7 Inch IPS Indicator Install Sheet

We reserve the right to alter, without giving prior notice, technical data, dimensions and weights described in this manual.
Thames Valley Controls Ltd. Manor Farm Industrial Estate, Flint, Flintshire CH6 5UY
(t): +44 (0) 1352 793222 (f): +44 (0) 1352 793255

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7 Inch Indicator V2
TVL375 ISSUE 1

Introduction

The TVC 7 Inch IPS Indicator can be used as a car or landing indicator.
The unit will display position (double floor characters 50mm high), scrolling travel or committed direction arrows, text, time, date and DOW, and service graphics e.g. fire service, car preference etc.
The display can be adjusted to landscape or portrait orientation via the Ethos Two MMI.
The screen is a full colour IPS LCD display: Size = 7 inch / 800x480 dots, Wide viewing angle 80/80/80/80 (IPS), 16.7M RGB colours, LED backlight with brightness 800 cd/m². Ethos Two Eco mode compatible – will dim LED backlight to save power.
The unit will act as a speech unit whilst in car mode or as a gong and call acceptance buzzer in landing mode. Speech phrases and optional screen background picture can be loaded on the built in SD card via the USB mini connector.
The Indicator also has provision to interface to 2 landing call pushes and a feature input. The unit is driven by a dedicated CAN bus from the Ethos Two controller.
The unit is a slim 30mm deep supplied with a drilled & rebated Polycarbonate lens (5mm thick, clear) with fixings and spacers.
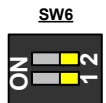
Precautions

Observe normal precautions for handling electronic devices, avoid static electricity, dampness and extreme temperatures. Please read this instruction sheet fully before use. The unit is to be wired as per the relevant panel drawings. Ensure that all interface wires are connected properly and that the supply voltage is correct before turning on the unit.
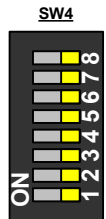
Specification

Supply Voltage	24 V d.c.
Board Operating Current	270mA
Max Output Current (per output)	50mA (LED type indicators only)
Output Short Circuit Protection	Yes
Audio	3.2W with 4 Ohm speaker
Dimensions (including connector)	198 (223) x 123.3 x 30mm
Fixings	4 x M3 at 186 x 115mm
Storage Temperature	-10 ºC to +60 ºC
Operating Temperature	-10 ºC to +50 ºC
Humidity Operating Range	0 - 90% relative humidity (non-condensing)

DIP Settings

SW6

DIP	Name	
2	CAN Term	DIPs 1 and 2 on for CAN termination
1	CAN Term	These should only be set on the last node in the network. (optional)

SW4

DIP	Car Mode	Landing Mode
8	ON = Car	OFF = Landing
7	OFF = Front / ON = REAR	OFF = Front / ON = REAR
6	N/A	Floor Bit 5
5	N/A	Floor Bit 4
4	PCB Test (Factory Use)	Floor Bit 3
3	RAM Test (Factory Use)	Floor Bit 2
2	N/A	Floor Bit 1
1	N/A	Floor Bit 0

1 to 6 assign floor no.
1 to 64 (in binary-1)

000000 = Floor 1   000100 = Floor 5   etc.
000001 = Floor 2   ....
000010 = Floor 3   011111 = Floor 32
000011 = Floor 4   111111 = Floor 64

Loop and Fault LED's

The Green LED (D2) will flash every 2 seconds to signify power to node and that the node is running.

The Yellow LED (D4) will light when the unit is in remote firmware upload mode, or if the SD card is accessed e.g. speech file being played.

The Red LED (D8) will light continuously for 4 seconds when the node is first powered up. After this point the red LED signifies various fault codes. The LED will do a quick flash every 4 seconds if the node has a fault.
1 flash every 4 secs = Node not communicating with Ethos.
2 flashes every 4secs = Node is experiencing data bus faults.
3 flashes every 4 secs = Node has stopped transmitting due to bus faults.
4 flashes every 4 secs = Node has stopped transmitting or receiving from the data bus

Volume Adjustment

Speaker Volume can be adjusted with the on board potentiometer R21, clockwise to increase volume and anti-clockwise to lower the volume. It can also be altered via the Ethos Two MMI. In Landing Mode, the on board speaker is used as a buzzer, for call acceptance, to conform with DDA requirements.
In Car mode the unit is supplied with an external 4 Ohm speaker, for voice annunciation. Place SW1+SW2 in the top position for external speaker.
For landing gongs the unit can use the on board speaker or external speaker.

Setup / Adjustable Parameters

Press: Indicators & Speech or Settings → Search Settings → Indicators & Speech → TVC Indicator Config.
The settings for the indicators are pre configured within the Ethos Two unit. These can be adjusted via the Indicators button on the home screen or the "Settings" menu.

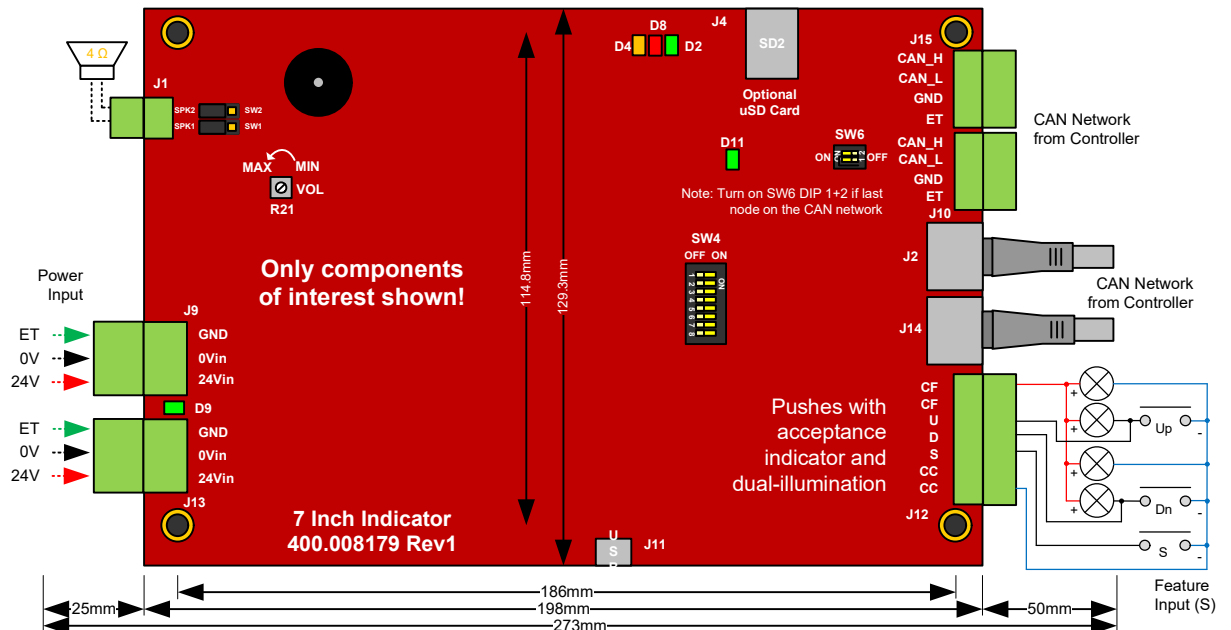The following parameters are adjustable:

Screen Brightness	Background and Text Colour	Time / Date Visible 12/24hr	Speech / Gong Volume
Orientation Portrait or Vertical	Feature Text Messages	Background Image Enable	Landing Gong Option
Call Accept Buzzer Enable	Extended Floor Legends	Display Car Load / Size	

Internal PCB Layout (Rear)
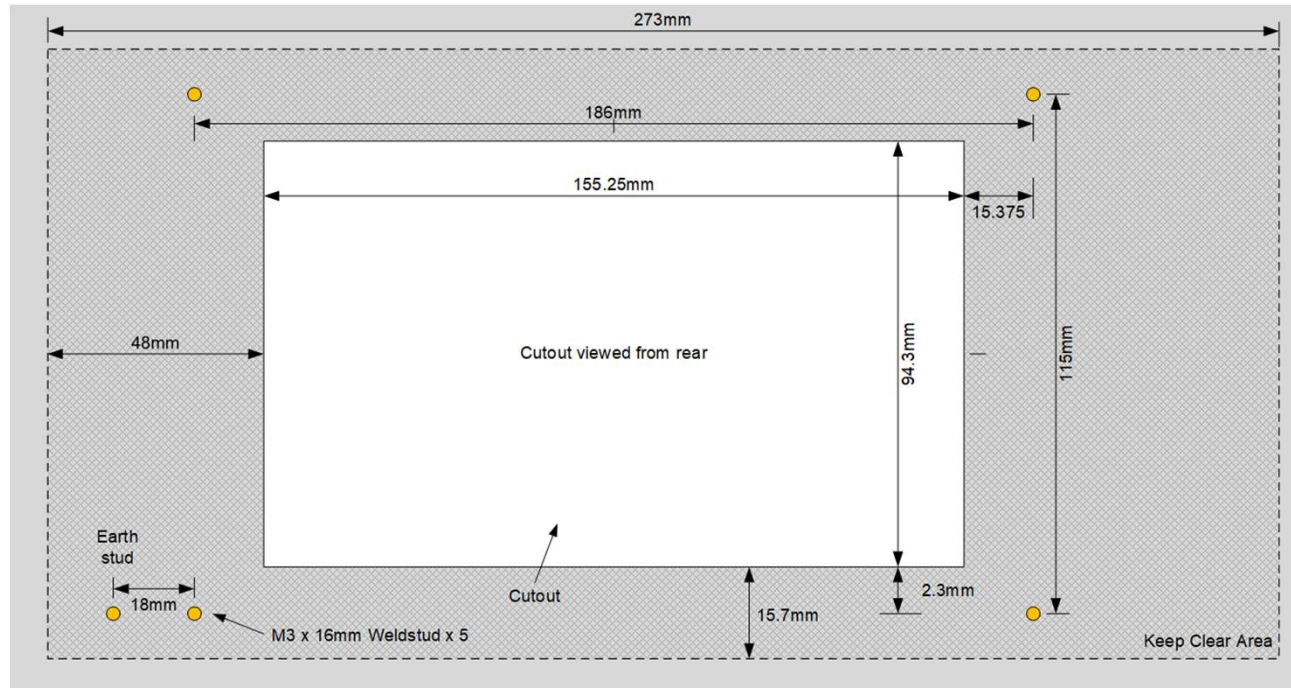
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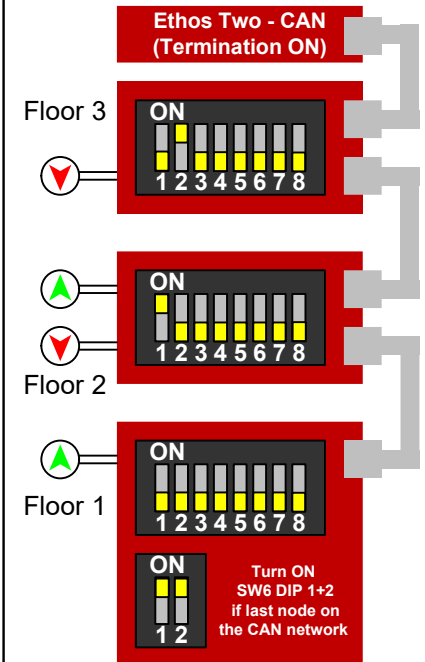
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Safety Note

This Manual is to be read in conjunction with Ethos 2 Quick Start Manual (TVL350) It is important that you familiarise yourself with both manuals before commencing any work with the Ethos or the Ethos 2 serial system. Be aware that the lift panel will contain equipment that is supplied with potentially lethal voltages. Please make sure the panel is isolated before carrying out any installation work or modifications. The TVC Ethos 2 Serial System is a distributed field-bus network for interfacing calls and I/O to an Ethos 2 lift controller. The system is used in place of normal discrete wiring for calls and car related input and outputs. Instead of each push and call lamp being directly connected to the panel, in the motor room, they are can be connected to local PCB's or nodes that are distributed about the car and lift shaft. This will depend on particular installation requirements.

Cutout and Studding

Note: Studs M3, Indicator thickness 22mm (inc. 3mm of lens)

273mm
186mm
155.25mm
15.375
94.3mm
115mm
48mm
Cutout viewed from rear
Earth stud
18mm
M3 x 16mm Weldstud x 5
Cutout
2.3mm
15.7mm
Keep Clear Area

Simple Landing Network Example

Ethos Two - CAN (Termination ON)

Floor 3
ON
1 2 3 4 5 6 7 8

Floor 2
ON
1 2 3 4 5 6 7 8

Floor 1
ON
1 2 3 4 5 6 7 8

ON
1 2
Turn ON SW6 DIP 1+2 if last node on the CAN network

EMC Guidelines

It is extremely important that the following guidelines are adhered to:
All bus runs must be kept away from motor wiring, a separation of at least 300mm. Keep bus wiring away from mains. If wiring has to cross any high voltage cable this must be done at right angles.
Nodes must be mounted away from any high voltage equipment e.g. motors, door gear etc.
Mains power input and motor output cables should be shielded and earthed as per panel drawings.
Any screens in the trailing cable must be earthed at both ends.
Networks must be correctly terminated, terminate CAN with DIP's on the last indicator in the landing riser run. See panel drawings for car network termination.
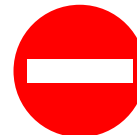
Graphic Key

Fire Recall

Emergency Recall

Out of Service

Hospital Serv

Fireman's Service

Evacuation Service

Kg Overloaded

Car Preference