# X3 Firmware Update List

FW 3.535.C12 - February 15, 2024 Cantar X3 3.535.C12 (15-02-2024)

## Bug fixes:

- In some situation holding TALK button on streamdeck can crash the user interface
- DSR2 scan wasn't working depending of the DSR2 firmware version

FW 3.532.C12 - December 04, 2023 Cantar X3 3.532.C12 (04-12-2023)

### New features:

The 32 bits float bit depth audio file format is available in the audio settings. Please note that there is no bridge inside Cantar to convert it into a regular 24/16-bit audio file format.

## Bug fixes:

- In some settings DSR4 receiver manager data can be not accurate and freezes
- The subgroup settings were not embedded in the Save/Load Cantar process.
- The ethernet behavior of the ethernet Cantar link can be faulty and provide a wrong IP address such as 0.0.0.0

FW 3.530.C12 - November 02, 2023 Cantar X3 3.530.C12 (02-11-2023)

## New features:

- Hydra compatibility with the new Lectro DSR4 HF receiver (Four Channel Digital Slot Receiver).

After seated the DSR4 in his slot, a reset of the Tx location is needed once.

- A 25kHz frequency step is now available for MCR54

### Stream Deck

It includes a new setup in STOP position regarding the behavior of the TALK to

# TRACK button located in RECORD position

2 modes are available:

- a direct mode
- a safe mode, like on the Cantar (talk to track protected by a dual keys to be activated)
- In Rf overview, the RF icons provide the status of the corresponding slot.

### Dante status

- To prevent DANTE trouble, when DANTE is enabled it is not affected by the Cantar low power mode.
- A didicated DANTE Ethernet/IP informations has been added

# Bug fixes

- Small fixes in Stream Deck behavior (some icons mismatch, some layers update mismatch and very rare loss of stream deck control)
- On A10 receiver the Min/Max frequency can be wrong
- Sometimes, a problem can occur in the Input link setup dialog box
- Sometime, the Cantar screen application restarts opening Editing metadata dialog box

FW 3.515.C11 - June 08, 2023 Cantar X3 3.515.C11

This is a mandatory update to record 16bits audio file flavor on Cantar.

# New features (stream deck):

- A macro keys has been added to easily adjust the take number
- Talk to track is now a toggle button.l
- The stream deck panel can be locked/unlockedl
- The macro key status has been improved to identify the record status
- A backlight dimmer is available on stream deck in stop position
- A setup in stop position allows to get transport macro key in PPR & REC position

# Bug fixes:

- A critical error has been fixed on 16bits audio file flavor recording.
- The balance Lock as well as Pot Actuator lock was not correctly working.

FW 3.507.C11 - May 03, 2023 Cantar X3 3.507.C11

## New features:

Cantar integrate a new level of control with 15 LCD keys including more than 600 self explanatory graphical buttons and addressing, with effectively laid-out profiles, each and every menus and function keys of both recorders.

No setup needed, simply plug Steam Deck onto one of the USB ports and enjoy a refreshing and colorful interface.

Compatible with the original Stream Deck and Stream Deck MK.2

Install this new fee based licence to open a all new way of using your Cantar with quick and easy access

to tasks that may have seemed difficult to perform using the embedded controls.

Key combinations are now reduced to one single push of a button while access to your ingrid or outmap menus, among other menus, has been simplified with a single lay out

# Bug fixes:

- In some situations, hydra with 2 hubs was not working correctly
- In case of several MCR54 in use on an hydra system, the receivers were not correctly managed.
- Country / Region text according to the RF Recevier A10/A20I
- Play Out Mute was not correctly implemented on Dante & Aes Out

FW 3.411.C11 - January 19, 2023

Cantar X3 3.411.C11

For Cantress users, do not forget to update your Cantaress to C11 label to keep Cantar/Cantaress compatibly!

## New features

## Post-roll

An adjustable post roll duration function has been added.

This is active when main selector moves from the record position to the prerecord position.

If user switch back to record before the end of the post roll, the recording continue without creating a new take.

In pre-record position, post roll process can be manually terminated by pressing ESC key.

#### Cantaress

The RF receiver overview information (Tx battery levels, RF quality link...) are now automatically duplicated in the Cantaress main screen.\

## Hydra

Hydra feature is now fully compatible with the new A20 RF receiver.

Band can be changed (select field then change Band and validate with OK / Cancel with Esc)

Power can now be changed on both channels for A10/A20 Tx Id are now displayed when they are available.

### Rearm track

In case of a rearm track during record, the update process have been improved. The update process was aborted in case of metadata editing.

# Assignation Bank

- Rework of the Assignation Bank interface
- Delete bank function have been added (F4 button)
- Bank Name increased to 24 characters
- Reset Assignation bank when a reset factory is launched

# Dropbox

- Dropbox improvement in case of the internet disconnection/reconnection.

# Bug Fixes:

- In some situation the audio delay setup on MIC1 is not applied.
- In case of the metadata editing, the rearmed track background update process on the external medias could not work correctly.
- In some situation, the display EQ curve where not displayed.
- Save Bank was not handling Cantarem2 Slider 11 & 12 correctly
- Wrong display of Dante Outmap configurations
- Jog assignment gain may be false in some situations
- In some situation non assigned slices can generate none significant pop up messages
- Linked Melody may display wrong limiter State in the Solo Window
- In the sound reports, for very large audio files, the size field may be an invalid value.

FW 3.402.C9 - September 28, 2022 Cantar X3 3.402.C9

This version take place of the 3.401.C8

Compatibility with the C9 labeled Cantaress firmware.

FW 3.401.C8 - September 19, 2022 Cantar Cantar X3 3.401.C8

Be carreful, FPGA will change during update to 3.400.C8.

As written DO NOT POWER OFF Cantar during this step.

For safety, please use at least 2 power sources during update (e.g. 2 batteries or 1 external power on the XLR4 and 1 battery)

In case of firmware downgrade the same process will occur.

## New features

- A basic audio waterfall spectral analysis tool has been added.

The spectral analysis is available from 20Hz to 20kHz and works with Cantar sample rate set at 48kHz.

2 frequencies corresponding to the 2 spectral lines of maximum energy are displayed.

In any SOLO inputs dialog box and in SOLO track in PLAY position, press [F4] key to display the waterfall.

- Assignation bank have been added to store faders and pots assignments as presets.

Open any assignment dialog box and press F1 to get the assignment overview. The current configuration can now be edited within the overview screen.

The banks to store and load is accessible from that dialog box,

Use the shortcut keys (displayed as reminder at the footer line) to navigate and operate.

- Quality info have been added at the top of the vu-meter for the ADX5 and the A10.

To be displayed, the Cantar input parameter needs to be setup in RF receiver manager screen.l

0-Red 1-Orange 2-Yellow 3-Cyan 4&5-Green

# Bug Fixes:

- Idle Poly/Mix was not creating Advanced Scene & Take template iXml fields causing issues

with batch modification of Scene & Take fields when renaming the files.

- Sometimes, the phantom power parameter setting was not correctly stored.
- Tape Id longer than 4 characters were cut to 4 in some fields-Hydra serial numbers were not correctly displayed in some situations and could corrupt the interface process.

FW 3.333.C8 - May 23, 2022 Cantar Cantar X3 3.333.C8

#### New features:

- Rework of the hub management fixing several issues.
- Digital Quality level has been added for Shure and Audio limited (v5.01) in RF overview.
- Shure: a display of the audio Max Output has been added.
- A Dropbox account can be paired to your Cantar. Pre requisite:

Be a Dropbox account holder (2GB free account can be subscribed on Dropbox website).

Your Cantar needs to be linked with the internet using ethernet Cantar socket. You will use your smartphone one time to pair your Cantar and the Dropbox account.

(Follow Dropbox connect in TECHNICAL settings).

The Dropbox account is available as an external Media DBX in the Cantar. Dropbox can be used as target in COPY/BACKUP (for audio files and/or sound reports).

Dropbox can be setup as a could idle mode in SESSION screen.

For more details refer to the Dropbox start up guide.

As the Cantar Dropbox access is an option, do not hesitate to request a 14 days free trial periode.

## Bug Fixes:

- In case of disconnection/reconnection of the hydra usb communication, an inappropriate hub crossing could occurs, resulting a bad power state to be applied.
- Some "silence rec" were displayed by mistake (in PPR position if you rearm a track just after the end of a record)
- In some situation the "Run" label for idle backup and rearm-track was displayed by mistake
- Hydra: Shure ADX5D Some Tx informations were not correctly updated and FD-C mode corrections.

FW 3.324.C8 - March 01, 2022 Cantar X3 3.324.C8

This version take place of the 3.323.C8

# Bug Fixes:

- Rearmed tracks were not inserted in sound reports files (.PDF .ALE .CSV).
- In idle backup, a "Run" label was displayed even in case of empty project.
- Lectrosonics: compatibility mode wasn't correctly displayed.

FW 3.323.C8 - February 09, 2022 Cantar X3 3.323.C8

## New features

-Re-arm track(s) during record:

All disarmed tracks with a routed input can be armed while recording. Pre requisite:

The monophonic flavor must be recorded on the internal SSD (recommended in all cases).

The "Arm during rec" parameter needs to be ON (available in the AUDIO & TIMECODE page).

While arming a track during the record, no extra take/file is created and the complete content of the armed take (since the beginning of the recording) will be recovered.

As soon as the track is armed, it is available for mixing.

At the end of the recording, the content of the external medias (SD card, USB) set in live rec mode needs to be updated.

This is done seamlessly in the background with the Cantar in test position. This process can be performed at any time, so it is not necessary to do it immediately after the end of the recording.

Note: for safety, disarming a track while recording is not available.

- The behavior of the Cantar push buttons have been improved in cold environment.
- On hydra reset RX location process, the user can choose to swap the RF receiver lines position I

in the Cantar RF overview screen.

- From the Load Settings dialog box, it is now possible to delete previously generated \*.cfg files

(Select the desired file then press Shift + ESC and confirm with OK)

# Bug Fixes:

- Hydra (Shure ADX5) in some situations, the hydra interface was feezed
- Hydra (Shure ADX5) the yellow color of the parameters wasn't correctly updated
- Changing the Dante out outmap Id using the left crown was not working
- Lectrosonics compatibility mode "NU Hybr" was not included

- When Ratio mode was selected with Lectrosonics, field selection could go beyond last field.

FW 3.3.16.C8 - December 13, 2021 Cantar X3 Version3.316.C8

### New features

- When Advanced Template is selected, Advanced Fields (Season, Episode, FX, Unit) are now displayed on main screens. They can be modified when the Cantar is in PreRecord position.
- In low power mode, the Dante card power can be included or not in the process.

When using DANTE network, it is mandatory to disable DANTE low power.

- In PLAY position F5 start play at half speed.

## HF receiver

- Shure, Lectro, AudioLimited, Sennheiser, Wisycom: when applying a frequency from the Scan dialog, it is done immediately (no need to get out of the Scan dialog to apply it).
- Shure:

Changing band/group/chanel neeeds a confirmation by pressing Ok button. Tx Mute status is now displayed

- Lectrosonics

Diversity Mode & Compatibility Mode are now displayed and can be changed}
IR Sync may be started from UI
Audio Tone may be started from UI

# Bug fixes

- Battery remaining times becomes briefly wrong in some situations.
- MultiConfig outmaps on Dante Out was only working on the last 8 outputs displayed in the Outmap configuration dialog
- Audio limited, Rx toggle was not working in some situations
- Sennheiser incorrect frequency when getting out of Scan dialog
- Headphone Configurations on Dante Out #25 to #32 was not working

FW 3.306.C8 - October 18, 2021 Cantar X3 version 3.306.C8

Be aware the of the C8 label for Cantaress compatibility, and update your Cantaress if needed.

## New features

We added some information / controls for the Shure ADX5

- Quality meter (as well as the ShowLink level)
- Transmitter Id
- Battery remaining time (if available)
- Audio Format (Analog / AES 3) and the ability to change it
- Select Tone Generator (Off; -60 dB; -54 etc...)
- Audio Gain on Receiver (and Mute status) and the ability to change it.

# Bug fix

- Trouble to install unlimited options.

FW 3.304.C8 - September 28, 2021 Cantar Cantar X3 3.304.C8

Be aware the of the C8 label for Cantaress compatibility, and update your Cantaress if needed.

### New features

- Hydra compatibility with the new Shure ADX5D wireless audio receiver On the receiver side, note the ADX5D firmware version 1.3.26 or later is mandatory.
- Frame.io is now part of the Cantar environment.

The Cantar can access to frame.io cloud services.

The access to frame io is a new option, ask us if you want to receive a demo version.

Afterwards, Frame.io cloud (FIO) will be accessible as other backup medias (SD

or USB) in idle mode and through the copy/backup menu. For more information refer to the Frame.io start up guide.

# Bug fixes

- When editing text fields [S]+Left was not deleting the last character
- Multiple improvements to HYDRA when connected to the SONY DWR-S03D.
- Improvement of HYDRA when connected to the WISYCOM MCR42 (channel 2 management)
- Improvement on screen display behavior in some situations.
- Shift+Esc to Reset Pdf Data Setup could cause the interface to crash
- Shift+Esc to Reset Pdf Data Setup was creating empty columns

FW 3.242.C7 - May 31, 2021 Cantar Cantar X3 3.242 C7 (31-05-2021)

### New features

- Talk Source can be selected between
  Internal Slate Mic
  3.5mmm Slate Mic
  Other Cantar regular inputs (Mic,Line,Aes,Aes42)
- The audio LTC sent to the tracks/audio outputs can be adjusted.

# Bug fixes

- Timecode in 23.98/29.97 mode was corrupted if LTC out generator is modified after the fps settings.
- The boot sequence wasn't competed (specially on Cantar Mini), in some situations.
- The compender list for Wisycom wasn't correct in some situations
- Invalid actuator movement (for example unassigned actuator) warning slowed
- Metadata editing using the WebApp is protected when the idle backup mode is engaged

FW 3.238.C7 - March 30, 2021 Cantar X3 version 3.238.C7

## New features

- Compatibility with the 606 Band used on Lectrosonics receivers
- On MCR54 when the RX3/4 is in analog mode and affected to the top TA5 outputs, the gain can be adjusted in hydra interface

## Bug fixes

- On hydra, the scanning area is automatically cleaned when the frequency range doesn't match to the last scan
- Diversity mode on Lectrosonics was disabled on exit of the scanning dialog box
- The reset receiver location on hydra wasn't complete when using MCR54
- The AES lock status on AES42 inputs was wrong in AES3 mode.
- The use of the 100kHz high bandwidth is only allowed with a 192kHz sampling rate.
- Melody status in solo dialog box was staying empty at melody startup
- Limiter and clip info on screen was staying on in case of Melody disconnection
- In Sequence field, using the Left Jog on a X3 or the Jog on a Mini was not correctly modifying the field
- Output Solo Dialog box: When a Line inputs was routed, another input was wrongly displayed even though not routed.

FW 3.233.C7 - March 16, 2021 Cantar X3 version 3.233.C7

Read carefully the following recommendations:

Loading this new Firmware will update the FPGA content.

After a software update, Cantar will reboot and update the FPGA.

A dedicated screen with progress bar will appear.

As written DO NOT POWER OFF Cantar during this step. For safety, please use at least 2 power sources during update (e.g. 2 batteries or 1 external power on the XLR4 and 1 battery)

The same behaviour will occurs when downgrading to a previous version.

## New features

- This version is compatible with the NEW Melody Aaton device. Melody is a double input analog audio preamplifier with low noise and extended bandwidth up to 100 KHz and digital output on AES42. It is fully controllable by the CantarX3 and CantarMini to extend the number of analog inputs.
- Delay: Delays may now be Disabled (while keeping the delay value) from the Delay Overview dialog or the Delay Dialog or even the Input Solo Dialog by pressing Shift+F2.
- On hydra system, the frequencies of the RF receiver can be adjusted directly form the scan screen.

To change a receiver frequency, use the cursor to define the new frequency and press Shift+OK to assign it to a receiver.

- SONY DWR-S03D is now supported in hydra system

# Bug fixes

- When EQ on inputs where enabled, if the input signal was saturated, the equalizations worsened the phenomena of saturation.
- Frequency were wrong on Lectrosonic receiver A1 when using the block 470.
- The Hydra scanning function was not working with Lectrosonic A1 model
- On A10 Tx Batt alert was not correctly updated
- In some situation Hydra data management was switched OFF with MCR54

FW 3.217.C7 - January 13, 2021 Cantar X3 version 3.217.C7

New features

# Hydra system

Wisycom MCR54 receiver is now supported (MCR54 Firmware 1.7-rc2). As it is a 4 channels receiver, 2 pairs of slots are occupied in the Cantar interface.

The first time you plug an MCR54 in your configuration (or if you change the MCR54 physical slot),

a reset Tx location sequence is needed.

For the A10 (firmware 2.91) overload notification has been added.

### Genral

- Dante Gain are displayed in a panel when they are changed.
- An output name field for each output in outmaps panel (different from Outmap configuration name) can be user defined
- The Solo Output dialog reflects the output name and can be edited.
- The Cantar audio timecode (LTC) can now be internally routed to any buses (Track, SubGroup, Anaolog digital and DANTE Outputs).
- The InGrid configuration name filter is less restrictive
- Pdf report :

Easier navigation on Header & Data fields using the Jog A boom Operator field has been added to Header available fields

# Bug fixes

- The remaining percentage indicated on battery slot 1 can be wrong in case of faulty battery.
- The notification of the USB over current was not working when it occurs during the Cantar boot time.
- Armed/Disarmed Track status could be wrong in Double Solo (if during a previous Solo Left track was disarmed)
- In PB&Rec browser when the Scene col was shown the take selection list was not scrolling correctly

FW 3.211.C7 - November 23, 2020 Cantar X3 version 3.211.C7

## New features

- DANTE slave mode is now available. To get it work, the DANTE board firmware needs to be updated.
- The instructions are in the Dante updater.pdf file.
- A small documentation of the new DANTE status screen is available int Dante Sataus.pdf file.

They are available in the User manual section of the website.

- A VNC server is now available inside the Cantar.

To activate it

Using a VNC client on a side device (e.g. Real VNC Viewer), you can connect be to the Cantar through the local network.

The VNC client will displayed the Cantar screen and allows a basic remote of the Cantar.

The regular keyboard arrow keys, enter keys and short cuts can be used in the VNC client interface.

[CTRL+ESC]=toggle PPR/RECORD [CTRL+F3]= TEST [CTRL+F4]=STOP [CTRL+F5]=PLAY...

### Note:

The mouse won't be supported, and the short cuts can't be customized. The display accuracy depends of the network in use (Wifi or Ethernet). The use of the VNC is not recommanded on very heavy settings.

- When the day suffix is used, a dialog box proposes to the user to apply it to the Tape ID.
- Battery status are available for all compatible batteries
- The full duplex mode (talk back) now affects the outputs too.

# Bug fixes

- Danteout were not functioning.
- Multiple outmap was not working on position using Headphone duplication
- Selecting a Multiple Outmap config with all position to the same outmap was not correctly applied.

- Routing a Dante input and a Mix to a track was making the track not seen as Mix track by the interface (for example for Mixdown Vumeter shifting).
- DANTE parameters of Dante 1 were not modifiable in Solo.
- Problem in clone mode to duplicate original TC fps.
- When an actuator was driving the Lineout level, it may be too sensitive bringing the Level panel too often in the interface
- Issue with PlayOutMute activated on Outputs when Tracks or Postfade were routed, mute was not correctly applied.
- In the record position using PB & REC the dedicated screen was lost if you check the inGrid or the Outmaps.
- The very low A10 RF level was not correctly displayed.

FW 3.205.C7 - August 17, 2020 Cantar X3 version 3.205.C7

## Bug fixes

- In very few case, a faulty access to the SD card at the record startup, can corrupt the final audio file.-
- In some situations the installation of a new demo option ley was not possible.

FW 3.203.C7 - July 09, 2020 Cantar X3 version 3.203.C7

### New features

- Compatibility with the Cantaress firmware labeled C7
- TRACK PAN: Possibility of modifying the track pan setup during record: In solo track dialog box, Shift+F5 toggles between L/R/C, hold Shift+F5 during 2 secondes to access the fine pan, use the jog to adjust it.
- The fine pan display has been improved.
- PLAYBACK menu: Shift+Left/Right arrow keys allow to move the waveform cursor by one frame step.
- WAVEFORM TIMELINE: For take longer than 1min 30sec, a magnified window is automatically displayed to provide a better resolution of the timeline.
- In PLAYBACK & REC, mode LIVE, play-card boundaries can be adjusted +/- 1 frame.

# Bug fixes

- In some cases, when set to "multiple configurations", the output setup information may not be correctly displayed.
- Unexpected popup of the input gain panel (mic/line...) has been removed.
- The Cantar configuration backup target media was wrong at startup.
- Incorrect initialization of the Aes42 Solo dialog box could result in an undetermined limiter status ("---")

## Bug fixes with option activated

- When in track solo mode, Aux Bus was not reflected in the routing items.
- F6 did not modify the AatonMix group choice when soloing a SubGroup.

## FW 3.201.C6 - June 25, 2020

This version takes place to the 3.200.C6.

# Bug fixe

- In some situations audio wave form were not created during the record process. The audio integrity was not affected by the problem.

## FW 3.200.C6 - March 11, 2020

#### New features

Compatibility with the 3 new Cantar options, your option status is available pressing F2 from STOP screen.

## Dante +

This option is intended for users who wish to work with the DANTE inputs in a proactive way.

This option offers a complete set of settings for the 32 DANTE inputs of the CantarX3.

It is composed of a limiter, phase inversion functionality and a digital gain whose maximum is set per input (between +0dB max up to +36 dB max pressing Shift+F1) and an equalization module.

All parameters are set through the SOLO dialog box.

# SubGroup

A new Sub Group routing grid allows you to create up to 24 mix buses which can be applied to two independent auxiliary channels (Ax1, Ax2).

Both channels can be sent to Digital or Analog Outputs or recorded to tracks

All 24 bus mixes are fully controllable (gain and EQ)
The setup page is available pressing F1 from the InGrid page.

#### AatonMix

The principle of the AatonMix is to automatically attenuate channels that have a weak signal at the input.

In the current algorithm, this attenuation is limited to -25 dB.

The AatonMix algorithm, never amplifies by itself the signal sent in the mixdowm.

The operating position of the AatonMix is therefore open mixdowm faders.

Consequently, at any time the user can manually mute a channel in the mixdown by closing the corresponding fader.

Four independent AatonMix groups (blue numbers) can be chosen and applied to selected channels

and used as complement or take the place of the user mix-down process.

Open the IN-GRID screen. (e.g. set the main selector at 5 o'clock position).

Use the left/right buttons to select the desired track and press [F6] to include/ remove the channel 1-24 to one of the four AatonMix groups

(blue square 1-4 at the bottom of each channel)

To enable/disable an automix groupe press [Shift+F6].

Each channels can be routed to Mix Left (XI) or Mix Right (Xr) or both: Toggle [F5] or [Shift+F5] for fine pan adjustment

# Bug fixes

- The Copy Eq feature was not functioning on the tracks
- Multiple outmap settings were not taking headphone miroring outmaps into account
- The slate field (available in adavanced mode) displayed in playback and rec mod was wrong.
- The audio levels output could be wrong in solo Aes output.

### Notes:

- A Cantaress version including a full compatibility with these new features of the version 3.2XX is in the pipe.
- If you need to downgrade to version 2.XX, it is mandatory to use the version 2.97.C5 and no older versions.

FW 3.101.C6 - February 13, 2020 Cantar X3 3.101.C6

## New features

- Compatibility with the Cantaress versions labeled C6

# Bug fixe

- Low Gain and Low Freq (in the EQ) were not functioning on Line Inputs.

FW 3.100.C5 - February 11, 2020 Cantar X3 version 3.100.C5

Read carefully the following recommendations:

Loading this new Firmware will update the FPGA content.

After a software update, Cantar will reboot and update the FPGA.

A dedicated screen with progress bar will appear.

As written DO NOT POWER OFF Cantar during this step. For safety, please use at least 2 power sources during update (e.g. 2 batteries or 1 external power on the XLR4 and 1 battery)

The same behaviour will occurs when downgrading to version 2.97.

New features

On all digital inputs (8 AES3, 4 AES42)

- The input gain range is individually selectable (Max = 0.6,12,18,24,30,36 dB are available)

The choice is made in the corresponding AES solo dialog box pressing [Shit+F1]

- A digital limiter is available. The setup is made in the corresponding AES solo dialog box

A digital limiter is available for the Mixdown

- The setup is available in AUDIO & TIMECODE PARAMETERS, item Mix limiters

EQ location Pre/post or both is available in the AUDIO SETTING parameters

- EQ are now also available Post-fader
- EQ location can be setup in the Track Solo Dialog box.

- When Soloing a Track, it may be listened Pre or Post-fader (in order to setup the EQ)

MS on all inputs (Mic, Line, Aes, Aes42, Dante)

- The m-s declaration process has been modified in the Ingrid Routing: When the input selection panel is opened, if an input is suitable to be declared as m-s, a red circled number S is displayed next to it, tipping the user that pressing F5 will change the m-s nature.

# Link available for Digital Inputs & Tracks

- Link Tracks : up to 6 groups (each 1 master, 7 slaves maximum)
- Link Digital: up to 6 groups (each 1 master, 7 slaves maximum)
- New Link Setup interface when pressing F5 while the Main Selector is in TEST position

## **Ambisonic**

Two ambisonics decoders are available inside Cantar.

The specific filters to convert A-format to B-format are implemented for the Sennheiser AMBEO mic.

## To be activated:

- Switch ON the AMBEO enable parameter in AUDIO PARAMETER menu
- Link the 4 mic inputs that will be used as the AMBEO mic inputs
- Open the AMBEO dialog box [Shift+OK] in TEST position to finalize your setup

# Hydra

- The support of the Lectrosonic 941 RF receiver has been added.
- The Wisycom S1/S2 communication is now enabled when AES3 is used as the receiver audio channel

# Bug fixes

- Using Wisycom MCR42 with hydra system, when changing the expander, the parameter was not correctly saved
- In some situation the Rx power ON/OFF was not working
- Small fixes in the Playback & Rec Browser (thanks Achim)
- Scene Column header could display incorrect information (Scene(Short) instead of Scene(Full))
- using the Shift+F1 to display SC&Take information, it was not possible anymore to change the file selection until getting back to the original Filed & Note columns

- Pressing F1 while being in Playback & Rec Browser would display Ingrid but not hide it (only way was changing Main Selector)
- Pressing Shift+Esc while displaying Ingrid in Playback & Rec Browser would display the Trash file dialog

FW 2.97.C5 - February 11, 2020 Cantar X3 version 2.97.C5

## New features

- Compatibility downgrade from version 3.XX
- The digital gain on AES42 up to +36dB is back, it can be adjusted in AUDIO PARAMETERS menu.
- Specific limitations has been added for the compatible the upgraded Lectrosonics SRb models

## Bug fixes

- The battery alarme range for Lectrosonics transmitters is modified to be compatible with all the voltages.
- AES42 remote was not possible when the 192kHz sample rate is selected.
- The colour of the bottom vumeter was wrong in some situations.
- An headset beep was engaged in stop position in some situations.
- The mixer calibration has been improved.

FW 2.96.C5 - November 19, 2019 Cantar X3 version 2.96.C5

### New features

- Compatibility with the new Cantaress version labelled C5
- The digital gain on AES42 up to +36dB is back, it can be adjusted in AUDIO PARAMETERS menu.

FW 2.93.C4 - October 22, 2019 Version history 2.93.C4 (22-10-2019)

### New features

- After opening any actuator assignment dialog box, an overview is available pressing F1 key.

All control surfaces will be displayed.

# Bug fixes

- MP3/OGG was not working
- Jog was running reverse.
- It was not possible to use the Shift + Solo functionality on the ABox (phase inverse or Track disarm)

FW 2.92.C4 - September 30, 2019 Version history 2.92.C4

### New features

- The Souriquette remote is now supported. The Souriquette needs to be directly connected to the Cantar.

It provides additional shortcuts in all screens.

A dedicated contextual help is available by pressing quickly 3 times the Souriquette shift button.

- Advanced Sc & Take : Added With or Without Reset for Alphabetical Slate Increment.

When Alphabetical is chosen the reset is blank and not 'A'

- Changed: File Network Access is not reseted anymore at startup.

# Bug fixes

- Sometimes, the Cantar interface was restarted during the startup of the file access server.
- When Mix L & R were declared on the same track, an incorrect warning message "Mix Track missing" was displayed.
- Double solo was not accessible with the Cantarem2 or the ABoxes (6 or 8)
- Loading Cantar configuration files may fail on big configurations
- Advanced Sc&Take: When using a white space as a separator, it was not read when editing metadata

- Advanced Sc&Take without the take indicator 't' was not working in some situations
- Incorrect trim of space character in the scene field
- In Play position, when displaying Ingrid, there was an issue to move the selection.
- In Play position, the displayed take type was accurate.

## FW 2.88.C4 - July 23, 2019

Bug Fix:

- When setting up the Advanced Scene and Take, it was possible to create an invalid parameter that cause the Cantar to freeze.
- Typo correction
- Desactivated items in the Advanced Scene adn Take composition window were not greyed when manipulating the list.

FW 2.87.C4 - July 19, 2019 Version history

Cantar X3 version 2.87.C4

New feature

- A brand new scene and take template is available (the old templates are still available).
- 1 Choose and build the new template

In the technical settings screen, select Advanced.tXX or Advanced.XX A new dialog box invites you to build your own template (press Ok to access it). Five fields are available in the Template organisation dialog box SEASON (4 characters)/ EPISODE(4 characters) / SEQUENCE(8 characters) SLATE(4 characters) / EFFECT(5 characters) / UNIT(1 character).

You can enable/disable and move each field individually. It il also possible to insert a separator between each field. The take number field size has been increased to 3 characters.

2 - In the technical settings screen a new parameter, "scene increment" defines the behavior of the slate field.

It allows the new shortcut (shift+Up/down) to modify the slate field without opening a regular edit field when the Cantar is in the PPR position.

- 3 Use your custom sc&tk template
- In PPR position only SEQUENCE and SLATE are displayed on main screen.
- All fields are accessible in the Next Take and Edit metadata dialog box. It includes the choice of the field separators.
- 4 The post-editing from the AUDIO FILE BROWSER
- Several displays of the scene fields are available in this screen (press F1 to choose).
- The track names are also available (press Shift+F1)
- The edit of several take simultaneously is still available with custom template, but it is limited

to the takes that have been created with the same template.

5 -The web-app have been improved, unused tracks are hidden and it is fully compatible with the advanced sc&tk template

#### WARNING:

- Once you upgrade to this version, and use the advanced scene& take features, it is strongly recommended to not downgrade to an older Cantar version. If you edit scene field with an old version it will be truncated to 8 characters
- For the same reasons, the first Aajax first compatible version with the new the advanced scene& take is 1.2.0.

  If you use Aajax don't forget to upgrade it.

### Other features

- Two different setups are available for the LTC Cantar output.

ON with playback TC: the Cantar generates audio files timecode during playback

ON without playback TC: the Cantar generates always the recording audio timecode

- The AES42 maximum gain is set up using AES42 max gain in the AUDIO & TIMECODE PARAMETERS screen, the maximum is now +24dB.
- In the playback & rec mode, when switching to record, the play cursor is automatically located at the of the first section.
- The PDF paper landscape is now available in A3 format. This allows to manage up to 28 columns on a single line.

## Bug fixes

- In some situations, the double solo was opened by mistake.
- When changing Track Level with Shift+Jog in InGrid Routing position (when the Main Selector is at 5 o'clock), the level was changed but not displayed
- In some situations, Shift+Left or Shift+Right would make the Lock Panel appear when it should not and even once the key released, it would activate the lock anyway.
- The playback of polyphonic files with more than 12 tracks was not possible possible in Cantar
- In playback and record, it was possible to create several markers at the same position
- In playback and record, take number was increased in clone mode.

FW 2.78.C4 - May 16, 2019 Version history

Cantar X3 2.78.C4

# Bug fix:

- Problem during establishing the Cantar - Cantaress connection. The connection was only possible with Cantar in play position.

FW 2.77.C4 - May 15, 2019 Version history

Cantar X3 2.77.C4

New features:

- WebApp: Unused track (no input declared on ingrid) columns are hidden
- Dedicated configurations (Headphone L/R/L+R) are available to duplicate the headphone on Cantar outputs (line or digital).
- Aes Power Menu: AUTO option for Aes Outputs was added (when selected each Digital output is automatically activated/deactivated according its current routing)!
- Menu bottom labels improvement

## Bug fix:

- After using the scan RF function on hydra, the frequency modification of the receiver was not possible.
- In some situations, when using 2 Hydra hub, the location of the receiver can be false in RF receiver overview screen.
- In Headphone outmap, toggling between Track and Post-fade was not consistent in some case.
- The beep was not sent to Aes MDR outputs or Dante outputs
- When Cantaress was connected after Cantan startup, the current waveform was not transmitted to the Cantaress

FW 2.72.C4 - March 27, 2019

Version History

Cantar X3 2.72.C4

Note regarding RF receivers:

Due to the API and or hardware manufacturing and or branding some features of Aaton Hydra can be limited.

Today the compatible receivers are MCR42, Lectrosonics SRc, A10 Audio limited and Sennheiser EK6042.

We strongly recommend to run receiver with the latest firmware versions.

Firmware version used during tests are MCR42: 3.21 - SRc: 1.20 - A10: 2.00.06 - EK6042: 1.1.3-3

Due to a communication disturbance in the Wysicom MCR42 (S1 and S2 hardware revision) audio analog channel number 2, these receivers do not allow us to offer real time monitoring of the modulation and the battery alarms of its transmitters.

So we decided to shut down the communication during the main operations (PPR and record Cantar position).

Nevertheless the receiver can still be powered by an Aaton RF system, and be setup in the

Cantar test position.

MCR42 S3 hardware revision are not concerned by this limitation.

#### Cantar Mini / X3 new features:

#### 192KHz RECORDING

Cantar offers now a recording sample rate of 192kHz.

At 192kHz, the number of tracks is limited to 16 tracks on the internal SSD.

#### **HYDRA™ MANAGEMENT OF RF RECEIVERS**

The functionalities need additional hardware, it can be an Aaton Hydra system, a modified Lectrosonics Octopack or PSC 6 pack.

Today we are compatible with:

- Wysicom MCR42 (Full specs with S3 only)
- Lectrosonics SRc
- Audio limited A10
- Sennheiser EK6042.

From TEST/PPR/REC, press SHIF+F1 to open RF receiver overview.

From RF receiver overview you can:

- manage the RF power ON/OFF (press OK, move to the RF, Up/down key ON/OFF)
- monitor your RF status.
- open RF receiver manager a dedicated panel to the RF (F1 to F4 to open RF1 to RF4) and (Shift + F1 to F4 to open RF5 to RF8)

From RF receiver manager you can:

- edit the receiver parameter (press OK, Up/Down move to the field to be edited,, Left/right and/or jog edit filed).
- stetup TX battery alert
- assign the receiver to a Cantar input
- open the scan mode (F4)

From the scan window (depending of the RF receiver in use) you can:

- Start stop the scan.
- Setup in/out scan area, set the scan step, see the frequency bank pre-set.
- All transmitters frequency position are located in scan screen.

Additional short cuts are described at the bottom of each screens.

The content of the screens may differ to suit the capacity of each RF receiver model.

#### MIXING FADER AUTOMATION DATA

- Mixing fader automation datas are embedded into the audio files. For time being they are displayed in play position on soloing the iso track.

The importation of the metadata automation in the post-production software is being implemented.

#### **EO IMPROVEMENT**

- The width of the Q factor has been optimized (Q narrowed up to 0.05).

The equalization frequency response is displayed in real-time during his adjustment.

#### **MISC**

- Unlock dialog box allows the Cantar user to check and to adjust actuators (sliders or pots) before unlocking.
- Cantar low power can drive low power on Cantaress and RF receiver
- Keyboard Ctrl+ESC switches to PPR, then a new Ctrl+ESC switch between REC and PPR
- User markers can be created [X3:F6 / MINI:Shfit+Ctrl+F2] in play position (in pause or on the fly), Then the navigation is possible through the file using the markers.

- Prevent the recorder to start a record in an empty project folder name.
- In playback and rec mode, in PLAY position, the automatic stop at the end of a marker area has been removed.
- A new media (SD/USB) that needs to be formatted is displayed in purple.
- A track containing a postfader (PN) of another track can now be sent to the mixdown
- When removing an input from a Track, mixdown PanPot is not cleared any moreCantar Mini / X3
- New format SD card process
- Now possible to assign postfade gain on outputs of the CantarMini
- Prevent the recorder to start a record in an empty project folder name.
- The startup record process has been improved in case of faulty SD card (Cantar records on remaining healthy media).

#### **Bug fixes:**

- An issue has been fixed in wordclock management, this upgrade is mandatory when using Cantar external wordclock.
- The solo button (slice 12) of the Cantarem 2 was rpoducing double solo action.
- F5 et F6 assigned to C1-4 Cantarem2 buttons is now possible
- The LTC userbits grabed by the Cantar (Timecode Ubits set to Hexa by LTC input) are now accurate in any situations.

# FW 2.50.C1 - September 26, 2018 Version 2.50.C1

- First version compatible with the C1 version of the Cantaress
- The battery status available for Aaton genuine battery (press F1 in stop position).
- Talk to Headphones: From Technical Menu, choose whether to send or not the Talk Back feed into

the headset when the TalkBack is activated

- Reset Factory: A dialog asks if the user wants to save a backup of the settings before resetting
- Beep Routing : Beeps (Start & Stop) can now be deactivated in the Headphones (error & alert beeps remain active)

- '\_' character is available for scene filed
- The jog is speed up in the edit field
- iXML modification to improve compatibility with On-Set Dailies software

# **Bug Fixes**

- The completion dialog box was not accessible in some cases
- In playback and record, the timecode in clone mode have been improved
- While Ingrid was displayed, in PPR or Test positions, Solo Button 3 of the old Cantarem I was not working.
- Inside Cantar, poly files of more than 12 tracks could not be read, the poly file integrity was not affected.
- In some specific situation, BWF riff size could be wrong on polyphonic flavors but the audio integrity was not affected.
- The MS metadata information can be wrong in some situation once again, the audio integrity was not affected.

# FW 2.37 - December 19, 2017 Version 2.37

- The 2 Aes outputs pairs available on the MiniDeltaRibon can now be configured.
- Dante outputs can now be configured by the user. In the Technical Menu, a Dante setting allows to choose between built-in configurations and user configurations.

  Once the user mode is selected for an output group (1 to 24 and/or 25 to 32), a dedicated page is added in OUTMAPS screens.
- During an external timecode JAM (Long press on F3), a confirmation is now needed.
- A number ID was added into the playback cards in the playback and record mode
- A progress status was added during the "save diagnostic" process.

- The direct access to phase inversion (Shift+solo) is available for the line, digital and AES42 inputs.

# Bug fixes:

- The displayed headphone limiter status was not initialized correctly during startup.
- In some situations, in case of a false start deletion (Shift + ESC in PPR), the take number wasn't automatically decreased and the recorded files on removable media wasn't erased.

FW 2.31 - November 09, 2017 Version 2.31

WARNING: On the first reboot, after the installation of this version, Cantar will update the FPGA content.

A dedicated screen with a progress bar will be displayed (estimated duration : 5 minutes).

As written DO NOT POWER OFF Cantar during this step.

For safety, please use at least 2 power sources during the update process.

(e.g. 2 batteries or 1 external power on the XLR4 and 1 battery)

Note: In case of software downgrade, this behaviour will be duplicated.

- Wordclock input is now activated. Worclock signal needs to be wired on the Mini Delta Ribbon connector.

The pin connection is: Pin 21=World clock In and Pin 22 = Ground.

The setting is available in the Audio Parameters Menu, item "Sample Rate".

- The system time Jam is now performed again even if the timecode was already initialized using the system time and if the time difference is higher than 10 seconds.
- In the AES42 Solo panel, the general AES power status is displayed.

# In Playback and Record:

- When Cantar is in playback and rec in PPR position, there is no need to hold shift to switch in

playback and rec in RECORD position.

- The navigation between overlapped sections was improved.
- F3 toggles display time/duration/no display.

## Bug Fixes:

- In 23.976 Fps or 29.97 Fps, the accuracy of Cantar LTC output was improved. Please note, the stamped timecode of the audio file was not affected by the problem.
- LTC out coherency in play when play/pause/jog commands are used.
- Format process for SD cards was changed.
- In case of a critical bandwidth on a media during record, the rescue behavior to keep SSD active was improved.
- When staying more than 2 hours and a half between the REC and PPR position, a faulty silent rec was displayed.
- RemoteRec was not behaving correctly regarding Multiple Outmaps configurations.
- TalkToTrack is now available to outputs when a track is rooted on an output.
- WebApp: It was not possible to validate the circled field modification.
- The compatibility of AES42 input was improved to manage some specific AES3 digital streams.
- The Abox compatibility trouble with Cantar X3 potentiometers.

FW 2.24 - July 28, 2017 Version 2.24

This version takes place of version 2.23.

# Bug Fix:

- In external timecode mode, the initialization was not correct at startup
- Save & Load settings were not handled correctly files with spaces in the name.
- The mixdown was sent in outputs (Line, Aes, Aes 42) even when Play out was muted
- There were duplicated lines in Cantar Mini contextual help

This version takes place of version 2.21.

# **Bug Fixes**

- Error during format process on some SD Card
- Wrong EQ information displayed in solo mode

FW 2.21 - June 28, 2017

Version 2.21

### New features:

- The playback and record allow Cantar to play a pre-selected file and to record new files simultaneously

The feature allows multiple possibilities to sound recordists, it includes 2 modes: CLONE MODE:

Cloning a last take (all your iso tracks) and redoing a mixdown track(s) All metadatas of the playback file are duplicated in the new record (Timecode, track name, scene, take notes ...).

#### LIVE MODE:

Dialogue that cannot be saved from production tracks can be re-recorded (ADR or looping).

A stored telephone call, background music or wild sound can be played and rerecorded during the 'live' recording

- How to use playback and record:
- 1 Switch the parameter Playback & rec parameter to ON in AUDIO setting page.
- 2 A new version of BROWSER-PLAY-TEST-PPR-RECORD is available holding the Shift button and rotating the main selector.
- 3 IN PLAYBACK & REC BROWSER
- 3.1 Select the mode you want to operate (CLONE: redo a mixdown) or (LIVE: play freely an audio file)
- 3.2 Select the audio file to be played during record and assign to a playback bank (a,b,c,d or e)
- 3.3 Edit the playback grid to assign sources track to the recorded track. (F1 key displays an overview of the merge grids)

In clone mode, all iso tracks are automatically added in the grid, and mixdown removed.

- 4 IN PLAY: for Live mode only, you can create play-card to define the audio sections that will be played during the record
- 5 IN TEST: you can hear incoming sound and play the play-card for test
- 6 IN PPR: playback file is preloaded for a instantaneous access in record position
- 7 IN RECORD: play sound and incoming audio is recorded in a new file

For all these screens a dedicated help (tripple shift) provides the details on the available short cuts.

Note 1: For the time being, ONLY AUDIO FILES CREATED BY A CANTAR CAN BE USED AS PLAYBACK FILES.

An import feature is in the roadmap, it will allow to import regular WAV files to be used as playback file.

Note 2: The playback sample rate frequency needs to match with the recording sample rate.

- Take Indicator removable

Menu Technical, Scene & Tk templates can be chosen with or without take letter indicator.

Without the take letter indicator, it is not written anymore in the take metadata or in the file name

- When Next Scene is changed while take type is 'p' take type is automatically reseted to 't'
- In play position, when play is muted for the outputs (Empty Triangle), inputs (Mic,Lines ...) remain active on outputs.
- The record starts even if a media has not enough available free space, as long as a mono version is still recorded on another media.
- WebApp: Graphical improvement on disarmed tracks infos more discrete (ms / mx)

## Bug fixed

- If the scene or the take was modified during Record, the filename was not matching.
- Sometimes, wrong Wifi status was reported in the stop position.

- During a record, if a media becomes full, upon Record cut due to file size (long record) the record was stopped.
- WebApp: disarmed tracks on next take information was incorrect upon reload
- WebApp: on a new day, next take line is now available
- Timecode displayed behind the timeline can be wrong on long take (>30mn). The audio file integrity is not affected.
- In the reports files, tape Id is not any more limited to 4 characters.

## FW V2.12 - March 23, 2017

WARNING, Before loading 2.12 release, update first Cantar Operating system to the last version if needed (see. OS release)

### Note:

- Running this new version, may change the 2 letters of your file tag
   (e.g. if your last record was labelled GT0120, the next one will be HL0121).
   Main features
  - A metadata WepApp is available through Ethernet or wifi connection.
    - 1 Connect your device tablet (e.g. iPad) or computer to the Cantar.(PC or MAC).

Your device may warn you about the fact internet is not available on this connection.

- 2 Open your web browser and enter the Cantar's IP address :
  - when using Wifi: 192.168.100.1
- when using ethernet, the IP address given by Display IP address in the Technical Menu.
- 3 You will be realtime connected to your Cantar and able to edit/view the metadata of the working day.
- Solo improvements

When soloing an input, corresponding track's vumeter is highlighted When soloing a single input, trigger Solo of the first corresponding track by pressing the Left or Right key

When soloing a single track, trigger Solo of the first input of the track by pressing the Left or Right key

- Talk To Tracks: select between All Tracks / Mix Tracks or a specific
   Track on which the Talk Back is sent when pressing Shift + Talk back keys
   (be careful to select a track that is recorded)
- Generates the audio files timecode during playback on LTC output
- Using Cantarem / Cantarem 2 keys, Shift can now be pressed on Cantar side
- Snap Report: Multi reports according to take types (same as in backup)
- Using file network acces, the write premission is enabled on both SD cards
- Wifi status added in the stop position

### **Bug fixes**

- Metadata on Poly & Mix files (was creating page breaks in Pdf by altering TapeRef)
- Audio wave form accuracy (the "silent rec" warning message was displaying inappropriately).
- Shift+F2 during metadata edit open the solo lineout dialog box
- Some freeze at SD format start-up
- AES42 Power ON/OFF was inverted into the interface
- The isolated post fade level (P1,P2..) was not displayed in "select Outmap" dialog box
- The isolated post fade level was not managed correctly in headphone. The regular mix down was not affected by the bug.
- Some problems at format start-up

# FW V1.119 - February 09, 2017

WARNING, Before loading 1.119 release, update first Cantar Operating system to the last version if needed (see. OS release)

### Main features

 The Mic level can be modified using the jog when it is not driven by an actuator.

# Bug fixes

- While balance was locked, the analog inputs levels may be incorrect at startup
- The "silent rec" warning message was displaying inappropriately

- A special character combination in comment field was freezing the interface
- Disarmed Tracks & Postfade of disarmed tracks were not activated in headphones even if Disarmed Audio Stream was On
- Some track indicator was missing in the ALE (Avid Log Exchange) file.

FW V1.118 - October 27, 2016

WARNING, Before loading 1.118 release, update first Cantar Operating system to the last version if needed (see. OS release)

## Main features

The audio stream of disarmed track can be turned ON or OFF (OFF is the
way it is in the previous version)
(if ON, Disarmed tracks still won't be recorded BUT the vumeters will
display any disarmed
track level, the disarmed tracks can be heard in any outputs (headphone,
line out or aes out)

•

- Using idle backup, status in test position is now persistent.
   A notification is displayed at Cantar power off, if the idle job is not finished.
- The linked mics and line status are displayed in the vumeter background information
- In PLAY position, several waveform vertical scales are available, press Shift+F3 to toggle

S-IvI: Signed waveform signal

S-dB: Signed waveform in dB

U-lvl: Unsigned waveform signal

U-dB: Unsigned waveform in dB

An optional user day suffix is available. On new day, a day suffix (up to 8 characters) can be added to the traditional day folder.(e.g. it can be used to add a shoot day like D001, D002... or a season/episode number like S01EP17)

The day folder for monophonic audio files will be 2016-10-25\_D002.AAD. To switch to another suffix within a day, use the "Day suffix" function located into SESSION screen.

A compact polyphonic mode can be selected in Audio & TC settings
 Original: Unused or disarmed tracks between used ones are embedded in

the poly file as a zero level track, preserving the tracks index

Compact: Unused or disarmed tracks between used ones are not embedded in the poly file (lighter files).

Depending of the non linear editing system, the original track index can be lost.

- The timecode user bit parameter change the behaviour of the user bit metadata field in PPR position and the now affect also the content of the LTC output.
- A "silent rec" message is displayed on track vumeters at the end of the record when audio recorded on the track stays always below -98dB. The warning is not diplayed on mixdown tracks. The message is automatically removed by a main selector movement or by a call to any solo (track, mic, line ...).
- Wifi can be activated. The channel used and the password (8 characters) is user defined. The Cantar wifi provides a wireless file network access (file network access needs to be enabled). The interactive Cantar Web app will be available in a subsequent version.
- Track Completion List can have up to 100 elements
- Edit Outmap config (F5 key) is now available from Ppr/Test

- A faulty user bits was generated after a power OFF/ON when timecode is preserved.
- The AES-EBU stream was not identified as a "Pro" stream.
- In some situation the wave form were not available in the recorded take.
- Load Settings, the assignements were not loaded if Parameter item was selected
- Load Settings, the Lineout levels were not loaded when Line/Aes Outmap was selected
- Remaining edited text stays after canceling the edit in the PRE-REC screen.
- When validating a completion entry, subsequent text is erased
- When a track is desarmed, the trackname background in vumeter remains even without trackname.

- Shift + Esc to clear TrackName in Track Solo was exiting the solo window
- Sometimes, track names were lost on track higher than 12
- Sometimes, in next metadata edit, after a config change to a smaller count of tracks,
  - the current selected item was not visible or movable.
- It was impossible to add inputs on a new Line or Digital Outmap config in the "Configuration Edit" window (F5 key)
- The iXML informations of Backuped files enhanced
- The task completion management dialog window can be locked in disable state.
- Line Outmap Menu Key hints corrected (Config cannot be edited (F5) outside of Outmap position on Main Selector)
- The items (even Multi Config) can be edited from Ppr/Test Menu
- When validating a completion entry, subsequent text was not erased
- The format USB shortcut key F6 was not active in Session Menu
- A better error management is introduced in case of trouble during a format process.
- When line out setup is open from TEST/PPR screen ESC was not working to exit

## FW V1.116 - August 10, 2016

WARNING, Before loading 1.116 release, update first Cantar Operating system to the last version if needed (see. OS release)

- An automatic screen back light level adjustment is now available. The Cantar uses his front panel light
- Inputs Linking: all mics can now be mastered (Firstly choose Master then Slaves)
- New preamp mic input level pre-set between HIGH LEVEL and MIC LEVEL.
- Shift + Solo to add a Solo to the Currently opened Solo for Double Mic and Track Solo
- The track name length is now 12 characters
- The notes length is now 160 characters
- The metadata can be edited during record (press OK to open the dialog box).
- An alternative vumeter scale is available, it includes an upper scale zoom
   The parameter setup is into TECHNICAL SETTINGS/Vum. scale

- Mixdown pan pot indicator is now available at the bottom of vumeters.
- In SESSION menu, clean SSD feature allows you to erase the full project or selected day in the project.
- The Cantar setting can be saved on Internal SSD
- External power limit can be set up to 10.5V
- Reassign the same Input on an actuator clears the other same assignment and any other actuator.(Example: M4 on Pot4 is inactive with M4 on Cantarem Slider 4... if assigned again to Pot 4 then Cantarem Slider 4 is cleared from its previous assignment)

### Bug fixes

- Led level setup is reset to max value at the end of low power mode.
- Double solo is activated by error after startup
- The slate detector needs two times F4 to be activated
- Using open template, the minus character is missing from scene field
- An error is return erasing a project with space character in his name
- With linked inputs, Phantom, phase, EQ were not correctly indicated on vumeter background
- Track Level not saved after reboot when unassigning the actuator of the track.
- Red Zone Level setup to 0db was displaying a Red Line over the vumeters
- On Linked inputs : master's Phase was applied to slaved inputs
- When Take type filtering was enabled, Poly and Mix reports were empty
- The comment line was truncated into the browser screen list after a multiple edit.

# FW V1.113 - June 23, 2016

WARNING, Before loading 1.113 release, update first Cantar Operating system to the last version if needed (see. OS release)

- Track name auto completion, a tool tip list displays the suggestions. From editing metadata screen, press F2 to open completion management (edit, delete, ON/OFF).
- Into edit fields, the cursor goes to the next/previous field with Left and Right key.

Double press on Left / Right while on the first / last character of a field or hold the Left/Right key pressed.

- The all Cantar settings can be bakcuped and restore using save/load settings into technical menu.
  - At restore step, Cantar user can select between all, Ingrid, Outmap ....
- Low power is available in stop position.
   The duration before starting the low power mode can be adjusted into technical settings.
- In PPR position, on "delete last take", a confirmation is now requested before moving the last take to the trash.
- In BROWSER position on deleta take, you can clean athe others media at the same time.
- During restore from audio trash, the files are moved when the target drive matches with the audio trash drive.
   The files are copied when the target drive differs from the audio trash drive.
- A management of USB port overcurent is now available from interface (overcurent notification and reset).

- The phase correlator labels are not updated
- Line level can't be adjusted (in a link situation) without actuator assigned.
- A message about the samba server is displayed at Cantar start up.
- The erase project process returns an error before finishing
- The limiter triangle blinks on the disarmed tracks
- The pink Oops screen is briefly displayed at the end of the Cantar boot sequence.
- The Unused named tracks are registred into the CSV report

- The start to record with (mono+stero on SSD and a faulty removable media) is not possible.
- Scrolling through the configuration editing, the display settings is not accurate.
- While in Test Menu if a sub section is activated (Delay, Link, Lineout level) and Lineout or Digiout configuration is displayed (F2 then F3), keys (Return etc..)
  - are handled by the sub section and not by Lineout Config Menu as it should be.
- Rotating the Left crown while the Multiple Outmap dialog box is opened was changing
  - the selected outmap index on the currently selected output
- In some situations, interface crash while modifying the Pdf Header or at startup
- Going from customisable field to single not customisable one was leaving the custom text

FW V1.103 - May 02, 2016

WARNING, Before loading 1.103 release, update first Cantar Operating system if needed (see. OS release)

- The compatibility with the 12 faders Cantarem 2 is supported. The assignation for the Cantarem 2 is available holding [Shift+Solo Cantarem 2].
- The Phase correlator based on tracks is available during playback
- A play continu is possible in playback (the player jumps to the next file at the end of the play).
  - It can be activated pressing [Shfit+ok] in play screen.
- The internal mixdown (XI Xr) can be combined with an external intput. This function is useful for people using an external mixing table.
- InGrid and Headphone Outmaps modifications are enabled from PPR,TEST screens (press F1 for Ingrid, F2 for Headphone)
- Arm or Disarm track from InGrid view by pressing [Shift + F3] with the cursor on the desired track.
- Modify the track Level of non assigned tracks (no fader to trim) from InGrid view.
  - (Hold the Shift button while rotating the Jog wheel)
- In solo, with gangabled mics or lines, master level and lock are displayed.

- The circle takes are labeled in pdf (like on Aajax).
- The circle takes column is added in CSV file.

## Bug fixes

- The Ms mic color is not displayed in solo screen
- The main selector management have changed
- The timecode behavior is improved if several system time initialisation are requested.
- The space characters are introduced during the scene/take field edition
- The Headphone adjustment is not working in a solo mic dialog box
- · Circle field is modified during metadata edit.

FW V1.101 - April 21, 2016

WARNING, Before loading 1.101 release, update first Cantar Operating system if needed (see. OS release)

#### Main features

- Double solo is available for mic inputs and tracks (press and hold 2 solo keys at the same time).
- A phase correlation indicator is added in double solo mode
- The last phase correlator can be shown or hidden by pressing the up key in TEST/PPR/RECORD screens
- Dante option board is symbolised by an icon on stop screen
- In play position, output configurations using Mix Left and Mix right stay valid.
  - (Recorded Mixdown down tracks are monitored on the corresponding output).

## Bug fixes

- Lock up in solo mode
- Level display jittering for potentiometers and sliders
- Error message starting on record immediately after startup
- Page breaks in the pdf report

FW V1.94 - March 23, 2016

WARNING, Before loading 1.94 release, update first Cantar Operating system (see. OS release)

- User assignation is now available for rotating potentiometers.
   Assignation is managed in the same way as the top panel sliders or the cantarem.
  - Long press on [Shift+Solo pot] to open the assignation dialog box.
- Pre fade and Post fade monitoring are available in play (press [Shift+F2] to toggle between the two modes)
- A full duplex mode was added for talk back (during talkback, current headset monitoring stay active)
- An external low voltage alarm can be setup into TECHNICAL SETTINGS (11V - 15V)
  - When alarm pops up, press ESC to ignore the message press OK to disable external input power and switch to internal battery (if there is a battery)
  - To enable external power, just unplug or switch off the external power source a few seconds.
- CSV file format added to audio reports (PDF and ALE).
- Enhanced report tools (in audio browser page : take type filters, and target can be defined by user)
- In copy/backup menu, reports can be managed like audio takes
- MS and mixdown tracks are automatically labelled into the PDF report track name field
- Multiple edit is available to modify the scene number (like notes, track names ...)
- Mixdowm tracks vumeters can be shifted to the right of the screen
   This function is useful for a friendly interface when Mixdown tracks are
   located on Tracks 1&2.
  - (see. TECHNICAL SETTINGS / Vum. mdxn shifted for setup)
- Delay and Phantom power indicator added to the vumeter background
- Multiple sources indicator added to the vumeter background
- Didasmed track label color over vumeter changed to grey
- The external Jam OK message is hidden in record position
- User bits are grabbed automatically from incoming LTC (see AUDIO & TIMECODE PARAMETERS / Timecode Ubits for setup)
- When the last take is deleted, monophonic files are moved to the audio trash
  - and on USB,SD1,SD2 the same take is definitively erased.
- Arm/Disarm track from IN GRID screen (short press [Shift+solo track]
- Erase in grid configuration (no more M1 M2 by default into the grid)

- Monophonic audio file recorded on Cantar X1/X2 can be merged into Cantar X3 day folder
  - (Project name needs to be the same on both equipments).
- In record position: direct access to Clap detection [F4] and Marker [F6]
- Erase project funtion on SSD added in SESSION page.
   Please note, all audio data into the project will be erased from SSD without possible recovery.
- Contextual help [triple shift] added in PLAY/TEST/STOP/AUDIO BROWSER/IN GRID...

Have a look, you may find unknown shortcuts and hidden functions.

## Bug fixes

- Shifted configuration in multiple outmap dialog box
- In multiple field editing, the original field content indicator was wiped during navigation
- Scene modification lost in PPR position if F5 short cut pressed while modifying from edit fields
- Firmware loading when spaces are added into the firmware file name
- On line out level when they are driven by Cantar slider 1 to 8
- In timecode record run mode, LTC out Timecode was running when Cantar was not recording
- Tape ref management for AVID if it was modified by the user
- System time not updated into technical settings
- Dialog assignation list incoherency
- Circle status changed on take type edition
- Lock panel triggered during the solo
- Lag when exiting from TEST position if idle mode is enabled.
- Confict between level display panel during metadata edit in PPR
- AES gain adjustement using jog
- Short audio file names are created instead of long name using "underscore only" mode

FW V1.90 - January 05, 2016

- Analog input status (phase inversion, analog filters, and EQ) added at the top of vumeters (for Mics, lines, Aes and Aes42).
- Brand new line out and digital out management (see user manual for details)
  - Delay on line out can be set to up to 22 frames at 24 fps and 48 kHz (in ms

of frame)

During playback, line out can be muted or not.

Beep indicator can be enabled or disabled on each line out.

The configuration used on line out can be defined for each position of the main selector

Press [shift+ok] in LINE OUTMAPS screen to adjust it.

Multiple lineout selection allows quick setup.

Press [shift+arrow] to highlight multiple line out

All these capabilities are available for the 8 AES outputs.

Adjustable headphone safety clamping,

Adjust your clamping level in relation to the current headphone Example with -6dB: With your current headphone level, signal over full scale minus 6dB will be clamped into your headset.

In PLAY/TEST/PPR/REC main selector position, press

[Headphone+Blue] to toggle ON/OFF the clamping function. Yellow headphone icon means ON.

[Headphone+Blue+jog] for quick clamping level setup.

When the clamp is active on too high signal, headphone audio quality is affected and headphone icon blink in red.

- Phase inversion added on AES and AES42 inputs
   EQ capability added on AES and AES42 inputs
   These functions are available for digital mics even without smart AES42 communication.
- Very low backlight level for night environment
- Contextual help is available in solo dialogs (Line, Mic, AES and AES42)
   Bug fixes
  - Update LED when arming/disarming tracks
  - Family UID correction
  - Conflict between lock panel and field move in the metadata Edit window.

FW V1.86 - November 25, 2015

Main features

• Idle backup mode is back.

This mode can be activated any time, the earlier in the day, the better it is. The setup of this mode is done in SESSION screen on recording Media. In TEST position, while the recording media is not on duty, Cantar

incrementally,

backs up the audio files onto idle target media SD card and/or USB.

Note that a three seconds delay lets you go through TEST without triggering the process.

A percentage of completed idle process will be displayed in green above the media icon,

up to End when it's finished.

The process will be automatically interrupted when exiting from TEST position.

The unfinished copy is erased, it will resume upon entering in TEST.

If you modify the metadata of a take, it is modified on the idle target media if it is still available.

Before removing target media, take time to run Snap report [F6] into BROWSING

position to create reports if needed.

If media is full, insert another media and Idle Backup will continue from where it previously stopped.

This function is useful, when media is too slow to work in mirroring.

- For external slate mic, bias power ON/OFF is now available (see bias power into AUDIO PARAMETERS page)
- Delay on inputs are displayed at the top of solo dialog box
- IN PLAY position F3 switch between timecode and elapse under the wave form
- By default, all new takes are not circled
- Phantom power on Mic inputs stay ON when switching between Mic level and high level
- EQ gain (low, mid and High) are quickly adjusted (+1dB step) with (SHIT+Jog)
- In palyback mode track names are displayed over the wavform during solo

You got the remaining time on each media according to the current configuration.

- In backup (mono + mix down) the mix down file was recalculated even if it already exist on target.
- Track name fix into PDF reports in case of multiple edit
- In assignation process on cantarem
- Lock panel works also when slider is use for for line out

- Circle information into backuped polyphonic and stereo audio files
- Digital slider assignation for inputs over 4

FW V1.84 - November 03, 2015

Main features

 Free media size is displayed in stop position pressing Up or down arrow key,

You got the remaining time on each media according to the current configuration.

Bug fixes

Stability correction (all previous versions were affected)

FW V1.83 - October 22, 2015

- Circle takes management
  - Circle status displayed in Audio & Backup Browsers [Shift+F3] in Audio Browser (directly in Browser or in Edit screen) toggles the circle status:
  - Available in multi selection; change is automatically reflected on all available media (SD/USB)
- New file naming template only with underscore as separator (see:TECHNICAL SETTINGS)
- ; separator character have been removed from the final comment embedded into audio file
- Lock panel and Disarmed tracks are persistent in case of power Cantar Power OFF/ON
- Detection of SD card Lock switch.
- If target free size is lower than the size of selected takes, user is still allowed to do the backup.
- Improperly closed audio files (power failure, media error, system error)
  may be fixed
  in the AUDIO BROWSER position by pressing F2 key.
- Direct access to IP address without confirmation.
- Headphone stay active in all positions of the main selector (except in stop and in Grid)

New shut-down screen

## Bug fixes

- Jamming 23.98 TC give the right FPS into the acknowledge message
- 2 times F6 key pressed was needed to create snap reports.
- Now Automatically Update parameters of the next take even if edit is done from the audio browser screen
- Jog conflict in solo line during EQ setup
- Down key was not working correctly into assignation dialog box

FW V1.80 - September 29, 2015

Main features

- AES42 control (KM D) of internal digital mic parameters
- Digital gain on AES42 inputs -inf +36dB
- Digital gain on AES3 inputs -inf +12dB
  - Please note 2 version of the input are available for IN-GRID
  - a1: original digital level of corresponding input (no additional gain)
  - A1: (capital letter) digital input modified by the new digital gain
  - Use Left/right arrow to make your choice into IN-GRID
- Drive (Internal SSD and SD card) access from your computer through Ethernet socket
  - (See TECHNICAL SETTINGS / File network access help for details)
- EQ display frequency response
- EQ log frequency adjustment and field navigation improved (Arrow to change filed, jog to modify the value)
- EQ maximum frequency moved up to 16 kHZ
- Meta data edit field behaves like full fields edit
- New units for input delay setup (ms / meters / samples).
- Factory test procedure were hidden
- Ready for the new 12 sliders USB Cantarem.
- Ninja rooting mode into IN-GRID screen (Do not cover all combinations).
   Pressing SOLO TRACK 1 then solo MIC 3, the result is: Mic 3 is added to be recorded on track 1

- Short cut in solo mic F4-F5-F6
- MS decoding in Mix down

- In case of exit by esc key from back light or led level adjustment
- On close dialog setup report using main selector

## FW V1.71 - August 28, 2015

#### Main features

- Digital filters/EQ on analog inputs
- Delay on inputs
- Into ingrid, routing of mono post fade (P1..P24)
- Into outmaps, highlite a T1..T24 position, press shift+F5 to map post fade (P1..P24)
- Backup of a full project
- MS decoded or balanced in mixdown
- Accurate timecode is maintaibed about 20 minutes in case of Cantar power off

After Cantar power on, a green timecode indicator means the last timecode is still valid.

- Tripple shift provide of contextual help (available only in PPR & solo mic for now)
- Extended PPR duration (up to 30s at 48kHz)
- Remote rec through MDR connector/tally

#### Related fields edit

- Up and down key are available for meta data field navigation
- Right key at end of field select next field
- · Left key at start of field select previous filed
- Into edit fields (OK -> validate and select next field)
- F4/F6 validate and close the corresponding dialog box
- F5 shortcut for take type indicator is available
- Shift+ok switch insert/overwrite mode
- Update play screen metadata field after edition from play screen using F4

- New management of "lazy" external media (SD/USB)
- Line, Aes, Dante out are included into reset factory configuration
- Balance lock are saved when power off
- Display limiters status

- End of play on mixdown and polyphonic files
- Desarmed track 11 creates an empty file for this track
- Firmware version loader

FW V1.62 - July 22, 2015

New in version 1.62

- Media formatting improved for better record performance specially with monophonic files (80% faster).
- Audio file larger than 2 GB are now supported (in all cases audio files stay smaller than 4GB).
- Beep Routing to all selected outputs (Menu Audio / Beep routing)
- Track Solo button + Left Crown accessible while assignation in Play
- Reset parameters to factory settings (Menu Technical / Reset Factory)
- Attribute reset more verbose

Bug fix on

- Battery communication
- · Audio file size in Pdf report
- Track name visibility in Previous Edit for Track count of 9 and 17
- Solo track input reminder includes Ms type

FW V1.61 - June 15, 2015

New in version 1.61

 Audio stream control has been improved and new messages have been added in case of trouble.

FW V1.53 - June 12, 2015

New in version 1.53

- New control added on audio stream integrity.
- Bug fix: Lag of interface in record vumeters and play back position.

FW V1.52 - June 10, 2015

New in version 1.52

- Mic inputs have now 3 predefined inputs level Mic level / High level(-26dB) / line level(-38dB).
- +6dB gain booster with phantom mics available (AUDIO & TIMECODE PARAMETERS/Phantom Mic gain)
- Fader scale have been modified to be more comfortable for mix

- +12dB mixdown capability (AUDIO & TIMECODE PARAMETERS/Fader Max Level)
- Inputs (mics, lines ...) directly rooted on line out are working in all position except in stop.
- Switching to REC position, RECORD will start even if a media is missing (e.e SdCard). *Note: A monophonic audio file record is mandatory on one of the remaining media.*
- In browser position a snap report (F6) have been added. It creates pdf/ale file on all removable media inserted into the Cantar.
   It has to be done at before removing the media when recording in mirror.
- Avid compatibility on track name into bext for numbers over 9
- At start up, with new day accepted, Tape id is automatically setup as MMDD (month-day)
- In edit fields, SHIFT+Left arrow erase filed content without confirmation
- Bug fix: Remaining size when a track is manually disarmed
- Bug fix: Critical error on audio stream fixed (happens very rarely).
- Bug fix: the date stay correct when Audio TC jump over midnight
- Bug fix: Read only attribute removed on recorded audio files

FW V1.44 - May 25, 2015

New in version 1.44 (May 25, 2015)

- Monophonic file naming change to \_NN (NN start at 01 for first track to \_24 for last track) for avid monophonic import compatibility.
- User warning added in case of trouble with the recorder (important for the safety of your records).
- Phase inverse identifier (bar at the bottom of vu-meter) only available if a single analog
- Shift+F2 solo line out access
- Digital out in headphone during setup
- Pdf track name repeated on sequence change
- Bug fix (phase invers link, empty timeline ...)

FW V1.43 - May 01, 2015

New in version 1.43

- Slate mic level adjustment.
- In solo, unused vumeter are darker.
- Bug fix TalkBack release and "black screen" in case of mistake in backup Cantaress