

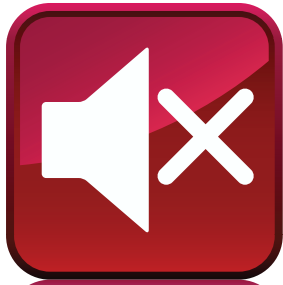
SM AUTOMATIC

MOTORIZATION FOR INTERIOR WINDOW TREATMENTS

WIRING INFORMATION

BLINDS & SHADES

EXCEPT SILHOUETTE® PIROUETTE® VIGNETTE®



3351 Jack Northrop Avenue, Hawthorne, CA 90250-4426
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BASIC SWITCHING CONTROL TERMINOLOGY AND INFORMATION GUIDE

LOW VOLTAGE MODULAR SWITCH (RECESSED WALL INSTALLATION)

Available with drapery motors only. A specially designed three button switch, open-stop-close, which allows direction reversal at any point. Low voltage switching connections are made, using RJ-11 modular cable, from the switching port of the motor to a modular wall jack (phone type); then inside the wall to the junction box containing the switch. Power to the motor is supplied by a 9 foot power cord.

HARD WIRED (HW)

All motors (except drapery motors and Model 9700) come with a 4 wire, 6 foot pigtail, consisting of a common, two directional wires and a ground. Used for wiring to a powered, SPDT (single-pole, double-throw) 110VAC switch. The motor's pigtail is connected either by hard wiring or by plug/receptacle to an individual junction box. If more than one motor is controlled by a single switch, isolation (parallel) relays are required.

HARD WIRED WITH ISOLATION RELAYS (HW/ISO)

This variation of Hard Wiring is used when controlling two or more motors simultaneously from a single SPDT switch. Each motor pigtail (with relay incorporated) is connected either by hard wiring or by plug/receptacle to an individual junction box. The wiring from each junction box is connected from one to the next; with the wiring from the terminal junction box going to the switch.

RADIO FREQUENCY WIRELESS REMOTE CONTROL (SMA-RF)

A radio frequency controlled system for most motors (except Model 9700). Transmitters are available to control from 1-24 motors, with individual, group and subgroup operation options. For Models 8000 and 9600, the RF receiver is concealed within the head rail, when ordered with the wireless remote control option.

INFRARED WIRELESS REMOTE CONTROL (SMA-IR)

The system is directional, digital coded and has a maximum range of 50 feet. Infrared systems are not subject to possible interference from outside sources, as is sometimes the case with radio frequency controls, but must have line of sight between the transmitter and sensor (sensors are available within or without a mounting case). Transmitters are available to control from 1-24 motors, with individual, group and subgroup operation options. A wide variety of configurations are possible, allowing for either individual or group operation; as well as auxiliary wall switches and control system interfaces. A receiving eye is plugged into the receiver using a modular cable, and takes it's signal from the transmitter.

RADIO FREQUENCY WIRELESS REMOTE CONTROL (RTS)

Radio Technology Somfy, provides a comprehensive method for radio frequency control of motorized systems, with cross platform control system integration. Available both as stand alone, single motor RF control, or as an integrated part of a whole house automated system.

CONTROL SYSTEM

Provides an interface with a home theater, multi-room control system, or whole-house automation system. For drapery motors interfacing with a home theater, multi-room control system, or whole-house automation system; two (2) momentary dry contacts (switching contacts with no voltage inputted) are required for open-stop-close (two button) operation. Operation initiates with either the "Open" or "Close" contact, and a second action with either contact produces the "Stop" function. All other motors (except model 9700) use two (2) momentary dry contacts. All motors are fully compatible with control systems by AMX , Crestron Electronics, LiteTouch, Lutron Electronics, Phast, Control4 and Vantage Controls.

SM AUTOMATIC

Product Catalog 2012

ELECTRICAL/ELECTRONIC CONTROL ACCESSORIES FOR MODELS 5100, 8000, 9600 AND 9300 SERIES

SWITCHES

S-DEC2	Decora style paddle switch (SPDT), three position with center off, and cover plate. Available as maintained or momentary. Colors: white, ivory or almond
S-DEC1	Decorator toggle switch (SPDT), three position with center off, and cover plate. Available as maintained or momentary. Colors: white, ivory or almond
S-DEC3	Decora style paddle switch (DPDT), three position with center off, and cover plate. To control two motors simultaneously, without using isolation relays. Available as either maintained or momentary. Color: white
S-5	Combination momentary-maintained rocker switch, five position with center off. Used in conjunction with Model 8000. Using ISO relays, 10 motor MAX. Color: white
S-DEC5	Decora style, combination momentary-maintained rocker switch, five center off. Used in conjunction with Model 8000. Using ISO relays, 2 motor MAX. Color: white
S-KEY	Key switch
PR	Plug and receptacle for hard wiring alternative. Consisting of a four wire plug, matching single receptacle and cover plate.
TS-HW	Tester switch used typically used for setting Model 9300 series (hard wired) motor limits when assembling COM shades, as well as confirming proper motor operation of Models 9300/9600/8000/5100, (hard wired) when installation site electrical hook up is not available
TS-CSI	Tester switch used typically used for setting Model 9300 series (with CSI option) motor limits when assembling COM shades, as well as confirming proper motor operation of Models 9300/9600/8000/5100, (hard wired) when installation site electrical hook up is not available.

RELAYS AND INTERFACE

CSI	Control System Interface
ISO	Electronic (solid state) isolation (parallel) relay for all 110VAC hard wired motors and must be used when controlling multiple motors from a single SPDT switch. Available with or without plastic enclosure.

ELECTRICAL/ELECTRONIC CONTROL ACCESSORIES FOR MODELS 5100, 8000, 9600 AND 9300 SERIES

WIRELESS REMOTE CONTROL

SMA-RF	Radio frequency remote control receiver. Cost is already included in 5100, 9300 and 9600 price charts under the "wireless" heading.
SMA-IR	Infrared remote control receiver, receiving eye, and modular cable (3 foot) Cost is already included in 5100, 9300 and 9600 price charts under the "wireless" heading.
RF/IR-T1	Radio Frequency or Infrared remote control transmitter (controls one motor)
RF/IR-T2	Radio Frequency or Infrared remote control transmitter (controls up to 2 motors individually and as a group)
RF/IR-T4	Radio Frequency or Infrared remote control transmitter (controls up to 4 motors individually and as a group)
RF/IR-T12	Radio Frequency or Infrared remote control transmitter (controls up to 12 motors individually and as a group)
RF/IR-T24	Radio Frequency or Infrared remote control transmitter (controls up to 24 motors individually and as a group)
IR Keypad	Recessed wall mount (single gang), keypad control. Includes built in infrared receiving eye. Available in configurations to control from 1-24 motors individually, as a group or as subgroups.
RF Keypad	Recessed wall mount (single gang), keypad control. Available in configurations to control from 1-24 motors individually, as a group or as subgroups. Custom configurations (both IR and RF versions) as well as custom labeling is available for an additional cost.
RES-2	Infrared receiving eye splitter for 2 motor individual and group control

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Product Catalog 2012

ELECTRICAL/ELECTRONIC CONTROL ACCESSORIES FOR MODELS 5100, 8000, 9600 AND 9300 SERIES

RTS

RTS-RCVR	RTS Receiver for Models 5100, 9600 and 8000 (already included in 9300-RTS)
Telis 1	One Channel Transmitter
Telis 4	Four Channel Transmitter
Telis 16	Sixteen Channel Transmitter (Telis 16 is for all motors except 5100, 8000 and 9600)
Decoflex 1	One Channel Wireless Wall Switch Color: white or ivory
Decoflex 1	One Channel Wireless Wall Switch Color: black
Decoflex 2	Two Channel Wireless Wall Switch Color: white or ivory
Decoflex 2	Two Channel Wireless Wall Switch Color: black
Decoflex 3	Three Channel Wireless Wall Switch Color: white or ivory
Decoflex 3	Three Channel Wireless Wall Switch Color: black
Decoflex 4	Four Channel Wireless Wall Switch Color: white or ivory
Decoflex 4	Four Channel Wireless Wall Switch Color: black
Decoflex 5	Five Channel Wireless Wall Switch Color: white or ivory
Decoflex 5	Five Channel Wireless Wall Switch Color: black
Chronis	RTS Timer
Sunis	RTS Sun Sensor
Repeater	RTS Repeater (extends signal range)
Dry Contact	Single Channel Dry Contact Interface
Table Top S	Table Top Wirelss Switch Housing (add appropriate Decoflex above) Color: silver
Table Top B	Table Top Wirelss Switch Housing (add appropriate Decoflex above) Color: black
Table Top W	Table Top Wirelss Switch Housing (add appropriate Decoflex above) Color: white
Universal Interface	RTS Universal Interface - Converts IR, RS232 or RS485 to RTS (Universal Interface is for all motors except 5100, 8000 and 9600)

RTS® - RADIO TECHNOLOGY SOMFY

Radio Technology Somfy (RTS) is a secure radio control system for the residential, commercial and hospitality markets. It offers a high performance, reliable and convenient wireless solution for motorization and automation, significantly reducing the wiring requirements. Wireless controls mean fast, easy installation with minimal impact on the building structure.

With the exclusive SMA-RTS receiver, the RTS control platform now extends across the entire spectrum of our product line, and is available for every drapery, blind and shade application.



Telis 1 Channel Transmitter



Telis 5 Channel Transmitter



Telis 16 Channel Transmitter



DecoFlex 1 Channel Wireless Wall Switch



DecoFlex 5 Channel Wireless Wall Switch



Chronis Timer



Universal Interface



Repeater



SMA-RTS Drapery Motor Receiver



Dry Contact Interface

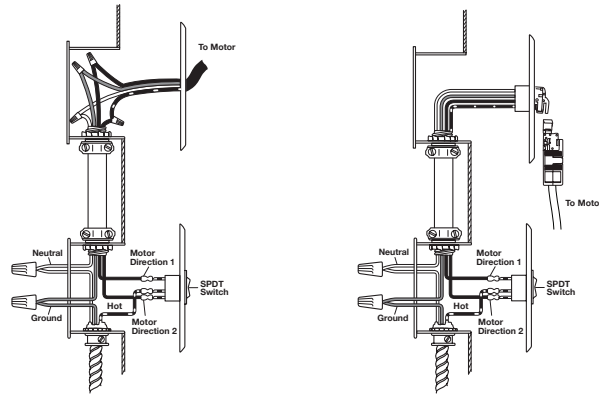


Sunis Sun Sensor

BASIC ELECTRICAL WIRING INFORMATION AND DIAGRAMS FOR MODELS 5100, 8000, 9600 AND 9300 SERIES

HARD WIRING (HW)

All motors come with a 4 wire 18 gauge grounded pigtail. This consists of a neutral, two directional wires, and a ground. This type of wiring is used when the motor is to be controlled by a recessed wall switch. The pigtail is connected by either hard wiring or a plug/receptacle. A single motor is controlled by an SPDT (single pole, double throw) switch. Two motors can be controlled together by a DPDT (double pole, double throw) switch. When more than two motors are to be controlled by a single switch, isolation (parallel) relays are required for each motor.

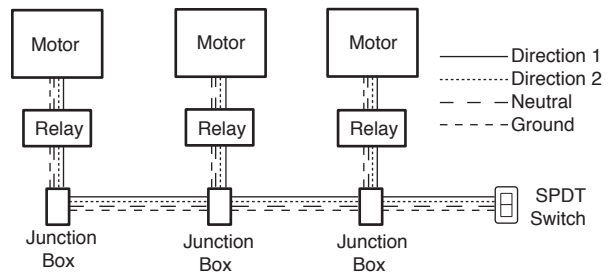


Standard Hard wiring

Hard wiring with optional plug/receptacle

HARD WIRING WITH ISOLATION (PARALLEL) RELAYS (HW/ISO)

This variation of hard wiring is used when controlling two or more motors simultaneously from a single SPDT switch. Each motor's pigtail (with relay incorporated) is connected either by hard wiring or by plug/receptacle to an individual junction box. The wiring from each junction box is connected from one to the next; with the wiring from the terminal junction box being connected to the switch. Ten motors are the maximum to be operated by one, 15 amp switch.



SMA-RF WIRELESS REMOTE CONTROL

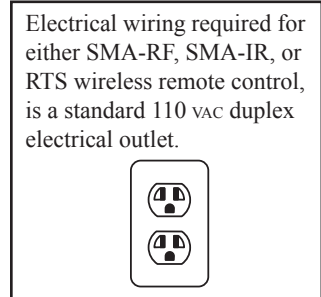
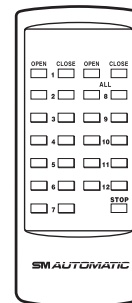
A radio frequency system which is controlled by a hand-held transmitter. It is omnidirectional, digital coded, and has a maximum range of 100'. Transmitters are available to control from 1-24 motors, with individual, group and subgroup operation options.

RTS-RF WIRELESS REMOTE CONTROL

Radio Technology Somfy, provides a comprehensive method for radio frequency control of motorized systems, with cross platform control system integration. Available both as stand alone, single motor RF control, or as an integrated part of a whole house automated system.

SMA-IR WIRELESS REMOTE CONTROL

The system is directional, digital coded and has a maximum range of 50 feet. Infrared systems are not subject to possible interference from outside sources, as is sometimes the case with radio frequency controls, but must have line of sight between the transmitter and sensor. Transmitters are available to control from 1-24 motors, with individual, group and subgroup operation options.



CONTROL SYSTEM INTERFACE

When interfacing with a home theater, multi-room control system, or whole-house automation system; two (2) momentary dry contacts (switching contacts with no voltage inputted) are required.



SWITCH AND TRANSMITTER OPTIONS FOR MODELS 5100, 8000, 9600 AND 9300 SERIES

WALL SWITCHES

S-DEC2 Almond



S-DEC1 Ivory



S-DEC3 White



S-DEC5

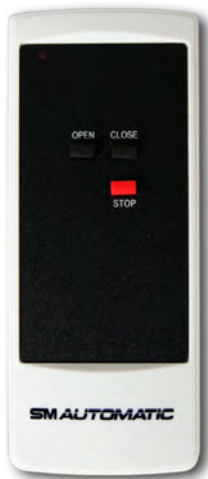


Please see page 6 for RTS Control Telis Transmitters and DecoFlex wireless switches.

Custom transmitter and keypad configurations are available by special order

RADIO FREQUENCY AND INFRARED REMOTE CONTROL

RF/IR-T1



RF/IR-T2



RF/IR-T4



RF/IR-T12



RADIO FREQUENCY AND INFRARED REMOTE CONTROL KEYPADS

RF-K1 / IR-K1



RF-K3 / IR-K3



RF-K4 / IR-K4



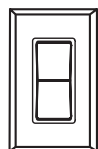
RF-K6 / IR-K6



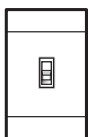
RF-12 / IR-K12



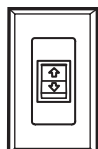
ELECTRICAL/ELECTRONIC CONTROL AND WIRING LEGEND



S-DEC2 Decora Paddle Switch



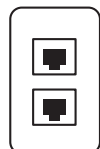
S-DEC1 Decorator Toggle Switch



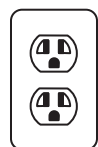
S-DEC5 Decora 5 Position Switch
(for Model 8000 only)



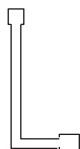
Modular Wall Jack (RJ-11)



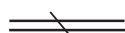
Modular Wall Jack Double (RJ-11)



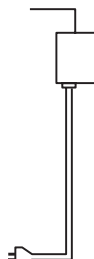
Standard 110 volt Duplex Outlet



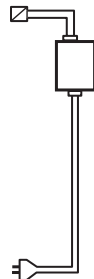
Modular Cable (four conductor: 4/26)



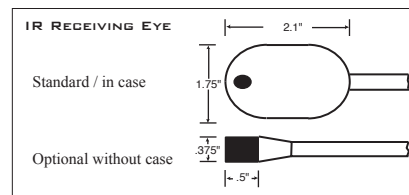
In-wall Modular Cable (four conductor: 4/26)
(supplied by others)



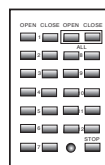
Radio Frequency Receiver



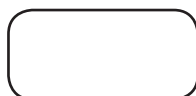
Infrared Receiver



Control System Interface



Infrared or Radio Frequency
Receiver Keypad



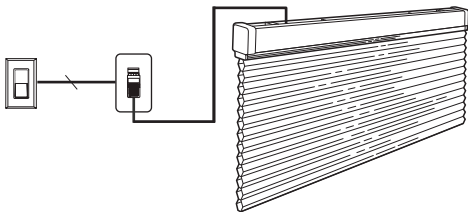
Automation Control System
(supplied by others)



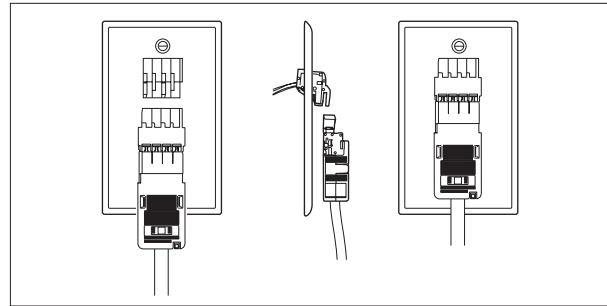
Automation Control System
User Interface
(supplied by others)

ELECTRICAL WIRING DIAGRAMS FOR MODELS 5100, 8000, 9600 AND 9300 SERIES

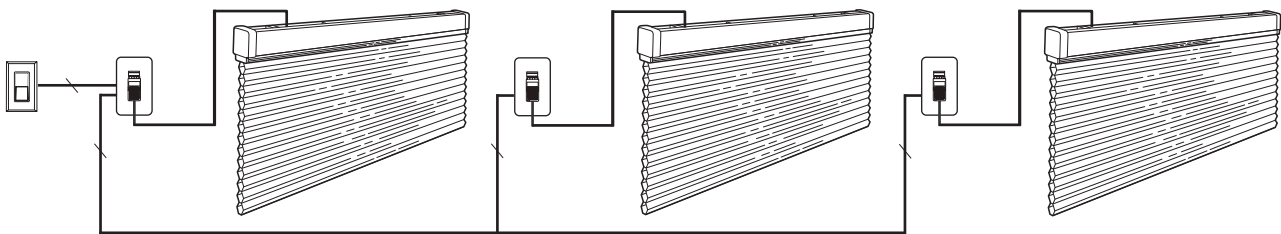
A. Hard wired Individual SPDT Control



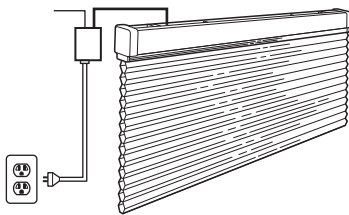
Optional Hard wiring Plug and Receptacle (PR)



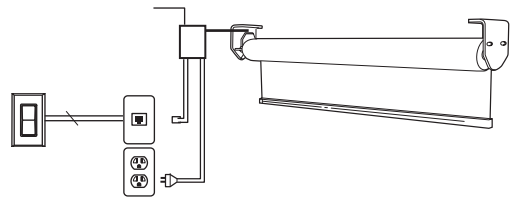
B. Hard wired Group Control using Isolation (parallel) relays



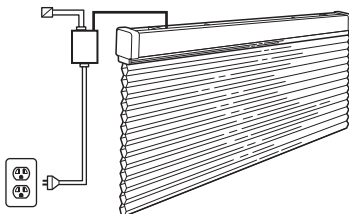
C. Individual Radio Frequency Remote Control



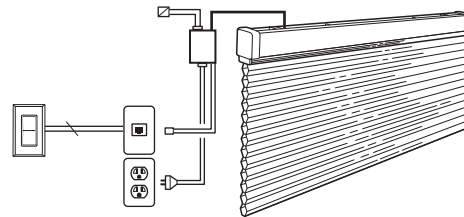
D. Individual Radio Frequency Remote Control with SPDT switch



E. Individual Infrared Remote Control



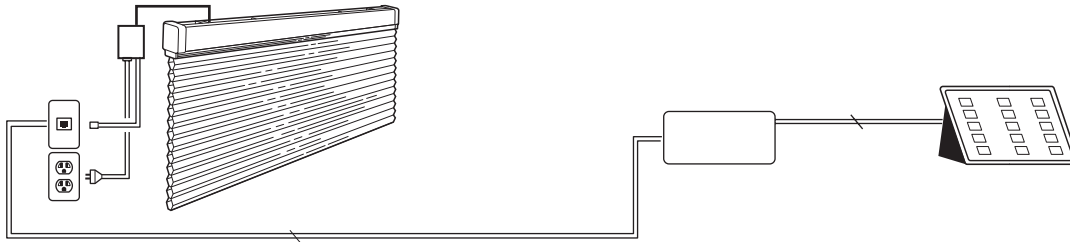
F. Individual Infrared Remote Control with SPDT switch



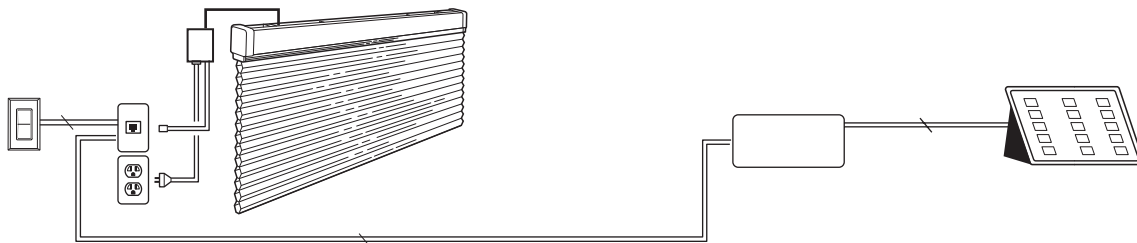
Remote control receivers, relays and low voltage interfaces, are located inside the head rails on models 9600 and 8000; and are external on models 5100 and 9300 series motors.

ELECTRICAL WIRING DIAGRAMS FOR MODELS 5100, 8000, 9600 AND 9300 SERIES

G. Automation Control System



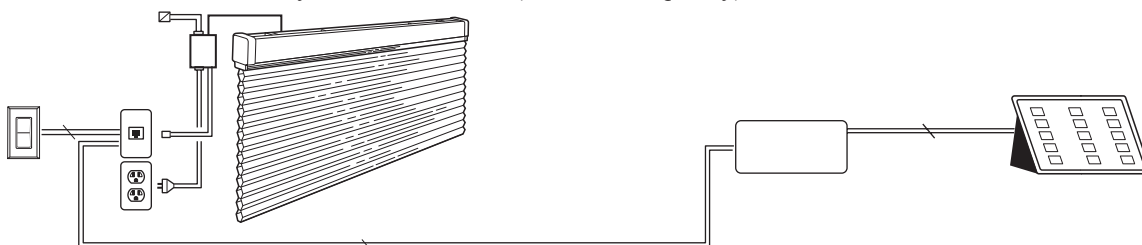
H. Automation Control System with SPDT Switch



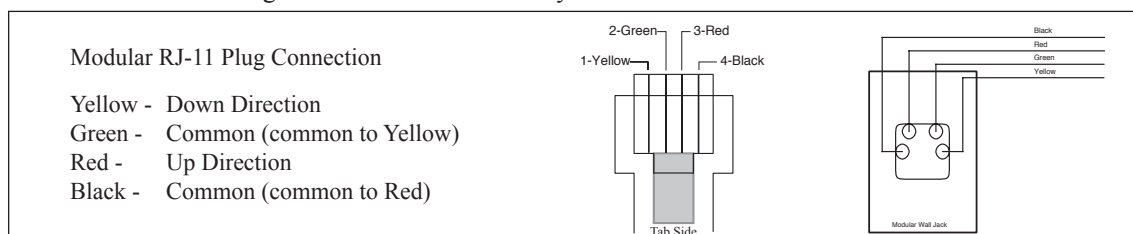
I. Automation Control System with Infrared (or Radio Frequency) Remote Control



J. Automation Control System with Infrared (or Radio Frequency) Remote Control and SPDT Switch



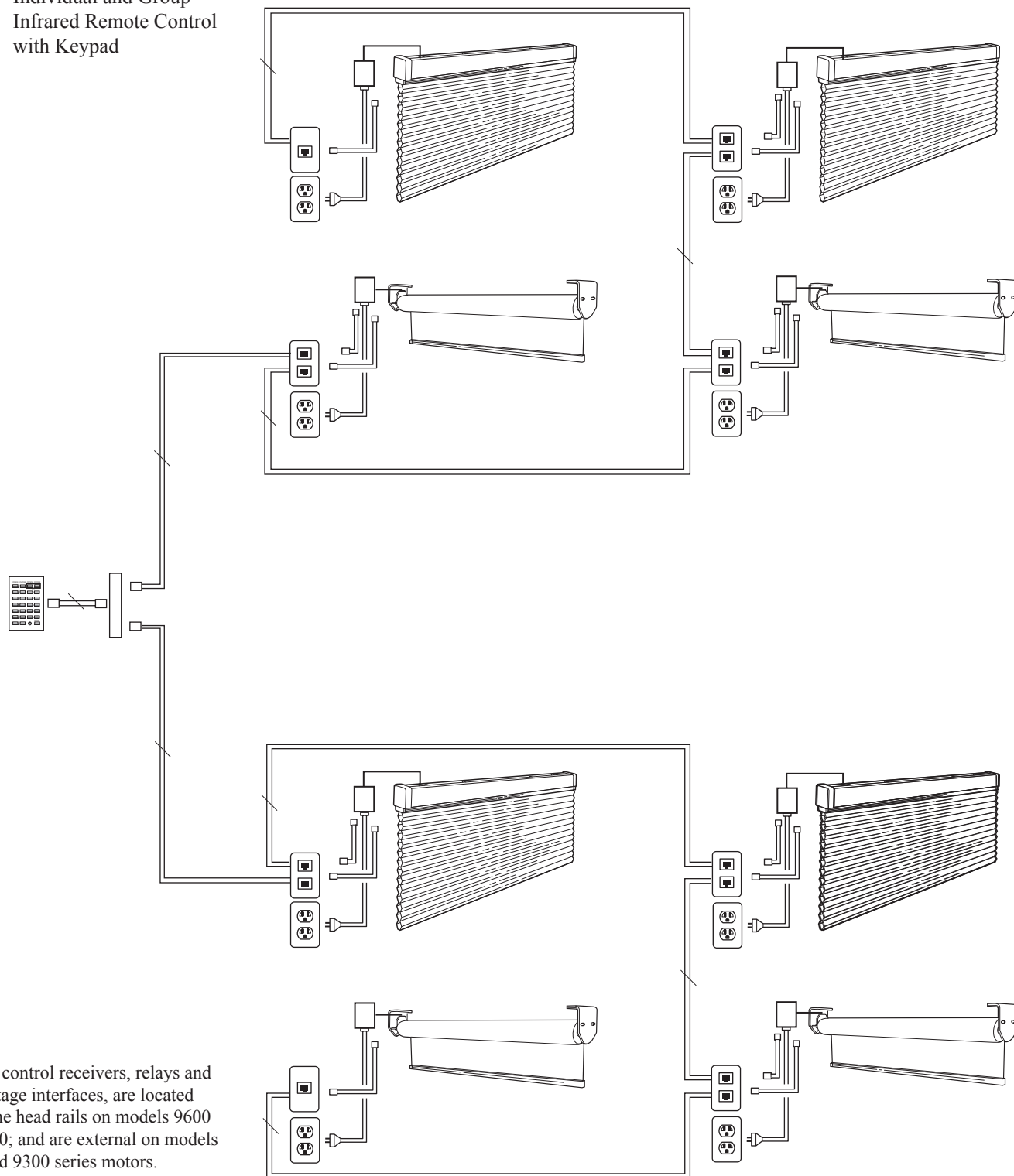
K. Modular Wiring for Automation Control System



SMA-RF and SMA-IR remote control receivers, relays and low voltage interfaces, are located inside the head rails on models 9600 and 8000; and are external on models 5100 and 9300 series motors (except 9300-RTS).

ELECTRICAL WIRING DIAGRAMS FOR MODELS 5100, 8000, 9600 AND 9300 SERIES

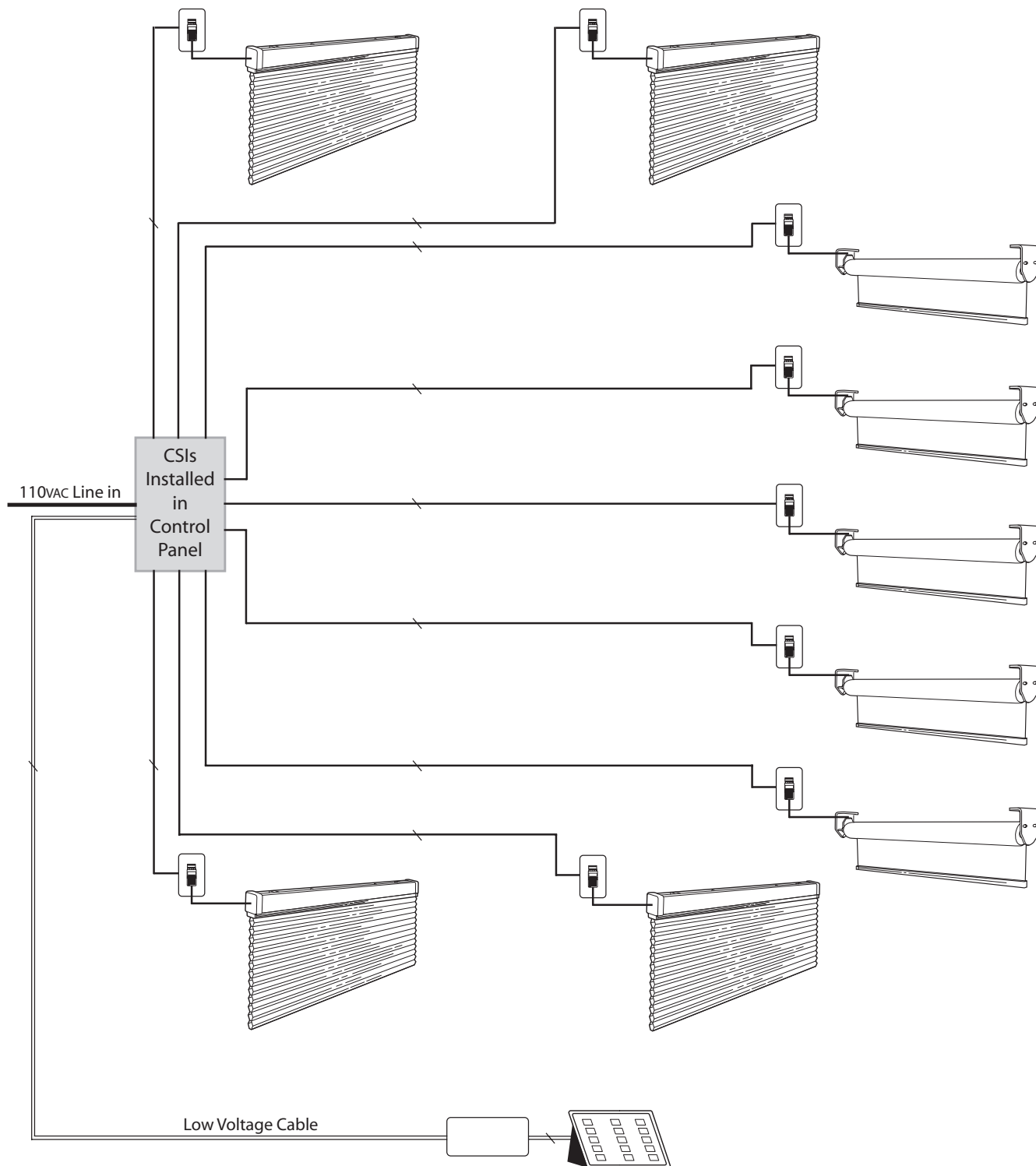
- L. Individual and Group
Infrared Remote Control
with Keypad



Remote control receivers, relays and low voltage interfaces, are located inside the head rails on models 9600 and 8000; and are external on models 5100 and 9300 series motors.

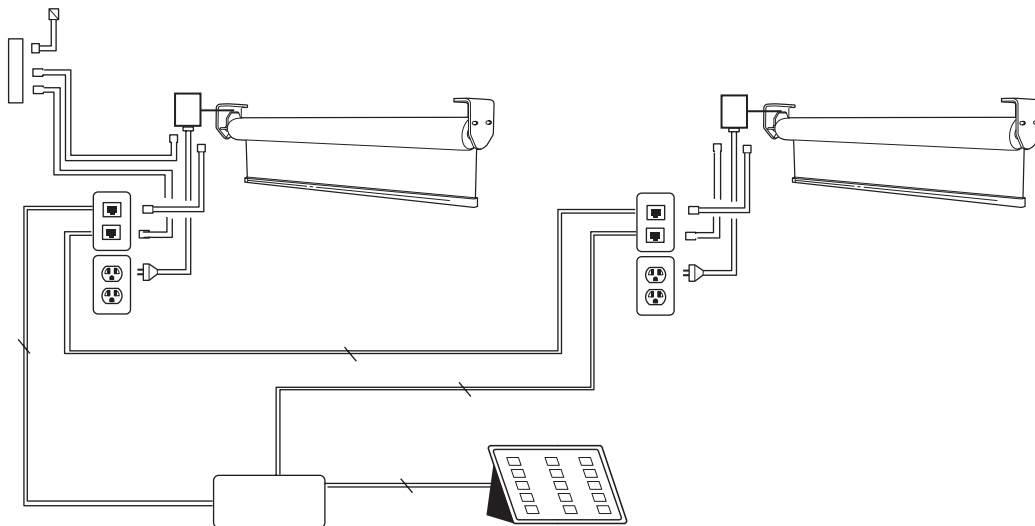
ELECTRICAL WIRING DIAGRAMS FOR MODELS 5100, 8000, 9600 AND 9300 SERIES

M. Control System Interfaces Installed within a Centralized Control Panel

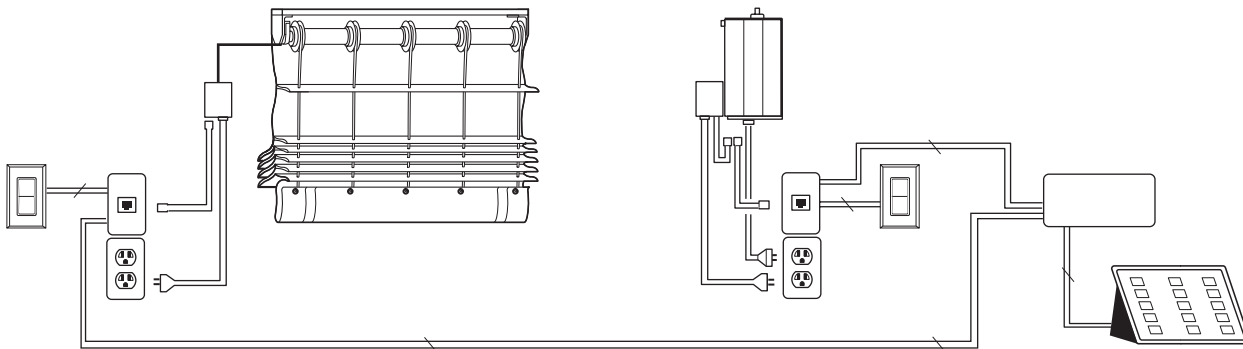


ELECTRICAL WIRING DIAGRAMS FOR MODELS 5100, 8000, 9600 AND 9300 SERIES

N. Individual and Group Infrared Remote Control with Automation Control System



O. Model 9300 series motor and Drapery Motor, with Automation Control System and SPDT Switch



IMPORTANT INFORMATION REGARDING RADIO FREQUENCY INTERFERENCE

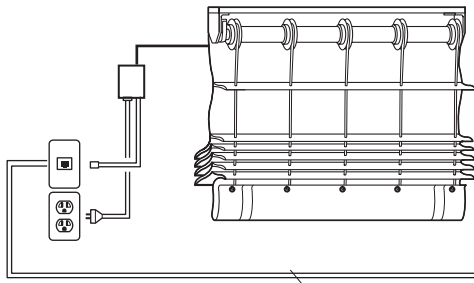
All radio frequency (RF) wireless remote control systems are subject to radio wave interference. When present, RF interference may be constant or intermittent.

According to FCC regulation, equipment used for RF wireless remote controlled window treatments, must follow these guidelines:

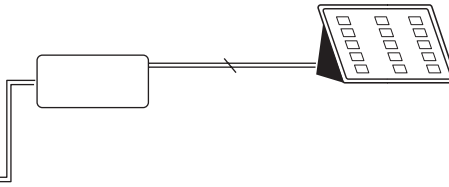
“Operation is subject to the following two conditions: (1) This device may not cause harmful interference and (2) this device must accept any interference that may be received, including interference that may cause undesired operation.”

ELECTRICAL WIRING INFORMATION AND DIAGRAMS - A COMPARATIVE GUIDE FOR CONTROL SYSTEMS

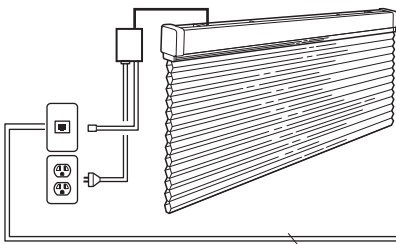
ROMAN AND ROLLER SHADES



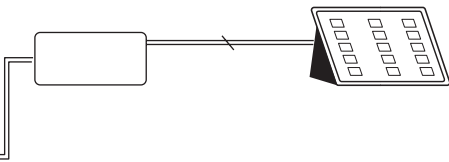
When interfacing with a home theater, multi-room control system, or whole-house automation system; two (2) momentary dry contacts are required. Operation initiates with either the “Open” or “Close” contact, and a second action with either contact produces the “Stop” function.



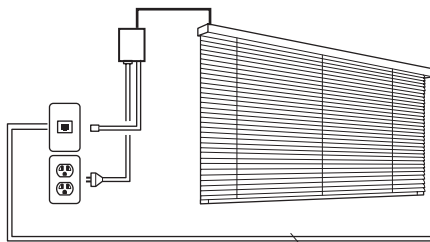
CELLULAR SHADES



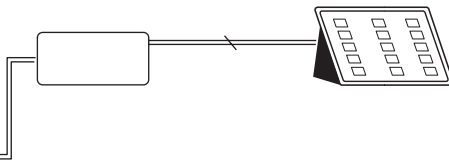
When interfacing with a home theater, multi-room control system, or whole-house automation system; two (2) momentary dry contacts are required. Operation initiates with either the “Open” or “Close” contact, and a second action with either contact produces the “Stop” function.



HORIZONTAL BLINDS



When interfacing with a home theater, multi-room control system, or whole-house automation system; two (2) SETS of momentary dry contacts are required. One set of contacts for “tilting” function must have timed contacts of less than 1.5 seconds. The second set of contacts for “lifting” function must have a timed contact of more than 1.5 seconds.



Modular Wiring for Shades and Blinds Connecting to an Automation Control System

