

COLOUR CODES FOR SENSOR WIRING

	Standard					
+12 Volt	Brown	Red	Red	Red	Red	Left
Signal	Black	Yellow	White	White	Brown	Centre
Ground	Blue	Black	Black	Blue	Black	Right

The standard colours are Brown/Black/Blue on the sensors we use now. Look along the table to the colour mix of the sensor you want to fit or replace and fit the wires in the place of the standard colours.



Front Box of Double Box Drill

This can also be a single box but it wouldn't have the red and black wires doubled up as that is the feed for the back box and the white and brown wires aren't used.



Back Box of Double Box



Single Box



SEE OTHER PAGES FOR WIRING OF A 4 BLOCK I/O BOARD AND A 2x3 BLOCK I/O BOARD

Jockey Wheel sensor

Motor sensor

Up until recent times we have had separate wires with 12V supply and 7 core flex going to each box.

Now we are running a thicker dual core wire carrying the 12V supply to the front box, joining it there and then running it to the back box.

A single 7 core flex runs from the controller plug to the front box, is joined there and then runs to the back box.

BLACK to front box joins with black to back box.

Yellow to front box from main wiring Empty slot

Green to front box from main wiring Blue to front box from main wiring Red from front box joins with red to back box.

White from front box wiring joins with blue to back box.

Brown from front box wiring joins with yellow to back box.

With the controller plugged in and turned on the following should occur.

This LED shows the pulse from the wheel sensor and it should flash when the jockey wheel is rotated. (Front or single box only)

This LED shows the pulse from the motor sensor and it should flash when the motor wheel is rotated.

This LED shows there is 12V power getting to the system and should glow continuously whenever the 12V supply is connected (even if the controller isn't plugged in)

This LED shows there is a signal coming from the controller to the motor. This should glow continuously when the jockey wheel is rotated with the controller in the RUN mode.

This LED isn't used at present on drills fitted with a jockey wheel so it doesn't glow at any time.

On earlier drills without a jockey wheel that are still using the proximity switch mounted above the axle the following applies.

This LED shows the switch is operating correctly and it should glow continuously when the drill is lowered into the drilling position and should go out when the drill is lifted out of the ground.

Ver 2.21 I/O board has1x fuse & 2x light diodes Sensor, Voltage info available in diagnostic mode

WIRING DIAGRAM FOR CONVERTING PLUGS FROM OLD CONTROLLER SYSTEM TO NEW



To Alter Wiring on an Existing Double Box Drill to accommodate the new RC 300 Controller Do The Following 1. Determine which 7 core flex goes to which box.

- 2. Remove the connecting plugs going to both boxes.
- 3. Cut the Yellow, Green, & Blue wires going to the **BACK** box only.
- 4. Cut the Brown & White wires going to the **FRONT** box only.
- 5. Connect both BLACK wires going to FRONT & BACK box to the SIGNAL RIGHT position of the plug.
- 6. Connect the BROWN wire going to the BACK box to the TAIL position of the plug.
- 7. Connect the YELLOW wire going to the FRONT box to the REVERSE position of the plug.
- 8. Connect the WHITE wire going to the BACK box to the EARTH position of the plug.
- 9. Connect the GREEN wire going to the FRONT box to the SERVICE position of the plug.
- 10. Connect the BLUE wire going to the FRONT box to the BRAKE position of the plug.
- 11. Connect the WHITE wire going to the BACK box to the REVERSE position of the plug.
- 12. Connect both RED wires going to FRONT & BACK box to the SIGNAL LEFT position of the plug.

For *Single box* wiring no change should be necessary. Wires should be fitted to suit the controller plug shown above.

