Dolby Medatada serial RS485 I/O

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



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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).

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electrical specifications

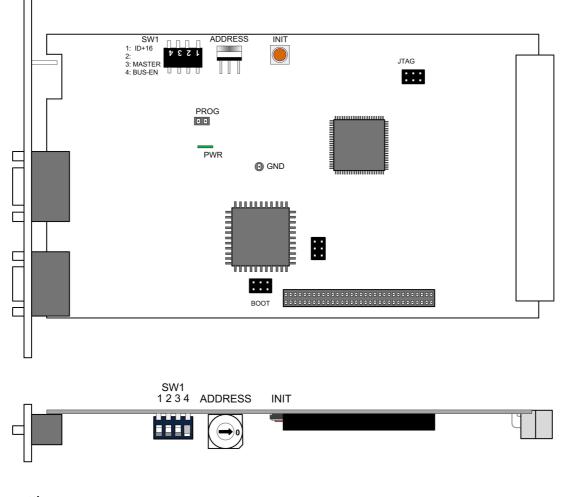
RS48	35 input Connector:	9pin Sub-D female		
	Format:	asynchronous 115kBit/sec., Dolby propriatary format		
RS48	35 output Connector:	9pin Sub-D male		
	Format:	asynchronous 115kBit/sec., Dolby proprietary format		
General				
Backplane connector:		ref. to DIN41612, 64pin, a+b, male		
Power supply:		+5V DC		
Consumption:		approx. 120mA		
Dimensions:		3RU, 4HP, 160mm deep		
Installation:		hot pluggable		

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installation



switch settings

ADDRESS

<u>INIT</u>

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

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).

digital audio modular processing system

C8000

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<u>SW1</u> 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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Dolby Medatada serial RS485 I/O

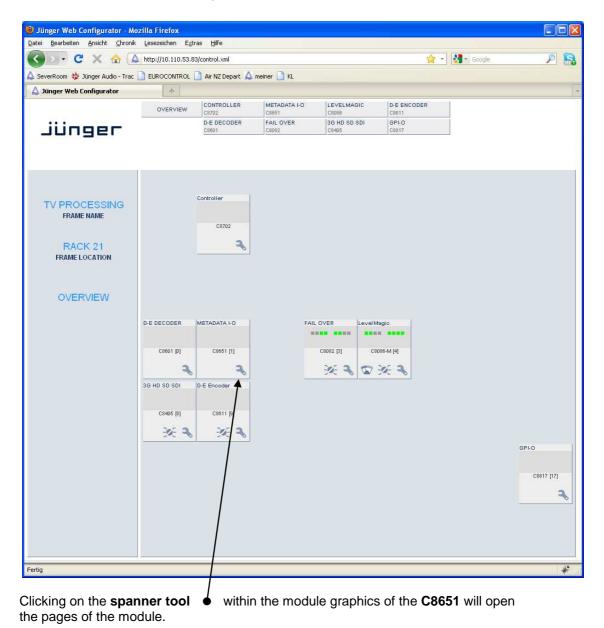
C8651

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



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DEVICE

🕹 Jünger Web Configurator - Moz	illa Firefox						
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🛕 Jünger Web Configurator	+						7
	OVERVIEW	CONTROLLER C8702	METADATA I-O C8651	LEVELMAGIC C8086	D-E ENCODER C8611		
Jünger		D-E DECODER C8601	FAIL OVER C8082	3G HD SD SDI C8405	GPI-0 C8817		
	DEVICE SET	UP					×
	Device Name		METADATA	сна			
METADATA I-O	Platform		c8651				
C8651							
Serial Metadata Interface							
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Inserter Status					,		
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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

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SETUP

🕲 Jünger Web Configurator - Moz	illa Firefox						
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	OVERVIEW	CONTROLLER C8702	METADATA I-0 C8651	LEVELMAGIC C8086	D-E ENCODER C8611		
jünger		D-E DECODER C8601	FAIL OVER C8082	3G HD SD SDI C8405	GPI-0 C8817		
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	Metadata Ins	erter					
METADATA I-O	fro	m C8000 Bus		Metadata	a	to C8000 Bus	1
	Demonstration of the	2ch					
C8651	<u> </u>	2011		Inserter	r	2ch S3	
Serial Metadata Interface	S2	8ch Mux					
	🗹 Ena	ble Error Detection				Enable Bus Driver	-
	M	etadata Input		4			-
Inserter Status Bus		2					
Metadata	RS48	5					
Extractor Status		0					
Bus Metadata	Metadata Ex	ractor					
	fro	m C8000 Bus		Metadata	a	Metadata Output	
	S25	2ch					
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		▼ 8ch Mux 1/2				0	
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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.