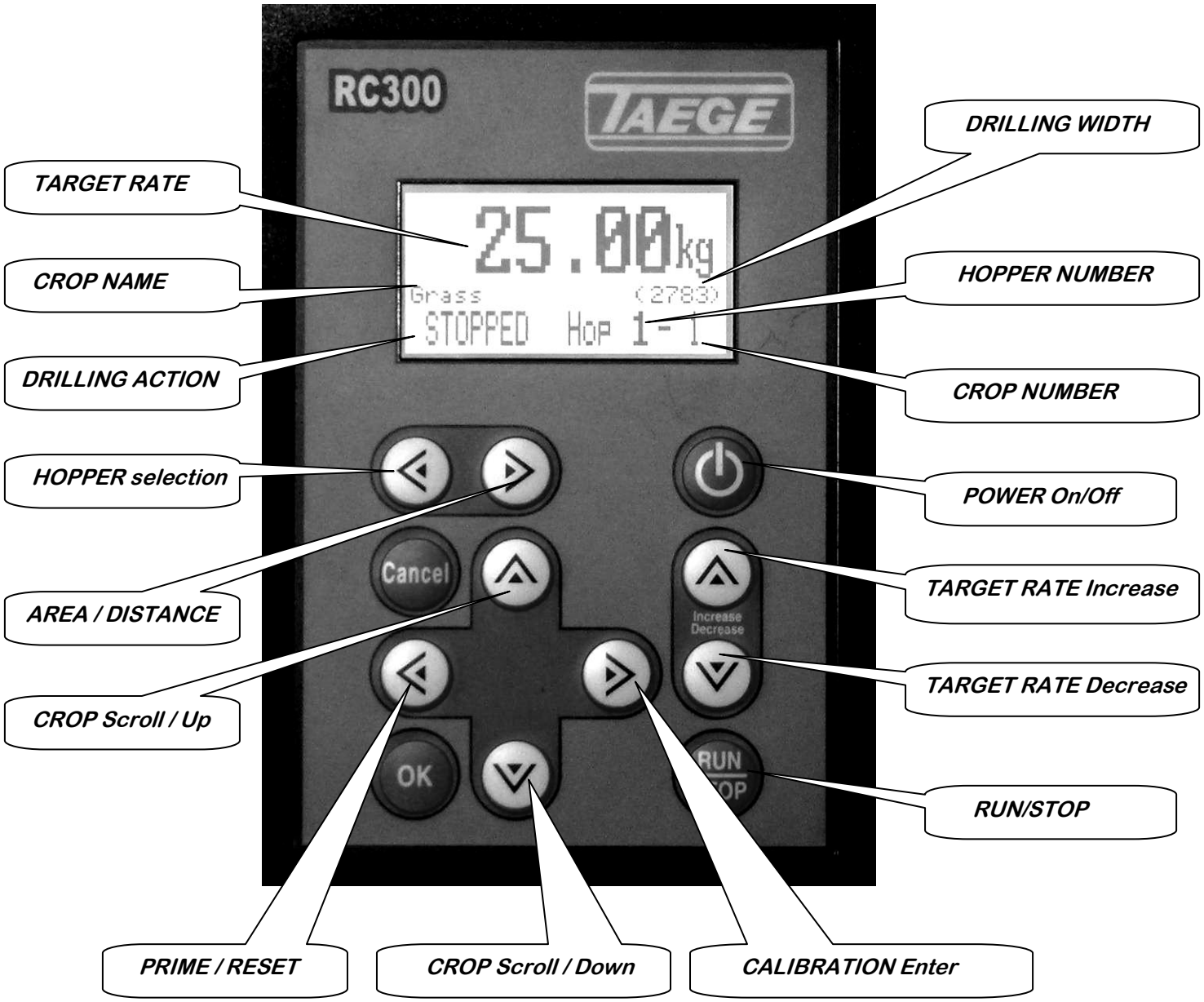

RC300
TAEGE
TAEGE
RC300 Rev 1.03
RUN
STOP
Cancel
OK

DEFAULT SCREEN

Button and Screen Layout



DEFAULT SCREEN

Screen Descriptions

TARGET RATE — Shows the current TARGET or seeding rate. This can be adjusted in both the STOP and RUN mode simply by pressing the TARGET RATE increase or decrease buttons. (Calibration is not affected)

CROP NAME — Shows the current crop selection by name. You can name the crops whatever you like in the **NAME CROP** mode. You can name the crops before or after calibration. Up to 25 crop presets can be stored for each hopper. This number can be changed in the **DRILL CONFIGURATION** mode.

CROP NUMBER — Shows the current crop number. It allows for easier location of a crop preset when there are a large number of crops saved.

DRILLING ACTION — Shows the current state of the drill. STOPPED means the drill will not sow even if you are moving.
TOO SLOW shows when the RUN/STOP button is pushed and means the drill is ready to go and will start sowing when you start to move. When you start moving this changes to the average drilling speed. (*Note this speed may not directly correspond to your tractors speedo, this is normal as it has a time factor included)*

DRILLING WIDTH — Shows the current drilling width set in the **DRILL CONFIGURATION** mode. This is generally the distance over the 2 outer tips plus 1 space.

HOPPER NUMBER — Shows the hopper that the onscreen information, or the current action relates to (1 being the front bin and 2 the back bin). This can be changed with the HOPPER SELECTION button.

Button Descriptions

HOPPER selection — When pressed this button switches between the number of hoppers programmed into the **DRILL CONFIGURATION** mode. It also brings you back to the DEFAULT or TARGET RATE screen

AREA / DISTANCE — When pressed this switches the screen between the AREA and DISTANCE screen. While in these modes the **DISTANCE/AREA** menu can be accessed where distance calibration is set up.

CROP Scroll / Up — When in the DEFAULT or TARGET RATE screen these buttons scroll thru the different crop names/numbers. Whenever the drill is calibrated the settings are automatically stored In whatever crop or hopper is shown on the screen. To start drilling you just simply turn on the unit, scroll to the desired crop, press RUN/STOP and drive.

CROP Scroll / Down

PRIME / RESET — When pushed and held, this button will prime the sponges on the hopper which is shown on the screen.
In Area/Distance mode, this button when held for 3 seconds resets the Area and Distance.

CALIBRATION Enter — When pressed this gets you into the calibration mode for the hopper displayed on the screen. See the **CALIBRATION** page for details.

RUN/STOP — When pressed it switches between the RUN & STOP modes.

TARGET RATE Increase
TARGET RATE Decrease — When pressed these change the target rate up or down. The target rate must be showing on the screen in either the stopped or run mode.

POWER On/Off — Turns the unit power ON or OFF if held for 3 seconds.

CALIBRATION

1. *Press here to turn on the unit.*

2. *Press here to choose the hopper you want to calibrate.*

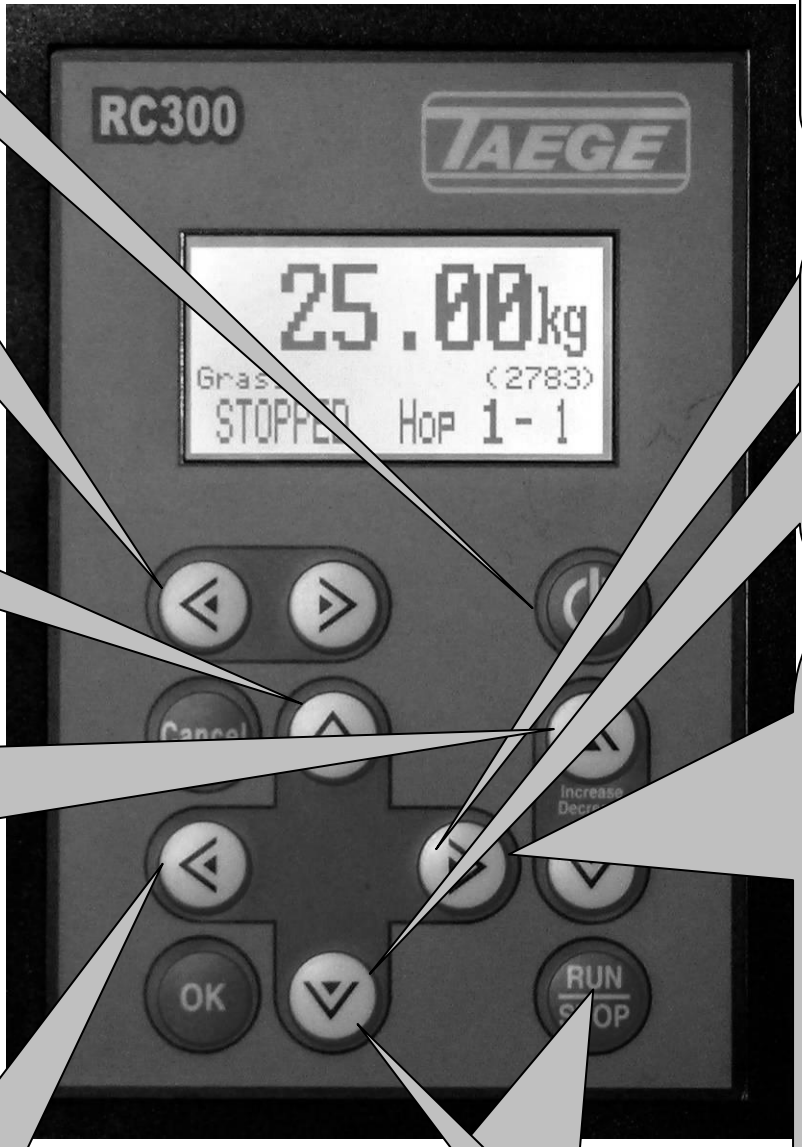
3. *Press here to choose the crop you want to calibrate.*

4. *Press here to increase or decrease your target seeding rate.*
Note another function of this button in step 8

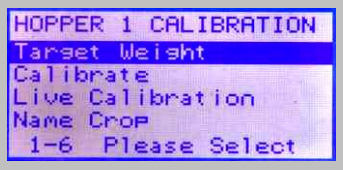
5. *Place the seed calibration trays under the sponges.*

Press here & hold to prime the metering system. The display will show the hopper being primed.

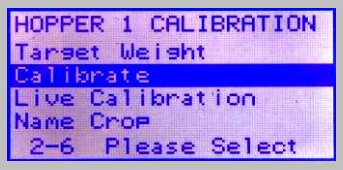
Empty the calibration trays and replace under sponges.



6. *Press the right navigate button and you will see the following screen.*

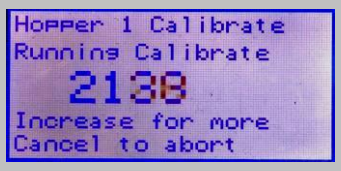


7. *Press the down navigate button and you will see the following screen.*



8. *Press the right navigate button 3 times and you will see the following screen.*

*(Every time you press the **Increase** button while this number is counting down 500 will be added onto the count so that more seed will be collected)*
The numbers will count down to 0 and the motor will stop.

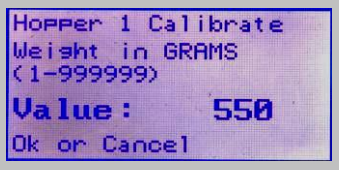


10. *Press Run/Stop and you will s the following screen.*

You are ready to go.

As you move, the 'Too Slow' area will change to Kmh and 'Running' will move across the screen.

9. *Weigh the seed collected. Use the left and right navigate buttons to highlight the number you want to change. Use the increase or decrease buttons to enter the weight. Press O.K. when completed to return to the default screen.*



CALIBRATION TEST

You are able to test your calibration settings the following way

Series 300 ---------- 36m = 100th ha
Series 360 ---------- 28m = 100th ha
Utility Drill ---------- 34m = 100th ha

1. *Press the **Run/Stop** button and you will see similar to the following screen showing **Area***

2. *Press & hold here for 3 seconds to **Reset** the **Distance** and **Area.***

Reset** can also be achieved in the Distance/Area menu by pressing **Right Navigate** button twice then **O.K.

3. *You should now see the following screen*

0.000ha
Too Slow
Area

4. *Place the Seed Calibration Trays under the sponges.*

Spin the Jockey or ground wheel; stop as soon as the screen reads the following. (this is 100th ha)

0.010ha
Too Slow Area

5. *Weigh the seed collected and it should be close to 100th of your target seeding rate.*
Ie. For 25kgha target weight you should have collected 250g of seed.

6. *If that isn't the case then you can press the **Increase** or **Decrease** buttons to alter the Target Seeding Rate then repeat steps 1 to 6*

(If it is a long way from being correct in the first test then recalibrate and try again)

DISTANCE / AREA

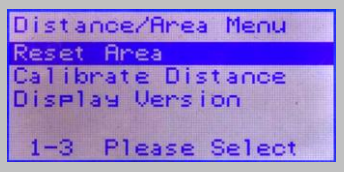
Reset &Calibration

1. *Press here in the **Stopped** mode to toggle between the **Area** or **Distance** page.*

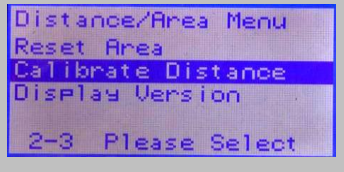
2. *Press & hold here for 3 seconds to **Reset** the **Distance** and **Area.***

Reset** can also be achieved in the Distance/Area menu by pressing **Right Navigate** button twice then **O.K.

3. *Press the **Right Navigate** button and you will see the following screen.*



4. *Press the **Down Navigate** button to highlight the **Calibrate Distance***



5. *Press the **Right Navigate** button and you will see the following screen.*

6. *Press the **Run** or the **Right Navigate** button and you will see the following screen.*

7. *Drive the distance you have measured out and stop. Press the **Run** or the **Right Navigate** button*

8. *Use the **Left** and **Right navigate buttons** to highlight the number.*
*Use the **Increase** or **Decrease** buttons to enter the distance you travelled. Press O.K. when completed to return to the Distance/Area screen.*

NAMING CROP

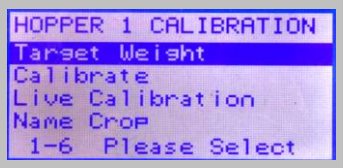
You have the option of saving up to 25 crop presets for each box. (See page 15 & 16 of the Drill Configuration Menu.) Every time you calibrate the drill, the settings are automatically saved in the area or crop number you have calibrated in. You can name this saved calibration anything you like up to 14 characters in length including spaces. The crop can be named before or after calibration. If you are drilling different crops over a short period of time there is no need to recalibrate each time. Simply scroll to the crop you have saved, press 'Run' and go. You can update calibrations simply by recalibrating over the top of a saved calibration.

1. *Press here to turn on the unit.*

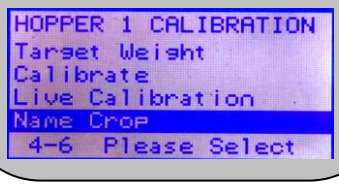
2. *Press the Hopper Selection button here to choose the hopper you want to name the crop for.*

3. *Press the up navigate button here to choose the space you want to save a calibrated crop to, or the crop you want to name.*

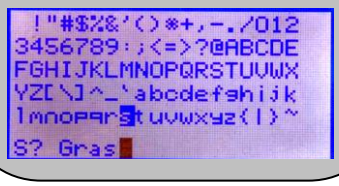
4. *Press the right navigate button and you will see the following screen.*



5. *Press the down navigate button 3 times and you will see the following screen.*



6. *Press the right navigate button and you will see the following screen.*



7. **a.** *Use the Hopper selection button to delete the current name.*
b. *Use the 4 navigate buttons to move the highlight cursor over the letter you want to use.*
c. *Press the Run/Stop button to add that letter to the name.*
d. *When the name is complete press O.K. to save the name.*

DRILL CONFIGURATION 1

This is the area where the drill and controller setups and options are set.

*Hold the **Cancel** & press the **Right Navigate** button and you will enter the drill configuration menu.*

*Use the **Up & Down Navigate** buttons to scroll thru the menu.*

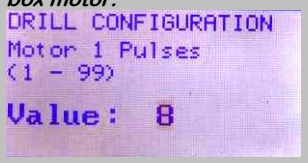
*Use the **Left & Right navigate** buttons along with the **Increase & Decrease** buttons to make any adjustments.*

*Press **O.K.** to return to the Stopped mode.*

Drill Configuration Menu Page 1

Always set to 8.

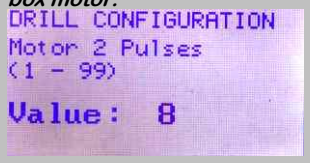
This is the number of pulses per revolution of the front box motor.



Drill Configuration Menu Page 2

Always set to 8.

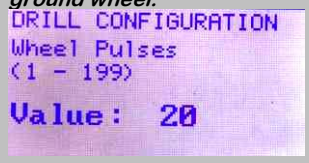
This is the number of pulses per revolution of the back box motor.



Drill Configuration Menu Page 3

Usually set to 20.

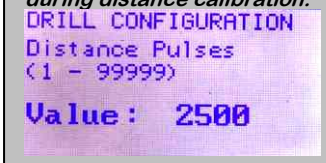
This is the number of teeth on the jockey wheel or ground wheel.



Drill Configuration Menu Page 4

Set during distance set up.

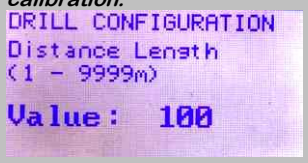
This is the number of pulses from the jockey wheel during distance calibration.



Drill Configuration Menu Page 5

Set during distance set up.

This is the distance travelled during distance calibration.



Drill Configuration Menu Page 6

Drill Width

The distance across the 2 outside tips plus 1 space.

Drill Configuration Menu Page 7

Usually set to 1500.

This is the speed of the metering system during calibration.

Drill Configuration Menu Page 8

Usually set to 300

This is the speed of the metering system when it slows down during calibration.

DRILL CONFIGURATION 2

Drill Configuration Menu Page 9

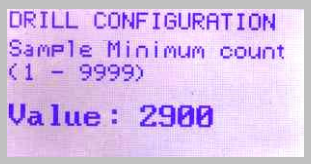
Usually Set to 200

This is the point at which the metering system slows down during calibration.

Drill Configuration Menu Page 10

Usually Set to 2000

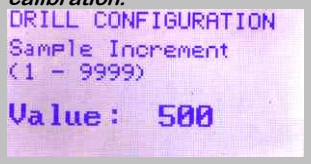
This is the number the motor counts down from during calibration.



Drill Configuration Menu Page 11

Usually set to 500

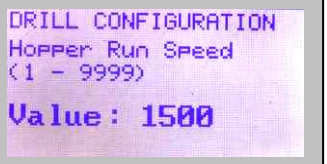
This is the number you can add or subtract from the motor countdown during calibration.



Drill Configuration Menu Page 12

Usually set to 1500

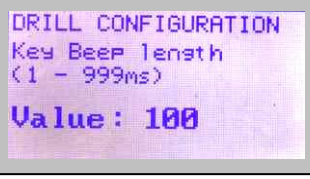
This is the speed of the metering system during priming or box emptying.



Drill Configuration Menu Page 13

Usually Set to 100

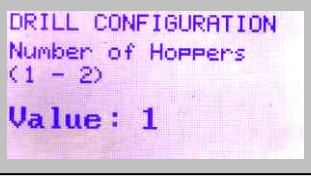
This is the setting for the length of the warning beep



Drill Configuration Menu Page 14

Set to 1 or 2

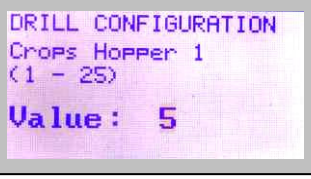
This is the number of hoppers on your drill.



Drill Configuration Menu Page 15

Usually set to 5

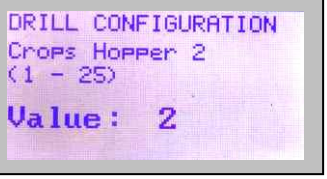
This is the number of crops that are available as presets for the front box. Up to 25 can be saved per box.



Drill Configuration Menu Page 16

Usually set to 5

This is the number of crops that are available as presets for the back box. Up to 25 can be saved per box.



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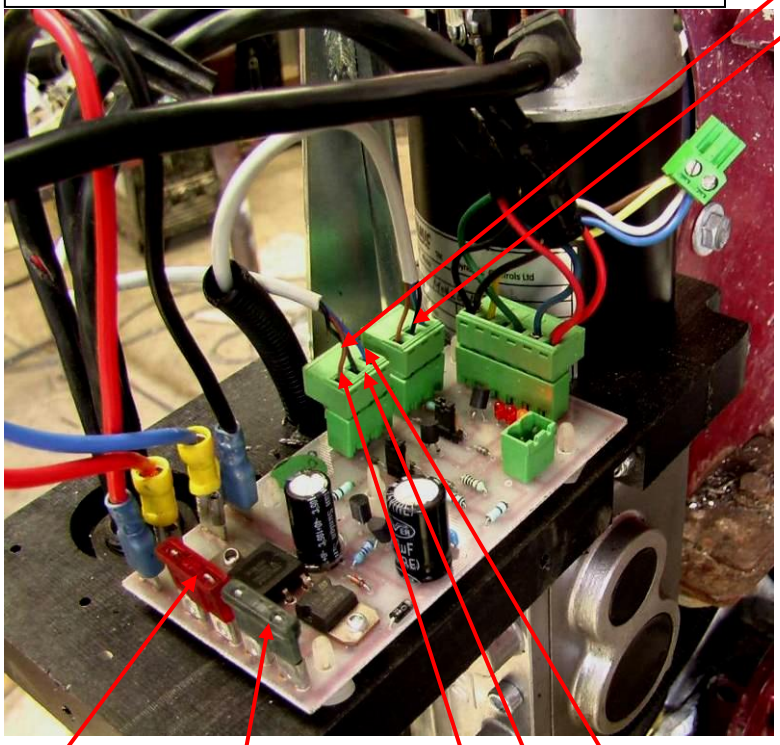
COLOUR CODES FOR SENSOR WIRING

	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 current sensors. Use the table to find the correct colour mix and fit the wires in the place of the standard colours.

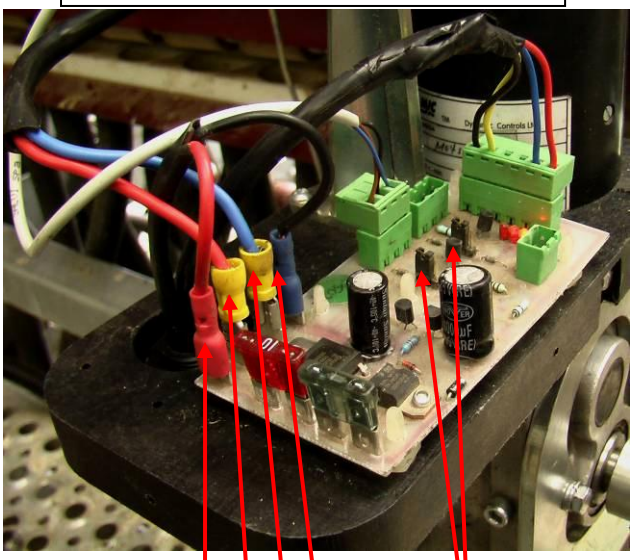
Front Box of Double Box Drill
This can also be a single box but it wouldn't have the red and black wires doubled up as they feed the back box.



Motor

Jockey Wheel

Back Box of Double Box



Main power 10 Amp Fuse

Controller system 2 Amp fuse

Blue

Black

Brown

Both sensors are wired up the same with the colours moving away from the motor.
Blue, Black, Brown.

Positive 12vdc supply from tractor or battery

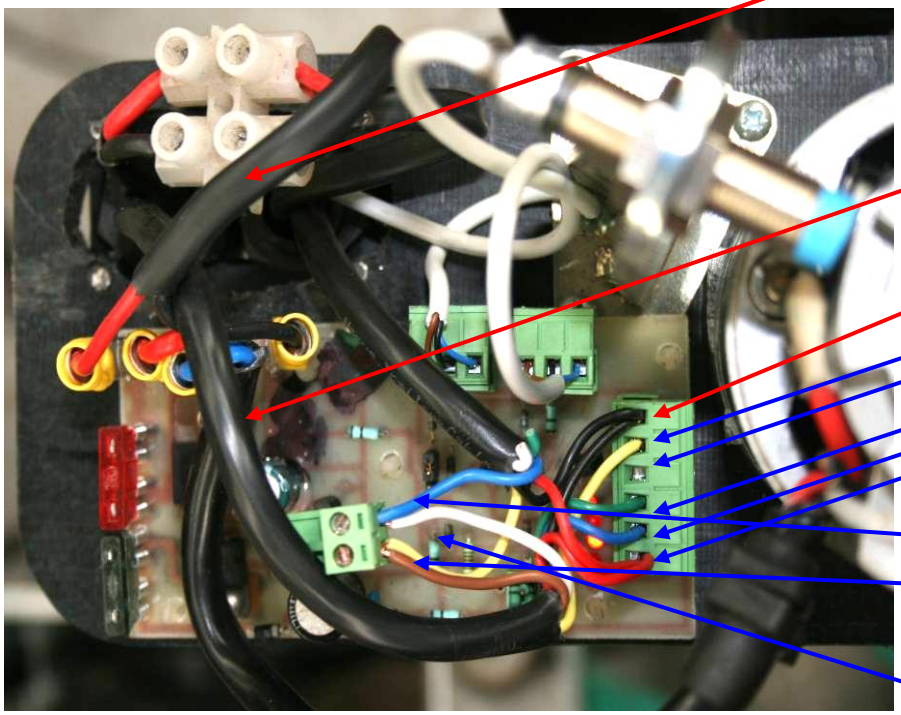
Positive 12vdc feed to motor

Negative 12vdc feed to motor

Negative 12vdc supply from tractor or battery

Both of these should be covering the 2 pins closest to the green 3 pin blocks.

Front Box of Double Box Drill



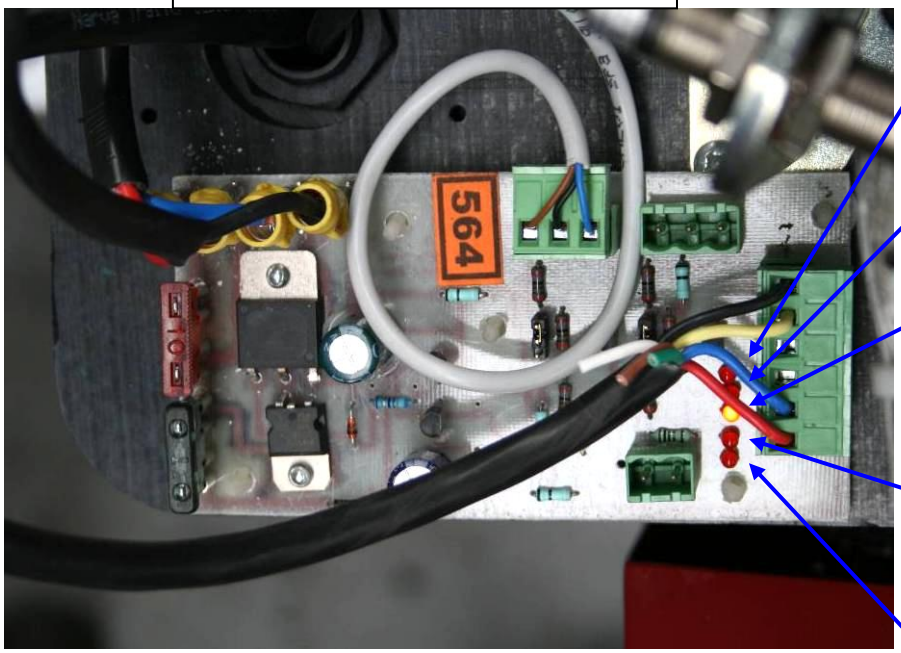
Run a thick dual core wire carrying the 12vdc supply from the tractor to the front motor box, joining it there and then run it to the back motor box.This is the 12vdc supply for the motors.

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

BLACK from the 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 the front box joins with red to back box.
White from the front box wiring joins with blue to back box.
Brown from the front box wiring joins with yellow to back box.

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

Back Box of Double Box



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

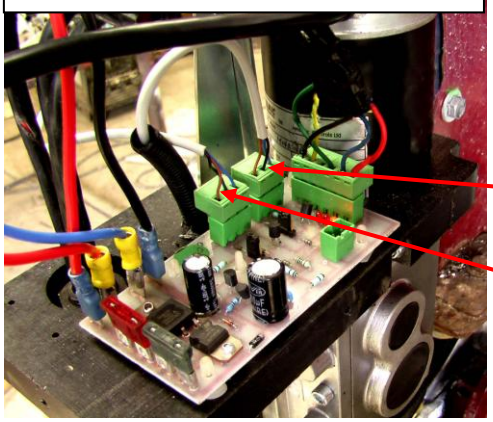
This LED shows the pulse from the motor sensor and it should flash when the motor wheel is rotated.

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

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

Single Box



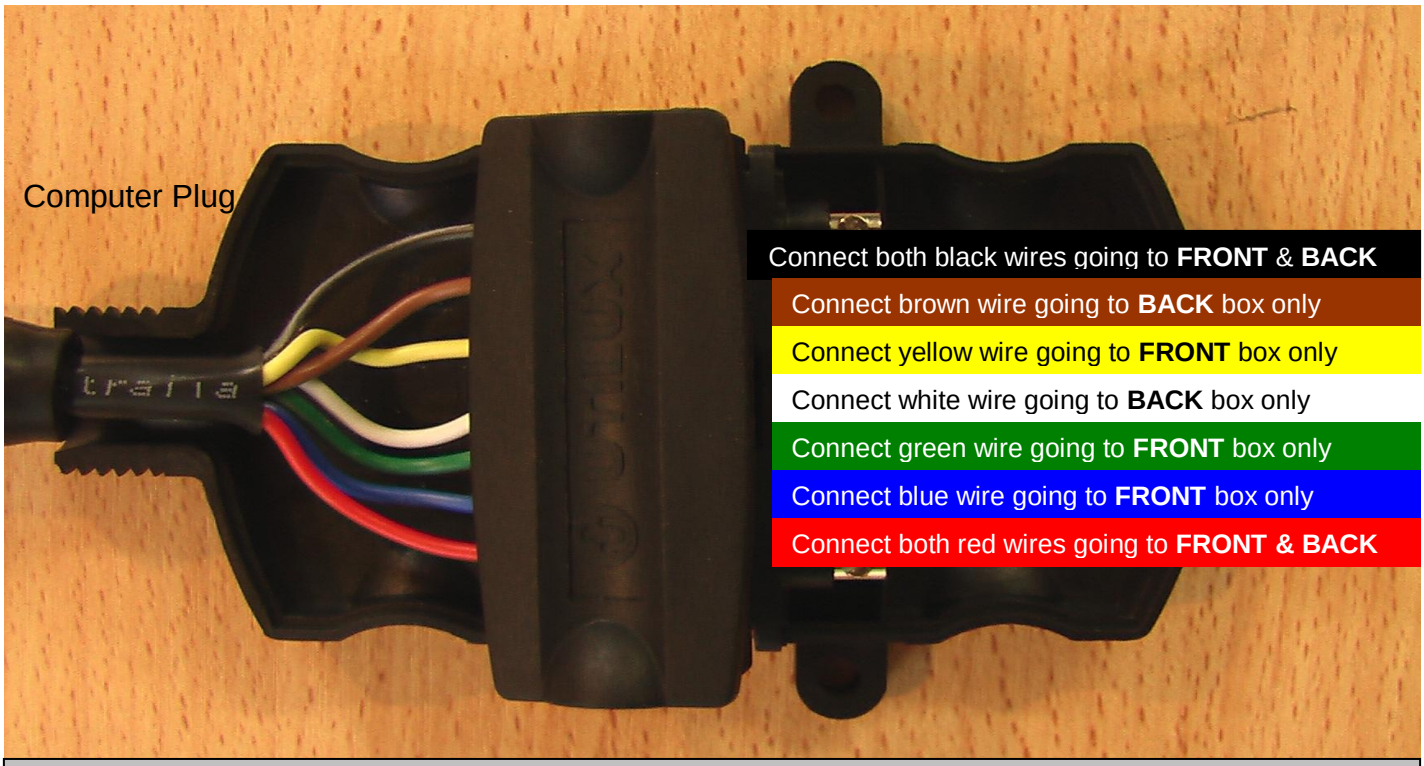
GOTO THE LAST PAGE 4 BLOCK SENSOR WIRING

Jockey Wheel Sensor

Motor sensor

Latest I/O boards have1x fuse & 2x light LED's and are easily identified as they have 3x capacitors these may be seen with ver 2.3 wiring diagrams and have Taege IO-1 dentification.

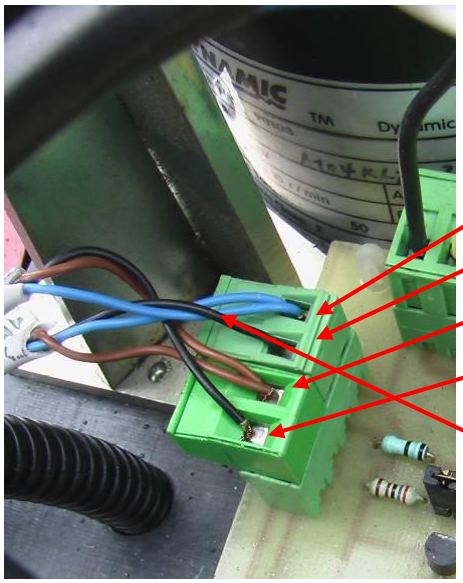
WIRING DIAGRAM FOR CONVERTING PLUGS FROM OLD COMPUTER SYSTEM TO NEW



To Alter Wiring on an Existing Double Box Drill to accommodate the new RC 300 Computer 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.



4 BLOCK SENSOR WIRING

BLUE Join both blue wires from both sensors.

BLACK from jockey wheel sensor to 2nd point away from

BROWN Join both brown wires from both sensors

BLACK from motor sensor to 4th point away from motor

This picture shows the sensor wiring for a single motor box or the front motor box of a double hopper drill with a 4 block sensor connection.

For the back box of a double hopper drill wire it up as per the code and just leave the 2nd connection away from the motor empty.