McLELLAND

AUDIO VIDEO CONNECTION SOLUTION PRODUCT(CSP)

UN-SHIELD TWISTED PAIR(UTP) TRANSCEIVER Models UT2312AB · UT2312AW



- * Balanced Mic or Line Level XLR Input
- * Selector switch MIC or LINE
- * Switch Selects which Pair (A, B or C) Feeds the Output
- * Signal and Power Pair Pass-through on RJ45
- * Power can be linked to the removable terminal
- * Blue LED Indicates Module is Powered
- * Daisy chain topology
- * AFC Design (AFC: Auto Feedback Gain Circuitry)

The -UT2312A modules are single-pair audio sending modules compatible with CSP twisted pair products. These modules are designed to be mounted in wall boxes, cabinets or other enclosures that allow users to connect audio sources. The -UT2312A models mount in CSP wall boxes, or in standard U.S. electrical boxes. The - UT2312AW features a white front-panel laminate with gray lettering that matches CSP-style remote controls. The -UT2312AB features a black front-panel laminate.

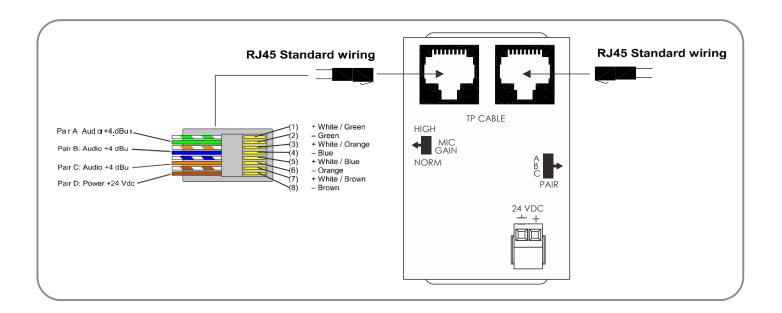
APPLICATION: The -UT2312A modules feature an XLR microphone input. The module provides IEC 24 V phantom and accepts input signals from both dynamic and condenser microphones. The input signal is amplified using a studio-quality microphone preamplifier optimized for normal operating levels. The rear-panel GAIN switch is normally set by the installer for NORM (normal) gain. If consistently low mic levels are expected, this switch may be set to the HIGH gain position. The pre-amplified microphone source is routed to one output cable pair selected during installation using a rear-panel switch.

These modules drive only one cable pair, therefore they accept signals and power from other mic-level or line-level UN-SHIELD senders. The -UT2312A modules have a second RJ45 jack for these input cables. Two other single- pair senders may be chained with The -UT2312A, or a single two-pair sender may be connected. If three single-pair senders are connected together, each sender must feed a different pair: A, B or C. The -UT2312A must be set to feed pair A if it is connected together with an CSP two-pair sender that feeds stereo audio on pairs B and C. The power pair and all three audio pairs are fed through both rear-panel RJ45 jacks.

The -UT2312A may be powered directly from a 24 Vdc power supply using the rear-panel detachable terminal block. Local power connected to the module is also fed to all connected remote modules. The -UT2312A may be remotely powered through the twisted pair cable from any other module, signal distributor or CSP power inserter connected to the same twisted pair cable. Module power is indicated by a front-panel LED.

CSP features superior audio performance that rivals or exceeds shielded wiring. Design simplicity, ease of installation, unsurpassed flexibility, automatic fused power, exceptional hum rejection, low noise, and low distortion provide designers and installers the optimum choice in economical twisted pair products

- **STEP 1:** Connect 24 Vdc to the power input terminals if this module is not being powered through the twisted pair cable from another module, or if this module is located an excessive distance from the next powered module on the cable. Note: The front-panel power LED will be illuminated if this module is powered. If this module is powering other modules through the cable and if there is a wiring short, the short must be cleared then power must be turned off to this module for 10 seconds to reset the internal protection circuit.
- **STEP 2:** Set the PAIR selector so the module is receiving signal from the desired pair A, B or C of the cable.
- **STEP 3:** Connect the twisted pair cable coming from senders or distributors.
- **STEP 4:** Connect the twisted pair cable feeding additional receiver(s), if any, and fasten the module in its mounting box.



TYPICAL PERFORMANCE

Input Connection: XLR

Input Level: - -45 to -65 dBu Bal.;

Max: -40 dBu (HIGH Gain), -28 dBu (NORM Gain)

Signal Pair Used: Switch-selectable A, B, or C Gain: 50 dB (NORM) or 63 dB (HIGH),

Switch-selectable on rear panel

UTP Input: RJ45

Output: CSP UTP RJ-45

Output Connection: RJ45

Frequency Response: 100 Hz to 30 kHz (+/- 1 dB);integral low-cut filter -10 dB @ 30 Hz

THD+N: < 0.1% (80 Hz to 20 kHz)

Noise below +4 dBu: < -80 dB (NORM Gain), < -70 dB (HIGH Gain)

Headroom above +4 dBu: > 18 dB

CMRR (50 to 150 Hz): > 60 dB (HIGH Gain), > 65 dB (NORM Gain)

Indicator: Power In

Power Connections (2): Detachable terminal block; RJ45
Power Requirement: 24 Vdc @ 65 mA plus connected loads

Maximum Load Current: 135 mA

Dimensions: 1.6" (4.06 cm) W; 4.11" (10.45 cm) H; 1.89" (4.8 cm) D Mounting Box Min.

Depth: 2.4"