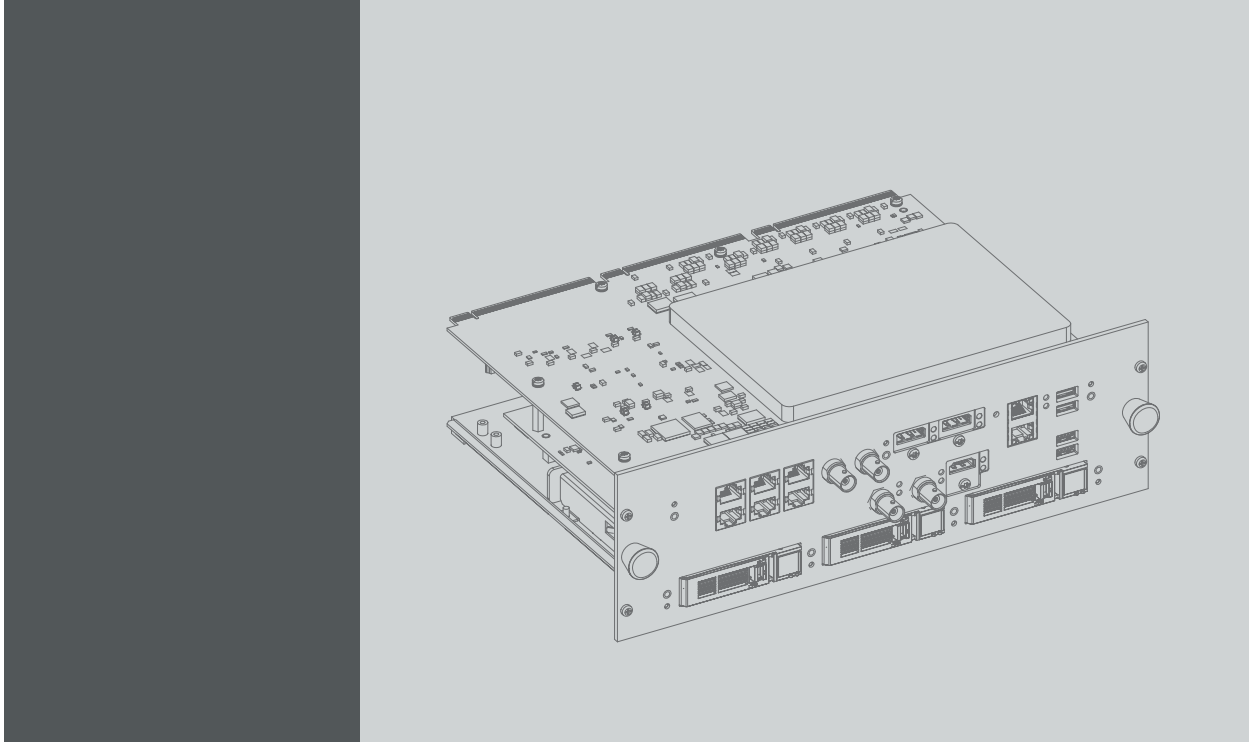


ICMP



## Service Manual DP Alchemy

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BARCO

Visibly yours

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# 1. SAFETY

## About this chapter

Read this chapter attentively. It contains important information to prevent personal injury while servicing the ICMP. Furthermore, it includes several cautions to prevent damage to the ICMP. Ensure that you understand and follow all safety guidelines, safety instructions and warnings mentioned in this chapter before servicing the ICMP. After this chapter, additional “warnings” and “cautions” are given depending on the service procedure. Read and follow these “warnings” and “cautions” as well.



**WARNING:** This manual is only intended for qualified service personnel.

---

## Overview

- Safety Instructions

## 1.1 Safety Instructions

---



**WARNING:** Before removing/replacing any projector components, disconnect the power to the unit mains terminals.

---

### Safety Instructions

1. Before returning an instrument to the customer, always make a safety check of the entire instrument, including, but not limited to, the following items:
  - a) Be sure that no built-in protective devices are defective and/or have been defeated during servicing.
    - (1) Protective shields are provided on this chassis to protect both the technician and the customer. Correctly replace all missing protective shields, including any removed for servicing convenience.
    - (2) When reinstalling the chassis and/or other assembly in the cabinet, be sure to put back in place all protective devices, including, but not limited to, insulating materials, barriers, covers/shields, and isolation resistor/capacitor networks. Do not operate this instrument or permit it to be operated without all protective devices correctly installed and functioning. Service people who defeat safety features or fail to perform safety checks may be liable for any resulting damage.
  - b) Be sure that there are no cabinet openings through which an adult or child might be able to insert their fingers and contact a hazardous voltage. Such openings include, but are not limited to, (1) excessively wide cabinet ventilation slots, and (2) an improperly fitted and/or incorrectly secured cover panels.
  - c) Leakage Current Hot Check. With the instrument completely reassembled, plug the AC line cord directly into a 220 V AC outlet (Do not use an isolation transformer during this test). Use a leakage current tester or a metering system that is designed to comply with the new IEC, ANSI and UL standards. With the instrument AC switch first in the on position and then in the off position, measure from a known earth ground (metal waterpipe, conduit, etc.) to all exposed metal parts of the instrument (antennas, handle bracket, metal cabinet, screwheads, metallic overlays, control shafts, etc.). especially any exposed metal parts that offer an electrical return path to the chassis. Any current measured must not exceed 3,5 mA. Reverse the instrument power cord plug in the outlet and repeat test. ANY MEASUREMENTS NOT WITHIN THE LIMITS SPECIFIED HEREIN INDICATE A POTENTIAL SHOCK HAZARD THAT MUST BE ELIMINATED BEFORE RETURNING THE INSTRUMENT TO THE CUSTOMER OR BEFORE CONNECTING ACCESSORIES.

#### AC Leakage Test

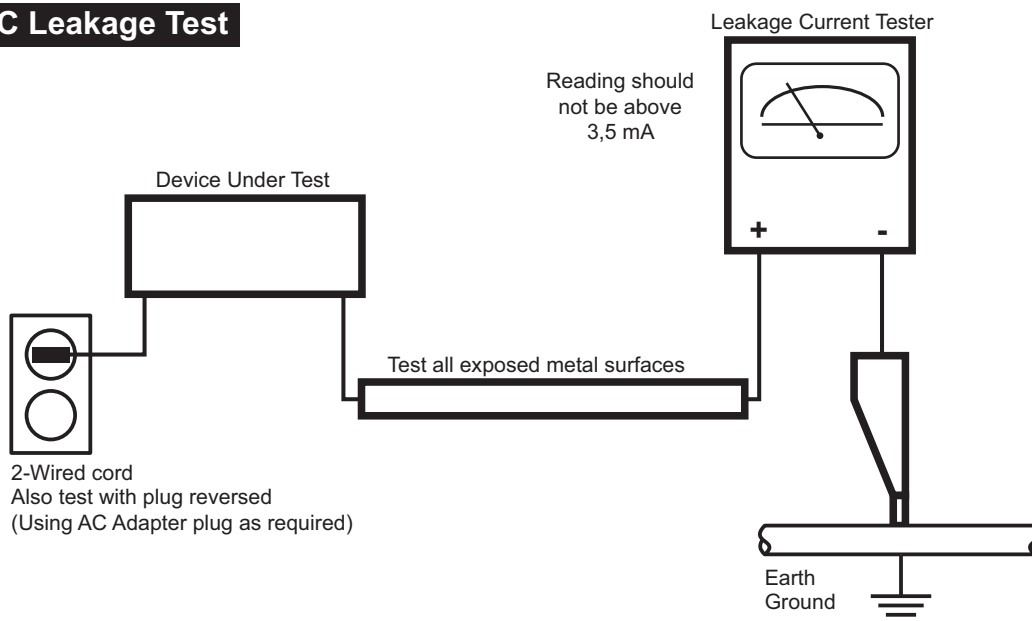


Image 1-1

- d) Ultraviolet Radiation exposure - Warning: This lamp can cause serious skin burn and eye inflammation from shortwave ultraviolet radiation if not operated in enclosed fixtures. DO NOT operate this lamp in a fixture with a missing or broken lens cover.
    - e) Ozone: Operating lamp generates ozone gas which is harmful to the respiratory system. Therefore the lamp should be operated in adequately ventilated equipment.
2. Read and comply with all caution and safety-related notes on or inside the projector cabinet or on the projector chassis, or on the picture tube.



3. Design Alteration Warning - Do not alter or add to the mechanical or electrical design of this apparatus. Design alterations and additions, including, but not limited to, circuit modifications and the addition of items such as auxiliary audio and/or video output connections, might alter the safety characteristics of this apparatus and create a hazard to the user. Any design alterations or additions may void the manufacturer's warranty and may make you, the servicer responsible for personal injury or property damage resulting therefrom.
4. Lamp explosion Protection Warning – The lamp in this projector operates with a high internal pressure and there is a slight risk that the lamp may explode, particularly if it is used beyond its rated life. Do not remove, install, or otherwise handle the lamp in any manner without first putting on shatterproof goggles equipped with side shields. People not so equipped must be kept safely away while lamps are handled. Keep the lamp away from your body. For continued explosion protection, replace the lamp only with one of the same type number. Always replace the lamp before the rated life time.
5. Hot Chassis Warning - This projector chassis has two ground systems: the primary ground system is formed by the negative voltage of the rectified mains (power) and is only used as a reference in primary circuits; the secondary ground system is connected to earth ground via the earth conductor in the mains (power) lead. Separation between primary and secondary circuits is performed by the safety isolation transformers. Components bridging these transformers are also safety components and must never be defeated or altered. All user-accessible conductive parts must be connected to earth ground, or are kept at SELV (Safety Extra Low Voltage).
6. Observe original lead dress. Always inspect in all areas for pinched, out-of-face, or frayed wiring. Do not change spacing between components, and between components and the printed-circuit board. Check AC power cord for damage. Take extra care to assure correct lead dress in the following areas:
  - a) near sharp edges
  - b) near thermally hot parts - be sure that leads and components do not touch thermally hot parts
  - c) the AC supply
  - d) high voltage
7. Components, parts, and/or wiring that appear to have overheated or are otherwise damaged should be replaced with components, parts, or wiring that meet original specifications. Additionally, determine the cause of overheating and/or damage and, if necessary, take corrective action to remove any potential safety hazard.
8. PRODUCT SAFETY NOTICE - Many electrical and mechanical parts have special safety-related characteristics some of which are often not evident from visual inspection, nor can the protection they give necessarily be obtained by replacing them with components rated for higher voltage, wattage, etc. Use of a substitute replacement that does not have the same safety characteristics as the recommended replacement part in BARCO service data parts list might create shock, fire, and/or other hazards. Product Safety is under review continuously and new instructions are issued whenever appropriate. For the latest information, always consult the appropriate current BARCO service literature.

## 1. Safety

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9. Do not spray chemical on or near this instrument or any of its assemblies.
10. Electrostatically Sensitive (ES) Devices Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistors and semiconductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by static electricity:
  - a) Immediately before handling any semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground. Wear a commercially available high impedance discharging wrist strap device.
  - b) After removing an electrical assembly equipped with ES devices, place the assembly on a static dissipative surface such as a 3M No 8210 table mat, to prevent electrostatic charge buildup or exposure of the assembly.
  - c) Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
  - d) Do not remove a replacement ES device from its protective package until immediately before you are ready to install it (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminium foil or comparable conductive material).
  - e) Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed. CAUTION: Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.
  - f) Minimize bodily motions when handling unpacked replacement ES devices (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ES device).

## 2. GENERAL

### About this chapter

This chapter contains some general information on the ICMP (Integrated Cinema Media Processor) such as the location of the main components, the LEDs status, the essential role of the battery in the ICMP, etc.

### Overview

- ICMP Assembly overview
- ICMP status LEDs
- ICMP HDD status LEDs
- Introduction of ICMP battery
- ICMP reset

## 2.1 ICMP Assembly overview

### Orientation and main components

ICMP assembly is composed of three superposed cards, positioned behind a front face.

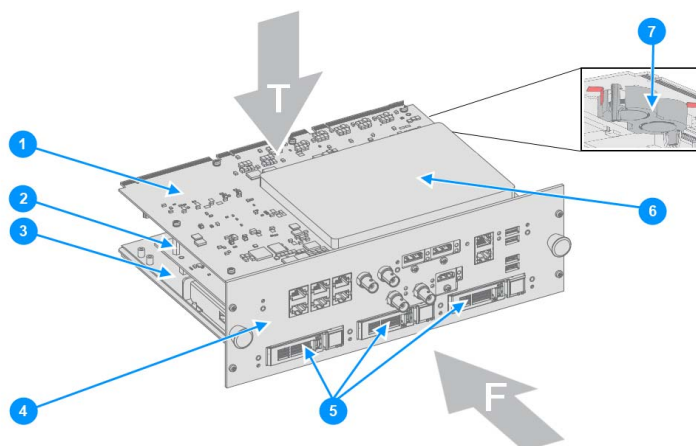


Image 2-1

- T Top of the ICMP
- F Front of the ICMP
- 1 Main board
- 2 Video mezzanine
- 3 HDD plate
- 4 Front face
- 5 HDDs
- 6 Security Module
- 7 Battery

## 2.2 ICMP status LEDs

### ICMP status LEDs and Reset button

LEDs on ICMP front panel give information on the status of the device.

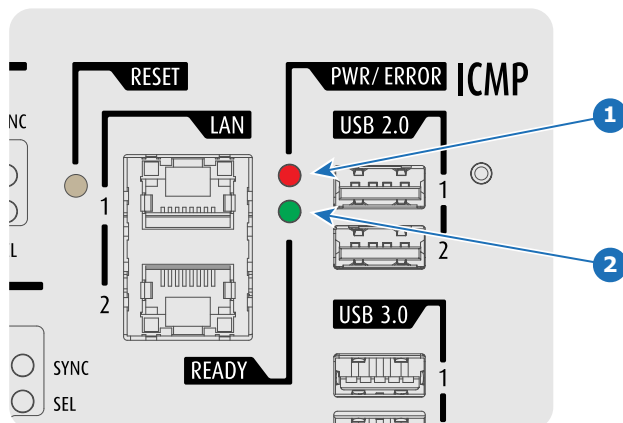


Image 2-2

Status overview PWR/ERROR and READY LEDs:

1 PWR/ER- ROR	2 READY	ICMP Status
Off	Off	Turned off
Red	Off	Board reset
Blinking Green	Off	Boot loader
Blinking Green	Blinking Orange	Operating System start up
Blinking Green	Orange	Security Manager - Image Integrity tests
Blinking Green	Blinking Yellow	Security Manager - Self Test
Blinking Green	Yellow	Security Manager - FPGA self-test
Green	Blinking Orange	Update ongoing
Green	Blinking Green	FIPS ok - Application startup
Green	Green	Power on & No Error
Blinking Red	Off	FIPS error

## 2.3 ICMP HDD status LEDs

### ICMP HDD status LEDs

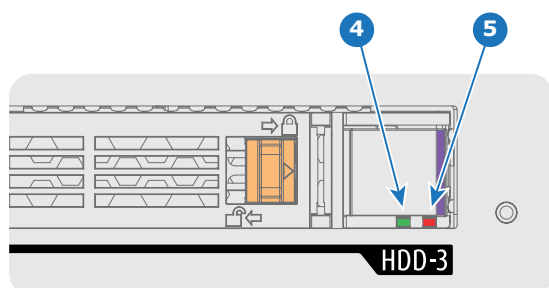


Image 2-3

Status overview PWR/ERROR and READY LEDs:

4	5	ICMP HDD Status
HDD I/O	RAID	
Off	Off	HDD idle / Disk in RAID OK.
Blinking Green	Off	HDD I/O activity / Disk in RAID OK.
Blinking Green	Blinking Red	HDD I/O activity / RAID rebuilding.
Off	Red	HDD idle / Disk error. See troubleshooting table below for curative actions.

### Troubleshooting

Situation	Solution
<p>One disk failed (red LED) + <b>RAID degraded</b>.</p> <p>The ongoing event is not interrupted.</p> <p><b>Note:</b> The disk status (RAID degraded) can be retrieved via the (Web) Commander. See user guide of the (Web) Commander.</p>	<ol style="list-style-type: none"> <li>Switch off the power.</li> <li>Replace the defect HDD with an original HDD spare part. See procedure "Removing a HDD from the ICMP", page 71, and "Installing a HDD into the ICMP", page 72. Ensure to insert the HDD firmly.</li> <li>Switch on the power.</li> </ol> <p><b>Result:</b> As soon the new HDD is detected by the ICMP the rebuild of the RAID is started (Blinking red LED).</p>
<p>One disk failed (red LED) + Error 10580 "<b>local storage not available</b>".</p> <p><b>Note:</b> The disk status (Error code) can be retrieved via the (Web) Commander. See user guide of the (Web) Commander.</p>	<ol style="list-style-type: none"> <li>Switch off the power.</li> <li>Replace the defect HDD with an original HDD spare part. See procedure "Removing a HDD from the ICMP", page 71, and "Installing a HDD into the ICMP", page 72. Ensure to insert the HDD firmly.</li> <li>Switch on the power.</li> </ol> <p><b>Result:</b> As soon the new HDD is detected by the ICMP the rebuild of the RAID is started (Blinking red LED).</p>

Situation	Solution
Multiple disks failed (multiple red LEDs) + <b>RAID broken</b> . <b>Note:</b> The disk status (RAID broken) can be retrieved via the (Web) Commander. See user guide of the (Web) Commander.	<ol style="list-style-type: none"><li>1. Switch off the power.</li><li>2. Replace all defect HDDs with original HDD spare parts. See procedure "Removing a HDD from the ICMP", page 71, and "Installing a HDD into the ICMP", page 72. Ensure to insert the HDDs firmly.</li><li>3. Switch on the power.</li><li>4. Start "RAID Initialize". See user guide of the Communicator.</li></ol> <b>Result:</b> a new empty RAID is created.
All HDD LEDs remain off + Error 10580 " <b>local storage not available</b> ". <b>Note:</b> The disk status (Error code) can be retrieved via the (Web) Commander. See user guide of the (Web) Commander.	<ol style="list-style-type: none"><li>1. Switch off the power.</li><li>2. Reseat all HDDs. See procedure "Removing a HDD from the ICMP", page 71, and "Installing a HDD into the ICMP", page 72. Ensure to insert the HDDs firmly.</li><li>3. If problem remains try "RAID Initialize". See user guide of the Communicator. Note that all content will be lost!</li><li>4. If problem remains contact Service for further instructions.</li></ol>



In case the ICMP has to be returned to factory (e.g. for repair) the non defective HDDs should be removed and kept.

## 2.4 Introduction of ICMP battery

### Functionality of battery

The battery is used to maintain the security data necessary to decoding in real-time the Digital Cinema files. If the battery is disconnected or discharged, this data will definitely be lost. In this case, the only possibility way to recover the functionality of the card is the return it to the manufacturer.

### Locate the battery

The battery is located at the rear upper left side of the ICMP assembly. Once the ICMP assembly removed from the projector, flip the board upside-down, and place the back of the board in front of you.

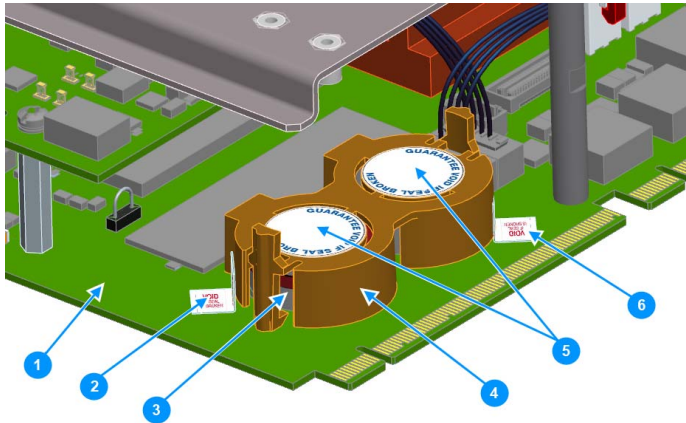


Image 2-4  
ICMP battery slot with cover

- 1 ICMP
- 2 Tamper evident sticker
- 3 Battery in his slot (under the cover)
- 4 Cover
- 5 Insertion date stickers
- 6 Tamper evident sticker

## Battery life time

An electric battery is a device is based on electrochemical cells that converts stored chemical energy into electrical energy. Over time, the degradation of these elements causes a discharge of the battery. It is necessary to change the battery every 5 years to ensure proper operation of the ICMP.



**The insertion date (MM/YY) is write on a label positioned on the top of the battery cover. During an inspection, if you see that the indicated date is more than 4 years, the battery should be changed as soon as possible.**

## Electric and electrostatic recommendations

The ICMP card is sensitive to electrical short-circuits. During the replacement procedure, be very careful not to touch the two connectors (positive / negative) in the battery slot with the battery or any other metallic objects. A short circuit between the two connectors would cause immediate failure of the card.

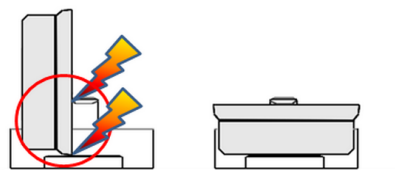


Image 2-5

After removing the ICMP assembly from the projector, it is recommended to put it on clear, stable and insulated support during all the battery replacement procedure, to avoid any accidental short-circuit.



**CAUTION: Wear insulating gloves during the execution of the procedure to avoid short-circuit.**

## 2.5 ICMP reset

---



This procedure requires that ICMP version 1.2.4 or later is installed.

---

### ICMP reset possibilities

- The Star button on the local keypad (Not for C- and B-series)
- The ICMP reset button in the GUI of the Communicator.
- The ICMP reset button in the GUI of the Commander.
- The ICMP reset button in the GUI of the Web Commander.
- The ICMP hardware reset button located on the front panel of the ICMP (Not recommended, use only when all other reset possibilities are exhausted!)

### How to reset the ICMP?

1. Click on the ICMP **reset button** in the GUI of the **Web Commander**

Or,

Click on the ICMP **reset button** in the GUI of the **Commander**

**Note:** It can be that the Commander or WEB-Commander is not able to send the reset command.

Or,

click on the ICMP **reset button** in the GUI of the **Communicator** (recommended)

Or,

press the **Star button** on the **local keypad** for a few seconds (Not for C- and B-series)

As a result the projector is safely prepared for the ICMP reboot. All ongoing events on the ICMP (e.g. ingest) are requested to end. After a few seconds the ICMP is requested to restart. The READY LED on the front panel of the ICMP starts to blink orange.

In case the ICMP is installed in DP4K-L series projector the lasers are switched off and the projector remains in the same mode (e.g. Conditioned). The Star button on the local keypad starts blinking green. After the reset of the ICMP the lasers are switched on again.

Once the READY LED lit continuous green the ICMP is up and running.

2. Did the reset of the ICMP fail?

If yes, perform a hardware reset as follows:

- a) switch off the lasers of the projector or switch of the projector lamp.
- b) press the ICMP **hardware reset button** a few seconds (reference 3 image 2-6) .

**Warning:** Resetting the ICMP with the hardware reset button may cause damage to the content on the HDDs. A re-configuration of the whole system may be required!



As a result the projector is safely prepared for the ICMP reboot. All ongoing events on the ICMP (e.g. ingest) are stopped immediately and the ICMP restarts.

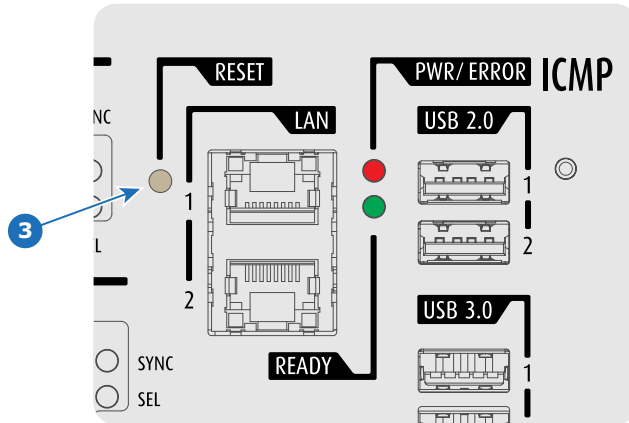


Image 2-6



**WARNING:** Resetting the ICMP with the hardware reset button may cause damage to the content on the HDDs. A re-configuration of the whole system may be required!



## 3. PREVENTATIVE MAINTENANCE ACTIONS

### Overview

- 1 year maintenance actions

### 3.1 1 year maintenance actions

---

#### MAINTENANCE TYPE C (perform every year)



The one year maintenance actions, listed below, may **ONLY** be performed by certified service personnel who are familiar with potential hazards of the product and all product safety checks.

No.	Maintenance action	Remarks
1	Check battery valid date.	If date is older than 4 years, replace battery preventative.



## 4. TROUBLESHOOTING

### About this chapter

This chapter enumerates all ICMP related error codes which can appear on the Touch Panel display of the cinema projector or in the projector log files. Note that some codes have a warning and an error state. Some only have an error state, others have only a warning state. In case of a “warning” the projector remains to operate. Nevertheless, it is recommended to solve the problem which causing the “warning” as soon as possible otherwise, the “warning” state may turn into an “error” state which will switch off the projector consequently.

The codes are placed in ascending order to make it easier to look up the code and find an appropriate solution.

### Overview

- Troubleshooting checklist

## 4.1 Troubleshooting checklist

### Code 10003: “system - error on power good” (Error)

Situation	Solution
There is a problem with one of the voltages.	Escalate the issue including a log package from the system.

### Code 10004: “system - error on power sequencer” (Error)

Situation	Solution
The power sequencer is failing at startup.	Escalate the issue including a log package from the system.

### Code 10005: “system - error on 0.9V power” (Error)

Situation	Solution
The 0.9V power supply is not there or is not correct.	Escalate the issue including a log package from the system.

### Code 10006: “system - error on 2.5V power” (Error)

Situation	Solution
The 2,5V power supply is not there or is not correct.	Check the cables to the satellite boards. If the problem persists, escalate the issue including a log package from the system.

### Code 10007: “system - error on 3.3V power” (Error)

Situation	Solution
The 3,3V power supply is not there or is not correct.	Check the cables to the satellite boards. If the problem persists, escalate the issue including a log package from the system.

**Code 10008: “system - over temperature detected” (Warning)**

Situation	Solution
The global environment temperature is too high. This can generate picture artefacts.	Check the dust filters, check the fan speeds in communicator. If the problem persists, escalate the issue including a log package from the system.

**Code 10009: “system - temperature to high on audio DSP” (Warning)**

Situation	Solution
The temperature measured on the Audio DSP is too high.	Check the dust filters, check the fan speeds in communicator. If the problem persists, escalate the issue including a log package from the system.

**Code 10010: “system - temperature to high on ICP FPGA” (Warning)**

Situation	Solution
The temperature measured on the ICP FPGA is too high.	Check the dust filters, check the fan speeds in communicator. If the problem persists, escalate the issue including a log package from the system.

**Code 10011: “system - temperature to high on IMB FPGA” (Warning)**

Situation	Solution
The temperature measured on the IMB FPGA is too high.	Check the dust filters, check the fan speeds in communicator. If the problem persists, escalate the issue including a log package from the system.

**Code 10012: “system - temperature to high on PPC” (Warning)**

Situation	Solution
The temperature measured on the embedded processor is too high.	Check the dust filters, check the fan speeds in communicator. If the problem persists, escalate the issue including a log package from the system.

**Code 10014: “formatter - satellite configuration error” (Error)**

Situation	Solution
One or more satellite boards are not configured.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10015: “formatter - satellite hardware mismatch” (Error)**

Situation	Solution
The three satellites are not of the same type.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10016: “formatter - DMD file checksum error” (Error)**

Situation	Solution
The DMD configuration file is corrupted.	Restart the projector. If the problem persists, escalate the issue including a log package from the system. An update of the ICMP (in the same version or in a more recent version) can help restore the configuration files.

**Code 10017: “formatter - sequence file checksum error” (Error)**

Situation	Solution
The sequence file is corrupted.	Restart the projector. If the problem persists, escalate the issue including a log package from the system. An update of the ICMP (in the same version or in a more recent version) can help restore the configuration files.

**Code 10018: “formatter - DMD file mismatch” (Error)**

Situation	Solution
The selected DMD file does not match the used DMD.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10019: “formatter - sequence file mismatch” (Error)**

Situation	Solution
The selected Sequence file does not match the used satellites.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10020: “formatter - red satellite thermal shutdown” (Error)**

Situation	Solution
The satellite is in shutdown due to over temperature.	Check the dust filters, check the fan speeds in communicator. If the problem persists, escalate the issue including a log package from the system.

**Code 10021: “formatter - red satellite offset under voltage” (Error)**

Situation	Solution
The offset voltage on the satellite is too low.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10022: “formatter - red satellite reset under voltage” (Error)**

Situation	Solution
The reset voltage on the satellite is too low.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10023: “formatter - red satellite bias under voltage” (Error)**

Situation	Solution
The bias voltage on the satellite is too low.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10024: “formatter - red satellite configuration error” (Error)**

Situation	Solution
There was an error while configuring the satellite.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

### Code 10025: “formatter - red satellite sri link error” (Error)

Situation	Solution
There is a communication error between ICMP and the satellite.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

### Code 10026: “formatter - red satellite in reset” (Error)

Situation	Solution
The satellite is in the reset state.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

### Code 10030: “formatter - green satellite thermal shutdown” (Error)

Situation	Solution
The satellite is in shutdown due to over temperature.	Check the dust filters, check the fan speeds in communicator. If the problem persists, escalate the issue including a log package from the system.

### Code 10031: “formatter - green satellite offset under voltage” (Error)

Situation	Solution
The offset voltage on the satellite is too low.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

### Code 10032: “formatter - green satellite reset under voltage” (Error)

Situation	Solution
The reset voltage on the satellite is too low.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

### Code 10033: “formatter - green satellite bias under voltage” (Error)

Situation	Solution
The bias voltage on the satellite is too low.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

### Code 10034: “formatter - green satellite configuration error” (Error)

Situation	Solution
There was an error while configuring the satellite.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

### Code 10035: “formatter - green satellite sri link error” (Error)

Situation	Solution
There is a communication error between ICMP and the satellite.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

### Code 10036: “formatter - green satellite in reset” (Error)

Situation	Solution
The satellite is in the reset state.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.



**Code 10040: “formatter - blue satellite thermal shutdown” (Error)**

Situation	Solution
The satellite is in shutdown due to over temperature.	Check the dust filters, check the fan speeds in communicator. If the problem persists, escalate the issue including a log package from the system.

**Code 10041: “formatter - blue satellite offset under voltage” (Error)**

Situation	Solution
The offset voltage on the satellite is too low.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10042: “formatter - blue satellite reset under voltage” (Error)**

Situation	Solution
The reset voltage on the satellite is too low.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10043: “formatter - blue satellite bias under voltage” (Error)**

Situation	Solution
The bias voltage on the satellite is too low.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10044: “formatter - blue satellite configuration error” (Error)**

Situation	Solution
There was an error while configuring the satellite.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10045: “formatter - blue satellite sri link error” (Error)**

Situation	Solution
There is a communication error between ICMP and the satellite.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10046: “formatter - blue satellite in reset” (Error)**

Situation	Solution
The satellite is in the reset state.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10050: “gip - no SMS.be communication” (Error)**

Situation	Solution
The GIP module has failed to connect with the SMS.be module.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10051: “gip - write to SMS.be failed” (Error)**

Situation	Solution
The GIP module could not send a command to the SMS.be module.	Retry the action. Restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10052: “gip - read from SMS.be failed” (Error)**

Situation	Solution
The GIP module could not read info from the SMS.be module.	Retry the action. Restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10055: “gip - communication error with DSP maxim1619” (Error)**

Situation	Solution
The GIP module could not access the DSP temperature sensor.	Retry the action. Restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10056: “gip - communication error with ICP maxim1619” (Error)**

Situation	Solution
The GIP module could not access the ICP FPGA temperature sensor.	Retry the action. Restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10057: “gip - communication error with IMB maxim1619” (Error)**

Situation	Solution
The GIP module could not access the IMB FPGA temperature sensor.	Retry the action. Restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10058: “gip - communication error with PPC maxim1619” (Error)**

Situation	Solution
The GIP module could not access the microprocessor temperature sensor.	Retry the action. Restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10060: “system - cpu cpld initialization failed” (Error)**

Situation	Solution
The system could not initialize the CPU control chip.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10061: “gip - no pciexpress connection with ICP FPGA” (Error)**

Situation	Solution
The communication channel to the ICP FPGA is not initialized.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10062: “system - ICMP startup process busy” (Info)**

Situation	Solution
Informational: communication with the ICMP is already possible, while some part(s) are still starting up.	Wait until the startup sequence completes.

**Code 10063: “gip - Slave ICMP: LTC is not locked” (Warning)**

Situation	Solution
The LTC connection with the slave(s) seems to be present, but the signal is not valid (not playing).	Check the interconnection cable(s) between the master and the slave(s).

**Code 10064: “gip - Slave ICMP: LTC is not alive” (Warning)**

Situation	Solution
The LTC connection with the slave projector could not be established (not playing).	Check the interconnection cable(s) between the master and the slave(s).

**Code 10065: “gip - Slave ICMP: LTC is not locked” (Error)**

Situation	Solution
The LTC connection with the slave(s) seems to be present, but the signal is not valid (while playing).	Check the interconnection cable(s) between the master and the slave(s).

**Code 10066: “gip - Slave ICMP: LTC is not alive” (Error)**

Situation	Solution
The LTC connection with the slave projector could not be established (while playing).	Check the interconnection cable(s) between the master and the slave(s).

**Code 10067: “gip - Slave ICMP not playing the same Videoframe” (Error)**

Situation	Solution
The LTC communication is OK, but the slave is at a different frame than the master.	Restart the master and slave projectors. If the problem persists, escalate the issue including a log package from the system.

**Code 10068: “gip - Slave ICMP receiving invalid LTC packages” (Error)**

Situation	Solution
The LTC connection with the slave(s) seems to be present, but the format is not valid.	Check the interconnection cable(s) between the master and the slave(s). Restart the master and slave projectors. If the problem persists, escalate the issue including a log package from the system.

**Code 10070: “system - I2C error reading environment temperature” (Error)**

Situation	Solution
There was a problem with the temperature sensor that monitors the environment temperature.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10071: “system - I2C error reading Audio DSP temperature” (Error)**

Situation	Solution
There was a problem with the temperature sensor that monitors the Audio DSP temperature.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10072: “system - I2C error reading ICP FPGA temperature” (Error)**

Situation	Solution
There was a problem with the temperature sensor that monitors the ICP FPGA temperature.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10073: “system - I2C error reading IMB FPGA temperature” (Error)**

Situation	Solution
There was a problem with the temperature sensor that monitors the IMB FPGA temperature.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10074: “system - I2C error reading Power PC temperature” (Error)**

Situation	Solution
There was a problem with the temperature sensor that monitors the processor temperature.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10075: “system - HDD power error” (Error)**

Situation	Solution
The power monitor detected a fault on the Hard disk power circuit.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10076: “system - Video Mezzanine FPGA version mismatch” (Warning)**

Situation	Solution
The firmware version on the Video Mezzanine add-on board does not match the ICMP software package.	Re-install the ICMP software package. If the problem persists, escalate the issue.

**Code 10501: “ICMP - unexpected error” (Error)**

Situation	Solution
The operation has failed for an unexpected reason.	Retry the operation. Restart the projector if the error still occurs. If the problem persists, escalate the issue including a log package from the system.
The ICMP reports a default error status.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10502: “ICMP - invalid command arguments - command rejected” (Error)**

Situation	Solution
The operation requested from the user interface has failed because the data received by the ICMP are not as expected.	Check the compatibility between the Barco (Web) Commander or TMS version and the ICMP version.

**Code 10503: “ICMP - command not implemented” (Error)**

Situation	Solution
The operation is not implemented in the current ICMP version.	The Barco (Web) Commander or TMS version is more recent than the ICMP. Check that the ICMP version is up to date.

**Code 10504: “ICMP - update running - command rejected” (Error)**

Situation	Solution
The operation is not available while the ICMP is being updated.	Wait for the end of the update and try again.

**Code 10505: “ICMP - system shutting down - command rejected” (Error)**

Situation	Solution
The operation is not available while the projector is entering sleep mode.	Wait for the projector to be in sleep mode, then wake the projector up to execute the operation.

**Code 10506: “ICMP - system starting - command rejected” (Error)**

Situation	Solution
The operation is not available because the ICMP is not fully started.	Wait for the projector to be fully started.

**Code 10507: “ICMP - invalid user login - login denied” (Error)**

Situation	Solution
The login is denied because the user name or password are not correct.	Perform a valid login.

**Code 10508: “ICMP - insufficient user rights - command rejected” (Error)**

Situation	Solution
The operation was rejected because it requires higher user rights.	Check the current user and log in as a user with higher privileges.
The operation is not available because the current user session has expired.	Perform a valid login.

**Code 10510: “ICMP - player requires all resources - command rejected” (Error)**

Situation	Solution
The operation was rejected because the system resources are allocated to playback.	Wait for the end of the playback and retry the operation.

**Code 10511: “ICMP - version info read error” (Error)**

Situation	Solution
The ICMP cannot read the version info.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10512: “ICMP - system log export running - command rejected” (Error)**

Situation	Solution
The system log export cannot be initiated because another one is already in progress.	Retry later upon completion of the previous export.

**Code 10513: “ICMP - started in failsafe mode” (Error)**

Situation	Solution
The system failed to start on the new version after update. The system restarted on a previous version.	Retry the update. If the problem persists, escalate the issue including a log package from the system.
The system failed to start correctly. The system restarted on a previous version.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10514: “ICMP - battery low warning” (Warning)**

Situation	Solution
The battery voltage is under a warning level and could soon be depleted. Replace the battery as soon as possible or the system could become totally inoperative.	Replace the ICMP battery following the Barco procedure.

**Code 10515: “ICMP - battery low error” (Error)**

Situation	Solution
The battery voltage is under a critical level. The system is about to become or is already totally inoperative.	Replace the ICMP module and return the old one to the provider.

**Code 10516: “ICMP - player not cleared - command rejected” (Error)**

Situation	Solution
The operation was rejected because content is loaded in the player.	Unload the content from the player and retry the operation.

**Code 10517: “ICMP - storage busy - command rejected” (Error)**

Situation	Solution
The operation was rejected because the system storage is busy.	Wait for the storage to be available again and retry the operation.

**Code 10520: “settings - invalid settings format - settings rejected” (Error)**

Situation	Solution
The update of the ICMP settings is rejected because the format of the settings data is not supported by the current version.	The Barco Communicator is more recent than the ICMP. Check that the ICMP version is up to date.
The update of the ICMP settings is rejected because the format of the settings data is not correct.	Check the format of the settings data. More detailed information might be found in the system log. Escalate the issue including a log package from the system.

**Code 10521: “settings - invalid network settings - settings rejected” (Error)**

Situation	Solution
The update of the ICMP settings is rejected because the network settings are not valid.	Change the network settings in the settings data.

**Code 10522: “settings - conflict between network addresses - settings rejected” (Error)**

Situation	Solution
The update of the ICMP settings is rejected because the network settings can cause conflicts and communication issues over the network.	Change the network settings. Make sure that the projector and the ICMP are not connected to the same network. A different network address should be set for each Ethernet port and the entered addresses cannot be in the reserved range "192.168.254.0/24".

**Code 10523: “settings - reserved network address range - settings rejected” (Error)**

Situation	Solution
The update of the ICMP settings is rejected because the network settings are trying to use reserved network addresses.	Change the network settings. Make sure that the projector and the ICMP are not connected to the same network. A different network address should be set for each Ethernet port and the entered addresses cannot be in the reserved range "192.168.254.0/24".

**Code 10524: “settings - duplicated automation event - settings rejected” (Error)**

Situation	Solution
The update of the ICMP settings is rejected because the automation settings data contains duplicate entries in the events section.	Change the automation events settings. Make sure all entries in the events section are using different identifiers.

**Code 10525: “settings - duplicated automation device - settings rejected” (Error)**

Situation	Solution
The update of the ICMP settings is rejected because the automation settings data contains duplicate entries in the devices section.	Change the automation devices settings. Make sure all entries in the devices section are using different identifiers.

**Code 10526: “settings - duplicated automation group - settings rejected” (Error)**

Situation	Solution
The update of the ICMP settings is rejected because the automation settings data contains duplicate entries in the groups section.	Change the automation groups settings. Make sure all entries in the groups section are using different identifiers.

**Code 10527: “settings - invalid audio delay - settings rejected” (Error)**

Situation	Solution
The update of the ICMP settings is rejected because the settings data contains an invalid audio delay.	Change the audio delay value in the player settings. The audio delay is expressed in milliseconds and has a limited range from -200 to +200.

**Code 10528: “settings - invalid audio output frequency - settings rejected” (Error)**

Situation	Solution
The update of the ICMP settings is rejected because the settings data contain an invalid audio output frequency.	Change the audio output frequency value in the player settings. The audio output frequency is expressed in Hz and can only be 48000 or 96000.

**Code 10529: “settings - player selection not cleared - settings rejected” (Error)**

Situation	Solution
The update of the ICMP settings is rejected because it cannot be executed when a content is selected in the player.	Clear any selected content from the player and retry updating the settings. This occurs when updating settings that have an impact on the behavior of the player.

**Code 10530: “settings - user password too weak - settings rejected” (Error)**

Situation	Solution
The update of the ICMP settings is rejected because at least one user password is not matching the minimum requirements.	Change the password to meet the requirements. Passwords have to be at least 8 characters long.



**Code 10531: “settings - missing minimum admin and show manager user - settings rejected” (Error)**

Situation	Solution
The update of the ICMP settings is rejected because the user list does not contain the minimum required users.	Add the minimum users to the user list in the settings. The user list must always contain at least one user with the USER_ADMINISTRATOR role and one user with the USER_SHOW_MANAGER role.

**Code 10532: “settings - conflict with reserved user - settings rejected” (Error)**

Situation	Solution
The update of the ICMP settings is rejected because the user list contains users with a reserved name.	Rename or remove users that have reserved names from the settings.

**Code 10533: “settings - settings file not found - unable to load” (Error)**

Situation	Solution
The settings files of the ICMP are missing or are corrupted.	Restart the projector. If the problem persists, escalate the issue including a log package from the system. An update of the ICMP (in the same version or in a more recent version) can help restore the settings files.

**Code 10534: “settings - restoring image processor files error - factory files not restored” (Error)**

Situation	Solution
An error occurred while trying to restore the Image Processor factory files (PCF...) The files could not be restored.	Restart the projector. If the problem persists, escalate the issue including a log package from the system. An update of the ICMP (in the same version or in a more recent version) can help restore the settings files.

**Code 10535: “settings - network settings update error - settings update failed” (Error)**

Situation	Solution
An error occurred while trying to apply the network settings.	Restart the projector. If the problem persists, escalate the issue including a log package from the system..

**Code 10536: “settings - multi-projector settings change refused - settings rejected” (Error)**

Situation	Solution
The multi-projector settings are not correct and have been rejected.	Check that the multi-projector settings are consistent.
The multi-projector settings have been rejected because the master projector is still connected on this slave.	Settings of a slave projector cannot be changed if the master projector is still connected to that slave. Remove this slave from the master settings.

**Code 10537: “settings - test settings already running - test settings rejected” (Error)**

Situation	Solution
The test of settings has been rejected because another test of settings is already running.	Wait for the end of the previous settings test and retry. If it does not work then restart the projector and retry.

**Code 10538: “settings - invalid system settings - settings rejected” (Error)**

Situation	Solution
The system settings are not correct and have been rejected.	Check that the system settings are consistent.

**Code 10539: “settings - unreachable NTP server - NTP sync might not work” (Warning)**

Situation	Solution
The NTP server could not be reached.	Check the NTP server settings and the network settings. Check the system network connectivity. Make sure no firewall could block the NTP access. If needed restart the projector and retry.

**Code 10540: “projector - communication not initialized - projector control disabled” (Error)**

Situation	Solution
The ICMP module cannot connect to the projector controller board.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10541: “projector - no messages available” (Error)**

Situation	Solution
OBSOLETE	OBSOLETE

**Code 10542: “projector - command rejected” (Error)**

Situation	Solution
The command has been rejected by the projector because it is not supported.	Some projector models may not support all commands.
The command has been rejected by the projector because it is busy.	If the projector is busy, the command might be rejected.

**Code 10543: “projector - macro execution error” (Error)**

Situation	Solution
An error was detected during the execution of a projector macro.	Check the projector macro. Check the connectivity between the ICMP and the projector.

**Code 10544: “projector - macro not found” (Error)**

Situation	Solution
The requested macro was not found on the projector.	Check the list of macros on the projector. Check the connectivity between the ICMP and the projector.

**Code 10560: “automation - engine not available - cue handling rejected” (Error)**

Situation	Solution
OBSOLETE	OBSOLETE

**Code 10561: “automation - internal login failed - player control not available” (Error)**

Situation	Solution
The automation manager could not login to the Player and will not be able to execute player actions.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10562: “automation - GPIO access error - GPIO status not available” (Warning)**

Situation	Solution
The physical status of GPI and GPO cannot be read by the system. GPI/O related operations may not work properly.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10563: “automation - device not supported - device ignored” (Warning)**

Situation	Solution
One of the devices from the automation settings is not supported in the current ICMP version. The device and related actions will be ignored.	Check the ICMP version. Edit the automation settings to change or remove the device and the related actions.

**Code 10564: “automation - action not supported - action ignored” (Warning)**

Situation	Solution
One of the actions from the automation settings is not supported in the current ICMP version. The action will be ignored.	Check the ICMP version. Edit the automation settings to change or remove the action.

**Code 10565: “automation - invalid action parameters - action ignored” (Warning)**

Situation	Solution
One of the actions from the automation settings is configured with incorrect parameters. The action will be ignored.	Check the ICMP version. Edit the automation settings to change or remove the action.

**Code 10566: “automation - action execution error - action failed” (Warning)**

Situation	Solution
An error occurred while executing one of the actions from the automation settings.	Check the system log for more detailed information.

**Code 10567: “automation - device not connected - action failed” (Warning)**

Situation	Solution
The automation action could not be executed because the connection with the device is not established.	Check the connectivity with the external device. Check the network settings and the device configuration.

**Code 10568: “automation - cannot check full macro execution - please check the macro has been executed” (Warning)**

Situation	Solution
The execution of the macro on the projector or on an external device cannot be fully verified by the system.	Check that the requested macro has been correctly executed on the device.

**Code 10569: “automation - referenced show not found - action ignored” (Warning)**

Situation	Solution
The automation cue reference a show that does not exist.	Check the automation cue and the list of shows.

**Code 10573: “storage - the RAID is broken - storage is not available” (Maintenance)**

Situation	Solution
The local storage is not available because of an error on the RAID controller.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.
The local storage is not available because the HDD are missing or invalid.	Insert valid HDDs in the system.

**Code 10574: “storage - HDD size mismatch - HDD full capacity not used” (Maintenance)**

Situation	Solution
One of the HDD has a capacity larger than the expected size. The HDD is used in the RAID but not to its full capacity.	Continue using that HDD or insert a valid HDD of the same size as the other HDDs.

**Code 10575: “storage - HDD size mismatch” (Warning)**

Situation	Solution
One of the HDD has a capacity lower than the expected size. The HDD cannot be added to the RAID.	Insert a valid HDD of the same size as the other HDD.

**Code 10576: “storage - possible file system corruption - please run file system check” (Maintenance)**

Situation	Solution
The system detected a possible file system corruption.	Run a file system check using Communicator.

**Code 10577: “storage - file system check running - command rejected” (Error)**

Situation	Solution
The command is rejected because a file system check is running.	Wait the end of the file system check and retry. The file system check can take several minutes to complete.

**Code 10578: “storage - storage database update in progress - command rejected” (Error)**

Situation	Solution
The command is rejected because the system database is being updated.	Wait the end of the database update. The database update can take several minutes. Please do not try to abort the database update or to reboot the projector.

**Code 10579: “storage - storage disabled by configuration - command not available” (Error)**

Situation	Solution
The command cannot be executed because the storage has been disabled by configuration.	Check the storage configuration.

**Code 10580: “storage - local storage not available” (Error)**

Situation	Solution
The local storage was not detected after powering the projector because the HDD are not inserted.	Insert all the HDDs correctly.
The system reports this error but it is expected to play without HDD.	Edit the settings to indicate that the system doesn't have any local storage. All ingest, content management and scheduling will be disabled.

**Code 10581: “storage - requested content not found” (Warning)**

Situation	Solution
The content is not present on the system anymore.	Insert all the HDDs correctly.

#### 4. Troubleshooting

Situation	Solution
The content is being ingested and is not fully available yet on the system.	Wait for the end of the ingest process to use the content.
The content is listed but some files are missing.	Try to ingest the content again. Restart the projector. If the problem persists, escalate the issue including a log package from the system.
This error occurs but the content is correctly listed in the browser page.	Restart the projector. If the problem persists, delete the content and try to ingest it again. If the problem persists, escalate the issue including a log package from the system.

#### Code 10582: “storage - requested key not found” (Warning)

Situation	Solution
The content key is not present on the system.	Check if the content key is present in the browser page. Check if the content or its keys were not deleted.
This error occurs but the content key is listed in the browser page.	Restart the projector. If the problem persists, delete the content key and try to ingest it again. If the problem persists, escalate the issue including a log package from the system.

#### Code 10583: “storage - read from storage error” (Error)

Situation	Solution
An error occurred while reading data from the storage.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

#### Code 10584: “storage - read from database error” (Error)

Situation	Solution
An error occurred while reading data from the database.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

#### Code 10585: “storage - the storage mount failed - cannot access storage” (Error)

Situation	Solution
The local storage cannot be mounted.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

#### Code 10586: “storage - the RAID is degraded” (Warning)

Situation	Solution
The local storage is degraded because one HDD has failed.	Check the LED status on all HDDs to identify the failed HDD. Replace the HDD with a new one. A RAID rebuild operation will be initiated automatically. The system should remain powered on until the rebuild is complete. If a power cycling occurs during the rebuild a new complete rebuild will start on next reboot.

#### Code 10587: “storage - HDD 1 errors detected - possible HDD 1 failure” (Warning)

Situation	Solution
Errors have been detected on HDD 1. This HDD is probably going to fail.	Replace the HDD with a new one. A RAID rebuild operation will be initiated automatically. The system should remain powered on until the rebuild is complete. If a power cycling occurs during the rebuild a new complete rebuild will start on next reboot.

**Code 10588: “storage - HDD 2 errors detected - possible HDD 2 failure” (Warning)**

Situation	Solution
Errors have been detected on HDD 2. This HDD is probably going to fail.	Replace the HDD with a new one. A RAID rebuild operation will be initiated automatically. The system should remain powered on until the rebuild is complete. If a power cycling occurs during the rebuild a new complete rebuild will start on next reboot.

**Code 10589: “storage - HDD 3 errors detected - possible HDD 3 failure” (Warning)**

Situation	Solution
Errors have been detected on HDD 3. This HDD is probably going to fail.	Replace the HDD with a new one. A RAID rebuild operation will be initiated automatically. The system should remain powered on until the rebuild is complete. If a power cycling occurs during the rebuild a new complete rebuild will start on next reboot.

**Code 10591: “check - requested content selected in player - cannot check content” (Error)**

Situation	Solution
The content integrity cannot be checked because the content is selected in the player.	Unload the content from the player and restart the integrity check operation.

**Code 10592: “check - requested content being ingested - cannot check content” (Error)**

Situation	Solution
The content integrity cannot be checked because the content is being ingested.	Wait for the end of ingest. The ingest process already checks the content integrity in the same way.

**Code 10593: “check - database error - cannot check content” (Error)**

Situation	Solution
The content integrity cannot be checked because a database error has occurred.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.
The content integrity cannot be checked because the content is corrupted in the database.	Delete the content and ingest it back. The ingest process is also checking the content integrity.

**Code 10594: “check - content check busy - cannot check new content” (Error)**

Situation	Solution
The content integrity cannot be checked because the integrity of another content is already being checked.	Wait for the end of the running integrity check or cancel it.

**Code 10595: “storage - file system check already running - file system check rejected” (Error)**

Situation	Solution
The file system check cannot start because another file system operation is already running.	Wait for the end of the previous file system operation.

**Code 10596: “storage - file system check is not running - no status available” (Error)**

Situation	Solution
OBSOLETE	OBSOLETE

**Code 10597: “storage - file system check storage mounted - file system check rejected” (Error)**

Situation	Solution
The file system check cannot start because the file system is mounted.	Restart the projector and retry.

**Code 10598: “storage - file system check failed - file system check aborted” (Error)**

Situation	Solution
The file system check has been aborted due to an unexpected error.	Restart the projector and retry.

**Code 10599: “storage - file system check uncorrected errors - errors left uncorrected” (Warning)**

Situation	Solution
The file system check could not fix all the errors. This should not happen on a normal storage.	Restart the projector and retry if needed.

**Code 10600: “save show - invalid format - save show rejected” (Error)**

Situation	Solution
The show cannot be saved because the format of the show data is incorrect.	Check the compliance of the show data.
The show cannot be saved because the format of the show data is not compatible with the module version.	Check the compatibility between the Barco (Web) Commander or TMS version and the ICMP version.

**Code 10601: “save show - show id already exists - save show rejected” (Error)**

Situation	Solution
The show cannot be saved because the unique ID is already registered in the database.	Each time a show is modified or created it must be assigned a new UUID. The Barco (Web) Commander or TMS applications should take care of that.



**Code 10602: “save show - show selected in player - cannot save show” (Error)**

Situation	Solution
The show cannot be saved because it is selected in the player.	Unload the show from the player to be able to save a new show with the same title.

**Code 10603: “save show - invalid title format - save show rejected” (Error)**

Situation	Solution
The show cannot be stored on the system because its title is not well formatted.	Remove any leading or trailing spaces from the show title and retry.

**Code 10620: “content not found - cannot delete content” (Error)**

Situation	Solution
The content cannot be deleted because it is not on the local storage.	Check if the content is present in the browser page. The content may already have been deleted.
The content cannot be deleted but it is listed on the browser.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10621: “content selected in player - cannot delete content” (Error)**

Situation	Solution
The content cannot be deleted because it is selected in the player.	First unload the content from the player then delete the content.

**Code 10622: “content being ingested - cannot delete content” (Error)**

Situation	Solution
The content cannot be deleted because it is being ingested.	First cancel the ingest job then delete the content if it is listed in the browser. Canceling an ingest job may result in deleting the content being ingested.

**Code 10623: “content being checked - cannot delete content” (Error)**

Situation	Solution
The content cannot be deleted because it is being checked.	First cancel the integrity check then delete the content.

**Code 10624: “database error - cannot delete content” (Error)**

Situation	Solution
An error occurred while removing the content from the database.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10625: “key being ingested - cannot delete key” (Error)**

Situation	Solution
The key cannot be deleted because it is being ingested.	First cancel the ingest job then delete the key if it is listed in the browser.

### Code 10626: “key not found - cannot delete key” (Error)

Situation	Solution
The key cannot be deleted because it is not on the local storage.	Check if the key is present in the browser page. The key may have already been deleted.
The key cannot be deleted but it is listed on the browser.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

### Code 10627: “database error - cannot delete key” (Error)

Situation	Solution
An error occurred while removing the key from the database.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

### Code 10628: “key selected in player - cannot delete key” (Error)

Situation	Solution
The key cannot be deleted because the related content is selected in the player.	First unload the content from the player then delete the key.

### Code 10629: “clip referenced in a show” (Warning)

Situation	Solution
The clip being deleted is referenced in a show.	If the deletion is confirmed, the clips will be deleted and shows referencing it will become incomplete.

### Code 10630: “key still valid” (Warning)

Situation	Solution
The key being deleted is still valid for playback.	If the deletion is confirmed, the related content might not play anymore if no more valid key are present on the system.

### Code 10631: “show scheduled” (Warning)

Situation	Solution
The show being deleted is in the schedule.	If the deletion is confirmed, the system will remove the show from the schedule.

### Code 10632: “show is referenced by a cue” (Warning)

Situation	Solution
The show being deleted is referenced by an automation cue.	If the deletion is confirmed, the automation cue will become invalid.

### Code 10640: “ingest - not available - cannot scan or ingest” (Error)

Situation	Solution
Ingest functionality is not properly initialized.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10641: “ingest scan - invalid source url - cannot scan source” (Error)**

Situation	Solution
The scan failed because the source URL is not correctly formatted.	Check the remote storage settings for the selected source.
The scan failed because the source is using a protocol that is not supported by the current ICMP version.	Check the ICMP version and the protocol defined in the settings.

**Code 10642: “ingest scan - connection to source failed - cannot scan source” (Error)**

Situation	Solution
The scan failed because the source refers to an invalid server.	Check the settings for the selected source.
The scan failed because the source refers to a server that rejects the connection.	Check that the remote server is running properly, check its configuration and logs. Some remote servers may have a limited number of connections or other restrictions.
The scan failed because the network path from the ICMP to the remote source is not correct.	Check the network configuration.

**Code 10643: “ingest scan - timeout connecting to source - cannot scan source” (Error)**

Situation	Solution
The scan failed because the source refers to an invalid server.	Check the settings for the selected source.
The scan failed because the source refers to a server that rejects the connection.	Check that the remote server is running properly, check its configuration and logs. Some remote servers may have a limited number of connections or other restrictions.
The scan failed because the network path from the ICMP to the remote source is not correct.	Check the network configuration.

**Code 10644: “ingest scan - source scan not started - scan report not available” (Error)**

Situation	Solution
There are no ingest scan data available because the scan of a source was not properly started.	The Barco (Web) Commander or TMS applications should start the scan of a source before reading the scan report.

**Code 10645: “ingest scan - source scan already started - new scan request rejected” (Error)**

Situation	Solution
A new ingest scan cannot be started because a previous one is still running.	Abort the previous scan or wait for it to complete.

**Code 10646: “ingest scan - too many files in source - cannot scan source” (Error)**

Situation	Solution
The USB source cannot be scanned because it contains too many files. The system has a limit in the amount of data it can process.	Remove unnecessary files from the USB source and restart a scan.
The remote source cannot be scanned because it contains too many files. The system has a limit in the amount of data it can process.	Remove unnecessary files from the remote source or define several ingest sources to point to different sub-directories on the same server. Try to minimize the amount of files that will be scanned at a time.

**Code 10647: “ingest scan - too many source parsers currently active - cannot scan source” (Error)**

Situation	Solution
A new ingest scan cannot be started because other clients are already running scans. There are not enough resources to run the scan.	Wait for other scans to end. If the problem persists, restart the projector. If the problem still persists, escalate the issue including a log package from the system.

**Code 10648: “ingest scan - invalid CPL metadata - cannot play that CPL” (Error)**

Situation	Solution
The CPL metadata are incorrect. The edit rate, aspect ratio or other metadata are inconsistent. The CPL will not play.	Check the content with the content provider.

**Code 10649: “ingest scan - invalid CPL body - cannot play that CPL” (Error)**

Situation	Solution
The CPL body is incorrect. No video track was found in some reels of the CPL. The CPL will not play.	Check the content with the content provider.

**Code 10650: “ingest scan - key not matching the local certificate - cannot play with that key” (Warning)**

Situation	Solution
The content key doesn't match the certificate of the ICMP. Ingest can be executed but the player cannot use the key.	Do not ingest that key unless you want to move the local storage to an ICMP for which the key is valid. Request another key from your key provider with the correct ICMP certificate.

**Code 10651: “ingest job - requested item not found - cannot ingest” (Error)**

Situation	Solution
The ingest job was aborted because the selected item cannot be found on the source.	Check if the item is present on the source and at the right location.

**Code 10652: “ingest job - not enough space on local storage - cannot ingest” (Error)**

Situation	Solution
The ingest job was aborted because there is not enough disk space on the local storage.	Delete unused content from the local storage to free enough space and retry to ingest the content.

**Code 10653: “ingest job - item selected by player - cannot ingest” (Error)**

Situation	Solution
The ingest job was aborted because the selected item is already locked by the player.	Clear the selection from the player and restart ingest.

**Code 10654: “ingest job - ingest job id already exists - cannot add ingest job” (Error)**

Situation	Solution
The ingest job cannot be added because a job with the same unique identifier already exist.	The Barco (Web) Commander or TMS applications should create a new job with a different identifier or should not specify any identifier.

**Code 10655: “ingest job - invalid key format - cannot ingest” (Error)**

Situation	Solution
The ingest job cannot ingest the content key because the file has an invalid format.	Check that the content key file is consistent. Note that any file copy to a USB device requires a safe eject procedure to ensure integrity of the copied data.
The ingest job cannot ingest the content key because the file format is not fully supported by the system.	Escalate the issue with log package from the system and a copy of the key file.

**Code 10656: “ingest job - copy failed - ingest aborted” (Error)**

Situation	Solution
The ingest job failed because at least one file could not be copied to the local storage: an error occurred while reading from the source.	Check that the source can still be reached by the ICMP. Check the integrity of the source, make sure all files are accessible.
The ingest job failed because at least one file could not be copied to the local storage: the local storage is removed or has failed.	Check the health of the local storage.

**Code 10657: “ingest job - invalid source url - cannot ingest” (Error)**

Situation	Solution
The ingest failed because the source URL is not correctly formatted.	Check the settings for the selected source.
The ingest failed because the source is using a protocol that is not supported by the current ICMP version.	Check the ICMP version and the protocol defined in the settings for the selected source.

**Code 10658: “ingest - maximum pending job count exceeded - cannot add more jobs” (Error)**

Situation	Solution
The ingest job cannot be added because there are too many pending ingest jobs.	Wait for the end of some ingest jobs before adding more ingest requests.

**Code 10659: “ingest - invalid or missing info from PKL - cannot ingest” (Error)**

Situation	Solution
The PKL file from the DCP does not provide enough data about assets to ingest the content.	Request a DCP with a correct and complete PKL file. The system log may provide more detailed information.

**Code 10660: “ingest - invalid or missing UUID - cannot ingest” (Error)**

Situation	Solution
The operation on the job failed because the job identifier is missing or incorrect.	The Barco (Web) Commander or TMS applications should create a new job with a well formatted identifier or should not specify any identifier.

**Code 10661: “ingest scan - CPL is corrupted - cannot play that CPL” (Error)**

Situation	Solution
The source DCP contains one or more corrupted files for the concerned CPL.	Request a new valid source DCP.
The system cannot parse some files of the CPL from the source DCP because they are not supported.	Update the ICMP with a version that supports the DCP files if possible.

**Code 10663: “ingest job - corrupted CPL - CPL might not play” (Warning)**

Situation	Solution
The CPL was ingested but some assets from the source DCP are corrupted and playback could fail.	Depending on the corruption, the playback could succeed though some frames could be wrongly decoded. It is best to ingest the CPL again from a valid source DCP.

**Code 10664: “ingest job - invalid CPL - CPL will not play” (Error)**

Situation	Solution
The CPL was only partially ingested and is marked as incomplete. Some assets from the source DCP are missing or incomplete.	Request a new valid source DCP to ingest the complete CPL.

**Code 10665: “ingest job - incomplete immersive sound - immersive sound will not play” (Warning)**

Situation	Solution
The immersive sound track is not complete. Immersive sound will not play.	A complete and valid DCP with all immersive sound assets should be ingested.

**Code 10666: “ingest job - corrupted immersive sound - immersive sound might not play” (Warning)**

Situation	Solution
The immersive sound track is corrupted. Immersive sound might not play correctly.	A complete and valid DCP with all immersive sound assets should be ingested.

**Code 10680: “scheduler - invalid schedule format - schedule update rejected” (Error)**

Situation	Solution
The update of the schedule is rejected because the format of the schedule data is not correct.	Check the format of the schedule data. More detailed information might be found in the system log. Escalate the issue including a log package from the system.
The update of the schedule is rejected because the format of the schedule data is not supported by the current version.	The Barco (Web) Commander or TMS version is more recent than the ICMP. Check the ICMP version is up to date.

**Code 10681: “scheduler - invalid schedule time range - schedule update rejected” (Error)**

Situation	Solution
The update of the schedule is rejected because the time range specified in the schedule data is incorrect.	The Barco (Web) Commander or TMS applications should provide schedule data with a correct range.

**Code 10682: “scheduler - show title not found - cannot start show” (Warning)**

Situation	Solution
The scheduled show cannot be started because it cannot be found on the local storage.	Add the correct show or edit the schedule to play a correct show.

**Code 10683: “scheduler - corrupted clips in the show - cannot start show” (Warning)**

Situation	Solution
The scheduled show cannot be started because the show contains clips that are marked as corrupted.	Delete and re-ingest the corrupted clips or remove the corrupted clips from the show.

**Code 10684: “scheduler - incomplete clips in the show - cannot start show” (Warning)**

Situation	Solution
The scheduled show cannot be started because the show contains clips that are marked as incomplete.	Re-ingest the incomplete clips or remove the incomplete clips from the show.

**Code 10685: “scheduler - system offline at show start time - show canceled” (Warning)**

Situation	Solution
The scheduled show was not started because the system was offline at the time the show should have started.	Nothing can be done, this occurred in the past. Make sure the system is online at the right time for scheduled shows to play.

**Code 10687: “scheduler - schedule write error - schedule update rejected” (Error)**

Situation	Solution
An error occurred while updating the schedule data.	Check the schedule data. Restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10688: “scheduler - login failed - player control not possible” (Error)**

Situation	Solution
The scheduler could not login to the Player and will not be able to play scheduled shows.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.



**Code 10689: “scheduler - maximum show count per day exceeded” (Error)**

Situation	Solution
The schedule update was rejected because the maximum number of shows per day has been reached.	Remove unnecessary shows from the schedule. The system limits the number of show per day to prevent TMS applications to flood the schedule.

**Code 10700: “security - clock adjustment out of allowed range - adjustment rejected” (Error)**

Situation	Solution
The secure clock adjustment was rejected because the requested shift would exceed the allowed limit per year.	Apply a shift within the allowed range. The DCI specifies that the real-time clock of the system cannot be changed more than 6 minutes forward or backward per year starting from January, 1 of each year.

**Code 10701: “security - log export already running - export rejected” (Error)**

Situation	Solution
The secure log export cannot be started because another export is already running.	Wait for the end of the running export or cancel it before starting a new one.

**Code 10702: “security - log export not running - no status available” (Error)**

Situation	Solution
There are no secure log export data available because no secure log export was initiated.	TMS applications should first start a secure log export before reading the export status.

**Code 10703: “security - certificate not found - cannot retrieve certificate” (Error)**

Situation	Solution
The requested certificate cannot be retrieved because it is not on the system.	Only certificates listed by the ICMP can be retrieved.
The requested certificate cannot be retrieved but it is listed by the system.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10704: “security - clock adjustment not allowed while playing - adjustment rejected” (Error)**

Situation	Solution
The secure clock adjustment was rejected because it is not allowed while a playback is running.	Wait the end of the playback and retry.

**Code 10705: “security - clock adjustment failed - adjustment not possible” (Error)**

Situation	Solution
An unexpected error occurred during the secure clock adjustment.	Restart the projector and retry.

**Code 10706: “security - automatic clock adjustment out of budget - auto adjustment not applied” (Maintenance)**

Situation	Solution
The secure clock cannot be automatically adjusted to the system clock because the maximum budget of this year has been consumed.	Contact the support.

**Code 10707: “security - automatic clock adjustment configured - adjustment rejected” (Error)**

Situation	Solution
The manual adjustment of the secure clock was rejected because the secure is configured to be automatically adjusted on the system clock.	Check the system clock management.

**Code 10720: “license - license id already exists - add license rejected” (Error)**

Situation	Solution
The license cannot be added because it is already present on the system.	Any new license must have a different unique identifier.

**Code 10721: “license - license invalid format - add license rejected” (Error)**

Situation	Solution
The license cannot be added because it has an invalid format.	Get a correct license file. Be sure the file doesn't get corrupted when copied over different devices.
The license cannot be added because its format is not supported by the current ICMP version.	Update the ICMP or get a valid license for that version.

**Code 10722: “license - license invalid signer thumbprint - add license rejected” (Error)**

Situation	Solution
The license cannot be added because its signer thumbprint is not correct.	Report the error and request a new license.

**Code 10723: “license - license invalid structure id - add license rejected” (Error)**

Situation	Solution
The license cannot be added because its structure id is incorrect.	Report the error and request a new license.

**Code 10724: “license - license decryption error - add license rejected” (Error)**

Situation	Solution
The license cannot be added because it cannot be decrypted on this system. It was probably created with another system certificate.	Report the error and request a new license. Provide this system certificate.

**Code 10725: “license - invalid license signer chain - add license rejected” (Error)**

Situation	Solution
The license cannot be added because its signer is not correct.	Report the error and request a new license.

**Code 10726: “license - invalid license signature - add license rejected” (Error)**

Situation	Solution
The license cannot be added because the signature is not correct. The file was probably modified or tampered.	Report the error and request a new license.

**Code 10727: “license - license out of date - add license rejected” (Error)**

Situation	Solution
The license cannot be added because it is not valid anymore.	Report the error and request a new license.

**Code 10728: “license - license outside signer time window - add license rejected” (Error)**

Situation	Solution
The license cannot be added because the signer time window is not respected.	Report the error and request a new license.

**Code 10729: “license - license file cannot be saved - add license rejected” (Error)**

Situation	Solution
The license cannot be added because an error occurred while storing the license.	Restart the system and retry.

**Code 10730: “license - license not found - cannot retrieve license” (Error)**

Situation	Solution
The license cannot be retrieved because the unique identifier is not found on the system.	Check the license is still present on the system.

**Code 10731: “license - license not yet active - inactive license” (Error)**

Situation	Solution
The license cannot be added because its validity time window has not started yet.	Wait for the validity period else report the error and request a new license.

**Code 10732: “license - license out of date - out-of-date license” (Error)**

Situation	Solution
The license cannot be added because its validity time window has ended.	Report the error and request a new license.

**Code 10733: “delete license - license not found - cannot delete license” (Error)**

Situation	Solution
The license cannot be deleted because the unique identifier is not found on the system.	Check the license is still present on the system.

**Code 10734: “license - license file cannot be deleted - cannot delete license” (Error)**

Situation	Solution
The license cannot be deleted because it is not allowed. Some licenses cannot be deleted and require the install of another license to be removed.	Report the error and request a new license.

**Code 10735: “license - no valid Live IP Streaming license found - live support disabled” (Error)**

Situation	Solution
No valid Live IP Streaming license is present on the system. The streaming of live content is not be allowed.	Report the error and request a new license.

**Code 10750: “settings - clip title already exist - cannot save clip” (Error)**

Situation	Solution
The clip title already exist on the system and the new clip cannot be saved.	Delete the existing clip before saving the new one.

**Code 10751: “settings - invalid clip title - cannot save clip” (Error)**

Situation	Solution
The clip title is not valid.	Enter a valid clip title.

**Code 10752: “settings - invalid clip properties - cannot save clip” (Error)**

Situation	Solution
Some clip properties are not valid.	Check the clip properties.

**Code 10753: “settings - clip not found - cannot delete clip” (Error)**

Situation	Solution
The clip cannot be deleted because it is not found on the system.	Check the clip is still present on the system.

**Code 10900: “player - command rejected” (Error)**

Situation	Solution
The command was rejected because the player is busy with some operation.	Wait for the player to end the current operation.
The command was rejected because the player has been busy with some operation for several minutes: player is stalled.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10901: “player - storage not available - selection failed” (Error)**

Situation	Solution
The player cannot select content because the HDDs for the local storage are not present.	Insert HDDs for the local storage.
The player cannot select content because the local storage was not mounted.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.
The player cannot select content because the local storage is in error.	Repair or replace the failed HDDs.

**Code 10903: “player - content not found - selection failed” (Error)**

Situation	Solution
The player cannot select content because it is not on the local storage.	Check that the content is present on the local storage.

**Code 10904: “player - content read error - selection failed” (Error)**

Situation	Solution
The player cannot select content because an error occurred while reading the content.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10905: “player - content ingest running - selection failed” (Error)**

Situation	Solution
The player cannot select content because the content is being ingested.	Wait for the end of ingest before playing the content.

**Code 10906: “player - content check running - selection failed” (Error)**

Situation	Solution
The player cannot select content because the content integrity check is running.	Wait for the end of the integrity check before playing the content or cancel the integrity check operation.

**Code 10907: “player - content not supported - selection failed” (Error)**

Situation	Solution
The player cannot select content because it refers to unsupported material.	Check the specification of the current version.
The player cannot select content because it refers to unsupported material in the current version.	Check the specification of the current version.

**Code 10908: “player - no valid clip found - selection failed” (Error)**

Situation	Solution
The player cannot select content because it found no valid clip to play.	Check validity of selected clips.

**Code 10909: “player - maximum clip count exceeded - selection failed” (Error)**

Situation	Solution
The player cannot select content because it refers to more than the allowed clip count.	Reduce the number of clips in the show.

**Code 10910: “player - maximum key count exceeded - selection failed” (Error)**

Situation	Solution
The player cannot select content because it refers to more than the allowed asset key count.	Reduce the number of encrypted clips in the show. Note that an encrypted clips usually refers to several asset keys.

**Code 10911: “player - incomplete content - selection failed” (Error)**

Situation	Solution
The player cannot select content because it refers to incomplete content.	Ingest the incomplete or missing clips.

**Code 10912: “player - bad content integrity - playback can fail” (Warning)**

Situation	Solution
The player selected content that was marked as corrupted. The play can start but it could run into issues depending on the corruption type.	It is highly recommended to delete and re-ingest corrupted content. If the source DCP is corrupted, then a healthy DCP should be requested. The playback of such content can create picture or audio artefacts or could simply fail.

**Code 10913: “player - hash from CPL and PKL do not match - selection failed” (Error)**

Situation	Solution
The player selected content that contains inconsistent assets hash codes. The hash codes are invalid in the DCP itself.	Request a new DCP from the content provider with matching hash codes between the PKL and the CPL. The DCI does not allow encrypted content to play if the hash codes don't match.

**Code 10914: “player - subtitles preprocessing error - cannot play” (Error)**

Situation	Solution
The subtitles cannot be played because the assets are invalid and cannot be processed.	Request a new DCP from the content provider with correct subtitles.
The subtitles cannot be played because an error occurred during pre-processing.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10915: “player - subtitles validation error - cannot play” (Error)**

Situation	Solution
The subtitles cannot be played because they are not valid and are rejected by the renderer.	Request a new DCP from the content provider with correct subtitles.
The subtitles cannot be played because they are not supported by the renderer.	Update the ICMP or get a content version with subtitles supported by the current ICMP version.

**Code 10916: “player - captions preprocessing error - cannot play” (Error)**

Situation	Solution
The closed captions cannot be played because the assets are invalid and cannot be processed.	Request a new DCP from the content provider with correct closed captions.
The closed captions cannot be played because an error occurred during pre-processing.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

### Code 10917: “player - captions validation error - cannot play” (Error)

Situation	Solution
The closed captions cannot be played because they are not valid and are rejected by the renderer.	Request a new DCP from the content provider with correct closed captions.
The closed captions cannot be played because they cannot be accessed by the caption rendering device.	Check the network path between the projector and the caption rendering device.
The closed captions cannot be played because they are not supported by the caption rendering device.	Check the caption rendering device specifications.

### Code 10918: “player - image processor not available - cannot play” (Error)

Situation	Solution
The play cannot start because there's no connection with the image processor software.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

### Code 10920: “player - assets read error - selection failed” (Error)

Situation	Solution
The player selection failed because an error occurred while reading content assets. One or more assets are corrupted.	Check the content integrity. Delete corrupted content and ingest it again. The system log may provide more details about the corrupted content.
The playback failed because an error occurred while reading content assets. One or more assets are corrupted.	Check the content integrity. Delete corrupted content and ingest it again. The system log may provide more details about the corrupted content.

### Code 10921: “player - assets missing - selection failed” (Error)

Situation	Solution
The player selection failed because some assets are missing.	Ingest the content that is incomplete to add the missing assets.

### Code 10922: “player - IMB not available - cannot play” (Error)

Situation	Solution
The play cannot start because there's no connection with the IMB.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

### Code 10923: “player - CPL not compliant with SMPTE 429-7 - cannot play” (Error)

Situation	Solution
The play cannot start because one of the CPLs is not SMPTE compliant.	Request a SMPTE compliant CPL from the content provider.



**Code 10924: “player - invalid CPL signature - cannot play” (Error)**

Situation	Solution
The play cannot start because one of the CPLs has an invalid signature.	Request a CPL with a valid signature from the content provider.

**Code 10925: “player - invalid CPL signer chain - cannot play” (Error)**

Situation	Solution
The play cannot start because the signature of one CPL was generated with an invalid or non-compliant signer chain.	Request a CPL that is signed with a valid signer chain from the content provider.

**Code 10926: “player - invalid CPL envelopped digest - cannot play” (Error)**

Situation	Solution
The play cannot start because one of the CPL digests used for the signature does not match.	Request a CPL with a valid signature from the content provider.

**Code 10927: “player - missing CPL assets - cannot play” (Error)**

Situation	Solution
The play cannot start because one of the CPLs is missing one or more assets.	Ingest the CPL that is incomplete to add the missing assets.

**Code 10928: “player - corruption in CPL assets - play might fail” (Warning)**

Situation	Solution
The play can start but one or more assets are corrupted and could cause problems or failure during playback.	It is highly recommended to delete and re-ingest corrupted content. If the source DCP is corrupted, then a healthy DCP should be requested. The playback of such content can create picture or audio artefacts or could simply fail.

**Code 10929: “player - integrity check initialization error - cannot play” (Error)**

Situation	Solution
The security module cannot compute valid integrity check values because the content HMAC values are incorrect.	Request a DCP with valid HMAC values from the content provider.
The security module cannot compute valid integrity check values because the content HMAC values are not supported.	Update the ICMP to a version supporting the HMAC values.

**Code 10930: “player - no valid KDM found - cannot play” (Error)**

Situation	Solution
The play cannot start because there are no valid KDMs for at least one of the encrypted clips.	Ingest a valid KDM for the encrypted CPL.

**Code 10931: “player - KDM not found - selection failed” (Error)**

Situation	Solution
The selection in the player failed because the requested KDM is missing on the local storage.	Check that the KDM is listed in the content browser. Delete the KDM and ingest it again.

**Code 10932: “player - KDM read error - selection failed” (Error)**

Situation	Solution
The selection in the player failed because the system failed to read the requested KDM file.	Delete the corrupted KDM and ingest it again.
The selection in the player failed because the system failed to read information for the requested KDM in the database.	Restart the projector. If the problem persists, delete the KDM and ingest it again. If the problem persists, escalate the issue including a log package from the system.

**Code 10933: “player - KDM not compliant with standard (SMPTE 430-1) - cannot play” (Error)**

Situation	Solution
The play cannot start because one KDM is not compliant with SMPTE 430-1 standard.	Request a KDM that is SMPTE 430-1 compliant. More details can be found in the syslog.

**Code 10934: “player - invalid KDM signer chain - KDM rejected” (Error)**

Situation	Solution
The play cannot start because the signature of one KDM was generated with an invalid or non-compliant signer chain.	Request a KDM that is signed with a valid signer chain from the content provider.

**Code 10935: “player - invalid KDM envelopped digest - KDM rejected” (Error)**

Situation	Solution
The play cannot start because one of the KDM digests used for the signature does not match.	Request a KDM with a valid signature from the content provider.

**Code 10936: “player - invalid KDM signature - KDM rejected” (Error)**

Situation	Solution
The play cannot start because one of the KDMs has an invalid signature.	Request a KDM with a valid signature from the content provider.

**Code 10937: “player - asset keys invalid match in the KDM - KDM rejected” (Error)**

Situation	Solution
The play cannot start because one of the KDMs is referencing keys that are not matching with the keys referenced by the CPL.	Request a KDM or a CPL with matching decryption keys.

**Code 10938: “player - invalid trusted device list in the KDM - KDM rejected” (Error)**

Situation	Solution
The play cannot start because one of the KDMs contains an invalid trusted device list (TDL).	Request a KDM with a valid or a generic TDL. Note the ICMP is a permanently married system and doesn't process the TDL but it needs to check that the TDL is properly formatted. For the same reason, the ICMP only provides one certificate while separate IMB - ICP configurations (non-permanently married) would provide 2 distinct certificates.

**Code 10939: “player - missing trusted device list in the KDM - KDM rejected” (Error)**

Situation	Solution
The play cannot start because one of the KDMs does not contain a trusted device list (TDL). The KDM should at least reference a generic TDL.	Request a KDM with a valid or a generic TDL. Note the ICMP is a permanently married system and doesn't process the TDL but it needs to check that the TDL is properly formatted. For the same reason, the ICMP only provides one certificate while separate IMB - ICP configurations (non-permanently married) would provide 2 distinct certificates.

**Code 10940: “player - KDM not matching the IMB certificate - KDM rejected” (Error)**

Situation	Solution
The play cannot start because one of the KDMs is not targeted for the current ICMP certificate. The KDM is targeted for another device with another certificate.	Ingest a KDM for the current ICMP certificate. The certificate can be exported from the about box of the Barco (Web) Commander or from Barco Communicator.

**Code 10941: “player - KDM decryption error - KDM rejected” (Error)**

Situation	Solution
The play cannot start because one of the KDMs could not be decrypted.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.
The play cannot start because one of the KDMs is invalid and cannot be decrypted.	Check the system log and request a new KDM.

**Code 10942: “player - unvalidated CPL referenced in KDM - KDM rejected” (Error)**

Situation	Solution
The play cannot start because the targeted KDM is referencing a CPL that was not previously validated. TMS application is trying to load a CPL with an explicit KDM which is not matching.	For such operations, TMS applications should provide a correct explicit KDM that matches the selected CPL.

**Code 10943: “player - Media Player input used - input switching rejected” (Error)**

Situation	Solution
The system cannot switch to an alternative input because the Media Player input is currently used: a playback is running.	Wait for the end of the playback or stop the current playback before switching to the alternative input.
The system cannot switch to an alternative input because the Media Player input is currently used: the scheduler is enabled.	Disable the scheduler and stop any running playback before switching to the alternative input.

**Code 10944: “player - service door tamper - cannot play” (Error)**

Situation	Solution
The play cannot start because a service door tamper is being reported.	Close the service door and clear the tamper from the projector.

**Code 10945: “player - board insertion tamper - cannot play” (Error)**

Situation	Solution
The play cannot start because an insertion tamper is being reported. The insertion tamper is triggered when the ICMP is removed from a projector but is only reported when inserted in a new projector.	Make sure the board is properly inserted and clear the insertion tamper from the projector.

**Code 10946: “player - no show selected” (Error)**

Situation	Solution
The selected show cannot be returned. A TMS application is trying to read the selected show from the player but nothing is currently selected.	TMS applications should first select a content in the Player in order to read the selected show.

**Code 10947: “player - Media Player input not selected - cannot play” (Error)**

Situation	Solution
The playback cannot start because the Media Player input is not the active input. An alternative input is currently selected.	Execute a macro on the projector to select the Media Player input before starting the playback.

**Code 10948: “player - incomplete content (no picture found) - selection failed” (Error)**

Situation	Solution
The player cannot play the selected content because it cannot identify the video asset.	The content is probably ill-formed or is using obsolete specifications. Get a valid source DCP with a correct version of the content.
The player cannot play the selected content because it does not support the type of video asset.	Update the ICMP with a version that supports that type of content.

**Code 10949: “player - KDM outside signer time window - KDM rejected” (Error)**

Situation	Solution
The play cannot start because one of the KDM validity is outside of the signer validity period.	Request a KDM with a correct validity period from the content provider.

**Code 10950: “player - slave player not connected - cannot play” (Error)**

Situation	Solution
The play cannot start because a slave projector is not connected.	Check the connectivity between the master and the slave projectors.

**Code 10951: “player - selection failed on slave player - cannot play” (Error)**

Situation	Solution
The play cannot start because the selection failed on a slave projector.	Check the error that occurred on the slave projectors. In case of show format error, try to modify the show on the master using the Web Commander application and then retry.

**Code 10952: “player - play failed on slave player - cannot play” (Error)**

Situation	Solution
The play cannot start because the play command failed on a slave projector.	Check the error that occurred on the slave projectors.

**Code 10953: “player - change position failed on slave player - cannot play” (Error)**

Situation	Solution
The play cannot start because the change position command failed on a slave projector.	Check the error that occurred on the slave projectors.

**Code 10954: “player - slave player not in slave mode - cannot play” (Error)**

Situation	Solution
The play cannot start because a slave projector is not in slave mode anymore.	Connect to the slave projectors, make sure the slave mode is active, reload the content on the master projector and retry.

**Code 10955: “player - stop failed on slave player” (Error)**

Situation	Solution
The stop command failed on a slave projector.	Check the error that occurred on the slave projectors.

**Code 10956: “player - clear failed on slave player” (Error)**

Situation	Solution
The clear command failed on a slave projector.	Check the error that occurred on the slave projectors.

**Code 10957: “player - slave player not in expected state - cannot play” (Error)**

Situation	Solution
The play cannot start because the player of a slave projector is not in the expected state.	Check the state and any error that occurred on the slave projectors.

**Code 10958: “player - missing license on master player - playing in standalone mode” (Warning)**

Situation	Solution
The expected multi-projector license is not present or not valid on the master. The master can be in standalone mode only.	Check the license on the master and request a new one.

**Code 10959: “player - command disabled in current player mode” (Error)**

Situation	Solution
The command is rejected because it is not allowed in the current player mode.	Change the player mode and retry.

**Code 10960: “player - selection failed on slave - playing in standalone mode” (Warning)**

Situation	Solution
The selection failed on a slave projector. The master can play in standalone mode.	Check the error that occurred on the slave projectors.

**Code 10961: “player - invalid insert show cue - incomplete playlist” (Warning)**

Situation	Solution
The player could not dynamically insert show referenced by a cue into the selected content. The show to insert does not exist or is used.	Check that the show referenced by the cue exist and that it is valid.

**Code 10962: “player - slave command rejected - not a Barco client” (Error)**

Situation	Solution
The slave projector rejects the command because it is reserved internal use.	Reserved API call cannot be used by TMS or any client.

**Code 10963: “player - license not allowing C-KDM key type - key rejected” (Error)**

Situation	Solution
The C-KDM key type is not accepted because no valid license is present to support them.	Request a KDM or request a license to support C-KDM only or both KDM and C-KDM.

**Code 10964: “player - license not allowing KDM key type - key rejected” (Error)**

Situation	Solution
The KDM key type is not accepted because no valid license is present to support them. A C-KDM license is probably installed.	Request a C-KDM or request a license to support KDM only or both KDM and C-KDM.

**Code 10965: “player - key store failed - key rejected” (Error)**

Situation	Solution
The key could not be stored by the security manager. The key cannot be used for playback.	Clear the player and reload the content. If this fails, restart the projector and retry. If this still fails, contact support.

**Code 10966: “player - no remaining key credit - cannot play” (Error)**

Situation	Solution
The key is not valid anymore because the playback budget has been fully consumed.	Request a new C-KDM to get new playback credits.

**Code 10967: “player - invalid key signature - key rejected” (Error)**

Situation	Solution
The play cannot start because one of the KDM has an invalid signature.	Request a KDM with a valid signature from the content provider.

**Code 10968: “player - invalid key signer chain - key rejected” (Error)**

Situation	Solution
The play cannot start because the signature of one KDM was generated with an invalid or not compliant signer chain.	Request a KDM that is signed with a valid signer chain from the content provider.

**Code 10969: “player - key decryption error - key rejected” (Error)**

Situation	Solution
The play cannot start because one of the KDM could not be decrypted.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.
The play cannot start because one of the KDM is invalid and cannot be decrypted.	Check the system log and request a new KDM.

**Code 10970: “player - invalid xml document - key rejected” (Error)**

Situation	Solution
The play cannot start because the key is not a well formed xml document. It is probably corrupted.	Request a new valid key by the content key provider.

**Code 10971: “player - degraded mode - master/slave sync may be temporarily unavailable” (Warning)**

Situation	Solution
The communication between the master and slave projectors is broken. The playback may continue till the end of the current clip then only the master will continue the playback.	Check the connectivity between the master and the slave projectors. If restored before the end of the current clip, the playback may continue as normal else the master player will go to the standalone mode.



**Code 10972: “player - reverted to standalone playback - master/slave sync is ignored” (Warning)**

Situation	Solution
The communication between the master and slave projectors is broken. The playback could not be synchronized anymore. The master player is playing in standalone mode.	Restore the communication and reload the content on the master.

**Code 10973: “player - no valid key found - cannot play” (Error)**

Situation	Solution
The play cannot start because there are no valid key for at least one of the encrypted clips.	Ingest a valid key for the encrypted CPL.

**Code 10974: “player - key not found - selection failed” (Error)**

Situation	Solution
The selection in the player failed because the requested key is missing on the local storage.	Check the key is listed in the content browser. Delete the key and ingest it again.

**Code 10975: “player - key read error - selection failed” (Error)**

Situation	Solution
The selection in the player failed because the system failed to read the requested key file.	Delete the corrupted key and ingest it again.
The selection in the player failed because the system failed to read information for the requested key in the database.	Restart the projector. If the problem persists, delete the key and ingest it again. If the problem persists, escalate the issue including a log package from the system.

**Code 10976: “player - key not compliant with standard (SMPTE 430-1) - cannot play” (Error)**

Situation	Solution
The play cannot start because one key is not compliant with SMPTE 430-1 standard.	Request a key that is SMPTE 430-1 compliant. More details can be found in this syslog.

### Code 10977: “player - invalid key envelopped digest - key rejected” (Error)

Situation	Solution
The play cannot start because one of the key digest used for the signature does not match.	Request a key with a valid signature from the content provider.

### Code 10978: “player - asset keys invalid match in the key - key rejected” (Error)

Situation	Solution
The play cannot start because one of the key is referencing keys that are not matching with the keys referenced by the CPL.	Request a key or a CPL with matching decryption keys.

### Code 10979: “player - invalid trusted device list in the key - key rejected” (Error)

Situation	Solution
The play cannot start because one of the key contains an invalid trusted device list (TDL).	Request a key with a valid or a generic TDL. Note the ICMP is a permanently married system and doesn't process the TDL but it needs to check the TDL is properly formatted. For the same reason, the ICMP only provides one certificate while separate IMB - ICP configurations (non-permanently married) would provide 2 distinct certificates.

### Code 10980: “player - missing trusted device list in the key - key rejected” (Error)

Situation	Solution
The play cannot start because one of the key does not contain a trusted device list (TDL). The key should at least reference a generic TDL.	Request a key with a valid or a generic TDL. Note the ICMP is a permanently married system and doesn't process the TDL but it needs to check the TDL is properly formatted. For the same reason, the ICMP only provides one certificate while separate IMB - ICP configurations (non-permanently married) would provide 2 distinct certificates.

### Code 10981: “player - key not matching the IMB certificate - key rejected” (Error)

Situation	Solution
The play cannot start because one of the key is not targeted for the current ICMP certificate. The key is targeted for another device with another certificate.	Ingest a key for the current ICMP certificate. The certificate can be exported from the about box of the Barco Web Commander or from Barco Communicator.

### Code 10982: “player - unvalidated CPL referenced in key - key rejected” (Error)

Situation	Solution
The play cannot start because the targeted key is referencing a CPL that was not previously validated. TMS application is trying to load a CPL with an explicit key which is not matching.	For such operations, TMS applications should provide a correct explicit key that matches the selected CPL.

**Code 10983: “player - key outside signer time window - key rejected” (Error)**

Situation	Solution
The play cannot start because one of the key validity is outside of the signer validity period.	Request a key with a correct validity period from the content provider.

**Code 10984: “player - limited playback - scheduled mode not allowed” (Error)**

Situation	Solution
The scheduler cannot play the loaded show because the playback has limitation and cannot start at the beginning of the show playlist. It will be the case if the key budget only allows to play the end of a content.	Play the show in manual mode or request a new key to have more budget to play the content.

**Code 10985: “player - immersive sound renderer error - immersive sound inactive” (Warning)**

Situation	Solution
Immersive sound cannot be validated by the immersive sound renderer or sound processor. Immersive sound will not play.	Check the communication with the immersive sound renderer or sound processor. Reload the content and retry. If the communication cannot be restored. Restart both the projector and the immersive sound renderer.

**Code 10986: “player - missing immersive sound assets - immersive sound skipped” (Warning)**

Situation	Solution
Some clips are missing immersive sound assets. Those clips will be played without immersive sound.	Check the content and ingest the missing assets.

**Code 10987: “player - corrupted immersive sound assets - immersive sound might fail” (Warning)**

Situation	Solution
Some clips contains corrupted immersive sound assets. The playback of immersive sound may fail or cause artefacts.	Check the content and ingest the corrupted assets.

**Code 10988: “player - no valid immersive sound key found - immersive sound skipped” (Warning)**

Situation	Solution
Some clips are missing immersive sound keys. Those clips will be played without immersive sound.	Request the keys for the immersive sound renderer.

**Code 10989: “player - immersive sound assets read error - immersive sound skipped” (Warning)**

Situation	Solution
Some immersive sound assets could not be read properly. Those clips will be played without immersive sound.	Reload the content. If this fails, restart the projector and retry. If this still fails try to delete and ingest the content again.

**Code 10990: “player - automatic input selection warning - play might fail” (Warning)**

Situation	Solution
An error was detected during the automatic input selection. The playback on that input may be incorrect.	Check the output on the screen. Check the macro used to select the input. Activate the macro manually if needed but also check the player status.

**Code 10991: “player - mezzanine communication error - live IP not available” (Error)**

Situation	Solution
The communication with the mezzanine board is in error. The live IP streaming is not possible.	Retry or restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10992: “player - live IP source selection error - live IP not available” (Error)**

Situation	Solution
The selection of the live IP source has Check the live IP source and connectivity.	Retry or restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10995: “player - ADSP input audio delay error - delay not applied” (Error)**

Situation	Solution
The audio settings for the alternative input could not be applied on the embedded sound processor. The audio is in error.	Retry or restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10996: “player - ADSP error - format configuration failed” (Error)**

Situation	Solution
The audio channel configuration could not be applied to the embedded sound processor. The audio is in error.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10997: “player - IMB input switching error - input switching failed” (Error)**

Situation	Solution
The input switching has failed due to an error in the IMB.	Retry or restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10998: “player - IMB error - play failed” (Error)**

Situation	Solution
The playback failed because an error occurred on the IMB.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.

**Code 10999: “player - IMB error - format configuration failed” (Error)**

Situation	Solution
The playback failed because an error occurred while applying the format on the IMB.	Restart the projector. If the problem persists, escalate the issue including a log package from the system.



## 5. ICMP SERVICE PROCEDURE

### About this chapter

This chapter describes how to removal and installation instructions of the ICMP and ICMP HDD. Furthermore, the battery replacement, the RAID controller replacement and ICMP HDD are described as well.

### Overview

- Removing the ICMP
- Installing the ICMP
- Removing a HDD from the ICMP
- Installing a HDD into the ICMP
- Replacement of the battery
- RAID controller replacement

## 5.1 Removing the ICMP

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**WARNING:** Power down the projector and let it cool down before starting the installation procedure. You will find in the installation manuals of each projector the way to switch off your installation.

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**CAUTION:** Wear a wrist band which is connected to the ground while handling the electrostatic discharge sensitive parts.

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### Necessary tools

- 7mm flat screwdriver.
- PH2 Phillips screwdriver.
- ESD wrist band.

### How to remove the ICMP from the projector Card Cage?

1. Depending on the projector type the input cover of the projector has to be removed to access the fixation screws of the installed ICMP. Use a 7 mm flat screwdriver. For detailed instructions see User & Installation manual of the projector.
2. Release the four retaining screws at the front of the ICMP (reference 1). Use a PH2 Phillips screwdriver.
3. Pull the ICMP out of its compartment.

**Note:** All connections are made via the board to board connection with the back plane.

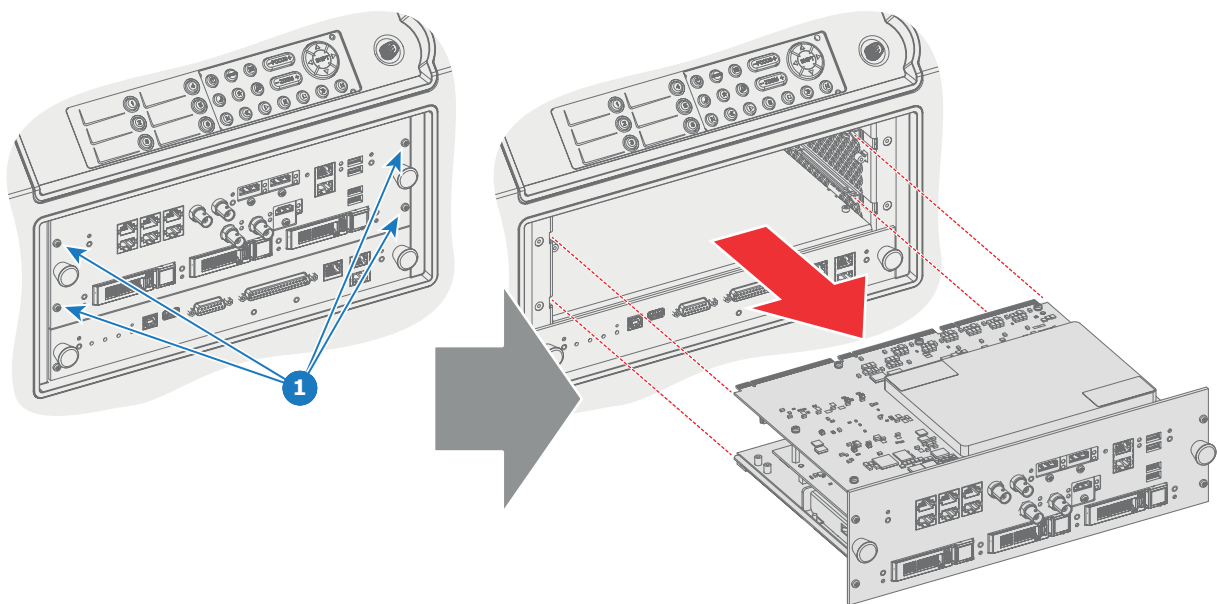


Image 5-1

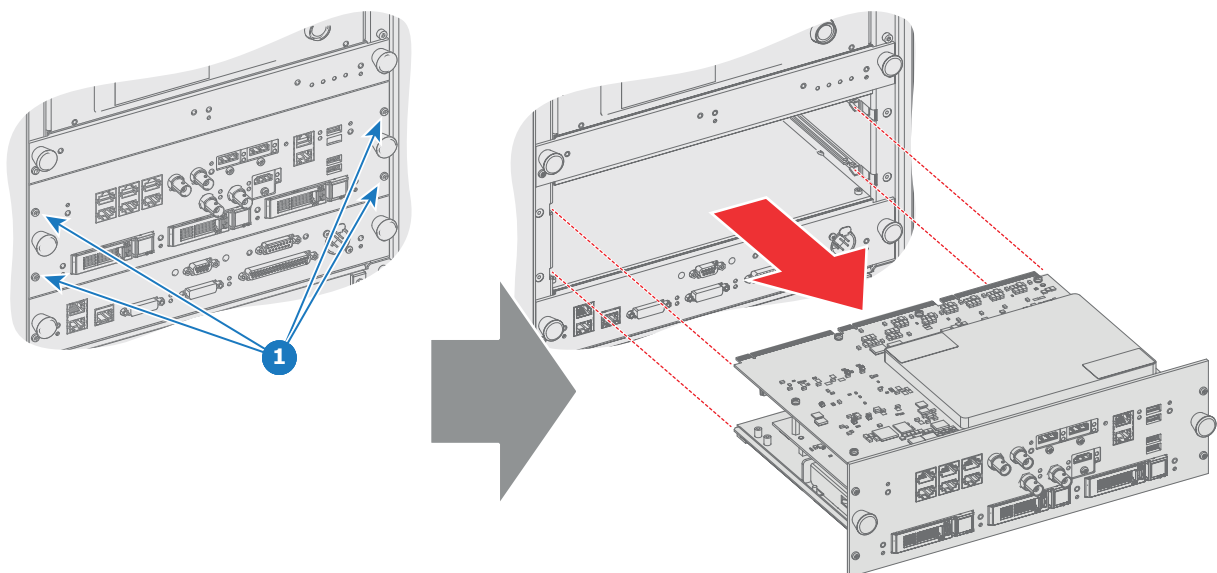


Image 5-2



**Removal of the ICMP from the Card Cage of the projector will result in tamper events (service door tamper, insertion tamper).**



**In the ICMP, the content is stored on removable disks that allow fast recovery of this content if you have to replace an ICMP. See chapter "Removing a HDD from the ICMP", page 71.**



## 5.2 Installing the ICMP



This procedure assumes that the projector has been made ICMP ready. In other words the Card Cage slots wherein the ICMP has to be inserted are empty and the latest projector software package is installed.



**CAUTION:** Wear a wrist band which is connected to the ground while handling the electrostatic discharge sensitive parts.

### Necessary tools

- 7mm flat screwdriver.
- PH2 Phillips screwdriver.
- ESD wrist band.

### How to install the ICMP into the Card Cage?

1. Gently insert the ICMP in the guides of the Card Cage as illustrated below.  
**Caution:** Ensure that the both sides of the ICMP are captured by the guides inside the Card Cage compartment. See detail in image below.
2. Push (apply a little pressure) on both handles until the ICMP is fully inserted and the connection is made with the back plane.  
**Note:** All connections are made via the board to board connection with the back plane.
3. Alternately fasten the four screws (reference 1) at the front side of the ICMP. Use a PH2 Phillips screwdriver.  
**Caution:** Ensure to tighten the screws alternately!

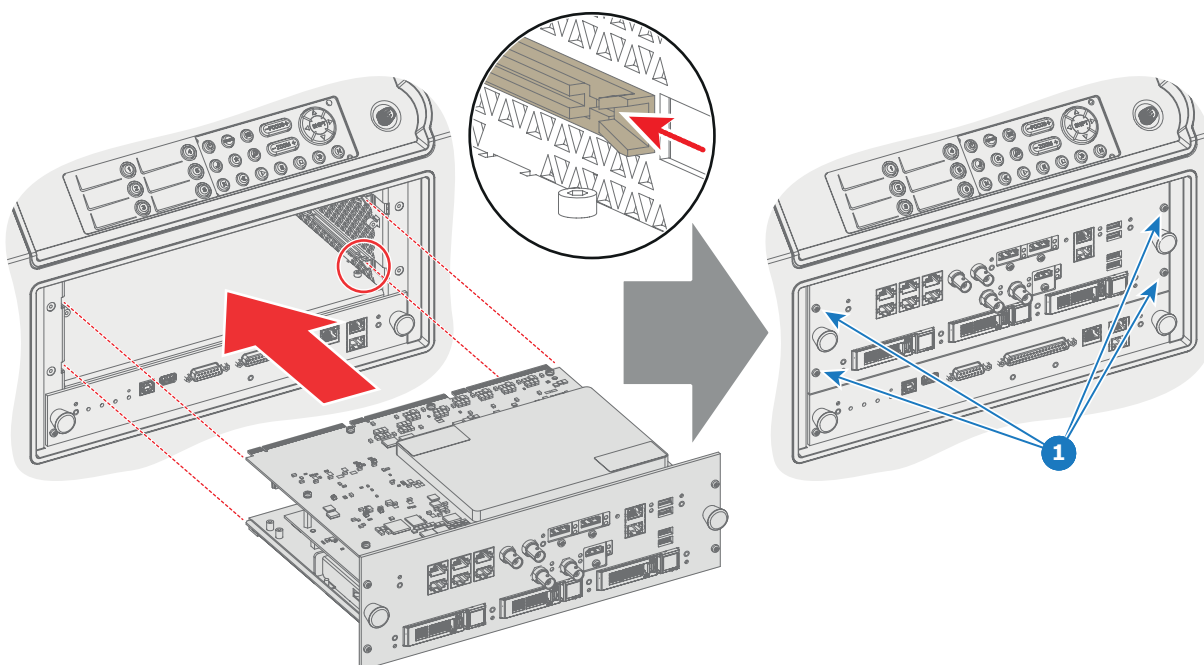


Image 5-3

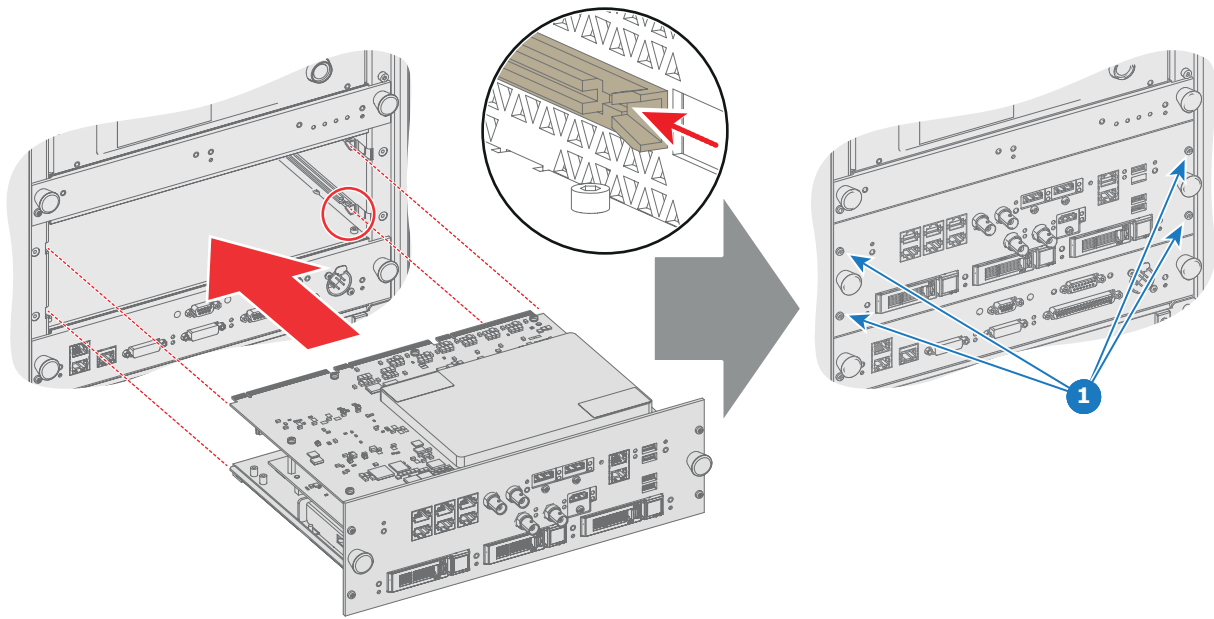


Image 5-4

4. Install the HDDs in case not yet installed. See procedure "Installing a HDD into the ICMP", page 72.
5. Install the cover of the Card Cage (not needed in case this is a DP2K S series projector). Use a 7 mm flat screwdriver.
6. Reconnect the power cord and switch on the projector.
7. Proceed with retrieving the device certificate from the ICMP for ordering the correct KDMs to play Digital Cinema Packages (DCPs). For detailed instructions see user guide of the (WEB) Commander or Communicator.



**Replacing the ICMP in the Card Cage of the projector will result in tamper events (service door tamper, insertion tamper). An authorization to clear the security warning on the projector, after installation, will be needed. You will find in the installation manuals of each projector the way to clear the security warnings.**



**In the ICMP, the content is stored on removable disks that allow fast recovery of this content if you have to replace the ICMP. See chapters "Removing a HDD from the ICMP", page 71, and "Installing a HDD into the ICMP", page 72. However, take into account that the matching KDM file must be ingested into the ICMP to play the cinema content (DCP file) available on the HDDs.**



**A newly installed ICMP has the factory settings. The ICMP software offers the ability to import setting parameters from a backup file. For detailed instructions see Communicator user guide.**

## 5.3 Removing a HDD from the ICMP



In case the ICMP has to be returned to factory (e.g. for repair) the non defective HDDs should be removed and kept.

### How to remove a HDD ?

1. Switch off the projector.
2. Moving the latch towards the left.

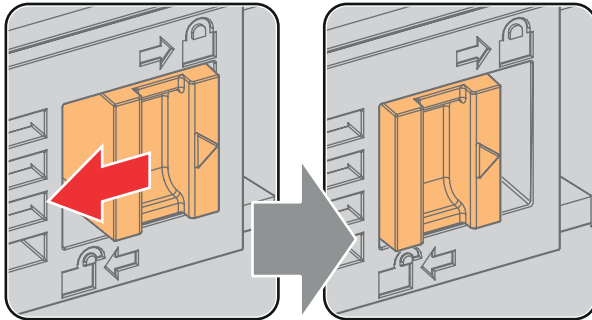


Image 5-5

3. Push the unlock button to open the handle.

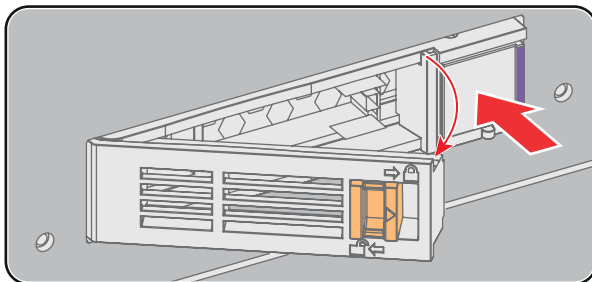


Image 5-6

4. Pull the HDD out of its slot.

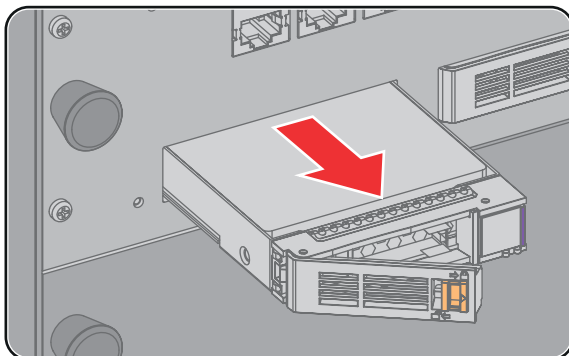


Image 5-7



To install the HDD see procedure "Installing a HDD into the ICMP", page 72.

## 5.4 Installing a HDD into the ICMP



This procedure assumes that the HDD slot of the ICMP is empty. If not, see procedure "Removing a HDD from the ICMP", page 71.



**CAUTION:** Always use a new empty spare part HDD from Barco to replace a malfunction HDD. Do not use a HDD from another ICMP HDD set.



**CAUTION:** Always make sure that all HDDs in the ICMP HDD set have the same storage capacity. See label on top of the HDD to know the storage capacity.

### How to install a HDD ?

1. Ensure that the projector is switched off.
2. Prepare the HDD for insertion by moving the latch towards the left and push the unlock button to open the handle.

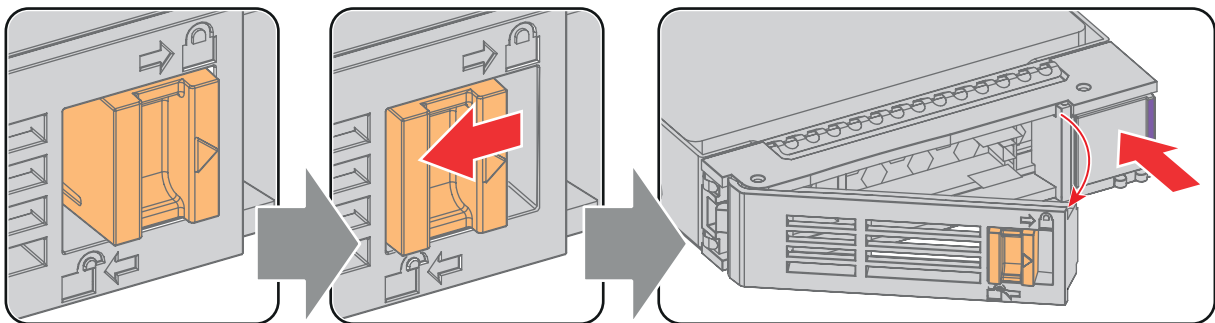


Image 5-8

3. Insert the HDD into the HDD slot. Ensure that the handle is sufficiently open so that the hook (reference 1) of the handle can pass the front plate of the ICMP.

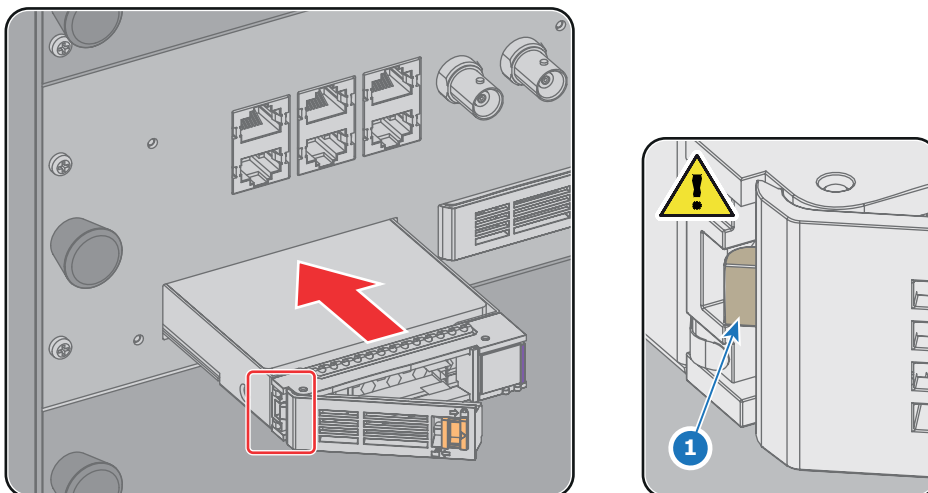


Image 5-9

4. Push the HDD completely and firmly inside its slot, close the handle, and move the latch towards the right.

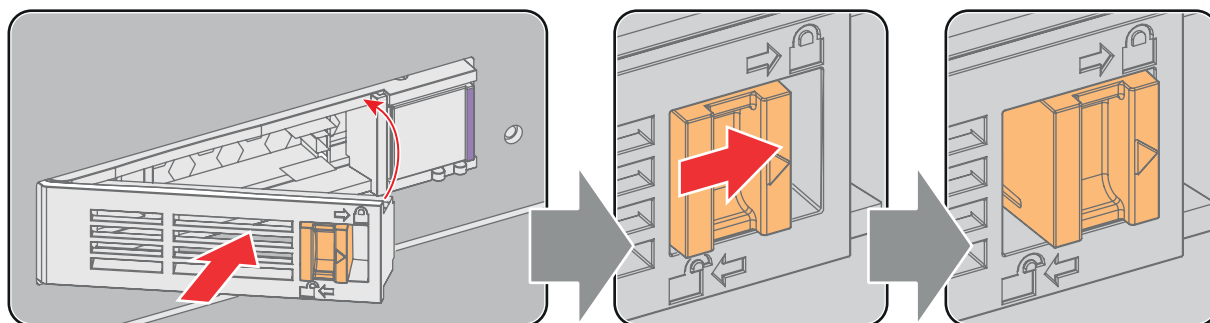


Image 5-10

5. Switch on the projector.



In case you replace one HDD (e.g. degraded mode) the ICMP automatically starts with the RAID recovery process. The red LED of the HDD which has to be rebuilt is blinking. This process takes about 200 GB per hour. Once the RAID is completed the red LED turns off.



**CAUTION:** It's strongly recommended to complete the RAID recovery process prior to starting a show. This to ensure that the content integrity is preserved and that the show is not interrupted.

## 5.5 Replacement of the battery

### What has to be done? (procedure overview)

Once the ICMP card is removed from the projector (see ICMP installation Manual), you must:

- Remove the cover from the battery slot.
- Insert the new battery in the empty slot.
- Remove the old battery.
- Replace the cover.
- Write the insertion date (MM/YY) on the sticker.



**CAUTION:** Danger of explosion when replaced with wrong type of battery. Replace the battery only with a 3V Lithium battery which has the same CR2477N (Barco Ref. [P222004]) or equivalent type recommended by Barco.



**CAUTION:** Always leave a working battery on the ICMP card. Removing all the batteries at the same time will cause immediate failure of the card and the only way to recover the functionality of the card is the return it to the manufacturer.

### Necessary tools

- Insulated flat blade screwdriver (not included in the replacement kit that Barco offers).
- Pen to write the date on the sticker (not included in the replacement kit that Barco offers).
- 2 Tamper evident stickers (not included in the replacement kit that Barco offers for security reasons).
- 5 cm of plastic (insulating) tube (Supplied in the replacement kit).
- Pair of insulating gloves (Supplied in the replacement kit).

### Preparation

1. Wear insulating gloves.
2. Place the ICMP on a stable (solid), flat and insulated support. Flip that board upside-down and place the back of the board in front of you.
3. Locate the batteries slots on the board.



**CAUTION:** Never place the ICMP on a conductive surface. This to avoid short circuits and a flat battery.



It is recommended to hold the ICMP card against a heavier object during the execution of the procedure in order to facilitate handling: Remove or put a battery sometimes requires exercising pressure on the card.

### How to replace the ICMP battery

1. Remove the cover from the battery slot by apply a little pressure on the two hooks situated on either side of the cover.

This action that give direct access to the battery, will break the tamper evident stickers. New tamper evident stickers must be applied after new battery is installed.

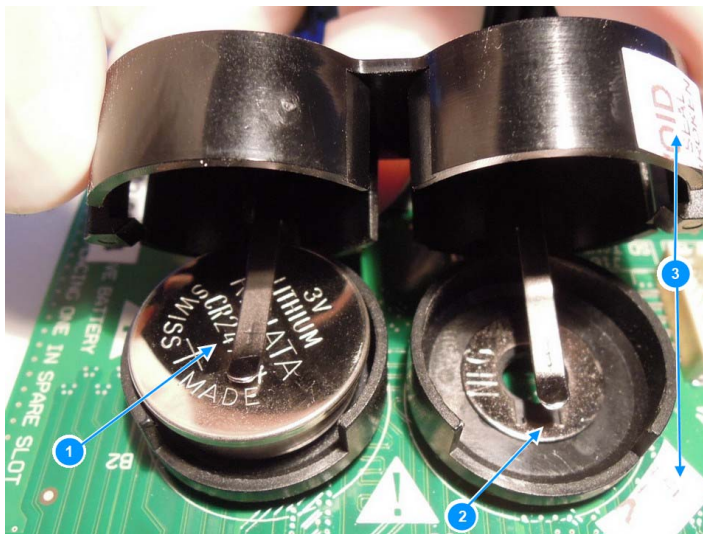


Image 5-11

- 1 Battery slot with battery inside
  - 2 Empty battery slot
  - 3 "Tamper evident" sticker cut in two parts.
2. Regardless of the battery slot (right or left), one of them already contains the old battery. Insert the piece of plastic tube on the positive connector of the empty slot.



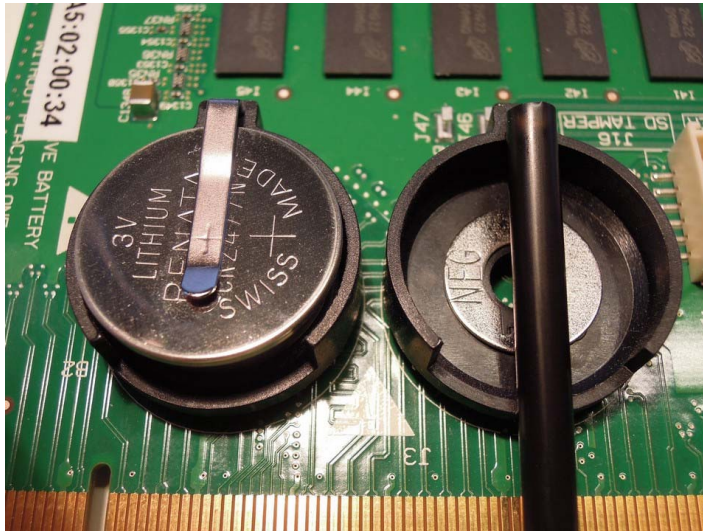


Image 5-12

- Put the new battery in the empty slot.

**Tip:** By introducing the battery on the front of the slot (where the edge is less high), you need to tilt less the battery.

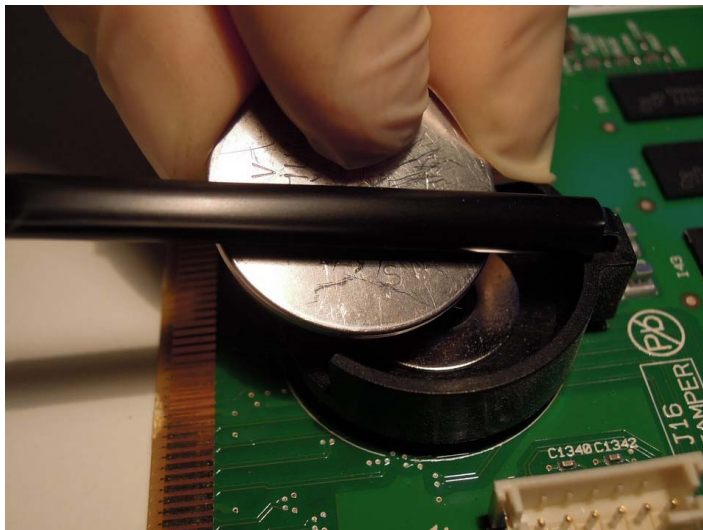


Image 5-13

**Caution:** CAUTION: Please insert the new battery in the correct orientation! References should be facing up.

## 5. ICMP service procedure

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Image 5-14

Now, there is one battery in each battery slot:

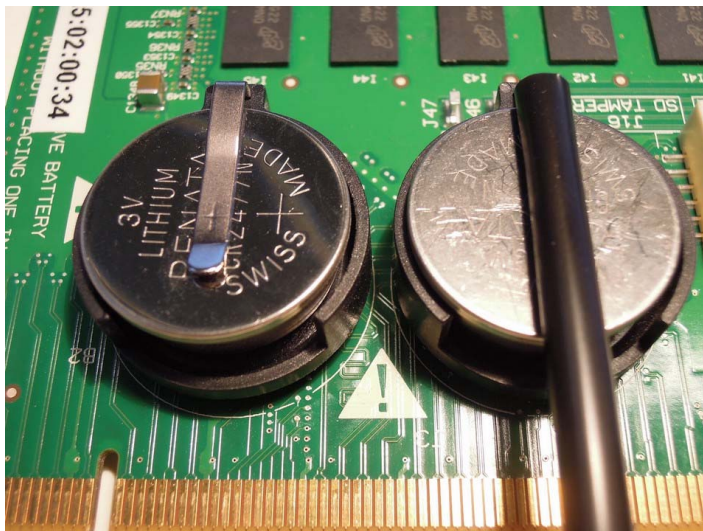


Image 5-15

4. Remove the piece of plastic tube.

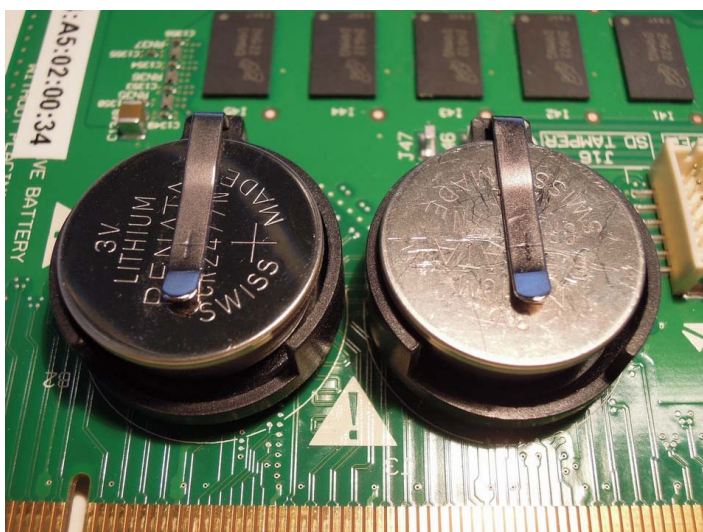


Image 5-16



5. Insert the piece of plastic tube on the positive connector of the other slot (the old battery).

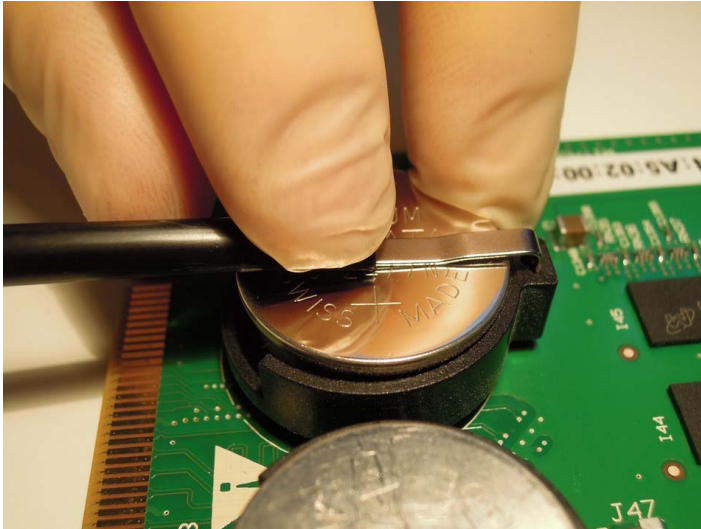


Image 5-17

6. You can use the insulated flat screwdriver to help you to release the old battery.

**Caution:** Be very careful not to touch the two connectors (positive / negative) in the battery slot with the battery or any other metallic objects. A short circuit between the two connectors would cause immediate failure of the card.

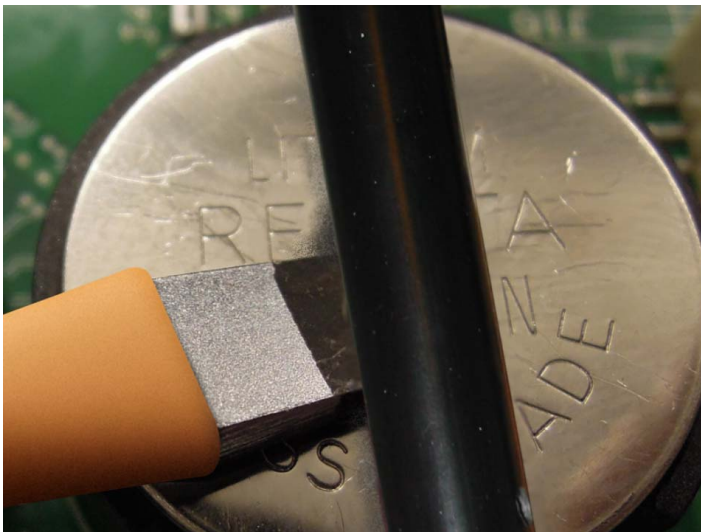


Image 5-18

7. Remove the piece of plastic tube.

Only the new battery remains. The other slot must be empty.

## 5. ICMP service procedure

---

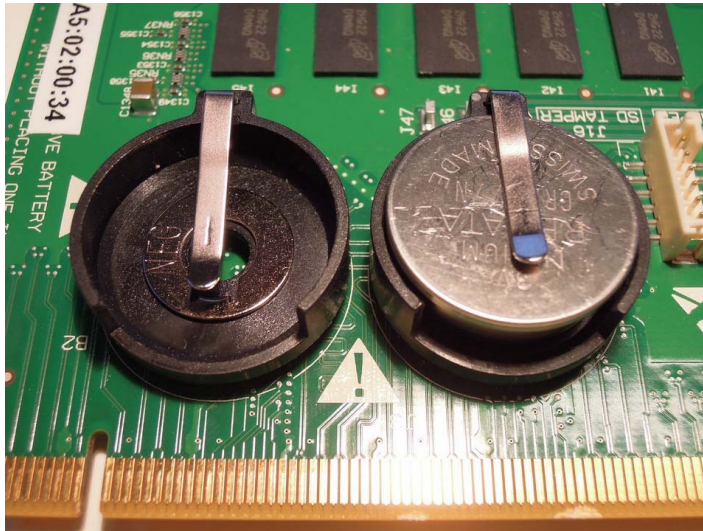


Image 5-19

8. Place the cover on the battery slot.

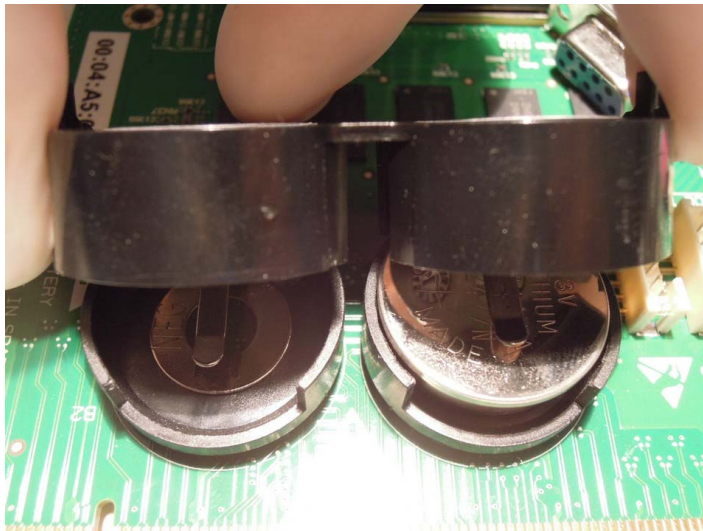


Image 5-20

9. Place two new tamper evident stickers between the cover and the card. Ensure that the tamper evident stickers do not cover the gold plated contacts of the printed circuit board.



Image 5-21

10. And finally, strike out the old insertion date on the cover and write the new one (MM/YY) on the empty location.

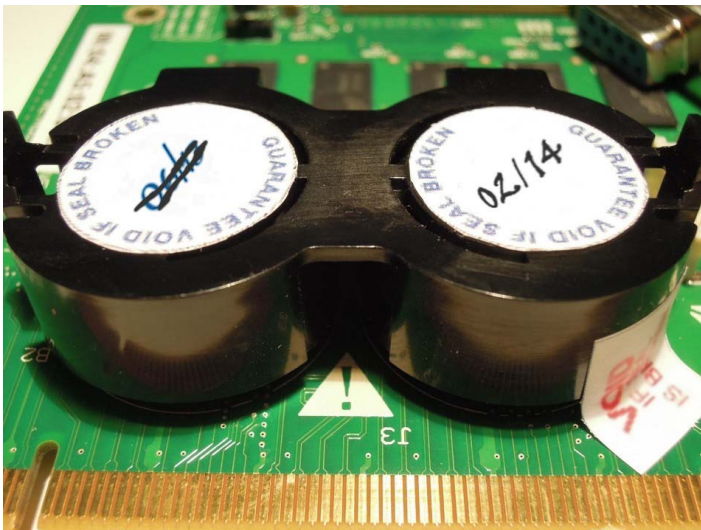


Image 5-22

## 5.6 RAID controller replacement

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**WARNING:** Power down the projector and let it cool down before starting the installation procedure. You will find in the installation manuals of each projector the way to switch off your installation.

---



**CAUTION:** Wear a wrist band which is connected to the ground while handling the electrostatic discharge sensitive parts.

---



No content is lost, and no new certificate (KDM) is needed during this procedure.

---

### Operating time

Replacement of the RAID controller, between ICMP board removal from the projector and ICMP board installed back and operating should take approximately 30 minutes.



**There is no extra time due to storage restore, because the replacement of the RAID controller has no incidence on the HDDs content.**

### Concerned parts

Spare Part Kit	Description
R7681136K	Barco ICMP RAID controller kit

### Necessary tools

- Torx T10 screwdriver
- Torx T15 screwdriver
- Phillips PH2 screwdriver (only to remove the ICMP from the projector)
- ESD wrist strap and anti-static mat
- Projector's Dallas key if applicable

### How to replace the RAID controller

1. Remove the ICMP from the projector. For details on the removing procedure, please refer to chapter "Removing the ICMP", page 67.

2. Remove the 3 hard disks. For details on the removing procedure, please refer to chapter "Removing a HDD from the ICMP", page 71.

**Warning:** *Applying next steps of this procedure without removing the hard disks may lead to severe damages of the system.*

3. Open the ICMP to get access to the RAID controller:

a) Put the ICMP upside down.

b) The bottom layer of the ICMP is constituted by the metal plate (without the 3 hard disks), the hard disks backplane and the security board.

c) Separate the modules by removing that bottom layer (which is at the top, following step a). You will need to loosen the 4 x T15 screws and remove 2 of the 3 long spacers that hold the security board with 5 x T10 on the metal plate, as shown in image 5-23.

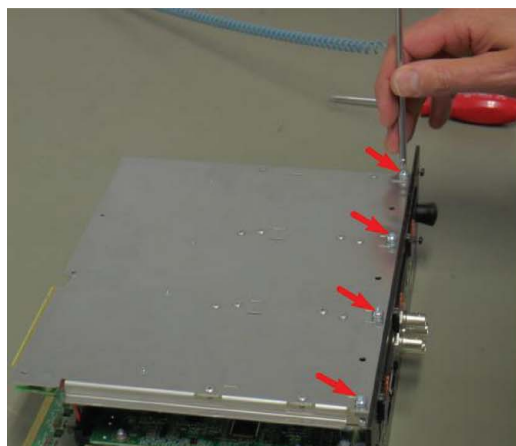
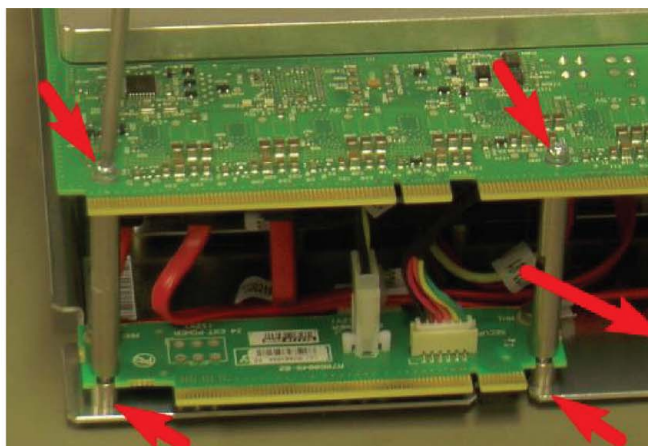


Image 5-23





d) Remove the 2 long spacers as shown in image 5-24. For this you need to loosen 5 x T10 screws.

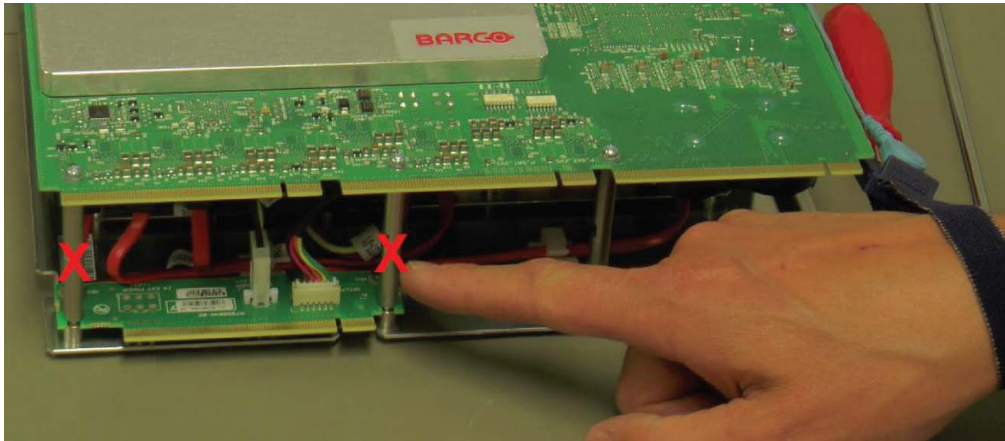


Image 5-24

e) Carefully, put the bottom board of the ICMP upwards, as shown on image 5-25.



Image 5-25

4. Removal of the RAID controller module.

## 5. ICMP service procedure

---

- a) You now have easy access to replace the RAID controller.
- b) Disconnect the 3 x SATA connectors from the RAID controller, identified by 1, 2 and 3 in image 5-26.

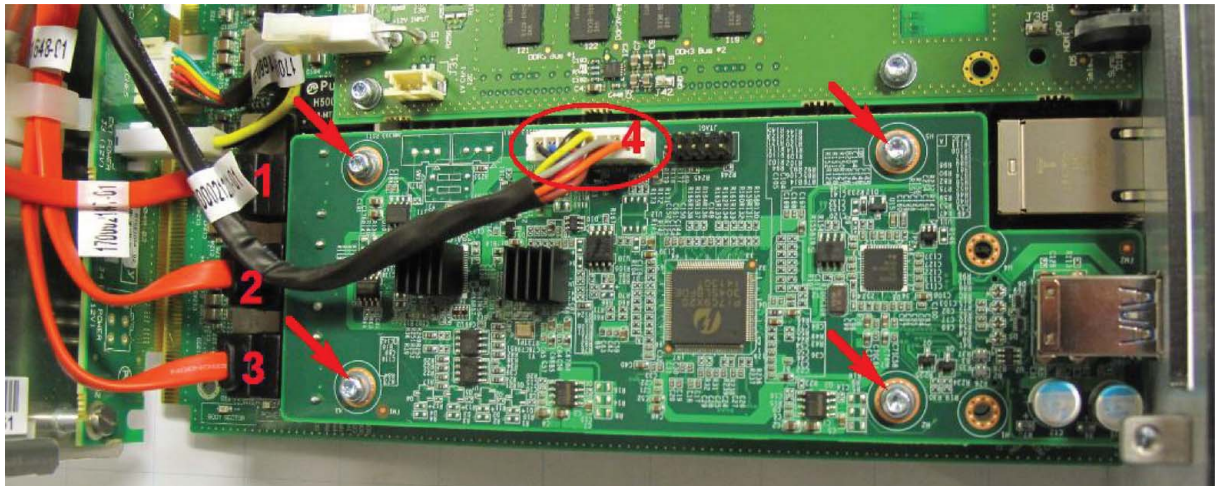


Image 5-26

Note: To disconnect SATA connectors, you have to press the clips at the bottom of every connector.

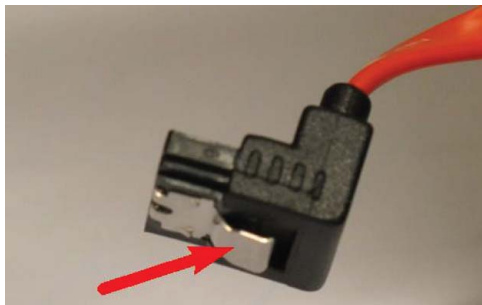


Image 5-27

- c) Loosen the 4 x T10 screws to release the RAID controller from the main ICMP module, identified by arrows in image 5-26.

Note: Be careful once these screws removed because it still remains a connector between the main ICMP board and the RAID controller.

- d) Now you can remove the white connector, identified by 4 in image 5-26, from the RAID controller.
- e) The RAID controller can now be removed.



Image 5-28

5. Installation of the new RAID controller module.

- a) Before placing back the RAID controller on the main ICMP board, click in the white connector on the RAID controller, identified by 4 in image 5-26.  
**Warning:** Neglecting to click on that white connector might bend and damage the new RAID controller.
- b) Position the new RAID controller on the ICMP module. Be careful with the connector between the main ICMP board and the RAID controller
- c) Tighten the 4 x T10 screws on the RAID controller to lock them together, identified by arrows in image 5-26.  
 Note: If you use a dynamometric Torx T10, you can setup this to a torque of 1 Nm.
- d) Connect the 3 SATA connectors, identified by 1, 2 and 3 on image 5-26.
- e) Place the bottom plate into the ICMP assembly and lock the 4 T15 screws from the bottom, as shown in image 5-23.
- f) Put the 2 long spacers back that hold the little security board on the metal plate and connect the 5 T10 screws that holds the whole assembly and spacers together, as shown in image 5-23.

6. Final steps.

- a) You can now install the 3 hard disks. They are auto detecting, so it's not important in which slot or order you've inserted the 3 hard disks. For details on the HDDs installation procedure, please refer to chapter "Installing a HDD into the ICMP", page 72.
- b) Place the ICMP module into the projector and secure the 4 x PH2 screws that hold the ICMP. For details on the ICMP installation procedure, please refer to chapter "Installing the ICMP", page 69.
- c) The removal of the ICMP from the Card Cage of the projector has resulted in a tamper event (service door tamper or insertion tamper). Before you can start playing content, you need to clear the error with either the Dallas key or the Key button depending on the type of projector.





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