INSTRUCTIONS: Programmer/Tester

Tonick Watering
Programmer/Tester for:
2wire Decoders, Decoder In A Solenoid (DIAS), Sensor Decoders (Senders) and COMBO decoder

Power-Up:

Plug the black circular DIN plug from the power supply into the left hand connector in the programmer.
For all the features below, the display should read **"P32"**, then **"USA"** for a couple of seconds

If it reads **"EU"** this is only for legacy decoder testing (Watermation). Phone Tonick for the procedure to change modes. (+44 7595 894484). This can be done by holding down all 4 buttons and cycling the power.

Connecting:

Press the top of each terminal and feed the bared wire into the hole at the front. Releasing the terminal will grip the wire. Do not try and twist the terminal. Make sure the terminal grips the bare copper and not the wire's insulation.

Decoder. TW/2W-x:

Red wire to the red terminal marked '*24v A.C.*'
Black wire to the black terminal marked '*24v A.C.*'
Solenoid output wires to the two yellow terminals marked '*SOLENOID*'.
If the decoder has a brown wire, this is the solenoid common and goes into one of the yellow terminals
Ensure any unused wires are not touching each other.
Multiple output decoder has its non-brown wires connected to the other yellow terminal, one at a time during programming or testing. Wire colours: Yellow=channel 0, Orange=channel 1, Green=channel 2 and Violet=channel 3. Please ensure the unused wires are not touching each other.

DIAS:

Feed one wire of the Decoder In A Solenoid (DIAS) into the red and and the other into the black terminal. Polarity is unimportant. There is no connection to the yellow terminals.

Sensor Decoders (Senders):
TK-FLO-CC, TK-FLO-FREQ, TK-PRES-xxx, TK-VWC-VH400, TK-UNI-8:

Feed only the red and black wires of the sender into the red and black terminals. DO NOT connect any other sender wires into the yellow terminals and make sure unused wires are not touching.

COMBO decoder: TK-COMBO:

Red wire to the red terminal marked '*24v A.C.*'
Black wire to the black terminal marked '*24v A.C.*'
Master Valve solenoid output wires: brown, yellow to the two yellow terminals marked '*SOLENOID*'.
DO NOT connect any other Combo wires into the yellow terminals and make sure unused wires are not touching.

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Programming:

Press the Grey '*Raise*' or '*Lower*' buttons to alter the red displays to the address to be programmed. (Holding the button down will cause the numbers to change more rapidly.)

- The Combo decoder can be programmed to only addresses 126 or 127 valve.
- TK-FLO-CC can be programmed Sender addresses 1-8 , (distinct from valve decoder addresses)
- TK-PRES-xxx can be programmed Sender addresses 1-8, (distinct from valve decoder addresses)
- TK-VWC-VH400 can be programmed Sender addresses 1-8 , (distinct from valve decoder addresses).
- TK-UNI-8 can be programmed Sender addresses 1-8 , (distinct from valve decoder addresses)
- TK-FLO-FREQ can be programmed Sender addresses 1-15, (distinct from valve decoder addresses)
- DIAS can be programmed to addresses 0*-127 Valve
- TW/2W-x can be programmed to addresses1-127 Valve
- TKDEC-1 can be programmed to addresses 1-63 Valve

Press the red '*Program*' button. The displays can show all or some of CH0, CH1, CH2, CH3, Sn1, Sn2, Sn3, Sn4, Sn5, Sn6, Sn7, Sn8 as the programmer identifies what is connected.

After one or more of these messages has been displayed, either the '*Pass*' (green) or '*Fail*' (red) lamps will illuminate. If passed, the Decoder/Sender/DIAS/Combo will have been programmed and then tested for the correct switching response at that address.

Tip:
THERE IS NO NEED TO PRESS THE 'TEST' BUTTON AFTER PROGRAMMING. Testing has already been done.

* DIAS, when programmed to address 0, behaves as a normal 24VAC solenoid. From address 1-127 it behaves as a decoder feeding its built-in solenoid.

Testing:

Press the green '*Test*' button. The displays can show all or some of CH0, CH1, CH2, CH3, Sn1, Sn2, Sn3, Sn4, Sn5, Sn6, Sn7, Sn8 as the programmer identifies what is connected.

After this, all possible decoder addresses will be cycled in quick succession until one responds. The displays will stop showing the address programmed (or set on the switches) and the green '*Pass*' lamp will illuminate.

If there is no response, the red '*Fail*' lamp will illuminate.

Tip:
Usually, do not bother to use the '*Test'* button with the Combo decoder TK-COMBO. It will take 2 minutes to check all the addresses from 1-125, before the address 126 or 127 responds. Instead, raise the address to 126 or 127 using the Grey '*Raise*' or '*Lower*' buttons, then press the '*Program'* button. The Combo will be be programmed, then <u>tested</u> at that address, which is much quicker.

For further help:
Contact the help desk on 01346-531193
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