

Cambox SCALA

PTZ HYBRID / Fiber INTERFACE

SCALA – Quick Manual – FULL Version

Devices:

PTX-150 Cambox Camera Adapter

PTY-150 Cambox Control Unit

Control Unit PTY-150

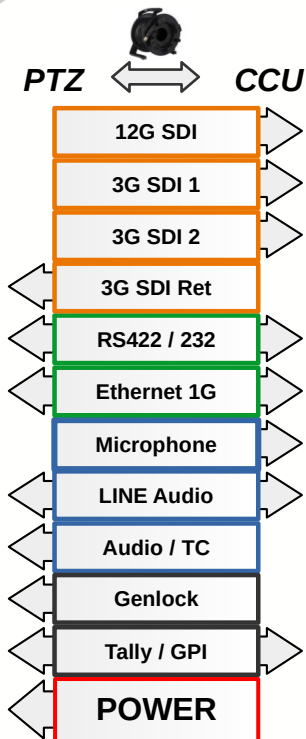
Connections

- 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/GPII (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)
- 18 Lemo Connector (CCA1)
- 19 Main 90-250 Vac (Fuse 2AT)

Camera Adapter PTX-150

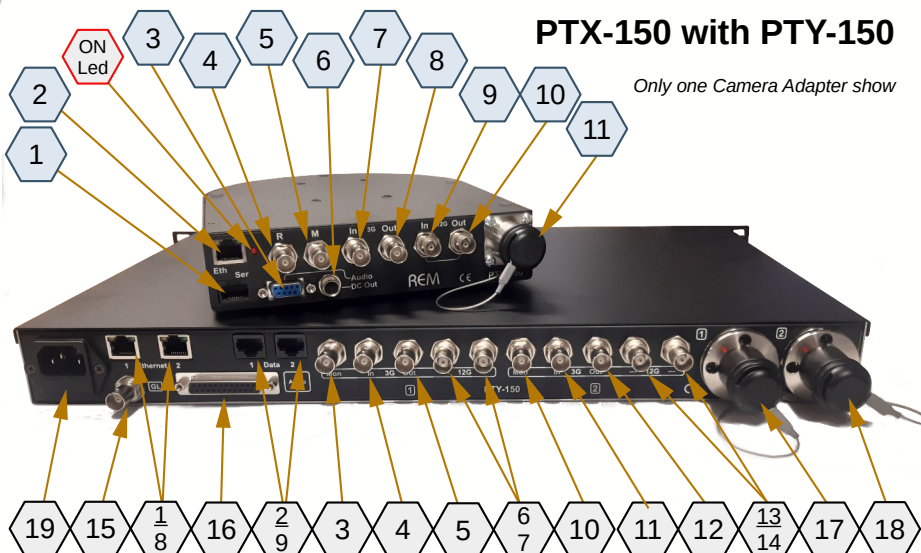
Connections

- 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 from Control Unit
- 9 12G input to Control Unit
- 10 12G Active Loop Out
- 11 Lemo Hybrid Connector



PTX-150 with PTY-150

Only one Camera Adapter show



Control Unit PTY-150

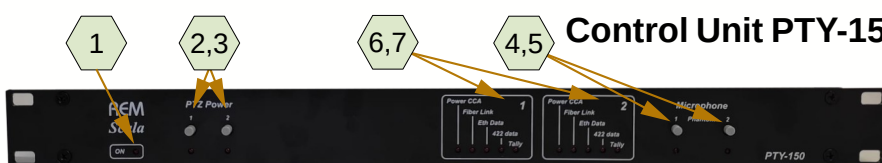
Commands / LEDs

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

Status LEDs:

- Power CCA** = PTX-150 Powered
- Fiber Link** = Fiber Active
- Eth Data** = Data present in Ethernet
- 422 Data** = Serial Data present
- Tally** = Tally Activated

Control Unit PTY-150



Safety Notes



Do not open units
Dangerous voltage inside.
Check Ground connection
Do not change fuse value

Note: Energy is not supplied to hybrid cable until camera adapter fully connected and handshaked.
To avoid unwanted spikes it is recommended to disable power to PTY-150 before disconnecting it



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 Status LED

Powered

Camera Adapter Controls

No Controls

Camera Adapter

XLR-4P Cable

Adapter Pinout

- 1 Ground
- 2 Unused
- 3 Unused
- 4 Out +12V



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] ^(*)

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]

Camera Adapter

DC Out Pinout <5>

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

[Use supplied XLR4P adapter]

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

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 -

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]

Hybrid Connection:

L: SMPTE LEMO 3K
 N: Neutrik OpticalCon DUO

Fiber Pair Version:

N: Neutrik Duo Lite
 P: LC/LC
 [No Power to CCA]

Notes:

Various PTZ cameras adapters, plates, cables and tripod mount available. Contact us for informations

Control Unit (CCU) Back



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

Fix Camera Mount Bracket on top using 4 screw supplied or 4MA-10mm max 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: 20 W per channel without camera load

MAX Camera Load: 12 Volts-60W (default) or 40W on POE++
 (*) only one option allowed

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

