

## 2 Way node installation / troubleshooting manual.

The 2 way node is an I/O card that as its name suggests has 2 programmable inputs / outputs. Generally the 2 way node is used for landing calls as part of the CAN-X/CAN-X\* distributed I/O system, but can be used in any of the 3 distributed networks, CAN 1, (landing) CAN 2, (Car) or CAN 3 (Controller) to provide 2 inputs / outputs.

The 2 way node has an on board buzzer for call acceptance. This buzzer is active when the I/O is programmed as a landing or car call and is switched on via the call acceptance allocation table in the CAN-X/CAN-X\* processor menu.

**Note:** The on board buzzer has a protective film to protect it from dust ingress during installation, this needs to be removed before putting the lift into service.

Each 2 way node on a network needs to have a unique binary address set via DIP switch SW1. Switches 1-6 are for node address, switches 8 and 9 are used to identify whether the node is in the controller, car, landing simplex or landing group, switch 7 identifies whether it is a rear call in a selective door system and switch 0 is an on board CAN resistor to identify the end of the network. (See relevant section for more detail of DIP switch settings)

Fig1

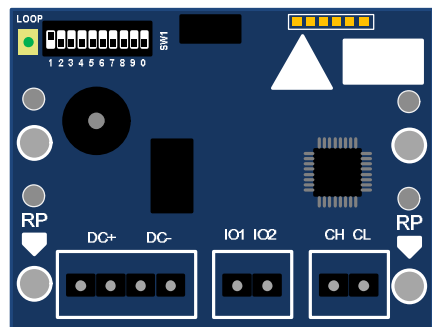


Fig 1 shows the basic board layout, connection locations and LED's.

The 2 way node has 1 CAN port, its connections are marked as CH and CL. There is also a diagnostic LED associated with the nodes processor marked LOOP (green) (See diagnostic paragraph overleaf for more detailed description of the LED) The power connections are marked as DC+ and DC- and have 2 connection points each, 1 for the supply in and 1 to connect to the relevant input device. The 2 inputs are marked as I/O 1 and I/O 2. If the 2 way node is attached to a DIN rail, a screwdriver should be inserted to the holes marked RP and upward pressure applied to release the DIN rail clips whilst putting downward pressure on the PCB. If the node is to be mounted via the standoff posts with the self-adhesive pad provided the mating surface should be clean and free of contaminants to promote maximum adhesion.

**Note:** Nodes should not be left loose in trunking or push boxes where their connections could short out.

Fig 2

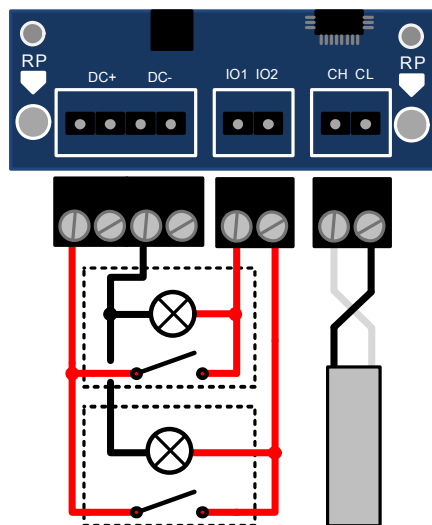


Fig 2 shows the basic power and I/O connections when used as a node for landing calls.

The input power connections are not shown connected in this diagram but are connected via the spare DC+ and DC- terminals. If in doubt refer to the site specific drawing.

Fig 3. The DIP switch settings of SW1 shown below are for node address.

Node Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
DIP number 1	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0
DIP number 2	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0
DIP number 3	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1	0
DIP number 4	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0
DIP number 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
DIP number 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

Fig 4. The DIP switch settings of SW1 below are for node location (control panel, car, landing simplex and landing group)

Node Location	Panel	Car	Landing(simplex)	Landing (Group)
DIP number 8	0	1	0	1
DIP number 9	0	0	1	1

Fig 5. The DIP switch settings of SW1 below are for front or rear door location (in group mode only)



Push Location	Front	Rear
DIP number 7	0	1

Fig 6. The DIP switch settings of SW1 for CAN termination. (If the node is on a pre-wired shaft loom from ILE the resistor is located on the loom so no need to switch on the termination resistor)

Node Location	Mid	End
DIP number 0	0	1

**Problem reporting / diagnostics**

The basic status of the 2 way node is reported by the loop LED (connected or not). The expanded status of the 2 way node is reported in the CAN-X/CAN-X + event history.

LED		Flashing once every second. Node is connected to the CPU and ready to receive or send CAN data.		Flashing 3 times a second. Node is not connected to the CPU so will not receive or transmit CAN data.
Loop				

**Specification**

Operating Voltage	10-30VDC
Operating Current	21mA
Input Voltage	10-30VDC
Input Current	8mA
Output drive current	600mA (per channel)

**EMC**

Care should be taken when running the group interconnect cable. All CAN interconnect should be segregated from mains / motor wiring and the screens connected to the screen clamps provided. If the interconnect cables need to pass cross high voltage cables they should do so at right angles. For further information on EMC refer to the ILE EMC manual.