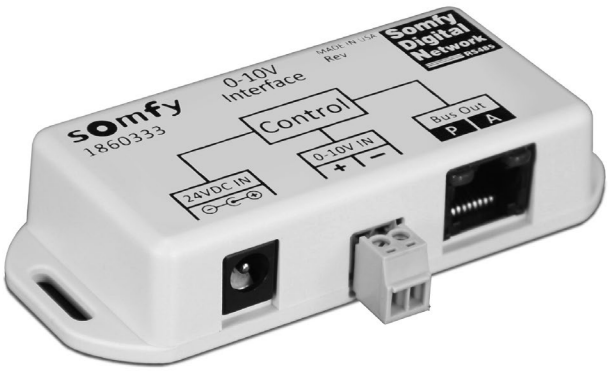


SDN 0-10V Interface

Part Number: 1860333

The SDN 0-10V Interface control is a device that will accept industry standard 0-10V input and convert it to a Somfy Digital Network™ (SDN) signal. The SDN signal will drive a Somfy RS485 motor to a percentage of opening or closing based upon the 0-10V input level and the setting of the reverse push button.

- No configuration or programming required.
- Reverse operation by pressing and holding the reverse button for 1 second.
- One control can drive up to 20 SDN tubular motors.
- Provides 45 SDN Bus Power units

0-10V INPUT	DEFAULT POSITION	REVERSED POSITION
0V	FULLY OPENED	FULLY CLOSED
1V (-0.1V/+0.8V)	11% CLOSED	11% OPEN
2V (-0.1V/+0.8V)	22% CLOSED	22% OPEN
3V (-0.1V/+0.8V)	33% CLOSED	33% OPEN
4V (-0.1V/+0.8V)	44% CLOSED	44% OPEN
5V (-0.1V/+0.8V)	55% CLOSED	55% OPEN
6V (-0.1V/+0.8V)	66% CLOSED	66% OPEN
7V (-0.1V/+0.8V)	77% CLOSED	77% OPEN
8V (-0.1V/+0.8V)	88% CLOSED	88% OPEN
9V (-0.1V/+0.8V)	FULLY CLOSED	FULLY OPENED

SETUP

1. Verify that the limits of the RS485 motor are set and the power to the motor is applied.

2. Verify that the SDN 0-10V Interface is OFF, then connect the motor data cable and the 0-10V input according to Figure 1. Do not connect the +24V power supply at this time.

   ***NOTE* VERIFY THE POLARTIY OF THE 0-10V POSITIVE (+) VIOLET AND NEGATIVE (-) GREY INPUTS BEFORE APPLYING POWER.**

3. Connect the +24V power supply to the 0-10V Control. Then verify that the Bus Power Supply LED on the Bus Out jack is solid green. Also verify that the Bus Activity LED on the Bus Out port turns on for 2 seconds and then turns off.

4. Turn on the SDN 0-10V Interface and verify that the motor responds accordingly to various input levels.
   If reverse operation of the motor is desired:
   - Drive the motor to the fully opened or the fully closed limit
   - Then press and hold the reverse button for 1 second
   - Verify that the motor moves to the opposite limit

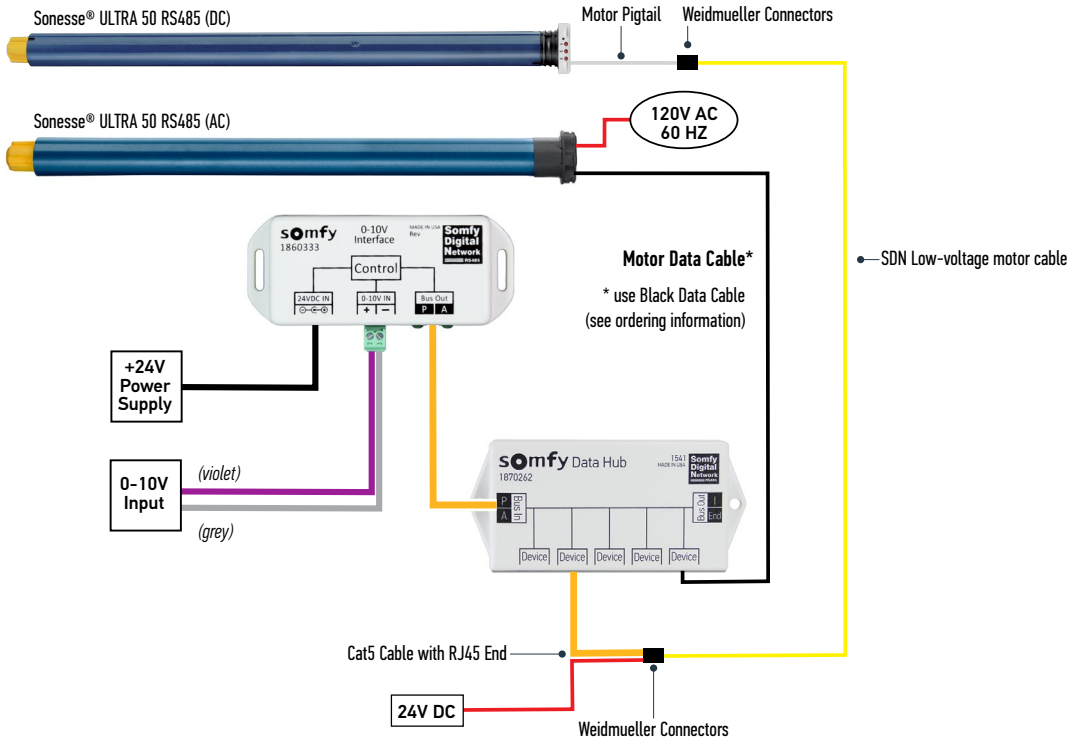
FIGURE 1. CONNECTION INFORMATION

CONNECTION DIAGRAM

The diagram shown below is meant for illustrative purposes to show the connections from product to product. This device could be used in other configurations than shown below. For specification information on individual products, see related product information. Follow all SDN wiring standards for distance limitations.

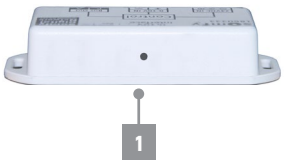
Notes:
For single motor operation, motor data cable connects directly to the SDN Bus Out port.
This example shows the Data Hub while the Data Hub Mini and Power Panel for SDN are also compatible.

SDN RS485 Tubular motors
(Sonesse® ULTRA 50 RS485 example shown)



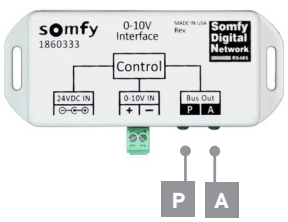
CONNECTIONS & INDICATORS

Back Side



Front Side

Top Side



	ELEMENT	FUNCTION
1	**Reverse Button**	Reverse shade position percentage
2	**Power Input (5.5 mm female barrel connector)**	Supply 24V DC power to device
3	**0-10V Input (screw clamp connector)**	Input from control system
4	**SDN Bus Power and Data Output (female RJ45)**	Output for power and data

LED Indicators				
LABEL	**ELEMENT**	**COLOR**	**FUNCTION ON**	**FUNCTION OFF**
P	**Bus Power**	**Green**	Power	No Power
A	**A (activity)**	**Green**	Data	No Data

FIGURE 2. MOTOR DATA CABLE CONNECTIONS

MOTOR COMPATIBILITY

Line-voltage (AC):
- Sonesse® ULTRA 50 RS485 (AC)
- LT50 RS485 (AC)

Low-voltage (DC):
- Sonesse® ULTRA 50 RS485 (DC)
- Sonesse® 30 RS485 (DC)

MOTOR DATA CABLE INFORMATION

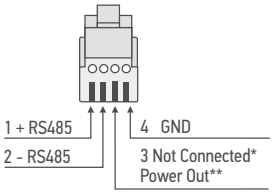
Line-Voltage (AC)

Motor Data Cable

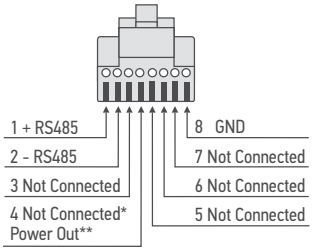
BLACK DATA CABLE *(without power out)*

4 Cond. 26AWG modular cable with RJ9 on one end and RJ45 other end

RJ9 Connects to Motor

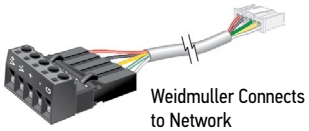


RJ45 Connects to Network

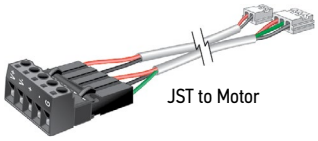


Low-Voltage (DC)

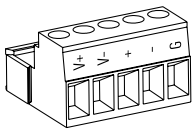
Sonesse® ULTRA 50 RS485 Data and Power Pigtail



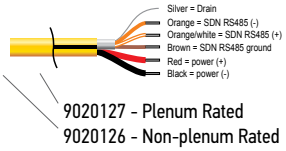
Sonesse® 30 RS485 Data and Power Pigtail



Weidmuller Connector (5 pin)



SDN Low-voltage Motor Power and Data Cable



ORDERING INFORMATION

DESCRIPTION	PART NUMBER
SDN 0-10V Interface (w/ +24V power supply)	1860333
Data Hub	1870262
SDN Mini Data Hub	1870277
Line-voltage RS485 Motor Data Cables	2.5 ft.: 9018541
	8 ft.: 9018542
	12 ft.: 9018543
	24 ft.: 9018544
Low voltage RS485 Motor Accessories	
24V DC 1.66A Wall Mount Plug-in Transformer	1822209
Power Panel for SDN	1870259
SDN Low-voltage Motor Power and Data Cable	9020126/9020127 (Plenum Rated) (from Liberty AV)
Weidmuller Connector (5 pin)	9020743
Sonesse® 30 DC RS485 Cable Data and Power Pigtail	9020261
Sonesse® Ultra 50 DC RS485 Cable Data and Power Pigtail	9020004

OFFICE LOCATIONS

New Jersey
121 Herrod Blvd.
Dayton, NJ 08810
P: (800) 22-SOMFY (76639) • F: (609) 395-1776

Florida
6100 Broken Sound Pkwy.
N.W. Suite 14
Boca Raton, FL 33487
P: (800) 22-SOMFY (76639) • F: (561) 995-7502

California
15301 Barranca Pkwy
Irvine, CA 92618
P: (800) 22-SOMFY (76639) • F: (949) 727-3775

Canada
5178 Everest Drive
Mississauga, Ontario L4W2R4
P: 1-800-66-SOMFY • CN: (905) 564-6446
F: (905) 238-1491

For more information visit: https://www.somfysystems.com/products/1860333/sdn-0-10v-interface