

# Strand Lighting

# Instruction Sheet

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## Outlook Room Combine I/F Board (Part No. 63039)

The Outlook™ Room Combine Interface is a single printed circuit board which is intended to be installed as part of an Strand Outlook lighting control system. Its function is to allow either the connection of partition switches or a custom room combine panel to the Outlook control network. The product is a printed circuit assembly (PC-718) for incorporation into a housing by others. Note that the same PCB with different software is used for the Outlook A/V interface and the Premiere™ A/V Interface, therefore check the part number on the carton to confirm that you have the correct version.

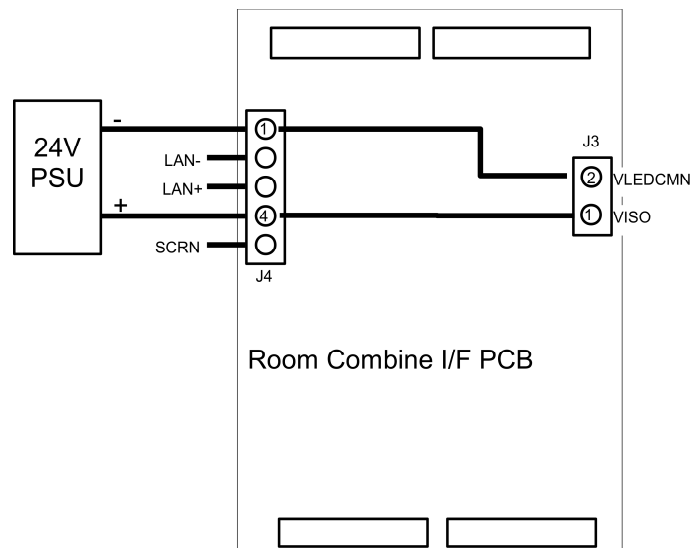
- ① Install the PCB inside a suitable enclosure and secure using the mounting holes at each corner, which are suitable for screw sizes up to 6-32 Unified, or M4 metric. The mounting holes are positioned at pitches of 151mm (5.95 inches) and 122mm (4.8 inches). Care should be taken that mounting hardware does not come into contact with adjacent components or PCB tracks.
- ② Connect the Interface to its power supply. The Interface requires one (or two) power supply of 24V DC. The PCB incorporates provision for total isolation between the Outlook LAN and the partition switches / panel controls. In this case, two 24V power supplies are required (one of these may be that which powers the main Outlook installation).

If isolation is not needed, the PCB and panel may be powered from the overall Outlook power supply. Connections should be as shown in the adjacent diagram, with links between the V+ pin of J4 and the “VISO” pin of J3, and the V- pin of J4 and the “VLEDCMN” pin of J3.

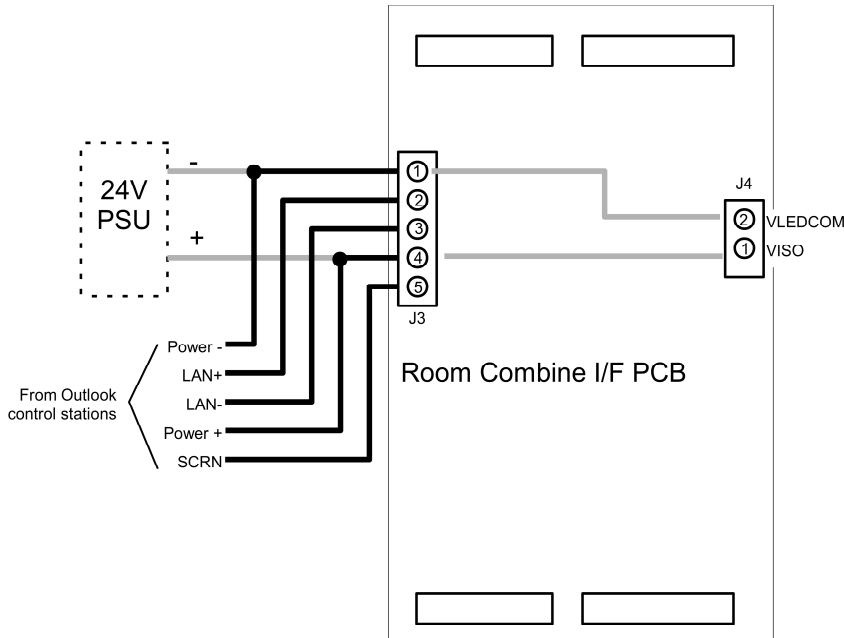
If separate power supplies are to be used, the main Outlook supply should be connected to J4 as shown adjacent, and the second 24V supply to the VISO (+24V) and VLEDCMN (0V) terminals of J3. Links between J3 and J4 must then be omitted.

Where two power supplies are used, the mains supplies to both should be switched together to avoid operational problems.

Neither power supply should have any of its output terminals connected to Ground.



- ③ Ensure that the dimmer system and power supplies are isolated and connect the Outlook LAN to J4. Connections are shown below.



Cable: Belden 9773 or equal.  
 Max Length: 1000 feet (300m - daisy chained runs only for each C-LAN).  
 Connector: Terminal block in processor cabinet & dimmer rack.

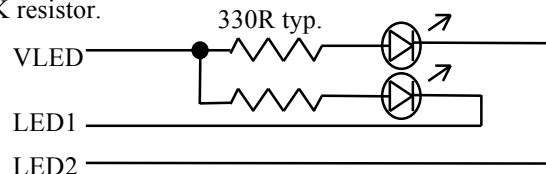
Term. #	Terminal Label	Signal	Comments	Pairs	Cable Color
4	V +	POWER +	Control Station power +	pair 1	Blk + Wh
1	V -	POWER -	Control Station power -	pair 3	Blk + Gn
2	L +	LAN +	LAN Signal True	pair 2	Red
3	L -	LAN -	LAN Signal Complement		Black
5	SCRN	SCREEN			Screen wire

- ④ The PCB has two different modes of operation. Set the rotary switch (SW1) according to the application.

**MODE A: For Custom Panels. Set SW1 to position 0 .**

In this mode the interface is typically used with a panel housing LED displays and switches, often laid out to geographically mimic the room partitions. Each of the 16 inputs (PB1 -PB16) corresponds to one of the 16 rooms supported by Outlook, with an associated LED drive output (LED1 - LED16) for status indication. One contact of each momentary action switch should be wired in common and connected to one of the VLED terminals of J6 or J5. The other contact of each switch is wired to the corresponding PB\* input. When a switch is closed the VLED voltage is applied to the appropriate input and the functions of room combine, interrogate and cancel can be achieved as described in the Outlook Pocket Guide (page 14).

LED indicators corresponding to each switch may be connected. Positive voltage is connected from a VLED terminal of the PCB J1 or J2 via 330R (typical) resistors to the anode of each LED. The individual LED cathodes are wired to the appropriate LED\* terminal, the drivers of which sink current via a 1.2K resistor.



To combine Rooms 1, 4 and 5 for example, press and hold the switch for room 1 until its LED flashes, Press the switch for Room 4 and press the switch for Room 5. Finally release the Room 1 switch. The LEDs for Rooms 1, 4 and 5 will remain on indicating that the rooms are now combined.

To preview which rooms are combined, for example, with Room 4, press the Room 4 switch for **less than 3 seconds**. Any rooms linked to this will also light their LEDs

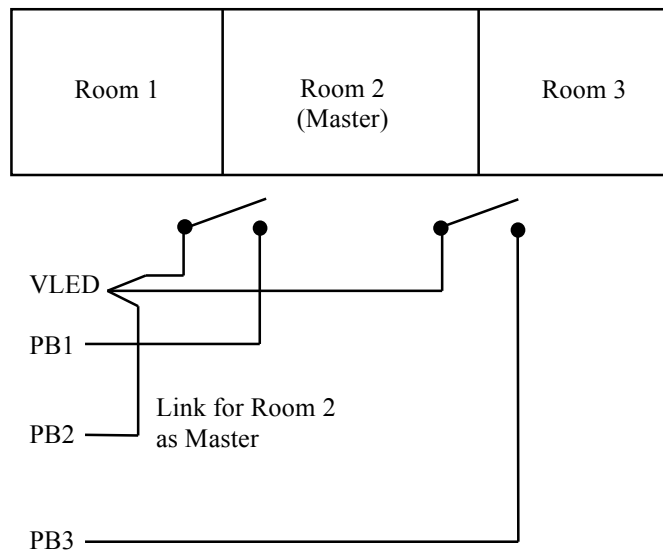
To cancel a room combination (e.g. cancel the combination of Rooms 2 and 3) press and hold the Room 2 switch until it flashes and then release the switch. The combination will then be cleared.

**MODE B: For use with rooms with switches built into partitions. Set SW1 to position 1.**

This application allows control of the lighting in two or more rooms to be combined or partitioned automatically when the room dividers are moved. It is only applicable to a single group of rooms and it is not possible to use the interface to combine Rooms 1 and 2 and separately combine Rooms 3 and 4, for example. This is because the system operates on the basis that one room is defined as the “Master” room to which other rooms may be joined. If multiple independent groupings of room combination are required the scheme should be implemented using Mode A with a dedicated control panel. If built-in partition switches are essential, a Premiere system should be used.

In Mode B the Master room must be chosen with consideration of the physical arrangement of the rooms. For example, in a situation where three rooms are in a line, the centre room must be the Master room.

The PB\* input corresponding to the chosen Master room must be hard wired to VLED (using a wire jumper across the terminals of the PCB). The individual partition switches are then wired between VLED and the appropriate PB input terminals. When a partition switch is closed (i.e. the room partition has been removed) that room is linked to the “master” room.



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