

MC-2020 Connection Guide

AES IN PGM & PST Pin #'s: 1=PS1+, 2=PS2+, 3=PS3+, 4=PS4+, 5=PG1+, 6=PG2+, 7=PG3+, 8=PG4+, 11=PS1-, 12=PS2-, 13=PS3-, 14=PS4-, 15=PG1-, 16=PG2-, 17=PG3-, 18=PG4-, 19=PS1gnd, 20=PS2gnd, 21=PS3gnd, 22=PS4gnd, 23=PM1gnd, 24=PG2gnd, 25=PG3gnd, 26=PG4gnd

AES IN / PVW & EXT1 Pin #'s: 1=P1+, 2=P2+, 3=P3+, 4=P4+, 5=E1+, 6=E2+, 7=E3+, 8=E4+, 11=P1-, 12=P2-, 13=P3-, 14=P4-, 15=E1-, 16=E2-, 17=E3-, 18=E4-, 19=P1gnd, 20=P2gnd, 21=P3gnd, 22=P4gnd, 23=E1gnd, 24=E2gnd, 25=E3gnd, 26=E4gnd

AES IN / EXT2 & EXT3 Pin #'s: 1=E2 1+, 2=E2 2+, 3=E2 3+, 4=E2 4+, 5=E3 1+, 6=E3 2+, 7=E3 3+, 8=E3 4+, 11=E2 1-, 12=E2 2-, 13=E2 3-, 14=E2 4-, 15=E3 1-, 16=E3 2-, 17=E3 3-, 18=E3 4-, 19=E2 1gnd, 20=E2 2gnd, 21=E2 3gnd, 22=E2 4gnd, 23=E3 1gnd, 24=E3 2gnd, 25=E3 3gnd, 26=E3 4gnd

MONITOR OUT – Typically monitors the Preset Bus. User may select to view the PVW/KEY bus.

AES Out/Aux,Spare Pin #'s: 1=A1+, 2=A2+, 3=A3+, 4=A4+, 5=S1+, 6=S2+, 7=S3+, 8=S4+, 9&10=n/a, 11=A1-, 12=A2-, 13=A3-, 14=A4-, 15=S1-, 16=S2-, 17=S3-, 18=S4-, 19=A1gnd, 20=A2gnd, 21=A3gnd, 22=A4gnd, 23=S1gnd, 24=S2gnd, 25=S3gnd, 26=S4gnd.

PROGRAM OUT
2)Connections; 1 for downstream devices and 1 for monitoring.

AES Out/PGM,MON Pin #'s: 1=M1+, 2=M2+, 3=M3+, 4=M4+, 5=P1+, 6=P2+, 7=P3+, 8=P4+, 11=M1-, 12=M2-, 13=M3-, 14=M4-, 15=P1-, 16=P2-, 17=P3-, 18=P4-, 19=M1gnd, 20=M2gnd, 21=M3gnd, 22=M4gnd, 23=P1gnd, 24=P2gnd, 25=P3gnd, 26=P4gnd

PREVIEW or Clean feed out

Standard Ethernet connection. We recommend the ethernet system include only Utah Scientific equipment

Unused

U-NET Port
Connects 2020 chassis to the UNET, daisy chain, network via CAT5 cable. Connect "Y" cable to the UNET port and connect the network cable to one side and either terminate the other port or loop to the next device. Max UNET length is 1000'.

Y Cable

Constant Reference Signal:
SD = any SMPTE 259M
HD = any SMPTE 292M

11 Inputs:
SDI: Max length 1000' using 8281
HD: Max length 500' using 1694A
All sources **must** be within +/- 1/2 line of reference

Time Code IN / AES reference
Pin 1&2 = Gnd,
3 = AES -, 4 = TC -, 5 = AES +, 6 = TC+

Relay Port B Pin #'s ("Rx"=relay number):R11=1&2, R12=3&4, R13=6&7, R14=8&9, R15=10&11, R16=13&14, R17=16&17, R18=19&20, R19=21&22, R20=23&24, R21=25&26, GND=5,12,15&18

Relay Port A Pin #'s ("Rx"=relay number):R1=1&2, R2=3&4, R3=6&7, R4=8&9, R5=13&14, R6=16&17, R7=19&20, R8=21&22, R9=23&24, R10=25&26, GND=5,12,15&18, N/A=10&11

CANBUS Pin #'s: 1=reset, 2=CANH, 3,4,7&9=GND, 5=TCK, 6=TDO, 8&15=+5V, 10=CANL, 11=N/A, 12=nTRST, 13=TMS, 14=TDI

Alarm Port Pin #'s: 1=SMPTE A1, 2=A1, 3=A3, 4=A5, 5=A7, 6=SMPTE A2, 7=A2, 8=A4, 9=A6 Alarms are TTL outputs.

4)RS-422 or 232 Serial Ports & Pin#'s
RS-232: 1=CD, 2=RX, 3=TX, 4=DTR, 5=GND, 6=DSR, 7=RTS, 8=CTS, 9=GND
RS-422: 1=CD, 2=RX-, 3=TX+, 4=TC, 5=GND, 6=RC, 7=RX+, 8=TX-, 9=GND

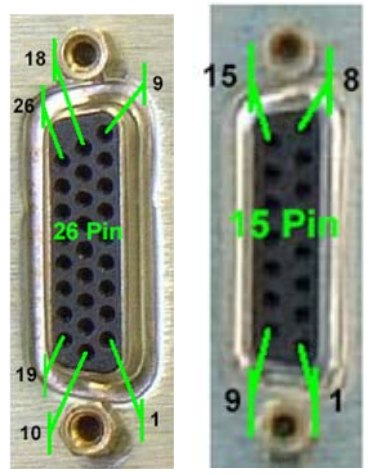
Clock IN / Pin #'s 1&2 = Gnd, 3 = T1 -, 4 = T2 -, 5 = T1 +, 6 = T2+

Locked = Green
Not Locked = Red

"ACTIVE" reference loop through. Any downstream device will loose reference in the event of a power outage on the MC-2020.

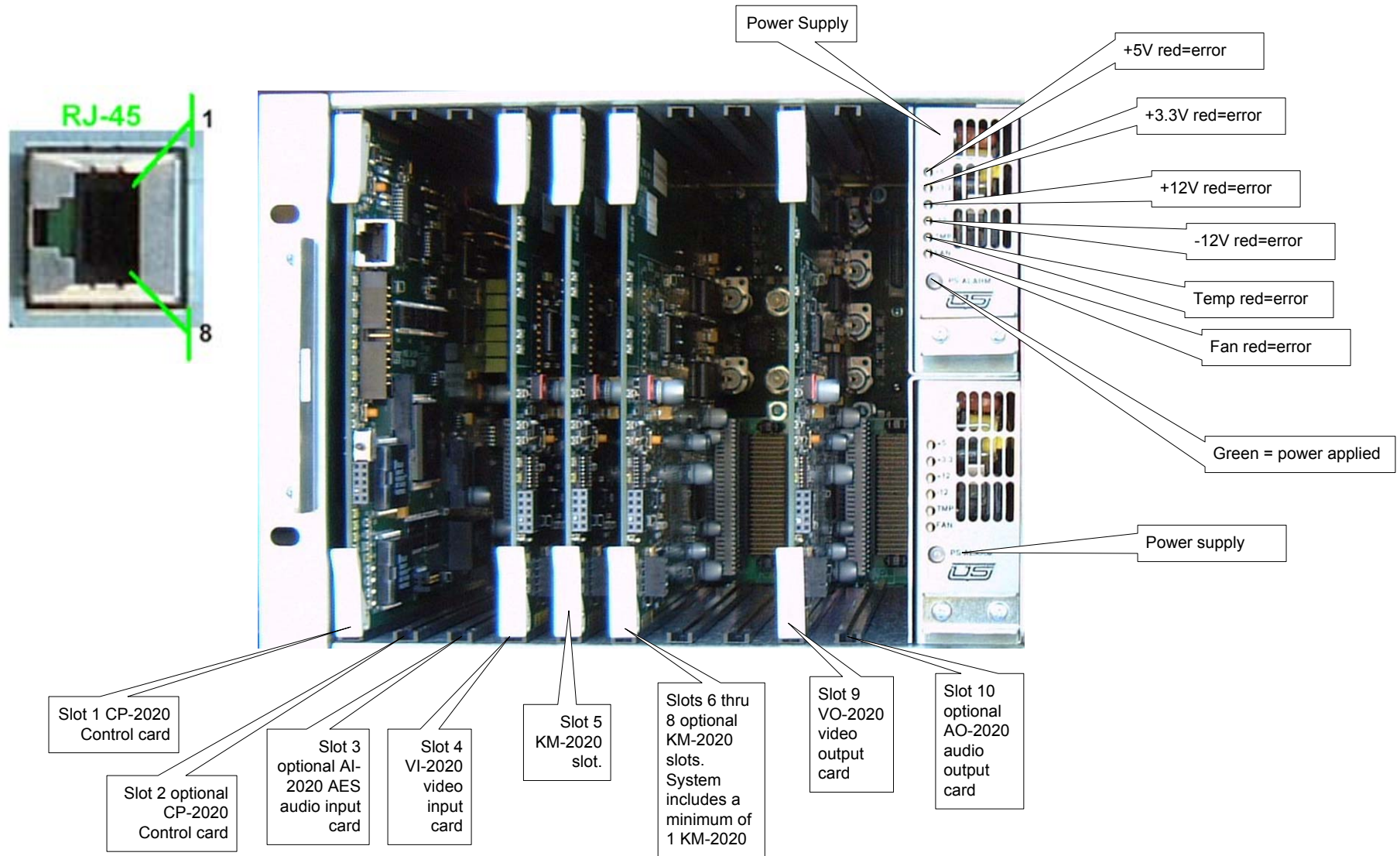
HD reference = Green
SD reference = Amber
Incorrect reference = Flashing

DIN and **RJ-45** connection diagrams showing pin configurations.



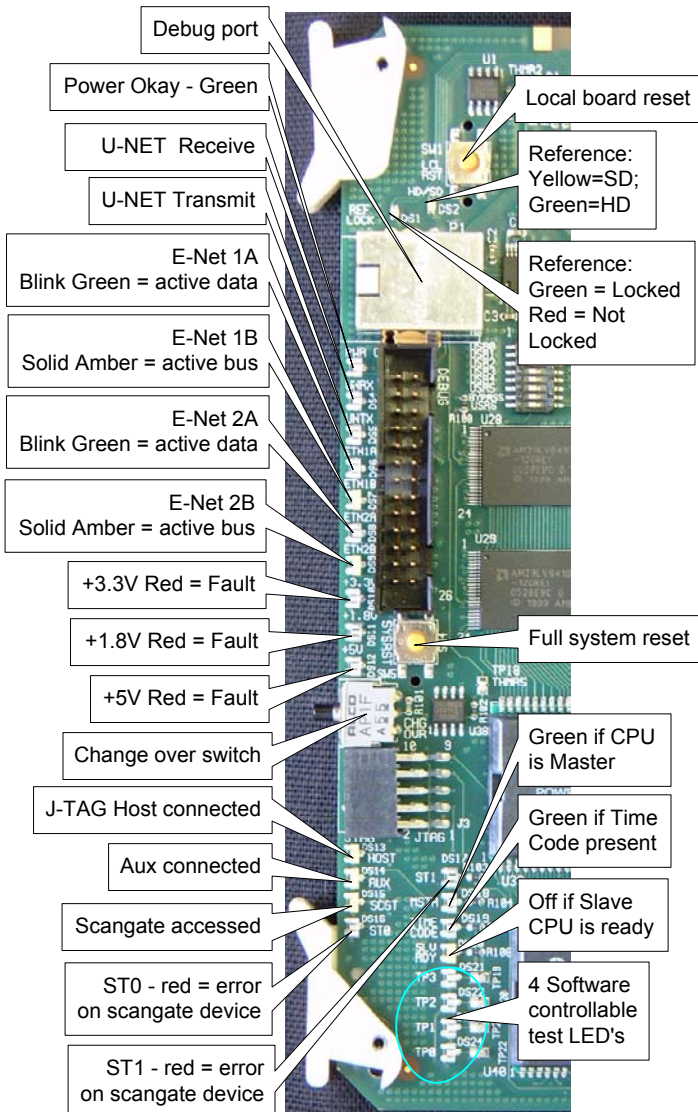
Note: your system may contain 2 rear panels on 1 chassis.

MC-2020 Front View Guide



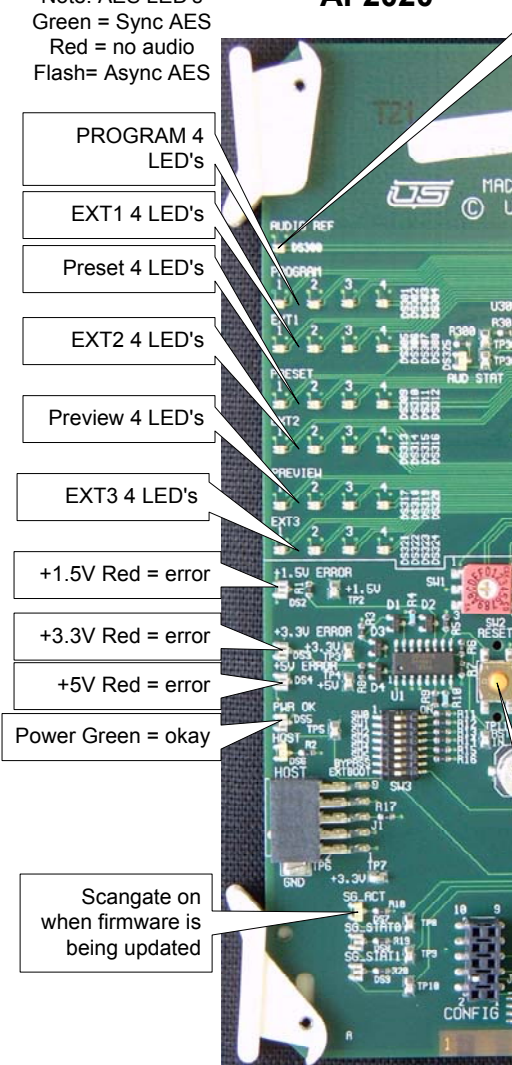
Note: your system may contain 2 master control systems in 1 chassis.

CP-2020

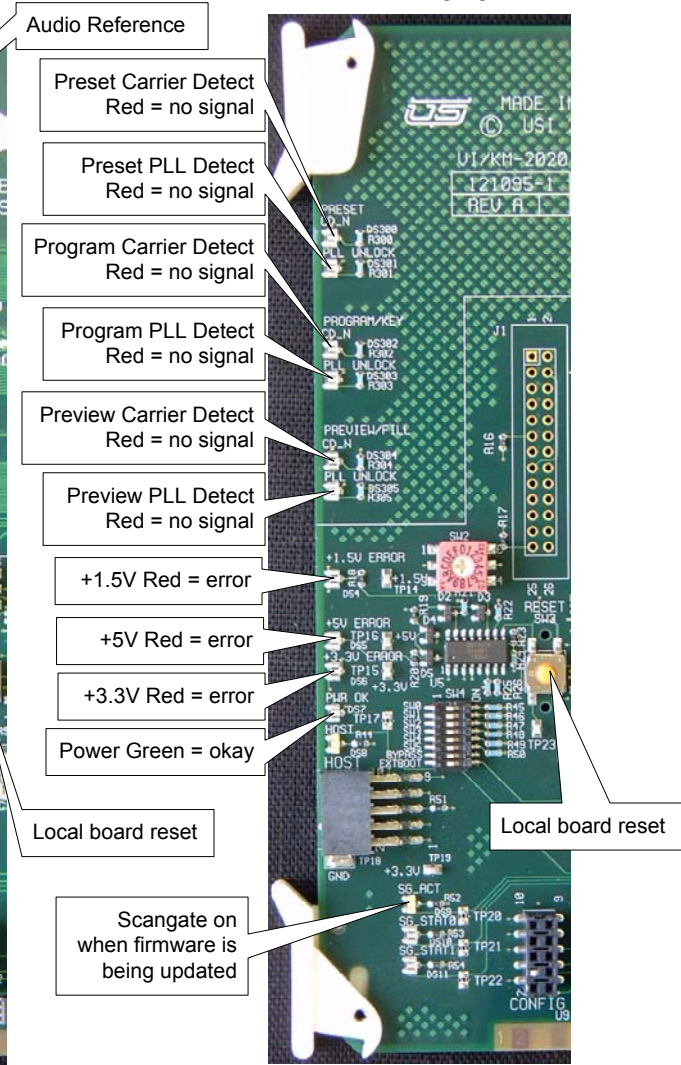


Note: AES LED's
Green = Sync AES
Red = no audio
Flash= Async AES

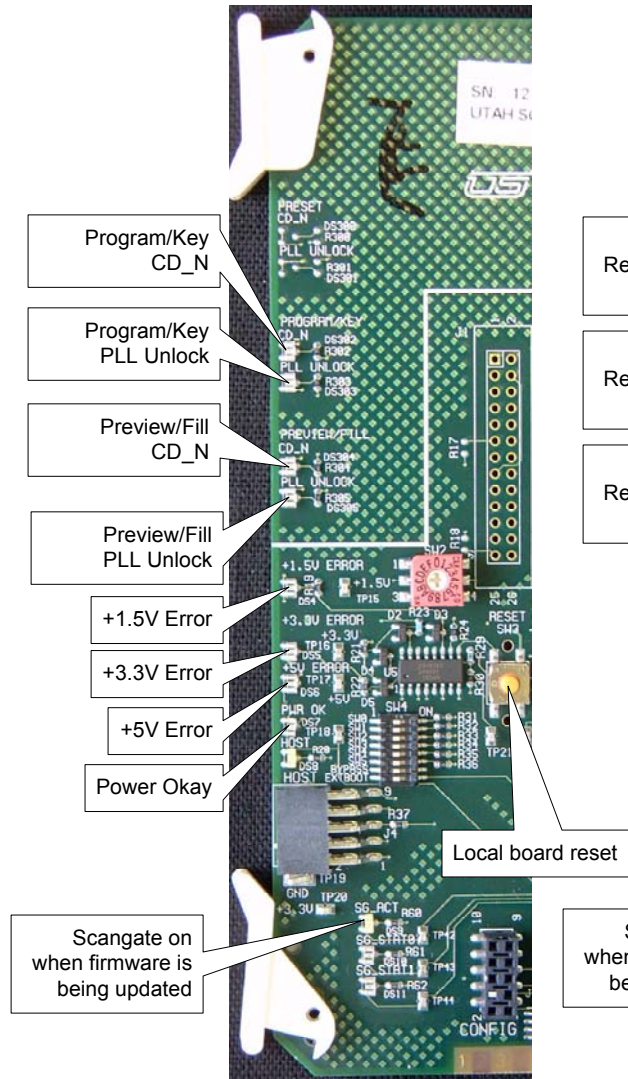
AI-2020



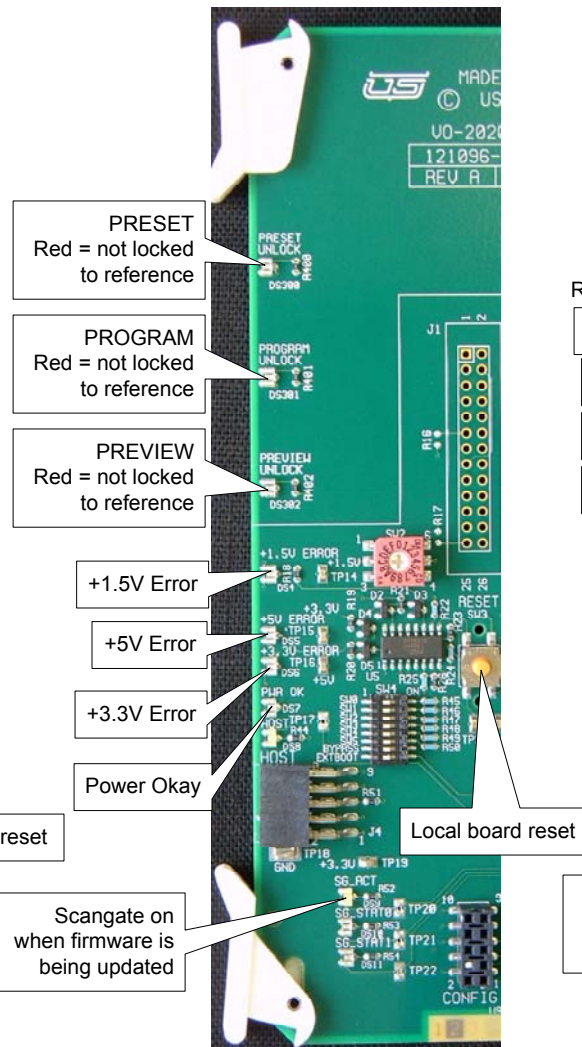
VI-2020



KM-2020



VO-2020



AO-2020

