

Custom Specification
PerfectTiltG4 Motorized Shutters

**Revision Log**

Effective Date	Remark
2019-12-05	Add module location for Bypass with 6 panels center/side open and 8 panels center/side open.



Quality Wholesale Window Coverings  
 Contract • Hospitality • Healthcare • Residential

## Table of Contents

Page  
1-15

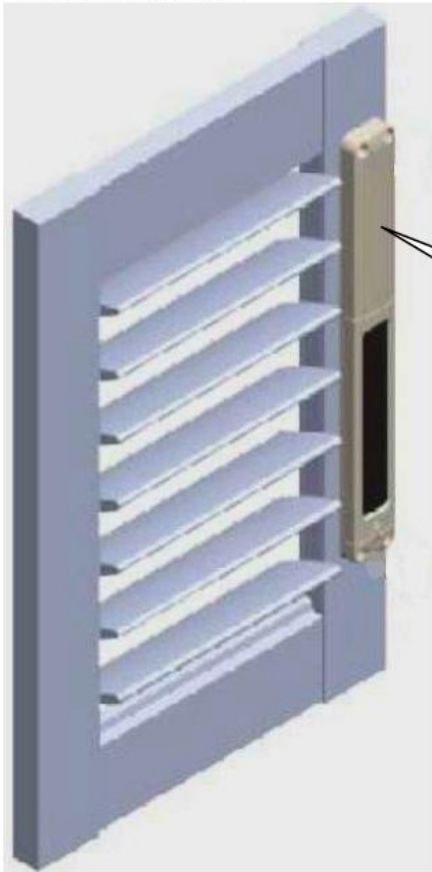
1 New PerfectTilt(TM)

## 1. New PerfectTilt(TM)

The new PerfectTilt(TM) G4 has many exciting features & benefits.

- \* iPhone and iPad control with hub (optional)
- \* Quick response to tilt commands
- \* 8 pre-programmed louver positions and one custom position with remote. Over 30 custom louver positions by utilizing the Dial
- \* Louvers can be tilted by hand, remote or app (via hub) without neither the need for flipping switches nor the risk of damage because of incorrect switch settings
- \* Two long-lasting rechargeable 18650 Lithium-ion batteries per module unit last up to 1 year on a single charge via USB port
- \* High efficiency solar panel included for extending battery charge
- \* Water repellent module units
- \* Built-in jam protection for child and pet safety

### Parts and Names:



PerfectTilt G4 Module



Smart Dial(TM) Remote

### Specifications:

	<b>New RF</b>		
Shutter Program	All Except Waterproof Woodlore Plus		
Shutter Type	All types except bi-fold double hung or panel with gap at bottom over 0.1" (no support on bottom)		
Specialty Shutter Shape	All shapes except shapes without a vertical stile in the middle (for example, eyebrow, elongated eyebrow, half-round sunburst without horizontal louvers)		
Tilt System	Invisible Tilt only, the tilting system will not split unless specified		
Stile Width	2.25" stile only		
Louver	2.5", 3", 3.5", 4.5" Elliptical louver		
Panel Size Limit	<p style="text-align: center;">Max. Panel Height without divider rail:  74" for Woodlore;  78" for Woodlore Plus, Brightwood and Normandy;  84" for Ultra;</p> <p style="text-align: center;">Min. Panel Width Limit: 8 11/16"  Max Width Limit: same as regular non-motorized shutters</p>		
Panel Size Limit	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; text-align: center;">Min. Panel Height With lined up Motors</td> <td style="text-align: center;">18"</td> </tr> </table>	Min. Panel Height With lined up Motors	18"
Min. Panel Height With lined up Motors	18"		
Panel Size Limit	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; text-align: center;">Min. Panel Height With Staggered motors (which is default for 180 degree bifold track shutters; and optional for other types of shutters)</td> <td style="text-align: center;">Louver space not less than 26", so at least  13 louvers for 2.5"louver; 11 louvers for 3"louver; 9 louvers for 3.5"louver; 7 louvers for 4.5"louver.</td> </tr> </table>	Min. Panel Height With Staggered motors (which is default for 180 degree bifold track shutters; and optional for other types of shutters)	Louver space not less than 26", so at least 13 louvers for 2.5"louver; 11 louvers for 3"louver; 9 louvers for 3.5"louver; 7 louvers for 4.5"louver.
Min. Panel Height With Staggered motors (which is default for 180 degree bifold track shutters; and optional for other types of shutters)	Louver space not less than 26", so at least 13 louvers for 2.5"louver; 11 louvers for 3"louver; 9 louvers for 3.5"louver; 7 louvers for 4.5"louver.		

### Components:

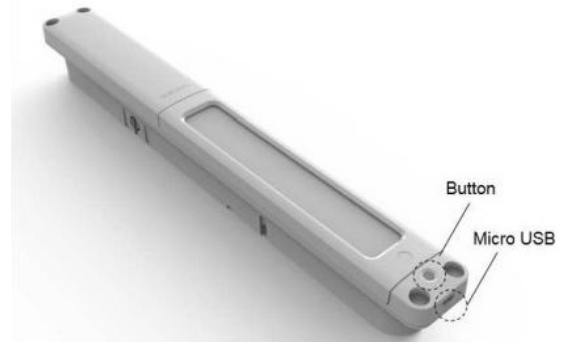
<p style="text-align: center;"><b>Items</b></p> <p>Smart Dial(TM) (Remote) and Docking: Radio Frequency; Battery: 2x CR2032</p> <p>Dimensions : 2.7"(68mm) diameter x 0.8"(21mm)</p> <p>Default color ring's color: black Optional color ring's colors: White, Gray, Bronze, Red</p>	 
--	--

**Module**  
 Model : PerfectTilt G4

Module color is White for shutter colors Pure White, Silk White & Pearl;  
 Module color will be match shutter colors except Pure White, Silk White & Pearl.

Dimensions : 13.09"(332.5mm)  
 x1.52"(38.5mm) x1.45"(36.8 mm)  
 One for each louver section,

2X long-lasting rechargeable 18650 lithium-ion batteries built-in, charge PerfectTilt G4 Module by Micro USB interface with 5V.1A power bank or adaptor.



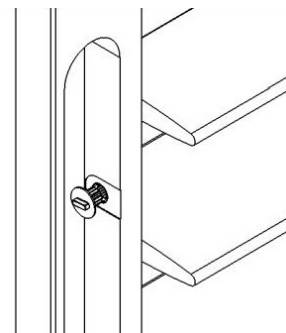
To charge the batteries, use micro USB cord and plug it into either a wall outlet or a portable power bank. It may take up to 8 to 10 hours to fully charge the rechargeable batteries. DO NOT remove the batteries from the motor module unit. Once they are removed, it will void the warranty. In addition, only use Norman® supplied batteries on PerfectTilt™ motors. The use of non-Norman® supplied batteries will also void the warranty.

**Micro USB cable**  
 Color: White, Length: 9.8'(3 meters) ,  
 For charging PerfectTilt G4 Module.

One free Micro USB cable for every 3 motorized shutters by default.  
 If you need extra Micro USB cable, please input USB cable quantity when placing orders.



**Slotted Point Driver**  
 One for each louver section.  
 Connect the Invisible Tilt / Easy Tilt and the Module; when fit the slotted point driver into the stile, make sure the angle is the same as that of the louvers.



Custom Specification  
PerfectTiltG4 Motorized Shutters

<p style="text-align: center;">Norman Hub Color: Black Dimensions: 3.7"(94mm) diameter x 1.09"(27.8mm)</p> <p style="text-align: center;">Micro USB cable Color: Black</p> <p>Connect the Smart phone and the Norman hub, all shutters assigned to the remote can be controlled by APP via Norman hub.</p>	 <p>The top image shows two black Norman Hub devices. The left one is a top-down view, and the right one is a side view with labels for 'RS-232', 'Button', 'Ethernet', and 'Power'. The bottom image shows a black Micro USB cable and a black circular Norman Hub device, both in their original packaging.</p>
<p style="text-align: center;">Repeater Color: black</p> <p>Plug Repeater into the enclosed Power Adapter and then plug into home power supply. It is recommended to deploy each room with a repeater; If the distance is more than 32.8'(10 meters), add one more repeater.</p>	 <p>The top image shows a black AC/DC Adapter with a power jack and a USB port. The bottom image shows a black Norman Repeater with a USB-A connector and a circular button.</p>

**For your convenience, the remote and motor pairing will be done at the factory.**

\*\* Group 1, 2 and 3:

- Factory default:
  - \* Windows on the right wall: Group 1
  - \* Windows on the center wall: Group 2
  - \* Windows on the left wall: Group 3
- Custom: If your desired pairing is different from the factory's default, specify at the time of ordering.

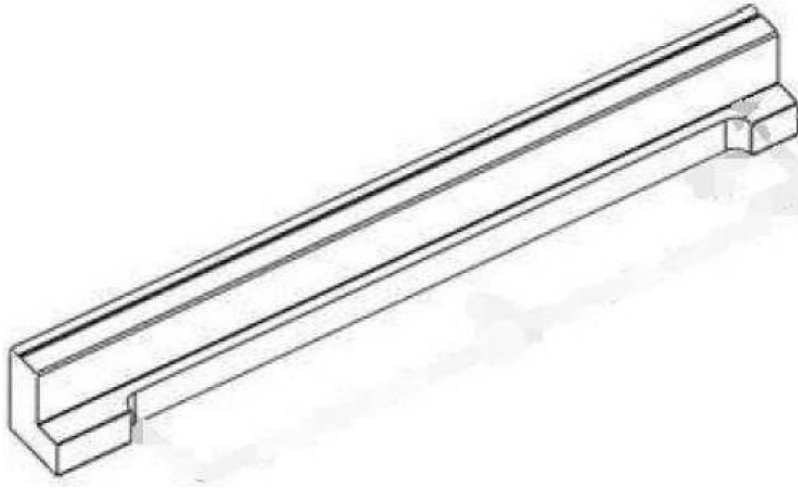
\*\* Group 4 and Group 5 are reserved for default settings.

- If there's divider rail or split tilt:
  - \* Group 4 will be for all upper louver sections of all applicable shutters.
  - \* Group 5 will be for all lower louver sections of all applicable shutters.
- If there's no divider rail or split tilt, Group 4 will be for all shutters.

Note: Please select the shutters will be installed on right / center / left wall when placing orders, then the groups will be programmed well at factory.

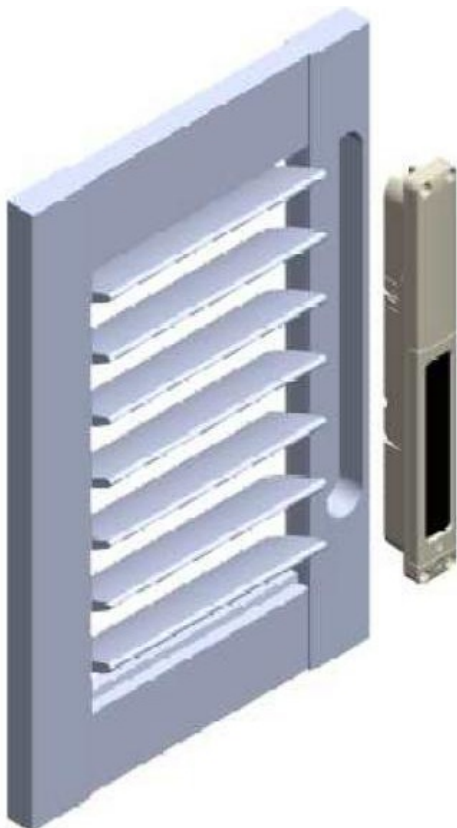
## Frame Cut-Out

For single panel or configuration similar to single panel with frame, the module location will conflict with the light block of the frame, so there will be cut-out on the light block of the frame to stop the conflict, the length for the cut-out would be 335mm (13.2").



Clearance:

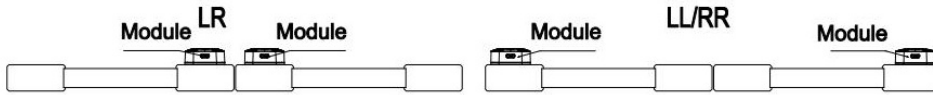
The module will protrude 5/8" from the back of the stile, please allow 11/16" clearance for the module.



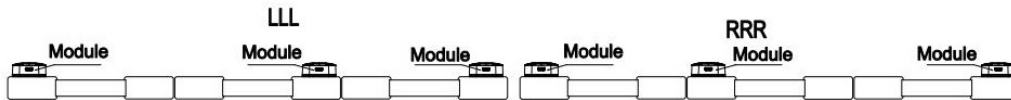
**Module Location:** (Invisible Tilt will be on the same side as the module)

**For regular shutters and bi-fold Applications (Except for 2014 bifold track):**

- 1) Single Panel: Module will be on the un-hinge stile
- 2) 2 Panels: LL, LR, RR



- 3) 3 Panels: LLL/RRR



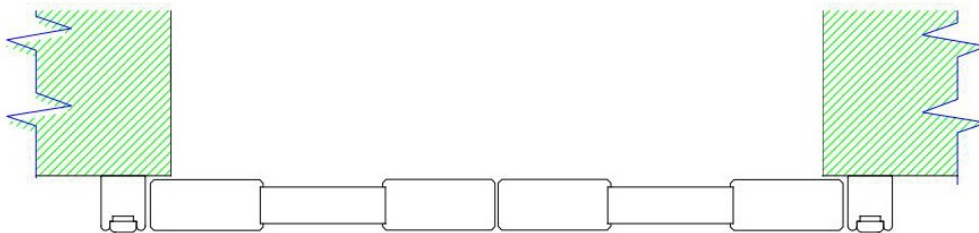
- 4) 4 Panels: LLRR/LLLL/RRRR



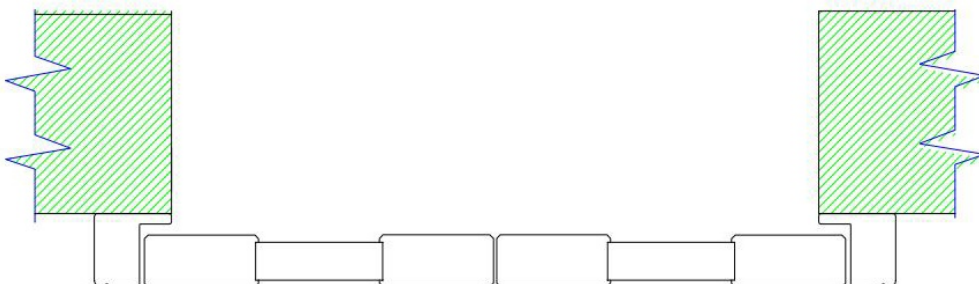
Given the need for module clearance, the following OM install frames will require either a build out or extension of at least 1/2" (12.7mm) when the modules must be located on the outermost stiles as outlined above:

1. Hang Strip (beside the panels)
2. L Frames with a light block thickness of less than 3/4" (19mm) installed flush with the window opening
3. All Deco Frames where the light block is installed flush with the window opening

Hang Strip



L Frames with a light block thickness less than 3/4" (19mm) flush with the window opening





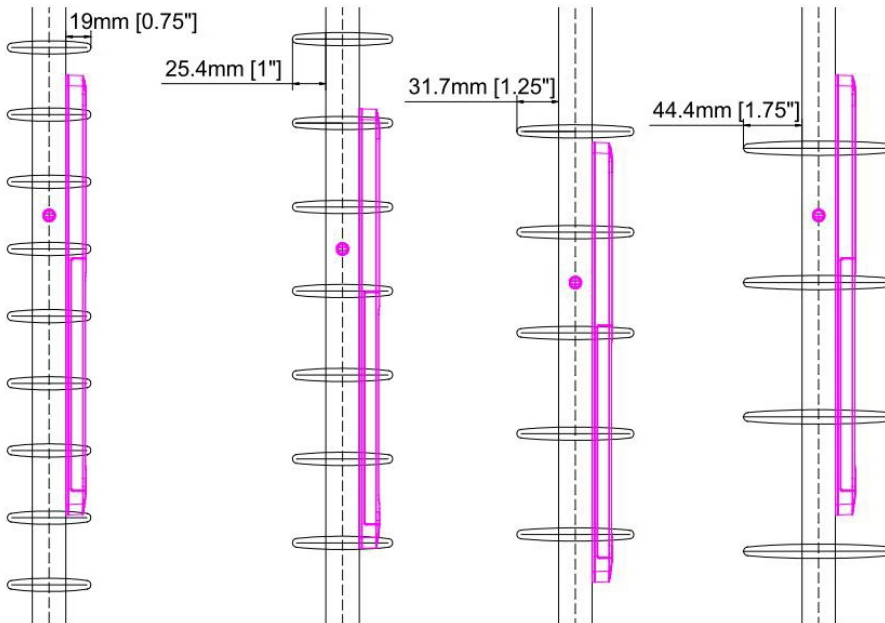
All Deco Frames with the light block flush with the window opening:



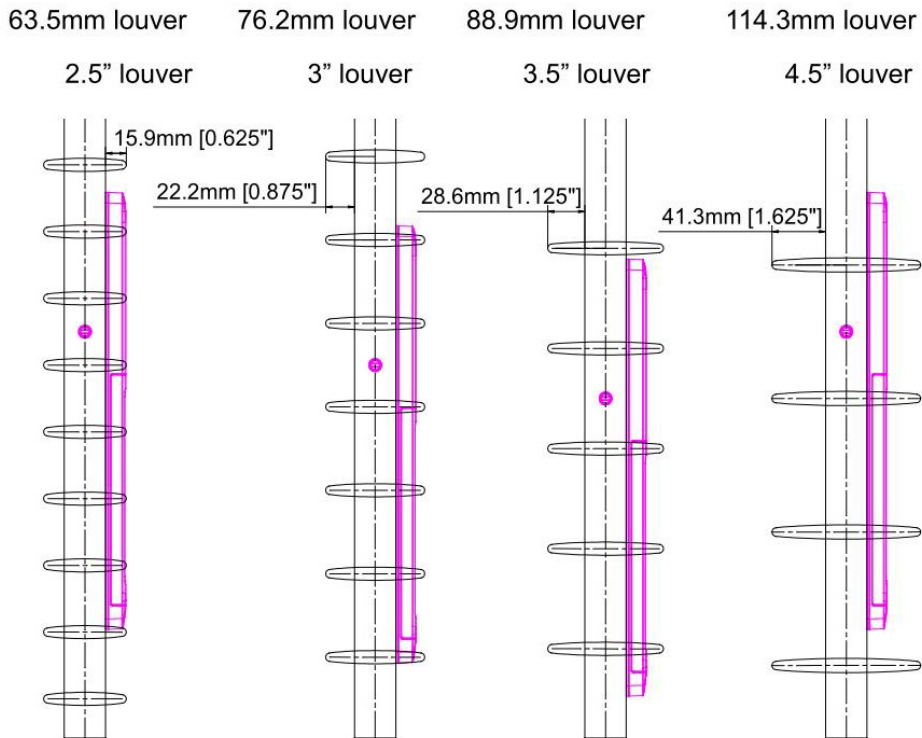
Side view for module in panel with different louver types

**For non Ultra programs**

63.5mm louver	76.2mm louver	88.9mm louver	114.3mm louver
2.5" louver	3" louver	3.5" louver	4.5" louver

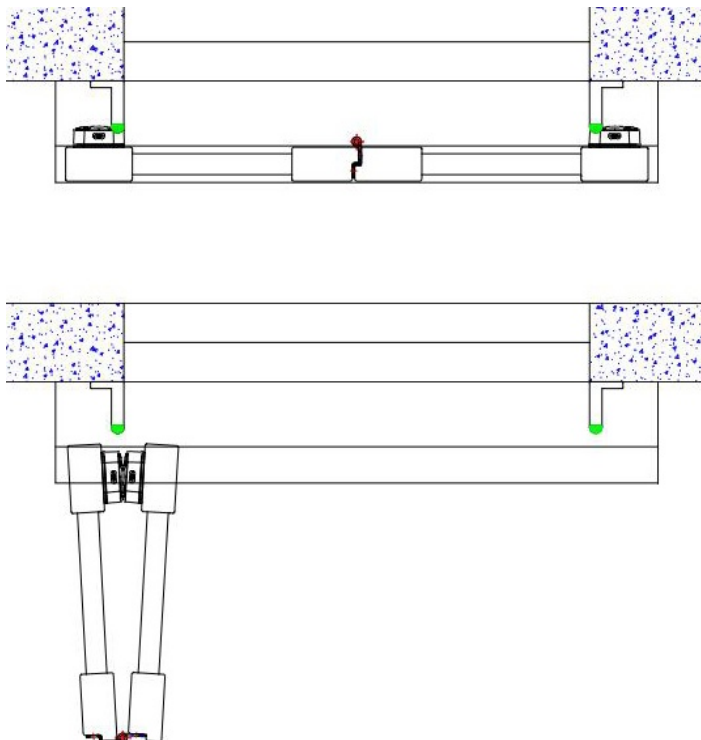


**For Ultra program**



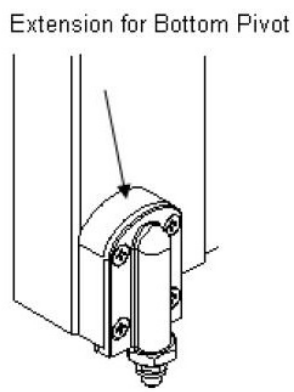
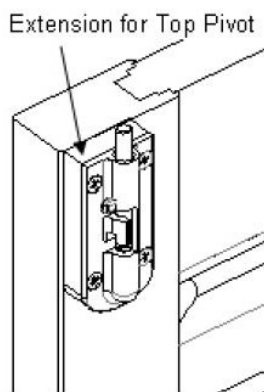
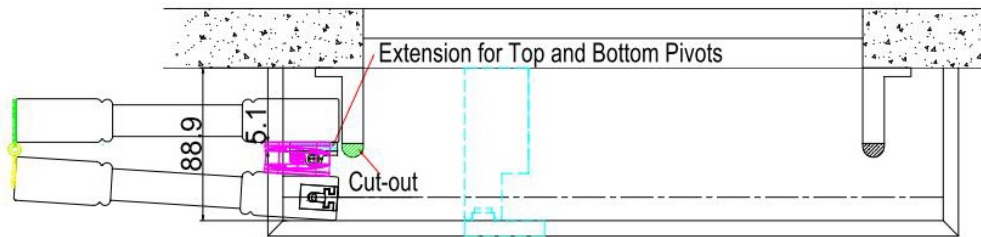
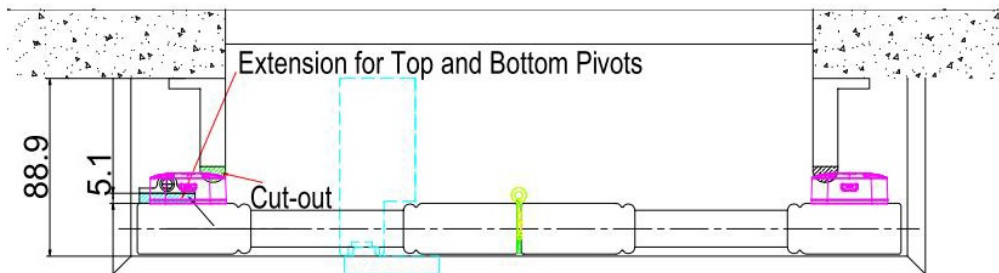
**For Motorized 90° Bifold Track Shutter:**

- 1) Both 76.2mm (3") and 88.9mm (3.5") Header are available;
- 2) The L Shape Light Block will be cut out 7.9mm (5/16") to avoid the conflict with the module;



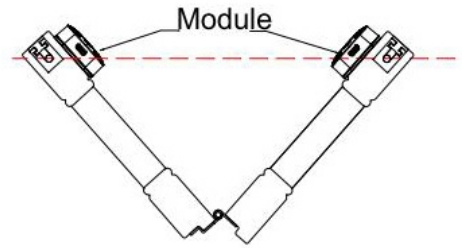
## For Motorized 180° Bifold Track Shutter:

- 1) The default header width is 88.9mm (3.5"); The min. Header width is 82.5mm (3.25"); so for 76.2mm (3") header, 6.35mm (0.25") extension is required for non-Ultra program.
- 2) The header width is no less than 95.25mm (3.75"), the min. Header width is 95.25mm (3.75"); so for 89mm (3.5") header, 6.35mm (0.25") extension is required for Ultra program.
- 3) The L Shape Light Block will be cut out 4mm (3/16") to avoid the conflict with the module; 5.1mm (0.2") extension is necessary for installation of the top and bottom pivots;

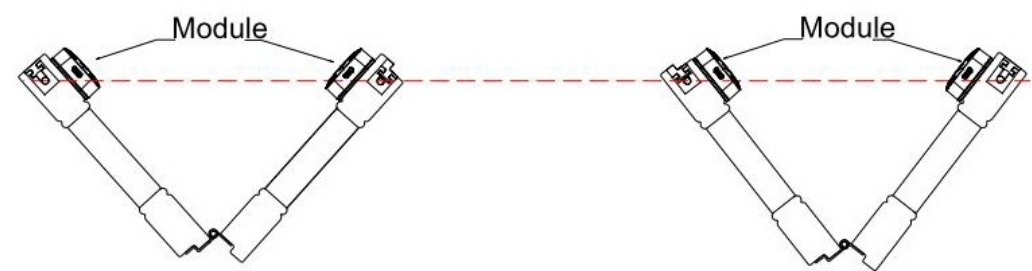


**For 90° Bifold Track:**

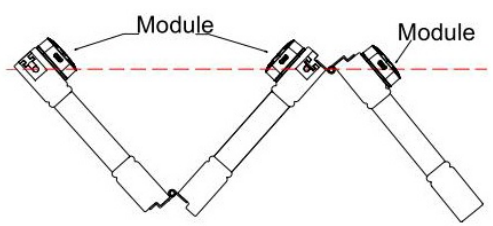
LL/RR



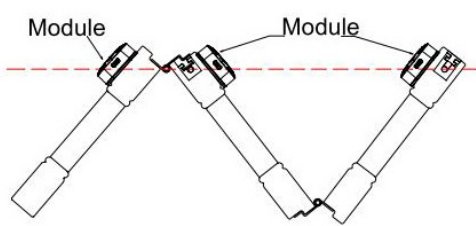
LLRR



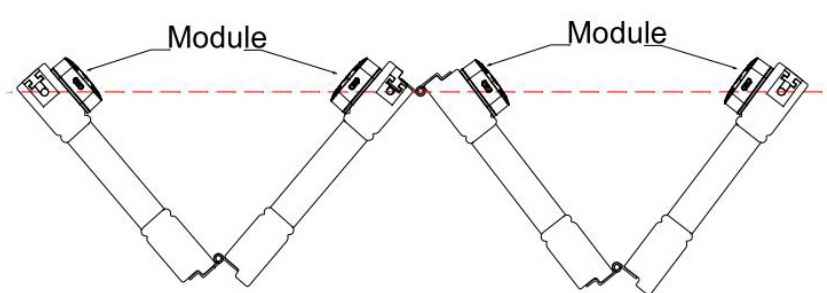
LLL



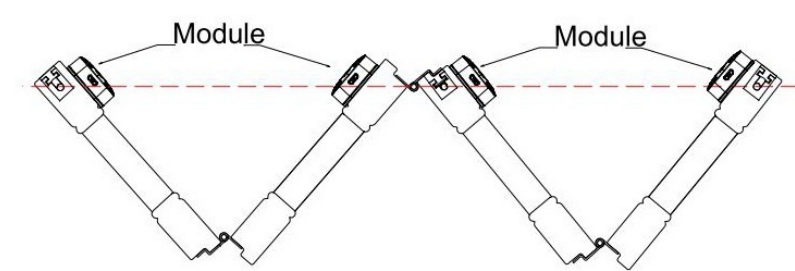
RRR



LLLL



RRRR



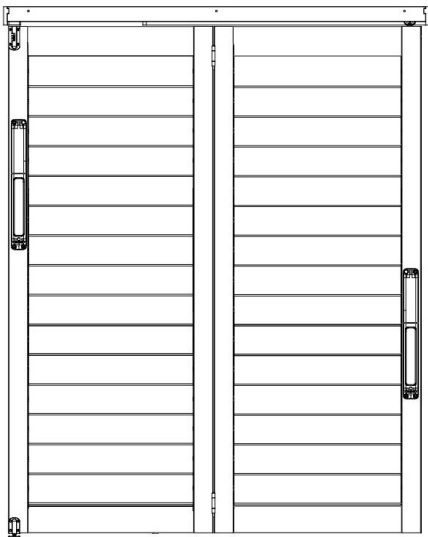
## Special Note on Bi-fold or Multi-fold Configurations

Please be aware that in bi-fold or multi-fold configurations of RF, the motorization modules will touch each other when the panels are folded together, so the panels can't be able to stack together as tightly as that of the non-motorized shutters.

Additionally, before folding the bi-fold or multi-fold panels together, please ensure that the louvers are returned to a completely closed position (either up or down) to prevent louver damage when folding panels.

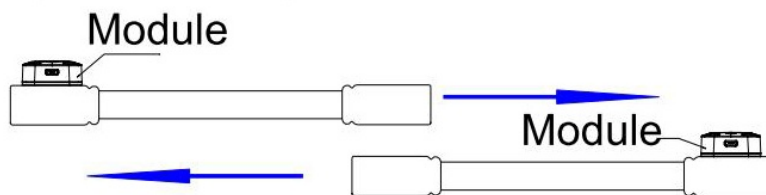
For better fold, it is optional to have the modules staggered for bi-fold/multi-fold shutters.

However, for 180° bi-fold track shutter, the modules can only be staggered.

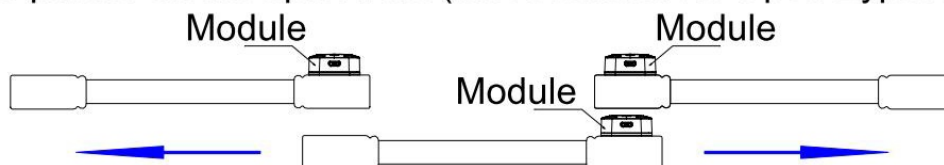


## For By-Pass Application

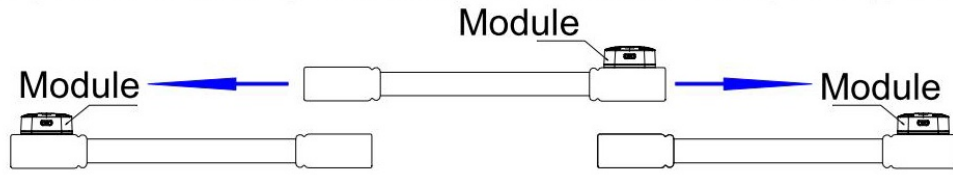
2 panels side open



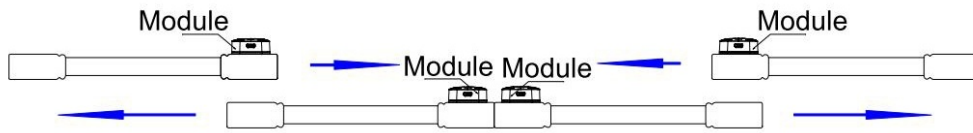
3 panels center open front ( not available for Open Bypass)



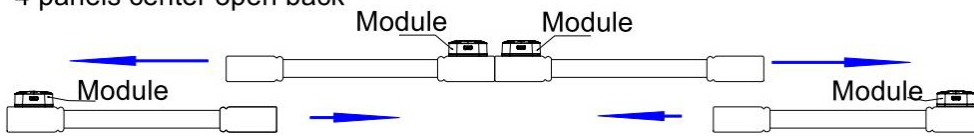
3 panels center open back ( not available for Open Bypass)



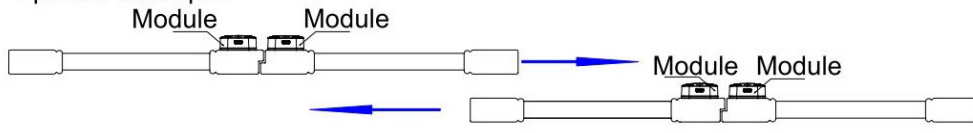
4 panels center open front



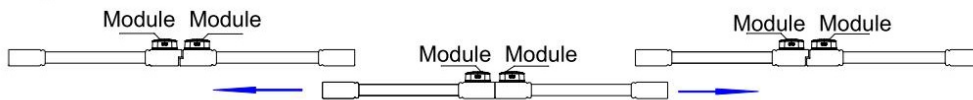
4 panels center open back



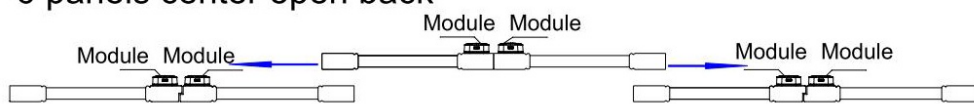
4 panels side open



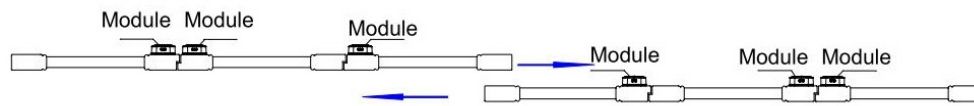
6 panels center open front



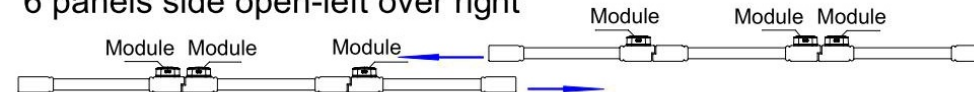
6 panels center open back



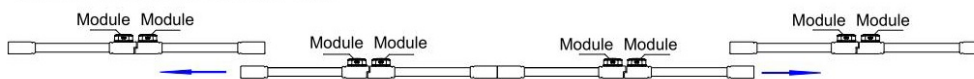
6 panels side open-right over left

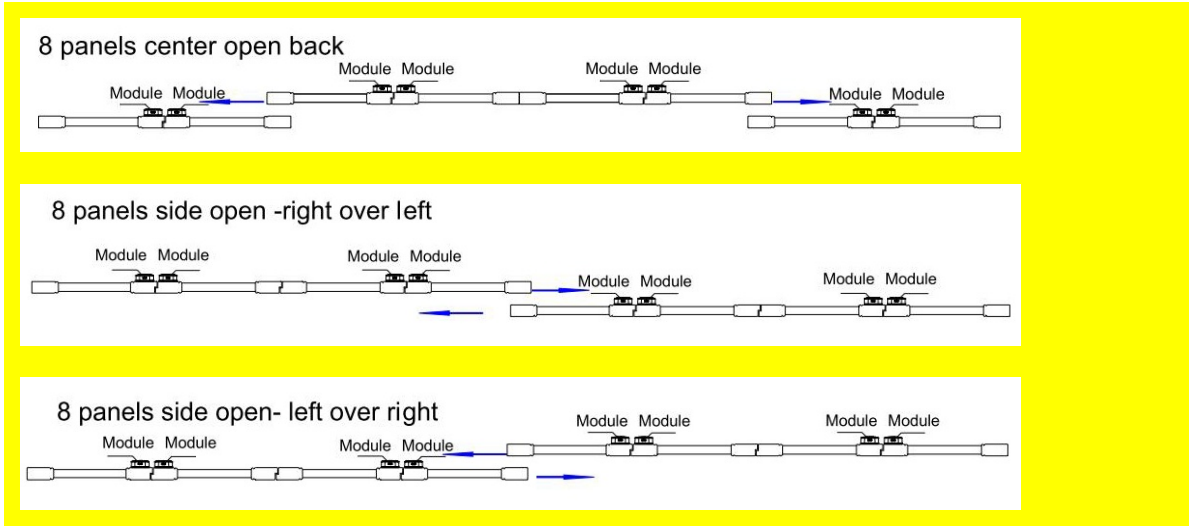


6 panels side open-left over right



8 panels center open front



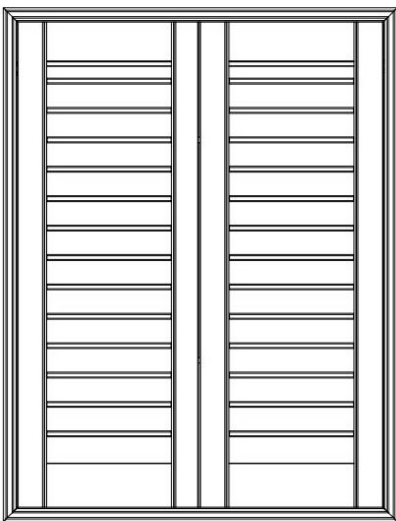


### For Special Shape Application:

Module location will be the same as the Invisible Tilt location.

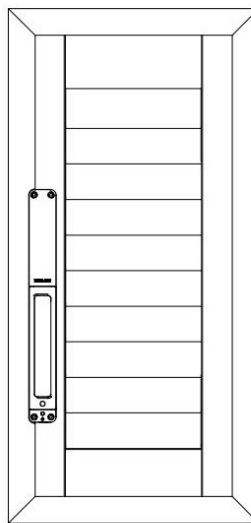
#### SHUTTER LOOK FROM FRONT AND BACK

The front side of the shutter



- \* No Receiver / Louver Cap
- \* Easy tilt only

The back side of the shutter



- \*The light block would be cut out along the module.