

Installation Instructions



SUN DIAL INDUSTRIES

455 Oshawa Blvd. North Oshawa, Ont., Canada L1G 5T4 Tel: 905-344-5940

www.smartblind.com





Figure 3: Wiring Schematic



1.0	Mounting the Power and Interface Unit
-	Place the drill template shown below up against the mounting surface where the Power and Interface Unit will be installed.
•	Using an awl, mark the mounting surface at the intersection of the cross-hairs to indicate the drill holes as shown on the drill
	template.
-	Drill pilot holes for the two #6 mounting screws. Use anchors if mounting onto drywall. Install the #6 screws leaving a gap of
	1/8" between the mounting surface and the bottom of the screw head as shown in Figure 4 below.
-	IMPORTANT - Snap the plastic caps provided onto the #6 screws. This will insulate the mounting screws from the
	internal electronics.
•	Drill a 1/2" Cable Entry Hole as indicated. This will be required for fishing and accessing the 6 conductor cable from the
	command unit.

Drill Template for Power and Interface Unit

2.0	Mounting the Command Unit
	Place the drill template shown below up against the mounting surface where the Command Unit will be installed.
	Using an awl, mark the mounting surface at the intersection of the cross-hairs to indicate the drill holes as shown on the drill
	template.
	Drill pilot holes for the two #6 mounting screws. Use anchors if mounting onto drywall. Install the #6 screws leaving a gap of
	1/8" between the mounting surface and the bottom of the screw head as shown in Figure 5 below.
	IMPORTANT - Snap the plastic caps provided onto the #6 screws. This will insulate the mounting screws from the
	internal electronics.
	Drill two 1/2" Cable Entry Holes as indicated. This will be required for fishing and accessing the 6 conductor cables from the
	Power and Interface Unit and the RJ12 adapter.

3.0	Mounting the RJ12 Adapter	
•	The RJ12 Adapter should be mounted near the headrail of the first blind in the system. fishing and running the 6 conductor cable to the RJ12 adapter but which keeps the first	A location should be chosen which all RJ12 cable as short as possible.
	The RJ12 adapter can be mounted using the double-sided tape provided or the wood sc	rew provided.
4.0	Connecting the System	
	See Section 7 below for instructions on stripping the 6 conductor cable.	
 Run or fish a length of 6 conductor cable from the RJ12 adapter to the Command Unit (See Figure 2.) 		
	<u>At the RJ12 adapter:</u> remove the sheathing from the 6 conductor cable and strip $\frac{1}{2}$ " of insulation from each of the 6 coloured wires. Connect the 6 wires to each of the 6 screw terminals on the RJ12 adapter as shown in Figure 3. Tighten the tie-wrap strain relief and remove excess.	
	Replace the plastic cover on the RJ12 adapter.	

- Remove the sheathing from this second cable and strip **0.2**" of insulation from each of the 6 coloured wires.
- Using a jeweler's screw driver connect each of the 6 coloured wires to the 'INTF' terminal strip J2 as shown in Figure 3.

At the Power and Interface Unit: Remove the four screws from the back of the Power and Interface Unit and open the box. Remove the sheathing from the 6 conductor cable which comes from the Command Unit and strip 0.2" of insulation from each the 6 coloured wires. Using a jeweler's screw driver connect each of the 6 coloured wires to the terminal strip – J2 as shown in Figure 3. • Tighten the tie-wrap strain relief and remove excess. Tilt the Power and Interface Unit to one side to tighten two of the enclosure screws. Repeat for the other side. Position the Power and Interface Unit mounting holes over the mounting screws installed in the mounting surface as described in Section 1. Push the Power and Interface Unit towards the mounting surface and slide down to lock the Unit in place. s m a r t BLIND

5.0	Mounting and Connecting the Sunlight Sensor	
•	The Sunlight Sensor can be mounted to any available surface near one of the blind headrails using the mounting clamp provided and an appropriate screw or fastener. The maximum distance from the blind is dictated only by the length of the sensor cable as shown in Figure 2.	
•	NOTE: The location of the sensor will determine the behaviour of the entire system. Choose a location which best represents the daylighting characteristics of the installation. For example, do not place the sensor in a location shaded by an external overhang if direct sunlight is allowed to enter the lower portion of the window. Once the system is installed, its sensitivity to daylight conditions can be adjusted (See User Manual.)	
•	The sensor can be connected to any of the blinds in the system. The two-conductor cable is plugged into the two-pin header on one of the blind computers as shown.	

6.0	Connecting the Blinds			
	The first blind in the system is co 2. The RJ12 cable connects to the first blind.	s shown in Figure l computer on the	A	
•	Subsequent blinds are connected configuration as shown in Figure	with additional RJ12 cables in 2.	n a 'daisy chain'	
 NOTE: Only use RJ12 cables provided by Sun Dial Industries. These cables are straight through (DATA) as opposed to crossover (VOICE), as shown below. CAUTION: USING CROSSOVER CABLES CAN DAMAGE THE SYSTEM! 				
	Pin 1 Pin 6 Tab facing up	Pin 6 Pin 1 Pin1 Tab facing up	Pin1 Pin 6 Tab facing up	Pin 6 Pin 1 Pin1 Tab facing up

Correct: straight through

Incorrect: crossover

7.0	Stripping the 6 Conductor Cable	
•	Use the stripping tool shown to remove the sheathing from the 6 conductor cable.	
•	Sheathing must be removed in small, ¹ / ₂ " segments.	
•	Clamp the stripping tool onto the sheathing and carefully rotate the tool to cut the sheathing.	
•	Once the sheathing has been cut all the way around, wiggle the sheathing to break a segment from the main cable.	
	Repeatedly remove small segments until enough wiring has been exposed.	