

# MULTILINK<sup>TM</sup> SNAPTRACK - DC

## Installation and Operating Instruction



Part No: 1822185 Old Part No: 6301993

#### **DESCRIPTION**

The MultiLink SnapTrack - DC control provides three separate ways to drive a Somfy motor:

- Infrared Remote Control with Somfy's 24 Channel IR Transmitter
- Manually using a low voltage switch
- Remotely by external automation device via RS232 Interface

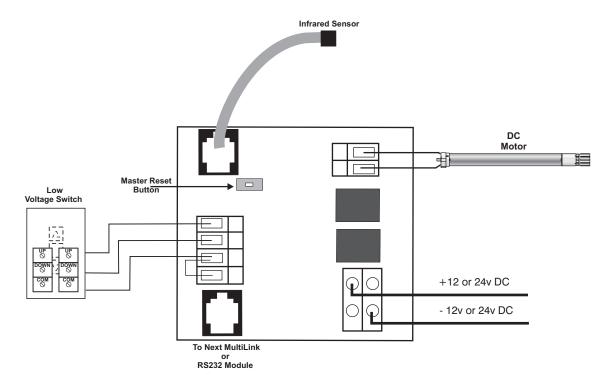
It is equipped with a dry contact input that can interface with a window alarm system. One typical application is for casement windows; when the window is open, the motor will not operate. This will help prevent damage to window coverings. The Snaptrac DC is specially designed to mount into industry-standard 3.4in. SnapTrack for easy panel mounting.

### **INSTALLATION GUIDELINES**

The following guidelines must be applied when installing a MultiLink SnapTrack control:

- When installing multiple controls, it is recommended having only 1 control powered at a time during programming.
- The MultiLink SnapTrack can memorize up to 8 Infrared Transmitter channels.
- 4 conductor, 6 position modular connection required for IR, RS232 or Daisy-Chain.

#### WIRING DIAGRAM



#### **SOMFY CANADA**

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#### LOW VOLTAGE SWITCH OPERATION

VERIFY MOTOR DIRECTION

This step MUST be performed prior to any transmitters being memorized!

- 1. Press and release the DOWN button on the low voltage switch. The motorized window treatment should begin to lower.
- 2. If this is incorrect, press and hold the STOP button for two seconds. The window treatment will jog UP then DOWN.
- **3.** To reverse directions again, simply repeat above step.

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## **NORMAL OPERATION**

Upon Power-Up, the MultiLink SnapTrack is unprogrammed and will only respond to the Low Voltage Switch Inputs or programming commands from a transmitter

- 1. Pressing either the UP or DOWN buttons on the low voltage switch will move the motorized treatment in the appropriate direction.
- 2. If the window covering is in motion, a STOP command can be given by activating the direction of movement. For example, if the treatment is moving up, activating another UP command within the programmed run time will stop the window treatment. Alternately, it can be stopped in any position by depressing the stop button on the IGC Switch.
- 3. To operate the tilt function in horizontal blind applications, simply press and hold the directional button on the switch. When the desired slat angle is reached, release the directional button.

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## LOCK OUT INPUT

The Lock Out input is an N-C (normally closed) terminal. It is typically connected to an alarm contact or other normally closed contact connected to a casement window or french door. When the door or window opens, this contact opens and disables the control. **DO NOT REMOVE FACTORY INSTALLED JUMPER IF THIS FEATURE IS NOT USED.** 

## INFRARED REMOTE OPERATION AND PROGRAMMING

NOTE: Characters enclosed in brackets such as <X>, indicate the IR Transmitter button to be pressed.

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## **VERIFY MOTOR DIRECTION**

This step MUST be performed prior to any transmitters being memorized!

- 1. Press and release the following buttons on a Somfy 24 Channel Infrared Transmitter: <G1> <G2> <G3> <ALL> <ALL>. The motorized treatment should iog UP then DOWN.
- 2. Press and hold the DOWN button, if the shading system lowers or extends, press and release the <ALL> button. The treatment will respond by jogging UP then DOWN.
- 3. If the direction is incorrect, press and release the STOP button on the IR transmitter. The window treatment will now jog UP then DOWN.
  NOTE: This procedure does NOT effect motor direction via the low voltage switch input. Please see the LOW VOLTAGE SWITCH OPERATION section.

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## PROGRAMMING A CHANNEL INTO MEMORY

#### A. Programming the First Channel

- 1. Press and release the following buttons on a Somfy 24 Channel Infrared Transmitter: <G1> <G2> <G3> <ALL> <ALL>. The control is now in programming mode and the motor will respond by jogging.
- 2. Press and release <1>, then the channel to be memorized.
- 3. Press and release the <ALL> button, the motor will respond by jogging and that channel will now operate the Snaptrack AC.

#### **B. Programming Additional Channels**

- **1.** Press and release the button(s) of a channel that is already programmed into memory.
- 2. Press and release the following buttons on a Somfy 24 Channel Infrared Transmitter: <G1> <G2> <G3> <ALL> <ALL>. The control is now in programming mode and the motor will respond by jogging.
- **3.** Press and release <1>, then the channel to be memorized.
- 4. Press and release the <ALL> button, the motor will respond by jogging and that channel will now operate the MultiLink.
- 5. Repeat these steps for each transmitter channel up to 8 total to be stored in memory. If a 9th channel programming is attempted, the MultiLink Snaptrack will respond by jogging, but any commands will be ignored.

#### **Examples:**

After entering programming mode enter the following transmitter button sequences:

To memorize channel 1: <1> <1> <ALL>
To memorize channel 99: <1> <9> <9> <ALL>

To memorize channel 23: <1><23><ALL> or <1><2><3><ALL> NOTE: if <2><3> is memorized, the control must be

addressed the same way.

## INFRARED REMOTE OPERATION AND PROGRAMMING

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## PROGRAMMING A CHANNEL INTO MEMORY (Continued)

#### C. Deleting Channels

- **1.** Press and release the button(s) of a channel that is already programmed into memory.
- 2. Press and release the following buttons on a Somfy 24 Channel Infrared Transmitter: <G1> <G2> <G3> <ALL> <ALL>. The control is now in programming mode and the motor will respond by jogging.
- **3.** Press and release <4>, then the channel to be deleted.
- 4. Press and release the <ALL> button, the motor will respond by jogging and that channel will no longer operate the MultiLink.

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## **LIFT/TILT OPERATION**

- 1. To lower or raise a window treatment, briefly press the desired unit number, then the UP or DOWN buttons of the Infrared Transmitter.
- **2.** To stop the treatment, press the STOP button.
- 3. To tilt a horizontal blind, press and hold the UP or DOWN buttons on the Transmitter. Release the button when the desired slat angle is reached.

#### **Disabling Tilt Function**

- **1.** Press and release the button(s) of a channel that is already programmed into memory.
- 2. Press and release the following buttons on a Somfy 24 Channel Infrared Transmitter: <G1> <G2> <G3> <ALL> <ALL>. The control is now in programming mode and the motor will respond by iogging.
- 3. Press and release <16>. NOTE: the "16" key must be pressed, pressing <1>then <6> will not perform the desired function.
- 4. The motor will respond by jogging. The Tilt function described above will no longer operate. This procedure will also effect the Low Voltage Switch Inputs.
- **5.** To re-enable the tilt function, simply repeat steps 1 3 above.



#### **MOMENTARY OR MAINTAINED OUTPUTS**

Normal operation of the MultiLink, upon power-up, is Maintained Outputs. This means the switch button needs only to pe pressed and released for the action to take. A Momentary Output requires the button to be pressed and held for the duration of the desired movement.

#### **Changing Output Mode**

- **1.** Press and release the button(s) of a channel that is already programmed into memory.
- 2. Press and release the following buttons on a Somfy 24 Channel Infrared Transmitter: <G1> <G2> <G3> <ALL> <ALL>. The control is now in programming mode and the motor will respond by jogging.
- 3. Press and release <11>. NOTE: the "11" key must be pressed, pressing <1>then <1> will not perform the desired function.
- 4. The motor will respond by jogging. The outputs are now changed to Momentary, when operated from the Low Voltage Switch Inputs ONLY.
- **5.** To re-enable the Maintain Outputs, simply repeat steps 1 3 above.

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#### INTERMEDIATE POSITION

The MultiLink Snaptrack - DC has two programmable intermediate positions that are accessible from either stop button on the infrared transmitter. Only one position is available from the low voltage input or RS232 interface.

#### A. Setting the Intermediate Position

- **1.** Press and release the button(s) of a channel that is already programmed into memory.
- 2. Press and release the following buttons on a Somfy 24 Channel Infrared Transmitter: <G1> <G2> <G3> <ALL> <ALL>. The control is now in programming mode and the motor will respond by jogging.
- **3.** Press and release <6>, the shade will respond by lowering to its bottom limit.
- 4. After the window treatment reaches its lower limit, press and release the UP button on the IR Transmitter. The shade will begin to raise.
- 5. Press the left STOP button on the Transmitter when the desired intermediate position is reached. The motor will stop, then respond by jogging UP then DOWN.
- **6.** Repeat steps 1 5 above for the right STOP button and second intermediate position.
- 7. The intermediate position can be changed at any time by repeating steps 1 5 above.

#### **B.** Reaching the Intermediate Position

When the motor is at rest, press either STOP button on an IR Transmitter. The window treatment will lower to its bottom limit and pause. After the programmed run time, it will raise to the programmed position.

#### C. Disabling the Intermediate Position

- **1.** Press and release the button(s) of a channel that is already programmed into memory.
- 2. Press and release the following buttons on a Somfy 24 Channel Infrared Transmitter: <G1> <G2> <G3> <ALL> <ALL>. The control is now in programming mode and the motor will respond by jogging.
- 3. Press and release <23>. NOTE: the "23" key must be pressed, pressing <2>then <3> will not perform the desired function.
- 4. The shade will respond by jogging. The intermediate position is now disabled. This procedure will also effect the Low Voltage Switch Inputs.
- **5.** To re-enable the intermediate position, simply repeat steps 1 3 above.

#### D. Clearing the Intermediate Position

In order to clear the programmed Intermediate Position, a Memory Clear command must be performed.

## INFRARED REMOTE OPERATION AND PROGRAMMING



## **SEQUENCE OR UP/STOP/DOWN OPERATION**

#### A. UP/STOP/DOWN Operation

Normal operation of the Low Voltage Switch Inputs of the MultiLink Snaptrack - DC, upon power-up, is UP/STOP/DOWN operation. This means a momentary contact between DIRECTION1 and COMMON will activate the UP command. Similarly, connecting the DIRECTION2 and COMMON terminals will activate a DOWN command. If the window covering is in motion, a STOP command can be given by activating the direction of movement. For example, if the treatment is moving up, activating another UP command within the programmed run time will stop the window treatment. Alternately, a momentary contact closure between all three terminals (DIRECTION1, DIRECTION2, COMMON) will also activate a stop.

#### **B.** Changing to Sequence Operation

- 1. Press and release the button(s) of a channel that is already programmed into memory.
- 2. Press and release the following buttons on a Somfy 24 Channel Infrared Transmitter: <G1> <G2> <G3> <ALL> <ALL>. The control is now in programming mode and the motor will respond by jogging.
- 3. Press and release <7>, the motor will respond by jogging. The operation of the Low Voltage Switch Inputs ONLY will now change to Sequencing.
- **4.** To return to UP/STOP/DOWN operation, simply repeat steps 1 3 above.

#### C. Sequence Operation

NOTE: the tilt function and intermediate position are disabled during sequence operation

In Sequencing Operation, each switch press will cycle through the directions as follows:

DEPRESS 1: UP DIRECTION DEPRESS 2: STOP DIRECTION DEPRESS 3: DOWN DIRECTION DEPRESS 4: STOP DIRECTION

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## **RUN TIME**

The motor outputs of the MultiLink Snaptrack – DC, upon power-up, will turn on for a period of 2 minutes when activated in Maintained Output mode. In other words, when a direction is activated, the motor will run for 2 minutes unless a STOP command is given. This run time can be adjusted to 1 minute, 30 seconds or 15 seconds if desired.

#### Changing the Run Time

- **1.** Press and release the button(s) of a channel that is already programmed into memory.
- 2. Press and release the following buttons on a Somfy 24 Channel Infrared Transmitter: <G1> <G2> <G3> <ALL> <ALL>. The control is now in programming mode and the motor will respond by jogging.
- 3. Press and release <18>. NOTE: the "18" key must be pressed, pressing <1>then <8> will not perform the desired function.
- **4.** Press and release one of the following buttons to select the indicated run time:
  - <1> for 15 seconds
  - <2> for 30 seconds
  - <3> for 1 minute
  - <4> for 2 minutes
- **5.** Press and release the <ALL> button. The motor will respond by jogging indicating the run time is saved.
- **6.** To change the run time, simply repeat steps 1 though 5 above.

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## **PULSE TIME**

The PULSE TIME is defined as the maximum time a signal can appear on the low voltage switch inputs before activating the tilt operation. Normal operation of the MultiLink Snaptrack - DC, upon power-up, is ½ second. In other words, if a switch closure lasts longer then ½ second, the control will go into tilt mode. This pulse time can be adjusted to 1/4 second, 3/4 second or 1 second if desired.

### **Changing the Pulse Time**

- **1.** Press and release the button(s) of a channel that is already programmed into memory.
- 2. Press and release the following buttons on a Somfy 24 Channel Infrared Transmitter: <G1> <G2> <G3> <ALL> <ALL>. The control is now in programming mode and the motor will respond by jogging.
- 3. Press and release <17>. NOTE: the "17" key must be pressed, pressing <1> then <7> will not perform the desired function.
- **4.** Press and release one of the following buttons to select the indicated pulse time:
  - <1> for 1/4 second
  - <2> for  $\frac{1}{2}$  second
  - <3> for 3/4 second
  - <4> for 1 second
- $\textbf{5.} \ \ \text{Press and release the} < \text{ALL} > \text{button}. \ \ \text{The motor will respond by jogging indicating the pulse time is saved}.$
- 6. To change the pulse time, simply repeat steps 1 though 5 above.

## INFRARED REMOTE OPERATION AND PROGRAMMING

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## **DISABLE LOW VOLTAGE INPUTS**

The Low Voltage Switch Inputs of the MultiLink can be disabled, if necessary. Keep in mind, all commands from this input will be ignored.

- **1.** Press and release the button(s) of a channel that is already programmed into memory.
- 2. Press and release the following buttons on a Somfy 24 Channel Infrared Transmitter: <G1> <G2> <G3> <ALL> <ALL>. The control is now in programming mode and the motor will respond by jogging.
- 3. Press and release <13>. NOTE: the "13" key must be pressed, pressing <1>then <3> will not perform the desired function.
- **4.** The motor will respond by jogging, indicating the Low Voltage Switch Inputs have been turned off.
- **5.** To re-enable the Low Voltage switch inputs, simply repeat steps 1 3 above.

# 1 MEMORY CLEAR

#### THIS STEP ERASES ALL MEMORIZED TRANSMITTER CHANNELS AND PROGRAMMED FUNCTIONS!

- **1.** Press and release the button(s) of a channel that is already programmed into memory.
- 2. Press and release the following buttons on a Somfy 24 Channel Infrared Transmitter: <G1> <G2> <G3> <ALL> <ALL>. The control is now in programming mode and the motor will respond by jogging.
- **3.** Press and release <22>. NOTE: the "22" key must be pressed, pressing <2>then <2> will not perform the desired function.
- **4.** The motor will respond by jogging. All transmitters and functions are now deleted from memory.
- **5.** Alternately, the memory can be cleared by pressing the Memory Clear button on the Control Board.

# 11 RS232 COMPATIBILITY

The MultiLink Snaptrack - DC Control can be operated by a home automation system via RS232 communication. Somfy's MultiChannel RS232 Interface (Part Number 6301232) is simply connected to either modular connector on the MultiLink. A graphic user interface (GUI) available from Somfy will emulate the appearance of the 24 Channel Infrared Transmitter. All options noted above can be programmed from the GUI by following the same steps.



## Somfy. MULTILINKTM SNAPTRACK - DC Quick Reference Guide

- A. Motor direction MUST be verified before any transmitters or functions are programmed.
- C. To Enter Programming Mode; the following keys MUST be pressed on the Somfy 24 Channel IR Transmitter: <G1> <G2> <G3> <ALL> <ALL>
- D. After entering programming mode, a function code is entered. The following is a summary of all the programmable functions, their key strokes and default values.

## FUNCTIONS AVAILABLE BEFORE THE FIRST CHANNEL IS PROGRAMMED

KEY PRESS	FUNCTION	
UP/DOWN	Verify Motor Direction	
STOP	Reverse Direction	
1	Save First Channel or Transmitter in Memory	

## FUNCTIONS AVAILABLE AFTER THE FIRST CHANNEL IS PROGRAMMED

KEY PRESS	FUNCTION	DEFAULT VALUE
1	Save a Channel or Transmitter in Memory	
4	Delete a Transmitter or Channel from Memory	
6	Enter Intermediate Position Setup	
7	Program switch inputs to UP/STOP/DOWN or Sequence	UP/STOP/DOWN
11	Make outputs Momentary or Maintained	Maintained
13	Disable or Enable Low Voltage Switch Inputs	Enabled
16	Disable or Enable Tilt Mode	Enabled
17	Program Switch Input Pulse time  1: 1/4 second	½ second
	2: ½ second	
	3: 3/4 second	
	4: 1 second	
18	Program Run Time	2 minutes
	1: 15 seconds	
	2: 30 seconds	
	3: 1 minute	
	4: 2 minutes	
22	Erase all programmed functions and memorized transmitters	
_23	Disable/Enable Intermediate Position	Enabled