Fontus
Installation Instructions

⚠️ INSTALLERS: PLEASE LEAVE THIS MANUAL WITH THE OWNER.
### FONTUS - THINGS TO CONSIDER BEFORE INSTALLING

#### Inputs / Outputs
- BCP - Inverted Header Side
- 485 - Header Side

#### Power Input
- 7v - 28v DC

#### Dimensions
- 0.86” L x 2.42” W
- (22 mm x 62 mm)

#### Max. Wiring Distance (UTP)
- 18 / 2 up to 150’
- 16 / 2 up to 200’

#### Features
- No Programming needed
- Plug-n-Play
- Full 2 way 485 Control
- 12v trigger for use with projectors
- Dry Contacts for use with any control systems
- IR input for use with included IR Receiver & Remote (1 Motor Control Kit)
- Phantom power - Fontus can be powered from any AC 485 motor
- Low Voltage Power Input - Fontus can receive power via any 7v - 28v DC power
- Connectors are compatible with all 485 shades / screens

### FONTUS - WIRING OVERVIEW

![Wiring Diagram](image-url)
**FONTUS - THINGS TO CONSIDER BEFORE INSTALLING**

**Mounting Fontus into your bracket - at the Motor end side**

1. Fontus will mount in the standard Nano® bracket
2. The spring clips that normally come with the wall bracket will need to be removed to accommodate the Fontus unit.

**Mounting Fontus - at the Head end side**

1. Fontus connects to Janus via the included jumpers (or make your own jumpers).
2. Fontus has an optional Din Rail Bracket which allows you to snap the Fontus into a Standard Din Rail. (See Janus manual to see various Din Rail mounting options).
3. You can also install on a standard rack mount shelf.

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**FONTUS - PACKAGE OPTIONS & IN THE BOX**

**1 Motor Control Kit (In the box)**

- Fontus codec non-paired (1)
- IR remote (1)
- IR receiver (1)
- Five conductor plug (1)
- Inverted five conductor plug (1)

**1 Motor Conversion Kit (In the box)**

- Fontus codec pair (1)
- Five conductor jumper (1)
- Five conductor plugs (2)
- Inverted five conductor plugs (2)

**8 Motor Conversion Kit (In the box)**

- Fontus codec pairs (8)
- Five conductor jumpers (8)
- Five conductor plugs (16)
- Inverted five conductor plugs (16)

All Kits are available in white / black color options to match your shade / screen.
**FONTUS - DUAL MOTOR CONVERSION**

**Head End (Power / Control Side)**

1. At the head end location, connect the 2-conductor wires coming from the head end location to the inverted header V+ and V- (Fontus).
   - **DO NOT** connect Fontus directly to Janus without a jumper. Fontus is directional and will only work when the 485 side is connected to Janus.
2. Terminate a 2-conductor wire to the V+ and V- positions on the inverted five conductor plug which will run to the motor end.
   - **DO NOT** connect the 2-conductor wire to the other 3 positions on your inverted five conductor plug.
   - BCP only works when you are connected to the V+ and V- positions.

**Motor end with Duocoup**

1. At the motor end location, connect the 2-conductor wires coming from the head end location to the inverted header V+ and V- (Fontus).
2. Connect 485 side of Fontus to the DUOCOUP inverted header, then connect the first motor to one of the other two headers, followed by connecting a second five conductor wire to the next motor.

**Motor End**

1. Terminate a 2-conductor wire to the V+ and V- positions on the inverted five conductor plug to the BCP side of Fontus.
   - Ensure the same conductors are consistently terminated on both inverted 5 conductor plugs.
2. Connect the terminal plug coming from the motor into the header on the 485 side of Fontus.
3. (Optional) Connect Dry Contact / 12v Trigger / IR to corresponding GPIO Inputs. (Refer to Control instructions section)

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**FONTUS - 1 MOTOR CONVERSION**

**Motor End**

1. Terminate a 2-conductor wire to the V+ and V- positions on the inverted five conductor plug to the BCP side of Fontus.
   - Ensure the same conductors are consistently terminated on both inverted 5 conductor plugs.
2. Connect the terminal plug coming from the motor into the header on the 485 side of Fontus.
3. (Optional) Connect Dry Contact / 12v Trigger / IR to corresponding GPIO Inputs. (Refer to Control instructions section)
Projector Wet Contact Closure Input
1a. If your motor is low-voltage then at the Head end location, connect the Power Supply wires to the V+ and V- (Fontus).
1b. If your motor is line-voltage then no power connection is needed at the Head end (AC motor provide power for Fontus).
2. Connect the TS - Tip (+) to the Data Ground (G) on the inverted plug and connect TS - Sleeve (-) to the Data + (+) on the inverted plug. Refer to drawing below.
3. Applying a latched 7 - 12v DC will send the lower limit (DOWN) command to the motor over 485.
4. When any voltage drops below 4v DC or if no voltage is present, the upper limit (UP) command is sent to motor over 485.

Fontus Wet Pinouts

GPIO Dry Contact Closure Inputs
1a. If your motor is low-voltage then at the Head end location, connect the Power Supply wires to the V+ and V- (Fontus).
1b. If your motor is line-voltage then no power connection is needed at the Head end (AC motor provide power for Fontus).
2. A momentary contact between (+) and (G) will send the upper limit (UP) command to the motor over 485.
3. A momentary contact between (-) and (G) will send the lower limit (DOWN) command to the motor over 485.
4. Momentary contacts between both (+ / -) and (G) will send the (STOP) command to the motor over 485.

Fontus Dry Pinouts
GPIO - IR Inputs (IR can be located at the head end or at the motor end)

1a. If your motor is low-voltage then at the Head end location, connect the Power Supply wires to the V+ and V- (Fontus).
1b. If your motor is line-voltage then no power connection is needed at the Head end (AC motor provide power for Fontus).
2. A short press of the (UP) button on the remote will send the upper limit (UP) command to the motor over 485.
3. A short press of the (DOWN) button on the remote will send the lower limit (DOWN) command to the motor over 485.
4. A short press of the (STOP) button on the remote will send the (STOP) command to the motor over 485.

Fontus IR Pinouts

Screen Power Supply

IR Receiver (incl. with 1 Motor Control Kit)

Fontus IR Pinouts

485 INPUT / OUTPUT side

Fontus - MOTOR CONTROL WITH IR

Hexcodes

Third party IR universal control systems may be used to control the screen and commands may be learned from the SI IR Remote or using these hex codes:

Note: Fontus can only respond to these IR codes. No serial connection can be made.

Fontus - PROGRAMMING

Screen

Red wire

Black wire

Fontus 485 Keypad

1. Connect Fontus 485 side to the AC Motor and connect your 2-conductor to the BCP side of Fontus.
2. Connect Fontus to the Spike (using your cable or using Five conductor jumper). Spike will connect to Cat5, which will connect to 485 Keypad. No power Supply needed, Phantom power provided by Fontus.

Fontus - 485 KEYPAD APPLICATION
Dry Contact Keypad

1. Connect 485 side of Fontus to AC Motor.
2. Connect the appropriate Fontus dry contacts to your Dry Contact Switch. No power Supply needed, Phantom power provided by Fontus. (See the Dry Contact page for additional details)