PB-PWD9600
Installation Manual

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- Where any defect or failure is attributed to accident, misuse, abuse, negligence or non-observance of the product user guide on the part of the installer, owner or user.
- Damage or defects caused by abnormal or unreasonable use (including unauthorised system modifications, repairs, and specifically, alterations by a person or party other than Polar Bear Solutions or their authorised agents).
- Damage or defects resulting from acts of nature, such as lightning strikes or floods.
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HOT SURFACES WARNING

During operation the back box and the PCB board can get hot. Sufficient care should be taken when handling or removing the product after operation. It is recommended that an appropriate amount of time is left after the unit powered off to allow the PCB and back box to cool down. Lower input voltages decrease the heat of the unit.

INSTALLATION COMPETENCE

This product is not intended to be installed by the general public or other un-trained personnel. The product should only be installed by trained individuals that have a minimum level of CEDIA qualification or other equivalent qualifications within the custom audio visual installation industry. Installation that is not carried out correctly, may invalidate the warranty.

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Overview

The wall docking station is a flush mount in-wall dock that allows the Philips TSU9600 control panel to be stored in wall and keeps the TSU9600 charged. The docking station also has four optional dry contact closure buttons on the base for lighting or other automation integration.

The docking station comes in two parts, the wall back box and the main docking station. The wall back box comes with a built in PCB board to allow the cables to be terminated and tested prior to the final stage of the project. The back box will get hot during the charging process and therefore should not be placed next to objects that will be affected by this.

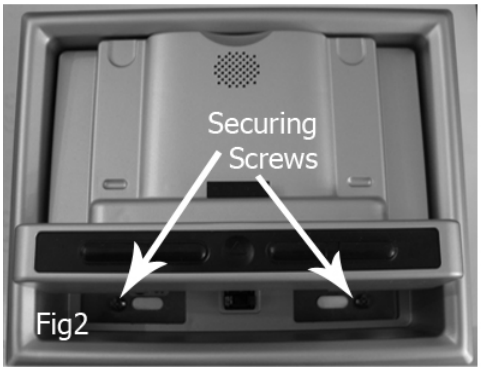
Back Box Installation

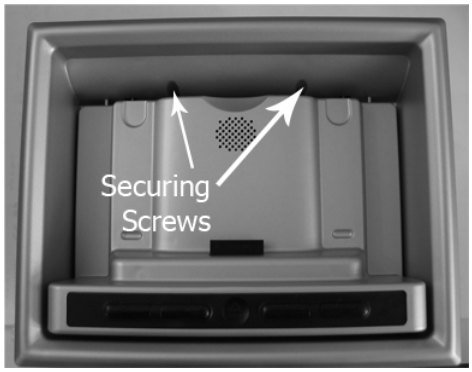
The back box should be installed into a wall securely using the fixing holes. The front of the back box should sit flush with the finished wall; otherwise longer M4 securing screws may be required to attached the wall dock. If the back box is to be left installed without the wall dock, the back box PCB board should be adequately protected. This PCB board should not be removed. Depending on the cabling used a grommet may be required to protect the cable where it enters the back box.

Wall Dock Installation

The wall dock has a ribbon cable at the back of the unit which should be plugged into the back box PCB board before screwing the wall dock into place. The wall dock is secured into the back box by four screws that protrude from the back. Before offering the unit up to the back box, ensure the screws are tight on the unit (see fig1), so they rigidly protrude out from the unit. This ensures that the screws all line up with the back box.

The four securing screws are accessible depending on whether the shelf is open or closed. When ejected the two lower screws are accessible, when closed the two upper screws are accessible via a long thin screw driver though the two holes just above the shelf (see fig2).





Power Supply

A 12v DC power supply should be used to power the wall dock and in turn charge the TSU9600 when docked. When installing cabling within a building, it is essential that the correct size cable is used and suitably protected by either a fuse or other appropriate means in accordance with relevant low voltage guidelines for your country. The DC power at the entry point into the product should be between 9v & 12v (lower voltage is actually better). If a Philips TSU9600 is suspected to have a faulty battery or problem do not dock the touch screen panel in the wall dock. Failure to meet these specifications may cause permanent damage to the wall dock product.

RJ45 Dry Contact connector

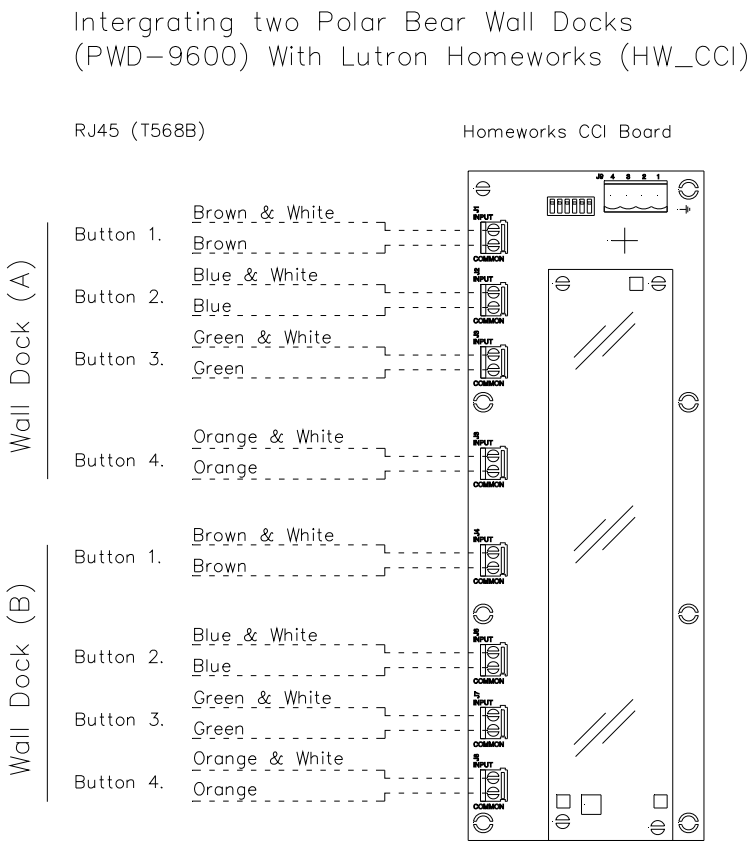
The RJ45 socket on the back box PCB is used for the dry contact closure cabling.
RJ45 Socket (T568B)
Left to Right

Button 1:	Brown / White (Pin7) & Brown (Pin8)
Button 2:	Blue / White (Pin5) & Blue (Pin4)
Button 3:	Green / White (Pin3) & Green (Pin6)
Button 4:	Orange / White (Pin1) & Orange (Pin2)

Button Usage Example:

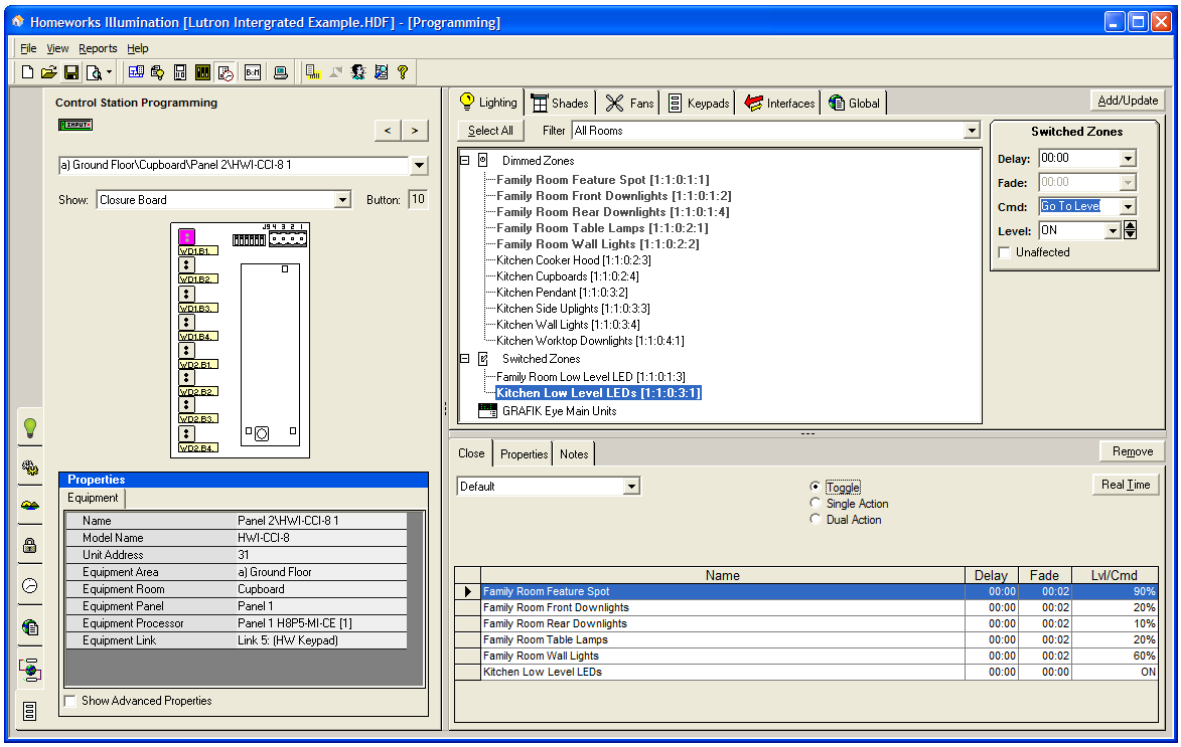
Integrating two Polar Bear Wall Docks (PWD-9600) with a Lutron Lighting system (Homeworks).
The four buttons can be used to control a whole house lighting control system. This can be achieved by directly wiring the CAT5e cable to an Input board (For Homeworks using a HW-CCI Board). The input board is then programmed using the lighting control system as if it was a Keypad.

Wiring Diagram.



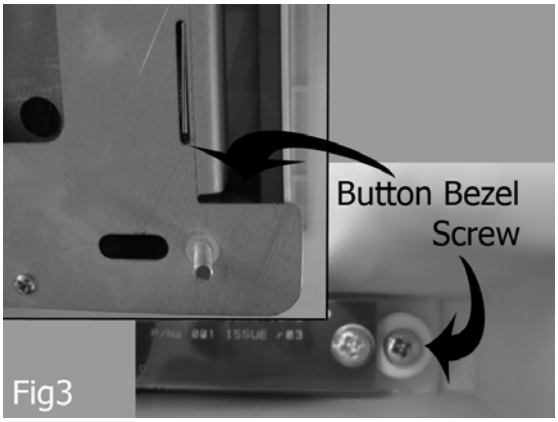
Programming a Lutron CCI board

The programming of a Lutron CCI board is done in the same way as a typical keypad. The CCI unit can co-exist with other Lutron Keypads on the same link number.



Button Blanking Strip

Included with the product is a button blanking strip that can be used to hide the four contact buttons on the product if not in use. Before the product is located in the wall, remove the two screws (see fig3) this releases the button bezel and the four plastic buttons. The blanking strip can then replace the button bezel and is attached with the two same screws.



Tech Specification:

Power input requirement:	12v DC 1.8Amps (max 12v DC, min 9v DC)
Push Buttons:	4 x Momentary Volt Free Contacts Max. Current rating 50mA @ 12Vdc
Power terminal size:	2x 2.5mm screw terminal
Colour:	Silver
Back Box Size:	180 x 142 x 89mm (W x H x D)
Product size on wall:	187 x 150 (W x H)

Contact: Polar Bear Solutions Ltd
Web site: http://www.PolarBearSolutions.com/
Email: sales@polarbearsolutions.com