

**DFB**

**SOL-R-SHADE®**

QS by DFB



# SOL-R-SHADE

LOW VOLTAGE  
QS 64  
FEATURES &  
BENEFITS

The QS 64 Roller shade is driven by the ultra quiet, precision control electronic drive unit. The drive unit is encased on the roller shade assembly, which controls the movement of the shade, to maintain track of the shade's positions and will adjust to the desired preset positions.

## FEATURES & BENEFITS

- Ultra quiet operation
- Shades move in perfect unison and exact alignment within  $\frac{1}{8}$ " accuracy at all times
- Starts and stops are smooth and silent
- Programmable stops are available
- Maximum window coverage with the smallest possible light gaps  $\frac{3}{4}$ " between the shade edge and frame
- Light gaps are symmetrical on both sides of shade
- No relay systems or group controls to create groups or sub-groups
- Simple, easy to read controls
- Power failure memory
- 24V low voltage power

## POWER

- Operating voltage: Low Voltage, Class 2, 24V power supply required
- Control system power supply offers (spike and brownout) over-voltage protection (+/- 10% of line voltage) for all devices in the system
- Power supply provides appropriate electro static discharge

## SYSTEM CAPACITY

- System allows for a total of 100 devices, QS shades, power supplies, keypads, and Grafik Eye
- System allows for a total of 100 zones, including shades and Grafik Eye
- Maximum size of shade fabric per Unit is 64 square feet

## PERFORMANCE

- System allows for symmetrical light gaps as small as  $\frac{3}{4}$ " on each side
- Each unit stores presets positioned at any stop put along the shade's travel, as well as full open and full close shade limits
- Each unit is capable of stopping with the accuracy of  $\frac{1}{16}$ " in steps for the entire travel of the shade
- Preset points can be located at any point between the open/close limits and are adjustable with a five second button push and hold from QS keypads or QS Grafik Eye
- For systems with multiple units, shades move in unison and exact alignment within  $\frac{1}{16}$ " accuracy at all times
- Limits are programmable and adjustable from the units, wall mounted QS keypads and/or QS Graphik Eye

## GROUPING

- System keypads can control any unit, group or sub-group without a separate group controller or additional interface
- System or sub-groups can be reconfigured at the point of control without rewiring and without access to the unit
- Controls within this system are able to operate any group or sub-group of the unit with any window treatment type
- Wireless capabilities available

## INTEGRATION

- Units seamlessly integrate with lighting controls and QS Grafik Eye without a separate interface
- Contact closure RS232, and ethernet available to integrate with AV equipment such as timeclocks and security systems

## CONTROLS

- QS shades can be controlled by built-in shade columns on a QS Grafik Eye or QS keypad
- QS keypads are low voltage
- Microprocessors are contained in the unit, QS Grafik Eye and QS Keypads allow for a higher level programming from either source
- All QS shades, QS Grafik Eye and QS keypads are wired together on the same communications link

The QS 100 roller shade utilizes the ultra-quiet, precision controlled electronic drive unit. Housed inside the roller shade assembly, the QS 100 controls the movement of the shade while keeping track of the shade's position.

The QS 150 roller shade is designed for tall and coupled shades, when the reduced speed of the 200CW is undesirable. Allows coupling capacity for up to 6 fabric panels.

The QS 200 CW features slow, gradual movement for large shades and coupling capability for up to 6 fabric panels.

## FEATURES & BENEFITS

- Ultra quiet operation
- Shades move in perfect unison and provide exact alignment within  $\frac{1}{8}$ " at all times
- Smooth, silent stops and starts
- Offers programmable stop points
- Provides maximum window coverage with the smallest possible light gaps are  $\frac{3}{4}$ " between the fabric and window frame
- Light gaps are symmetrical on both sides of the shade
- Easy to use and easy to read controls
- No group controls or relay systems to create shade groups or sub-groups

## POWER

- Operating voltage: Low Voltage, Class 2, 24V power supply required
- Control system power supply offers (spike and brownout) over voltage protection (+/- 10% of line voltage) for all devices in the system
- Power supply provides appropriate electro static discharge

## SYSTEM CAPACITY

- System allows for a total of 100 devices, QS shades, power supplies, keypads, and Grafik Eye
- System allows for a total of 100 zones, including shades and Grafik Eye
- Maximum size of shade fabric per Unit is 100 square feet

## PERFORMANCE

- Each unit stores presets positioned at any stop put along the shade's travel, as well as full open and full close shade limits
- Each unit is capable of stopping with the accuracy of  $\frac{1}{16}$  of an inch in steps for the entire travel of the shade
- Preset points can be located at any point between the open/close limits and are adjustable with a 5 second button push and hold from QS keypads or QS Grafik Eye
- For systems with multiple units, shades smoothly move in unison and exact alignment within  $\frac{1}{8}$  of an inch accuracy at all times
- Limits are programmable and adjustable from the units, wall mounted QS keypads and/or QS Graphik Eye

## GROUPING

- System keypads can control any unit, group or sub-group without a separate group controller or additional interface
- System groups or sub-groups can be reconfigured at the point of control without rewiring and without access to the unit
- Controls within this system are able to operate any group or sub-group of the unit regardless of the window treatment type

## INTEGRATION

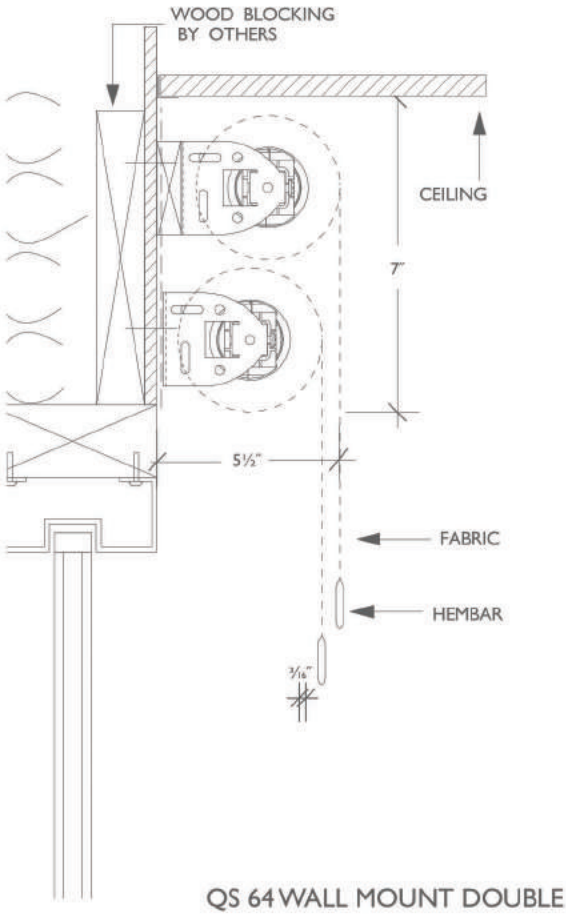
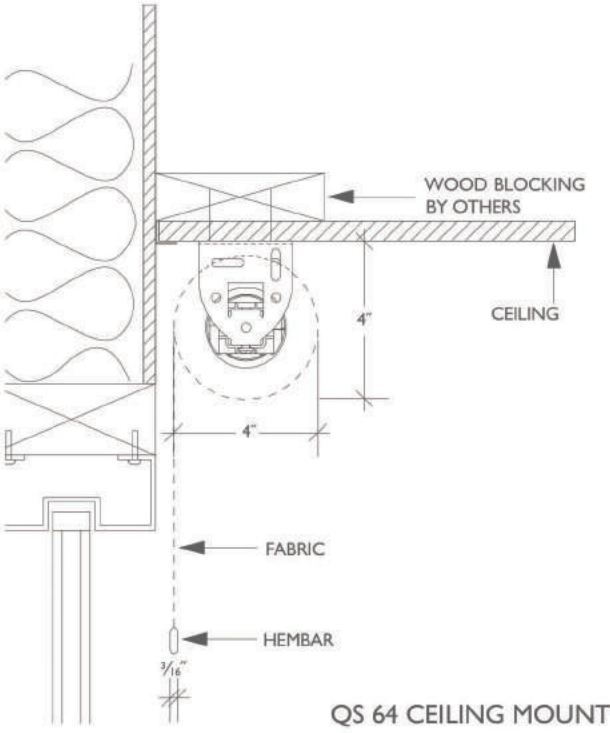
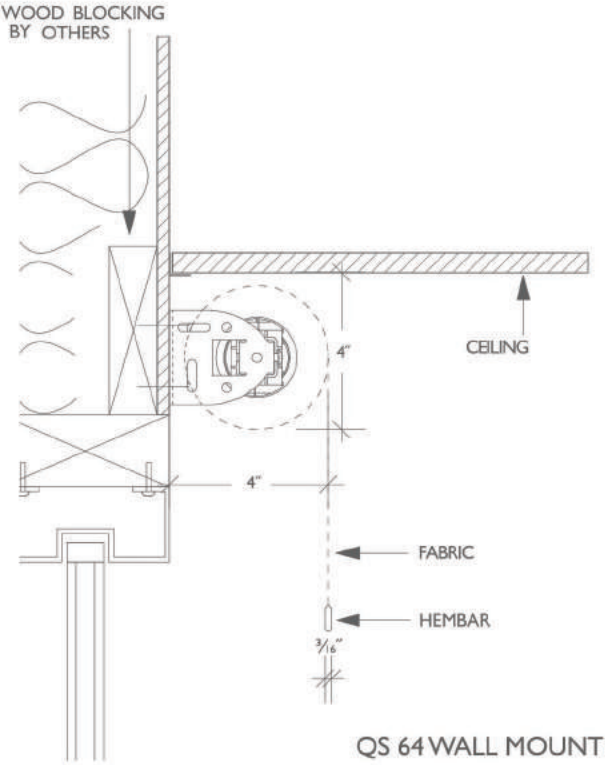
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- Contact closure RS232, and Ethernet available to integrate with AV equipment such as time clocks and security systems

## CONTROLS

- QS shades can be controlled by built-in shade columns on a QS Grafik Eye or QS keypad
- QS keypads are low voltage
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- All QS shades, QS Grafik Eye and QS keypads are wired together on the same communications link

# SOL-R-SHADE

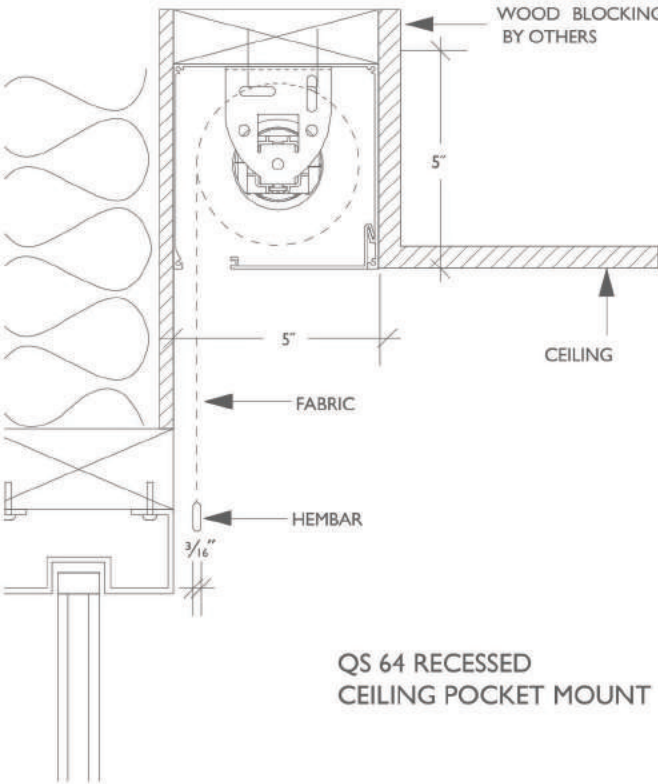
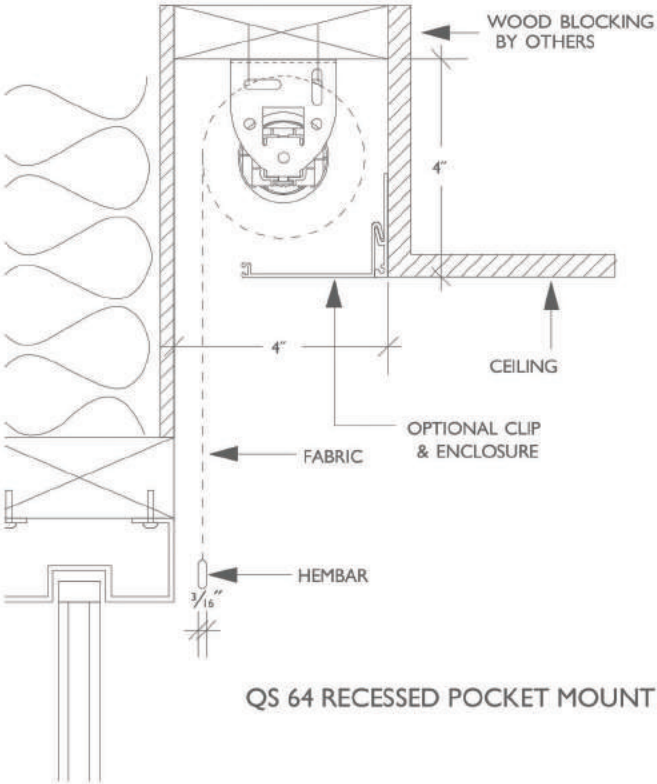
LOW VOLTAGE  
QS 64  
DETAILS





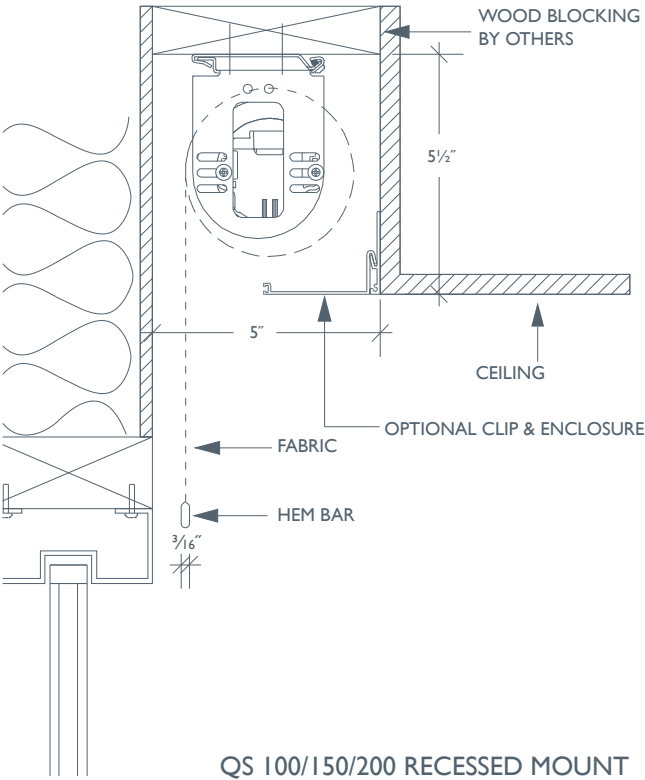
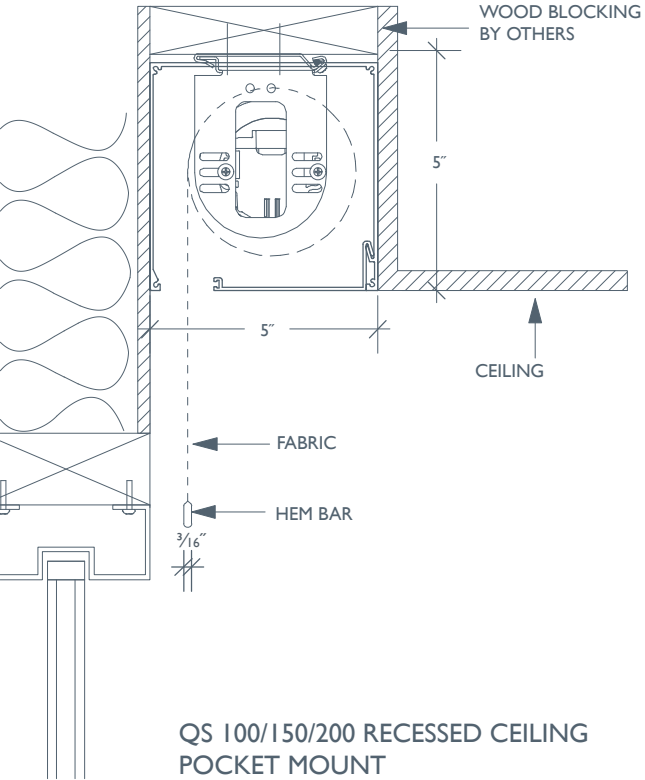
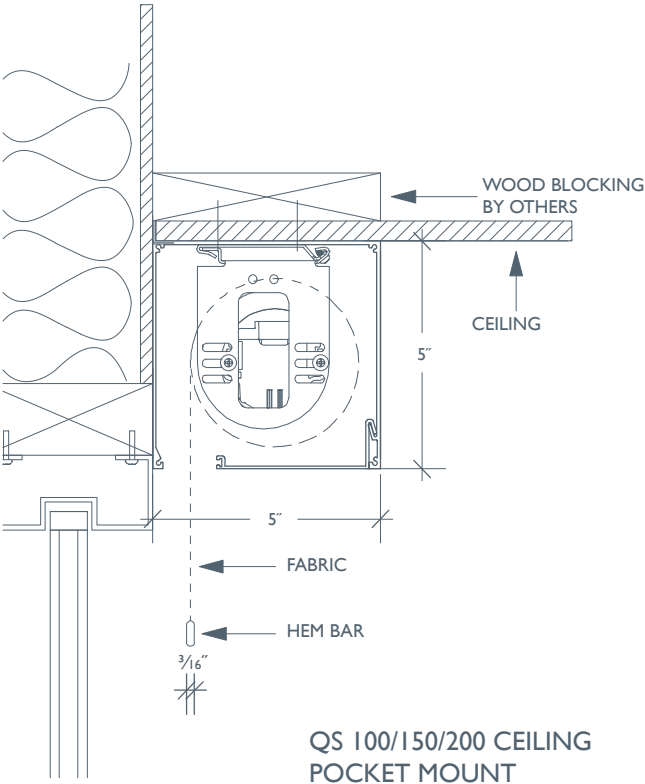
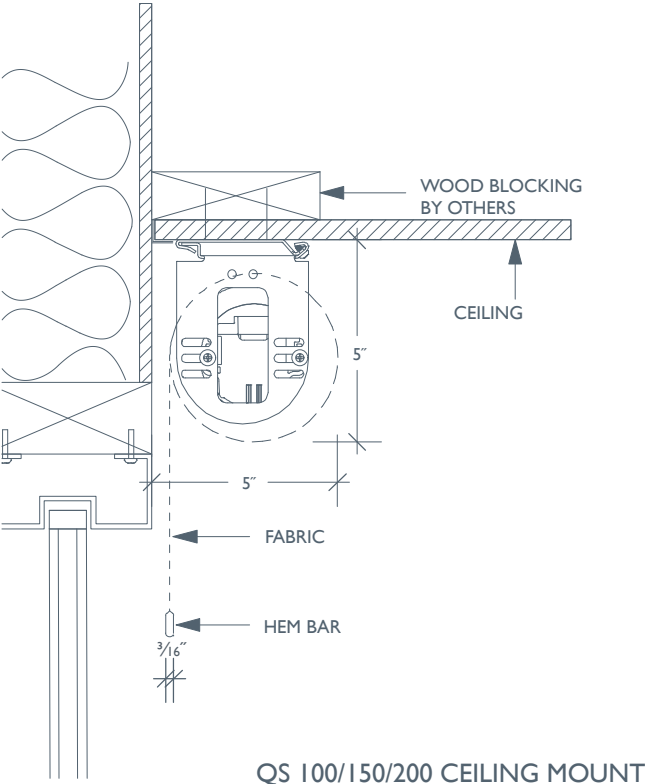
# SOL-R-SHADE

LOW VOLTAGE  
QS 64  
DETAILS



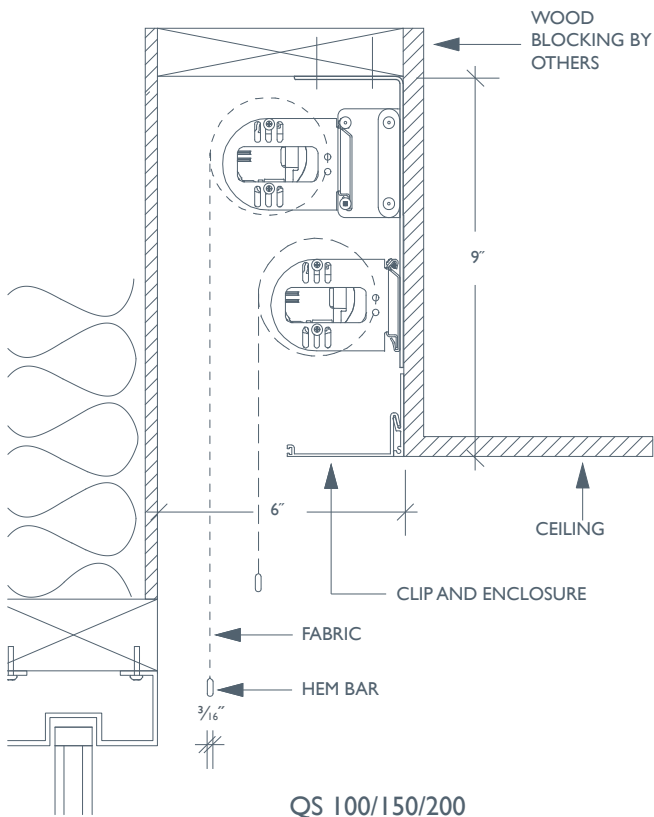
# SOL-R-SHADE

LOW VOLTAGE  
QS 100/150/200  
DETAILS

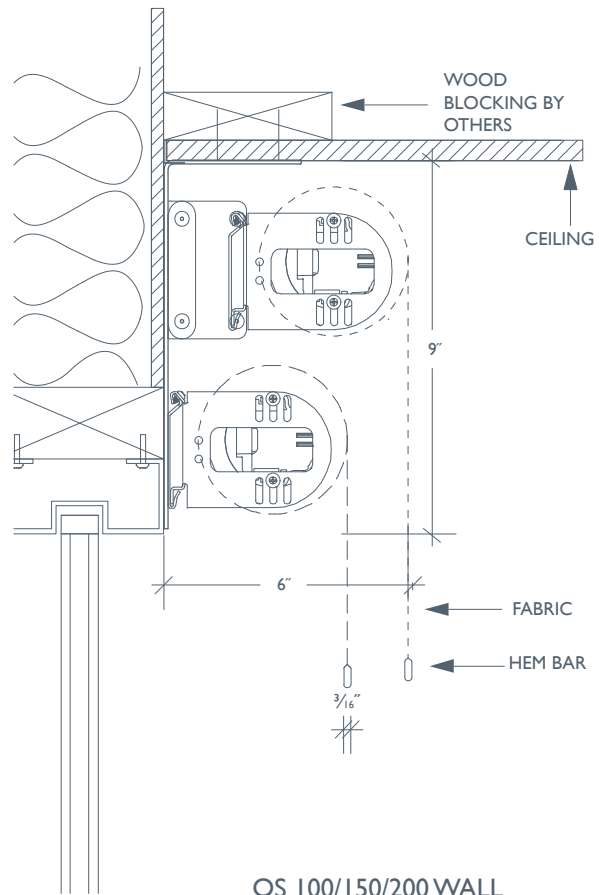


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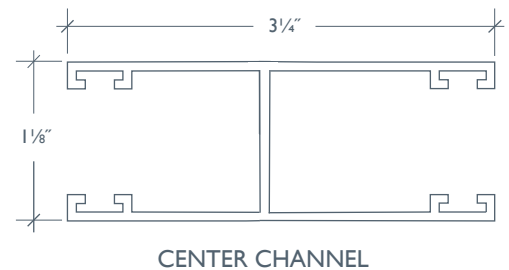
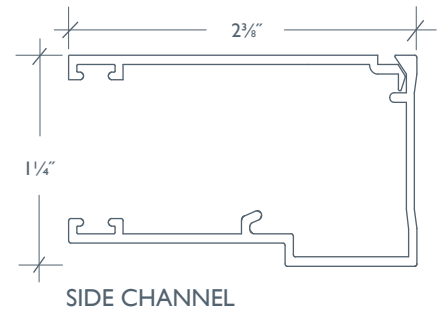
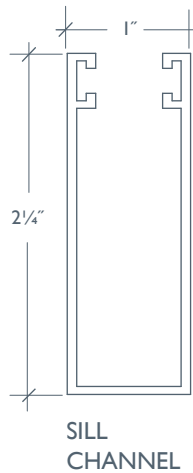
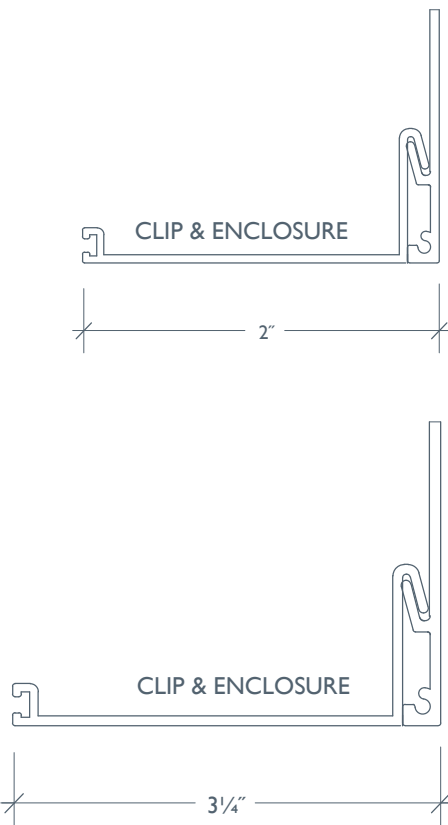
LOW VOLTAGE  
QS 100/150/200  
DETAILS



QS 100/150/200  
RECESSED POCKET MOUNT



QS 100/150/200 WALL  
MOUNT DOUBLE

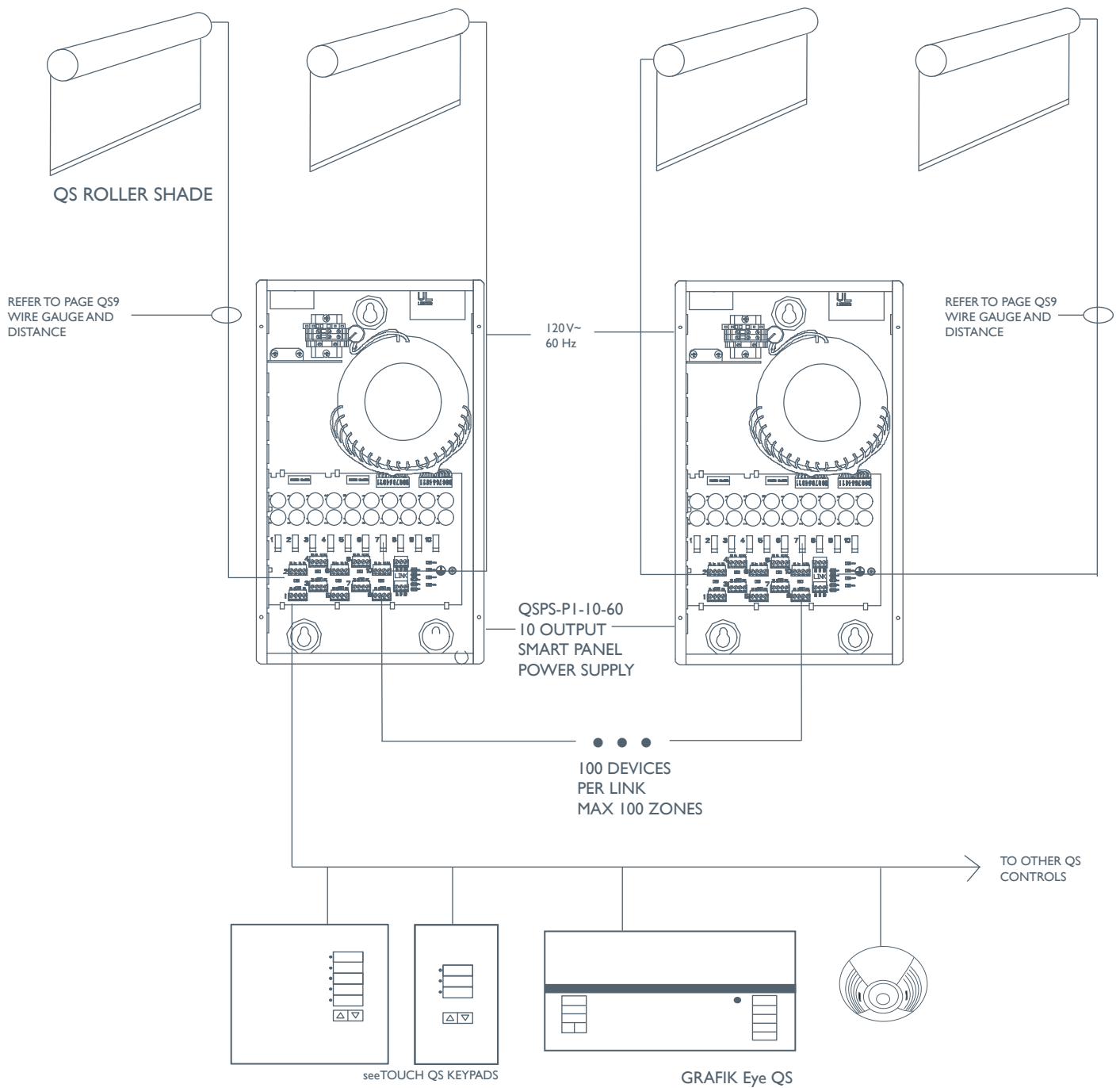




# SOL-R-SHADE

LOW VOLTAGE  
QS  
WIRING  
DETAILS

QS with GRAFIK Eye, QS system wiring  
Smart Panel Power Supply, single shade per output



# SOL-R-SHADE

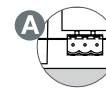
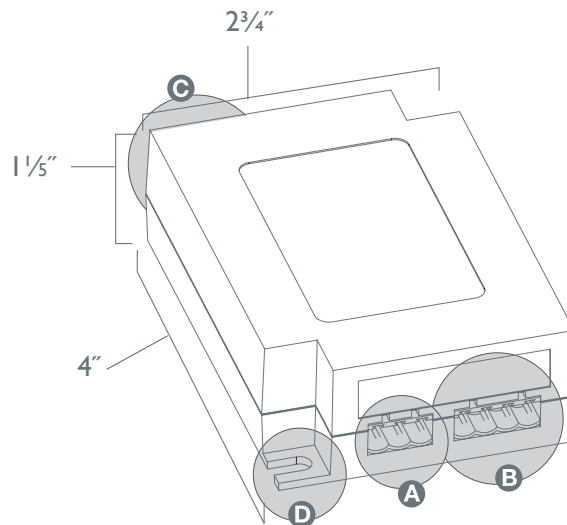
QS 64  
WIRING  
DETAILS

## QS 64 LINK POWER SUPPLY DIMENSIONS

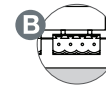
QSPS-PI-I-50

QSPS-P2-I-50

QSPS-P3-I-50



3-pin connector  
Communication to  
additional Power supplies



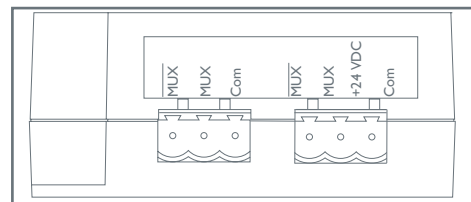
4-pin connector  
Power and Communication  
to QS shade or keypads



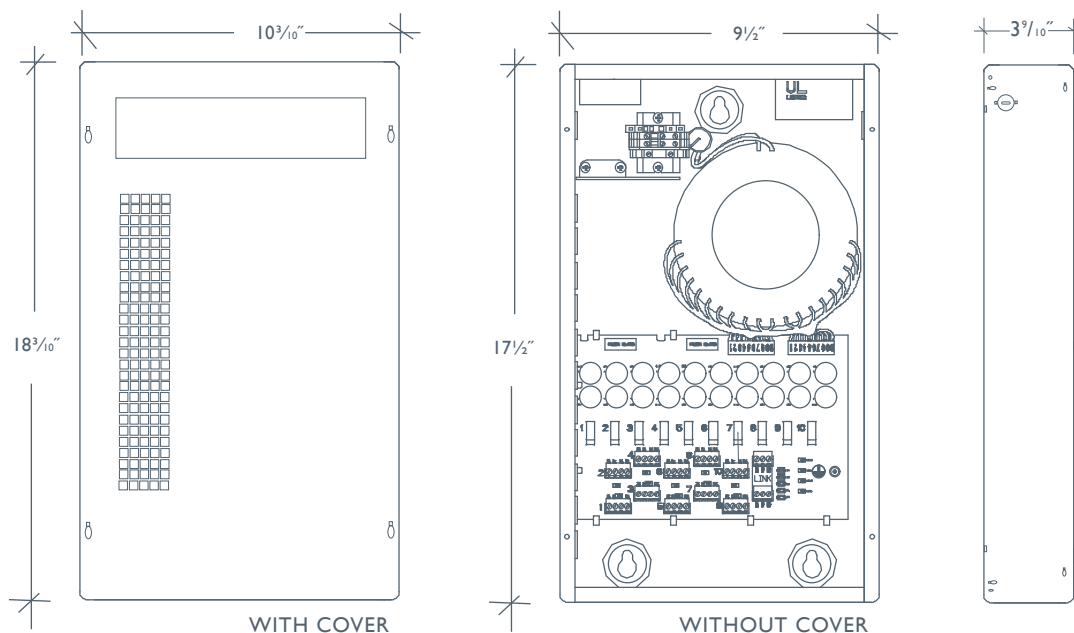
Line voltage input



Mounting tabs



## SMART PANEL POWER SUPPLY



# SOL-R-SHADE

LOW VOLTAGE  
QS LINK  
WIRING  
INFORMATION

## QS LINK WIRING

Use only cable with at least one twisted/shielded pair for communications (MUX and MUX)

Total length of wire in the entire system must be less than 200 ft.

QS SMART PANEL POWER SUPPLY WIRING GUIDE				
Maximum devices per one output		Maximum distance per one output based on wire gauge		
Shades & Controls		#12 AWG QSH-CBL-L-500 QSH-CBLP-L-500	#16 AWG QSH-CBL-M-500 QSH-CBLP-M-500	#18 AWG GRX-CBL-346S-500
None	Up to 8 seeTouch QS keypads	1200 ft	500 ft	300 ft
1 QS Shade/drapery drive unit	Up to 1 seeTouch QS keypad	500 ft	200 ft	100 ft
2 QS 64 Rollers ≤ 30 sq ft	None	200 ft	75 ft	50 ft
2 QS 64 Rollers ≤ 20 sq ft				
2 QS 100 Rollers ≤ 50 sq ft				
QS Individual Power Supply Wiring Guidelines				
1 QS Shade*	None	250 ft		
None	Up to 8 seeTouch QS keypads**	1200 ft		

\* roller 64, roller 100, roller 150, roller 200, roller 225

\*\* 2 seeTouch QS keypads may be exchanged for 1 control interface (QSE-CI-NWK-E)

QS WIRELESS POWER SUPPLY PANEL WIRING GUIDELINES			
Maximum devices per one output	Maximum distance per one output based on wire guage		
Shades & Drapery	#12 AWG	#16 AWG QSHY-CBLP-M-1000	#18 AWG
I QS Wireless Shade drive unit	500 ft	200 ft	100 ft
2 QS 64 Wireless ≤ 30 sq ft	200 ft	75 ft	50 ft
3 QS 64 Wireless ≤ 20 sq ft			
2 QS 100 Wireless ≤ 50 sq ft			
QS WIRELESS INDIVIDUAL POWER SUPPLY WIRING GUIDE			
I QS Shade	250 ft	100 ft	50 ft
None	1200 ft	500 ft	300 ft

## QS 64

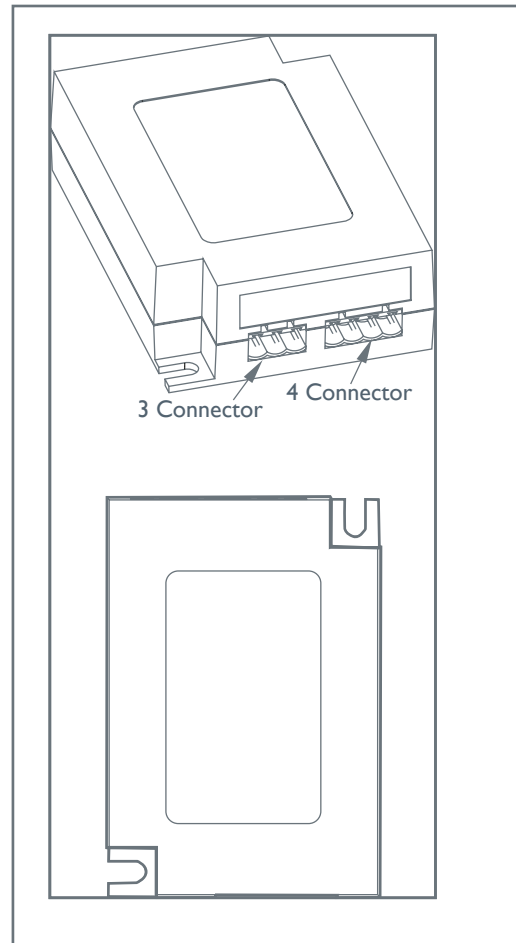
### LINK POWER SUPPLY

The QS 64 Link power supply (QSPS-PI-I-50/ QSPS-P2-I-50/ QSPS-P3-I-50) is a 24 V  $\equiv$  plug in power supply that is used with QS 64 shading devices.

The Link power supply plugs into a standard receptacle. The power supply is protected electronically in the event of a miswire, and will automatically reset when wiring is corrected.

### FEATURES

- 24V  $\equiv$  supply that provides power to shades, drapery drive units, keypads, and accessories
- Simple wiring scheme uses 4-conductor, low voltage link to provide power and communication for QS electronic drive units (EDUs), see Touch® QS keypads and QS integration interfaces
- Mounting tabs and small size allow for discrete installation
- Universal input voltage (100-240 VAC) enables global specification

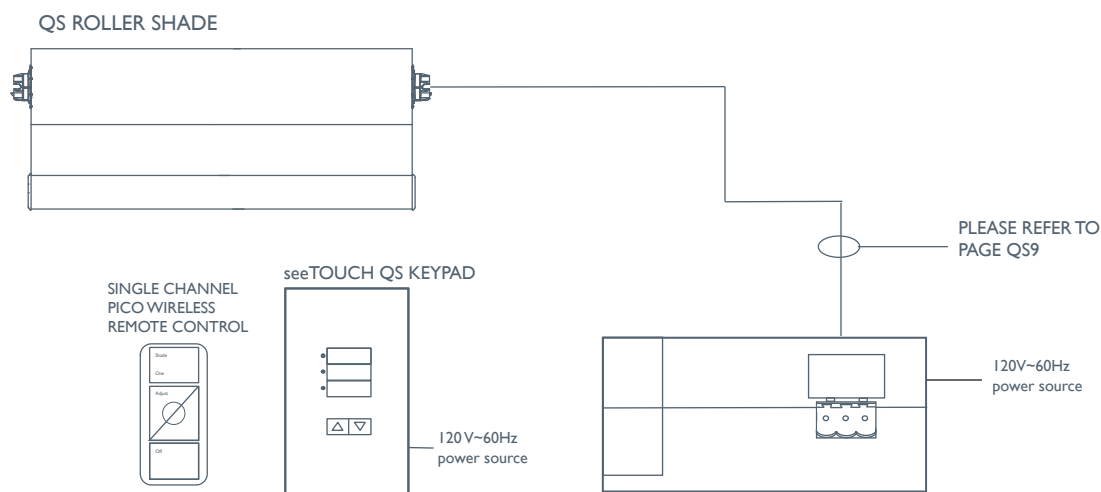


QSPS-PI-I-50  
Link power supply

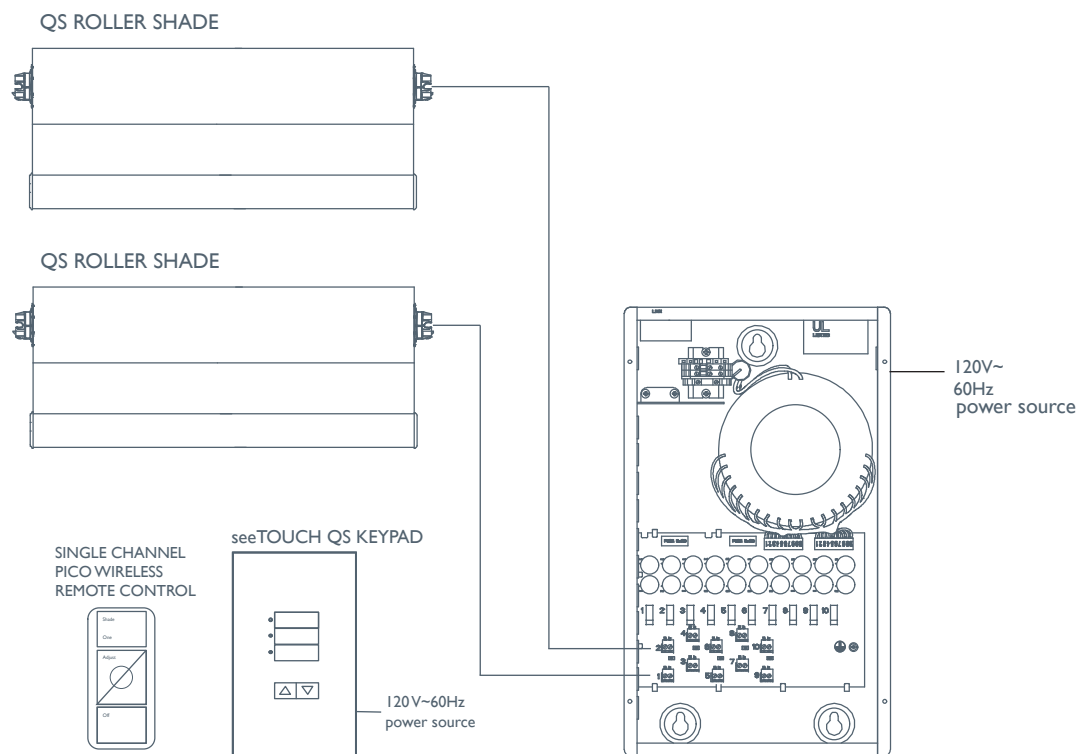
# SOL-R-SHADE

LOW VOLTAGE  
QS WIRELESS  
DETAILS

## ONE SHADE/DRAPERY PER POWER PANEL OUTPUT



## ONE SHADE/DRAPERY PER POWER PANEL OUTPUT

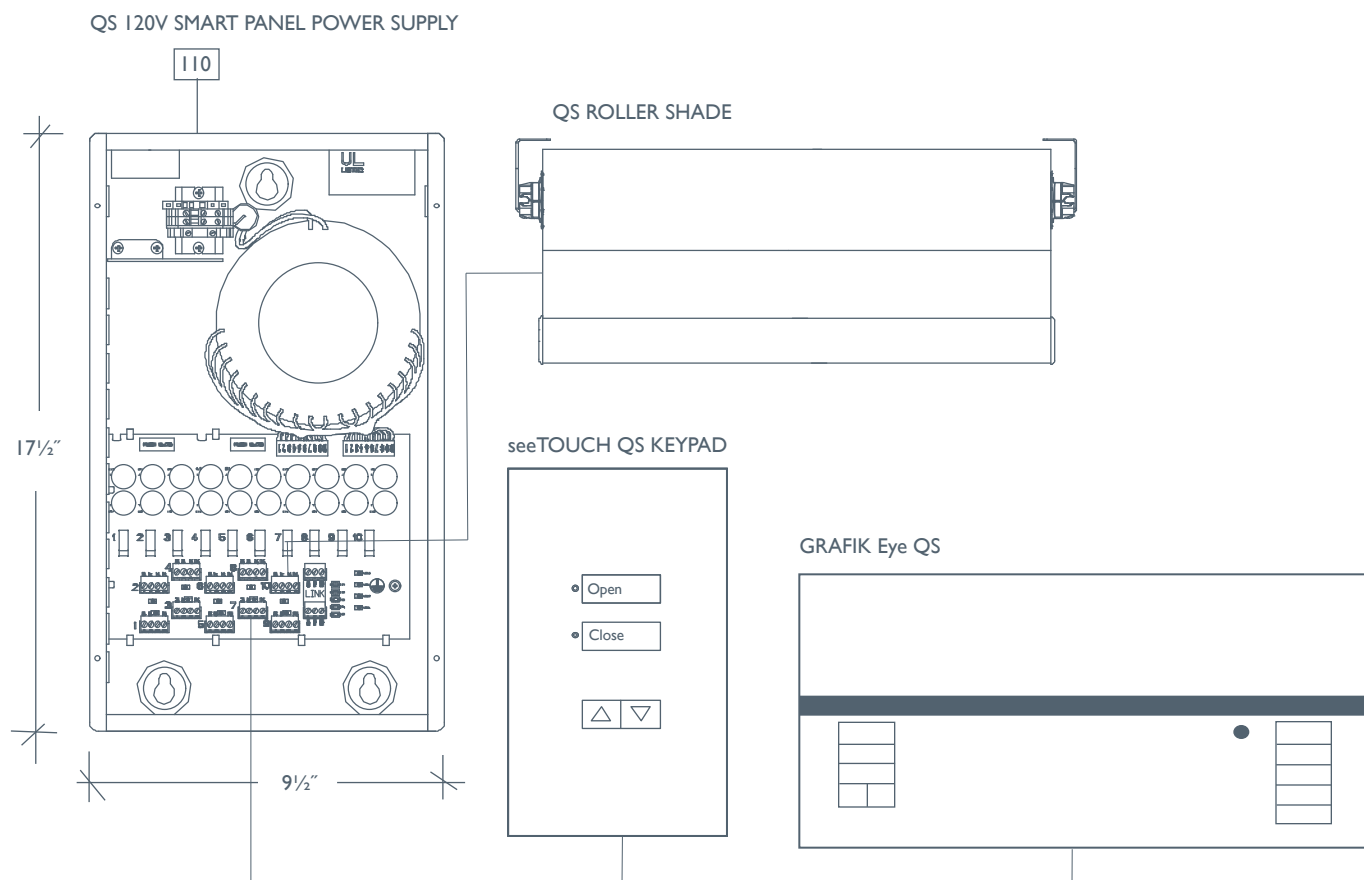


## 120V SMART PANEL POWER SUPPLY

The QS 120V Smart Panel power supply (QSPS-PI-10-60) is a 24V=== hardwired power supply that is used with QS lighting and shading devices. QSPS-10-60 simplifies the wiring and organizes installations that require multiple power supplies. Each panel contains ten 30W (60W peak) power supplies, designed for use with QS lighting and shading devices.

### FEATURES

- 24V === supply that provides power to shades, drapery drive units, keypads and accessories
- Simple wiring scheme uses 4-conductor low voltage link to provide power and communication for both QS electronic drive units (EDUs) and seeTouch QS keypads
- Flexible wiring topology for easy installation and integration
- 10 output panel provides power for 10 to 30 shades based on shade dimensions
- Confirms system communication and facilitates system installation
- Provides easy system testing with manual override buttons for shades and lighting



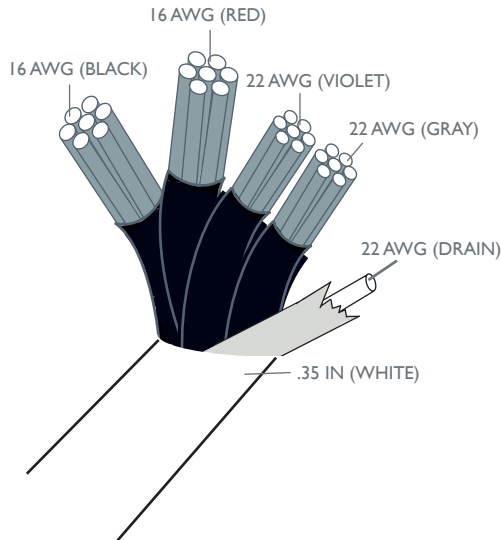


# SOL-R-SHADE

LOW VOLTAGE  
QS  
CABLE  
DIAGRAM

## QS CABLE DIAGRAM

Lutron offers two types of QS cable which incorporate both power and communications into the same bundle.



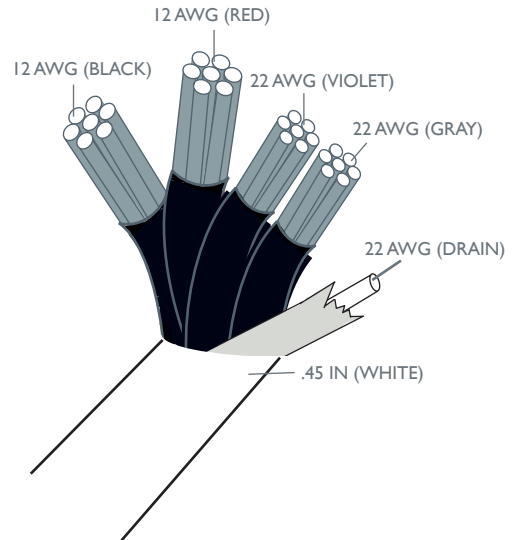
### QSH-CBL-M-500 CABLE

#### DESCRIPTION

- Non-plenum rated cable for use with QS (Plenum cable: QSH-CBLP-L-500)

#### SPECIFICATIONS

- Listed as cable type CL3
- Available in 500 ft. spools
- Five conductors:
  - Common 16 AWG
  - Power 16 AWG
  - MUX Data 22 AWG
  - MUX Data 22 AWG
  - Drain Wire 22 AWG
- Total outer jacket diameter .35 in.
- 300V Rated
- PVC Sheath, 90°C rated
- UL/CSA listed
- ROHS compliant



### QSH-CBL-L-500 CABLE

#### DESCRIPTION

- Non-plenum rated cable for use with QS (Plenum cable: QSH-CBLP-L-500)

#### SPECIFICATIONS

- Listed as cable type CL3
- Available in 500 ft. spools
- Five conductors:
  - Common 12 AWG
  - Power 12 AWG
  - MUX Data 22 AWG
  - MUX Data 22 AWG
  - Drain Wire 22 AWG
- Total outer jacket diameter .45 in.
- 300V Rated
- PVC Sheath, 90°C rated
- UL/CSA listed
- ROHS compliant



## DFB SALES

21-07 Borden Avenue  
Long Island City, NY 11101

T (718) 729-8310  
[www.dfbsales.com](http://www.dfbsales.com)

## ABOUT

DFB Sales specializes in the manufacturing and installation of high quality, customizable window and interior finish products for commercial and high-end residential markets. We work directly with top architectural firms, designers and construction firms to enhance spaces through our unique product offerings.

By choosing to work with DFB, a client can expect the highest quality product along with expert installation by their skillful craftsmen. We provide everything from estimating to product development to production under one roof, which ensures a seamless experience in working with any of our product lines.

DFB is geared to handle both small and large projects due to our scalable manufacturing processes. Because we make everything we sell, we directly support all of our products with simple and comprehensive warranties.