2 files for the upload are very big please allow the transfere SW please allow the PA transfere App a little time for all responses.</p><p>After transfer of the Bootloader to the fixtures, some fixtures may have their displays off. Please give them another 5 minutes for internal transfer of the bootloaders. and then start with the main application update.</p><p>After then main application update is transferred to the fixtures they will need another ten minutes to update all drivers internally. After this is done, the fixtures will perform a reset, show a red error message and then update/ restore the color calibration.</p></div>
WARNING	<div><p>⚠ A CRITICAL BUG WAS FIXED IN BOOTLOADER package 1.4.3 ! Make sure all slave bootloaders are updated to version 2.2.1 (Bootlaoder package 1.4.3 or BL package 1.4.4) before attempting any further update. If this is not obeyed, the Network Interface can be bricked and requires opening of the fixture!</p></div>

GLP Firmware Change Log

impression X5 (X5-19) / GLP impression X5 Firmware Log V1.4.4 / 07/04/2024





INFO	<div><div> This update is show critical as the tilt direction of bar fixtures is changed. And motor drivers are optimized in general. As the main bootloader is updated, the fixtures could be on factory settings after the update.</div><div> After updating to V1.4.3, it is not advisable to downgrade as this can lead to problems. For this reason, this is not recommended.</div><div> For devices without a network module (first GLP impression X5 production batches up to SN 11198****), this must be retrofitted first in order to obtain the ethernet functionality.</div></div>
VERSION PACKAGES	<div>impression-X5_1.4.3_BOOTDMX.bin , consist of Main BL V 1.1.0 (provided via website as download)</div> <div>impression-X5_1.4.3_DMX.bin (provided via website as download)</div>

GLP Firmware Change Log

impression X5 (X5-19) / GLP impression X5 Firmware Log V1.4.4 / 07/04/2024



02 Jun 2023 / **Main changes from V1.0.1 to V1.1.3**

NEW FEATURES & IMPROVEMENTS	<ul style="list-style-type: none">• Renamed DMX Mode 5 to Multipix Compressed RGB• Added new DMX Mode 6: Multipix Compressed RGBL• Added beta Firmware support. Version number has -beta appended and the screen background is purple.
BUG FIXES	<ul style="list-style-type: none">• Zoom, Pan and Tilt can freeze (very seldom) because of bus transmission issues• Gamma correction was accidentally applied to background layer pixels in any ColorMix Mode. Gamma correction should only be applied in ColorMix Mode: RGB. This resulted in different color outputs when the same color values were applied to foreground and background layer.• Lightning shutter effect was not working correctly• optimization of the SW of the motor driver boards
UPDATE PROCESS	<p>Fixtures need 1 update, if V1.0.1 or higher is installed already.</p> <p>Via D3Prog (RS485/DMX) :</p> <ol style="list-style-type: none">1. Update the Main Application V 1.1.3 via DMX/RS485 via D3Prog (impression-X5_1.1.3_DMX.bin) <p>Optional via iQ.Service App (no Login needed) :</p> <p>Change the Control Protocol in the Fixtures Protocol Setup Menu to iQ.Mesh, or via DMX Control Channel to iQ.Service Connect: DMX 012-013 (4,7% - 5,1%)</p> <ol style="list-style-type: none">1. Update the Main Application V 1.1.3 <div><p>Please make sure that no other DMX receivers or consoles are active on the line and fixtures Control Protocol is set to DMX!</p></div>
INFO	<p> This update is show critical as the color mix bug (Gama correction bug) is solved and should not be done on site, especially when background colors are programmed and in use.</p> <p> This update is an important and urgently needed firmware update that should be installed to prevent device errors.</p>
VERSION PACKAGE	impression-X5_1.1.3_DMX.bin (provided via website as download and iQ.Service App)

GLP Firmware Change Log

impression X5 (X5-19) / GLP impression X5 Firmware Log V1.4.4 / 07/04/2024



23 Mar 2023 / **Main changes from V0.14.5 to V1.0.1**

VERSION DETAILS

- Updated Color Calibration (4.5.0) (via iQ.Service App)
- Added iQ.Gamut Color selection: Full, Rec.2020, Rec709, DCIP3.65
- Added: Dimmer Curves Linear and S-Curve
- Added and adjusted Fan Modes. Regulated Mode will be much more quite and turn off all fans when LEDs off and the temperature allows fans off.
- Added: PWM Settings
- Added: Hibernate : Caution, fixture needs wakeup via DMX or power-cycle to leave hibernate.
- Added: Advanced Service Menu: Job Offsets (Pan, Tilt, Zoom)
- Added: RDM : Set Factory Default Settings
- Added: RDM : Get Fixture Serial Number


BUG FIXES

- Fixed: Color Mixing: Previous Color Calibration version could lead to color and intensity jumps
- Fixed: Increased Zoom Speed in Normal Performance Mode back to normal speed (faster).
- Fixed: iQ.Mesh: Activate iQ.Mesh via DMX Control Channel, as long as the DMX Slot (012-013) is selected. When the slot is not selected anymore a 5 minute timeout starts after which the iQ.Mesh module will fall asleep.
- Fixed: Update via iQ.Service App works fast as supposed to be. Unfortunately after this update ..
- Changed: No Signal Mode: Default is now DMX-Hold

GLP Firmware Change Log

impression X5 (X5-19) / GLP impression X5 Firmware Log V1.4.4 / 07/04/2024



UPDATE PROCESS	<p>Fixtures need 4 updates. One after the other.</p> <p>Via D3Prog / RS485/ DMX</p> <ol style="list-style-type: none">1. Update the Main Bootloader V1.0.0 via DMX/RS485 via D3Prog (impression-X5_1.0.0_BOOTDMX.bin)2. Update the Main Application V 1.0.1 via DMX/RS485 via D3Prog (impression-X5_1.0.1_DMX.bin) <p>Change the Control Protocol in the Protocol Setup Menu to iQ.Mesh: Update via iQ.Service App:</p> <ol style="list-style-type: none">3. Update the iQ.Mesh Version to V5.0.314. Update the Color Calibration to V4.5.0 <p>If you have fixtures below version 0.14.5 or just an older set bootloaders: it could occur that after the BL update (step 1) the fixture needs about 5 minutes to prepare all internal updates with its display off. Please do allow the fixture these 5 minutes before proceeding with the main update step 2, while display is off still. The display will come back automatically during step 2.</p> <p>The first two updates have to be done via DMX, D3Prog, daisy chain. When importing the bin files to a D3Prog make sure that you choose the file type „BIN“ before uploading the file to the programmer.</p> <div><p>Please make sure that no other DMX receivers or consoles are active on the line and fixtures Control Protocol is set to DMX for step 1 and step 2 and iQ.Mesh (iQ.Data) for step 3 and step 4 . Do set to iQ.Mesh via Protocol setup menu, only! All fixture settings will perform a reset to factory defaults after the main application update (step 2), if updateing from 0.X.X to 1.X.X After step 4 remember to change back the Protocol Data In to DMX.</p></div>
INFO	<p> This update is show critical as pattern, dimming, colormix and shutter behavior is changed and should not be done on site.</p>
VERSION PACKAGE	<p>impression-X5_1.0.0_BOOTDMX.bin (provided via website/download) impression-X5_1.0.1_DMX.bin (provided via website/download) iQ.Mesh V5.0.31 (included in iQ.Service App V1.4.2) ColorCalibration V4.5.0 (included in iQ.Service App V1.4.2)</p>

GLP Firmware Change Log

impression X5 (X5-19) / GLP impression X5 Firmware Log V1.4.4 / 07/04/2024




11 Jan 2023 / Main changes from V0.14.4 to V0.14.5	
VERSION DETAILS	<ul style="list-style-type: none">• N/A
BUG FIXES	<ul style="list-style-type: none">• Fixed bug in dimmer curve in RGBL - ColorMix Mode
UPDATE PROCESS	<p>If fixtures are on V0.12.6 or earlier an iQ.Mesh Update has to be performed via the iQ.Mesh App. Afterwards 2 files have to be uploaded via DMX/RS485. First the new Bootloader, second, the Main application. Please take care that fixtures don't loose power between the two updates. (1, 2, 3) For the mesh update please refer to the separate mesh update manual.</p> <p>If fixtures are already on V0.14.4 only the main application V0.14.5 has to be uplaoded. (3)</p> <p>1.) Mesh Update to Version 5.0.26</p> <p>2.) Upload: impression-X5_0.14.5_BOOTDMX.bin</p> <p>This has to be done via DMX, D3Prog, daisy chain. To get all drivers internally updated please wait 5 minutes after this update before you proceed with step 2. During Step1 the fixtures display can go off. Don't worry. Just wait the specified 5 minutes. The display will go On after step 2 again.</p> <p>3.) Upload: impression-X5_0.14.5_DMx.bin</p> <ul style="list-style-type: none">• When importing the bin files to a D3Prog make sure that you choose the file type „BIN“ before uploading the file to the programmer. <div><p>The fixtures can be updated daisy chain via DMX/RS485. Please make sure that no other DMX receivers or consoles are active on the line and fixtures Control Protocol is set to DMX</p></div>
INFO	<p>⚠ This update is show critical as pattern, dimming, colormix and shutter behavior is changed and should not be done on site. V0.12.4 and 0.12.6 is stable, still.</p>
VERSION PACKAGE	<p>impression-X5_0.14.5_DMx.bin impression-X5_0.14.5_BOOTDMX.bin</p>

GLP Firmware Change Log

impression X5 (X5-19) / GLP impression X5 Firmware Log V1.4.4 / 07/04/2024



22 Dec 2022 / **Main changes from V0.12.6 to V0.14.4 / BL0.14.4**

VERSION DETAILS	<ul style="list-style-type: none">• Added additional pattern• Improved RDM, added RDM Identify• Implemented "No-Signal" Scene• Implemented Manual DMX• Implemented Fan Modes High, Medium and Low• Implemented Hibernation via DMX• Implemented various test modes
BUG FIXES	<ul style="list-style-type: none">• Fixed bugs in dimmer curve• First light output at Dimmer DMX 001
UPDATE PROCESS	<p>Two files have to be uploaded via DMX/RS485, first the new Bootloader, second, the Main application. Please take care that fixtures don't loose power between the two updates.</p> <p>1.) Upload: impression-X5_0.14.4_BOOTDMX.bin</p> <p>This has to be done via DMX, D3Prog, daisy chain. To get all drivers internally updated please wait 5 minutes after this update before you proceed with step 2. During Step1 the fixtures display can go off. Don't worry. Just wait the specified 5 minutes. The display will go On after step 2 again.</p> <p>2.) Upload: impression-X5_0.14.4_DMX.bin</p> <ul style="list-style-type: none">• When importing the bin files to a D3Prog make sure that you choose the file type „BIN“ before uploading the file to the programmer. <div><p>The fixtures can be updated daisy chain via DMX/RS485. Please make sure that no other DMX receivers or consoles are active on the line and fixtures Control Protocol is set to DMX</p></div>
INFO	<p> This update is show critical as pattern, dimming, colormix and shutter behavior is changed and should not be done on site. V0.12.4 and 0.12.6 is stable, still.</p>
VERSION PACKAGE	<p>impression-X5_0.14.4_DMX.bin impression-X5_0.14.4_BOOTDMX.bin</p>

11 Nov 2022 / **iQ.Mesh Update to Version 5.0.26**

VERSION DETAILS	Mandatory Update of the iQ.Mesh Version via the iQ.Service App
-----------------	--

GLP Firmware Change Log

impression X5 (X5-19) / GLP impression X5 Firmware Log V1.4.4 / 07/04/2024



VERSION PACKAGE	impression-X5_0.12.6_DMX.bin
19 Aug 2022 / Main changes from V0.12.4 to V0.12.6	
VERSION DETAILS	Added support for new display type
BUG FIXES	--
UPDATE PROCESS	<p>One file has to be uploaded via DMX/RS485</p> <ol style="list-style-type: none">1. Upload: impression-X5_0.12.6_DMX.bin <p>When importing the bin file to a D3Prog make sure that you choose the file type „BIN“ before uploading the file to the programmer.</p> <p>The fixtures can be updated daisy chain via DMX/RS485. Please make sure that no other DMX receivers or consoles are active on the line and fixtures Control Protocol is set to DMX.</p>
INFO	<p>Update is not necessary on older fixtures.</p> <p>V0.12.4 is stable.</p> <p>Update is not show critical</p>
VERSION PACKAGE	impression-X5_0.12.6_DMX.bin
13 May 2022 / Main changes from V0.9.5 to V0.12.4	
CHANGES	<ul style="list-style-type: none">• Changed DMX Modes to final version• Changed Mode5, this mode comes now without color channel• Changed Zoom direction, zoom 255 is now wide• Changed Pan Tilt range default to normal angle and added option to choose between 540°pan (normal) and extended pan range 650°• Changed and finished pattern and pattern channel layout• Added: RGBL Color Mode• Added: Battery mode• Added: “No-Signal: Hold”• Added: Pan Motor is disabled when working in the menu
BUG FIXES	Fixed: Light Output During Reset.

GLP Firmware Change Log

impression X5 (X5-19) / GLP impression X5 Firmware Log V1.4.4 / 07/04/2024



UPDATE PROCESS	<p>Two files have to be uploaded in sequence via DMX/RS485, one after the other:</p> <ol style="list-style-type: none">1. Upload: impression-X5_0.12.4_BOOTDMX.bin After the update of the new Bootloader is finished please wait about 30 seconds before the second step below2. Upload: impression-X5_0.12.4_DMX.bin When importing the 2 bin files to a D3Prog make sure that you choose the file type „BIN“ before uploading the files to the programmer. <p>The fixtures can be updated daisy chain via DMX/RS485. Please make sure that no other DMX receivers or consoles are active on the line and fixtures Control Protocol is set to DMX.</p>
INFO	<p>Update is show critical!! Anything programmed and running with V0.9.5 should stay on 0.9.5 if it should work and look the same as before !</p>
VERSION PACKAGE	<p>impression-X5_0.12.4_DMX.bin; impression-X5_0.12.4_BOOTDMX.bin</p>
12 Mar 2022 / V0.9.5 (Fieldtest)	
INFO	<p>First Release</p>
VERSION PACKAGE	<p>impression-X5_0.9.5_DMX.bin</p>