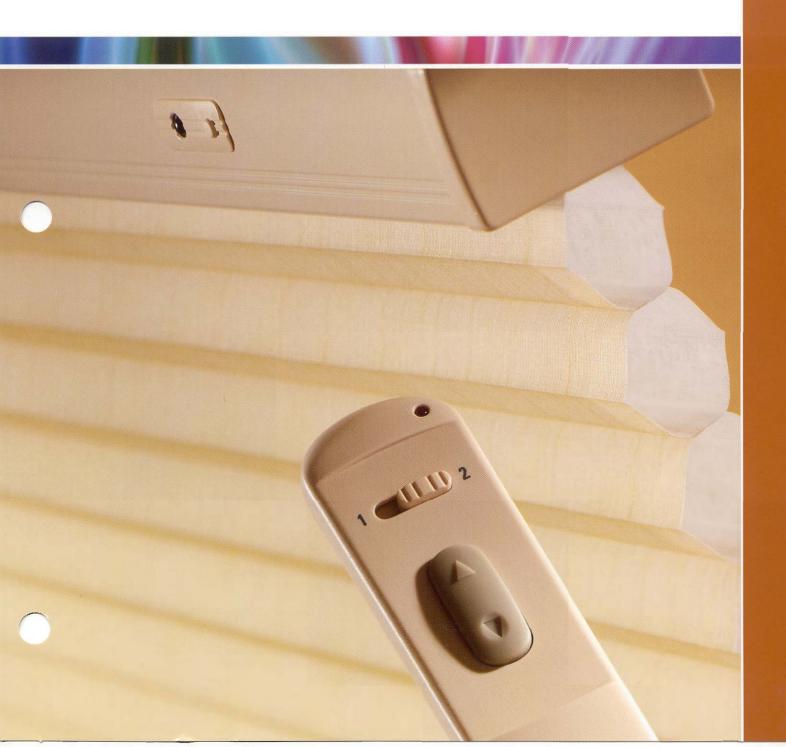
# Motorization



# Motorization

### CONTROL LIGHT WITH THE TOUCH OF A BUTTON.

Why Motorize? Motorized window coverings provide these advantages:

#### CONVENIENCE

What could be easier than operating a window covering by remote control or with a wall switch?

#### **ACCESSIBILITY**

Motorization makes raising and lowering window coverings in high windows or behind furnishings easy.

#### **APPEARANCE**

No tassel cords or cord loops to detract from the window's appearance.

#### **CHILD & PET SAFETY**

The absence of cords provides enhanced child and pet safety.

#### **AUTOMATION**

For ultimate ease and convenience, operation of motorized window coverings can be integrated into popular brands of home automation systems. Hunter Douglas dealers can coordinate with home automation professionals to provide the components and installation services needed to add motorized window coverings to home automation systems.



For privacy, light control and easy operation with the touch of a button.



Makes adjusting even the hardest to reach window coverings a breeze.



For ease of operating multiple or individual shades.

# Motorization

Almost half of all Hunter Douglas product lines can be motorized. The methods of motorization are as varied as the window coverings themselves — from PowerRise®, PowerGlide® and PowerTilt™ infrared (IR) remote control systems to hard-wired switch control systems. Some systems are powered by batteries, others by household current and several give the consumer both options. Plus, many Hunter Douglas motorized products can be installed as part of sophisticated home automation systems.

With all these possibilities, selling motorized window coverings can sometimes be confusing. The purpose of this Reference Guide section is to take the mystery out of the motorization sales process. For the first time, you'll see all motorization methods summarized in one place, and you'll learn a basic selection process that will help you and your customers choose the right system.

#### THE SELECTION PROCESS

The flow chart at right illustrates the basics of choosing a motorization system. It's a simple process of answering a few key questions to focus on the right choices.

- Can hidden or visible wires be run from a power source to the window openings?
- · Will home automation be utilized?
- Is the preferred window covering available with the preferred motorization system?

This selection process is a general guideline. Sometimes the choice of a motorization system will depend upon the availability of a specific window covering which offers that system; other times the only consideration will be the customer's personal preference.

#### FOR DETAILS AND PRICING

For pricing and detailed information about any of the motorization systems described on the following pages, refer to the specific Reference Guide section for the product you are motorizing. The Application Summary, on page MO-2, shows at a glance which products offer which systems.

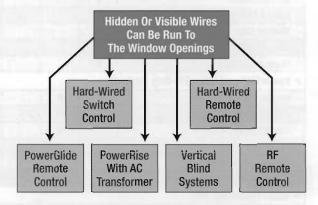
#### **GUARANTEED FOR LIFE**

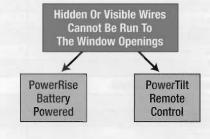
All window coverings are covered by the Hunter Douglas Lifetime Limited Warranty, recognized as the most comprehensive protection available in the window coverings industry. The limited warranty covers motors and circuitry for five years.

# CONTENTS

Application Summary	)-2
PowerRise and PowerGlide Remote Control MC	)-3
PowerTilt Remote Control	)-4
Vertical Blind Systems	)-4
Radio Frequency (RF) Remote Control MC	)-4
Hard-Wired Switch Control	)-5
Hard-Wired Remote ControlMC	)-5
Home Automation	)-6

#### **Choosing A Motorization System**







# Application Summary MOTORIZATION

Motorization		€		ades	EverWood® Alternative Wood Blinds		Modern Precious Metals® Aluminum Blinds	hades	® 0	sbı		LI.
Application	ades	spoods	sape	hS d	Alte	eers	ecion	e® od S	unce	nadir	pu	Mode
	ce®	y Wc	er Sha	®	ood Blinc	ette / Sh	n Pr	Wo	nbra w Sł	ette w Sł	II BII	te® I
Summary	Brilliance® Pleated Shades	Country Woods® Wood Blinds	Designer Screen Shades	Duette® Honeycomb Shades	EverWood® A Wood Blinds	Luminette® Privacy Sheers	Modern Precious Aluminum Blinds	Provenance® Woven Wood Shades	Remembrance® Window Shades	Silhouette® Window Shadings	Vertical Blind Systems	Vignette® Modern Roman Shades
➤ PowerRise® and PowerGlide®	HOLV ILLIAN		Table 1									
Remote Control	•			•		•				•		•
2-Channel Selection	•			•			1986			•		•
Headrail Infrared Eye	•			•						•		•
Satellite Eye	•			•		•				•		•
Battery Wand	•			•						•	4-	•
Satellite Battery Pack				•						•		
AC Transformer	•			•		•				•		•
Manual Control Button	•			•		•				•		•
Memory Stop	•			•						•		•
Daisy-Chain Power	•			•		•				•		•
Home Automation	•			•		•				•		•
➤ PowerTilt <sup>™</sup> and Other Tilt-Only	Systems			1								
Remote Control		•			•		•				•	
Satellite Eye		•			•		•			Regula N	•	
Satellite Battery Pack		•			•		•					
AC Transformer					•		•				•	
Battery Switch Control											•	
Home Automation		•			•		•					
➤ Radio Frequency (RF)												
Remote Control			•					•	•			
5-Channel Selection			•					•	•			
Satellite Eye			•					•	•			
Wireless Wall Switch			•					•	•			
Wireless Timer			•					•	•			
110V Power Cord			•						•			
➤ Hard-Wired Remote Control												
Remote Control			•	•				•	•	•	•	•
10-Channel Selection				10000							•	
12-Channel Selection			•	•				•	•	•		•
Remote Receiver			•	•					•		•	
Master Wall Switch			•	•				•	•	•	•	
Power Supply			•	•				•	•	•		
AC Transformer												
Control Unit			•	•				•	•	•	•	•
Home Automation			•	•				•	•	•		•
➤ Hard-Wired Switch Control												
Wall Switch(es)			•	•				•	•	•		•
Power Supply		N. Paris	•					•	•	•		•
Home Automation			•					•	•	•		•

#### SIMPLE AND AFFORDABLE

The PowerRise® remote control system is the most economical and easiest-to-install motorization option. An infrared receiver eye and a battery wand with AA or AAA alkaline batteries are built into the headrail. Mount the shade in the window, point the remote and it's ready to go.

The following options increase the versatility of the PowerRise system to enable its use in a wider variety of applications.

#### Optional Satellite Eye

A satellite eye can be ordered if the built-in infrared eye will be blocked by a top treatment, or if its function is compromised by direct sunlight or bright interior light. The satellite eye can be positioned up to 8' from the headrail.

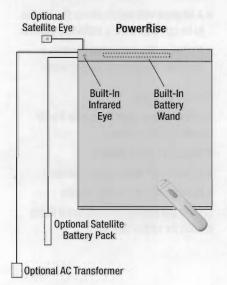
#### Optional Satellite Battery Pack

If a built-in battery wand would be difficult to access — if the shade were in a high window, for example — a satellite battery pack can be ordered to make battery replacement easier. The battery pack may be positioned up to 8' from the headrail.

The satellite battery pack is required for outside-mounted Silhouette® shadings and Vignette® Shades.

#### Optional AC Transformer

The optional AC transformer eliminates the need for batteries. The transformer may be plugged into a wall outlet up to 25' from the headrail of the window covering.



#### **Product Lines**

The following product lines offer the PowerRise remote control system:

- Brilliance<sup>®</sup> pleated shades
- Duette<sup>®</sup> honeycomb shades
- · Silhouette window shadings
- Vignette Modern Roman Shades

Consult the appropriate Reference Guide section for further details.

#### TILT AND TRAVERSE

Luminette® Privacy Sheers are motorized using the PowerGlide® system, which is similar to the PowerRise system. Instead of raising and lowering (and tilting with Silhouette shadings), the PowerGlide system tilts and traverses Luminette sheers.

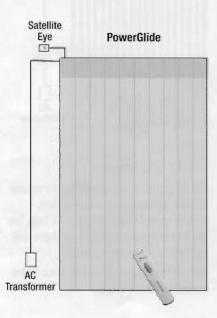


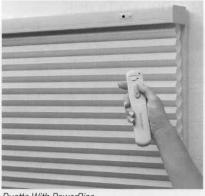
With the PowerGlide system, the satellite eye and AC transformer are required components, rather than options. There are no choices for the consumer to make.



An important enhancement with outsidemounted PowerGlide systems is returns to the wall. There is no gap between the end treatment and the wall.

For more PowerGlide information, refer to the Luminette Privacy Sheers section of the Reference Guide.





Duette With PowerRise



Silhouette With PowerRise



Vignette With PowerRise



Luminette With PowerGlide

## PowerTilt™, Vertical Blind Systems and RF Remote Control

MOTORIZATION

#### **MOTORIZED TILTING**

In many windows, horizontal blinds are rarely raised and vertical blinds are rarely traversed open. Most of the operation performed by the consumer is tilting the vanes to control light and privacy. For these customers, motorized tilting of the vanes is an ideal option.

#### HORIZONTAL BLINDS

The PowerTilt remote control system is a battery powered system for horizontal blinds. The batteries are contained within a battery holder, similar to the PowerRise satellite battery pack. The infrared signal is received by a satellite eye or, in some systems, a receiver box.

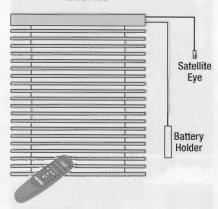
#### **Product Lines**

The following product lines offer the PowerTilt remote control system:

- · Country Woods\* wood blinds
- EverWood<sup>®</sup> alternative wood blinds
- · Modern Precious Metals aluminum blinds

Consult the appropriate Reference Guide section for further details.

#### **PowerTilt**



#### **VERTICAL BLINDS**

Hunter Douglas vertical blinds offers two levels of motorized systems: tilt-only and full tilt and traverse.

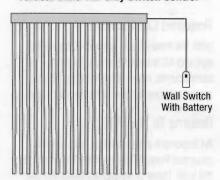
#### Tilt-Only

Tilt-only systems are available as switch control or remote control.

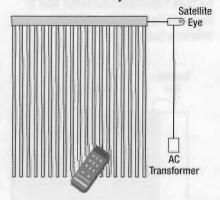
The wall switch for the switch control system also serves as the power source. A 9-volt alkaline battery fits inside the switch housing and provides up to one year of use. The wall switch connects to the motor with an 18' telephone-type cord.

The tilt-only remote control system is powered by household current. The power cord connects to the satellite eye, which in turn connects to the motor. A 3-channel remote is used to control the tilting of the vertical vanes. The tilt-only system is offered with the PermAlign® and PermaTrak® headrail systems.

#### Vertical Blind Tilt-Only Switch Control



#### **Vertical Blind Tilt-Only Remote Control**



#### Full Tilt and Traverse

Full tilt and traverse motorization for vertical blinds is available with switch control, remote control or a combination of both. The full tilt and traverse system is available with the Specialty Systems headrail.

Consult the Vertical Blinds Reference Guide section for further details.

#### RADIO FREQUENCY

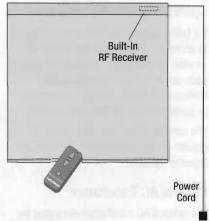
With radio frequency (RF) systems, the operating signal is "broadcast" from the remote like a radio transmitter. This allows the signal receiver to be located out-of-sight; in fact, with Hunter Douglas systems, the receiver is built into the motor.

#### Required Components

Required external components of an RF system are a power cord and a remote.

- The power cord comes with a plug in 3', 6' and 12' lengths; or without a plug in the 6' length for direct hard-wiring.
- The 5-channel remote can operate up to 5 shades individually, or 5 groups of shades, from up to 65' away.

#### **RF Remote Control**



#### **Optional Components**

To enhance the operation of an RF system, these optional components are offered:

- A wireless wall switch allows the shades to be operated from a stationary position.
- A wireless timer operates shades automatically at programmed times.

#### Product Lines

The following product lines offer the RF remote control system:

- Designer Screen Shades
- Provenance<sup>®</sup> woven wood shades
- Remembrance<sup>®</sup> window shades

Consult the appropriate Reference Guide section for further details.

## Hard-Wired Systems

MOTORIZATION

#### WHY HARD-WIRE?

Hard-wired systems operate larger window coverings and offer greater capabilities, including individual operation of up to 12 shades or shadings. Hidden wires are routed to each window from one or more power supplies (and control units with remote control systems). The power supplies and control units are usually concealed in a closet or attic.

#### SWITCH CONTROL

With switch control systems, wires are run from the power supply to a switch to the shade or shading. Each motorized window covering must have its own switch.

#### Components

- Power supply(ies): 2-amp, 3-amp, 4-amp and 8-amp power supplies are utilized, depending upon the product line and number of window coverings.
- Switch(es): one switch is required for each shade or shading.

#### REMOTE CONTROL

With remote control systems, the power supply connects to the control unit. The control unit, in turn, connects to the remote receiver and to each individual shade or shading. An optional master wall switch is offered to operate all the window coverings in a group.

#### Components

- Power supply(ies): 2-amp, 3-amp, 4-amp and 8-amp power supplies are utilized, depending upon the product line and number of window coverings.
- Control unit(s): one control unit can operate up to four window coverings; the control unit is the "brain" of a hard-wired remote control system.
- Remote receiver: one receiver is used per group of up to 12 shades or shadings; the receiver is connected to a control unit.
- Remote transmitter: the 12-channel transmitter is a universal remote control that can also operate PowerRise systems.

 Optional master wall switch: the master wall switch connects to a control unit and provides simultaneous operation of all window coverings in a group.

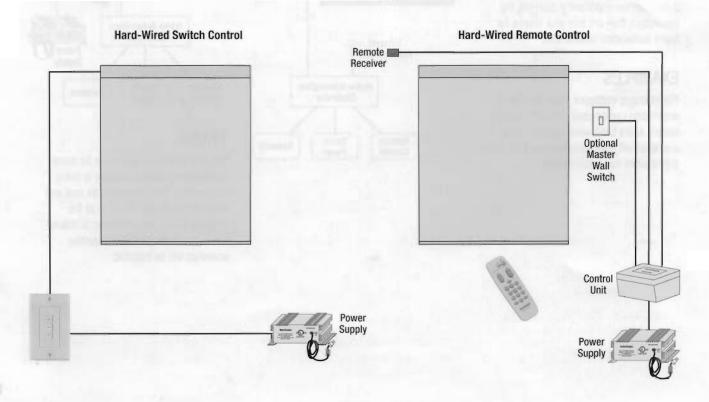
#### PRE-WIRING

It is usually much easier to run concealed wires during the construction or remodeling of a home. Wire can be purchased from Hunter Douglas or other sources. Refer to the Hunter Douglas wiring guide for more information. And be sure to check local building code requirements.

#### PRODUCT LINES

The following product lines offer the switch control and remote control hard-wired systems described on this page:

- · Duette® honeycomb shades
- Silhouette<sup>®</sup> window shadings
- Vignette\* Modern Roman Shades
   Consult the appropriate Reference Guide section for further details.



### Home Automation

**MOTORIZATION** 

#### FOR ALL SYSTEMS

Home automation systems can easily accommodate most motorized systems from Hunter Douglas, including PowerRise®, PowerTilt® and hard-wired systems.

Home automation allows the window coverings to operate with a remote control, a touch panel or even light sensors. In addition, operation can be programmed to raise and lower the window coverings at certain times of the day, on different days of the week.

#### Home Automation Controller

The key component of home automation systems is a mini-computer — the home automation controller. The controller has input/output ports for all the connections and components utilized.

#### **CONSULT PROFESSIONALS**

When selling motorized systems for home automation, it is important to work with a home automation professional. Not only is their expertise important in planning the installation, they are also your source for home automation components.

#### **EXAMPLES**

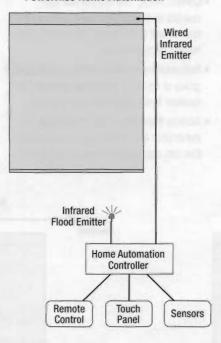
The following examples show how home automation can be used with a PowerRise system and a hard-wired system. These examples will help you understand the basic principles of home automation.

#### **PowerRise**

With PowerRise systems, the job of the home automation system is to communicate the infrared signal to the shade or shading. It does this in one of two ways:

- An infrared flood emitter can "flood" the room with the IR signal. All shades set to the signal's channel must be operated at the same time.
- Wired infrared emitters can be attached to the window coverings' infrared eyes. This allows individual operation, but requires wiring to each shade or shading.

#### **PowerRise Home Automation**

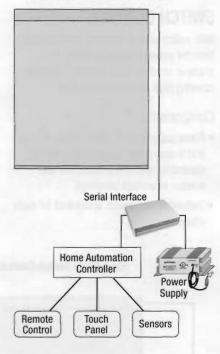


#### Hard-Wired

In hard-wired systems, the Hunter Douglas power supply and the home automation control unit are connected to a serial interface. This interface acts as a switch for each window covering being automated.

The "switches" are activated by the control unit and the motors are powered by the power supply.

#### **Hard-Wired Home Automation**



#### TIMING

The best time to wire a house for home automation is while the house is being constructed. This minimizes the cost and effort. Wires should be run to all the windows even if the consumer is unsure when (and if) the motorized window coverings will be installed.