

Dingo Servo Mounts

Crossing Gate Sequencer

Safety Precautions.

Before installing this product, make sure that you have read the full instruction guide and are comfortable with the requirements.

Make sure that all parts, especially plastic packets, are kept away from young children.

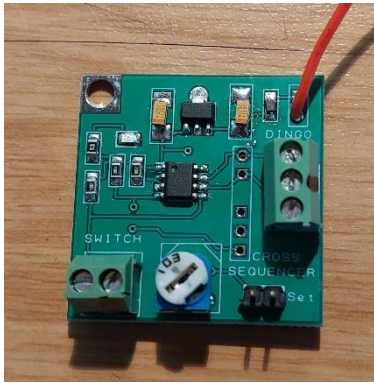
Only use certified power supplies for your region and **DO NOT** interfere with the Mains side of the power supply.

If you are unsure as to how to do the electrical connections, please consult with someone who has the required expertise or contact Dingo Servo Mounts for more information.

These units are not toys, but serious modelling parts.

These boards are still in a test phase of marketing and maybe subject to failure.

Description and Origin



This control board came into being to address the issue with overlapping crossing gates.

It requires one to move one gate first before moving the second gate.

In the reverse mode the gates have to close in to opposite sequence.

This board is designed to work with our Red Twin servo board but can be used with any other control board with certain limitations.

(Please contact me if you wish to do this)

Wiring up.

Wiring up is very simple.

The 3 long header pins included in the kit need to be removed from the plastic holding strip.

These are then used to connect the 3 terminals on the Sequencer board directly to the 3 terminals on the Red Twin Servo Control Board.

The red (+12V) wire needs to be inserted to the +12V connection on the Twin Servo Board.

This will supply the board with power – Note it has a protection diode on board just in case of wrong polarity.

Then your switch needs to be connected to the switch terminals of the sequencer board.

The switch is a simple on/off switch (SPST)

In the open position both outputs will be high meaning that both servo inputs will be open circuit.

When the switch is closed, the first servo activates (ie the connection is shorted out)

Then after the set time delay, the second servo is activated.

Note a push button switch will not work unless it is self latching.

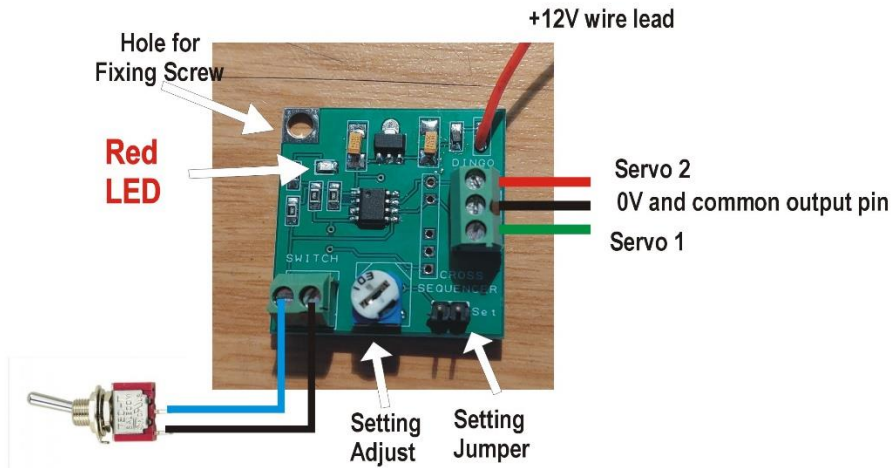
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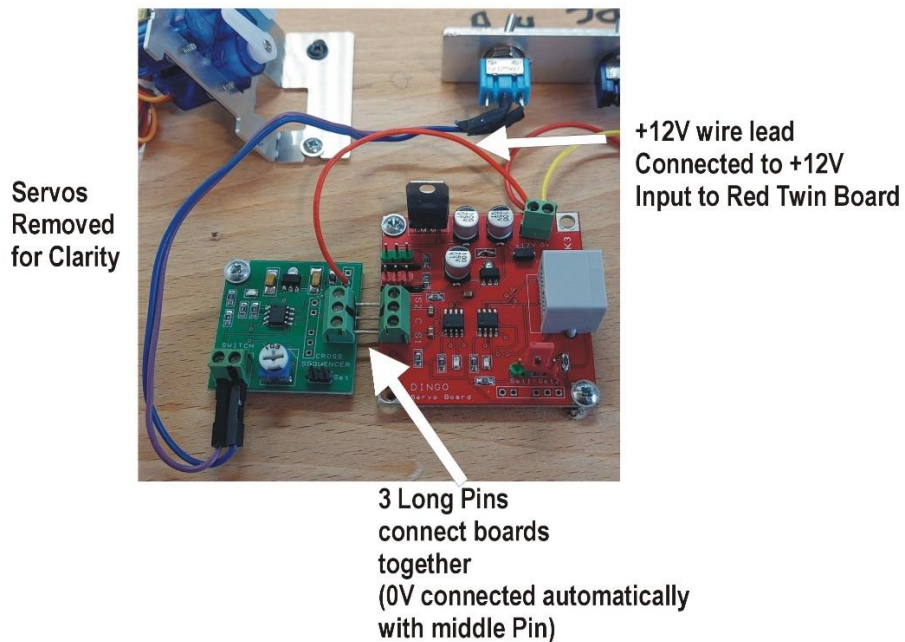
Crossing Sequence Control Board

Wiring connections



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Crossing Sequence Control Board Connecting to Twin Red Servo Board



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Crossing Gate Sequencer

Setting up the Crossing Gate positions.

You may want to set this up without gates in just to be sure there are no accidents.

Start with the gates in the closed position and the switch on the sequence board open (or disconnect one wire from the board)

Make sure that the first gate you wish to move is connected to servo 1 on the control board.

Using the setting Jumper on the servo board move Gate one to the closed position.

Now switch the sequencer board and in a couple of seconds the gate will be active and you can move it via the setting box on the control board to the open position.

Go back to the open position on the sequencer board to make sure the gate is operating as required.

Now you can do the same with gate 2 remembering that it will operate after a timed sequence following the activation of Gate 1.

The final setting up is to set the timer on the sequencer board

With the sequencer switch in the open position, place the setting jumper on the 2 setting pins

You can now adjust the timing with the small trim pot.

Clockwise increase the timing and anti-clockwise reduces the time

(Do Not activate the gates during setting up the timer)

Remove the jumper and test the timing – modify as required.

All done

You can now operate your gates in sequence just by operating the switch,

Further Ideas.

The unit can also be operated by track detection systems as long as they have a relay or opto-coupled output – and provided the output is stable during the time the gates need to be open

The boards are marked with which pin is grounded (0V)

I hope that you will find this unit useful and as always I welcome any feedback.

Dave Ingoldby

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