The Digital Communication Platform

# Installation Guide


**interstage**
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**www.interstage.dk**
**-** pro audio with a smile

# General

Artist m is known for its simple installation and putting into operation.  If you still need support or technical assistance, please contact RIEDEL – The Communications People.

We are always happy to help you with any questions you might have.

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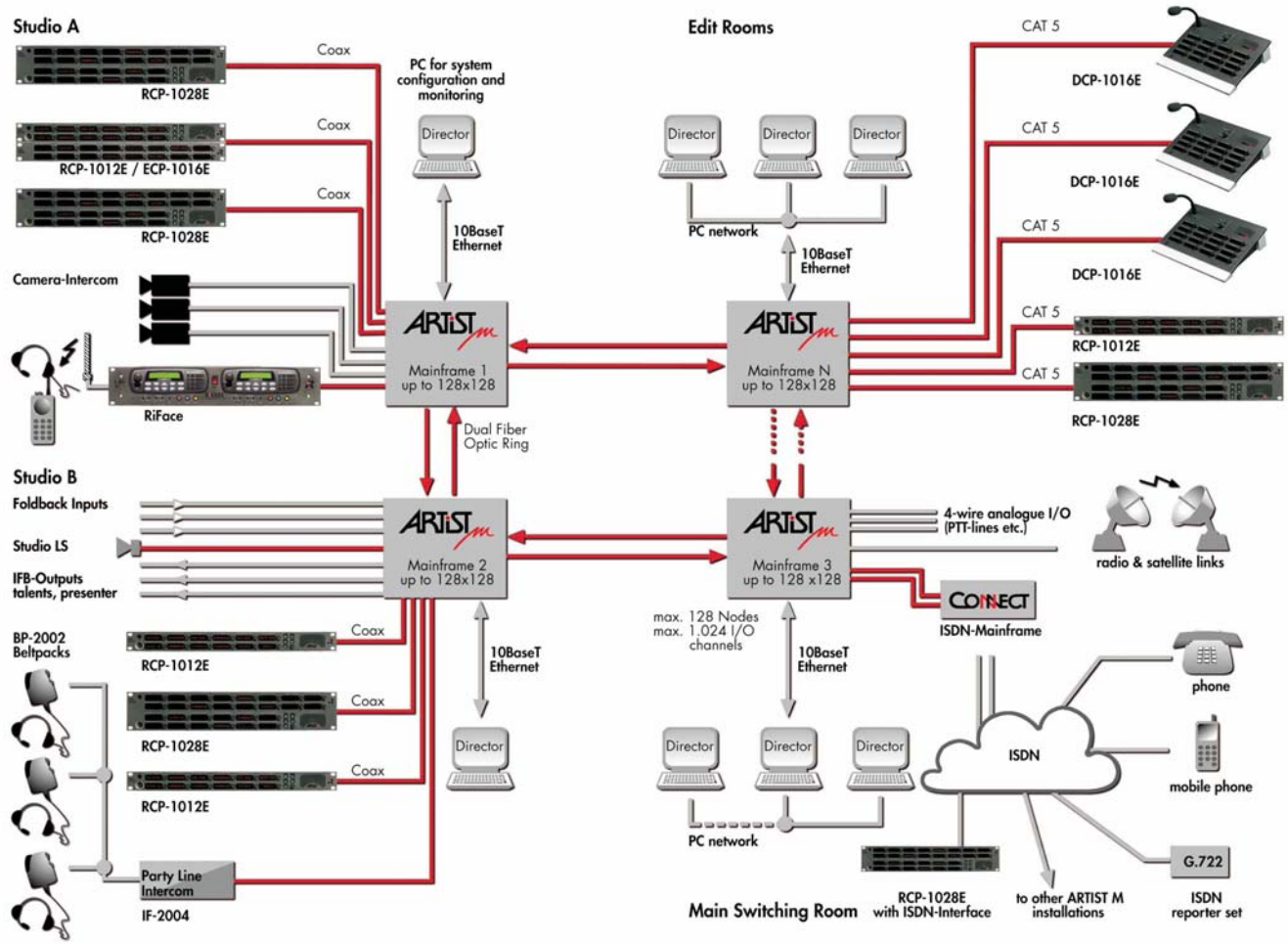
# ARTIST m - Digital Matrix Intercom



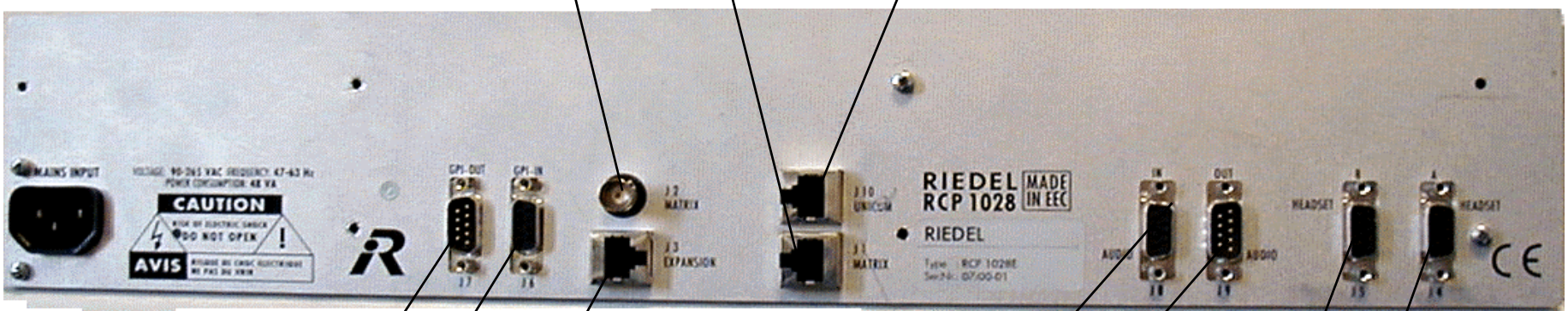
# ARTIST m Control Panel Types

Expansion Control Panel
ECP1016E

Rackmount Control Panels
RCP1012E
RCP1028E

Desktop Control Panel
DCP1016E

# Connections: Control Panel Rear View




J1 Matrix connection via CAT5

J2 Matrix connection via Coax

J10 Unicom (optional)

J7 GPI Out [1)]

J6 GPI In [1)]

J3 Expansion

J8 Audio In [2)]

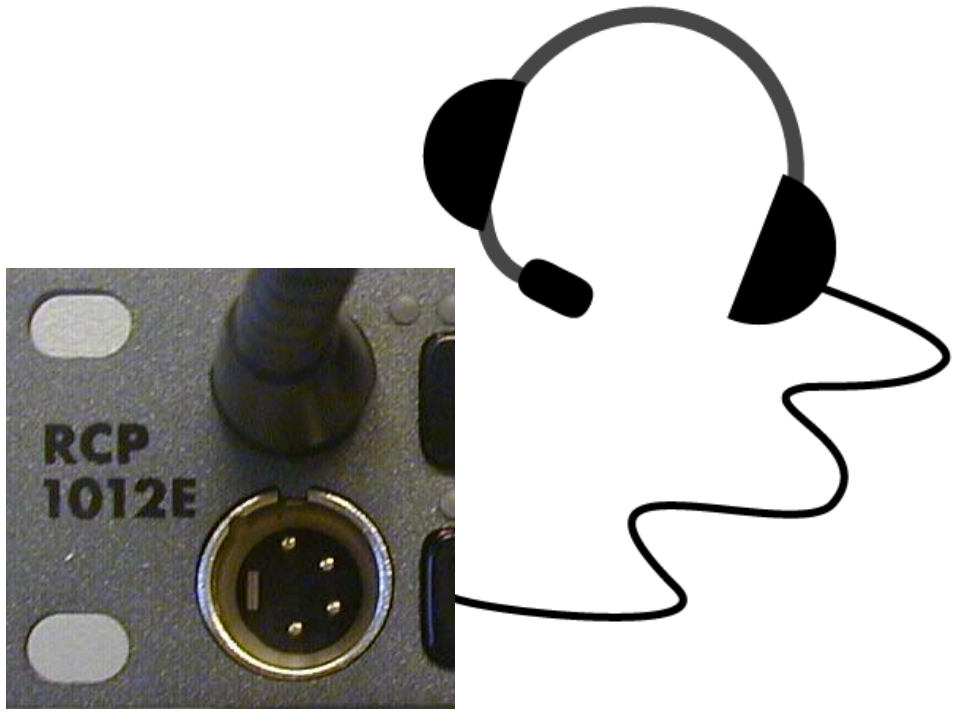
J9 Audio Out [2)]

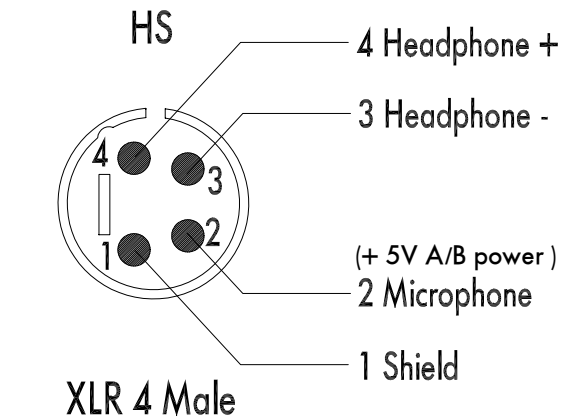
J5 Headset B [2)]

J4 Headset A [2)]

[1)] requires GPI-Option RCP-GPI-E
[2)] requires Audio-Option RCP-AIO-E

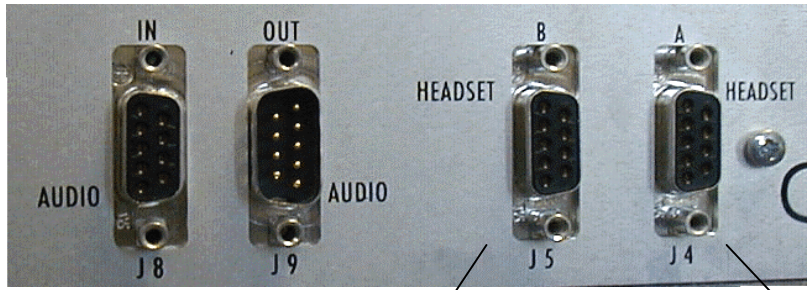
# Headset connection on the front of the unit



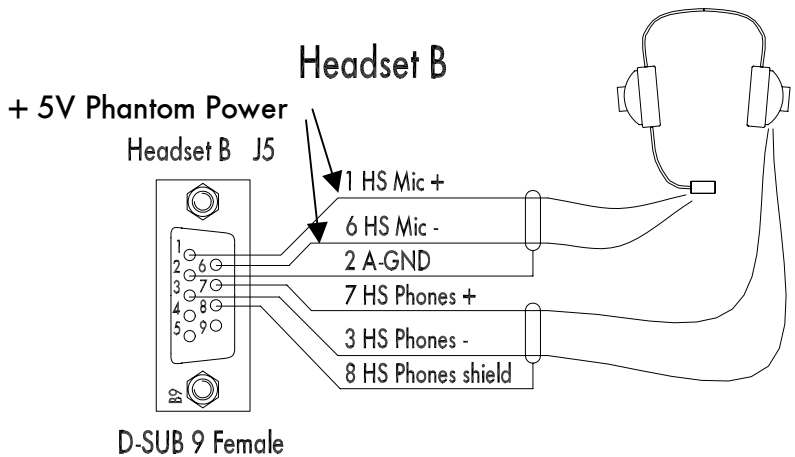




Front view of the connectors

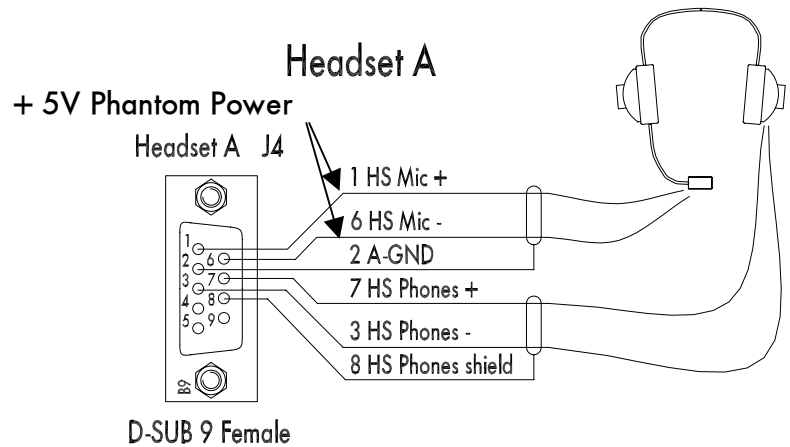
# Headset connection on the rear of the panel




By unsymmetrical connection of a electrec microphone the micro + is on PIN 1 and micro shield is switched to PIN 6 and PIN 2. This results in A/B power for the electret microphone.

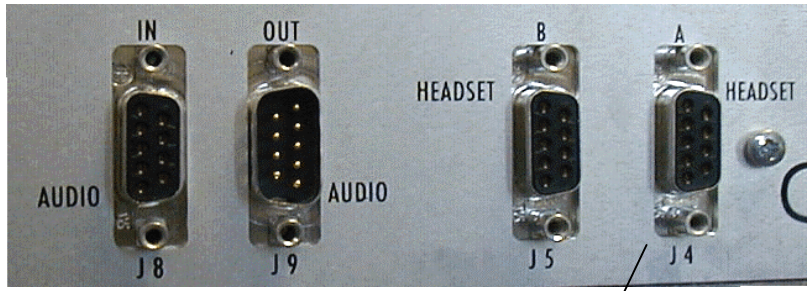


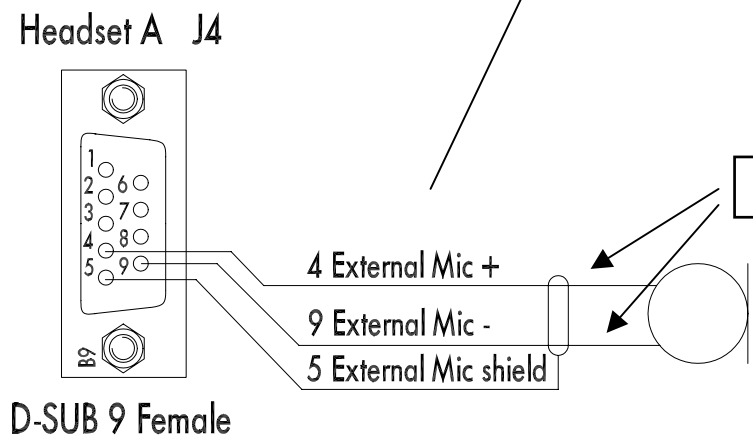

Front view of the connectors




requires Audio-Option RCP-AIO-E

# Connection of an external microphone to the rear of the Conrol Panel



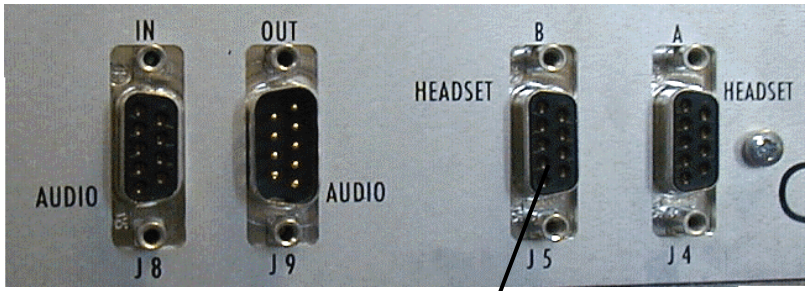



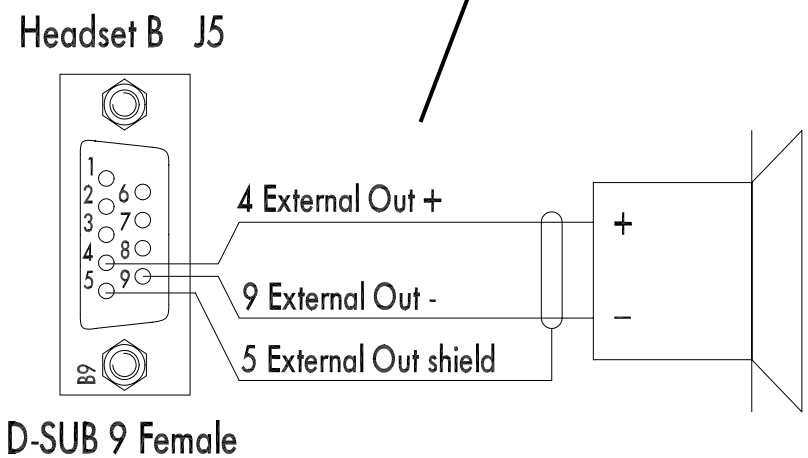

By unsymmetrical connection of a electrec microphone the micro + is on PIN 4 and micro shield is switched to PIN 9 and PIN 5. This results in A/B power for the electret microphone.

Front view of the connectors

requires Audio-Option RCP-AIO-E

# Connection of a Loudspeaker to the rear of the panel




Front view of the connectors

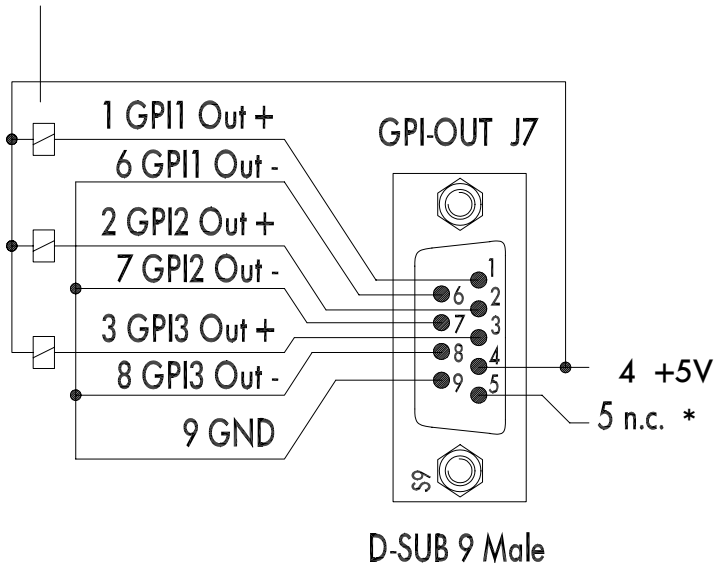
Output wattage:

2 W /4 Ohm

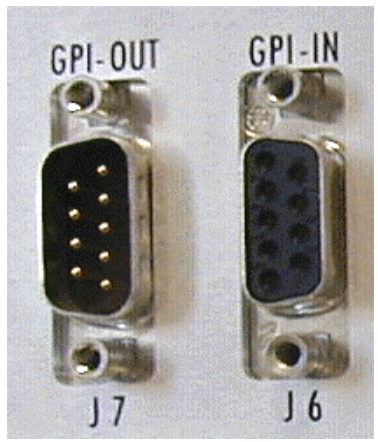
requires Audio-Option RCP-AIO-E

# Connection to GPI Input / Output Contacts

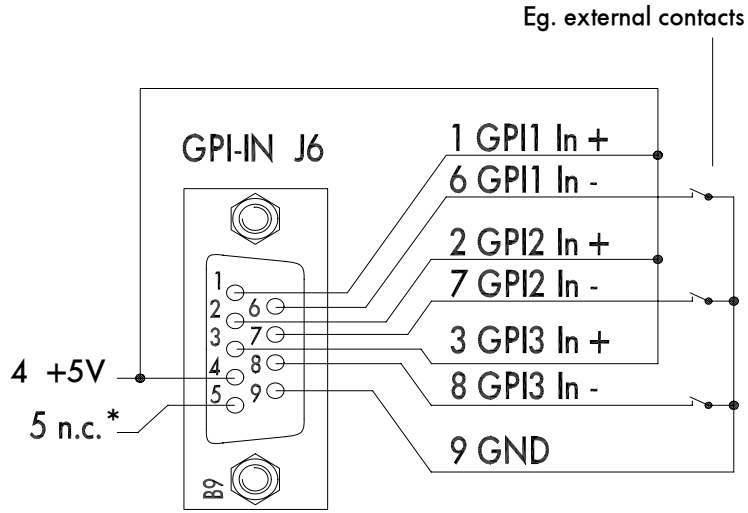
Eg. External 5V relays




D-SUB 9 Male




Eg. external contacts




D-SUB 9 Female

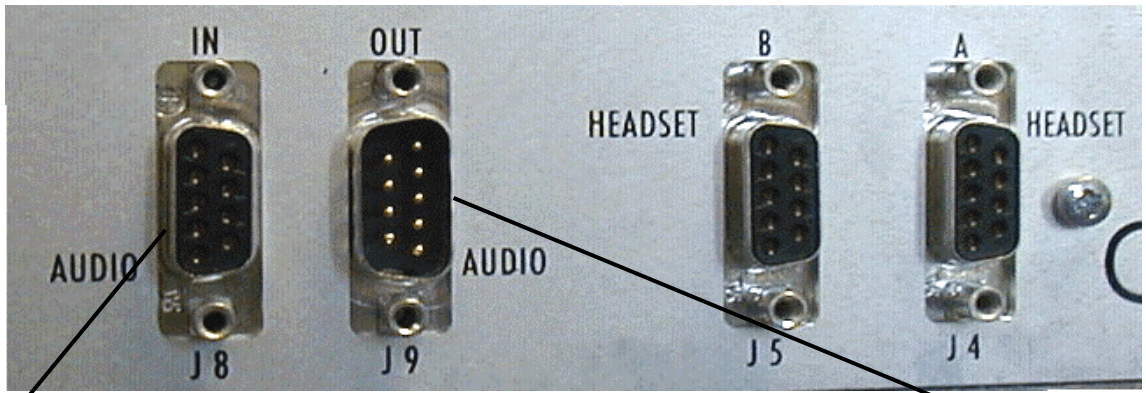
Notes:

- The carrying capacity of Pin 4 totals 50 mA
- The contact carrying capacity of the outputs is 300 mA (protected by self resetting fuse)
- The voltage on the GPI Inputs totals 5 - 48 V
- The bond strength for GPI Output is max. 60V
- * n.c. = not Connected

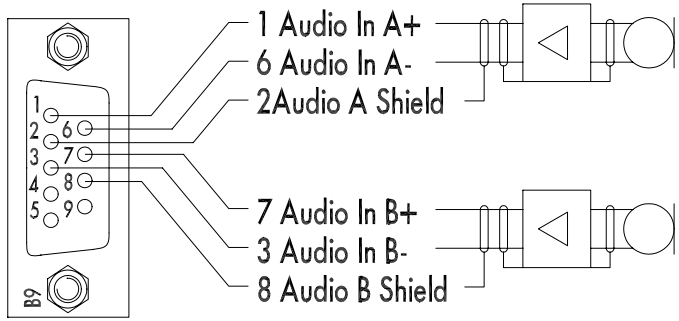
Front view of the connectors

requires GPI-Option RCP-GPI-E

# Connection of external analog audio sources




Audio IN J8



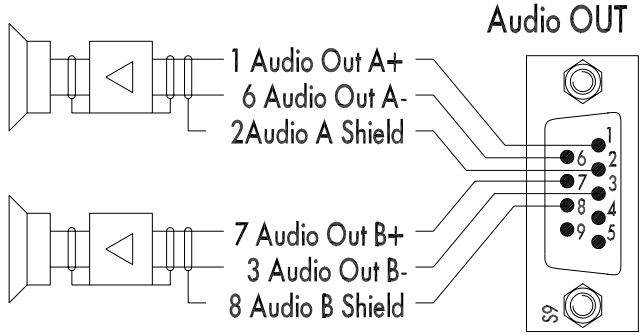

D-SUB 9 Female

Level: norm +6dBu maximal +18dBu

Input Impedance: >20kOhm

Front view of the connectors

Audio OUT J9



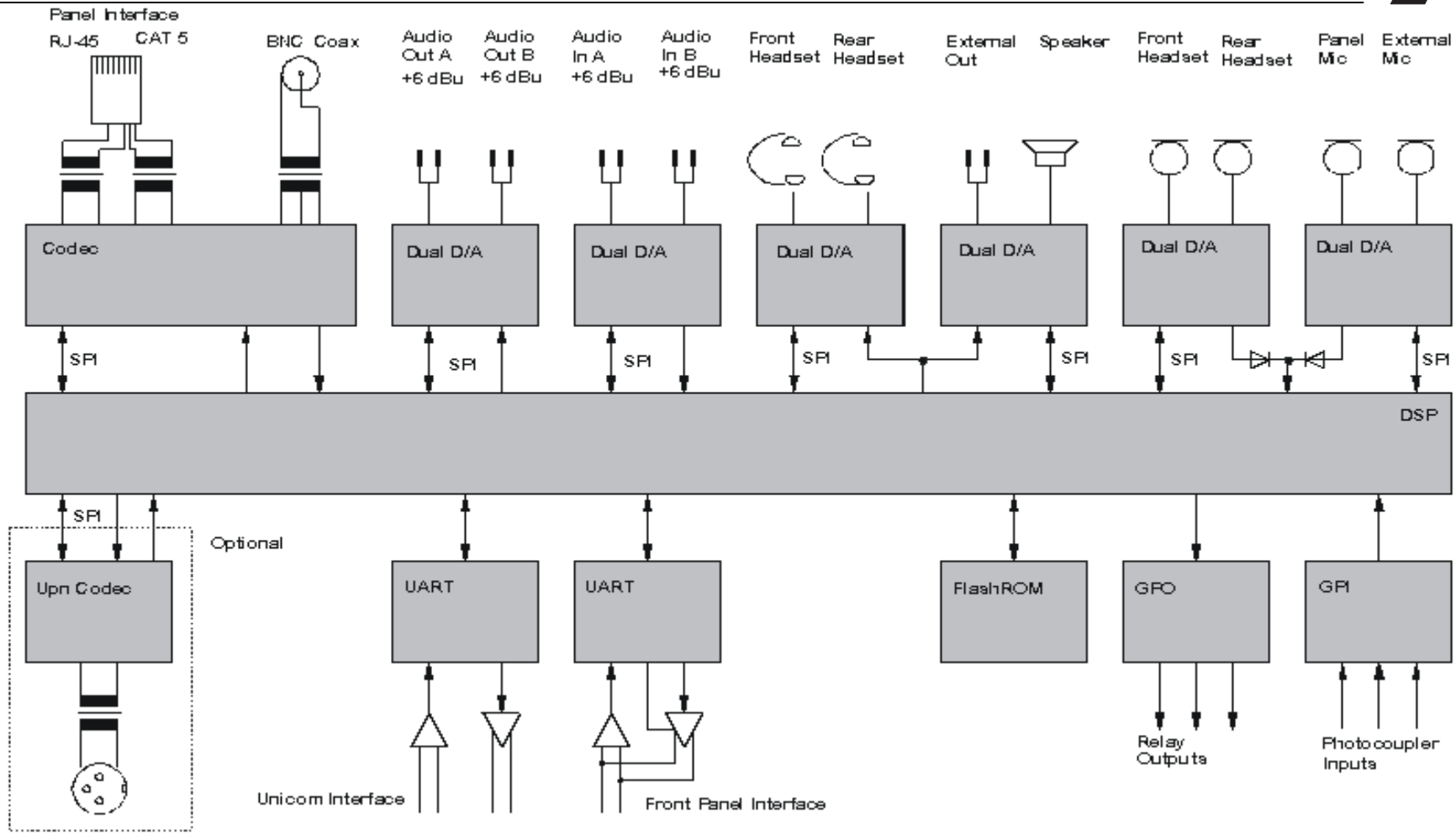

D-SUB 9 Male

Level: normal +6dBu maximal +18dBu

Output Impedance: < 10Ohm

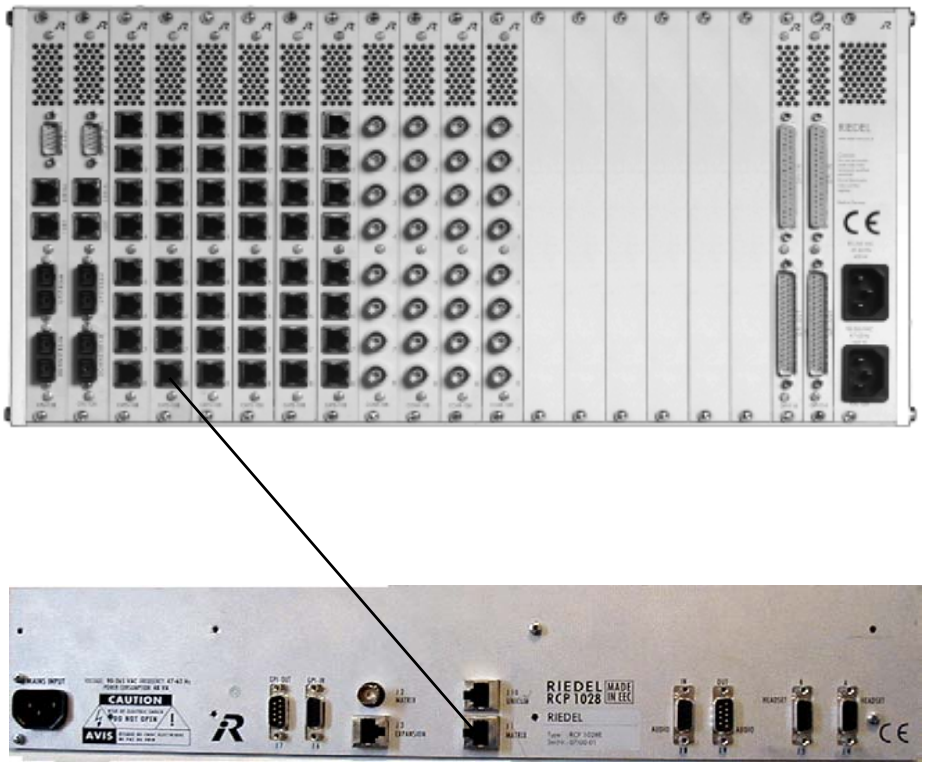
requires Audio-Option RCP-AIO-E

# Control Panel including Audio and GPI Option



# Connection of a Panel via CAT5 to an ARTIST m Matrix

Rear view: ARTIST m Frame

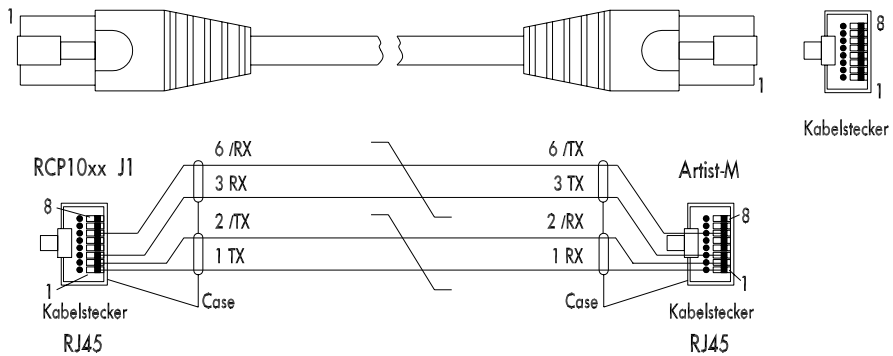



Rear view: Control Panel, here a RCP-1028

## Cable Specifications

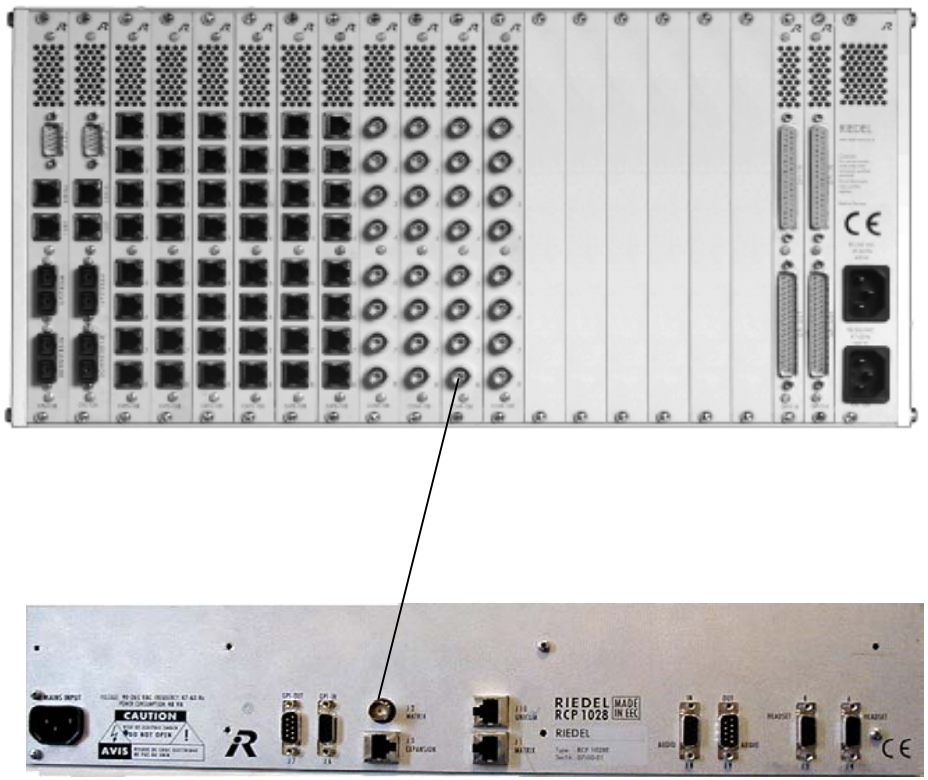
- Type: Cat5 (4x2 AWG24) Twisted pair with overall braid screen
- Connectors: RJ 45
- Cable Length: max. 300 meters

## Pin Connections



# Connection of a Panel via Coax to an ARTIST m Matrix

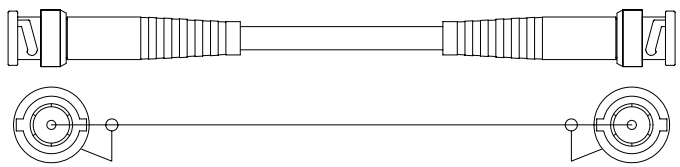
Rear view: ARTIST m Frame




Rear view: Control Panel, here a RCP-1028

## Cable Specificaitons

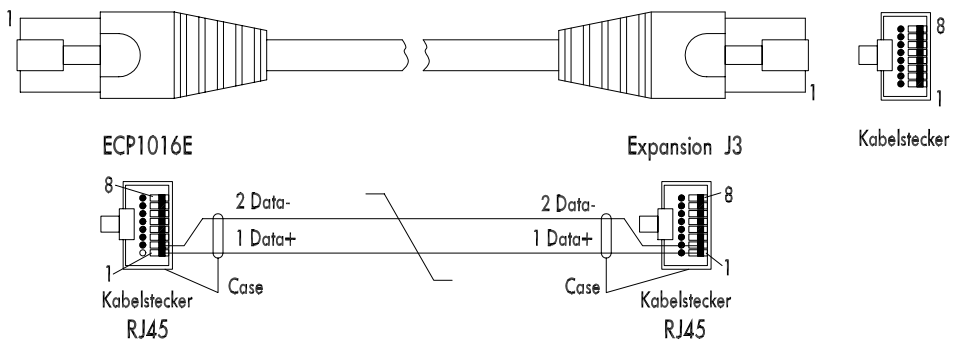
| | |
|---|---|
| • Type: | RG59 – 20 AWG<br>Video Kabel<br>*75 Ω / 0,8 / 3,7*<br>FRNC – halogen free |
| • Cable Length: | max. 650 Meter |
| • Type | *75 Ω / 0,6 / 3,7* |
| • Cable Length: | max. 350 Meter |
| • Connectors: | BNC 75 Ω<br>(anti-kink) |



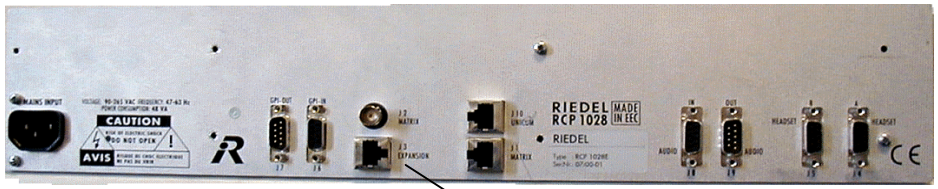
# Connection of an Expansion Panels

## Cable Specifications

- Type: Cat5 (4x2 AWG24) Twisted pair with overall braid screen
- Connector: RJ 45
- Cable Length: max. 2 Meter




Rackmount Panel, here a RCP1028E




Expansion Panel –1, ECP1016E


Expansion Panel Adresse 1

Expansion Panel –2, ECP1016E


Expansion Panel Adresse 2

max. 7x Expansion Panels

Expansion Panel –n, ECP1016E

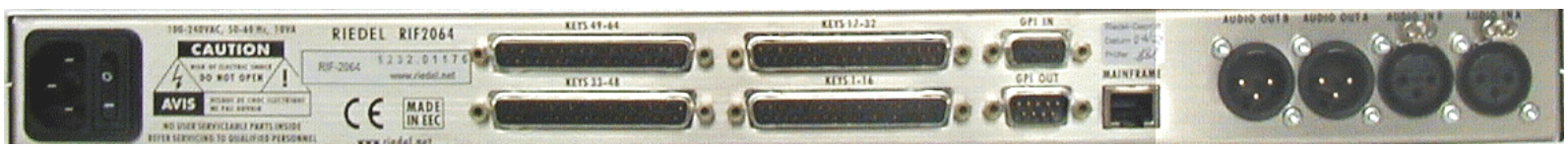

Expansion Panel Adresse n

Note: Only use each address once!

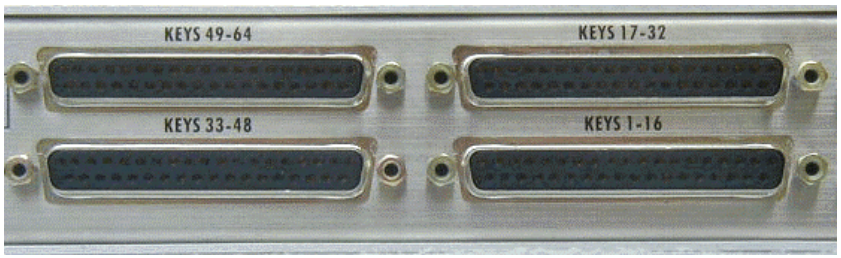
# Front and Rear View RIF 2064

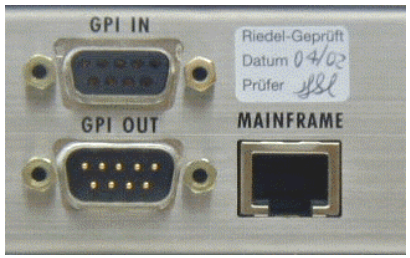
## RIF 2064 Front View


## RIF 2064 Rear View

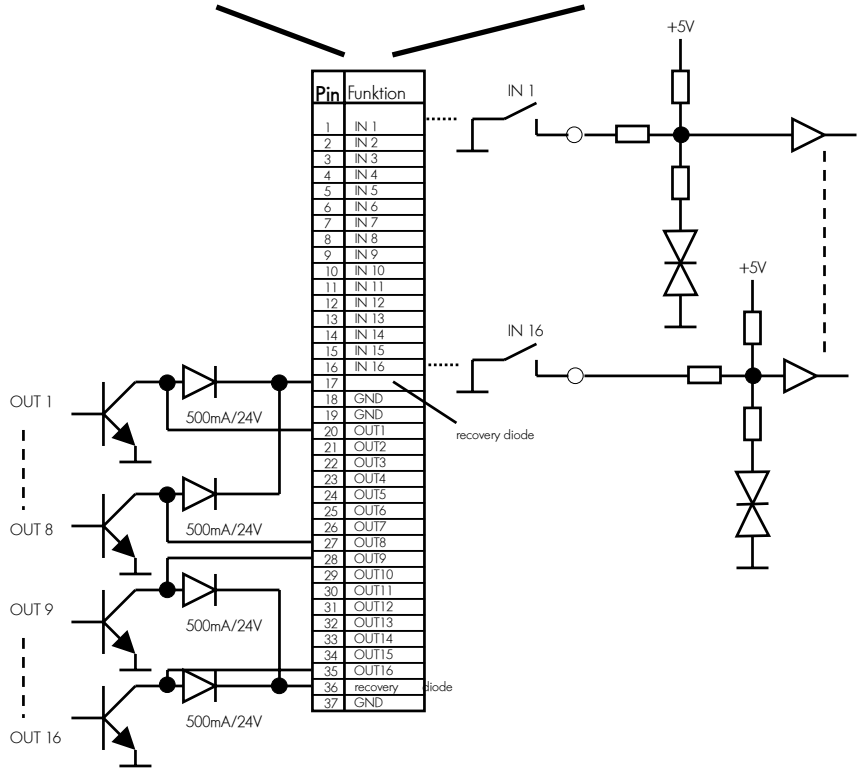


# Connector Pin Assignment
# RIF 2064








„GPI-Input" *
D-Sub 9 Female

| Pin | Signal |
|---|---|
| 1 | GPI 1 In + |
| 2 | GPI 2 In + |
| 3 | GPI 3 In + |
| 4 | 5V |
| 5 | n.c. |
| 6 | GPI 1 In – |
| 7 | GPI 2 In – |
| 8 | GPI 3 In – |
| 9 | GND |

"GPI-Output" *
D-Sub 9 Male

| Pin | Signal |
|---|---|
| 1 | GPI 1 Out A |
| 2 | GPI 2 Out A |
| 3 | GPI 3 Out A |
| 4 | 5V |
| 5 | n.c. |
| 6 | GPI 1 Out B |
| 7 | GPI 2 Out B |
| 8 | GPI 3 Out B |
| 9 | GND |

"Mainframe"
RJ45

| Pin | Signal |
|---|---|
| 1 | TxD + |
| 2 | TxD – |
| 3 | RxD + |
| 4 | 5V Out |
| 5 | 5V Out |
| 6 | RxD – |
| 7 | GND |
| 8 | GND |

"Audio Out"
3 pol XLR Male

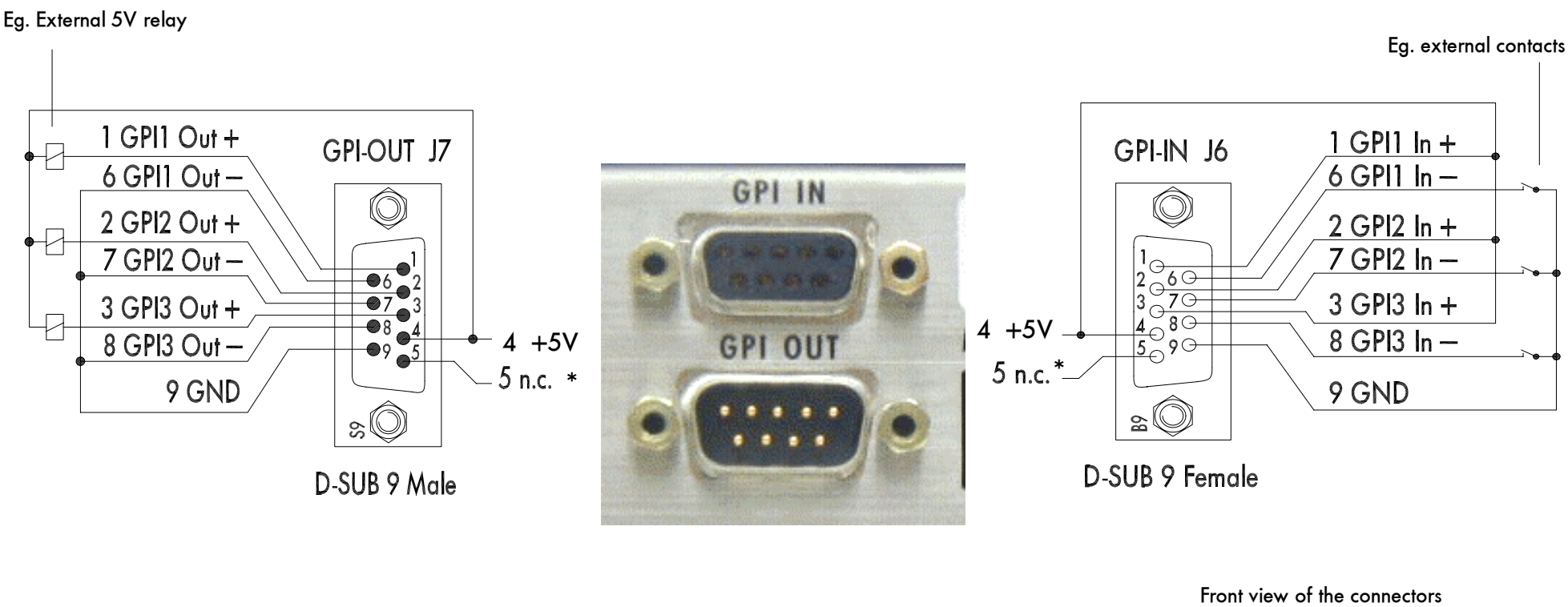
| Pin | Signal |
|---|---|
| 1 | Shield |
| 2 | OUT + |
| 3 | OUT - |

"Audio IN"
3 pol XLR Female

| Pin | Signal |
|---|---|
| 1 | Shield |
| 2 | IN + |
| 3 | IN - |

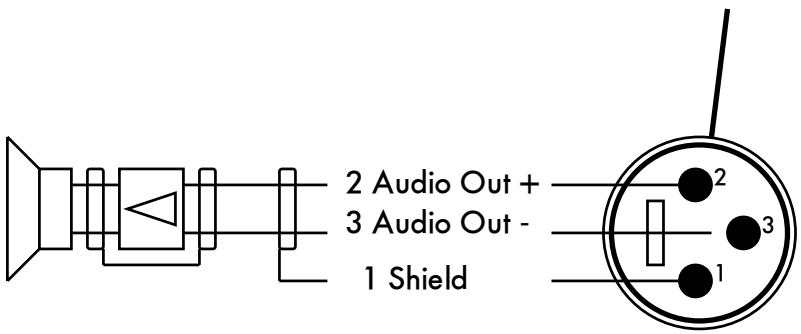
Note:
a) Maximum load of Pin 4 is 50 mA (fused)
b) Maximum load of GPI-Output is 300 mA each (fused)
c) GPI-Input Range: +5 ... +48 V

# Connection to GPI Input/Output Contacts
# RIF 2064




Front view of the connectors

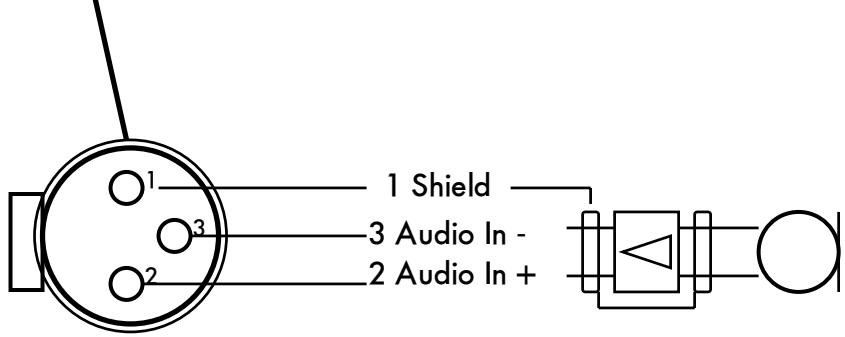
# Connection of Audio Input / Output
# RIF 2064


XLR 3 Male

Level: nominal +6dBu maximal +18dBu

Output impedance: < 10 Ohm



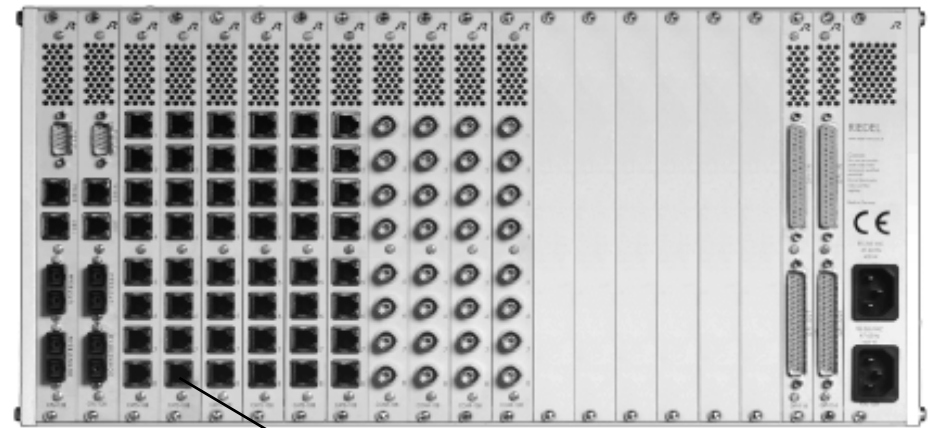

XLR 3 Female

Level: nominal +6dBu maximal +18dBu

Input impedance: >20k Ohm

# Connecting a RIF2064 via CAT5 to a ARTIST M Matrix

Rear view: ARTIST M Frame



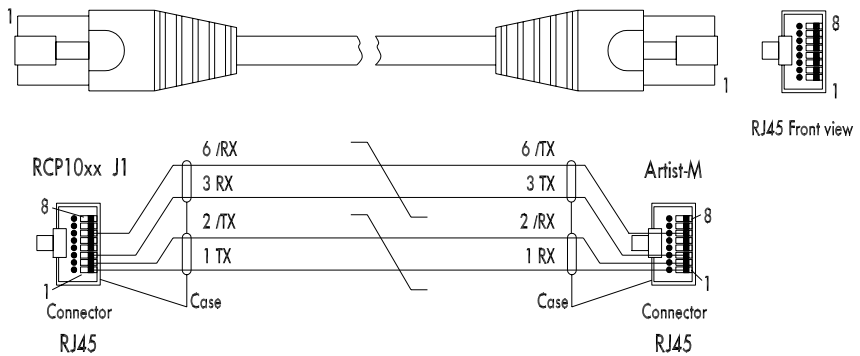
Rear view: RIF 2064

## Cable specification

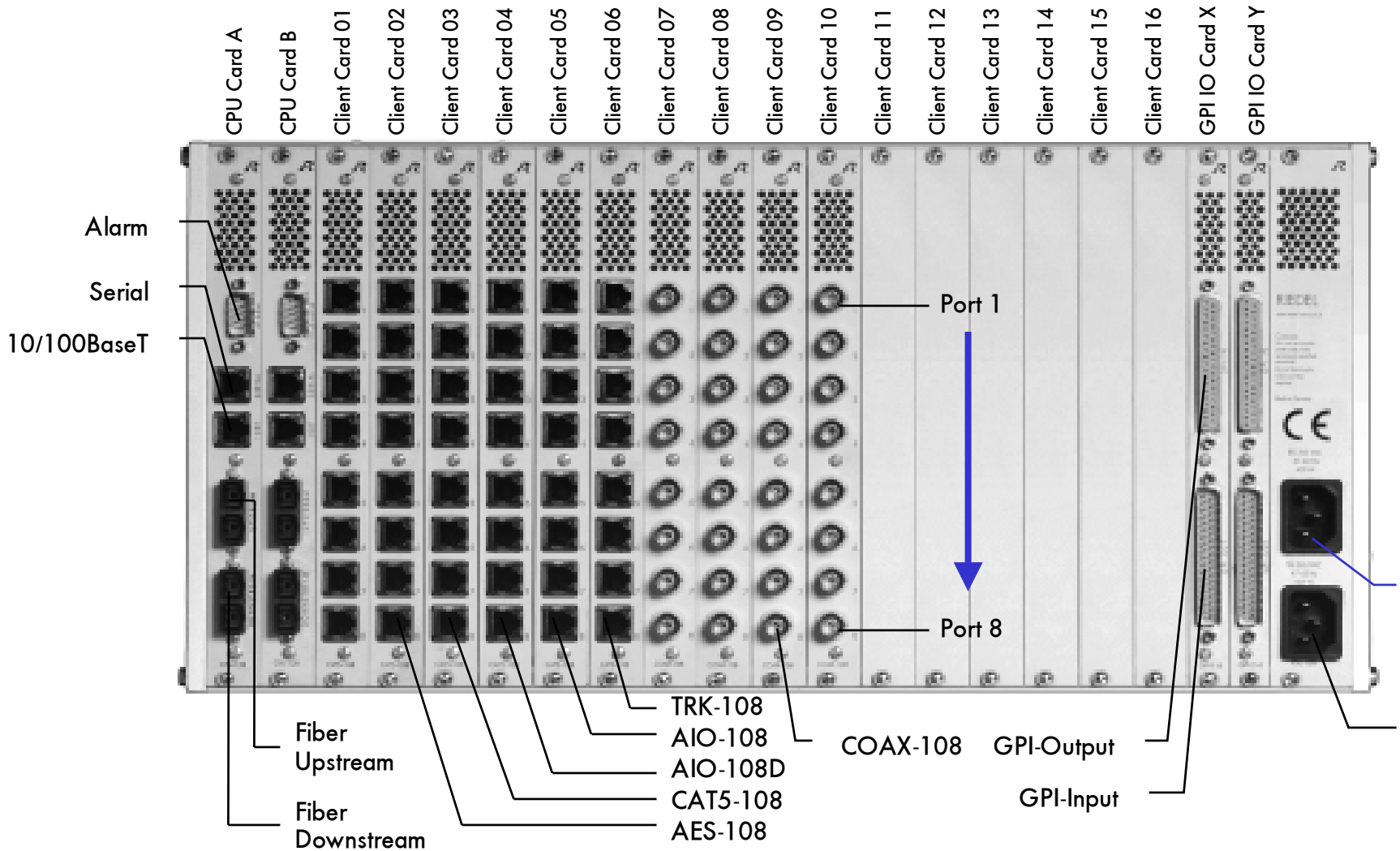
ype: Cat5 (4x2 AWG24)
Twistedpair and shielded

onnector type: RJ 45

## Cable layout



# Rearview Matrix




## Note:

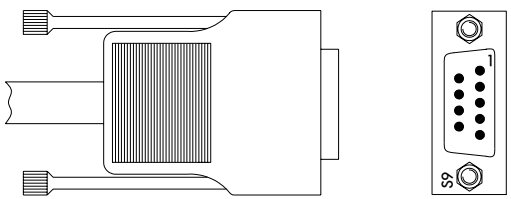
The 16 client card slots can be filled with the following cards:

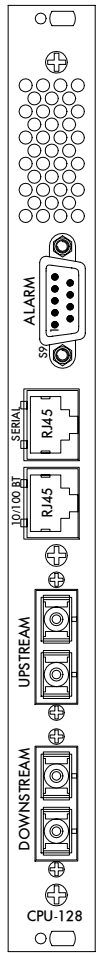
- •COAX-108
- •CAT5-108
- •AIO-108
- •AIO-108D
- •TRK-108
- •GPI-116

# Alarm Connections

| "CPU-128" "Alarm" D-Sub 9 Male | |
|---|---|
| Pin | Signal |
| 1 | Alarm 1 Out A |
| 2 | Alarm 2 Out A |
| 3 | Alarm In + |
| 4 | 24 V |
| 5 | n.c. |
| 6 | Alarm 1 Out B |
| 7 | Alarm 2 Out B |
| 8 | Alarm In – |
| 9 | GND |

Connector: D-Sub 9 Male




Please Note:

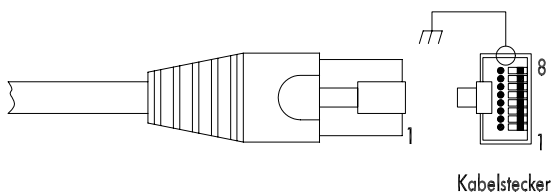
- The carrying capacity of Pin 4 is 100mA!
- (protected by a self resetting fuse)
- The current amounts to: +5 ... +48 V
- Bond Strength: 1 A
- Current load
  Alarm In+ +5 ... +25V
  Alarm In – +5 ... +25V

# Serial Interface Connection

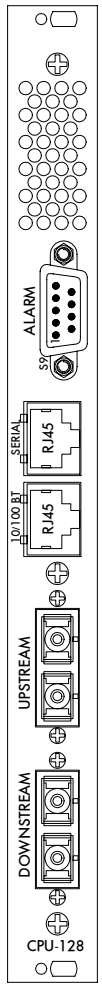
"CPU-128"
"Serial Interface"
RJ45

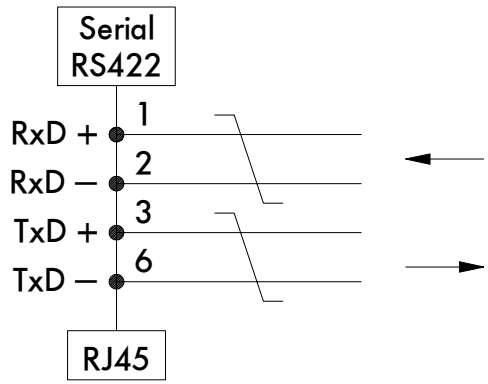
| Pin | Signal |
|---|---|
| 1 | RxD + (RS422) |
| 2 | RxD – (RS422) |
| 3 | TxD + (RS422) |
| 4 | RxD (RS232) |
| 5 | GND (RS232) |
| 6 | TxD – (RS422) |
| 7 | TXD (RS232) |
| 8 | GND |

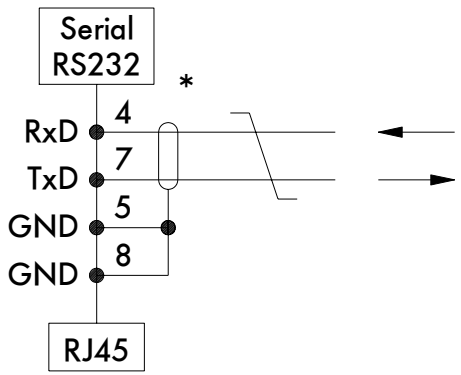
Connector: RJ45



Kabelstecker

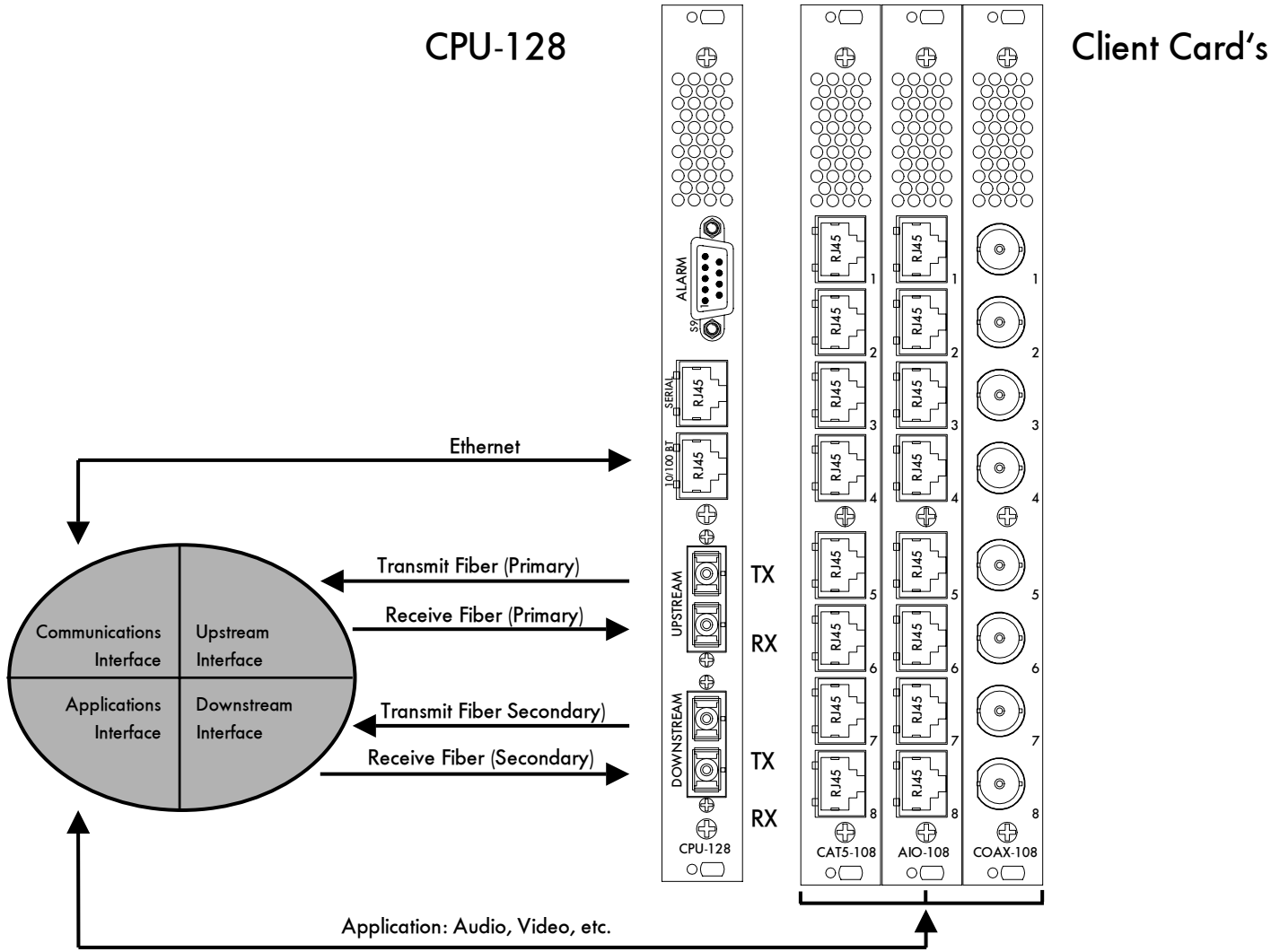



* This port is normally used only for service purposes and is not required during normal operation.

# Fiber Connection Up and Downstream

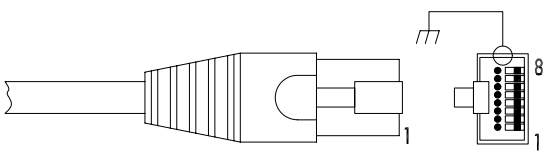


# Ethernet Connection 10/100BT

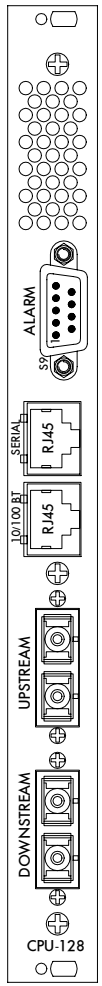
"CPU-128"
"10/100BT"
RJ45

| Pin | Signal |
|---|---|
| 1 | TxD + |
| 2 | TxD – |
| 3 | RxD + |
| 4 | n.c. |
| 5 | n.c. |
| 6 | RxD – |
| 7 | n.c. |
| 8 | n.c. |

Connector: RJ45



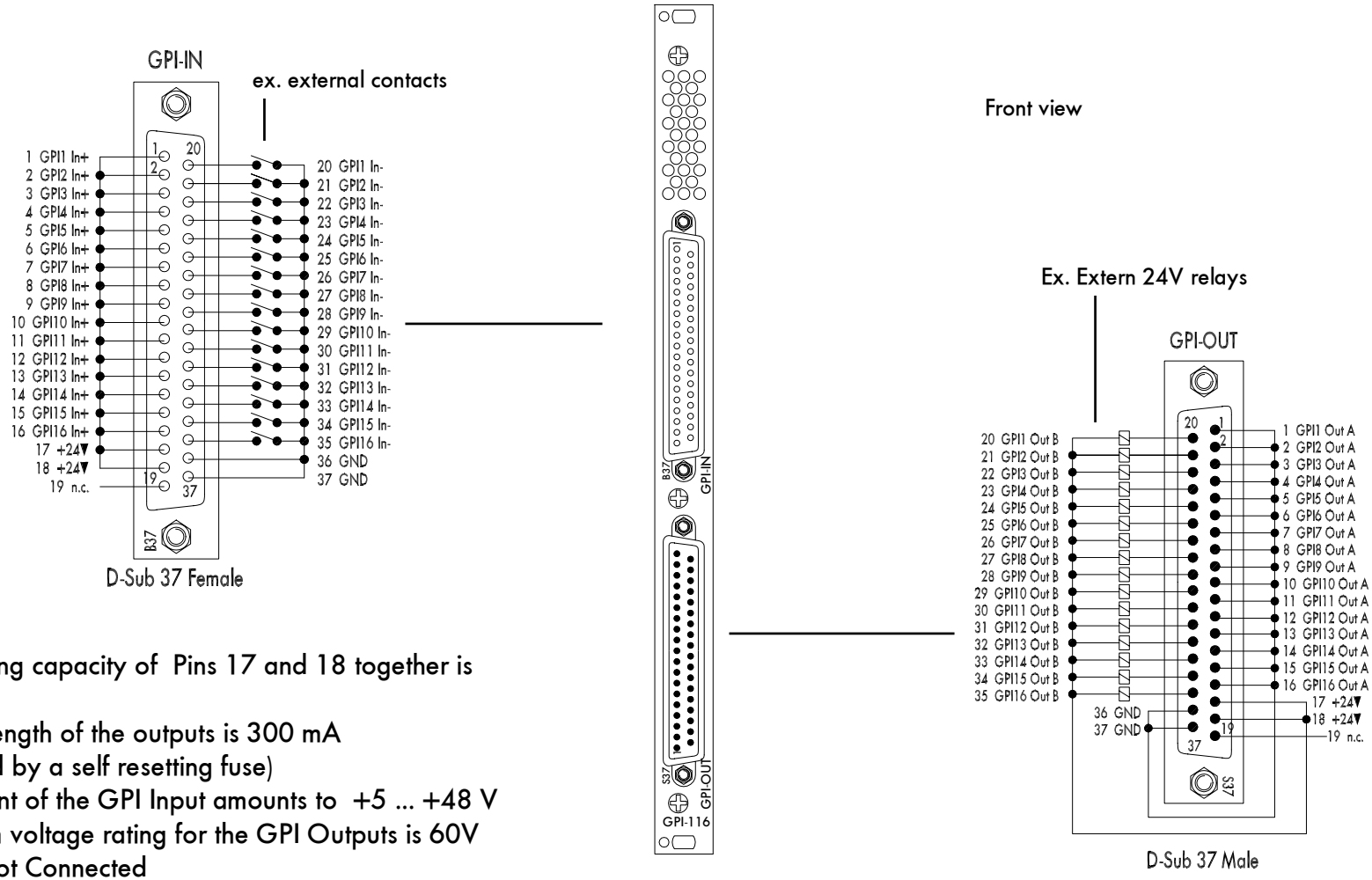
Kabelstecker




## Note:

- Connection uses "PC"-pin assignment.
- When connected to a Hub a1:1 cable is required!
- When connected directly to a PC a cross cable must be used.

# Connetion of GPI Inputs / Outputs




Note:

- The carrying capacity of Pins 17 and 18 together is 100 mA!
- Bond Strength of the outputs is 300 mA (protected by a self resetting fuse)
- The current of the GPI Input amounts to +5 ... +48 V
- Maximum voltage rating for the GPI Outputs is 60V
- * n.c. = not Connected

# Pin Assignment Control Panel 19" RCP10xx

"Matrix"
RJ45

| Pin | Signal |
|---|---|
| 1 | TxD + |
| 2 | TxD - |
| 3 | RxD + |
| 4 | n.c. |
| 5 | n.c. |
| 6 | RxD - |
| 7 | n.c. |
| 8 | n.c. |

"Matrix"
BNC

| Pin | Signal |
|---|---|
| 1 | RxD, TxD |
| 2 | Shield |

"Expansion"
RJ45

| Pin | Signal |
|---|---|
| 1 | Data + |
| 2 | Data – |
| 3 | GND |
| 4 | GND |
| 5 | GND |
| 6 | GND |
| 7 | GND |
| 8 | GND |

„GPI-Input" *
D-Sub 9 Female

| Pin | Signal |
|---|---|
| 1 | GPI 1 In + |
| 2 | GPI 2 In + |
| 3 | GPI 3 In + |
| 4 | 5V |
| 5 | n.c. |
| 6 | GPI 1 In – |
| 7 | GPI 2 In – |
| 8 | GPI 3 In – |
| 9 | GND |

"GPI-Output" *
D-Sub 9 Male

| Pin | Signal |
|---|---|
| 1 | GPI 1 Out A |
| 2 | GPI 2 Out A |
| 3 | GPI 3 Out A |
| 4 | 5V |
| 5 | n.c. |
| 6 | GPI 1 Out B |
| 7 | GPI 2 Out B |
| 8 | GPI 3 Out B |
| 9 | GND |

Note:
a) The carrying capacity of Pin 4 totals 50 mA (protected by self resetting fuse)
b) The bond strength of the outputs is 300 mA (protected by self resetting fuse)
c) Current GP-Input: 5 – 48 V

„Headset A" **
D-Sub 9 Female

| Pin | Signal |
|---|---|
| 1 | HS Mic + |
| 2 | A GND |
| 3 | HS Phones - |
| 4 | External Mic + |
| 5 | Ext. Mic Shield |
| 6 | HS Mic - |
| 7 | HS Phones + |
| 8 | HS Phones Shield |
| 9 | External Mic - |

„Headset B" **
D-Sub 9 Female

| Pin | Signal |
|---|---|
| 1 | HS Mic + |
| 2 | A-GND |
| 3 | HS Phones - |
| 4 | External Out + |
| 5 | Ext. Out Shield |
| 6 | HS Mic - |
| 7 | HS Phones + |
| 8 | HS Phones Shield |
| 9 | External Out - |

"Headset A"
XLR 4 Male
(vorne)

| Pin | Signal |
|---|---|
| 1 | Shield |
| 2 | Microphone |
| 3 | Headphone - |
| 4 | Headphone + |

"Unicom"
RJ45

| Pin | Signal |
|---|---|
| 1 | TxD + |
| 2 | TxD - |
| 3 | RxD + |
| 4 | Audio A Out + |
| 5 | Audio A Out - |
| 6 | RxD - |
| 7 | Audio A In + |
| 8 | Audio A In - |

„Audio In" **
D-Sub 9 Female

| Pin | Signal |
|---|---|
| 1 | Audio In A + |
| 2 | Audio A Shield |
| 3 | Audio In B – |
| 4 | n.c. |
| 5 | n.c. |
| 6 | Audio In A – |
| 7 | Audio In B + |
| 8 | Audio B Shield |
| 9 | n.c. |

„Audio Out" **
D-Sub 9 Male

| Pin | Signal |
|---|---|
| 1 | Audio Out A + |
| 2 | Audio A Shield |
| 3 | Audio Out B – |
| 4 | n.c. |
| 5 | n.c. |
| 6 | Audio Out A – |
| 7 | Audio Out B + |
| 8 | Audio B Shield |
| 9 | n.c. |

* requires GPI-Option RCP-GPI-E
** requires Audio-Option RCP-AIO-E

# Pin Assignment Expansion Control Panel

"EXP IN
RJ45

| Pin | Signal |
|---|---|
| 1 | Data + |
| 2 | Data – |
| 3 | GND |
| 4 | GND |
| 5 | GND |
| 6 | GND |
| 7 | GND |
| 8 | GND |
| | |

"EXP OUT
RJ45

| Pin | Signal |
|---|---|
| 1 | Data + |
| 2 | Data – |
| 3 | n.c. |
| 4 | n.c. |
| 5 | n.c. |
| 6 | n.c. |
| 7 | n.c. |
| 8 | n.c. |

# Pin Assignment Desktop Control Panel

"Matrix"
RJ45

| Pin | Signal |
|---|---|
| 1 | TxD + |
| 2 | TxD - |
| 3 | RxD + |
| 4 | n.c. |
| 5 | n.c. |
| 6 | RxD - |
| 7 | n.c. |
| 8 | n.c. |
| | |

"Matrix"
BNC

| Pin | Signal |
|---|---|
| 1 | RxD, TxD |
| 2 | Shield |

„GPI-Input" *
D-Sub 9 Female

| Pin | Signal |
|---|---|
| 1 | GPI 1 In + |
| 2 | GPI 2 In + |
| 3 | GPI 3 In + |
| 4 | 5V |
| 5 | n.c. |
| 6 | GPI 1 In – |
| 7 | GPI 2 In – |
| 8 | GPI 3 In – |
| 9 | GND |
| | |

"GPI-Output" *
D-Sub 9 Male

| Pin | Signal |
|---|---|
| 1 | GPI 1 Out A |
| 2 | GPI 2 Out A |
| 3 | GPI 3 Out A |
| 4 | 5V |
| 5 | n.c. |
| 6 | GPI 1 Out B |
| 7 | GPI 2 Out B |
| 8 | GPI 3 Out B |
| 9 | GND |

Note:
a) The carrying capacity of Pin 4 totals 50 mA (protected by self resetting fuse)
b) The bond strength of the outputs is 300 mA (protected by self resetting fuse)
• The voltage on the GPI Inputs totals 5 - 48 V

"Headset A"
XLR 4 Male

| Pin | Signal |
|---|---|
| 1 | Shield |
| 2 | Microphone |
| 3 | Headphone - |
| 4 | Headphone + |
| | |

"Headset B"
XLR 4 Male

| Pin | Signal |
|---|---|
| 1 | Shield |
| 2 | Microphone |
| 3 | Headphone - |
| 4 | Headphone + |

„Audio In" **
D-Sub 9 Female

| Pin | Signal |
|---|---|
| 1 | Audio In A + |
| 2 | Audio A Shield |
| 3 | Audio In B – |
| 4 | External Mic + |
| 5 | Ext. Mic Shield |
| 6 | Audio In A – |
| 7 | Audio In B + |
| 8 | Audio B Shield |
| 9 | External Mic – |
| | |

„Audio Out" **
D-Sub 9 Male

| Pin | Signal |
|---|---|
| 1 | Audio Out A + |
| 2 | Audio A Shield |
| 3 | Audio Out B – |
| 4 | External Out + |
| 5 | Ext. Out Shield |
| 6 | Audio Out A – |
| 7 | Audio Out B + |
| 8 | Audio B Shield |
| 9 | External Out – |

* requires GPI-Option RCP-GPI-E
** requires Audio-Option RCP-AIO-E

"Unicom"
D-Sub 15 Female

| Pin | Signal |
|---|---|
| 1 | TxD - |
| 2 | RxD - |
| 3 | n.c. |
| 4 | Audio A Out + |
| 5 | n.c. |
| 6 | Shield |
| 7 | n.c. |
| 8 | Audio A In + |
| 9 | TxD + |
| 10 | RxD + |
| 11 | Audio A Out - |
| 12 | n.c. |
| 13 | n.c. |
| 14 | n.c. |
| 15 | Audio A In - |

Note:
The "Unicom " connector is only availible as an option.

It can only be included at the time of the intial order.

# Pin Assignment Matrix 1/2: CPU and Client Cards

"CPU-128"
"Serial Interface"
RJ45

| Pin | Signal |
|---|---|
| 1 | RxD + (RS422) |
| 2 | RxD - (RS422) |
| 3 | Txd + (RS422) |
| 4 | RxD (RS232) |
| 5 | GND (RS232) |
| 6 | TxD - (RS422) |
| 7 | RXD (RS232) |
| 8 | GND |
| | |

This port is used for service purposes only.

"CPU-128"
"Alarm"
D-Sub 9 Male

| Pin | Signal |
|---|---|
| 1 | Alarm 1 Out A |
| 2 | Alarm 2 Out B |
| 3 | Alarm In + |
| 4 | 24 V |
| 5 | n.c. |
| 6 | Alarm 1 Out B |
| 7 | Alarm 2 Out B |
| 8 | Alarm In - |
| 9 | GND |

Note
- The carrying capacity of Pin 4 totals 100mA! (protected by self resetting fuse)
- Current: 5 - 48 V
- Bond strength: 1 A

"CPU-128"
"10/100BT"
RJ45

| Pin | Signal |
|---|---|
| 1 | TxD + |
| 2 | TxD - |
| 3 | RxD + |
| 4 | n.c. |
| 5 | n.c. |
| 6 | RxD - |
| 7 | n.c. |
| 8 | n.c. |

Note:
This is a "PC"-assignment, for connection to a Hub's 1:1 cable is necessary!

"COAX-108"
Kupplung 1 - 8
BNC

| Pin | Signal |
|---|---|
| 1 | RxD / TxD |
| 2 | Shield |

"CAT5-108"
Kupplung 1 - 8
RJ45

| Pin | Signal |
|---|---|
| 1 | RxD + |
| 2 | RxD - |
| 3 | Txd + |
| 4 | n.c. |
| 5 | n.c. |
| 6 | TxD - |
| 7 | n.c. |
| 8 | n.c. |

"AES-108"
Kupplung 1 - 8
RJ45

| Pin | Signal |
|---|---|
| 1 | RxD + |
| 2 | RxD – |
| 3 | TxD + |
| 4 | n.c. |
| 5 | n.c. |
| 6 | TxD – |
| 7 | n.c. |
| 8 | n.c. |

"AIO-108"
Kupplung 1- 8
RJ45 - 4-Wire

| Pin | Signal |
|---|---|
| 1 | RxD + * |
| 2 | RxD - * |
| 3 | TxD + * |
| 4 | Audio In + |
| 5 | Audio In - |
| 6 | TxD - * |
| 7 | Audio Out + |
| 8 | Audio Out - |

* Only AIO-108D

"TRK-108"
Kupplung 1- 8
RJ45 - 4-Wire

| Pin | Signal |
|---|---|
| 1 | RxD + |
| 2 | RxD - |
| 3 | TxD + |
| 4 | Audio In + |
| 5 | Audio In - |
| 6 | TxD - |
| 7 | Audio Out + |
| 8 | Audio Out - |

# Pin Assignment Matrix 2/2:
# GPI Input / - Output

"GPI-Input"
"GPI-116"
D-Sub 37 - Female

| Pin | Signal | Pin | Signal |
|---|---|---|---|
| 1 | GPI 1 In + | 20 | GPI 1 In - |
| 2 | GPI 2 In + | 21 | GPI 2 In - |
| 3 | GPI 3 In + | 22 | GPI 3 In - |
| 4 | GPI 4 In + | 23 | GPI 4 In - |
| 5 | GPI 5 In + | 24 | GPI 5 In - |
| 6 | GPI 6 In + | 25 | GPI 6 In - |
| 7 | GPI 7 In + | 26 | GPI 7 In - |
| 8 | GPI 8 In + | 27 | GPI 8 In - |
| 9 | GPI 9 In + | 28 | GPI 9 In - |
| 10 | GPI 10 In + | 29 | GPI 10 In - |
| 11 | GPI 11 In + | 30 | GPI 11 In - |
| 12 | GPI 12 In + | 31 | GPI 12 In - |
| 13 | GPI 13 In + | 32 | GPI 13 In - |
| 14 | GPI 14 In + | 33 | GPI 14 In - |
| 15 | GPI 15 In + | 34 | GPI 15 In - |
| 16 | GPI 16 In + | 35 | GPI 16 In - |
| 17 | 24V | 36 | GND |
| 18 | 24V | 37 | GND |
| 19 | n.c. | | |

Note
- The carrying capacity of Pins 17 and 18 together is 100 mA! (proteected by a self resetting fuse)
- Current: 5 – 48 V

"GPI-Output"
"GPI-116"
D-Sub 37 - Male

| Pin | Signal | Pin | Signal |
|---|---|---|---|
| 1 | GPI 1 Out A | 20 | GPI 1 Out B |
| 2 | GPI 2 Out A | 21 | GPI 2 Out B |
| 3 | GPI 3 Out A | 22 | GPI 3 Out B |
| 4 | GPI 4 Out A | 23 | GPI 4 Out B |
| 5 | GPI 5 Out A | 24 | GPI 5 Out B |
| 6 | GPI 6 Out A | 25 | GPI 6 Out B |
| 7 | GPI 7 Out A | 26 | GPI 7 Out B |
| 8 | GPI 8 Out A | 27 | GPI 8 Out B |
| 9 | GPI 9 Out A | 28 | GPI 9 Out B |
| 10 | GPI 10 Out A | 29 | GPI 10 Out B |
| 11 | GPI 11 Out A | 30 | GPI 11 Out B |
| 12 | GPI 12 Out A | 31 | GPI 12 Out B |
| 13 | GPI 13 Out A | 32 | GPI 13 Out B |
| 14 | GPI 14 Out A | 33 | GPI 14 Out B |
| 15 | GPI 15 Out A | 34 | GPI 15 Out B |
| 16 | GPI 16 Out A | 35 | GPI 16 Out B |
| 17 | 24V | 36 | GND |
| 18 | 24V | 37 | GND |
| 19 | n.c. | | |

Note
- The carrying capacity of Pins 17 and 18 together is 100 mA! (protected by self resetting fuse)
- Bond strength of the outputs is 300 mA (protected by a self resetting fuse)

# Standard Keys

## DISPLAY KEYS

The 8 digit displays also serve as keys. The knobs to the right of the keys serve as individual volume controls for each cross point. Turning the knob right raises the volume while turning the knob to the left lower it.

Pressing the knob longer mutes the signal . Pressing it again for a longer period returns the volume to the previous level. This feature is can be turned off by the Director software.

To return a cross point volume to the norm, hold the "norm" function key while pressing the key of the desired cross point.

## SIGNALING

The LEDs above the key of a particular destination light up as green when there is a connection to that destination. In incoming call causes the lights to blink green. If the destination is busy the lights above the destination are red. Variations in the display serve to differentiate between "Talk," "Listen," and controlling functions (ex. Closing of relays, etc.)

## REPLY

The reply key automatically displays the name of the calling destination.

By pressing the reply key the last call can be answered, regardless of whether or not that specific destination has a key programmed for it on the control panel. The Director software sets the amount of time that elapses before the key again displays <reply> after a call has been received.

Double clicking on the knob next to the Reply Key allows you to scroll through a list of the last 4 destinations which called the panel. Select the desired destination by pressing longer on the knob.

# Function Keys

## SHIFT

Enables the switching between the two levels of destinations.
RCP1012E: Keys 1 – 12 and keys 13 – 24
RCP1028E: Keys 1 – 28 and keys 29 – 56
DCP1016E: Keys 1 – 16 and keys 17 – 32

If ECP-1016E expansion panels are connected to a control panel the shift key also shifts to the second layer of the expansion panel's keys.

## NORM

Sets the volume of an individual cross point back to the norm level. Hold the NORM key and press the key of the cross point you wish to return to the norm.

## OPT = OPTION

This key calls up the function menu. See the next page for more details.

## HS = HEADSET

Pressing the headset key (HS) switches off the gooseneck microphone and the internal loudspeaker and activates the headset connection. In order to signal the headset use the LED next to the HS key and the panel master volume change color from yellow to green.

## BEEP

Causes an audible tone at the selected destination. Hold the BEEP key and press the desired destination key to activate.

# Function Keys

## Key OPT = Option

Pressing the option (OPT) key causes the standard keys to display the option menu. Here the specific settings of the panel are displayed.

- **PORT ADDRESS** and **PANEL NAME**
  The port where the panel is connected is displayed, along with the panel's display name. Ex. Net 1 Node 2 Port 2.3 Camera

# Technical Specification

## CONTROL PANELS

RCP-1012E

| | |
|---|---|
| Dimensions (W x H x D): | 19" x 1 RU x 56mm |
| Weight: | 1.0 kg |
| Power Consumption: | 30 VA |

RCP-1028E

| | |
|---|---|
| Dimensions (W x H x D): | 19" x 2 RU x 56mm |
| Weight: | 1.8 kg |
| Power Consumption : | 48 VA |

ECP-1016E

| | |
|---|---|
| Dimensions (W x H x D): | 19" x 1 RU x 56mm |
| Weight: | 1.0 kg |
| Power Consumption : | 30 VA |

DCP-1016E

| | |
|---|---|
| Dimensions (W x H x D): | 255 x 77 x 235 mm |
| Weight: | 1.6 kg |
| Power Conumption : | 30 VA |

| | |
|---|---|
| AC-IN: | 85-265V 47-63Hz |

## MATRIX

| | |
|---|---|
| Dimensions (W x H x D): | 19" x 5 RU x 36cm |
| Power Consumtion: | 115 VA |
| AC-IN: | 85-265V 47-63Hz |
| Matrix Size: | 8 x 8 up to 1024 x 1024 |
| Audio quality: | 16 Bit 48 KHz |
| Contact Separation | |
| • Client Cards: | by Transformer |
| • Panels: | by Transformer |
| Fiber Ring Max. Lengths | |
| With CPU-128F: | 500 m (Multi-mode) |
| With CPU-128HP: | 10 km (Single mode) |
| Connectors: | SC Duplex |
| Alarm Contacts | SubD 9 on CPU-Karte |
| • Power Supply Failure | |
| •CPU Failure | |
| • Temperature | |
| Start Time | |
| Cold Start: | 30 sec. |
| Warm Start: | 15 sec. |