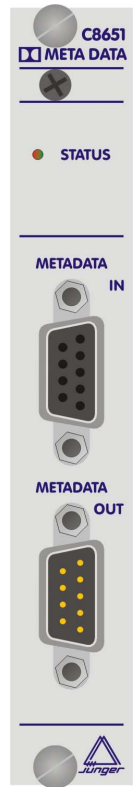Dolby Medatada serial RS485 I/O

C8651

features

- Serial RS485 asynchronous Dolby metadata input

- Serial RS485 asynchronous Dolby metadata output

- C8k Dolby metadata internal bus inserter

- C8k Dolby metadata internal bus extractor

functional description

The **C8651** allows to receive and transmit asynchronous Dolby metadata (RDD6) via serial RS485 interface. The metadata received will be inserted into a pre selected audio data bus for reception by any module within a c8k frame. This proprietary metadata transport mechanism is very flexible and powerful for metadata exchange and management.

Since Junger Audio is using the AES User Bits for transportation, this method is compatible with all kind of AES/EBU related audio transport interfaces like AES3, AES3id, MADI and SDI embedded audio. If one connects such an audio bus to a C8188/89 AES output you will be able to move the metadata alongside with discreet audio.

The **C8651** will also extract metadata from a c8k audio bus and will move it to the asynchronous serial RS485 output connector. The source of such metadata can be any kind of module inside a c8k frame (e.g. the VANC Dolby metadata de-embedder).

Dolby Medatada serial RS485 I/O

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electrical specifications

RS485 input
Connector: 9pin Sub-D female

Format: asynchronous 115kBit/sec., Dolby propriatary format

RS485 output
Connector: 9pin Sub-D male

Format: asynchronous 115kBit/sec., Dolby proprietary format

General

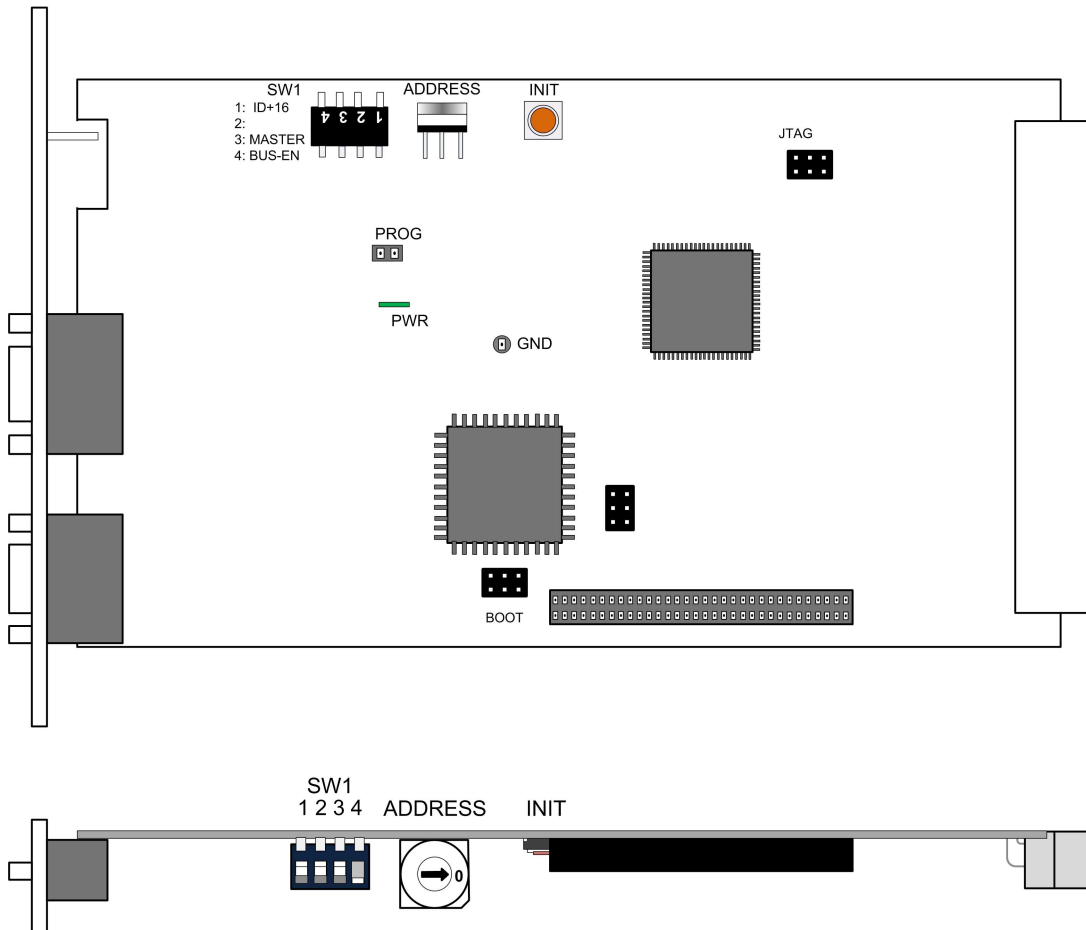Backplane connector: ref. to DIN41612, 64pin, a+b, male

Power supply: +5V DC

Consumption: approx. 120mA

Dimensions: 3RU, 4HP, 160mm deep

Installation: hot pluggable

Dolby Medatada serial RS485 I/O

C8651

installation

switch settings

INIT Pressing the **INIT** button during power up will initialize the module parameters to factory default values.

ADDRESS Set the **CAN ADDR** rotary encoder to an address, which is not in use by another module of a C8000 frame (for details regarding CAN addressing, see C8000 system manual).

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C8651

SW1

1 = ID +16   **ON**
CAN address is extended by **+16** (counting from 0x10 to 0x1F)
OFF
CAN address is standard (counting from 0x0 to 0xF)

2 = Not Used   **OFF**

3 = MASTER: **OFF**
Must stay OFF

4 = BUS-EN: **ON**
Connects the outputs to the C8k audio buses on power up
OFF
Disconnects the module outputs from the C8k buses on power up

Important note! To avoid audio bus conflicts when you replace a **C8651** or install an additional one and the configuration is unknown, the output bus drivers must be disabled before inserting it. If all settings are done remotely and the unit fits into the bus assignment scheme of a frame, you must remove it and place the switch back into position **BUS-EN=ON**.

pin assignment of the RS485 connectors

connector :	Metadata IN
female	9 pin Sub-D
1	GND
2	NC
3	Rx data in +
4	GND
5	NC
6	GND
7	NC
8	Rx data in -
9	GND

connector :	Metadata OUT
female	9 pin Sub-D
1	GND
2	NC
3	Tx data out +
4	GND
5	NC
6	GND
7	NC
8	Tx data out -
9	GND

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C8651

web browser based GUI

> *Set up of all configurations, parameters and functions via a web browser.*
> *See also C8702 Frame Controller manual and respective firmware release notes.*
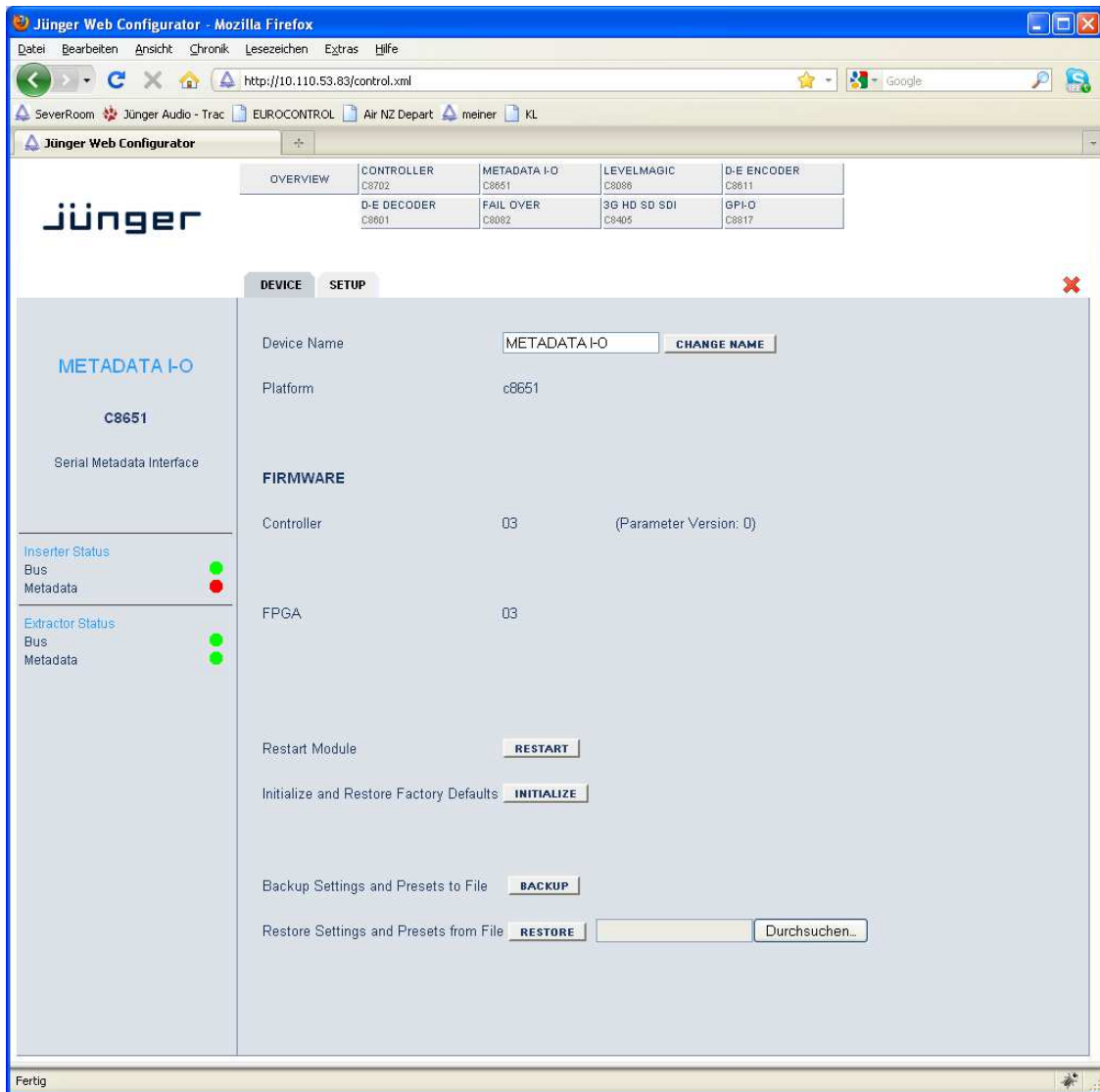> *Layout and functionality are related to firmware version 1.7.x of the C8702.*

OVERVIEW   The example below shows a **C8651** named **Metadata I-O**
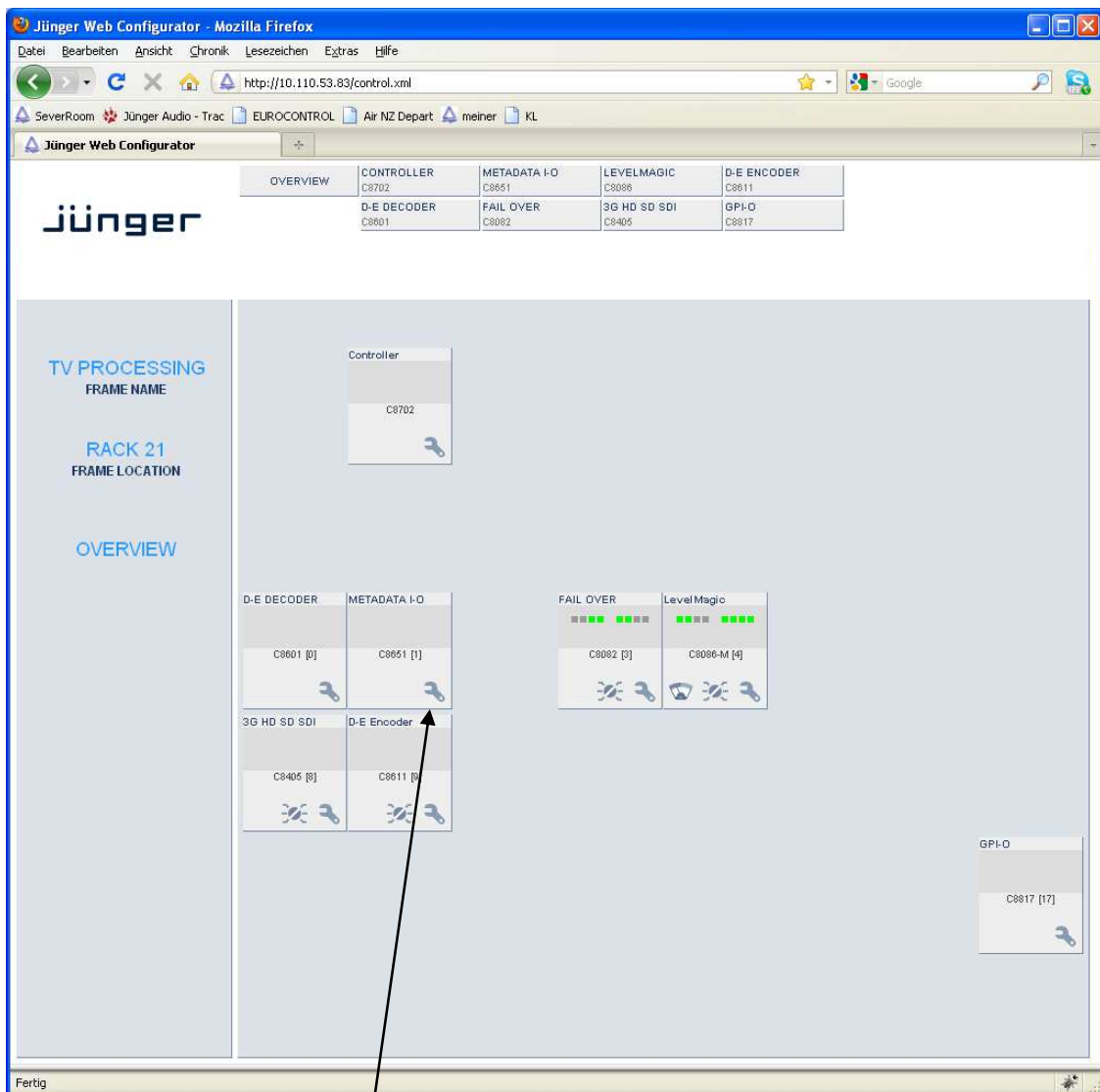
Clicking on the **spanner tool** ● within the module graphics of the **C8651** will open the pages of the module.

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C8651

DEVICE

Device Name	a 16 character device name can be set
Restart Module	warm starts the module (like a reset)
Initialize	recalls factory default settings
Controller Version	firmware version of the built-in module controller
Backup	will store all module data from its NV-memory to file
Restore	will restore module data from file to its NV-memory

Dolby Medatada serial RS485 I/O

C8651

SETUP
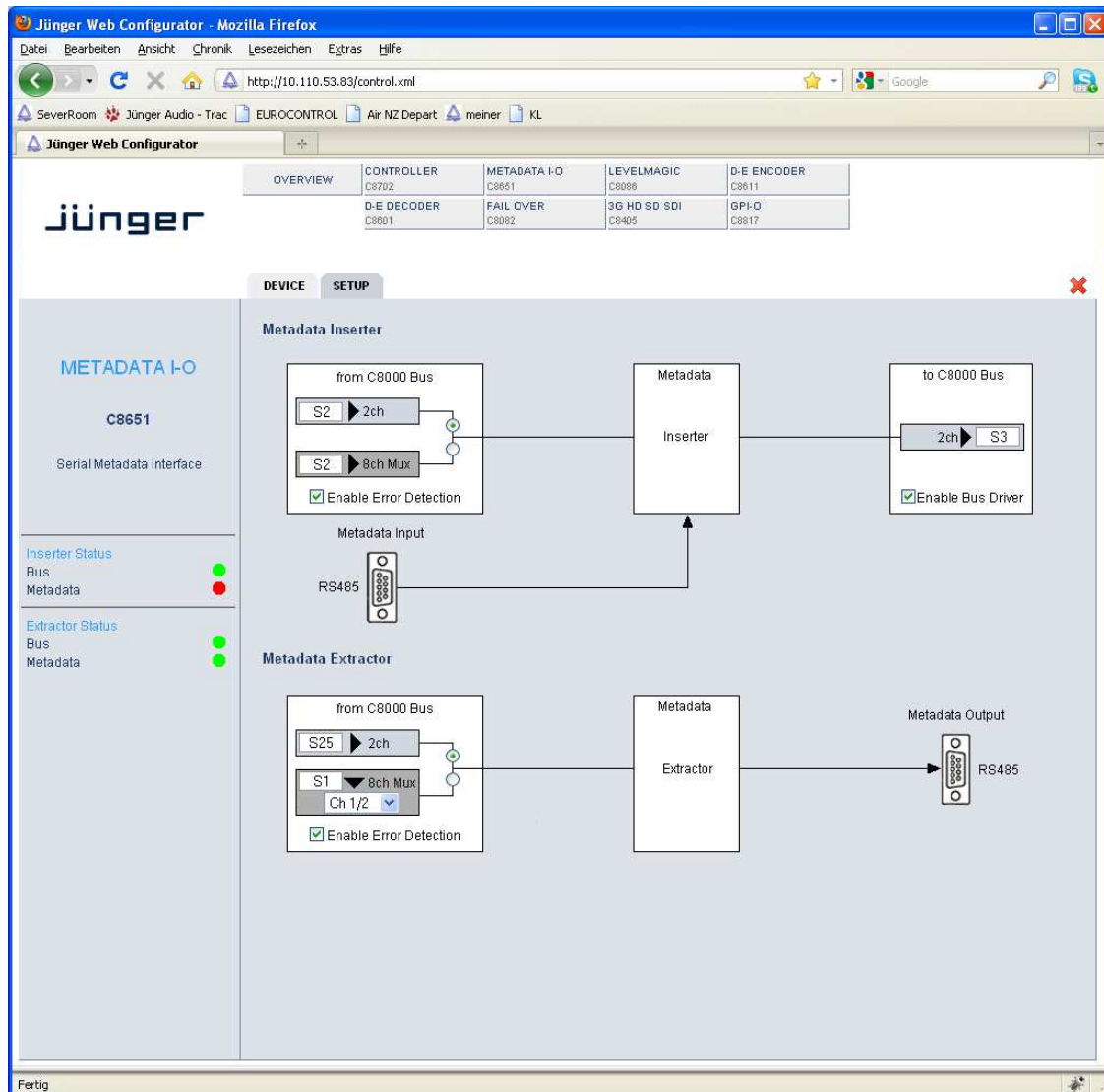
Metadata Inserter
From C8000 Bus   here you must select an audio bus where you want to insert the
                            external serial metadata. It may be a 2Ch or 8Ch multiplex bus.

Metadata Inserter   the metadata inserter will insert the decoded serial metadata from the
                            9-pin input into the USER bits of the respective audio signal.

To C8000 Bus   here you must select **an other** bus that will carry the metadata after
                            inserting

Enable Bus Driver   one can enable / disable the Bus Driver to set up the module without
                            interference with other modules already installed.

Metadata Extractor
From C8000 Bus   here you must select an audio bus that carries Dolby metadata. If such
                            bus is in 8Ch multiplex mode you may select one of four pairs that has
                            Dolby metadata attached to it.