Standard configuration

mc²66

Lawo AG, 09/2004

Lawo AG
Am Oberwald 8
D-76437 Rastatt

Tel. +49 72 22 - 10 02 - 0
Fax +49 72 22 - 10 02 - 24

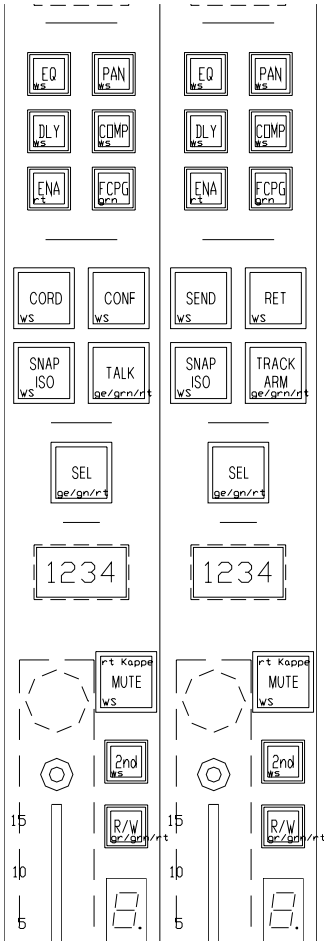
www.lawo.de

Content

1 Introduction

This document should describe the basic features that are implemented in the mc²66.

There are two basic configurations concerning the Fader panels at the moment. A Broadcast and a Recording configuration.



Broadcast-Version

The broadcast version is equipped with keys to realize a mix minus matrix (CORD, CONF). Furthermore there are keys for snap-Isolation (SNAP ISO) and Talkback.

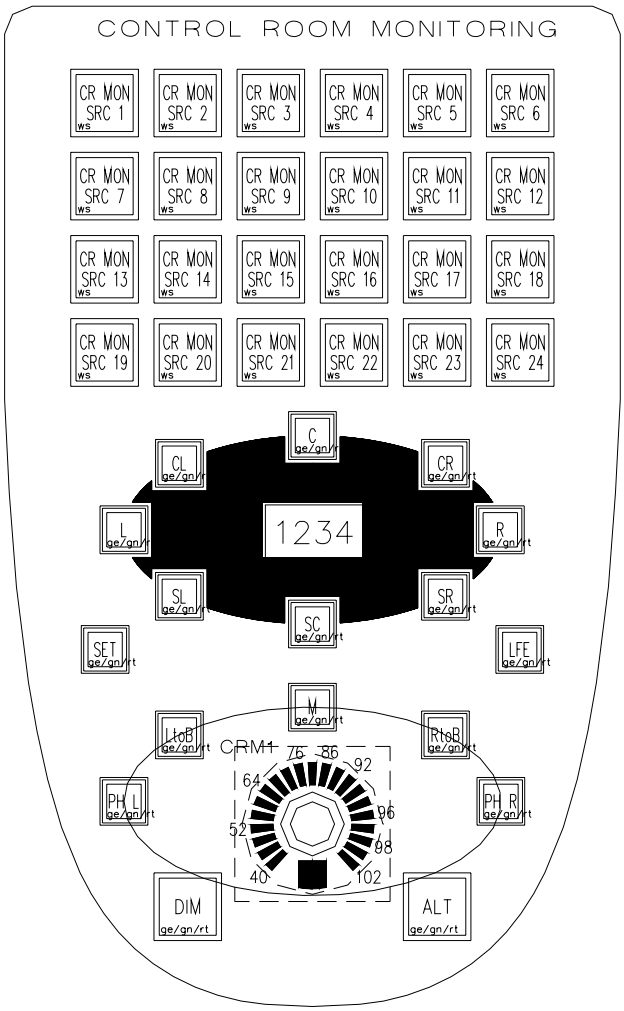
Recording-Version

The recording version is equipped with keys to switch the monitor channels between send (SEND) and return (RET). There is also a snap-iso (SNAP ISO) button.

Note:

- The Track arming function (TRACK ARM) will only be available in connection with a machine remote control unit (e.g. Colin Broad).

2 Control Room Monitoring



The control room monitoring section (CRM) includes 24 free configurable monitoring keys.

In the basic configuration there is no layering monitoring available. The CRM keys are only used to select the monitoring sources.

You can select stereo- and surround sources.

The monitoring features are located at the DSP- summing unit of a MADI Slot-card.

Stereo-Monitoring:

For stereo monitoring we use the upper 4 time slots of the first MADI slot card **Slot2/Port1**. At this port you can dispose of the entire time slot capacity.

Surround-Monitoring:

For surround monitoring we use the time slots 53-60 of the MADI Slot card at **Slot2/Port1**. You can therefore dispose of **only 52** time slots at this card!

AFL:

If the AFL button is activated at least one channel strip all current monitoring points will be cut.

Output monitoring:

You can only listen to sources. There is no possibility to listen to outputs!!

CRM Loudspeaker Outputs Set A (7.1 SDDS)

Channel	(HDCoreSlot/ Port/ DalisSlot/ SignalNo)Signal	HLSD	Comment
Front Left		CRM:000:000:000	
Front Right		CRM:000:001:000	
Center Left		CRM:000:002:000	
Center Right		CRM:000:003:000	
Center		CRM:000:004:000	
LFE		CRM:000:005:000	
Surr Left		CRM:000:006:000	
Surr Right		CRM:000:007:000	

CRM Loudspeaker Outputs Set B (7.1 SDDS) , when *ALT*-Key is acitvated

Channel	(HDCoreSlot/ Port/ DalisSlot/ SignalNo)Signal	HLSD	Comment
Front Left		CRM:001:000:000	
Front Right		CRM:001:001:000	
Center Left		CRM:001:002:000	
Center Right		CRM:001:003:000	
Center		CRM:001:004:000	
LFE		CRM:001:005:000	
Surr Left		CRM:001:006:000	
Surr Right		CRM:001:007:000	

CRM PPM Outputs (7.1 SDDS)

Channel	(HDCoreSlot/ Port/ DalisSlot/ SignalNo)Signal	HLSD	Comment
Front Left		DSP:000:000:000	
Front Right		DSP:000:001:000	
Center Left		DSP:000:002:000	
Center Right		DSP:000:003:000	
Center		DSP:000:004:000	
LFE		DSP:000:005:000	
Surr Left		DSP:000:006:000	
Surr Right		DSP:000:007:000	

CRM Headphone Outputs

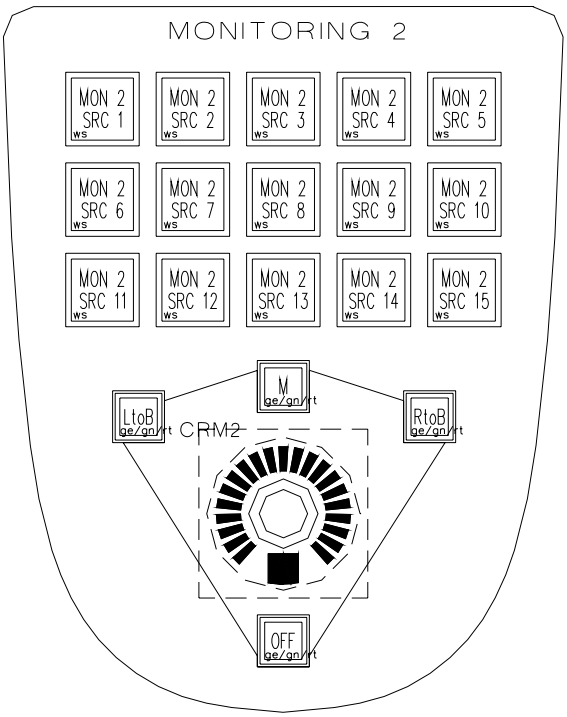
Channel	(HDCoreSlot/ Port/ DalisSlot/ SignalNo)Signal	HLSD	Comment
Front Left		CRM:002:000:000	Right side placed Plug, left channel
Front Right		CRM:002:001:000	Right side placed Plug, right channel

Overview of the Monitoring sources

Key	Key Label	Source (HDCoreSlot / Port/ DalisSlot/ SignalNo)	HLSD	Comment	Format (mono / stereo / Surround)
CR MON SRC1	SUM 1-6		FL OUT:003:000:000 FR OUT:003:001:000 FC OUT:003:002:000 LFE OUT:003:003:000 SL OUT:003:004:000 SR OUT:003:005:000		5.1
CR MON SRC2	SUM 1-8		FL OUT:003:000:000 FR OUT:003:001:000 FC OUT:003:002:000 LFE OUT:003:003:000 SL OUT:003:004:000 SR OUT:003:005:000 CL OUT:003:006:000 CR OUT:003:007:000		7.1
CR MON SRC3	GRP 1-6		FL OUT:002:000:000 FR OUT:002:001:000 FC OUT:002:002:000 LFE OUT:002:003:000 SL OUT:002:004:000 SR OUT:002:005:000		5.1
CR MON SRC4	GRP 1-8		FL OUT:002:000:000 FR OUT:002:001:000 FC OUT:002:002:000 LFE OUT:002:003:000 SL OUT:002:004:000 SR OUT:002:005:000 CL OUT:002:006:000 CR OUT:002:007:000		7.1
CR MON SRC5	GUI 1		????		5.1
CR MON SRC6	GUI 2		????		stereo
CR MON SRC7	SUM 1/2		OUT:003:000:000 OUT:003:001:000		stereo
CR MON SRC8	SUM 3/4		OUT:003:002:000 OUT:003:003:000		stereo
CR MON SRC9	SUM 5/6		OUT:003:004:000 OUT:003:005:000		stereo

CR MON SRC10	GRP 1/2		OUT:002:000:000 OUT:002:001:000		stereo
CR MON SRC11	GRP 3/4		OUT:002:002:000 OUT:002:003:000		stereo
CR MON SRC12	GRP 5/6		OUT:002:004:000 OUT:002:005:000		stereo
CR MON SRC13	AUX 1/2		OUT:004:000:000 OUT:004:001:000		stereo
CR MON SRC14	AUX 3/4		OUT:004:002:000 OUT:004:003:000		stereo
CR MON SRC15	AUX 5/6		OUT:004:004:000 OUT:004:005:000		stereo
CR MON SRC16	AUX 7/8		OUT:004:006:000 OUT:004:007:000		stereo
CR MON SRC17	AUX 9/10		OUT:004:008:000 OUT:004:009:000		stereo
CR MON SRC18	AUX 11/12		OUT:004:010:000 OUT:004:011:000		stereo
CR MON SRC19	AUX 13/14		OUT:004:012:000 OUT:004:013:000		stereo
CR MON SRC20	AUX 15/16		OUT:004:014:000 OUT:004:015:000		stereo
CR MON SRC21					stereo
CR MON SRC22	PFL to MAIN		OUT:007:000:000 OUT:007:001:000	Marker: if at least one PFL is activated, the chosen source is released and the PFL Bus is switched on the Monitors	stereo
CR MON SRC23	AFL to MAIN		OUT:007:000:000 OUT:007:001:000 OUT:007:002:000 OUT:007:003:000 OUT:007:004:000 OUT:007:005:000 OUT:007:006:000	Marker: if at least one AFL is activated, the chosen source is released and the PFL Bus is switched on the Monitors	7.1
CR MON SRC24	AFL/ PFL reset	NONE	NONE	Lamp lights if at least one PFL or AFL is active, hitting the Key clears all AFL and PFL keys	-

3 Monitoring 2



Monitoring 2 (M2)disposes of 15 free configurable monitoring keys.

The basic configuration includes no layering monitoring. The M2 keys are only used to select monitoring sources..

You can only select stereo sources.

The monitoring features are located at the DSP-summing unit of a MADI Slot-card.

For stereo monitoring we use the upper 4 time slots of the first MADI slot card **Slot2/Port1**. At this port you can dispose of the entire time slot capacity

MON2 Loudspeaker Outputs (stereo)

Channel	(HDCoreSlot/ Port/ DalisSlot/ SignalNo)Signal	HLSD	Comment
Left		CRM:003:000:000	
Right		CRM:003:001:000	

MON2 PPM Outputs (7.1 SDDS)

Channel	(HDCoreSlot/ Port/ DalisSlot/ SignalNo)Signal	HLSD	Comment
Left		DSP:003:000:000	
Right		DSP:003:001:000	

MON2 Headphone Outputs

Channel	(HDCoreSlot/ Port/ DalisSlot/ SignalNo)Signal	HLSD	Comment
Left		CRM:004:000:000	Left side placed Plug, left channel
Right		CRM:004:001:000	Left side placed Plug, right channel

Overview of the Monitoring sources

Key	Key Label	Source (HDCoreSlot / Port/ DallisSlot/ SignalNo)	HLSD	Comment	Format (mono / stereo / Surround)
MON2 SRC1	SUM 1/2		OUT:003:000:000 OUT:003:001:000		stereo
MON2 SRC2	SUM 3/4		OUT:003:002:000 OUT:003:003:000		stereo
MON2 SRC3	SUM 5/6		OUT:003:004:000 OUT:003:005:000		stereo
MON2 SRC4	GRP 1/2		OUT:002:000:000 OUT:002:001:000		stereo
MON2 SRC5	GRP 3/4		OUT:002:002:000 OUT:002:003:000		stereo
MON2 SRC6	GRP 5/6		OUT:002:004:000 OUT:002:005:000		stereo
MON2 SRC7	AUX 1/2		OUT:004:000:000 OUT:004:001:000		stereo
MON2 SRC8	AUX 3/4		OUT:004:002:000 OUT:004:003:000		stereo
MON2 SRC9	AUX 5/6		OUT:004:004:000 OUT:004:005:000		stereo
MON2 SRC10	AUX 7/8		OUT:004:006:000 OUT:004:007:000		stereo
MON2 SRC11	AUX 9/10		OUT:004:008:000 OUT:004:009:000		stereo
MON2 SRC12	AUX 11/12		OUT:004:010:000 OUT:004:011:000		stereo
MON2 SRC13	PFL to MAIN		OUT:007:000:000 OUT:007:001:000	Marker: if at least one PFL is activated, the chosen source is released and the PFL Bus is switched on the Monitors	stereo
MON2 SRC14	AFL to MAIN		OUT:007:000:000 OUT:007:001:000	Marker: if at least one AFL is activated, the chosen source is released and the PFL Bus is switched on the Monitors	stereo
MON2 SRC15	GUI2		????		stereo

4 Faderstarts

The basic configuration includes 8 source-related faderstart options. (Also usable as Redlight signalisation)

The fader start works as follows:

If the fader of a selected source „X“ is opened the related relay will be activated. To use this features it is important that the source is connected with only one DSP Channel

There is only a maker at the relay. There is no control via start/stop signal.

To benefit of this feature you have to use a DALLIS GPI slot card.

Relay	Audio Sources	Comment
FS1		
FS2		
FS3		
FS4		
FS5		
FS6		
FS7		
FS8		

5 Monitoring attenuation

Every monitoring unit (CRM and M2) disposes of a DIM optocoupler. If this optocoupler is activated the monitoring system is attenuated by an adjustable Amount.

Monitoring System	Optocoupler	Comment
CRM		
Monitoring 2		

6 General

Console:

- How many Panels are left side and right side of central control unit?
  Is a foot construction used or an OB Van version?

Interfacing:

- Quantity, Type und Position of the cards in the HD Core
- Quantity, Type und Position of the DALLIS-frames
- Quantity, Type und Position of the cards in the DALLIS-frames

Per Signal (look Signal list mc²66):

- Box Slot Number
- MADI Port (if the Signal is connected directly to a MADI-board)
- ATM Port (if the Signal is connected directly to a ATM-board)
- Box Slot Number for redundancy
- MADI Port for redundancy
- Port Connector Type
- DALLIS Device Location
- Mounting Frame /DALLIS No (customers name)
- DALLIS Mounting Slot (In which DALLIS Slot is the board)
- IF Type (Type of interface)
- Device Type No (Lawo Type number)
- Signal number per unit
- Connector
- Signal Format (mono or stereo)
- Signal name
- Matrix Directory (where is the Signal in the GUI)
- Matrix Directory (ditto)
- Signal Comment (description of the Signal)
- Snap Off (Targets only, anticipate the “over connecting” by snap recalling a Snapshot)
- HLSD Group
- HLSD Subgroup
- HLSD Number
- HLSD Component (mono: 000, stereo-left: 000, stereo-right: 001)

7 Versions

Version	date	by	What
0.1	03.09.04	AB	First draft
0.2	12.10.04	AB	correction: monitoring on MADI-board on Slot 2 (was Slot 1)
0.3	03.11.04	TB	Translation in English
1.0	10.11.05	AB	actualized Version