

DESCRIPTION

The DC5 MultiLink control provides three separate ways to drive Somfy's 12 or 24 VDC motor line:

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

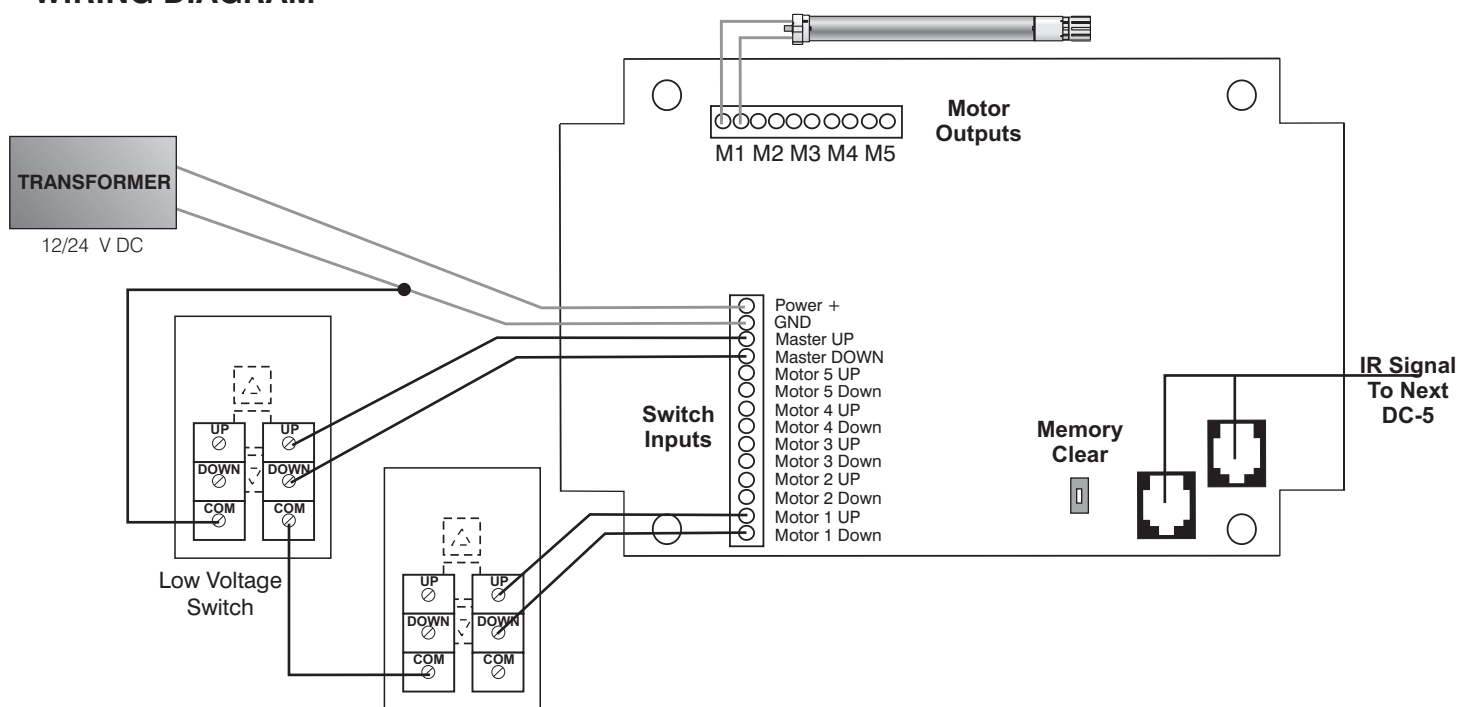
It can operate up to 5 motors individually or as a group. It has several functions that are programmable from the infrared transmitter.

INSTALLATION GUIDELINES

The following guidelines must be applied when installing a DC5 MultiLink control:

- When installing multiple controls, it is recommended having only 1 control powered at a time during programming.
- Each individual motor on the DC5 MultiLink can memorize up to 4 Infrared Transmitter channels.
- The DC5 MultiLink can operate up to 2 DC motors per output. This would require the fuse be changed to 10A.
- Fits into Somfy's plastic enclosure, part number 9012054.

WIRING DIAGRAM



LOW VOLTAGE SWITCH OPERATION

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NORMAL OPERATION

Upon Power-Up, the DC5 MultiLink 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 a low voltage switch will move a 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.

INFRARED REMOTE OPERATION AND PROGRAMMING

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

1 PROGRAMMING A CHANNEL INTO MEMORY

A. Adding Channels

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 motors will respond by jogging.
2. Press and release <5>, then the motor number you want assigned, then the channel number to be memorized.
3. Press and release the <G3> button, that motor will respond by jogging and that channel is now memorized
4. Repeat steps 2 & 3 for each transmitter channel - up to 4 per motor - to be stored in memory. If a 5th channel programming is attempted, the DC5 will respond by jogging, but any commands will be ignored.
5. If finished programming, press and release the <ALL> button to exit programming mode. Otherwise, continue to next programmed feature.

Examples:

After entering programming mode enter the following transmitter button sequences:

- To memorize channel 1 to motor 1: <5><1><1><G3>
- To memorize channel 1 to motor 2: <5><2><1><G3>
- To memorize channel 75 to motor 3: <5><3><7><5><G3>
- To memorize channel 23 to motor 4: <5><4><23><G3>

B. Deleting Channels

1. If not already in programming mode, press and release the following buttons on a Somfy 24 Channel Infrared Transmitter: <G1> <G2> <G3> <ALL> <ALL> to enter programming mode and the motors will respond by jogging.
2. Press and release <4>, the motor number and channel to be deleted.
3. Press and release the <G3> button, that motor will respond by jogging and that channel will no longer operate the DC5.
NOTE: The DC5 will always retain at least one Infrared Transmitter in memory.
4. If finished programming, press and release the <ALL> button to exit programming mode. Otherwise, continue to next programmed feature.

2 PROGRAMMING THE GROUP BUTTONS

1. If not already in programming mode, press and release the following buttons on a Somfy 24 Channel Infrared Transmitter: <G1> <G2> <G3> <ALL> <ALL> to enter programming mode and the motors will respond by jogging.
2. Press and release <24>, then the group button (G1, G2, G3) you want assigned this DC5 board.
3. If finished programming, press and release the <ALL> button to exit programming mode. Otherwise, continue to next programmed feature.
4. To erase the assigned group, after entering programming mode, press and release <24> then <ALL>.

3 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 for Individual Motor

1. If not already in programming mode, press and release the following buttons on a Somfy 24 Channel Infrared Transmitter: <G1> <G2> <G3> <ALL> <ALL> to enter programming mode and the motors will respond by jogging.
2. Press and release <16> then the motor number. NOTE: the "16" key must be pressed, pressing <1> then <6> will not perform the desired function.
3. The motor will respond by jogging. The Tilt function described above will no longer operate for that motor only. This procedure will also effect the Low Voltage Switch Inputs.
4. To re-enable the tilt function, simply repeat steps 1 & 2 above.
5. If finished programming, press and release the <ALL> button to exit programming mode. Otherwise, continue to next programmed feature.

Disabling Tilt Function for All Motors on DC5 Board

1. If not already in programming mode, press and release the following buttons on a Somfy 24 Channel Infrared Transmitter: <G1> <G2> <G3> <ALL> <ALL> to enter programming mode and the motors will respond by jogging.
2. Press and release <16> then <G3>.
3. The motors will respond by jogging. The Tilt function described above will no longer operate. Tilt operation of individual motors cannot be activated until the function has been reactivated for the board. This procedure will also effect the Low Voltage Switch Inputs.
4. To re-enable the tilt function, simply repeat steps 1 & 2 above.
5. If finished programming, press and release the <ALL> button to exit programming mode. Otherwise, continue to next programmed feature.

INFRARED REMOTE OPERATION AND PROGRAMMING

4 RUN TIME

The motor outputs of the DC5 MultiLink upon power-up will turn on for a period of 1 minute when activated. In other words, when a direction is activated, the motor will run for 1 minute 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. If not already in programming mode, press and release the following buttons on a Somfy 24 Channel Infrared Transmitter: <G1> <G2> <G3> <ALL> <ALL> to enter programming mode and the motors will respond by jogging.
2. Press and release <18>. NOTE: the "18" key must be pressed, pressing <1> then <8> will not perform the desired function.
3. 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 1.5 minutes
 - <5> for 2 minutes
4. To change the run time, simply repeat steps 1 through 3 above.
5. If finished programming, press and release the <ALL> button to exit programming mode. Otherwise, continue to next programmed feature.

5 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 DC5 MultiLink upon power-up is 1/2 second. In other words, if a switch closure lasts longer than 1/2 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. If not already in programming mode, press and release the following buttons on a Somfy 24 Channel Infrared Transmitter: <G1> <G2> <G3> <ALL> <ALL> to enter programming mode and the motors will respond by jogging.
2. Press and release <17>. NOTE: the "17" key must be pressed, pressing <1> then <7> will not perform the desired function.
3. Press and release one of the following buttons to select the indicated pulse time:
 - <1> for 1/4 second
 - <2> for 1/2 second
 - <3> for 3/4 second
 - <4> for 1 second
4. To change the pulse time, simply repeat steps 1 through 3 above.
5. If finished programming, press and release the <ALL> button to exit programming mode. Otherwise, continue to next programmed feature.

6 MEMORY CLEAR

A. Individual Motor

1. If not already in programming mode, press and release the following buttons on a Somfy 24 Channel Infrared Transmitter: <G1> <G2> <G3> <ALL> <ALL> to enter programming mode and the motors will respond by jogging.
2. Press and release <22> and motor number. NOTE: the "22" key must be pressed, pressing <2> then <2> will not perform the desired function.
3. That motor will respond by jogging. All transmitters memorized to that motor only are now deleted from memory.
4. If finished programming, press and release the <ALL> button to exit programming mode. Otherwise, continue to next programmed feature.

B. Whole DC5 MultiLink Board

1. If not already in programming mode, press and release the following buttons on a Somfy 24 Channel Infrared Transmitter: <G1> <G2> <G3> <ALL> <ALL> to enter programming mode and the motors will respond by jogging.
2. Press and release <22> and <ALL>. The motors will respond by jogging. All transmitters and functions memorized to that motor only are now deleted from memory. This step will automatically exit programming mode.
3. Alternately, the memory can be cleared by pressing the Memory Clear button on the control board.

7 RS232 COMPATIBILITY

The DC5 MultiLink 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 4-conductor modular connector on the DC5. 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.

A. To Enter Programming Mode; the following keys should be pressed on the Somfy 24 Channel IR Transmitter:
<G1> <G2> <G3> <ALL> <ALL>

B. 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.

KEY PRESS	FUNCTION	DEFAULT VALUE
5	Save Transmitter or Channel in Memory	
4	Delete a Transmitter or Channel from Memory	
16	Disable or Enable Tilt Mode	Enabled
17	Program Switch Input Pulse time	1/2 second
	1: 1/4 second	
	2: 1/2 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	
24	Program the Group Buttons	

C. Programming mode will deactivate after 30 seconds if no buttons are pressed.

D. Master Reset can be performed by pressing the reset button on the control board or via the transmitter.