

Tyro 2X2 Standard Configurations

9D04-9699-A001 REV B



CATTRON™

2-2-S-XC-G

Two-Motion, Two-Speed Function

First Speed Control

If Motion 1, Direction A button is pressed for < 2 s:

- Relay remains active only during button press and de-energizes immediately upon release.

If Motion 1, Direction A button is pressed for ≥ 2 s:

- Relay remains active during the press and continues for an additional 0.5 seconds after release (run-on delay).

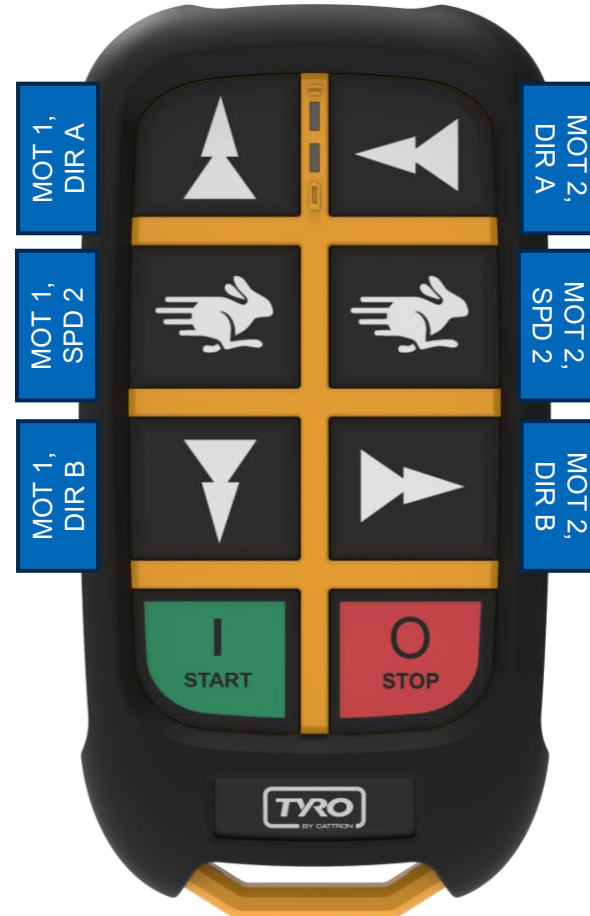
Second Speed Control

- The Second Speed function may only be engaged if a first speed relay is active.
- For single hand operation, Speed 2 must be engaged within 0.5 seconds of the Speed 1 Button release.

Second Speed Release

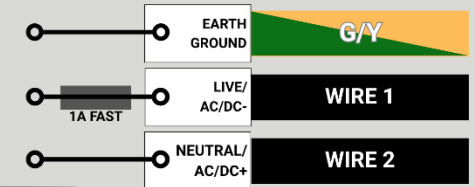
- If the Second Speed button is released, the second speed relay de-energizes and operator must reengage first speed as described upon to return to second speed.
- Operator may resume at first speed if the first speed button is engaged within 0.5 s of second speed button release
- If first speed is not re-engaged, system will fully de-energize the first speed relay 0.5 s after second speed button release

If the operator attempts to switch directions while Speed 2 is active, the system enforces a neutral interlock. All interlocked relays/commands must be de-energized to continue operation in the opposing direction.



POWER SUPPLY

*Consult the product label to confirm power supply requirement



RELAY OUTPUTS

RELAY 1: MAINLINE

RELAY 2: MOT 1, DIR A

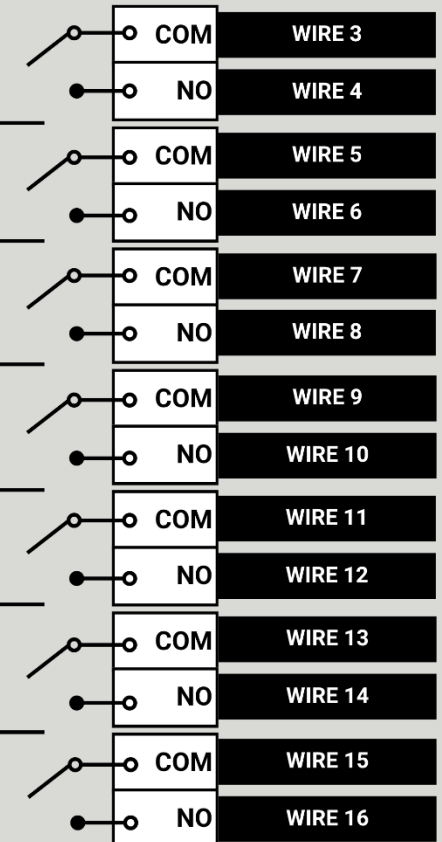
RELAY 3: MOT 1, DIR B

RELAY 4: MOT 1, SPD 2, DIR A/B

RELAY 5: MOT 2, DIR A

RELAY 6: MOT 2, DIR B

RELAY 7: MOT 2, SPD 2, DIR A/B



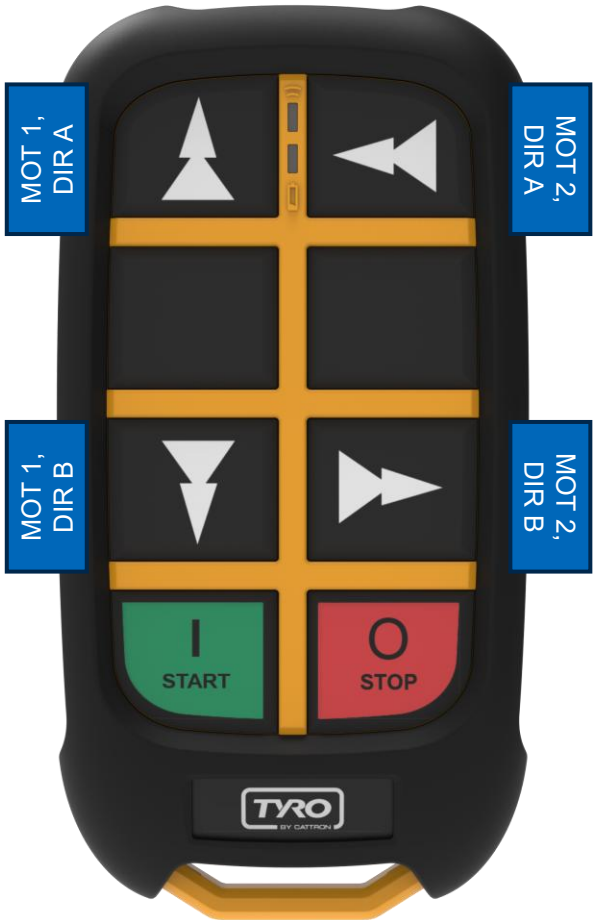
2-1-S-XC-G

Two-Motion, One-Speed

Function

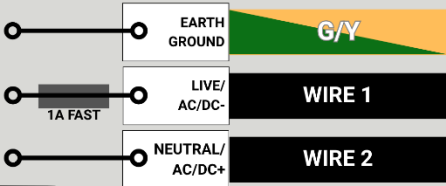
- When Motion 1, Direction A is pressed the relay for Motion 1, Direction A remains active through the button press, then immediately disengages once released. This is true for all directional controls

Note: Prolonged relay deactivation removed for one speed operation.



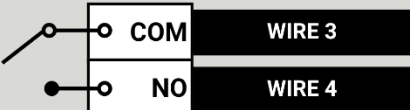
POWER SUPPLY

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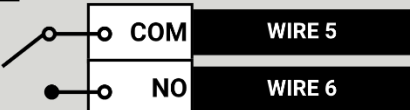


RELAY OUTPUTS

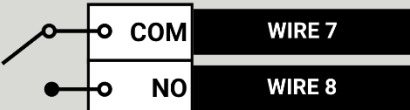
RELAY 1: MAINLINE



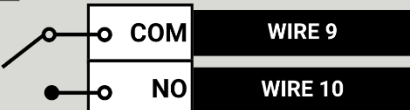
RELAY 2: MOT 1, DIR A



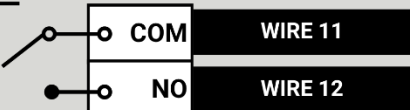
RELAY 3: MOT 1, DIR B



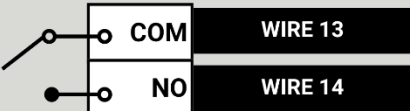
RELAY 4: NOT USED



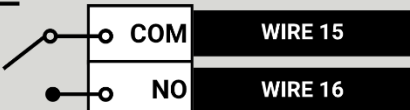
RELAY 5: MOT 2, DIR A



RELAY 6: MOT 2, DIR B



RELAY 7: NOT USED

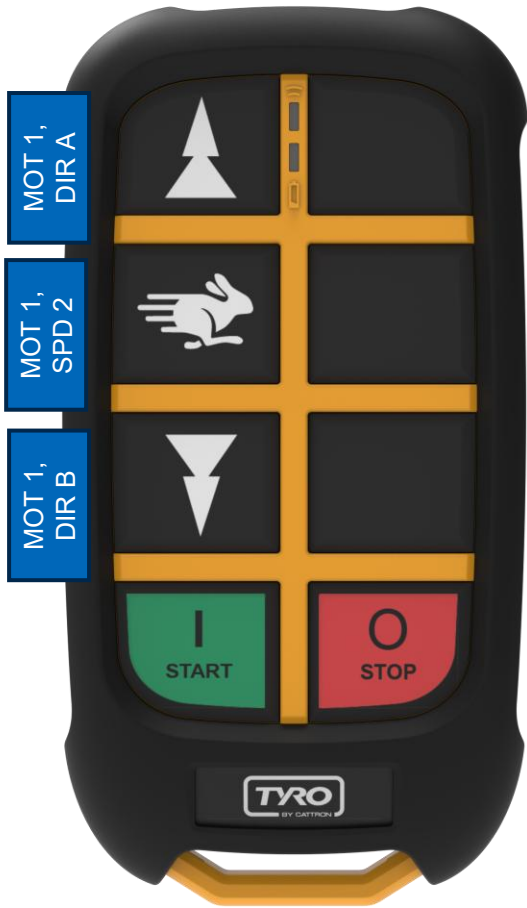


1-2-S-XC-G

One-Motion, Two-Speed

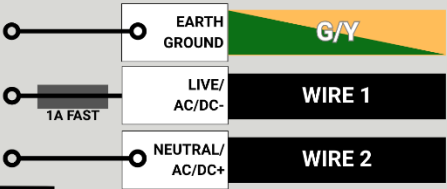
Function

- When Motion 1, Direction A is pressed for less than 2 seconds, the relay for Motion 1, Direction A remains active through the button press, then immediately disengages once released. This is true for all First Speed Controls.
- When Motion 1, Direction A is pressed for 2 seconds or more, the relay for Motion 1, Direction A remains active though the button press and remains active for an additional 0.5 seconds after button release. This is true for all First Speed Controls.
- The Second Speed function may only be engaged if a first speed relay is active. For single hand operation, Speed 2 must be engaged within 0.5 seconds of the Speed 1 Button release.
- If Second Speed button is released, the operator must return to First Speed. The operator may resume at second speed by following the process above. The operator has 0.5 seconds to press the first speed button again to maintain movement at first speed. At this point, the second speed relay will de-energize. If the first speed button is not pressed within 0.5 seconds, the direction relay will then also de-energize.



POWER SUPPLY

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RELAY OUTPUTS

RELAY 1: MAINLINE

RELAY 2: MOT 1, DIR A

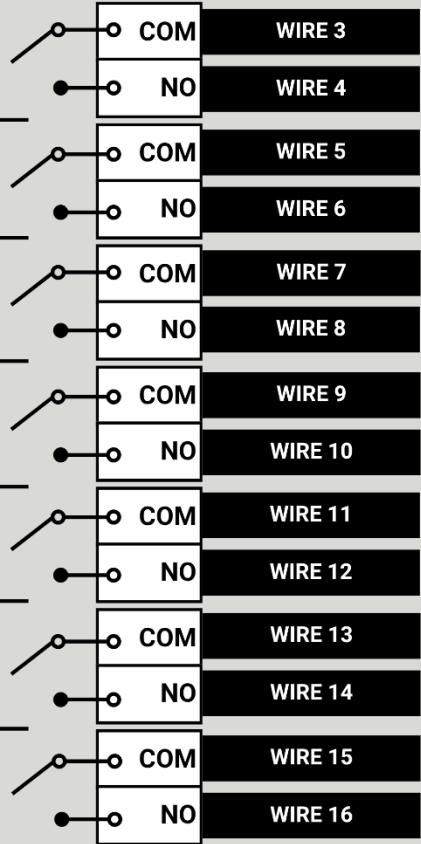
RELAY 3: MOT 1, DIR B

RELAY 4: MOT 1, SPD 2, DIR A/B

RELAY 5: NOT USED

RELAY 6: NOT USED

RELAY 7: NOT USED



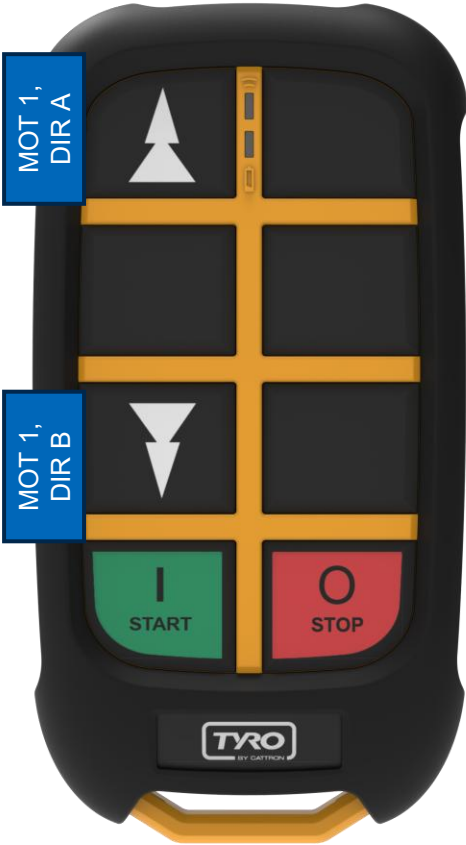
1-1-S-XC-G

One-Motion, One-Speed

Function

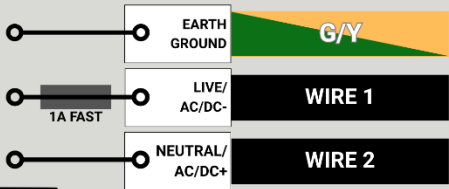
- When Motion 1, Direction A is pressed the relay for Motion 1, Direction A remains active through the button press, then immediately disengages once released. This is true for all directional controls

Note: Prolonged relay deactivation removed for one speed operation.



POWER SUPPLY

*Consult the product label to confirm power supply requirement



RELAY OUTPUTS

RELAY 1: MAINLINE

RELAY 2: MOT 1, DIR A

RELAY 3: MOT 1, DIR B

RELAY 4: NOT USED

RELAY 5: NOT USED

RELAY 6: NOT USED

RELAY 7: NOT USED

