Platform/Software	Package version	Status	Release date
ICMP Software	1.3.4.1	Release	July 24th, 2018

1 Introduction

1.1 About this document

This document provides the release notes of the different versions of the ICMP software and it should be used by anyone wishing to install a software version of ICMP. The release note is provided in the software update package and is available on the secured Barco website (https://www.barco.com).

1.2 About ICMP

The Integrated Cinema Media Processor (ICMP) stores, decrypts and decodes the cinema content and delivers it to the projector in a usable format, all integrated into a single assembly placed directly in the projector.

1.3 About this release

Version 1.3.4.0 is the new release version of the ICMP firmware available for both hardware revisions:
- R7681061
- R7681270 and R7681271 (no mezz)

The new firmware enables the EclairColor DCP support and the SMPTE Audio Sync Delay.

ICMP new firmware 1.3.4.0 is only applicable in those installations where an Barco APX is used and/or those that are part of an EclairColor system.

Version 1.3.4.1 is a service release.

2 ICMP Software Release Notes

2.1 Version 1.3.4.1 – July 24th, 2018

In order to have access to all 1.3.4.1 features and improvements, please install:

Software	Version	Reference
Barco Communicator Software		
Barco Communicator (Windows)	5.11 or higher	R33002303 /34
Barco Communicator (Mac)	5.11 or higher	R33002302M /31
Barco Communicator (Linux)	5.11 or higher	R33002303L /31
Barco Commander Software		
Barco Commander (Windows)	1.9.0 or higher	R33051752 /14
Barco Commander (Mac OS X)	1.9.0 or higher	R33051754 /14
Barco Commander (Linux)	1.9.0 or higher	R33051755 /14
Clone package		
Clone package for Galaxy 4K projectors without Infitec	dpBaseCloneIcmp_Galaxy4K.2.7.8*	R33051784 /03
Clone package for Galaxy 4K projectors with Infitec	dpBaseCloneIcmp_Galaxy4K.2.7.8*	R33051769 /05
Clone packages for 2K/4K projectors	dpBaseCloneIcmp.2.8.1*	R33051762 /07
Clone packages for 4K Laser projectors	dp4K-60L_BaseCloneIcmp.2.7.7*	R33051796 /03
Cinema Controller Software		
Cinema Controller for L series	1.4.4 or higher	
Cinema Controller for B and C series	2.4.42 or higher	

Cinema Controller for CLP series	2.4.42 or higher	
Cinema Controller for S and E series	1.10 or higher	
Other files		
Configuration files (Automation for CPXXX)	-**	R33051807 /02
Hardware	**Version**	**Reference**
ICMP***	Rev 19 or higher	R98011351
ICMP+****	Rev 19 or higher	R7681270 and R7681271

* See Barco Communicator manual for more info on cloning.

** Those xml files can be merged to the existing ICMP Automation cues library. Once merged, it is advised to change the IP address of the new added device.

*** **ONLY required for LTC !** All previous HW rev. are fully compatible with version 1.2.5, but will not output LTC.

**** This hardware revision has two HDMI 2.0 ports (needed to display HDMI 2.0 formats).

2.1.1 Feature Improvements

1.3.4.1 (SERVICE RELEASE)
- Fix a communication issue when too many encrypted CPLs are included inside a show
- Fix a database update issue while upgrading to 1.3.4.X

1.3.4.0 (INITIAL RELEASE)
- ICMP now support EclairColor DCP. A license is required in order to be able to play those CPLs
- A SMPTE Sync Audio delay can be added on top of the basic Audio Delay for Barco immersive sound renderer
- The name of the played CPL is now displayed in the Dashboard and the Player page of Barco Web Commander
- Improved content management. A database update will be executed on first boot after update
- New Automation Over IP commands available :
  - Recover
  - Recover and play
  - Ignore Recovery
  - Enable Repeat
  - Disable Repeat
  - Clear
- Fix a parsing display issue. Related CPLs and KDMs are now displayed side by side
- Fix a defect in secure logs export process

1.3.3.5 (SERVICE RELEASE)
- Fix a blanking issue on first play
- Fix an issue when the ICMP was not responding anymore after a "Pause Positioning" in a CPL with HDMI input selected
- Fix a Automation over IP issue for the support of PAA20+ device

1.3.3.4 (SERVICE RELEASE)
- Improve the JNior client behavior so that all input signals can be triggered without sending an output first
- Reduce the polling frequency of the CPL and KDM validation between ICMP and CP850 in order to increase the reliability of the communication between those two devices
- Improve "Play Now" reliability to avoid a ICMP crash
- Display Port are now working after an ICMP update (fix on the EDID)
- Special characters are now supported in show titles

1.3.3.3 (SERVICE RELEASE)
- Final improvement of the ICMP behavior when switching from HDMI2.0 input back to MediaPlayer

1.3.3.2 (SERVICE RELEASE)
- Improve the behavior when a CPL playback freeze could occur after a switch from HDMI2.0 input back to MediaPlayer
- Fix a copyright date display issue
- Improve handling for disconnection of automation TCP devices

1.3.3.1 (SERVICE RELEASE)
- Automatic reload of an ATMOS show if the connection is lost between ICMP and the CP850 (workaround due to CP850 CPL validation failure)
- It is now possible to change the color space of the HDMI 2.0 inputs if the "Over rule infoframes" checkbox is enabled in Barco Communicator
- Ignore invalid frame id in case of data path issue
- Fix possible invalid lamp status in API when the projector lamp is on
- Avoid system crash when trying to save a show on a unmounted RAID (also valid for "Add Kdms", …)
- Add an audio fade out when switching from HDMI 2.0 to MediaPlayer
- Fix execution of alternative input macro during a CPL playback
- Fix scaling issue on Display Port
- Fix possible flickering issue on HDMI 1.4

1.3.3.0 (INTIAL RELEASE)
- The RealD Ghostbusting can be enabled / disabled via Barco Communicator 5.10

1.3.2.2 (SERVICE RELEASE)
- Fix main picture format issue when multiple CPLs are sharing same video assets
- Fix issue when stopping and clearing the player during a clip transition
- Fix a timeout issue during full scan of an ingest source
- Fix connection loss when removing a USB device during ingest scan
- Fix possible crash when a source mxf file is not accessible anymore during ingest
- Fix possible issue when pressing play while switching from HDMI 2.0 to mediaplayer
- Fix RPL error when playing with AuroMax rendering
- Fix seldom issue when updating automation settings during projector cues execution

1.3.2.1 (INTIAL RELEASE)
- Improve "User session" management in order to avoid unexpected logout from the UI
- Improve ingest behavior and communication between ICMP and CinemaController on L-series projector to avoid any connection loss
- Improve ingest of shows and database cleanup behavior so that it doesn't create an error when the two actions are done simultaneously

1.3.2.0 (BETA RELEASE)
- Pause Positioning: this feature allows the user to change the timeline position anywhere in the playlist while the player is paused and see the image at the new position on screen. This timecode can be copy/paste in the show editor
- Monitor show cues / clips : using the API, it is now possible to get a status and monitor the execution of cues or get the status of clips from a selected show
- Auto readout of projector ID: the ICMP will now support automatically any kind of new projector model
- Improve the retrieve time of secure logs export via Barco Communicator

1.3.1.8 (SERVICE RELEASE)
- Improve network connection stability between Barco ICMP and Dolby CP850

1.3.1.7 (SERVICE RELEASE)
- Fix a playout issue (wrong checksum) on encrypted SMPTE Test content (5.1 and 7.1) where sound issues were occurring (no sound)

1.3.1.6 (SERVICE RELEASE)
- Fix a playout issue when reaching the end of a Escape CPL in PlayNow mode

1.3.1.5 (SERVICE RELEASE)
- Fix a bug on network connection drop/reconnect timeout settings that could lead to failing ingest jobs

1.3.1.4 (SERVICE RELEASE)
- Fix an ingest timeout issue
- Fix an issue on displaying Test Patterns on Laser Phosphor projectors
- Improve the behavior of the "Black Screen Detection" on startup

1.3.1.3 (SERVICE RELEASE)
- Fix a "Play Now" issue when trying to play an Interop CPL with Closed Caption
- Automatic selection of the target color space for HDMI 2.0 inputs
- Fix reported HDD size and total storage capacity

1.3.1.2 (INITIAL RELEASE)
- Improve syslog download
- Fix a dimming issue
- Prevent saving a show with an empty title

1.3.1.1 (BETA RELEASE)
- Improve "Play Now" robustness

1.3.1.0 (BETA RELEASE)
- The "Black Screen Detection" mechanism is now fully editable. Please use Barco Communicator 5.6 or higher in order to be able to access those settings
- HDR can be enabled on HDMI2.0 ports. You have to enable this feature by adding a license using Barco Communicator
- "Play Now" is now available in the ingest panel. The selected CPL will be directly loaded in the player, ready to be played (without being ingested). Please refer to Barco ICMP User manual for a full description of this feature and its limitations

1.3.0.1 (SERVICE RELEASE)
- Enable support of HDMI 2.0 ports on R7681270 and R7681271 hardware revision

2.1.2 Limitations

ICMP firmware updates limitation:
- Install a recent 1.3.X version could not work when trying to update from an old ICMP firmware. If the device is running on 1.2.5.X or below, please update first to 1.2.6.1. The board will then be able to be updated to any 1.3.X firmware.

Features not yet activated:
- LTC : SMPTE12M-1 does not support HFR or interlaced field
- 3G-SDI: color space setting via PCF file only when not available in stream payload.
- HDMI :
  - Some image artefacts might appear when switching from one HDMI 4K format to another or rebooting/reconnecting the HDMI device
    - WORKAROUND: reapply the correct HDMI macro.
  - Select a TestPattern when HDMI source is selected is not working
  - Side-by-side full sources are not supported
  - 480i sources are currently not supported
- Display Port : 3D formats on single display port are not supported (2048x1080 and 1920x1080)

- Alternative content decoder (MPEG-2 DCPs are readily supported)
- Cannot parse drives with more than 100.000 files.
- No content must be selected in the player in order to change the ICMP player settings or in order to reset the ICMP factory settings.
  - Audio-channel settings can be changed while playing.
- When using the USB Tethering from your tablet to connect to the ICMP, your tablet will not charge when in use (or charge very slowly).
- Post Production Communicator: CLUT is not supported and no color adjustment on some internal test patterns
- The IP address range 192.168.254.xxx is also not allowed for ICMP Lans or Projector IP address. Please refer to the Barco Communicator Manual for more details
- DCP-Publishing:
  - The FTP client has to be configured in "Binary mode" in order to be able to retrieve files from the ICMP.
  - When using the FXP protocol (between an ICMP and a TMS for example), it is recommended to transfer one file at a time in order to avoid any file corruption.
  - FTP username and password are not editable by users.
- For exertnal usb drives, NTFS file system partitions are limited to 2TB
- Play Now feature is limited to the following sources :
  - NFS
  - USB3.0 (no recovery available)

2.1.3 Software defects

Barco puts utmost efforts in testing software, however the errors listed below or other issues may occur. Please contact your Barco support in case of any trouble.

- Some USB keys and USB3.0 drives may sometimes fail to be recognized by the ICMP.
  - WORKAROUND: for USB3.0 drives try high-quality cables (gold plated connectors).
- There is no warning when a show with invalid content or invalid/missing KDM is scheduled.
- In some cases an intermission cue that includes a Stop action (e.g. to switch to an alternative content input), may result in this intermission being played in a loop continuously, instead of only once.
  - WORKAROUND: make sure to delay the first stop by one second. E.g. this cue configuration will properly execute an intermission of 15 seconds (delays in msec):

PLAYER	**Stop**	**1000**
PROJECTOR	Macro->DP	5000
PROJECTOR	Macro->MediaPlayer	18000
PLAYER	Play	20000

- Dual Projection setup have some limitations :
  - While doing the setup, please only use numerical IP addresses to define the Slave setup (hostname is not working).
  - Text error messages for the same error are different on Master and Slave interfaces.
  - It is possible to configure both Master and Slave to display the same eye. With such a configuration the stereoscopic effect is lost, but no specific warning is displayed.
  - If the Master ICMP is going offline (hard shutdown, power failure, …), playback will continue on the slave projector.
    - WORKAROUND: please connect with Commander/Web Commander on the slave projector to stop the playback manually.
- Escape Projection setup have some limitations :
  - If the Master ICMP is going offline (hard shutdown, power failure, …), playback will continue on slave projectors.
    - WORKAROUND: please connect with Commander/Web Commander on slave projectors to stop the playback manually.
  - If one of the two slave projector is going offline (hard shutdown, power failure, …), playback will

continue on the other slave projector until the next transition. Then the playback will be stop on both slaves.

- WORKAROUND: please connect with Commander/Web Commander on the running slave projector to stop the playback manually.
- o As an Escape DCP is always SMPTE compliant, Interop content (including subtitles) are not supported.
- o When the master ICMP is in a "Paused" state, Slaves projectors are still displaying "Playing" as a status (but they are paused, waiting for the Master ICMP to restart the playback).

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