



User Guide



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SAFETY INFORMATION

WARNING

Read all warnings and instructions prior to installing the device. Failure to follow these instructions may result in property damage or serious personal injury.

Before installation, check that this product is compatible with the associate equipment and accessories.

Do not use the device for anything other than its intended use. Any use outside the sphere of application specified by HAB Home Intelligence is not approved. Such use, or any failure to comply with the instructions given herein will invalidate the warranty and HAB Home Intelligence refuses to accept liability.

CAUTION

- To avoid damaging the product never immerse it in liquid, avoid impacts, never drill holes in it and do not drop it.
- Existing metal blinds may have sharp edges. Use gloves to prevent cuts or abrasions when removing and reinstalling blinds.
- To prevent cable damage or abrasion, do not expose cables to edges of sheet metal or other sharp objects.

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

IBLINDS KIT CHECKLIST



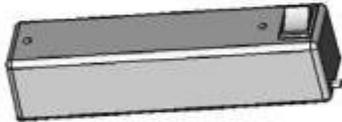
IBlind motor



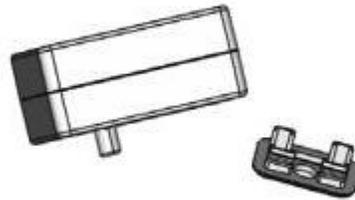
Height Adapter



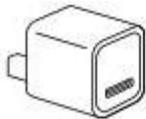
Tilt Shaft



Battery



Charge Adapter and Clip



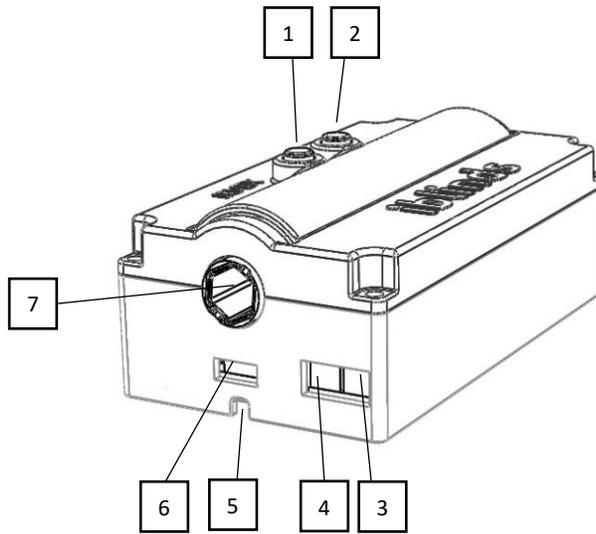
USB Adapter



USB Charging Power Cable

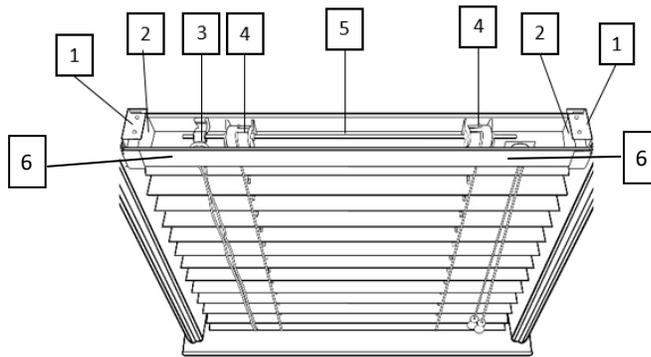


Hex Wrench



iblinds Motor

1.	Z-Wave Include / Exclude Button
2.	Calibration Reset Button
3.	Battery Connector
4.	Solar Connector
5.	String Pass-Through Channel
6.	Micro USB Connector
7.	iblinds Motor Tilt Shaft



Window Blind Components

1.	Window Blind Mounting Bracket
2.	End Cap
3.	Tilting Mechanism
4.	Tilt Drum
5.	Tilt Rod
6.	Headrail

Installation

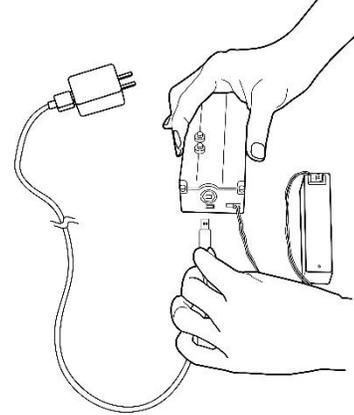
1. Charge Battery

Add battery charge instructions and image

IMPORTANT! Charge battery before first use.

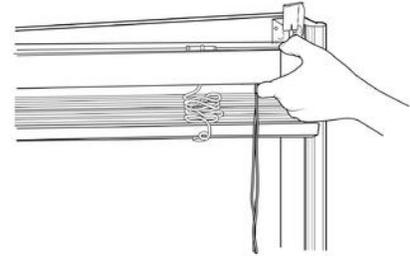
Connect battery cable to the red BAT port. Connect USB Charging Power Cable to the USB Port. Move battery switch to the ON [I] position. Plug USB power outlet into a wall outlet.

Charge battery until the Motor LED Indicator turn green



2. Remove Blind from Window:

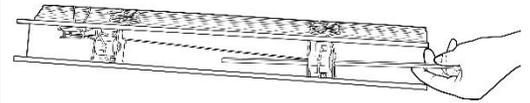
Tilt the blind slats to the fully open position and then raise the window blind. Remove any window blind valances and remove the blind from the window mounting brackets.



3. Remove the Tilt Rod

With your window blind on a flat surface, note the orientation of the tilt drums in the headrail. **You want to make sure the tilt drums all have the same orientation when the tilt rod is reinserted.** Carefully remove the tilt rod.

Note: Many blinds will have end caps and a rubber gasket to keep the rod from sliding. These must first be removed before the tilt rod can be removed.

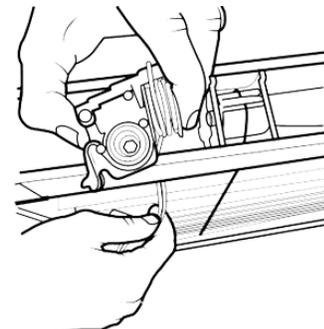


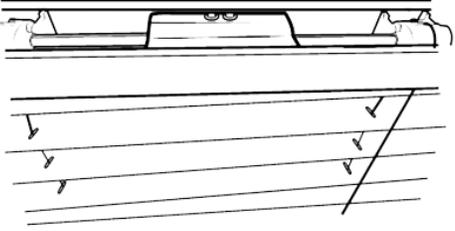
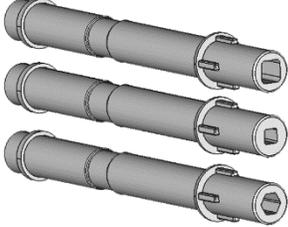
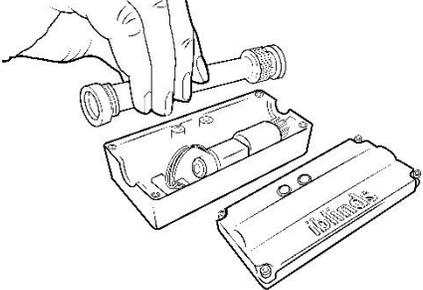
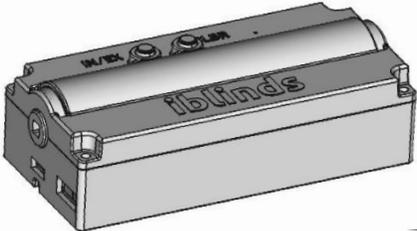
4. Remove Tilt Mechanism

Locate your tilting mechanism (String or Twist Rod).

String: Remove any tassels first. Then remove the tilt mechanism.
Twist Rod: Remove the twist rod first. Then remove the tilt mechanism.

Note: Removing the tilt mechanism disables your ability to control your blinds manually.

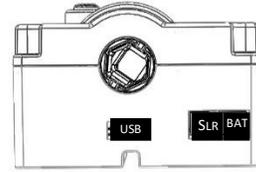


4. Determine iblinds Motor Location	
<p>The motor should be installed near the center of the headrail. Make a note of where the iblinds motor will be installed. All wires will be run to this area.</p>	
5. Determine Tilt Shaft Shape	
<p>Your iblinds Kit comes with 3 different tilt shafts- Large Square, Small Square and Hexagonal. Choose the tilt shaft that matches the tilt rod in your blinds.</p>	
6. Remove the Motor Case Lid & Tilt Shaft	
<p>Use the enclosed hex wrench to unscrew all four screws on the Motor Case lid. Lift Tilt Shaft with bearings out of the case.</p> <p>Note: <i>It is not necessary to remove the screws all the way. It's easier to unscrew them partway & lift the top off.</i></p>	
7. Remove Bearings & Shaft Gear	
<p>Slide the bearings off each end of the tilt shaft & remove the shaft gear.</p>	
8. Install New Tilt Shaft & Close Motor Case	
<p>Place the Shaft Gear on the Tilt Shaft with the correct shape. Make sure the gear is turned so the grooves fit over & it is pushed all the way down to the ridge.</p> <p>Place a bearing on each end of the new Tilt Shaft.</p> <p>Place the Tilt Shaft into the Motor Case, making sure the shaft gear is engaged with the gear inside the motor.</p>	

Screw the lid back down, taking care not to overtighten the screws.
The lid will not stay on when the threads have been stripped.

5. Choose Power Option

The iblinds device has 2 Power charging options. Select the option that best suits you and follow the instructions below.

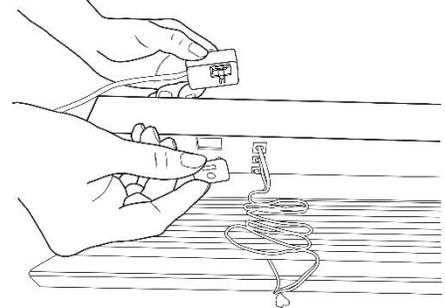


[Option 1. Rechargeable Battery with Charge Adapter]

A. Install the Charge Adapter

The Charge Adapter is installed where the tilt mechanism is removed from. Align the Charge Adapter so the bottom opening of the Charge Adapter sits over the slot where the tilt mechanism was removed from. From the bottom of the headrail, use the included clip to attach the Charge Adapter to the headrail. Connect the Charge Adapter cable to the iblinds motor.

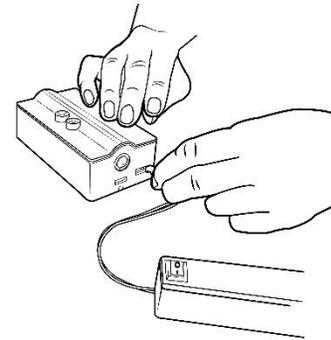
NOTE: It is important to install the Charge Adapter that with the kit. Using an older version power adapter will cause damage the internal electronics.



B. Attach the Battery

Locate the battery and make sure it is in the off position. Attach the battery cable to the iblinds motor. Place the battery in an empty space in the headrail. Remember to save room for the iblinds motor as close to the center of the window blind headrail as possible.

Note: Make sure you select the correct connector on the iblinds motor.



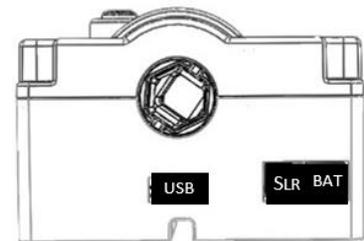
[Option 2. Rechargeable Battery with Solar Panel *]

A. First Follow Steps A and B in Option 1

B. Attach Solar Panel (sold separately*)

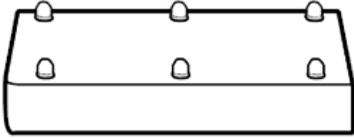
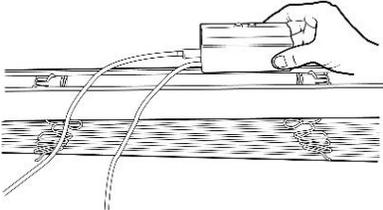
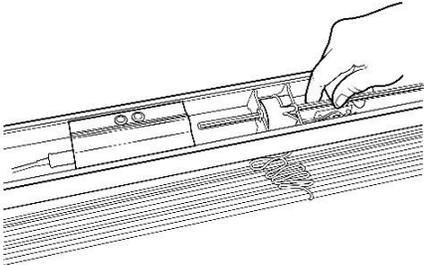
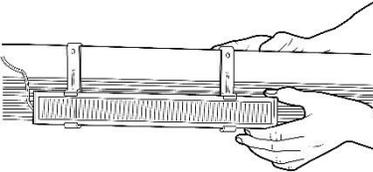
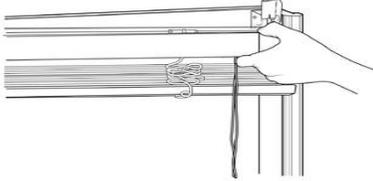
Locate the solar panel and attach the solar panel cable to the SLR port on the iblinds motor.

Note: Make sure you select the white SLR connector port on the iblinds motor when connecting the solar panel.



6. Prepare Motor for Installation

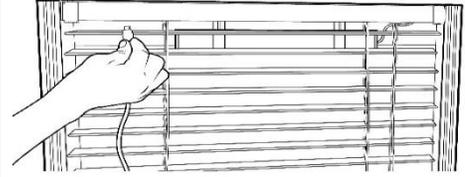
First determine if you will need to use the Height Adapter

Height Adapter	
<p>The iblinds motor will work with high-profile and low-profile window blind headrails. If you have a high-profile headrail, attach the Height Adapter to the bottom of the iblinds motor. To determine what type of headrail profile you have, measure the height of the headrail.</p> <p>High-Profile Headrail Height = 2 inches Low-Profile Headrail Height = 1.5 inches</p>	
7. Install the iblinds Motor	
<p>Once all connections to the iblinds motor have been made, and the proper adapters have been installed, place the iblinds motor in the headrail. The motor should be as close to the center of the window blind headrail as possible.</p>	
8. Reinsert the Tilt Rod	
<p>Make sure the tilt drums are all in the same orientation that they were in during step 2, before the tilt rod was removed. Carefully insert the tilt rod. Take care to align the tilt rod so it will slide through the adapter (if used) and the iblinds motor.</p> <p>Note: You may need to rotate the twist rod slightly to have it slide through the adapter (if used) and the iblinds motor.</p>	
9. Route Cables	
<p>Carefully place all the excess cables in the headrail. Take care to route the cables where they will not interfere with the tilt rod or any of the moving mechanisms in the headrail.</p>	
10. Window Blind Installation	
<p>1. Attach Solar Panel <i>(if using the solar panel option)</i> Lock solar panel into clear clips and use hooks to hang onto headrail. Plug into the solar charging port SLR.</p>	
<p>2. Mount Window Blind Carefully place the window blinds back in the headrail mounting brackets and lower the window blind. Make sure all cables are tucked away in the headrail and are not interfering the movement of any moving parts of the headrail.</p>	

Charging Battery using the Charge Adapter, USB Cable and USB Adapter

1. Attach USB Cable to Headrail Charge Adapter

Attach the Micro USB end of the supplied USB Cable into the Charge Adapter of the headrail. Leave connected for at least 8 hours.



2. Attach USB and Plug in Power Adapter

Attach the other end of the USB cable into the USB power adapter and plug the power adapter into the wall outlet.



Z-Wave Specifics

Z-Wave Compatibility

The iblinds device can be operated in any Z-Wave network, with other Z-Wave certified devices from other manufacturers. All non-battery-operated nodes within the network will act as repeaters regardless of vendor to increase reliability of the network.

Z-Wave Association Group

The iblinds product grouping identifier is 1 and maximum number of devices that can be added to the group is 1. Group 1 is lifeline.

Group Number	Group Name	Max Nodes
1	Lifeline	1
	Description:	Members of this group will receive unsolicited reports related the status of the battery low level and push button toggle events.
Command Sent:		
Battery Report		
Switch Multilevel Report		

Z-Wave SmartStart

The iblinds device supports Z-Wave's new Smart Start feature. Please do not throw out the Quick Start Guide with in the box that has your unique QR code with your DSK (Device Specific Key). This QR Code can also be found on the bottom of the iblinds motor and on the bottom of the box.

Z-Wave Basic Command Class Mapping

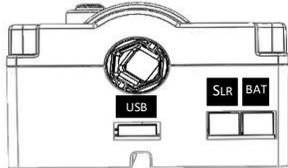
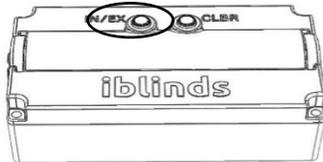
The Z-Wave Basic Command Class is mapped to Multilevel Switch as shown in the table below.

Basic Set (Value=0xFF)(255)	Multilevel Switch Set (0xFF)(255)
Basic Set (Value=0x00)(0)	Multilevel Switch Set (0x00)(0)
Basic Set (Value=0x01..0x63)(1-99)	Multilevel Switch Set (0x01..0x63)(1-99)
Basic Report	Multilevel Switch Report

Z-Wave Command Classes

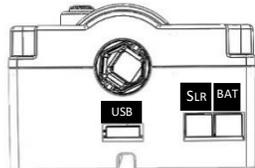
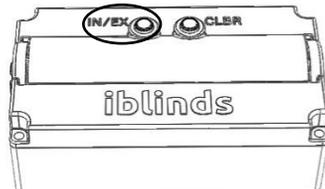
SWTICH_BINARY	SUPERVISION
ASSOCIATION version 2	FIRMWARE UPDATE MD version 5
ASSOCIATION GROUP INFO	BATTERY
TRANSPORT SERVICE version 2	MULTILEVEL SWITCH
VERSION version 2	CONFIGURATION
MANUFACTURER SPECIFIC	INDICATOR version 3
DEVICE RESET LOCALLY	Z-WAVE PLUS INFO version 2
POWERLEVEL	MULTI CHANNEL ASSOCIATION version 3
SECURITY 2	WINDOW COVERING version 1

Z-Wave Network Remove for Exclusion

<p>1. Remove the window blind from the headrail.</p>	
<p>2. Power the iblinds device. Follow step 5. Choose Power Option to make sure the power connection is correct. Note: If you are using Option A: Rechargeable Battery with Charge Adapter or Option B: Rechargeable Battery with Solar Panel, move the switch located on the battery to the on Position.</p>	
<p>3. Z-Wave Remove for Exclusion Follow the directions for your Z-Wave device to place it in the exclusion mode. Press the exclude button 3 times and wait for the device to be removed from the Z-Wave network.</p>	

Z-Wave Network Add for Inclusion

Before returning the window blinds to the window, the iblinds device must be joined to a Z-Wave network.

<p>1. Power the iblinds Device. Follow step 5 Power Options above to make sure the power connection is correct. Note: If you are using Option A: Rechargeable Battery with Charge Adapter or Option B: Rechargeable Battery with Solar Panel move the switch located on the battery to the ON [I] position</p>	
<p>2. Z-Wave Add for Inclusion Follow the directions for your Z-Wave hub/controller to place it in the add for inclusion mode. Press the inclusion button 3 times and wait for the device to be discovered and joined to the Z-Wave network. Follow the directions for your Z-Wave controller to uniquely identify your device. (Ex: Bedroom iblinds) <i>If you have trouble joining the motor to the Z-Wave network follow the Z-Wave network exclusion process later in this guide. Then repeat step 2.</i> <i>Note: If your Z-Wave Controller supports S2 encryption, enter the first 5 digits of DSK into your Controller's interface if it is requested. The DSK can be found on the bottom of the device, the box and inside the included Quick Start Guide.</i></p>	

Operation

Control

Use your Control Device and control your 3rd Party Z-wave Controller to change the tilt angle of the blinds. (Follow your Z-Wave Controller specific instructions for operating your user control device)

iblinds motor will tilt the blinds to any angle between 0-99

0 = Closed Down

50 = Fully Open

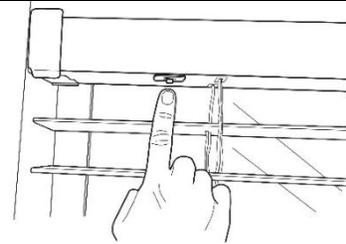
99 = Closed Up

The User Control Device can be a Cell Phone, Tablet, Remote, Computer or Voice Control using a digital assistant.

Note: Upon first use, iblinds will auto calibrate. It will cycle open and closed several times while finding the end points. Then it will move to the user requested position....



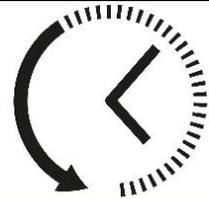
Manual Control – To toggle the blinds between Closed and last Open Position press the charge adapter button once.



Schedule

Follow your 3rd party Z-Wave Controller guide to schedule times to open and close your blinds using the iblinds device.

Example: Set your blinds to open at sunrise and close at sunset.



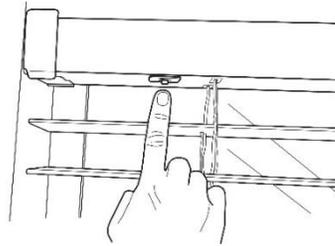
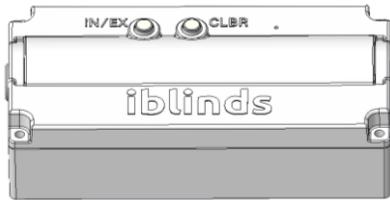
Status information

Most Z-Wave Controllers support receiving battery level & window blind position level information from the iblinds device. Follow your 3rd Party Z-Wave Controller to receive this information.



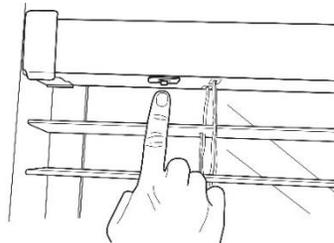
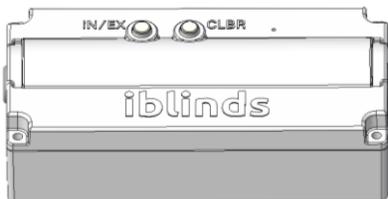
Button Functions

Button	Press	Function
IN /EX	3 Press	Z-Wave Network Include / Exclude
IN/EX	5 Press	Manual, Factory Reset – Please use this procedure only when the network primary controller is missing or otherwise inoperable
CLBR	5 Press	Reboot
CLBR	Press and Hold > 7 seconds.	Reset and Clear Parameter values
Charge Adapter Push Button	1 Press	Toogle Blind between Closed and last Open Position
Charge Adapter Push Button	3 Press	Z-Wave Network Include / Exclude
Charge Adapter Push Button	Press & hold > 7 seconds	Start Manual Calibration



LED Indicators

Motor Red	5V Power is connected
Motor Yellow	Battery Is Charging
Motor Green	Battery is fully Charged
Charge Adapter	3 flash indicates iBlinds successfully included or excluded Z-Wave Network
Charge Adapter	5 Quick flashes indicate Reboot
Charge Adapter	Slow Flash Join network



Z-Wave Customization Parameters

Parameter	Name	Description	Default	Range
1	Close Interval	Used for auto calibration. Sets interval endpoint detection. Smaller interval will make the blinds close tighter.	0x16	0x0F - 0x1E (15-30)
2	Reverse Direction	Used to reverse the direction of the blinds.	0(forward)	0,1
3	Disable Report	Used to disable Z-Wave Report. This is useful for systems that poll iBlinds immediately after sending a position command. Disable if this an immediate report is causing iBlinds motor to function improperly.	0(True)	0,1
4	Default ON Value	Used to set the default ON Level when manual push button is pushed- Default value for ON = 50% (0x32) , change this value if you wish to set the push button ON value to a different preset value.	0X32	0x01 - 0x63 (1-99)
5	Reserved	Reserved for Manufacturer		
6	Speed	Used to set the default blind Speed. 0= No Delay. The Larger the number the slower the speed. Note: Duration Value >0 will always override the speed parameter	0	0-100

Notes: It is necessary to ask a controlling node to rediscover the iBlinds capabilities after altering capabilities. It is necessary to re-include iBlinds in the network **if the controller does not have any capability rediscovery option.**

Troubleshooting

Symptom	Cause	Solution
iblinds Unresponsive	Power -Battery	Plug battery into proper port
		Turn battery power switch on
	Power - Direct Power	Connect 5V Power to USB Port
		Check 5V Power Source
System malfunction	Hold Pass Through Charger push button for 10 seconds to reset the device	
Z-Wave Hub/Controller	Check Controller	
Z-Wave Include Problems	Distance	Move within 5 feet of the Z-Wave Controller
	Associated with a previous network	Exclude device first then Include
	System malfunction	Set Z-Wave controller in Include Mode. Press CLBR to reset device then a second later include by pressing the INC/EXC button.
	Power	Refer to power solutions above.
	Pass Through Charger not connected	Connect Pass through adapter
Z-Wave Exclude Problems	Distance	Move within 5 feet of the Z-Wave Controller
	System malfunction	Set Z-Wave controller in Include Mode. Press CLBR to reset device then a second later include by pressing the INC/EXC button.
	Power	Refer to power solutions above.
	Pass Through Charger not connected	Connect Pass through adapter
Solar not Keeping Battery Charged	Not enough sun light	Reposition Solar Panel or use USB Charger and Cable to charge the battery
Short Battery Life	Excessive polling	Check Z-Wave Controller Reduce iblinds Z-Wave polling to once a day
	Excessive Usage	Reduce usage to twice a day
	Defective Battery	Replace Battery – Contact support@myiblinds.com
Auto Calibration	Heavy Blinds or Blind profile not found	Lift blinds ¾ up and initiate auto calibration by holding the Charge Adapter Button for 7 seconds.

For additional questions and support contact support@myiblinds.com

Limited Warranty

See website for Refund and Returns we may need to update this website.

HAB Home Intelligence offers a limited one-year warranty on the hardware components of its kit. If a defect in the hardware, or any component thereof, appears at any time during the first year after purchase, HAB Home Intelligence will repair or replace (at its option) the kit or the defective component at no cost to you beyond the cost of shipping the defective item to us.

Who Makes This Warranty

This warranty is made by HAB Home Intelligence, LLC.

Who Is Covered

This warranty extends only to the original purchaser of the product. This warranty is intended for natural persons only and does not extend to any corporation, limited liability company, or commercial entity.

What Is Covered

The limited one-year warranty on hardware covers manufacturing defects and includes parts, labor, and the cost of shipping the repaired (or replacement) product from HAB Home Intelligence to you. The warranty does not cover installation of repaired or replacement items. If we send replacement parts, we may use new or reconditioned parts. If we send a replacement motor box, we may use a new or reconditioned motor.

Where and How to Obtain Warranty Service

You can obtain warranty service from HAB Home Intelligence at the address indicated below. It is your responsibility to deliver or ship the defective product to us at your expense, together with a copy of your receipt showing date of purchase and a description of the claimed defect, prior to the expiration of the warranty period. To obtain information regarding this warranty, you may contact us by mail, e-mail.

HAB Home Intelligence, LLC
5750 Rufe Snow #149
North Richland Hills, TX 76180
support@myiblinds.com

Exceptions and Exclusions

This warranty does not include damage or defects resulting from misuse, accident, failure to maintain, or any other causes following your purchase of the product.

Use of the kit with any other system or components (including affixing non-HAB Home Intelligence attachments or accessories) voids this warranty. Failure to follow the user's manual in installation or use of the system voids the warranty. Unauthorized repair or modification voids the warranty.

The system is intended for personal home use. HAB Home Intelligence does not warrant its system for commercial use, and any such use voids the warranty.

TO THE GREATEST EXTENT PERMITTED BY LAW, THIS WARRANTY IS IN LIEU OF AND EXCLUDES ALL OTHER WARRANTIES NOT EXPRESSLY SET FORTH HEREIN, WHETHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Limitation of Liability

THE SOLE REMEDIES AFFORDED UNDER THIS WARRANTY ARE REPAIR, REPLACEMENT, OR, IF REPAIR OR REPLACEMENT IS NOT COMMERCIALY PRACTICABLE OR CANNOT BE TIMELY MADE, A REFUND OF THE PURCHASE PRICE. IN NO EVENT SHALL THE LIABILITY OF HAB HOME INTELLIGENCE RELATED TO ANY PRODUCT EXCEED THE PURCHASE PRICE OF THE PRODUCT.

YOUR USE OF HAB HOME INTELLIGENCE PRODUCTS IS AT YOUR SOLE RISK. HAB HOME INTELLIGENCE SHALL NOT BE LIABLE UNDER ANY CIRCUMSTANCES FOR CONSEQUENTIAL, INDIRECT, SPECIAL, OR INCIDENTAL DAMAGES ARISING FROM OR IN CONNECTION WITH THE USE OF ANY HAB HOME INTELLIGENCE PRODUCT. (SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.)

Other Legal Rights

This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.