

Quick Start Guide

Tyro™ 2x2 System

1. Wire Your Machine Control Unit (MCU)

The MCU terminals and pin numbering relative to the OCU buttons are identified in the system configuration drawing provided with your system. For standard systems, please review the “Standard Configurations” available on www.cattron.com

1. In almost all cases the implementation of an appropriate main line contactor power circuit is required using OUTPUT 1.
2. Connect power and ground (per system specification based on power supply).
3. Connect the correct antenna to the antenna connector.
4. Check the wiring and turn on the MCU power. When no OCU is connected, the Status LED will flash red.



2. Operator Control Unit (OCU) Battery Status and Maintenance



Battery Status LED

The LED flashes red, slowly (1x per sec), when battery is low.

Battery Life

Battery Life can be 3-6 months pending usage.

Changing the Batteries

The battery compartment of the handheld transmitter is located on the backside.

- By removing the 4 x Philips screws, the battery compartment can be carefully opened.
- Replace the battery (2x AA Alkaline) and close the compartment. Be careful not to over-tighten the screws.

3. Powering on the OCU and Moving to Active Mode

Press the Start Key for 2 seconds. The OCU and MCU/mainline will become active.

When the OCU is in Active Mode, the OCU Status LED flashes green when a function key is pressed to indicate transmission.

The OCU is programmed to go **enter sleep mode after 3 min of no activity**. This will trigger a STOP and deactivation of the mainline. The OCU is programmed to **support out of range protection** and will also result in a STOP/deactivation of the mainline if comm loss occurs.

When the MCU is in Active Mode, the MCU Status LED will flash yellow:

- Every 0.3 sec when messages are received from OCU.
- Every 1 sec when idle/no messages received.



4. Pairing an Operator Control Unit (OCU)

Put the OCU in "Pairing Mode"

1. Turn off the handheld transmitter by using the OFF-key.
2. Press and hold function keys 1 and 2 simultaneously while the handheld transmitter is turned on with the ON-key.
3. The status LEDs on the handheld transmitter flash red and green rapid alternately.
4. The handheld OCU is now in "pairing mode," the keys can now be released.

LED Behaviour

Status	Behavior
System is in 'pairing mode'	The status-LEDs on the handheld transmitter flash rapidly alternating red and green
Pairing successfully completed	The alternating flashing is stopped
Pairing failed	The flashing stops, the buzzer beeps once

PRESS



Put the MCU in "Pairing Mode"

1. Locate the black pairing button on the bottom of the receiver.
2. Press and hold the pairing button for 1 second.
3. The status-LED will flash red and yellow.
4. The MCU is now in "pairing mode," the button can now be released.

PRESS



When both devices are in "Pairing Mode"

1. When both the MCU and the OCU are in "pairing mode," the devices will find each other and can be successfully connected.
2. When pairing the OCU to the MCU is successfully completed, the blinking of the status-LEDs will stop and the MCU status-LED will turn off.
3. Pairing the OCU to the MCU is now complete.

Troubleshooting:

- If the pairing was unsuccessful, the status-LED on the handheld transmitter will stop flashing and the buzzer will beep once.
- If no receiver is found, the system returns to "normal mode" after 60 seconds. Previously paired MCUs remain active.
- The receiver will "forget" the previously paired transmitter when a new OCU is paired.

Need more information?

Check out the Product Manuals linked below:

Musca 2S (OCU) - <https://downloads.tyroremotes.com/manuals/en-musca-2s/>

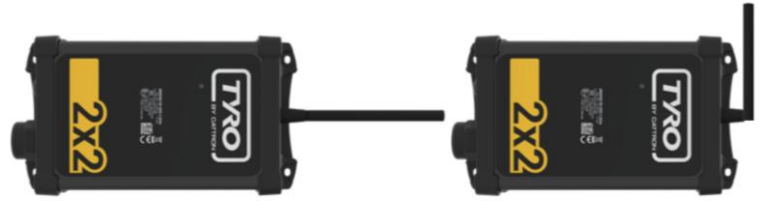
Lepus 2S (MCU) - <https://www.cattron.com/wp-content/uploads/tyro-lepus-2s-user-manual-en.pdf>



Mounting Guide

Best Mounting Orientation

- Antenna is high, line of sight is good
- Cable gland faces down for less cable strain and exposure to water

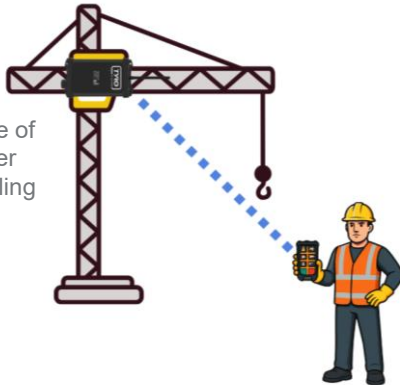


Other Mounting Options

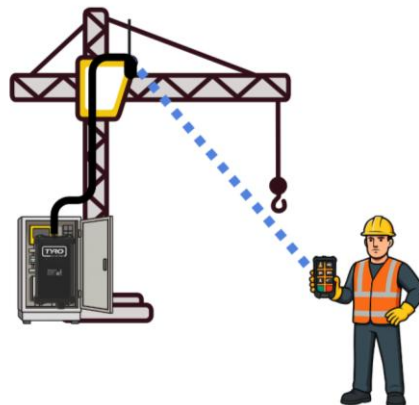
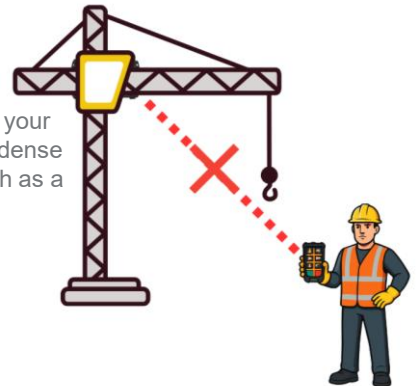
- Antenna is high, line of sight is good
- May require strain relief on cable; consider clamping to machine
- See also 90-degree elbow antenna options when space is of concern

Antenna Placement

Always consider line of sight with the receiver antenna when installing the system.



Avoid mounting your antenna behind dense obstructions such as a metal plane.



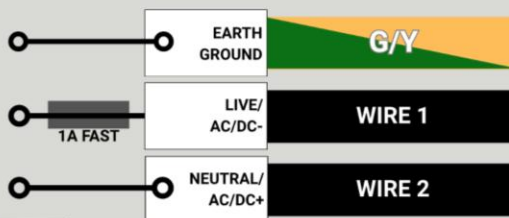
Achieve a better line of sight by leveraging antenna line kits to mount your antenna in a more visible location for the operator.



Wiring Guide

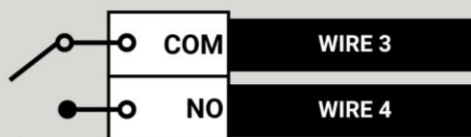
POWER SUPPLY

*Consult the product label to confirm power supply requirement

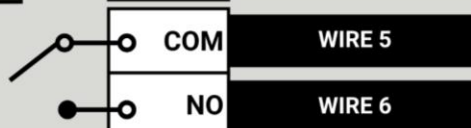


RELAY OUTPUTS

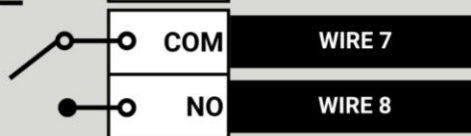
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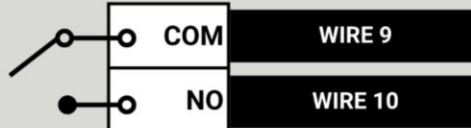
RELAY 2



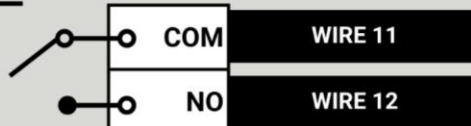
RELAY 3



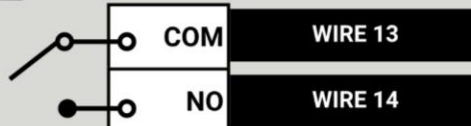
RELAY 4



RELAY 5



RELAY 6



RELAY 7

