

IP-4d

Release Candidate

Notes

Version 1.06-rc10

29.10.2025



IP-4d Release Candidate Notes

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29.10.2025

Fixed Issues

- TS/Demux configuration dialog might not open with some special service lists and the device might even crash when trying to change the configuration via the LCD menu (CSM-1427)
- Fixed wrong (generic) file name in log entry for settings upload/activation
- Fixed possibly empty VLAN select box (CSM-1423)

Version 1.06-rc9

24.10.2025

Fixed Issues

- "Timed out" counter was not reset on "Reset counters"
- "Missed" counter is no longer reset on stream resume after timed out input stream
- Enhanced compatibility of the Icecast client
- Fixed audio output getting silent due to wrong automatic detection of codec type even if specific codec type is selected (e.g. MP2) in a TS/Demux input source. Even with a specific codec selected the (potentially wrong) automatic could kick in and break decoding.

Version 1.06-rc8

06.10.2025

Fixed Issues

- The sample rate converter (SRC) was accidentally removed from the 4th audio output in the FPGA firmware (since 1.06-rc7)

Version 1.06-rc7

29.09.2025

New Functionality

- Added support for new Dual DVB-S/S2/S2X Tuner

Fixed Issues

- Fix the possibility of corrupted core dump files in case of an application crash



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- Livewire SRC name changes on the device are not changing the advertised name immediately, but only after a reboot (CSM-1385)
- Fix a possible (and theoretically often) crash when loading settings, doing factory settings or changing the audio output name

Version 1.06-rc6

25.09.2025

New Functionality

- Added Ancillary Data Output alarms

Fixed Issues

- Ember+: Increased buffer sizes to prevent malformed packets when a lot of entries are subscribed (CSM-1308)
- Optional SAT tuner: fix wrong status on LCD screen for RF2 input (showing "Not configured")
- The device could crash under special circumstances when loading settings
- Changing just the input source name did not change its name in the extended log
- The audio outputs could have output errors (signal outages) when reset counters is activated
- The Icecast client may get stuck in a redirect, not being able to re-establish the stream decoding (CSM-1358)



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Version 1.06-rc5

21.08.2025

Fixed Issues

- NMOS: Fix startup behaviour/configuration of the AES67 inputs
- Further enhancements to configuration changes done via NMOS (CSM-1329)

Version 1.06-rc4

15.08.2025

Fixed Issues

- After e. g. disabling/enabling an AES67 output the stream has an UTC/TAI offset of 37 seconds (CSM-1329)
- Further improvements to PTP synchronization stability
- Wrong PTP state in external clock status block
- Optional SAT tuner: no private/ancillary data output after reboot (CSM-1305)
- No displayed source on UDP Ancillary Output after select and save (CSM-1305)
- When changing the width of one of the log tables the page got distorted (CSM-1200)
- Icecast Server input source: add/delete didn't show immediate effect
- Overview: optional FM tuner shows wrong RDS values if the source is in standby

Version 1.06-rc3

16.07.2025

Fixed Issues

- The revised PTP implementation had a major problem likely selecting the wrong interface (and thereby the wrong PTP hardware clock) internally as the clock source



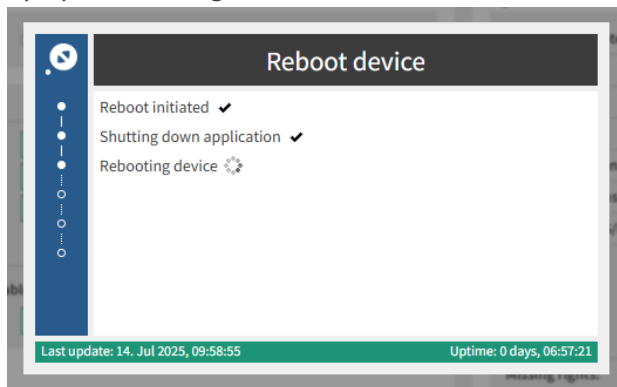
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Version 1.06-rc2

15.07.2025

New Functionality

- The possible actions that can be triggered by a GPI are enhanced by two new options, which allow to enable or disable a decoder input source
- Optional SAT tuner: added a second C/N alarm
- For the optionally available SDP files on the Status/Storage page it is now additionally possible to copy the content of the file to the clipboard (instead of downloading the file)
- The rudimentary wait page shown when e. g. doing a firmware update or rebooting the device is replaced by a prettier dialog

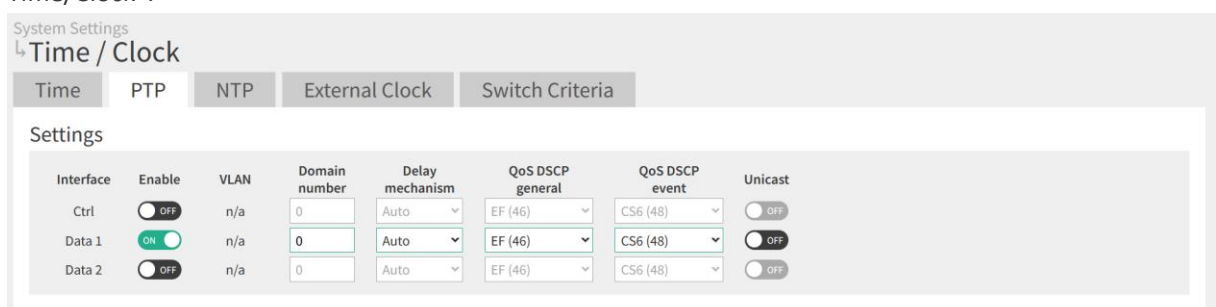


Changed Functionality

- The PTP functionality did get a complete revision, as it was not working reliably. In the course of these changes we did also revise the way to configure everything related to time and clock handling including NTP and external clock.

Before this revision several menu options were involved in the configuration. The selection of interfaces, on which PTP should be enabled was done via the “Network Settings / Services” menu. The PTP configuration itself (e. g. domain number and delay mechanism) was done via the “AoIP Settings / External Clock” menu (but only allowing to use the same configuration for all interfaces enabled for PTP). NTP configuration was done via “Network Settings / NTP”, time configuration (time zone) via “System Settings / Time”. Pretty much scattered all over the place.

All these configuration options are now consolidated into a single place – the menu “System Settings / Time/Clock”:





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You still have to configure via the “External Clock” tab (which corresponds to the former “AoIP Settings / External Clock” menu), if and which external clock source (PTP, NTP, 1PPS) should be used for the audio clock synchronization (including optional AES67 outputs).

System Settings
Time / Clock

Time PTP NTP External Clock Switch Criteria

Main Backup 1 Backup 2

Source: PTP Source: None Source: None

If a backup for the external clock is configured (e. g. NTP), the switch criteria are now configured via the “Switch Criteria” tab of the “Time / Clock” menu.

System Settings
Time / Clock

Time PTP NTP External Clock Switch Criteria

Common

Fallback mode: Holdover

Expert settings: OFF

PTP 1PPS NTP

Criteria(s)

State: Synced (slave)

Master offset: > 50000 μ s

Time settings

T1: 30 s

T2: 30 s

There’s also a new “Fallback mode” which allows you to control the behaviour if all configured external clock sources do fail. In “Holdover” mode (the new default) the device will keep the last external clock (no longer regulated) and will not switch to the internal clock, which would always result in a glitch.

- Together with the revision of the time and clock configuration we did also revise the available status information for time / NTP / PTP / external clock. Before the revision the NTP status could be found via the “Status / NTP” menu, whereas the external clock status could be found on the Overview page in a separate tab. PTP status information was only provided via this “External Clock” tab on the Overview page. The complete status information for all this is now also consolidated into a single place – the menu “Status / Time/Clock”:

Status
Time / Clock

PTP / NTP External Clock

Present Date / Time

Date/Time: 11. July 2025, 09:42:49

Timezone: Europe/Berlin

Synchronization Status

Sync source: PTP (Ctrl)

Last reference time (UTC): Fri Jul 11 07:42:46 2025

Stratum: 2

Frequency: 64.47 ppm

Skew: 0.00 ppm

RMS offset: 34 ns

Clock Sources

PTP - Ctrl ec4670.ffe.00ffb

Source state: Current best

Stratum: 1

Frequency: 0 ppm

Freq. skew: 0.002 ppm

Measured offset: +277 ns

Estimated error: 150 μ s

PTP Details

State: Synced (Slave)

Domain: 0

Frequency: 45.5 ppm

Master offset: -157 ns

Path delay: 5799 ns

Sync lost: 0

NTP Server 1 pool.ntp.org (as44222.vserver.site)

Source state: No select

Stratum: 2

Frequency: -0.036 ppm

Freq. skew: 0.087 ppm

Measured offset: -939 μ s

Estimated error: 11 ms

Poll: 512 s

Reach: ●●●●●●●●

Last RX: 386 s

Reset Counters

- If an audio output is configured to be AES67 (instead of AES/EBU or Analog), the AES67 output stream can now be enabled/disabled via the web interface (before the AES67 output stream was always enabled when the audio output was switched to AES67 and couldn’t be disabled via the web interface)



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Fixed Issues

- AAC decoder: in case of bad input (due to e. g. stream or SAT reception interruptions) the audio level may change unintendedly when the decoding resumes (CSM-1074)
- Fix web interface error (showing "no space left on device"), even preventing login to web interface (CSM-1252)
- The individual gain may not get applied after reboot for TS/Demux inputs (CSM-1256)
- TS/IP input stream may not continue decoding after stream interruption (CSM-1077)
- Fix high AES67 output jitter
- Fix AES67 output time jumps when decoder is stopped/started
- Improved Icecast client compatibility in case of connection problems



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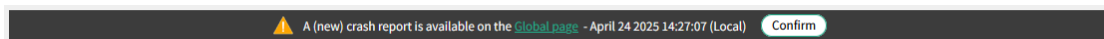
Version 1.06-rc1

09.05.2025

New Functionality

- Added new crash report functionality

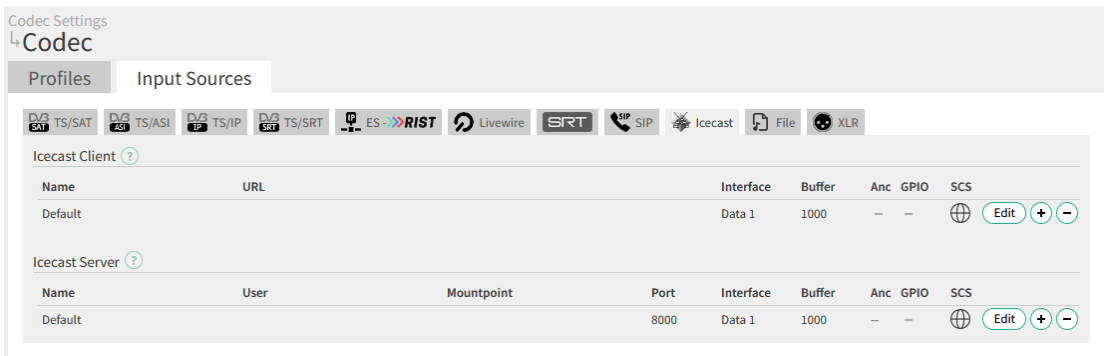
In case the device does crash (performing an unintended reboot) it was until now very difficult to find the root cause for the crash/reboot. In such a case a crash report will now be generated which should be sent to us via the 2wcom Support Center. It will allow us to inspect the reason for the crash/reboot, enabling us to develop a fix for the crash.



The crash report can be downloaded via System Settings / Global:



- Added Icecast server as new input source type, allowing to get audio from an Icecast source client connecting to that server instance



- Added PTP QoS DSCP settings

Fixed Issues

- Headphone output not working with less than max. channel licensed (since 1.05/1.05-rc8)
- Loading factory settings might not stop/clear all input sources internally which could result in old settings still being used
- Ember+ may answer with "null" on set commands (disturbing e. g. proper operation of VisTool)
- Icecast client may stop receiving data (after redirect to illegal URL) and does not recover automatically
- General Icecast client compatibility enhancements
- Changing the input source gain of a file input source was not applied to all instances