

# Shades of Sustainability

A commitment to a healthy environment



# WhisperShade® IQ® System

A technologically advanced motorized window-covering solution that meets the demands of designers, owners, and occupants.

It optimizes daylight use, energy savings, and occupant comfort.

## Quiet and powerful

- A robust motor means that there is no compromise between noise and lifting capacity.
- Its smooth, reliable performance is made possible by a streamlined, low-friction design.



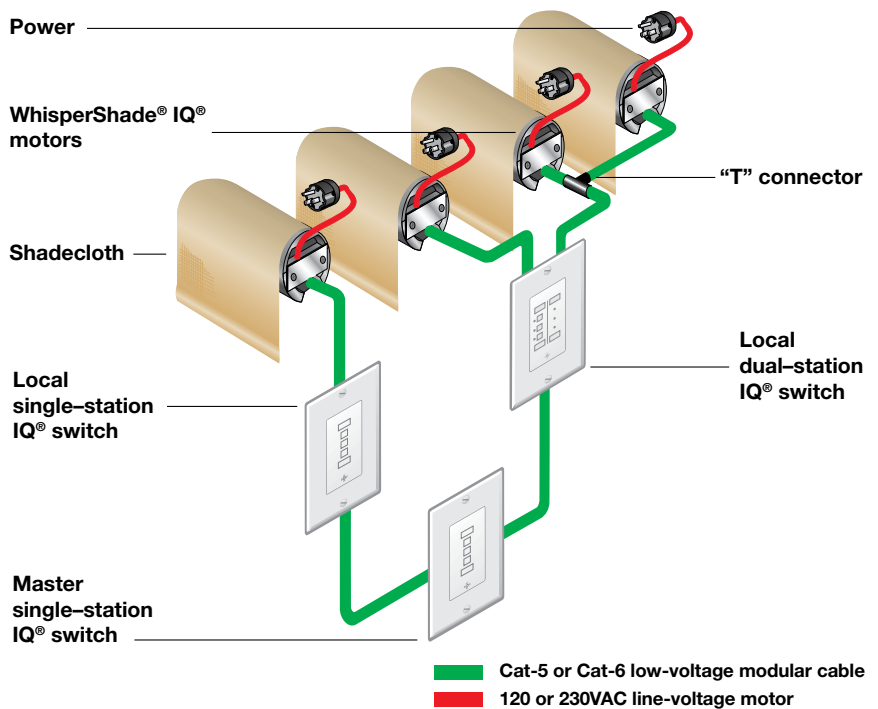
WhisperShade® installed in the IAC Building. Architectural interiors: STUDIOS Architecture.

**Innovative features include:**

- Smooth, ultra-quiet operation.
- A powerful system that can lift multiple shade bands in unison, reducing the number of motors needed, thereby minimizing costs.
- A built-in communications port to eliminate the need for relay-based controls.
- Direct connections to low-voltage IQ® switches, which appreciably reduce wiring costs.
- Default intermediate shade-height positions.
- Customizable intermediate shade-height positions.
- Precise alignment of shades across multiple windows.
- Seamless integration with many other 3rd-party control systems.
- Advanced wireless control through our MechoRF™ ZigBee® interface.
- A variety of configurations including DoubleShades®, DualShades®, and multibanded shades.



**Fewer external controls, less wiring, lower costs**



**Specifications:**

**506 Model – 50mm**

120VAC +/-10%, 50/60Hz,  
0.9A max., 34 r.p.m.

230VAC +/-10%, 50Hz,  
0.5A max., 26 r.p.m.

**512 Model – 50mm**

120VAC, +/-10%, 50/60Hz,  
1.8A max., 34 r.p.m.

230VAC, +/-10%, 50Hz,  
1.0A max., 26 r.p.m.

**IQ® switch**

10mA max. per switch contact  
15VDC, 0.5W power supply

An internal, digitally encoded motor-control system reduces installation costs by eliminating group controllers and the need for calibration. The system uses industry standard Cat-5 and Cat-6 cabling and modular plugs that are widely available.

### Advanced control logic built into the motor

- The WhisperShade® IQ® system moves beyond conventional mechanized models by providing up to three customizable intermediate positions (plus full-up and full-down) which are programmed right into the motor.
- An internal digital encoder allows precise shade positioning, with no calibration needed as with a group controller. The elimination of a group controller also means easier, less costly installation and setup.
- The WhisperShade® IQ® System operates in two modes: **normal** and **uniform**.

In the **normal** mode, shades are adjustable to full up, full down, and three intermediate positions. Shades can be stopped at any position or the five preset positions.

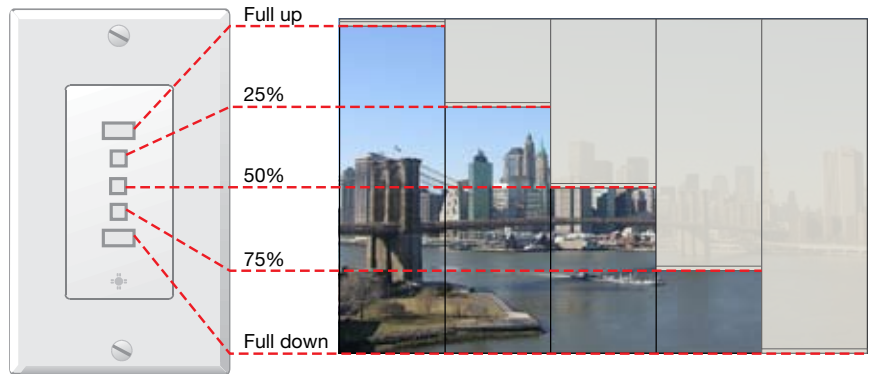
In **uniform** mode, shades are adjustable to only the five preset positions.

### Uniform mode



As seen here at the U.S. Green Building Council headquarters in Washington, D.C., in uniform mode, the shades can only be moved to one of five factory-preset or user-defined positions.

### Five preset positions



In addition to full up and full down, the switch provides three intermediate positions. These positions are factory preset at 25%, 50%, and 75% heights but can be user-customized to align with architectural features or set at any other height desired.

**Customizable settings that exceed expectations**

- The WhisperShade® IQ® System allows multiple shades to be aligned within a fraction of an inch, a level of accuracy that was not possible before now.
- The alignment of shades along an elevation provides for a clean, symmetrical appearance.
- This uniquely flexible system offers custom, user-defined positions on the window.
- Shades can be controlled as a group or individually, whether across a floor or throughout an entire building.



U.S. Green Building Council Headquarters

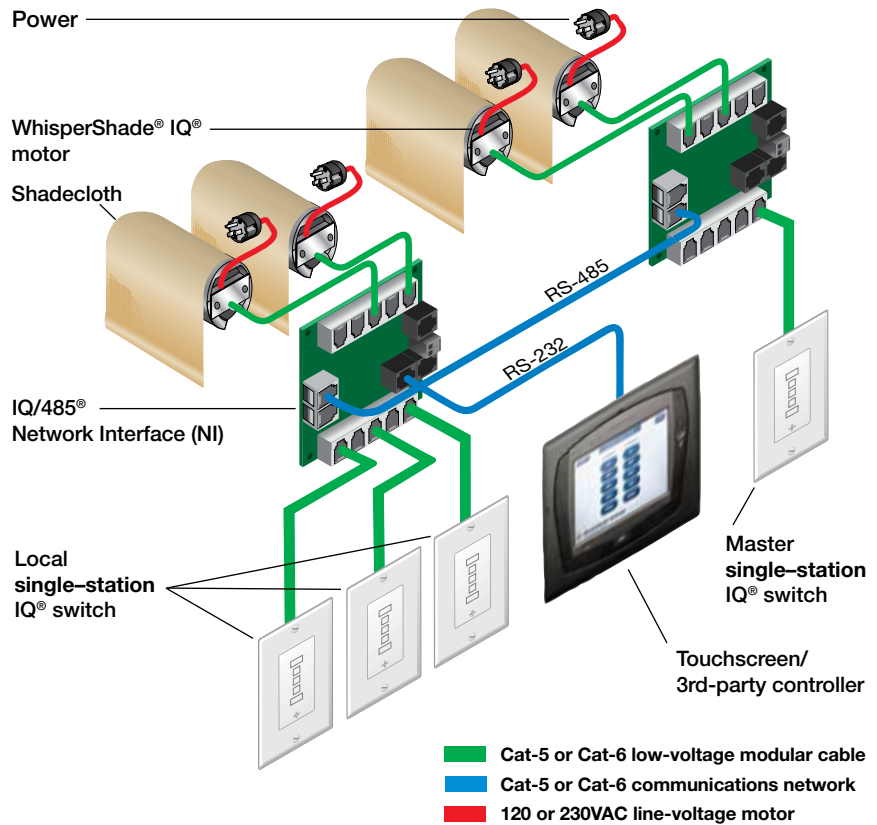


Shades, as above, can be automatically aligned along an entire elevation.

# Integration

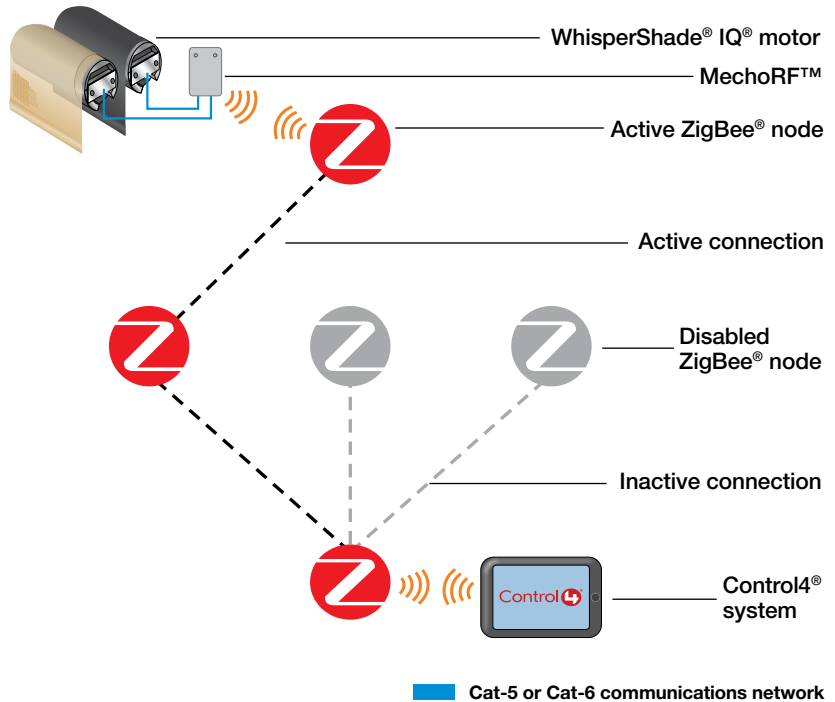
## Flexible, expansive, and open control

- WhisperShade® IQ® is designed to work seamlessly with other manufacturers' control systems, maximizing flexibility and ease of installation.
- Its open architecture enables it to communicate with lighting, audio-visual, and building-automation systems.
- Through the IQ/485® Network Interface (NI) card, the system can connect to other devices via dry contact, RS-232 and RS-485, also Wi-Fi, RF, and RTS wireless technologies.
- Third-party control manufacturers that integrate with the WhisperShade® IQ® System include Control4®, Crestron®, Encelium®, Legrand®, Leviton®, Lutron®, Savant®, Vantage®, and Somfy®.



## An evolution in wireless shade control

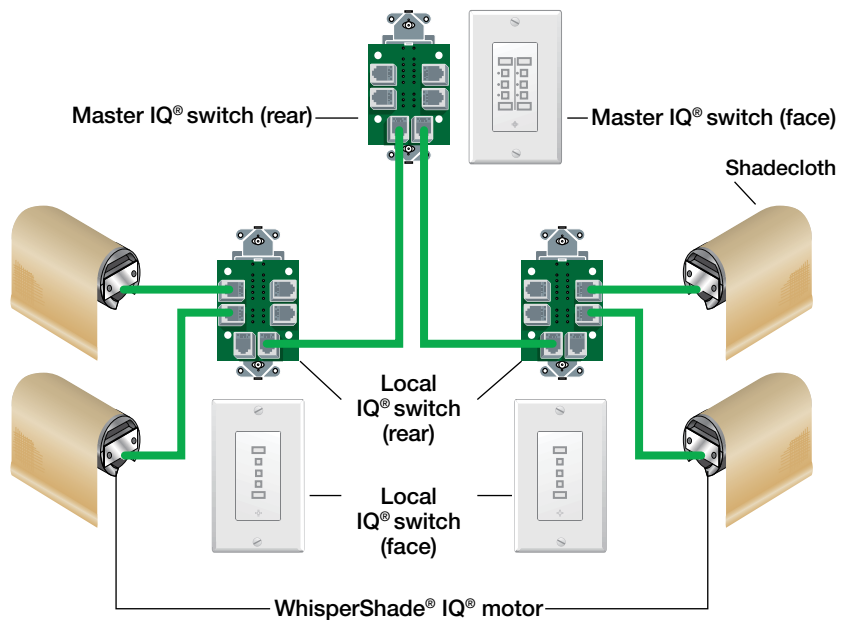
- The interoperable design of the WhisperShade® IQ® System supports the new, more robust ZigBee® Pro wireless technology.
- Through the MechoRF™ interface unit, the system seamlessly works with the Control4 ZigBee® Pro network.
- This configuration provides energy-efficient, self-healing wireless control over long distances, all with greater design flexibility and lower installation costs.
- A single MechoRF interface can control two units, such as a solar shade and blackout shade at the same window, as in the schematic here.



The ZigBee® mesh network has a self-healing feature that routes wireless commands around disabled or inactive connections, automatically discovering the shortest active path from controller to WhisperShade® IQ®.

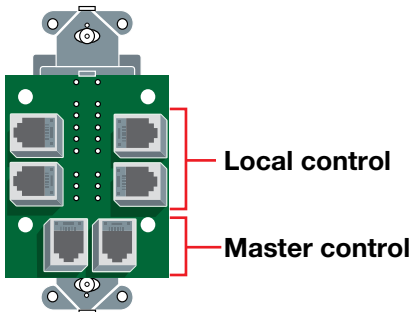
**More switches, more convenient control, more flexibility**

- A single WhisperShade® IQ® switch can control a group of shades or just one at the touch of a button.
- Direct wiring makes installation simple.
- Switches are available in a range of colors and can be custom-labeled.
- Switch dimensions fit standard Decora® panels to serve a wide range of applications.



**Cat-5 or Cat-6 low-voltage modular cable**  
120 or 230VAC line-voltage motor not shown

**Rear of IQ® switch**



Low-voltage control wiring uses industry-standard Cat-5 and Cat-6 cabling that's easy to locate, purchase, and use for simple, cost-effective installation.

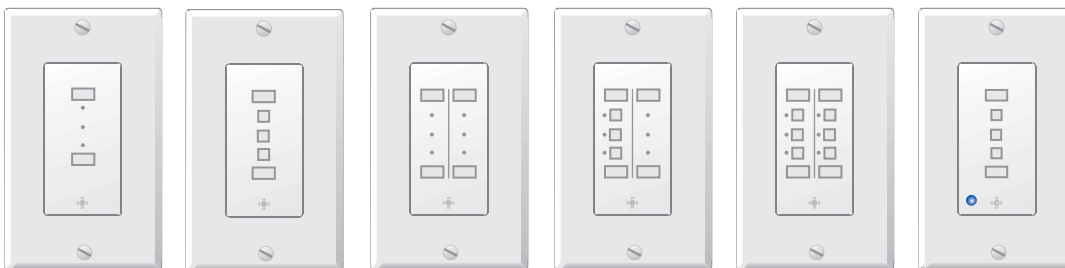


Solar shades, Eagle conference room, New York Times Building.



Solar shades and blackout shades

**IQ® switches**



Available color:  
WH = White

- 2-button single station IMLC DS02
- 5-button single station IMLC DS05
- 2+2 button dual station IMLC DS22
- 5+2 button dual station IMLC DS52
- 5+5 button dual station IMLC DS55
- 5-button single station with LED IMLC DS05

Switches are also available with LED indicators. Switchplates are sold separately.



Photo: IAC/InterActiveCorp, New York City. Architecture: Gehry Partners, LLP. Architectural interiors: STUDIOS Architecture.  
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