DAY NIGHT CONTROL UNIT

Run Times 5 to 80 seconds Oceanair Part No. AC-SP-CONTROLLER-DAY/NIGHT

Introduction

The Day Night control unit is a versatile unit running on 24v DC, which can be controlled by either RTS protocol transmitters or push button inputs and has two motor output channels.

Specific software enables it to be used to control either window day/night or roof blinds. It has built in self-resetting over current protection and the run time for the motor outputs can also be adjusted to suit the application.

How to Install the Control Unit

Fit the control unit

The controller should be mounted in an easily accessible position, to allow initial connection of the unit and subsequent setting of the DIP switches. Wiring should be installed as shown in the diagram.

Inputs

The unit should be fed from a regulated 24v DC power supply rated at 5 A max.

Normally Open (N/O) push buttons can be connected as shown to J3.

Transmitters from the Telis range with RTS protocol can be loaded onto the control system.

The system can accept up to a maximum of 36 transmitters.

There are also 3 push buttons mounted on the board to enable easy commissioning of the system.

Outputs

Motor connection, the polarity of the motor wires depends on whether the motor is left or right hand mounted. Motor output A goes +ve and B –ve during an UP command so motors should be connected accordingly.

Set the DIP Switches

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DIP switches 1-3 set the time period that the motors run for on receipt of a command. The preset minimum time is 5 seconds; this can be increased in increments as shown in the following table up to a maximum of 80 seconds.

DIP 4 OFF = unit in DNC mode, for window blinds DIP 4 ON = unit in RFB mode for roof blinds

Run Time Seconds	DIP 1	DIP 2	DIP 3
5	Off	Off	Off
10	On	Off	Off
15	Off	On	Off
20	On	On	Off
30	Off	Off	On
40	On	Off	On
50	Off	On	On
80	On	On	On

Mode Selection

There are two selectable modes, RFB for roof blinds and DNC for window blinds. Upon receiving a command, the output relays energise in a set sequence as shown below to control the motors fitted to the blinds. Any subsequent commands received during the run time are treated as a stop command, as the motors may have already stopped on their own limit switches this can cause confusion to the operator so it is important to set the run time as close as possible to the actual run time of the blind. It is however recommended to build in an additional margin to allow for motor speed fluctuations.

DIP 4 OFF = DNC Mode				
Command	Motor 1	Motor 2		
Up	Up	Up		
MY	Down	Up		
Down	Down	Down		

DIP 4 ON = RFB Mode				
Command	Motor 1	Motor 2		
Up	Up	Down		
MY	Down	Down		
Down	Up	Up		

Adding and Deleting Transmitters

Up to 36 transmitters from the Telis range can be loaded onto the control unit. Transmitters are added and deleted by pressing the *Add/Delete Transmitter Button* located on the raised board in the top right hand corner of the main board, as shown on the diagram.

Adding Transmitters

Press and hold the *Add/Delete Transmitter Button* for 2 seconds until the receiver LED comes on, within 2 minutes press the prog button on the back of the transmitter you need to add. The receiver LED will flash 7 times to confirm that the transmitter has been added. Repeat this process for further transmitters.

Deleting Transmitters

To delete an individual transmitter, press and hold the *Add/Delete Transmitter Button* for 2 seconds until the receiver LED comes on, within 2 minutes press the *prog* button on the back of the transmitter you need to delete. The receiver LED will flash 7 times to confirm that the transmitter has been deleted. Repeat this process for further transmitters. To delete all transmitters on the system, press and hold the *Add/Delete Transmitter Button* for 7 seconds total, after 2 seconds the receiver LED comes on solid, keep the button held in for the remaining 5 seconds until the LED flashes, all transmitters are now deleted.

User Operating Information

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Pressing the UP button moves both blinds to the fully up position leaving the window un-obscured. The blinds automatically stop at the end of travel limit, pressing any button while the motor outputs are still active stops the movement.

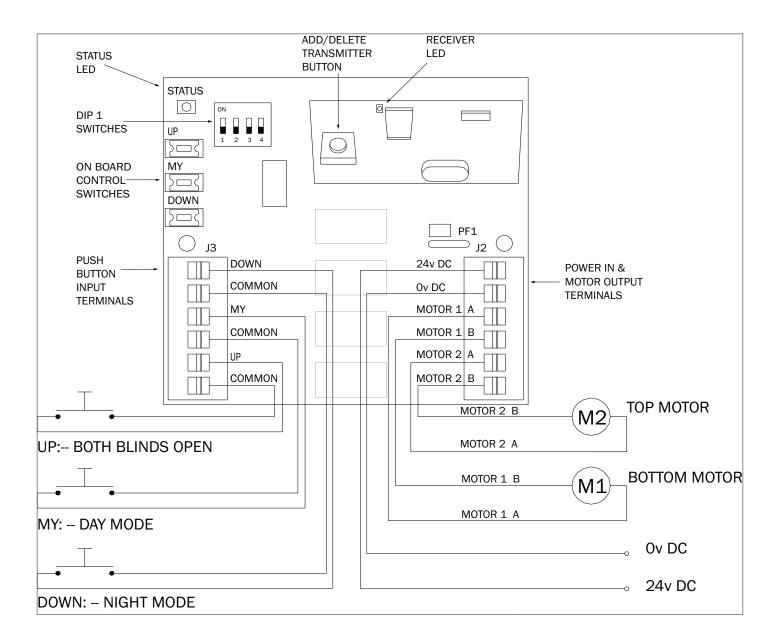
Pressing the MY button closes the DAY blind leaving the window semi-obscured.

Pressing the DOWN button closes the NIGHT blind leaving the window fully obscured.

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Status LED Indication

Red Flash	Reset Signal During Power Up
Constant Red	Push Button Input Active During Power Up
Green Flash Every Second	Unit Powered up - Relay Outputs Idle
Red/Green Flash Every Second	Unit Powered Up - Relay Outputs Active



Specification

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Supply Voltage	24v DC Regulated
Supply current	5A
Max Motor Power	650mA (Somfy LW 25)
Radio Frequency	433.42 MHz
Radio Protocol	RTS
Max No. Transmitters	36
IP Rating	44
Dimensions (mm)	H 108 / W 110 / D 40