REM
Fiber Solutions

Cambox SCALA
PTZ HYBRID / Fiber INTERFACE

SCALA – Quick Manual – FULL Version

Devices:

PTX-150 **C**ambox **C**amera **A**dapter
PTY-150 **C**ambox **C**ontrol **U**nit
WBP-150 **W**all-**B**ox **P**ower Manager

Camera Adapter PTX-150
Connections ⬡

1 RS422 + Tally
2 Ethernet
3 Audio In/Out
4 Reference Out
5 SDI 'M' Input (to Control Unit)
6 DC Out to PTZ
7 SDI Input (to Control Unit)
8 SDI Output (from Control Unit)
9 12G Input (to Control Unit)
10 12G Active Loop Output
11 Lemo Hybrid Connector

PTZ ⬌ **CCU**

12G SDI	▷
3G SDI 1	▷
3G SDI 2	▷
3G SDI Ret	◁
RS422	◁
Ethernet 1G	◁
Microphone	◁
LINE Audio	◁
Audio / TC	◁
Genlock	◁
Tally / GPI	◁▷
POWER	◁

Control Unit PTY-150
Connections ⬡

1 Ethernet (CCA1)
2 RS422 & Tally/GPI (CCA1)
3 SDI 'M' Output (from CCA1)
4 SDI Input (to CCA1)
5 SDI Output (from CCA1)
6 SDI-12G (from CCA1)
7 SDI-12G (from CCA1)
8 Ethernet (CCA2)
9 RS422 & Tally/GPI (CCA1)
10 SDI 'M' Output (from CCA2)
11 SDI Input (to PT 2)
12 SDI Output (from CCA1)
13 SDI-12G (from CCA2)
14 SDI-12G (from CCA2)
15 Reference Input (BB or MS)
16 Audio In/Out (4+4)
17 Lemo Connector (CCA1) or LC/LC
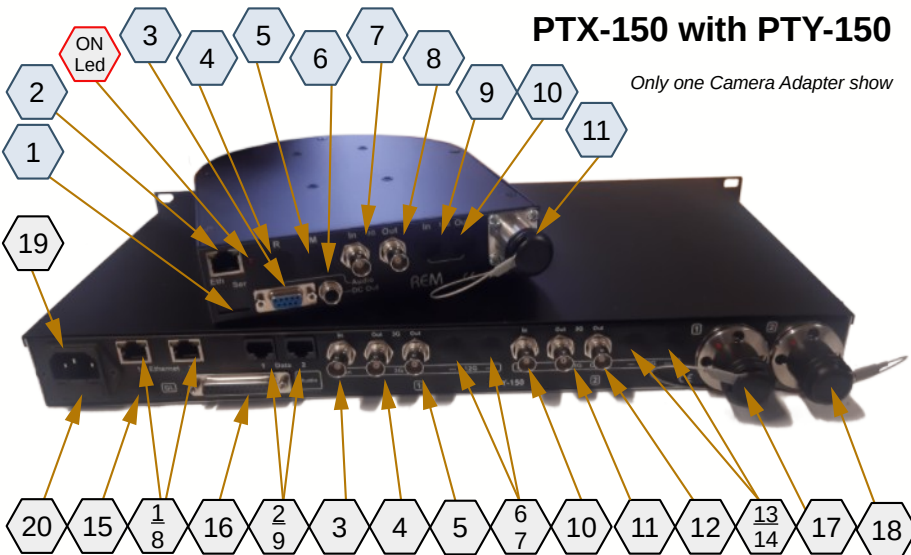18 Lemo Connector (CCA2) or LC7LC
19 Main 90-250 Vac
20 Fuse 2AT

PTX-150 with PTY-150

Only one Camera Adapter show
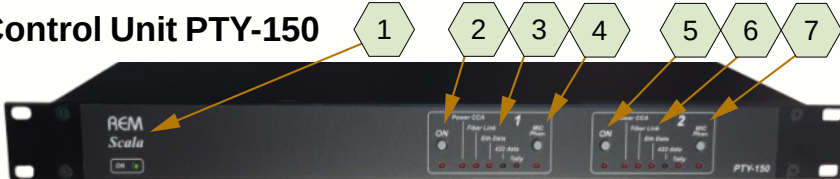

Control Unit PTY-150
Commands / LEDs ⬡

1 CCU PTY-150 Powered
2 Power Enable (CCA1)
3 Status (CCA1)
4 Phantom Enable (CCA1)
5 Power Enable (CCA2)
6 Status (CCA2)
7 Phantom Enable (CCA2)

Status LEDs :
Power CCA = PTX-150 Powered
Fiber Link = Fiber Active
Eth Data = Ethernet Data present
422 Data = Serial Data present
Tally = Tally Activated
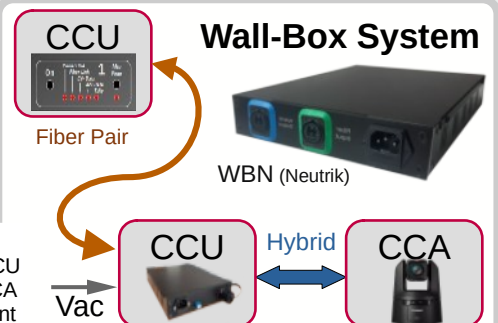
Control Unit PTY-150

Note: Energy is not supplied to hybrid cable until camera adapter is connected and handshaked. It is good practice to turn off the power to CCA before disconnecting the hybrid cable

WBP-150
Optional Power Manager

1 Main Vac
2 Fiber from CCU
3 Hybrid to CCA
- On/Off on front

Wall-Box System

CCU

Fiber Pair

WBN (Neutrik)

CCU — Hybrid — **CCA**

Vac

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Control Unit Status LEDs

CCA Powered *[CCA connected, Power supplied to camera]*
Fiber Link Active *[Fiber connection established]*
Eth Data *[Ethernet active (flashing)]*
422 Data *[Data present on RS422 bus (flashing)]*
Tally *[Tally line activated]*

Control Unit Controls

CCA Power Enables *[Power saving]*
Microphone Phantom Enables *[Channel 1 / Channel 2]*

Camera Adapter
XLR-4P Cable Pinout

1 Ground
2 Unused
3 Unused
4 Out +12V

Camera Adapter Status LED
  Powered
Camera Adapter Controls
  No Controls

Camera Adapter Inputs Signals
Video Signals: 1 - SDI 3G, 6G, 12G [BNC]
                  2 - SDI SD, HD ,3G [BNC]
                  1 - Reference [BNC]
Audio Signals: 1 - Balanced Analog (Line Level) [DB9]
                  1 - Balanced Microphone Input [DB9]
Data Signals: 1 - Serial Data (RS422) [RJ45]
                  1 - Ethernet 1GB [RJ45]
                  2 - GPI In [RJ45] (1)

Camera Adapter Outputs Signals
Video Signals: 1 - SDI SD, HD, 3G
Audio Signals: 1 - Unbalanced Analog Audio [DB9]
Data Signals: 1 - Serial Data (RS422) [RJ45]
                  1 - Ethernet 1GB (with opt. POE++)   [RJ45](*)
                  1 - Tally Out (open collector) [RJ45]
Power :   1 - POE++ on Ethernet [RJ45] *Option*
                  1 - 12V Out [M8] (*)

Control Unit Inputs Signals per each Camera Adapter Channel
Video Signals: 1 - SDI SD, HD, 3G [BNC]
                  1 - Reference (BB, Composite) [BNC]
Audio Signals: 2 - Unbalanced Analog (Line Level) [DB9]
Data Signals: 1 - Serial Data (RS422) [RJ45]
                  1 - Ethernet 1GB [RJ45]
                  1 - Tally In [RJ45]
                  2 - GPI Out [RJ45]

Control Unit Outputs Signals per each Camera Adapter Channel
Video Signals: 1 - SDI 3G, 6G, 12G [BNC]
                  2 - SDI SD, HD ,3G [BNC]
Audio Signals: 1 - Balanced Line Output [DB25]
                  1 - Balanced Microphone Line Output [DB25]
Data Signals: 1 - Serial Data (RS422) [RJ45]
                  1 - Ethernet 1GB [RJ45]
                  2 - GPI Out (open collector) [RJ45]
Power :   1 - Main 90-240 Vac [VDE with Fuse]

CCA & CCU
RS422 Pinout (RJ45)

1 TX-
2 TX+
3 Ground
4 RX-
5 RX+
6 Tally   [→ CCA]
7 GPI 1   [→ CCU]
8 GPI 2   [→ CCU]

Control Unit
Audio Pinout (DB25)

1   Output Mic 1+
2   Ground
3   Output Line 1-
4   Input Line A+
5   Ground
6   Input Line 1 B-
7   Output Mic 2+
8   Ground
9   Output Line 2 -
10 Input Line 2 A+
11 Ground
12 Input Line 2 B-
13 Ground
14 Output Mic 1-
15 Output Line 1+
16 Ground
17 Input Line A-
18 Input Line 1 B+
19 Ground
20 Output Mic 2-
21 Output Line 2+
22 Ground
23 Input Line 2 A-
24 Input Line 2 B+
25 Ground

Camera Adapter
DC Out Pinout <5>

1 Out +12V
2 Out +12V
3 Ground
4 Ground
5 Out +12V

[Use supplied XLR4P adapter]

Camera Adapter
Audio Pinout (DB9)

1 Output Line A Audio +
2 Output Line B Audio +
3 Ground
4 Input Mic + (30db)
5 Input Line Audio +
6 Output Line A Audio -
7 Output Line B Audio -
8 Input Mic - (30db)
9 Input Line Audio -

Hybrid Connection:
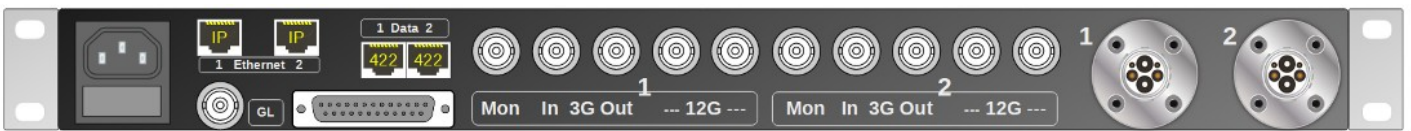L: SMPTE LEMO 3K
N: Neutrik OpticalCon DUO

Fiber Pair Version:
N: Neutrik Duo Lite
P: LC/LC

NOTE:
Fiber Pair Version require
WallBox-Power Manager
(CBS-WB1 ½RU) or ORH
to connect CCA via
Hybrid Cable
CCU *-LC-* **WB** *-Hybrid-* **CCA**

Control Unit (CCU) Back

CCA Camera **Mechanical Installation** (*e.g.: AW-UE-150)*

Fix Camera Mount Braket on top using the 4 screw supplied then follow
the PTZ camera Installation manual
¼" holes available on bottom for Tripod or similar fixing
Do not obstruct the flow of air, do not cover Fan gate and front holes

Power Consumption: 16 W per channel without camera load
MAX Camera Load: 12 Volts - 60W
CCA Mechanical: Dimension: W x H x D (182, 40, 219 mm)
                     Weight (1,9 Kg)
CCU Mechanical: Dimension: 1RU, Depth 300mm
                     Weight: (1Ch 3,1 Kg) (2Ch 3,9 Kg)

AW-UE150 Connections Example

Microphone In
Phantom (On/Off)

Return Video
SDI 3G from CCU

Note: *Multiple Version Available.* Contact us for details or visit our website