

### **Certification Exhibit**

FCC ID: 2ABLX-150017 IC: 8832A-150017

FCC Rule Part: 15.247
IC Radio Standards Specification: RSS-247

ACS Project Number: 15-0410

Manufacturer: Qmotion Incorporated Model: QM150017

### **Manual**

#### **FCC**

Warning: Changes or modifications to this device not expressly approved by QMotion® Incorporated -Advanced Shading Systems could void the user's authority to operate the equipment.

NOTE: 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.

#### **RF Exposure**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

#### **INDUSTRY CANADA**

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

#### **RF Exposure**

Cet équipement est conforme aux limites d'exposition aux radiations dans un environnement noncontrôlé. Cet équipement doit être installé et utilisé à distance minimum de 20cm entre le radiateur et votre corps. Cet émetteur ne doit pas être co-localisées ou opérant en conjunction avec tout autre antenne ou transmetteur.





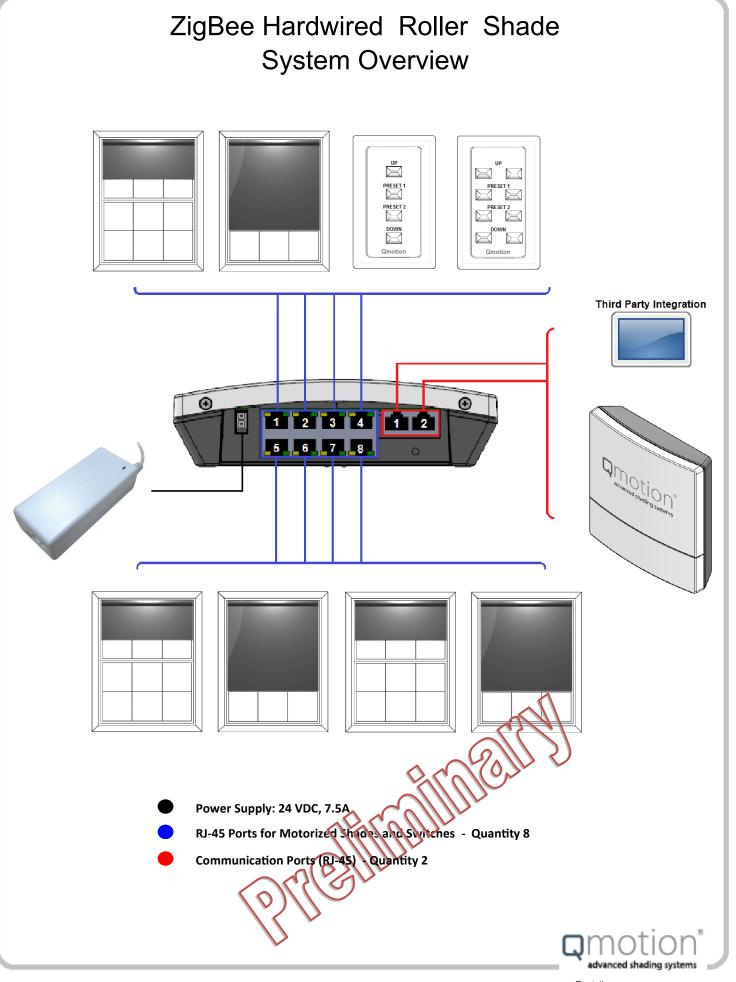




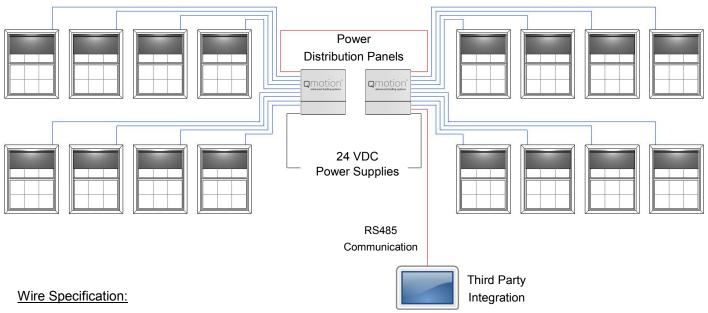
# **QMotion ZigBee Hard Wired Control Roller Shade Application Guide**



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## ZigBee Hardwired Roller Shade Third Party Integration



- Category 5e/Category 6 for use with RJ-45 Connector
- 24 AWG
- Maximum length of wire from Power Distribution Panel to device :

- 8' X 8' Shade with 40:1 motor - 1250'

- 12' X 12' Shade with 73:1 motor - 750'

- 12' X 20' Shade with 73:1 motor - 500'

- Hardwired 4 and 8 Button Switches - 1000'

\*Length based on 115K baud rate

Maximum wire length for RS485 communication - 2000'

#### System Capacity:

 200 Devices (QMotion Shades, QMotion Wireless Remotes, QMotion Hardwired Switches and other ZigBee devices)

#### Power Distribution Panel:

- 8 RJ-45 ports for motorized shades and switches
- 2 additional RJ-45 communication ports dedicated to daisy chain with other Power Distribution Panels and Third Party Integration via RS485.
- Power Supply
  - AC Input: 100-240 VAC, 2.5A
  - DC Output: 24 VDC, 7.5A

#### Note:

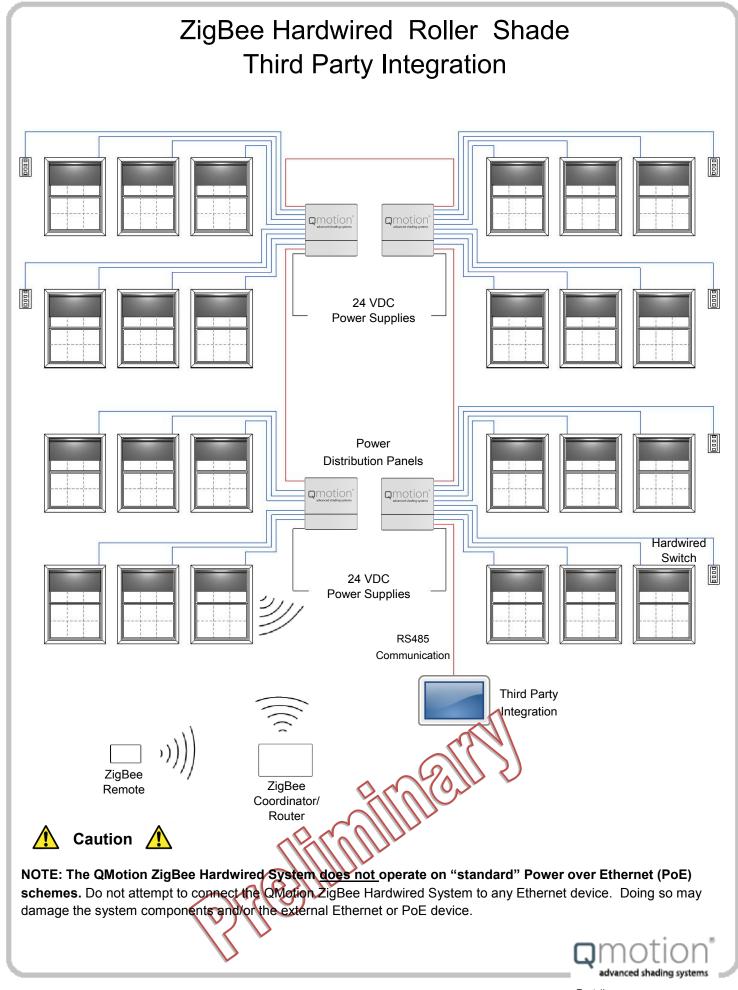
- Standard Roll Applications (Motor Left) Wire will need to be run to the LEFT side of the window (as shown).
- Reverse Roll Applications (Motor Right) Wire will need to be run to the RIGHT side of the window.

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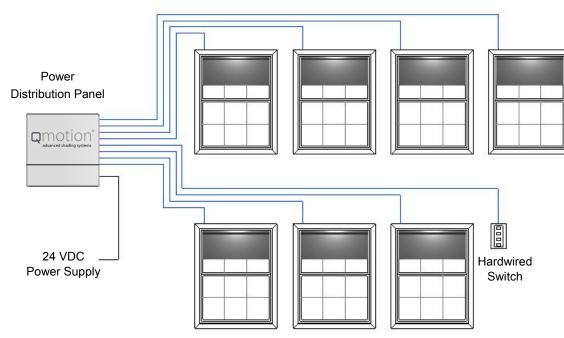
\*Specifications are subject to change without notice



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## ZigBee Hardwired Roller Shade Single Hardwired Switch Application



#### Wire Specification:

- Category 5e/Category 6 for use with RJ-45 Connector
- 24 AWG
- Maximum length of wire from Power Distribution Panel to device:

- 8' X 8' Shade with 40:1 motor - 1250'

- 12' X 12' Shade with 73:1 motor - 750'

- 12' X 20' Shade with 73:1 motor - 500'

- Hardwired 4 and 8 Button Switches - 1000'

\*Length based on 115K baud rate

Maximum wire length for RS485 communication - 2000'

#### **System Capacity:**

• 200 Devices (QMotion Shades, QMotion Hardwired Switches)

#### Power Distribution Panel:

- 8 RJ-45 ports for motorized shades and switches
- 2 additional RJ-45 communication ports dedicated to daisy chain with other Power Distribution Panels and Third Party Integration via RS485.
- Power Supply
  - AC Input: 100-240 VAC, 2.5A
  - DC Output: 24 VDC, 7.5A

#### Note:

- Standard Roll Applications (Motor Left) Wire will need to be run to the LEFT side of the window (as shown).
- Reverse Roll Applications (Motor Right) Wire will need to be run to the RIGHT side of the window.

\*Specifications are subject to change without notice



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## ZigBee Hardwired Roller Shade Multiple Power Distribution Panel Application

#### Wire Specification:

- Category 5e/Category 6 for use with RJ-45 Connector
- 24 AWG
- Maximum length of wire from Power Distribution Panel to
  - 8' X 8' Shade with 40:1 motor - 1250
  - 12' X 12' Shade with
  - 73:1 motor -
  - 12' X 20' Shade with 73:1 motor -
  - Hardwired 4 and 8 Button Switches -
- \*Length based on 115K baud rate
- Maximum wire length for RS485 communication - 2000'

#### System Capacity:

 200 Devices (QMotion Shades, QMotion Hardwired Switches)

#### Power Distribution Panel:

- 8 RJ-45 ports for motorized shades and switches
- 2 additional RJ-45 communication ports dedicated to daisy chain with other Power Distribution Panels and Third Party Integration via RS485.
- Power Supply
- AC Input: 100-240 VAC, 2.5A
- DC Output: 24 VDC, 7.5A

# Hardwired Switch Power Distribution Panel amotion 24 VDC Power Supply RS485 Communication Power **Distribution Panel** motion 24 VDC Power Supply

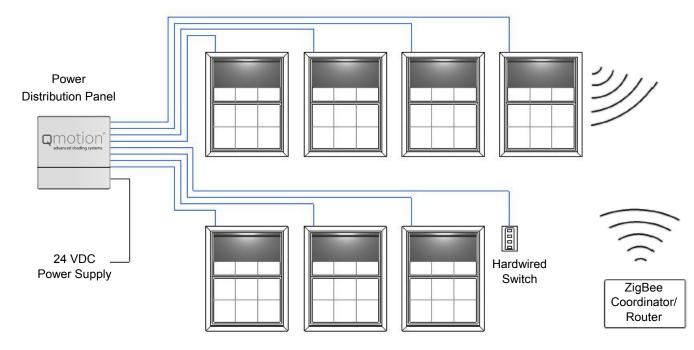
#### Note:

- Standard Roll Applications (Motor Left) Wire will need to be run to the LEFT side of the window (as shown).
- Reverse Roll Applications (Motor Right) Wire will need to be run to the RIGHT side of the window.

\*Specifications are subject to change without notice



## ZigBee Hardwired Roller Shade Wireless Remote / Optional Hardwired Switch Application



#### Wire Specification:

- Category 5e/Category 6 for use with RJ-45 Connector
- 24 AWG
- Maximum length of wire from Power Distribution Panel to device:

- 8' X 8' Shade with 40:1 motor -1250'

- 12' X 12' Shade with 73:1 motor -750'

- 12' X 20' Shade with 73:1 motor -500'

- Hardwired 4 and 8 Button Switches - 1000'

\*Length based on 115K baud rate

Maximum wire length for RS485 communication - 2000'

#### System Capacity:

200 Devices (QMotion Shades, QMotion Wireless Remotes, QMotion Hardwired Switches and other ZigBee devices)

#### Power Distribution Panel:

- 8 RJ-45 ports for motorized shades and switches
- 2 additional RJ-45 communication ports dedicated to daisy chain with other Power Distribution Panels and Third Party Integration via RS485
- Power Supply
  - AC Input: 100-240 VAC, 2.
  - DC Output: 24 VDC, 7.5

#### Note:

- Standard Roll Applications (Motor Left) Wire will need to be run to the LEFT side of the window (as shown).
- Reverse Roll Applications (Motor Right) Wire will need to be run to the RIGHT side of the window

\*Specifications are subject to change without notice



Part #

ZigBee

Remote

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