



Electrical Considerations for Executive Screens

All electrical work being done must be in accordance with all Local and National Electrical Codes.

Power Isolation

ⓘ When planning for an Executive motorized unit, keep in mind you must always be able to cut power to each unit independently. This is not only during installation, but also in the event that the unit should ever need servicing, a new remote needs to be added, or a re-screen is necessary.

The simplest way to wire an Executive is to attach the supplied plug to the end of the cable coming from the motor. The customer can then either plug the unit into a receptacle, or hire an electrician to hard wire the unit once the installation has been completed. Another way wiring can be set up during construction for isolation of each individual unit is to have the builder install a switch (standard light switch) in the ceiling or wall next to where the unit will be installed. From the switch, the electrician can run a pigtail wire (18" or 457 mm into the opening) to where the Executive will be installed. This can be an added cost, so it is important to budget for it accordingly. Be sure that you never make the motor wire or connections inaccessible, or bury them so that they are difficult to gain access to.

Motors

The Hertz motors run off of 120V AC/60Hz power with an Integrated Radio Receiver, and have the following characteristics:

- 6 ft. (1828.8 mm) Motor Cable
- UL Recognized
- CSA Approved

- FCC Approved
- IP 44 Rated

Hertz motors are low amperage; therefore it would be acceptable to operate more than one Executive unit wired in series to a 15-amp circuit as long as it complies with electrical codes. (see table below):

Motor Model	Speed (RPM)	Power (Watts)	Current (Amps)
525Hz/Hz02+	18	180	1.6
535Hz/Hz02+	18	250	2.1

The Hz motors however cannot be wired to a directional switch (rocker, maintained, momentary etc.), as they are not “directional” motors. Wiring a Hz motor to such a switch for control purposes will damage the motor and render it inoperable. A switch can only be wired to a Hz motor for the purpose of isolation of the power.

Wiring

Standard “house” wire (12/2 or 14/2 gauge cable¹) is acceptable for wiring Executive units. Electrical code suggests that the electrician match the size of cable if possible to the existing house wiring. If you have only one power source for multiple units, the electrician can wire in parallel from one unit to the next providing that the rated capacity of the circuit is **not exceeded**. Use the space in the top back of the housing to hide the wire, but be sure the wire is attached firmly to the housing. After all the units have been set up, connect all of the wiring. It is recommended that all exposed wire be installed in conduit.

¹ 14/2 and 12/2 stands for 14 or 12 gage cable with 3 conductors.
ⓘ Important Information

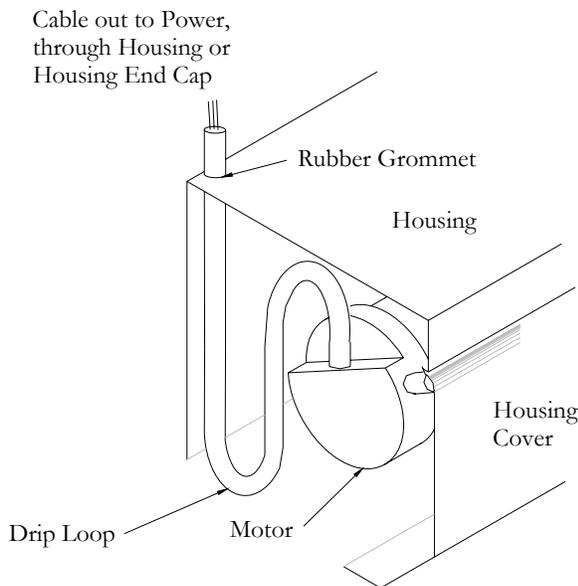




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When a power source is located near the bottom of an Executive unit equipped with standard track, a simple technique to wiring the unit is to run the wire through the housing, behind the roller, and down inside of the sidetrack before the track covers are snapped into place.

When attaching the motor wire, make sure there is a drip loop in the wire if the unit is exposed to the elements. The purpose of a drip loop is to prevent any water from running down the cable and onto the head of the motor as it can cause irreparable damage. Instead, the moisture will drip off the lowest point of the loop.



Home Automation (HA) Systems

If you are working on “smart homes” with a centralized computer or home automation system it is important to note that each brand of HA systems have different specifications for connection to an Executive unit. Phantom Screens offers a RTS single channel dry contact

transmitter, or a 16 channel RS232 dry contact transmitter, which can wire directly into most home automation systems and transmit a signal to the screens to go up and down once programmed. There is also a second option of a multi channel RTS transmitter with RS232 and IR outputs. Phantom Screens can make available the wiring diagrams for the following home automation systems:



If you have any question please call for further assistance and a Phantom Screens Technical Support Representative will be happy to supply you with the information you require.

Remotes

All of the remote controls transmit with radio waves, and are not infrared. They also pose an extremely low risk of cross transmittance, as they are equipped with a rolling code signal. The wireless remotes are exclusive to the motors. They are offered in not only hand held and surface mountable remotes, but also an in-wall that has the appearance of a decora box mount switch that requires no hard wiring.

The expected battery life in one of these remotes with normal operation is approximately 3 years for the hand held and wall mounted remotes, and can be replaced with a standard 3V lithium battery (CR 2430).





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The In-Wall remotes sold prior to September 2004 will also take the CR 2430, however those sold after September 2004 will have a 25-year life expectancy battery (CR 2450). Both batteries can be found in most any store.

Environmental Controls

All of the environmental controls from the wind only (Eolis), sun/wind (Soliris), and sun only (Sunis or the Inteo Chronis for indoor use only) do not require any hard wiring to the motors. The wind and sun controls, with the exception of the indoor sun control, which is battery operated (2-1.5V DC AAA batteries), require only a standard wall receptacle to be plugged into for power. The accessories are provided with 36 feet of cable broken down into 6 feet from the power outlet to the 24V transformer supplied, and 30 feet to the actual sensor itself. These accessories are also programmed like a wireless remote making them simple to install and integrate on any job.

Alternative Power

Phantom Screens can supply alternative motors to the customer if there is a requirement for DC power or if there is a need for voltage that differs from what we currently offer.