

# CONNECTOR WIRING GUIDE

PINOUT DIAGRAMS FOR POPULAR AUDIO, VIDEO & DATA CONNECTORS

Compiled by
Adrian Redmond
CHANNEL 6 TELEVISION DENMARK
from
original manufacturers' documentation

#### **XLR 3-POLE FEMALE**



#### **XLR 3-POLE MALE**



#### FOR BALANCED AUDIO

PIN 1 - SCREEN / SIGNAL GROUND

PIN 2 - SIGNAL + (HOT) PIN 3 - SIGNAL - (COLD

FOR UNBAL PINS 1 & 3 COMMON

#### **XLR 4-POLE FEMALE**



#### **XLR 4-POLE MALE**



#### FOR 12V DC POWER ONLY

PIN 1 = NEG - / GROUND

PIN 2 = (n/c)PIN 3 = (n/c)

PIN 4 = POSITIVE +

#### **XLR 5-POLE FEMALE**



#### **XLR 5-POLE MALE**



PIN 1 = SCREEN / GROUND

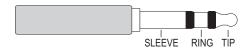
PIN 2 = CH 1 + (HOT)PIN 3 = CH 1 - (COLD) PIN 4 = CH 2 + (HOT)

PIN 5 = CH 2 - (COLD)

#### FOR BALANCED STEREO AUDIO STANDARD FOR

STEREO MICROPHONES AND SONY CAMCORDER MONITOR OP

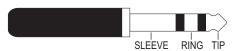
#### PO316 B-GUAGE TRS PATCHFIELD JACK (or BANTAM B-GUAGE JACK)



#### FOR BALANCED MONO AUDIO

TIP = SIGNAL + (HOT) RING = SIGNAL - (COLD SLEEVE = SCREEN / GROUND

#### 1/4" STEREO A-GUAGE JACK



#### FOR UNBALANCED MONO AUDIO

TIP = SIGNAL + (HOT)RING = COMMON WITH GROUND SLEEVE = SCREEN / GROUND

#### 3.5 mm STEREO MINI JACK



#### FOR UNBALANCED STEREO AUDIO

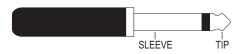
TIP = LEFT + (HOT)RING = RIGHT + (HOT)SLEEVE = SCREEN / GROUND

#### FOR UNBALANCED MONO INSERT

TIP = SEND + (HOT)RING = RETURN + (HOT)

SLEEVE = SCREEN / COMMON GROUND

#### 1/4" MONO A-GUAGE JACK



#### FOR UNBALANCED MONO AUDIO

TIP = SIGNAL + (HOT) SLEEVE = SCREEN / GROUND

#### 3.5 mm MONO MINI JACK



#### 5-POLE 180° STEREO DIN MALE PLUG



#### FOR UNBALANCED STEREO SOURCE

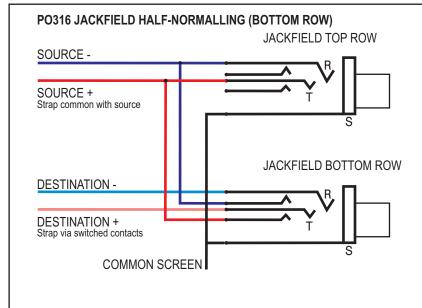
PIN 1 = LEFT OUT PIN 2 = SCREEN / GROUND PIN 3 = LEFT IN PIN 4 = RIGHT OUT

PIN 5 = RIGHT IN

#### **DESTINATION**

PIN 1 = LEFT IN PIN 2 = SCREEN / GROUND

PIN 3 = LEFT OUT PIN 4 = RIGHT IN PIN 5 = RIGHT OUT

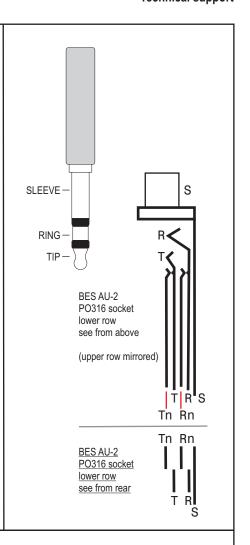


#### **CONNECTION PINOUTS**

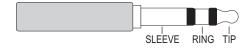
MONO BALANCED - TIP = + RING = - SLEEVE = GROUND / SCREEN

STEREO UNBALANCED - TIP = LEFT RING = RIGHT SLEEVE = GROUND / SCREEN

ALL SOURCES AND DESTINATIONS WIRED BALANCED AT PATCHFIELD AND MODIFIED FOR UNBALANCED AT CONNECTION TO UNIT IF REQUIRED



# PO316 B-GUAGE TRS PATCHFIELD JACK (or BANTAM B-GUAGE JACK)



#### FOR BALANCED MONO AUDIO

TIP = SIGNAL + (HOT) RING = SIGNAL - (COLD SLEEVE = SCREEN / GROUND

#### FOR UNBALANCED MONO AUDIO

TIP = SIGNAL + (HOT) RING = COMMON WITH GROUND SLEEVE = SCREEN / GROUND

#### FOR UNBALANCED STEREO AUDIO

TIP = LEFT + (HOT) RING = RIGHT + (HOT) SLEEVE = SCREEN / GROUND

#### 5-POLE PREH LOCKING DIN MALE PLUG



#### FOR DWIGHT CAVENDISH BALANCED INPUTS

PIN 1 = CHANNEL 1 + (HOT) PIN 2 = SCREEN / GROUND PIN 3 = CHANNEL 1 - (COLD) PIN 4 = CHANNEL 2 + (HOT)PIN 5 = CHANNEL 2 - (COLD)

#### FOR DWIGHT CAVENDISH BALANCED LOOP OUTPUTS

PIN 1 = CHANNEL 1 - (COLD) PIN 2 = SCREEN / GROUND PIN 3 = CHANNEL 1 + (HOT)PIN 4 = CHANNEL 2 - (COLD) PIN 5 = CHANNEL 2 + (HOT)

#### 5-POLE PREH LOCKING DIN MALE PLUG



#### FOR DWIGHT CAVENDISH BALANCED LOOP CABLE Between DC units LOOP OUTPUT & BALANCED INPUT

PIN 1 ----- to ----- PIN 3 PIN 2 ----- to ----- PIN 2 PIN 3 ----- to ----- PIN 1 PIN 4 ----- to ----- PIN 5 PIN 5 ----- to ----- PIN 4

#### **SQN-3M SIDE PANEL CONNECTORS**

#### SOCKET A

Wiring side of mating plug



SOCKET B Wiring side of mating plug



- 1 Nagra 4 mixer connection (Unbalanced 600mV; Rs =  $690\Omega$ )
- 2 Balanced output3 Balanced return3 -50dBm (see note)
- 4 Power input & battery negative (-)
- 5 Battery positive (+)
- 6 Power input positive (+)
- 7 Ground

Note: This output is internally switchable to +8 dBm level (remove top lid)

- 1 Live T Floating line output
- 2 Ground +8 dBm; Rs = 160 ohm) 3 Return Load = 600 ohm

- 4 Live 5 Return 3-10 to +20 dBm; Rin = 27 k.ohm

LINE INPUT (Balanced)

Range -10 to +20 dBm; Rin = 27 k.ohm

MIC INPUTS (150 - 600 ohm IEC standard) Pin 2 phase and positive T power

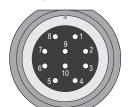
PHONES OUTPUT

Impedence range 50 ohm to 1K.ohm

#### SQN-4 Mk III MULTICONNECTOR (HIROSE 10 POLE) MALE PLUG

PIN 8 = RET LEFT - (COLD) PIN 7 = RET LEFT + (HOT)

PIN 6 = RET RIGHT - (COLD) PIN 5 = RET RIGHT + (HOT)



PIN 1 = OP LEFT + (HOT)

PIN 2 = OP LEFT - (COLD)

PIN 3 = OP RIGHT + (HOT) PIN 4 = OP RIGHT - (COLD)

PIN 9 = GROUND PIN 10 = GROUND

#### 3-POLE 180° DIN MALE PLUG



#### 4-POLE 270° DIN MALE PLUG



#### FOR QUAD PREAMPLIFIER UNBALANCED STEREO INPUT

PIN 1 = (n/c)

PIN 2 = SCREEN / GROUND

PIN 3 = LEFT

PIN 4 = (n/c)

PIN 5 = RIGHT

#### FOR QUAD PREAMPLIFIER UNBALANCED STEREO OUTPUT

PIN 1 = LEFT + (HOT)

PIN 2 = SCREEN / GROUND (COLD)

PIN 3 = RIGHT + (HOT)

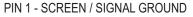
PIN 4 = (n/c)

#### **SONY MXP-42 PORTABLE EFP AUDIO MIXER**

#### **XLR 3-POLE FEMALE MXP-42 INPUT**

### **XLR 3-POLE MALE** (CABLE)

#### BALANCED MICROPHONE LEVEL INPUT CONNECTORS



PIN 2 - SIGNAL + (HOT) PIN 3 - SIGNAL - (COLD



#### **XLR 3-POLE MALE MXP-42 OUTPUTS**



**XLR 3-POLE FEMALE** (CABLE)



#### **BALANCED MAIN AND SUB OUTPUT CONNECTORS**

PIN 1 - SCREEN / SIGNAL GROUND

PIN 2 - SIGNAL + (HOT) PIN 3 - SIGNAL - (COLD

FOR UNBAL PINS 1 & 3 COMMON

#### HIROSE SMC9-4P MALE PLUG (SONY STANDARD)



**MINI XLR 3-POLE FEMALE** (MODIFIED ON CH. 6 MXP-42)



#### FOR MXP-42 EXTERNAL POWER INPUT

PIN 1 = **DC IN +12V** 

PIN 2 = **N/C** 

PIN 3 = N/C

PIN 4 = GROUND

#### FOR MXP-42 EXTERNAL POWER INPUT (MODIFIED UNIT)

PIN 1 = GROUND

PIN 2 = **N/C** 

PIN 3 = **DC IN +12V** 

#### **HIROSE SMC9-4P MALE PLUG**



#### FOR MXP-42 UNBALANCED MONITOR INPUT

PIN 1 = **N/C** PIN 2 = **IP 1** 

PIN 3 = **IP 2** 

PIN 4 = GROUND

#### HIROSE SMC9-6P MALE PLUG



#### FOR MXP-42 REMOTE CONTROL

PIN 1 = CH 1

PIN 2 = CH 2

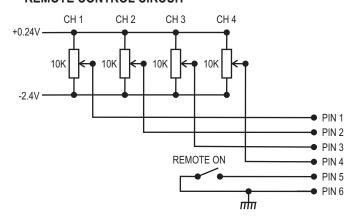
PIN 3 = CH 3

PIN 4 = CH 4

PIN 5 = REMOTE ENABLE

PIN 6 = GROUND

#### REMOTE CONTROL CIRCUIT



#### 6-POLE LOCKING DIN MALE PLUG



#### FOR NAGRA 4.2 ACC (Accessories) connector

PIN 1 = n/c

PIN 2 = GROUND

PIN 3 = LINE INPUT (Min source impedance 47 Kohm)

PIN 4 = Speed correction input

PIN 5 = n/c

PIN 6 = -10 V stabilized power output max 100 mA

#### 7-POLE LOCKING DIN MALE PLUG



#### FOR NAGRA 4.2 MIXER CONNECTOR

PIN 1 = Input, fixed sensitivity 560 V to obtain 0 dB input imp. 9 K ohm

PIN 2 = -10 V STABILIZED OUTPUT Max 50 mA

PIN 3 = Direct amplifier output min load imp. 10 k ohm

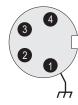
PIN 4 = Unstabilized negative supply voltage, Max 2A

PIN 5 = Playback amplifier output (Min imp. 100 K ohm)

PIN 6 = Motor STOP - connect to -10 V to stop motor (no function in rewind mode)

PIN 7 = GROUND(chassis)

#### 4-POLE LOCKING DIN MALE PLUG



#### FOR NAGRA 4.2 PILOT & CLAPPER INPUTS

PIN 1 = GROUND

PIN 2 = CLAPPER - oscillator control input (see manual)

PIN 3 = X-TAL 50 or 60 Hz internal generator output

PIN 4 = Pilot signal input imp 50 K ohm input level 0.5 - 25 V

#### 6-POLE LOCKING DIN MALE PLUG



#### FOR NAGRA 4.2 POWER PACK

PIN 1 = - BATTERY (Negative pole of battery compartment)

PIN 2 = + BATTERY (Negative pole of battery compartment)

PIN 3 = PILOT PLAYBACK OUTPUT

PIN 4 = Speed correction input

PIN 5 = EXTERNAL -12 to -30 V input for external PSU negative polarity

PIN 6 = -10 R -10 V stabilized voltage output during record - max 100 mA

#### 6-POLE LOCKING DIN MALE PLUG



#### FOR NAGRA III POWER PACK

PIN 1 = - 18V BATTERY (Negative pole of battery compartment)

PIN 2 = EARTH (Positive pole of battery compartment)

PIN 3 = INPUT 10 mV

PIN 4 = BH: Start/Stop PHO: Automatic SLO (See manual)

PIN 5 = EXTERNAL -12 to -30 V input for external PSU negative polarity

PIN 6 = -10.5 V stabilized voltage output during record

#### 6-POLE LOCKING DIN MALE PLUG



#### FOR NAGRA III PILOT INPUT

PIN 1 = Pilot signal input

PIN 2 = EARTH

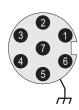
PIN 3 = EARTH

PIN 4 = Speed correction (SLO) (See manual)

PIN 5 = Pilot signal output

PIN 6 = Startmark Input

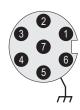
#### 7-POLE LOCKING DIN MALE PLUG



#### FOR NAGRA IV-S STEREO UNBALANCED INPUTS

- PIN 1 = CHANNEL 2 (RIGHT) INPUT (Min imp. 47 Kohm)
- PIN 2 = -10 V STABILIZED OUTPUT Max 100 mA
- PIN 3 = CHANNEL 1 (LEFT) INPUT (Min imp. 47 Kohm)
- PIN 4 = n/cPIN 5 = n/c
- PIN 6 = n/c
- PIN 7 = GROUND for input signals

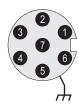
#### 7-POLE LOCKING DIN MALE PLUG



#### FOR NAGRA IV-S EXTERNAL NRS (UNBALANCED)

- PIN 1 = EXT NRS OUTPUT CHANNEL 2 (RIGHT)
- PIN 2 = -10 V STABILIZED OUTPUT Max 100 mA
- PIN 3 = EXT NRS OUTPUT CHANNEL 1 (LEFT)
- PIN 4 = n/c
- PIN 5 = EXT NRS INPUT CHANNEL 1 LEFT (Min imp. 47 Kohm) PIN 6 = EXT NRS INPUT CHANNEL 2 (RIGHT) (min imp. 47 Kohm)
- PIN 7 = GROUND for input signals

#### 7-POLE LOCKING DIN MALE PLUG



#### FOR NAGRA IV-S STEREO UNBALANCED LINE OUTPUTS

- PIN 1 = CHANNEL 2 (RIGHT) OUTPUT (Min imp load 500 Ohm)
- PIN 2 = -10 V STABILIZED OUTPUT Max 100 mA
- PIN 3 = CHANNEL 1 (LEFT) OUTPUT (Min imp load 500 Ohm)
- PIN 4 = V unstab: Unstabilized power supply voltage
- PIN 5 = -10R stabilized voltage in record mode only Max 100 mA
- PIN 6 = STOP Input for motor stop connect to -10V to stop motor
- PIN 7 = GROUND

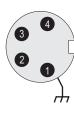
#### 7-POLE LOCKING DIN MALE PLUG



#### FOR NAGRA IV-S CUE

- PIN 1 = Sync reference
- PIN 2 = -10 V STABILIZED OUTPUT Max 100 mA
- PIN 3 = Pilot output
- PIN 4 = Speed correction input
- PIN 5 = -10 V FM connect to -10V to activate modulator
- PIN 6 = Cue Output
- PIN 7 = GROUND

#### 4-POLE LOCKING DIN MALE PLUG



#### FOR NAGRA PILOT INPUT

- PIN 1 = GROUND
- PIN 2 = CLAPPER Reference oscillator or crystal pilot gen input
- PIN 3 = X-TAL 50 or 60 Hz internal generator output
- PIN 4 = Pilot signal input

#### 6-POLE LOCKING DIN MALE PLUG



#### FOR NAGRA IV-S POWER PACK

- PIN 1 = BATTERY (Negative pole of battery compartment)
- PIN 2 = + BATTERY (Positive pole of battery compartment)
- PIN 3 = STOP Connect -10 V to stop motor
- PIN 4 = Speed correction input
- PIN 5 = EXTERNAL -12 to -30 V input for external PSU negative polarity
- PIN 6 = -10 g -10 V stabilized power output max 100 mA

#### 5-POLE HIROSE MALE PLUG



#### FOR NAGRA IV-S TIME CODE INPUT / OUTPUT

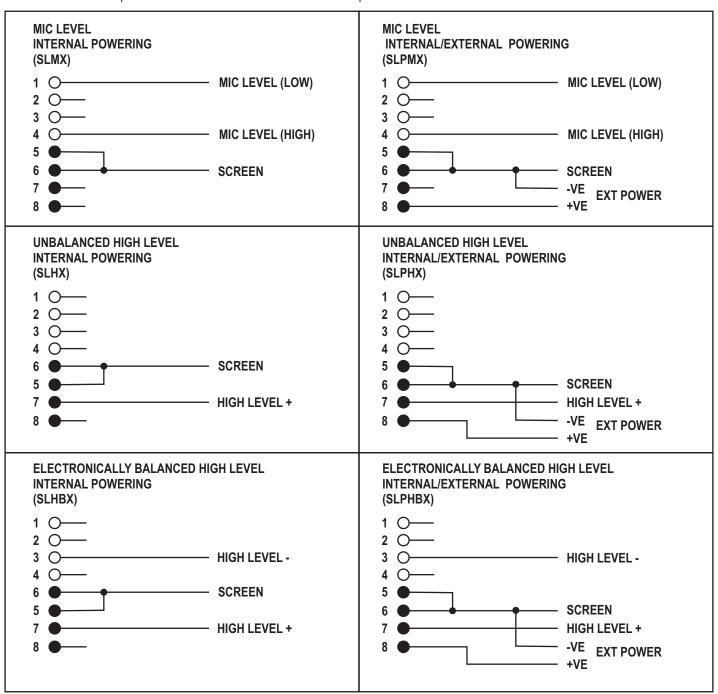
- PIN 1 = GROUND
- PIN 2 = TIME CODE INPUT
- PIN 3 = SERIAL INPUT (see manual)
- PIN 4 = TIME CODE PLAY
- PIN 5 = TIME CODE OUTPUT

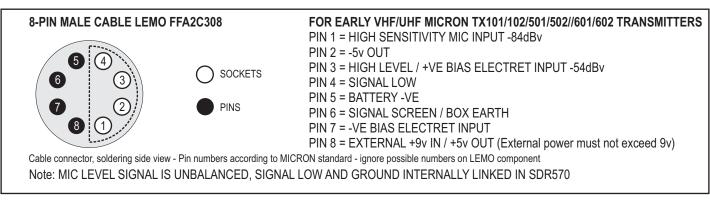
#### 6-PIN MALE CABLE LEMO FGG.OB.306.CLAD 52Z FOR LATER UHF MICRON SDR570.1 / 570.2 WIRELESS RECEIVERS PIN 1 = MIC LEVEL OP PIN 2 = EXTERNAL SUPPLY +VE PIN 3 = HIGH LEVEL OP SIGNAL + PIN 4 = HIGH LEVEL OP SIGNAL -PIN 5 = EXTERNAL SUPPLY -VE/GROUND PIN 6 = INTERNAL BATTERY -VE Note: MIC LEVEL SIGNAL IS UNBALANCED, SIGNAL LOW AND GROUND INTERNALLY LINKED IN SDR570 MICRON 6-PIN LEMO STANDARD OUTPUT CABLES (by Micron part number) LEMO FGG.OB.306.CLAD 52Z (MALE) XLR 3-POLE MALE HIROSE HR10-7P-4P (SONY 12V POWER OP) Note: All LEMO connectors must be fitted with a link between pins 5 & 6 MIC LEVEL (-37dbv) INTERNAL POWER ONLY (SD6LMX) SDR570.1/.2 1 O 2 🔾 3 🔾 LEMO Screen **SILVER** 2 **XLR** 3 ELECTRONICALLY BALANCED HIGH LEVEL (+6dBm variable) INTERNAL POWER ONLY (SD6LHBX) SDR570.1/.2 1 0-2 🔾 3 () **LEMO** Screen 5 🔾 **BLACK** 2 XLR ELECTRONICALLY BALANCED MIC LEVEL (-37dBv variable) INTERNAL POWER ONLY (SD6LHBX/A) SDR570.1/.2 1 0-2 🔾 **LEMO** 5 C 1 **SILVER** 2 XLR 3 (RED SLEEVE) ELECTRONICALLY BALANCED HIGH LEVEL (+6dBm variable) WITH EXTERNAL POWER (SD6LPHBX) SDR570.1/.2 1 0-**SONY POWER 12V** 2 2 ()-HIROSE 3 3 () HR10-7P-4P **LEMO** 4 0 Screen 5 ( **BLACK** 2 XLR ELECTRONICALLY BALANCED MIC LEVEL (-37dBv variable) WITH EXTERNAL POWER (SD6LPHBX/A) SDR570.1/.2 1 O **SONY POWER 12V** 2 2 0 HIROSE 3 3 🔿 LEMO HR10-7P-4P 4 O Screen **BLACK** 2 XLR 3

# 8-PIN MALE CABLE LEMO FFA2C308 FOR EARLY VHF MICRON SDR570.1 / 570.3 WIRELESS RECEIVERS PIN 1 = MIC LEVEL OP LOW PIN 2 = SIGNAL STRENGTH (H) VOLTS PIN 3 = HIGH LEVEL OP SIGNAL PIN 4 = MIC LEVEL OP HIGH PIN 5 = INTERNAL BATTERY -VE PIN 6 = EXTERNAL SUPPLY -VE/GROUND PIN 7 = HIGH LEVEL OP SIGNAL + PIN 8 = EXTERNAL SUPPLY +VE Cable connector, soldering side view - Pin numbers according to MICRON standard - ignore possible numbers on LEMO component Note: MIC LEVEL SIGNAL IS UNBALANCED, SIGNAL LOW AND GROUND INTERNALLY LINKED IN SDR570

#### MICRON 8-PIN LEMO STANDARD OUTPUT CABLES (by Micron part number)

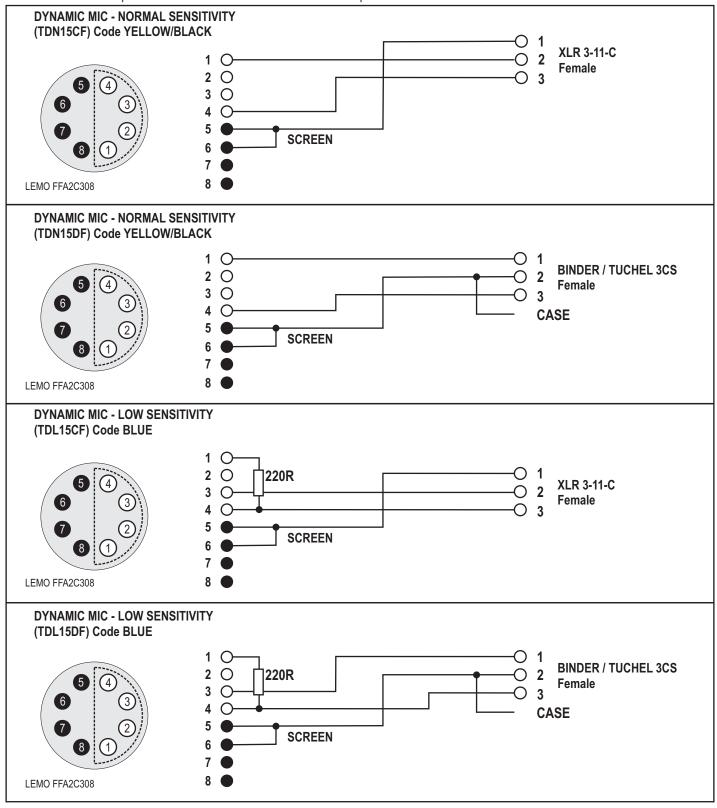
Note: All LEMO 8-pin connectors must be fitted with a link between pins 5 & 6

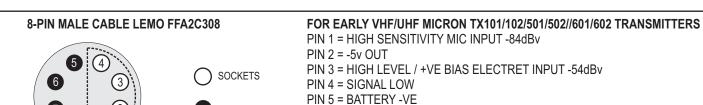




#### MICRON 8-PIN LEMO STANDARD INPUT CABLES (by Micron part number)

Note: All LEMO 8-pin connectors must be fitted with a link between pins 5 & 6



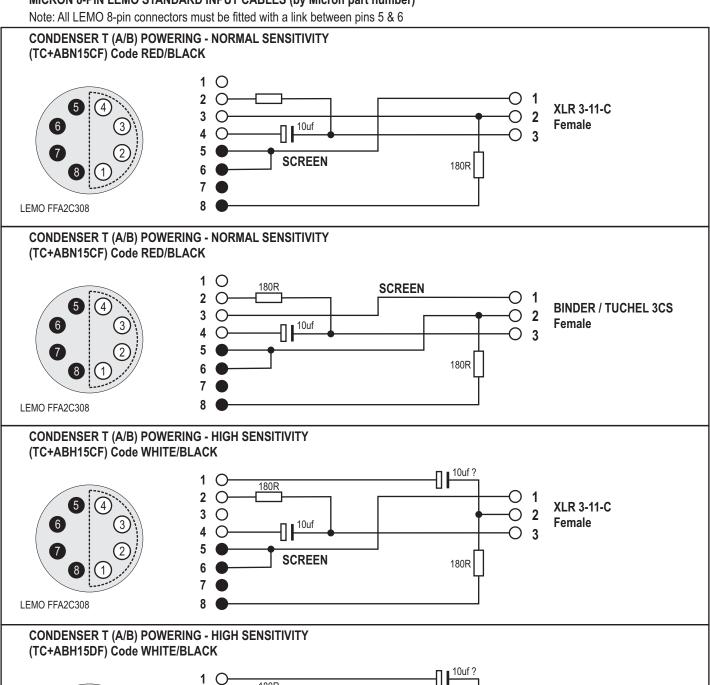


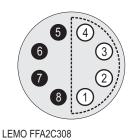
PIN 6 = SIGNAL SCREEN / BOX EARTH PIN 7 = -VE BIAS ELECTRET INPUT

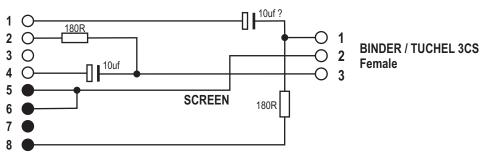
PIN 8 = EXTERNAL +9v IN / +5v OUT (External power must not exceed 9v)

Cable connector, soldering side view - Pin numbers according to MICRON standard - ignore possible numbers on LEMO component Note: MIC LEVEL SIGNAL IS UNBALANCED. SIGNAL LOW AND GROUND INTERNALLY LINKED IN SDR570

#### MICRON 8-PIN LEMO STANDARD INPUT CABLES (by Micron part number)









PIN 1 = HIGH SENSITIVITY MIC INPUT -84dBv

PIN 2 = -5v OUT

PIN 3 = HIGH LEVEL / +VE BIAS ELECTRET INPUT -54dBv

PIN 4 = SIGNAL LOW

PIN 5 = BATTERY -VE PIN 6 = SIGNAL SCREEN / BOX EARTH

PIN 7 = -VE BIAS ELECTRET INPUT

PIN 8 = EXTERNAL +9v IN / +5v OUT (External power must not exceed 9v)

FOR EARLY VHF/UHF MICRON TX101/102/501/502//601/602 TRANSMITTERS

Cable connector, soldering side view - Pin numbers according to MICRON standard - ignore possible numbers on LEMO component

Note: MIC LEVEL SIGNAL IS UNBALANCED, SIGNAL LOW AND GROUND INTERNALLY LINKED IN SDR570

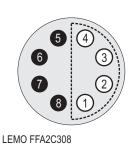
#### MICRON 8-PIN LEMO STANDARD INPUT CABLES (by Micron part number)

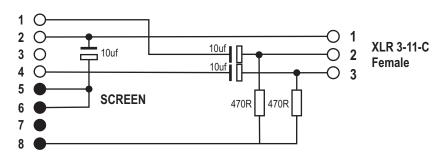
SOCKETS

Note: All LEMO 8-pin connectors must be fitted with a link between pins 5 & 6

#### **CONDENSER LOW VOLTAGE PHANTOM POWERING - NORMAL SENSITIVITY** (TC+PN15CF) Code GREEN/BLACK

When using TC+P cables do not allow microphone to touch transmitter case

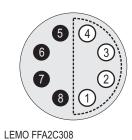


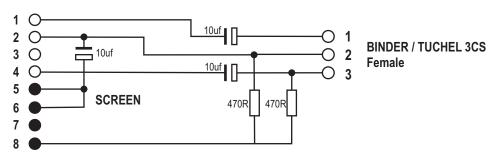


#### CONDENSER LOW VOLTAGE PHANTOM POWERING - NORMAL SENSITIVITY

(TC+PN15DF) Code GREEN/BLACK

When using TC+P cables do not allow microphone to touch transmitter case

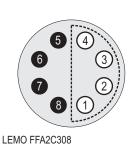


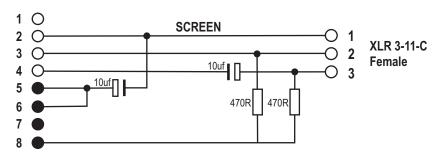


#### **CONDENSER LOW VOLTAGE PHANTOM POWERING - LOW SENSITIVITY**

(TC+PL15CF) Code GREEN/BLUE

When using TC+P cables do not allow microphone to touch transmitter case

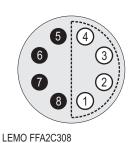


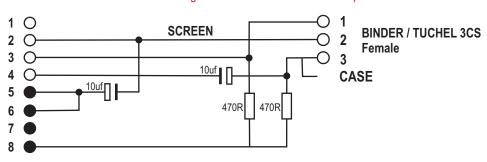


#### **CONDENSER LOW VOLTAGE PHANTOM POWERING - LOW SENSITIVITY**

(TC+PL15DF) Code GREEN/BLUE

When using TC+P cables do not allow microphone to touch transmitter case

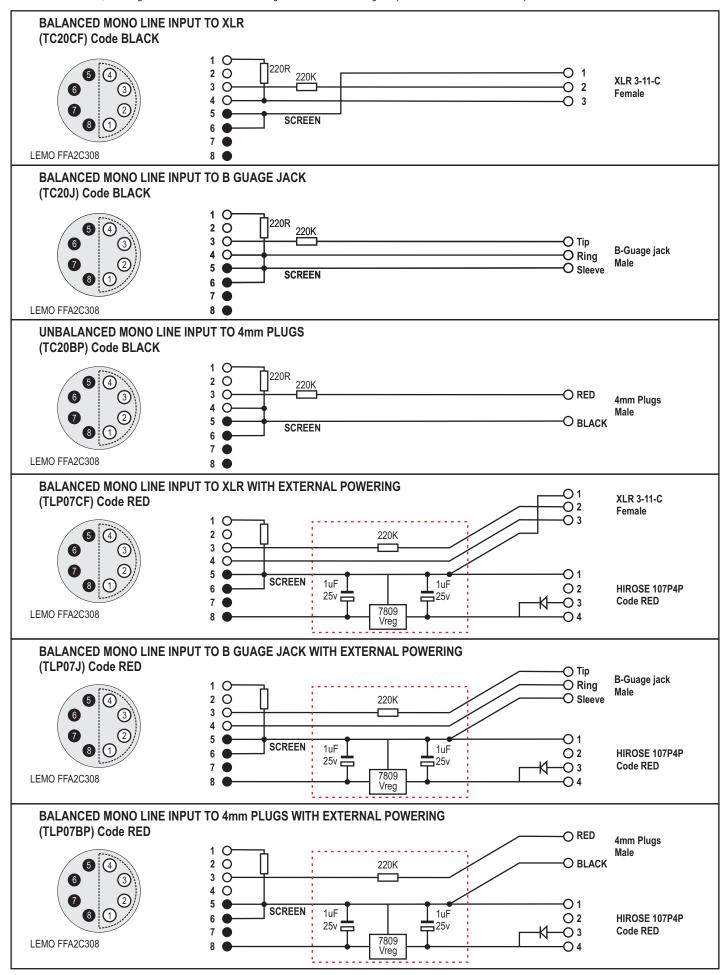




#### MICRON 8-PIN LEMO STANDARD INPUT CABLES (by Micron part number)

Note: All LEMO 8-pin connectors must be fitted with a link between pins 5 & 6

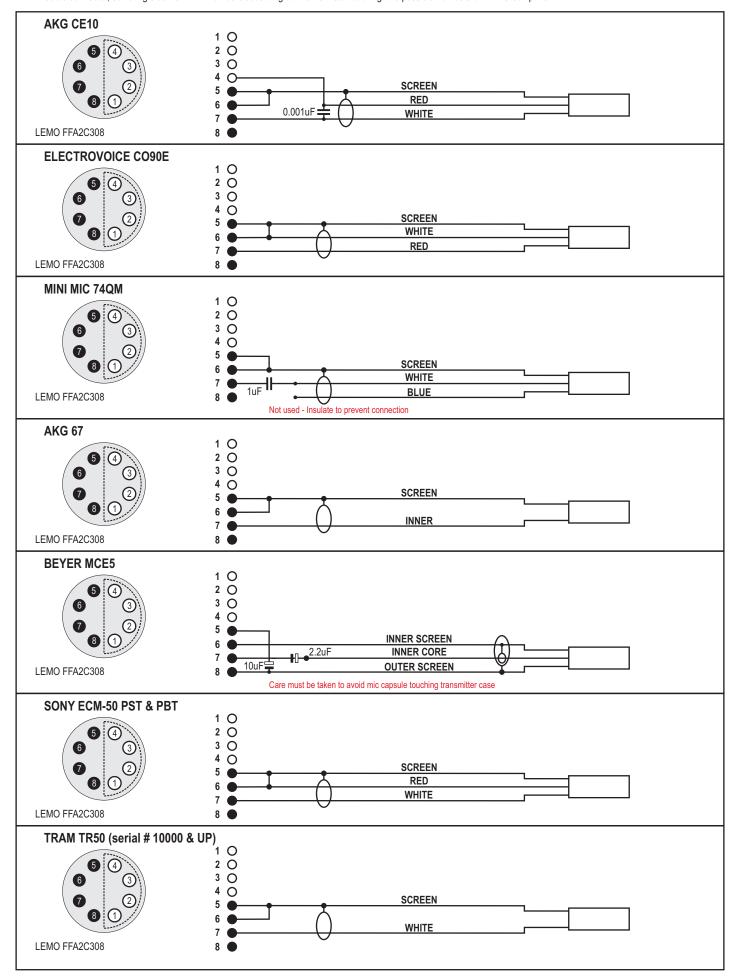
Cable connector, soldering side view - Pin numbers according to MICRON standard - ignore possible numbers on LEMO component



#### **MICRON 8-PIN LEMO MICROPHONE CONNECTIONS**

Note: All LEMO 8-pin connectors must be fitted with a link between pins 5 & 6

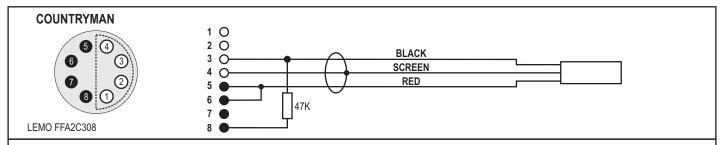
Cable connector, soldering side view - Pin numbers according to MICRON standard - ignore possible numbers on LEMO component



#### **MICRON 8-PIN LEMO MICROPHONE CONNECTIONS**

Note: All LEMO 8-pin connectors must be fitted with a link between pins 5 & 6

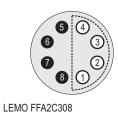
Cable connector, soldering side view - Pin numbers according to MICRON standard - ignore possible numbers on LEMO component



#### FOR MICRON 500 SERIES ONLY (TX501 / TX502)

SONY ECM-55 (BT, ST, BPT, SPT) SONY ECM-77 (BT, ST, BPT, SPT) Code BROWN When used as a cable microphone all battery packs can be used.

(When using battery packs with single core cable, link pins 5,6, and 4 in the battery pack Lemo connector)

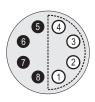




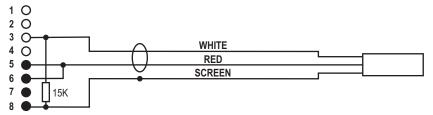
#### FOR MICRON 100 SERIES (TX101 / TX102) & 500 SERIES (TX501 / TX502)

SONY ECM-55 (BT, ST, BPT, SPT) SONY ECM-77 (BT, ST, BPT, SPT) Code YELLOW When used as a cable microphone, ONLY battery packs with two-core cable can be used. (PBT, PST, BPT, SPT types)

**CAUTION - Care must be taken to avoid the microphone body touching the transmitter case.** 



LEMO FFA2C308

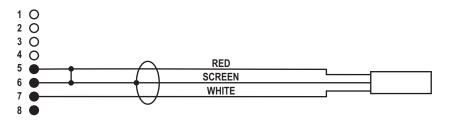


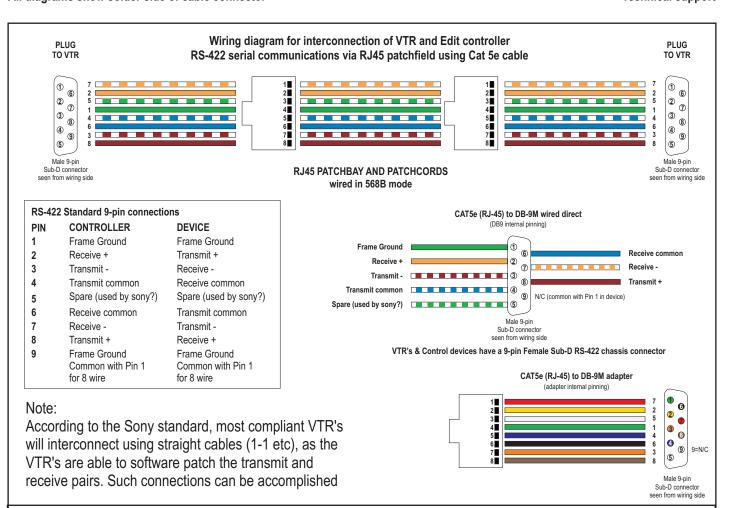
#### FOR MICRON 100 SERIES (TX101 / TX102) & 500 SERIES (TX501 / TX502)

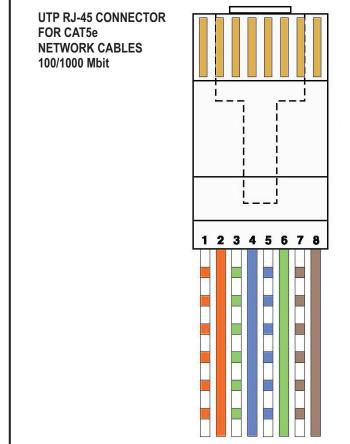
SONY ECM-55 (BPT, SPT) SONY ECM-77 BPT, SPT) Code BLACK

LEMO FFA2C308

When used as a cable microphone,
ONLY battery packs with single-core cable can be used. (ECM-50B / ECM-30 types)





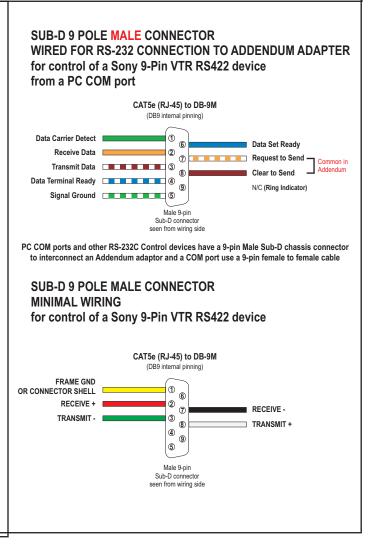


WH OR

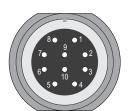
GR

BL **TIA 568 B** (with clip down)

OR



#### 10-POLE HIROSE LOCKING MALE PLUG



# FOR AVID PINNACLE CHROME HD BOB PSU CABLE (CONNECTION TO PSU)

PIN 1 = V1 +5V DC (RED) PIN 2 = V1 +5V DC (RED) PIN 3 = COMMON (BLACK) PIN 4 = COMMON (BLACK) PIN 5 = COMMON (BLUE) PIN 6 = V2 +15V DC (YELLOW)

PIN 7 = V2 +15V DC (YELLOW) PIN 8 = V3 -15V DC (WHITE)

PIN 9 = GROUND PIN 10 = GROUND

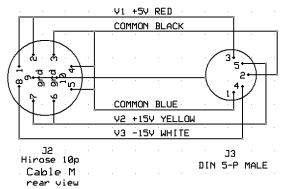
#### 5-POLE 180° PREH LOCKING DIN MALE PLUG



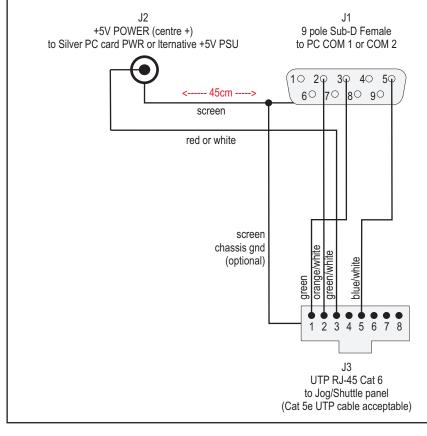
# FOR AVID PINNACLE CHROME HD BOB PSU CABLE (CONNECTION TO BOB)

PIN 1 = COMMON (BLUE) PIN 2 = COMMON (BLACK) PIN 3 = V1 +5V DC (RED) PIN 4 = V3 -15V DC (WHITE) PIN 5 = V2 +15V DC (YELLOW) CHASSIS = GROUND

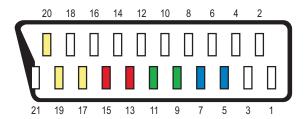
output cable colours identical to OEM Astrodyne SP45-303 PSU cable



#### 9-PIN SERIAL TO RJ-45 SPECIAL CABLE FOR LIQUID JOG-SHUTTLE CONTROL







STANDARD SCART PINOUT CHECK WITH SPECIFIC EQUIPMENT MANUAL BEFORE MAKING CUSTOM SCART CABLES

Pin 1 = Audio output (right) Pin 2 Audio input (right) Pin 3 Audio output (left/mono)

Pin 4 Audio ground

Pin 5 RGB Blue ground (pin 7 ground)

Pin 6 Audio input (left/mono) Pin 7 RGB Blue up

S-Video C down [a]

Component PB up [b]

Pin 8 Status & Aspect Ratio up [c]

0-0.4 V ? off 5-8 V? on/16:9 9.5-12 V? on/4:3

Pin 9 = RGB Green ground (pin 11 ground)

Pin 10 = Clock / Data 2 [d]Control bus (AV.link)

Pin 11 = RGB Green up Component Y up [b]

Pin 12 = Reserved / Data 1 [d]

Pin 13 = RGB Red ground (pin 15 ground)

Pin 14 = Usually Data signal ground (pins 8, 10 & 12 ground)

Pin 15 = RGB Red up S-Video C up Component PR up [b]

Pin 16 = Blanking signal up RGB-selection voltage up 0-0.4 V ? composite

1-3 V ? RGB

Pin 17 = Composite video ground (pin 19 & 20 ground)

Pin 18 = Blanking signal ground (pin 16 ground)

Pin 19 = Composite video output S-Video Y output

Pin 20 = Composite video input

S-Video Y input

Pin 21 = Shell/Chassis [e]

Rarely supported. [a]

[b] Non-standard extension.

[c] From STB to VCR when used for unattended recording

[d] Protocol not standardised, e.g. D<sup>2</sup>B.

This pin is part of the shell/surround of the male connector. It is often [e] connected to the overall screen in a cheap cable. In equipment, Pin 21 should be connected separately to the chassis, but often it is merely connected to all the other ground pins.

> output/input denotes symmetrical links up/down denotes links to/from the TV set

Source = http://en.wikipedia.org/wiki/Scart

#### 15-POLE SUB-D CABLE MALE PLUG

#### (8<sub>0</sub> 7<sub>0</sub> 6<sub>0</sub> 5<sub>0</sub> 4<sub>0</sub> 3<sub>0</sub> 2<sub>0</sub> 1<sub>0</sub> 15° 14° 13° 12° 11° 10° 9°

#### FOR TEKTRONIX 1781R WAVEFORM/VECTORSCOPE X-Y AUDIO INPUT ONLY

Pin 1 = -X input LEFT - (cold)

Pin 2 = n/c

Pin 3 +X input LEFT+ (hot)

Pin 4 n/c

Pin 5 -Y input RIGHT - (cold)

Pin 6 = n/c

+Y input RIGHT + (hot) Pin 7 =

Pin 8 = n/c

Pin 9 = -X input LEFT - (cold)

Pin 10 = **GROUND** 

Pin 11 +X high gain input LEFT + (hot)

Pin 12 = **GROUND** 

Pin 13 = -Y input RIGHT - (cold)

Pin 14 = n/c

Pin 15 +Y high gain input RIGHT + (hot)

#### TERMINAL BLOCK CONNECTION FOR BALANCED AUDIO INPUTS AND OUTPUTS - VIDEOTEK RS-10A 10-1 STEREO SWITCH

#### SWITCHER CHANNEL BALANCED STEREO INPUTS FIVE SCREW TERMINALS

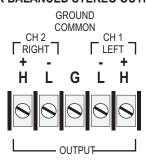
#### GROUND COMMON CH<sub>2</sub> CH 1 □ LEFT □ [RIGHT] G - IP CH # ·

FOR EACH BALANCED STEREO INPUT AND OUTPUT

INPUTS ARE ARRANGED IN A SINGLE CONNECTOR ROW NUMBERING CH 10 TO CH 1 FROM LEFT TO RIGHT WHEN VIEWED FROM REAR OF RS-10A

H = SIGNAL + (HOT) L = SIGNAL - (COLD) G = COMMON GROUND

#### SWITCHER BALANCED STEREO OUTPUT



OUTPUTS ARE LOCATED AT RIGHT END OF CONNECTOR ROW WHEN VIEWED FROM REAR

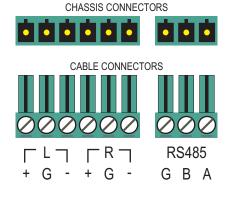
+ = SIGNAL + (HOT) - = SIGNAL - (COLD) G = COMMON GROUND

ENSURE THAT SCREEN/GROUND TAKES THE STRAIN OF THE CABLE

#### TERMINAL BLOCK CONNECTIONS FOR BALANCED AUDIO INPUTS AND OUTPUTS - KRAMER SWITCHES

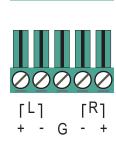
#### **KRAMER VS848 MATRIX SWITCH**

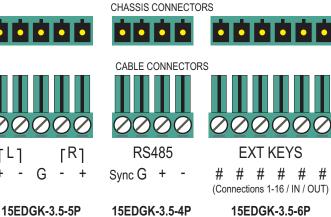
#### KRAMER VS162AV MATRIX SWITCH



15EDGK-3.5-3P

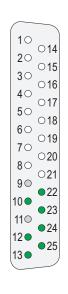
15EDGK-3.5-6P

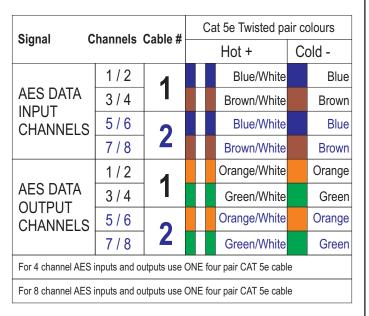




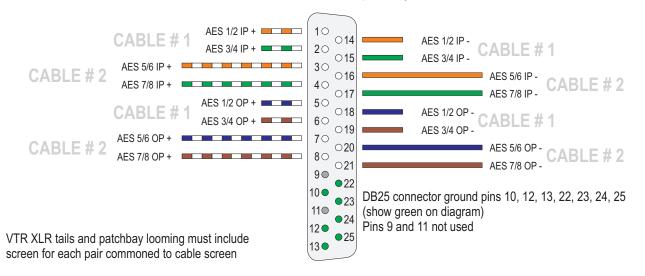
#### 25-POLE SUB-D CABLE MALE PLUG FOR YAMAHA 03D MIXER CD8AES DIGITAL AUDIO INTERFACE

Signal	Pin#				
Oignai	Hot +	Cold -			
	1/2	1	14		
AES DATA INPUT	3/4	2	15		
CHANNELS	5/6	3	16		
	7/8	4	17		
	1/2	5	18		
AES DATA OUTPUT	3/4	6	19		
CHANNELS	5/6	7	20		
	7/8	8	21		
Unused			9, 11		
GROUND	10, 12, 13, 22, 23, 24, 25				





#### 8 Channel AES to and from YAMAHA O3D MIXER CD8AES from AES patchbay



#### LEGACY (INSTALLED) 4 x Twisted pair (Cat5e) cable for AES connections (FROM AES PATCHBAY TO VTR 5)

Signal AES Channels			Cat 5e Twisted pair colours			
			Hot +		Cold -	
AES IP	1/2			Blue/White		Blue
CHANNELS	3 / 4	Twisted pair		Brown/White		Brown
AES OP	1/2	Cable		Orange/White		Orange
CHANNELS	3 / 4			Green/White		Green

VTR XLR tails and patchbay looming must include screen for each pair commoned to cable screen

#### HOUSE STANDARD) for 4 x Twisted pair (Cat5e) cable for AES connections to devices with up to 2 stereo AES in and outputs

Signal AES Channels			Cat 5e Twisted pair colours			
			Hot +		Cold -	
AES IP	1/2			Blue/White		Blue
CHANNELS	3 / 4	Twisted pair		Brown/White		Brown
AES OP	1/2	Cable		Orange/White		Orange
CHANNELS	3 / 4			Green/White		Green

VTR XLR tails and patchbay looming must include screen for each pair commoned to cable screen

#### 50-POLE SUB-D CABLE FEMALE SOCKET

34 🔾

10

#### 180 35 🔾 20 190 36 🔾 30 200 37 0 40 210 38 🔾 50 220 39 🔾 60 230 40 🔾 70 240 80 41 0 250 42 0 90 260 43 🔾 100 270 44 🔾 110 280 45 🔾 120 290 46 🔾 130 30 🔾 47 0 140 310 48 🔾 150 320 49 🔾 160 330

#### FOR EDIT1-CHROME HD DESK AUDIO PATCHBAY Patchbay #2 - middle row - connections

to Patchbay #3 - lower row from Multicore #2 from VTR rack

M/C COLOUR		TO#	GND	-	+	FUNCTION	
			121	1	18	34	ADA 1 BAL IP LEFT
			122	2	19	35	ADA 1 BAL IP RIGHT
			129	3	20	36	NLE 1 CHROME HD IP 1
			130	4	21	37	NLE 1 CHROME HD IP 2
			131	5	22	38	NLE 1 CHROME HD IP 3
			132	6	23	39	NLE 1 CHROME HD IP 4
			143/144	7	24	40	EDIT1-530 ST. UNBAL IP
			n/c	8	25	41	
			n/c	9	26	42	
			n/c	10	27	43	
			n/c	11	28	44	
			n/c	12	29	45	
			n/c	13	30	46	
			n/c	14	31	47	
			n/c	15	32	48	
			n/c	16	33	49	
			n/c	17		50	
						- 0	

#### 50-POLE SUB-D CABLE MALE PLUG

50 🔾

170

#### 34 • 35 ● 36 37 21 • 38 • 22 • 39 23 • 40 ● 24 • 41 • 25 42 **•** 26 10 • 43 ● 27 11 • 28 • 12 • 45 ● 29 • **13** • 46 **•** 30 ● 47 **•** 31 **15** • 48 ● 32 49 ● 16 • 33 • 50

#### FOR EDIT1-CHROME HD DESK AUDIO PATCHBAY

Patchbay #3 - lower row - connections

to Patchbay #2 - middle row from Multicore #2 from VTR rack

#### PINOUT NUMBERING THE SAME AS ABOVE

#### NOTE:

ALL CONNECTIONS WIRED AS BALANCED MONO **ON PATCHBAYS** 

#### **EXCEPT**

143/144 EDIT1-530 STEREO UNBAL

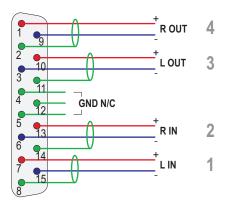
(PLUS OTHER PC AUDIO LINES NOT COVERED BY THIS LINK CABLE)

Which use a single twin-screed cable for stereo unbalanced

connection to two PO316 sockets

# 15-POLE SUB-D CABLE MALE PLUG PCX924 J2 - ANALOGUE AUDIO

#### **Pinning 1:1 MALE TO MALE**



# FOR ANALOGUE INTERCONNECTION BETWEEN DIGIGRAM PCX924 AUDIO CARD AND SONIFEX DAW-P

Pin 1 = R OUT + Pin 2 = GROUND Pin 3 = L OUT -Pin 4 = GROUND

Pin 5 = GROUND (MIC IN - on PCX924-HR MIC card)

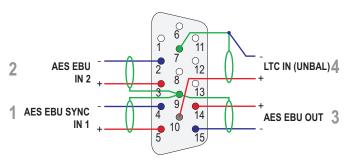
Pin 6 = R IN -Pin 7 = L IN + Pin 8 = GROUND Pin 9 = R OUT -Pin 10 = L OUT + Pin 11 = GROUND

Pin 12 = GROUND (MIC IN + on PCX924-HR MIC card)

Pin 13 = R IN +Pin 14 = GROUND

# 15-POLE DE-15 CABLE MALE PLUG PCX924 J2 - DIGITAL AUDIO

#### Pinning 1:1 MALE TO MALE



GPI & LTC not connected for DAW-P configuration

# FOR DIGITAL INTERCONNECTION BETWEEN DIGIGRAM PCX924 AUDIO CARD AND SONIFEX DAW-P

Pin 1 = GPI OUT 1A Pin 2 = AES EBU IN 2-Pin 3 = AES EBU IN 2+ Pin 4 = AES EBU / SYNC IN 1-Pin 5 = AES EBU / SYNC IN 1+ Pin 6 = GPI INPUT 2

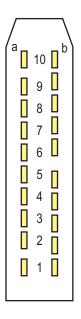
Pin 7 = GROUND / GPI INPUT COMMON

Pin 8 = GPI INPUT 1
Pin 9 = GROUND
Pin 10 = LTC IN
Pin 11 = GPI OUT 1B
Pin 12 = GPI OUT 2A
Pin 13 = GPI OUT 2B

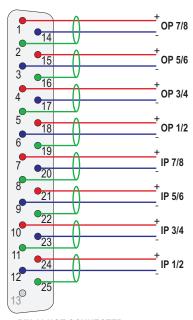
Pin 14 = AES EBU OUT + Pin 15 = AES EBU OUT -

#### **20-POLE SEIMANS DIN CONNECTOR**

#### NOT IMPLEMENTED



#### 25-POLE SUB-D CABLE MALE PLUG AVID NITRIS DX AES/EBU INPUTS/OUTPUTS



**PIN 13 NOT CONNECTED** 

# FOR AES/EBU INTERCONNECTION WITH AVID NITRIS DX BOX

#### **AES/EBU LINE INPUT**

Pin 25 - Input Channel 1/2 GROUND

Pin 24 - Input Channel 1/2 +

Pin 12 - Input Channel 1/2 -

Pin 11 - Input Channel 3/4 GROUND

Pin 10 - Input Channel 3/4 +

Pin 23 - Input Channel 3/4 -

Pin 22 - Input Channel 5/6 GROUND

Pin 21 - Input Channel 5/6 +

Pin 9 - Input Channel 5/6 -

Pin 8 - Input Channel 7/8 GROUND

Pin 7 - Input Channel 7/8 +

Pin 20 - Input Channel 7/8 -

#### **AES/EBU LINE OUTPUT**

Pin 19 - Output Channel 1/2 GROUND

Pin 18 - Output Channel 1/2 +

Pin 6 - Output Channel 1/2 -

Pin 5 - Output Channel 3/4 GROUND

Pin 4 - Output Channel 3/4 +

Pin 17 - Output Channel 3/4 -

Pin 16 - Output Channel 5/6 GROUND

Pin 15 - Output Channel 5/6 +

Pin 3 - Output Channel 5/6 -

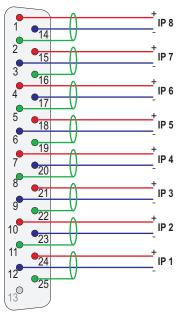
Pin 2 - Output Channel 7/8 GROUND

Pin 1 - Output Channel 7/8 +

Pin 14 - Output Channel 7/8 -

Note: PIN 13 is not connected

# 25-POLE SUB-D CABLE MALE PLUG AVID NITRIS HD ANALOGUE INPUTS (not Nitris DX)



**PIN 13 NOT CONNECTED** 

# FOR ANALOG INTERCONNECTION WITH AVID NITRIS HD BOX

#### **ANALOG LINE INPUT**

Pin 25 - Input Channel 1 GROUND

Pin 24 - Input Channel 1 +

Pin 12 - Input Channel 1 -

Pin 11 - Input Channel 2 GROUND

Pin 10 - Input Channel 2 +

Pin 23 - Input Channel 2 -

Pin 22 - Input Channel 3 GROUND

Pin 21 - Input Channel 3 +

Pin 9 - Input Channel 3 -

Pin 8 - Input Channel 4 GROUND

Pin 7 - Input Channel 4 +

Pin 20 - Input Channel 4 -

Pin 19 - Input Channel 5 GROUND

Pin 18 - Input Channel 5 +

Pin 6 - Input Channel 5 -

Pin 5 - Input Channel 6 GROUND

Pin 4 - Input Channel 6 +

Pin 17 - Input Channel 6 -

Pin 16 - Input Channel 7 GROUND

Pin 15 - Input Channel 7 +

Pin 3 - Input Channel 7 -

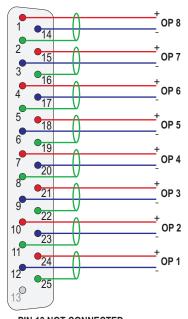
Pin 2 - Input Channel 8 GROUND

Pin 1 - Input Channel 8 +

Pin 14 - Input Channel 8 -

Note: PIN 13 is not connected

#### 25-POLE SUB-D CABLE MALE PLUG AVID NITRIS HD ANALOGUE OUTPUTS (not Nitris DX)



**PIN 13 NOT CONNECTED** 

# FOR ANALOG INTERCONNECTION WITH AVID NITRIS HD BOX

#### **ANALOG LINE OUTPUT**

Pin 25 - Output Channel 1 GROUND

Pin 24 - Output Channel 1 +

Pin 12 - Output Channel 1 -

Pin 11 - Output Channel 2 GROUND

Pin 10 - Output Channel 2 +

Pin 23 - Output Channel 2 -

Pin 22 - Output Channel 3 GROUND

Pin 21 - Output Channel 3 +

Pin 9 - Output Channel 3 -

Pin 8 - Output Channel 4 GROUND

Pin 7 - Output Channel 4 +

Pin 20 - Output Channel 4 -

Pin 19 - Output Channel 5 GROUND

Pin 18 - Output Channel 5 +

Pin 6 - Output Channel 5 -

Pin 5 - Output Channel 6 GROUND

Pin 4 - Output Channel 6 +

Pin 17 - Output Channel 6 -

Pin 16 - Output Channel 7 GROUND

Pin 15 - Output Channel 7 +

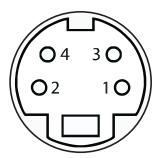
Pin 3 - Output Channel 7 -

Pin 2 - Output Channel 8 GROUND

Pin 1 - Output Channel 8 +

Pin 14 - Output Channel 8 -

Note: PIN 13 is not connected



#### S-VIDEO (MALE PLUG) 4-pin Mini DIN connector (Mini-DIN-4)

Pin 1 = GROUND (Y)Pin 2 = GROUND (C)

Pin 3 = Y(LUMINANCE)

Pin 4 = C (CHROMINANCE)

The shells should be connected together by an overall screen/shield. However, the shield is often absent in low-end cables, which can result in picture degradation.

#### S-VIDEO TO COMPOSITE VIDEO ADAPTER

