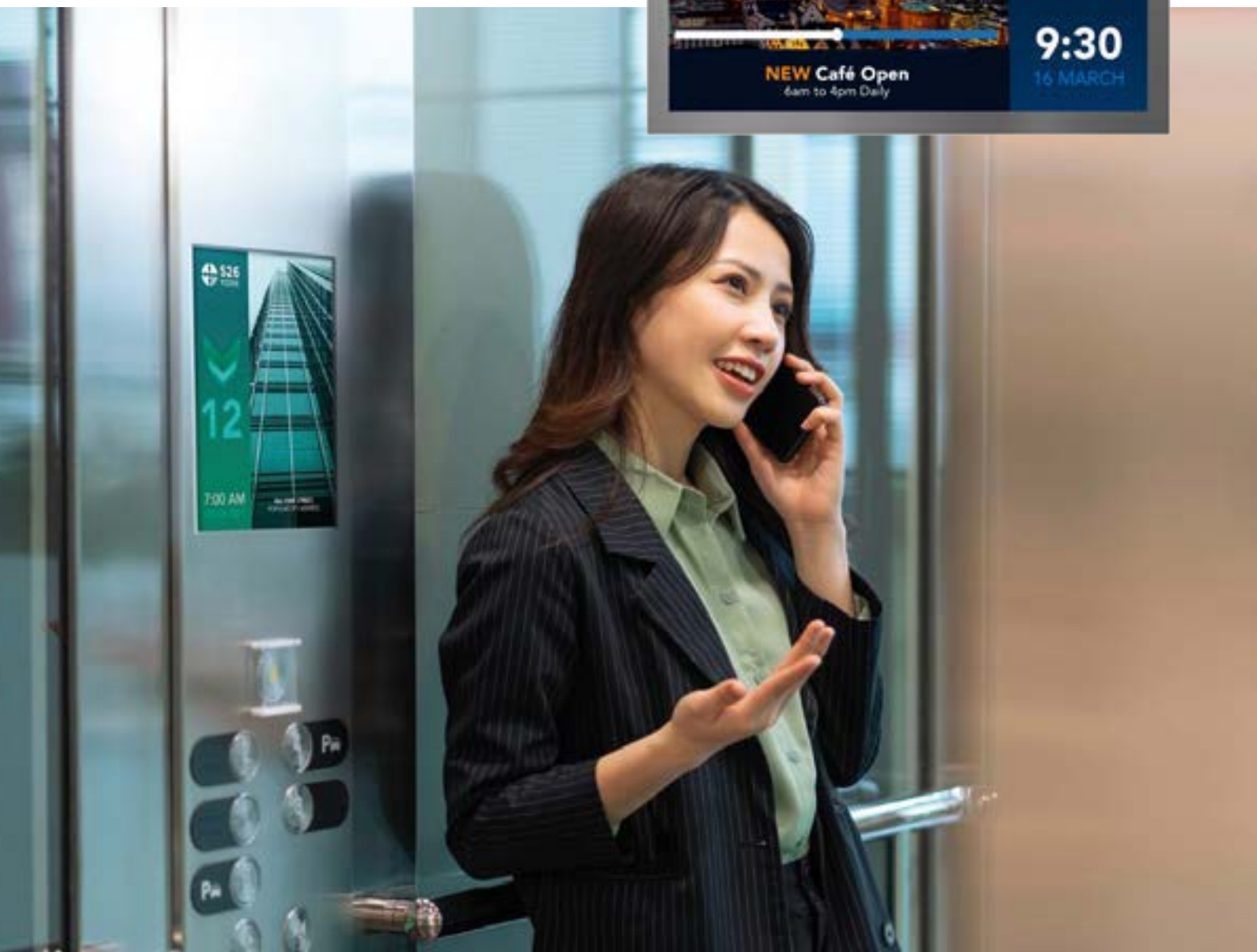




ATOM Lite

Economical multimedia elevator display with configurable screen design and content

Installation Guide



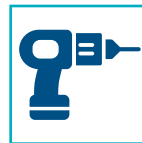
Before you start

Items Required for Installation:

- + ATOM Lite Multimedia Display
- + Power Supply
- + 8 x M4 Fixing Screws

Tools Required for Installation: (Not Included)+

- + Screwdriver
- + Power Drill suitable for 4.5mm Holes
- + Digital Multimeter

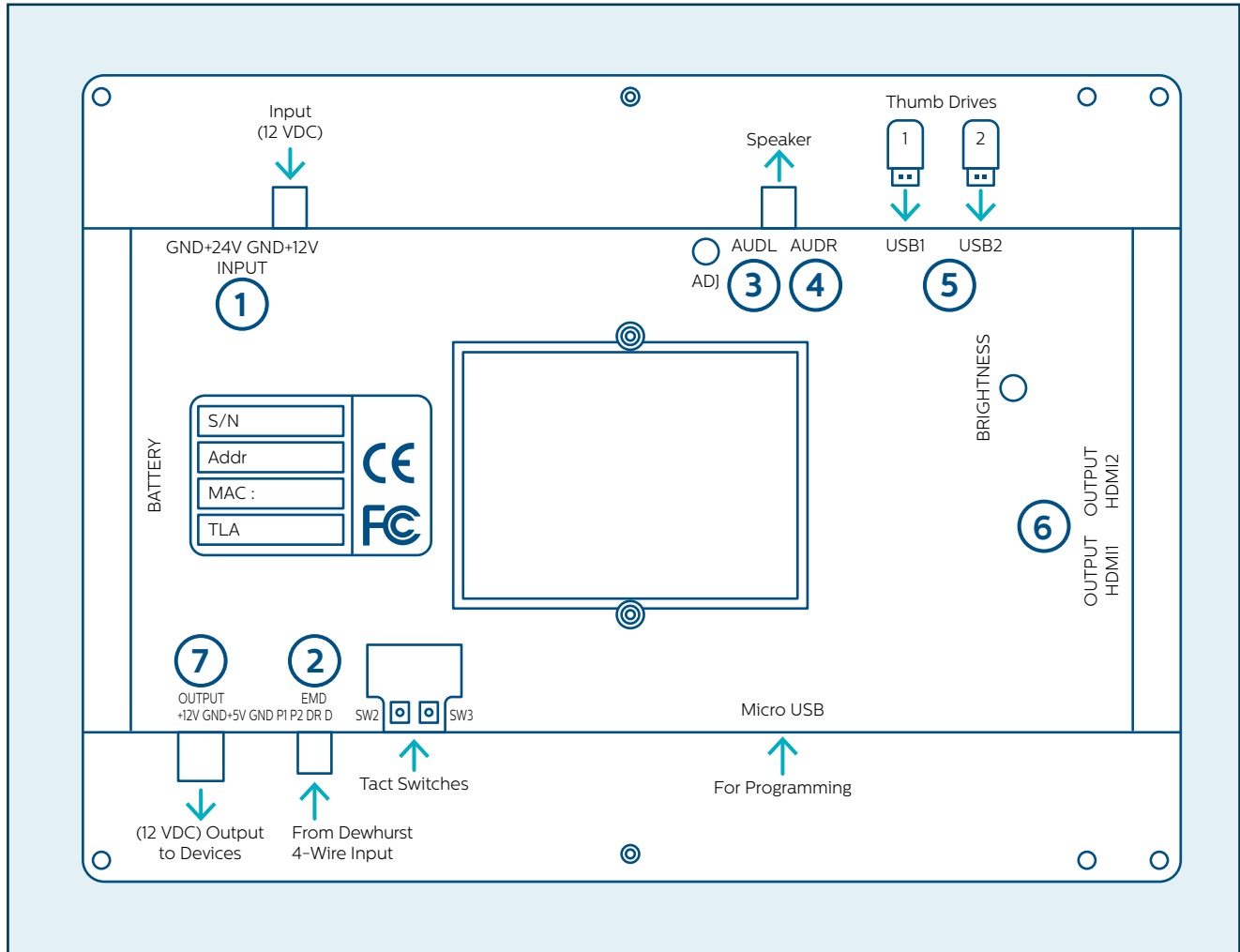


Optional Items Dependent on Installation:

- + 5m USB Extension Cable (Male/Female) (133-C-1-0229)
- + Encoder CX-BASIC (for lift signals)
- + CX-Synchro (time synchronisation)
- + Gongs & Buzzers



1. Wiring Connections – ATOM Lite



SCREEN SIZE

10.4"

Model No.	ATOML-104-1-GO-940
ELECTRICAL & ENVIRONMENTAL	
Operating Voltage (VDC)	24 (Main Screen) 12 (Aux Screen)
Typical Current Consumption (A)	0.6 (Main Screen) 0.5 (Aux Screen)
Typical Power Consumption (W)	14 (Main Screen) 6 (Aux Screen)
Operating Temperature (°C)	0 < 50
Humidity Range (%RH)	10 < 90

1. Power Input -12V GND -Power Connector

Connector Type	STLZ1550/4G-3.81-V-Green from Phoenix Mecano or equivalent
Mating Connector Type	AKZ1550/4-3.81-Green from Phoenix Mecano or equivalent
Pin 1 -12V	Supply 12V DC
Pin 2 - GND	Supply Ground

2. Signal Input -EMD -Dewhurst 4-Wire Connector

Connector Type	STLZ1550/2G-3.81-V-Green from Phoenix Mecano or equivalent
Mating Connector Type	AKZ1550/2-3.81-Green from Phoenix Mecano or equivalent
Pin 1 - DR	Data Return
Pin 2 - D	Data Supply

3. Audio Signal -AUD_L -Audio Connector

Connector Type	STLZ1550/2G-3.81-V-Green from Phoenix Mecano or equivalent
Mating Connector Type	AKZ1550/2-3.81-Green from Phoenix Mecano or equivalent

4. Audio Signal -AUD -Audio Connector

Connector Type	3.5mm Audio Female Jack
Mating Connector Type	3.5mm Audio Male Jack

5. USB1/USB2 -USB Connector

Connector Type	USB Type A (USB 2.0)
Mating Connector Type	Compatible USB Plug

6. HDM11/HDMI2 -HDMI Connector

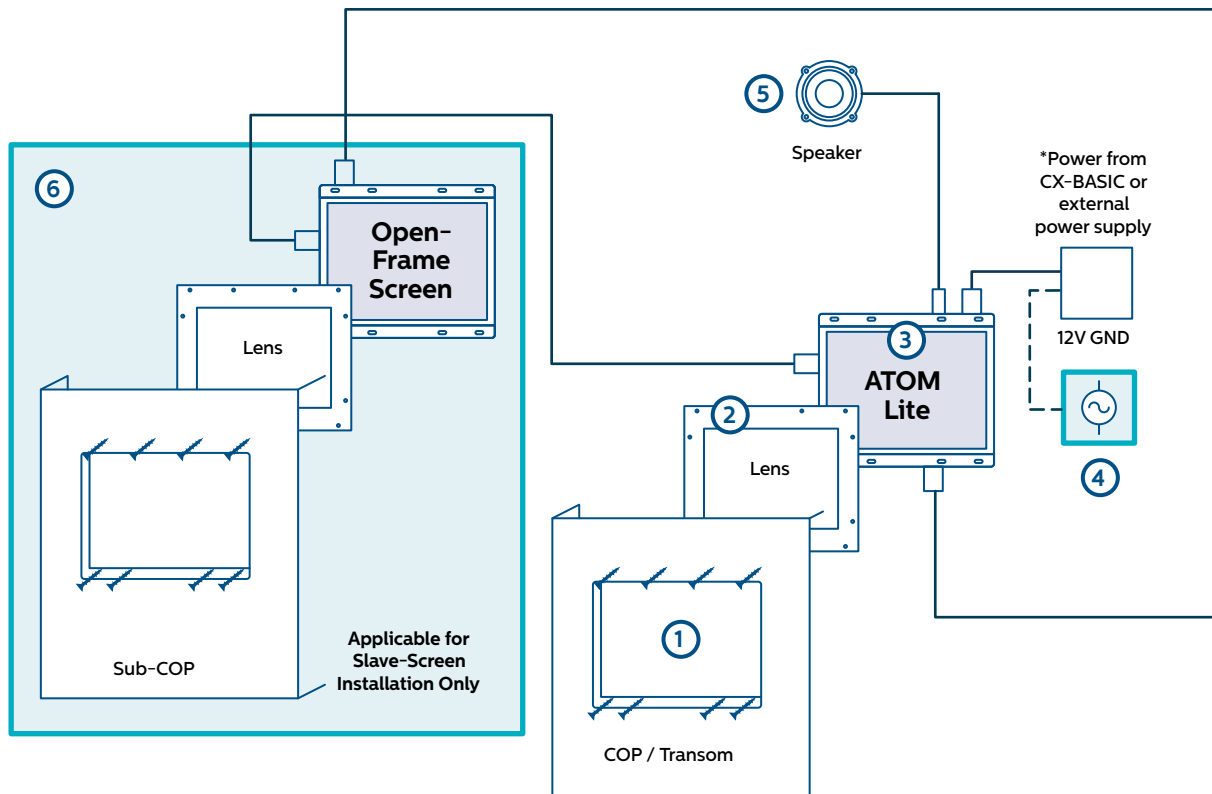
Connector Type	47151-1001 from Molex
Mating Connector Type	Compatible HDMI Lead

7. Power Output -12V GND -Power Connector

Connector Type	KF2EDGR-5.0-2P from KaiFeng or equivalent
Mating Connector Type	KF2EDG-X-5.0-2P from KaiFeng or equivalent
Pin 1 -12V	Supply 12V DC
Pin 2 - GND	Supply Ground

Installation guide

2. Mechanical installation



Step by Step Guide

1. Prepare the COP cut-out and mounting studs according to the mechanical drawing of the screen/lens used. Ensure sufficient air space around the LCD unit for ventilation
2. Next, mount the lens. This item is optional. A lens is recommended for the additional protection of the screen and the aesthetic look of the COP/Transom. Peel adhesive first and stick to screen
3. Mount the ATOM Lite LCD unit
4. Prepare 1 x Mains (110/230VAC) socket. This is for the ATOM Lite LCD unit.*
5. Mount the speaker on the car-top, with the speaker facing into the car
6. If there is an Open frame application, follow step 1 to 4 for the mounting and use the HDMI & 12VDC outputs on the display to provide HDMI and power to the slave screen.

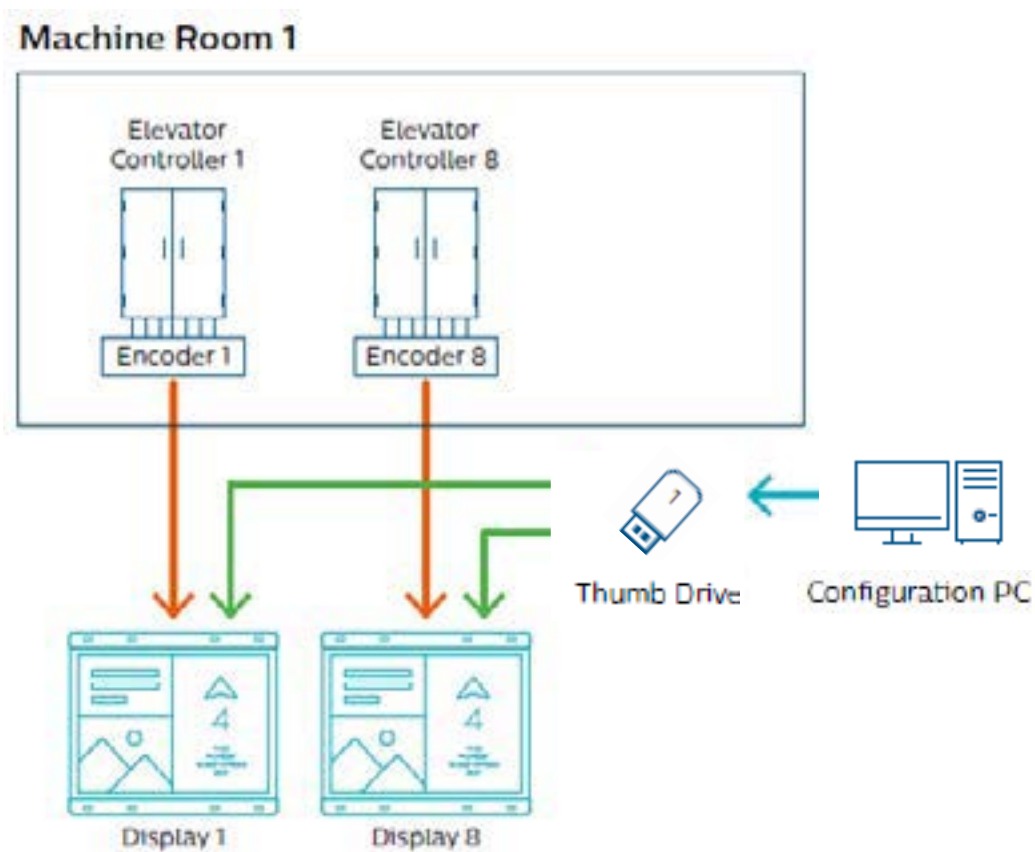
*Please adhere to instructions on power supply

Caution



- + Risk of electric shock. Never remove the casing of the unit
- + Ensure that the power supply is connected properly and that the voltage is correct before turning on the system.
- + Handle LCD unit with care. Do not knock or place heavy object on the top surface of the LCD unit
- + Avoid direct contact with heat dissipating components e.g. heat sink
- + PSU 135-0-0-0022 has selectable AC voltage inputs. Always ensure this is checked before connecting the display
- + Do not operate this product in potentially explosive atmospheres

Network overview



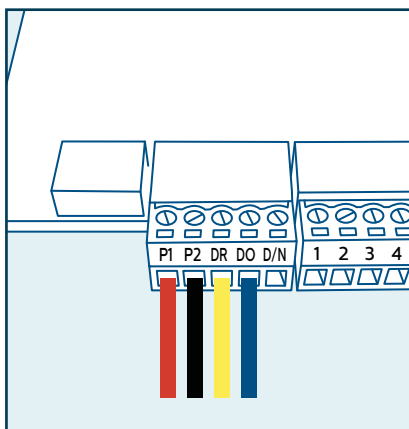
3. Quick Setup

3.1 Setup & Configuration - Lift Controller - Serial (4-Wire)

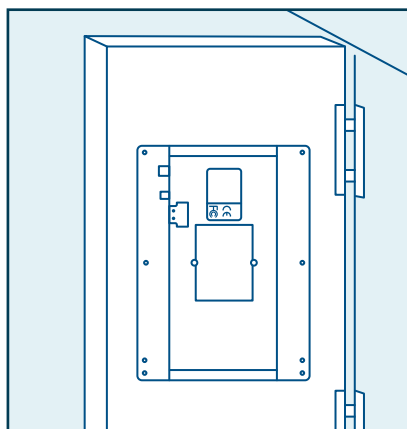
3.1.1 Encoder/Converter Board Wiring and Setup

To show lift information on the ATOM Lite an Dewhurst encoder is required. The CX-BASIC is Dewhurst's standard encoder providing both power and data to the ATOM Lite display via 4-wire connection (power for display can be supplied either directly from CX-BASIC or local power source).

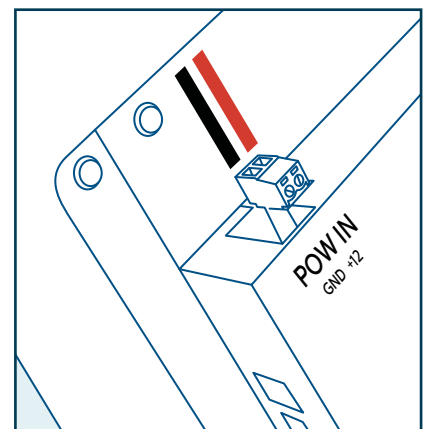
The following shows how to connect the CX-BASIC encoder into the ATOM Lite display.



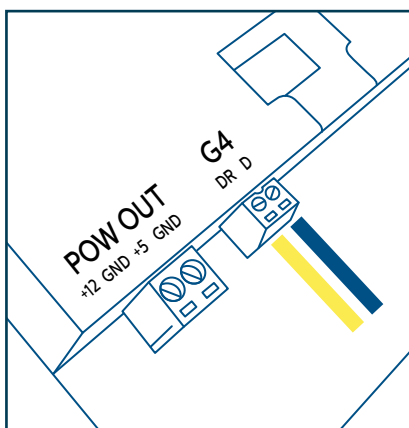
1. Screw in the wiring for the 4-wire serial output (JP9 SER1) on the CX-BASIC (power is 12VDC out of the CX-BASIC)



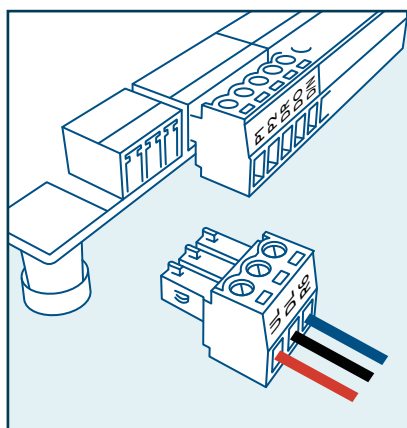
2. Ensure the screen is mounted correctly within the fixture



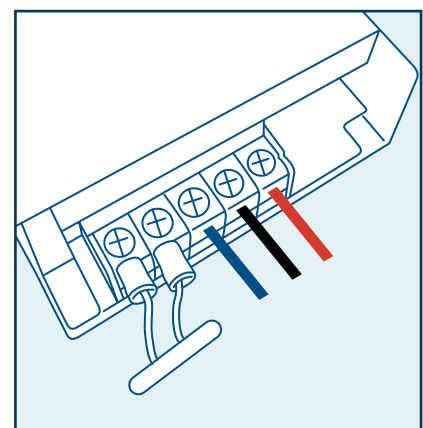
3. Connect the power and ground wiring from the CX-BASIC to the display power input.



4. Screw in the serial communication into the display from the CX-BASIC (JP9 SER1)



5. Screw in the 12VDC wiring from the power supply to the CX-BASIC taking care to follow the correct pin arrangement



6. Screw in wiring into the power supply and connect to the appropriate power source, ensuring correct supply voltage is selected.

Caution

- + Risk of electric shock. Never remove the casing of the unit
- + Ensure that the power supply is connected properly and that the voltage is correct before turning on the unit.

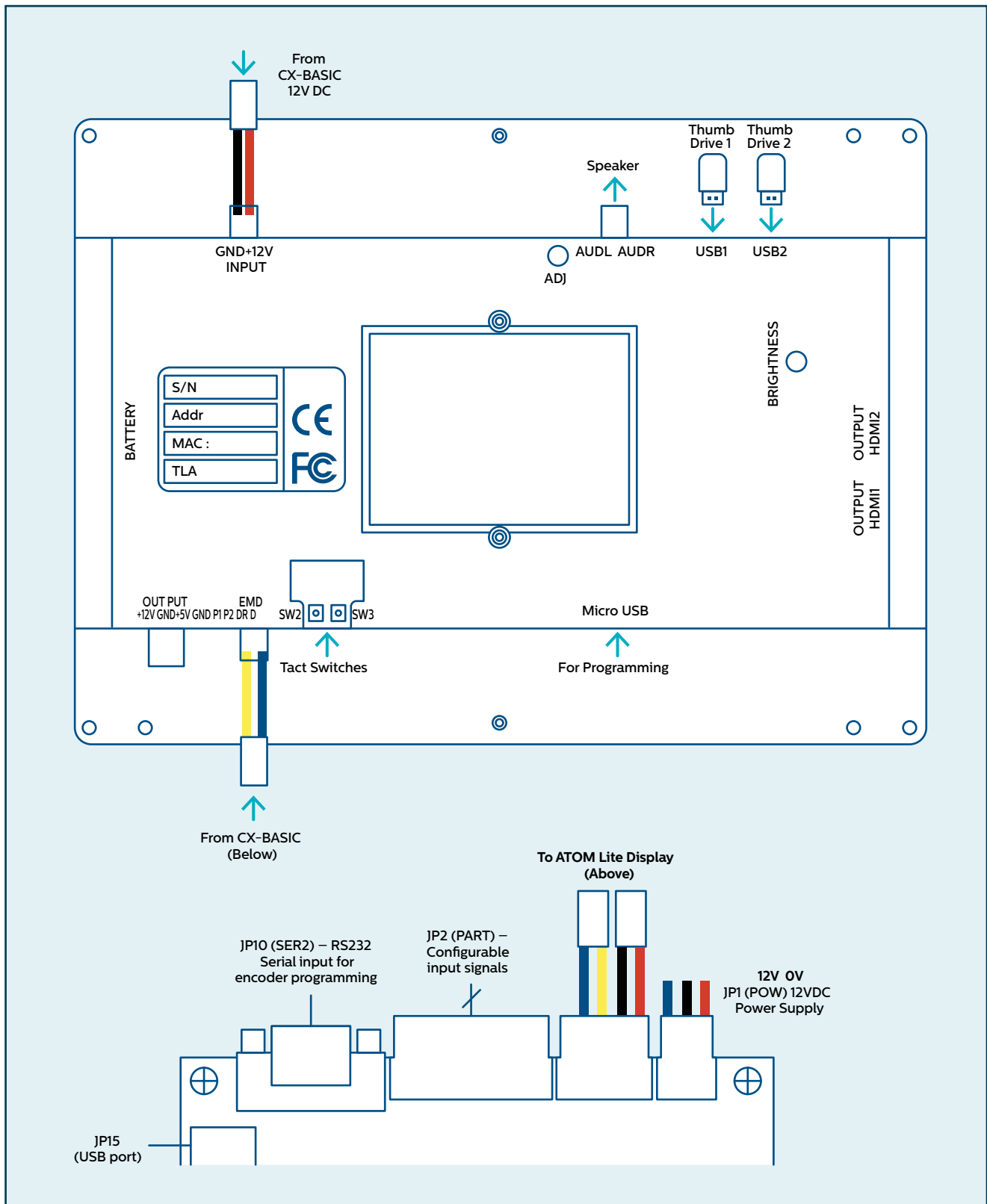


ATTENTION – Electrostatic Discharge (ESD) Safe Handling

1. Remove the display from anti static package only when it is ready to be installed
2. If there is the need to set the display down, put it back into the anti static package itself (do not put the display on a metal surface)
3. Handle the display only by holding it by its frame or edges
4. Do not touch exposed circuitry, pins or joints
5. Limit movement while handling the display as movement can cause static exectricity to build up
6. Additional care needs to be taken while handling the display during cold weather as heating reduces indoor humidity resulting in an increase in static electricity



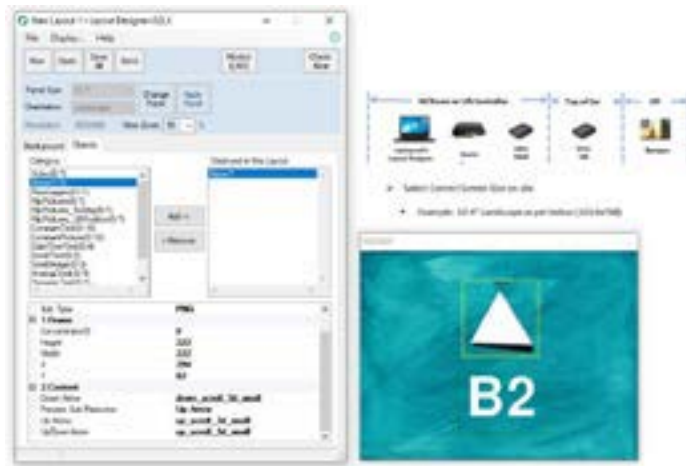
3.1.2 Example Wiring Architecture



4. Getting Started

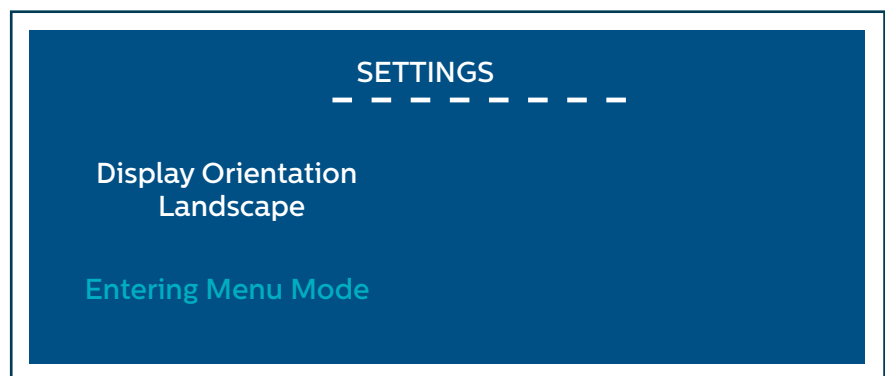
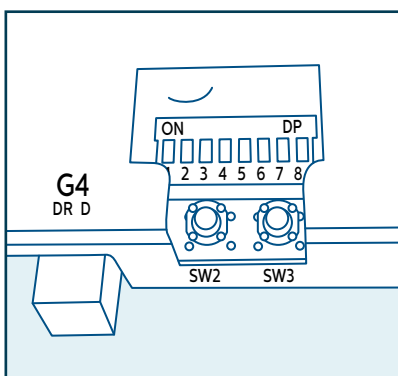
4.1 Start-up

Once power is supplied to the ATOM Lite display the Dewhurst start-up animation will show and then the loaded layout will be presented. The layout can be edited by using the layout designer software and update via USB.



4.2 On-board menu configuration

The ATOM Lite features an onboard programming interface allowing the user to make minor configuration changes such as date, time and time zone configuration. This is configured by a menu that appears when SW2 and SW3 tact switches or pushed together.



The respective fields can then be set after the “Entering Menu Mode ...” disappears.

Once the OSD menu is active, you can navigate the menu via tact switch by pressing:

- SW2 for mode select.
- SW3 for item select

5. On-Board Menu Options

Input Type Serial		
Dewhurst 4-Wire		Select the display serial interface * MKCAN Bus not available on ATOM Lite
MKCAN Bus*		

DST Zone		
0		Set device daylight savings time settings.
1 - US		
2 - UK		
3 - AUS		
4 - NZ		
5 - Custom		
	DST Month+	
	DST Day+	
	DST Week Day+	
	DST Month -	
	DST Day -	
	DST Week Day -	

Date/Time		
Year		Set display date & time settings.
Month		
Day		
Hour		
Minute		

Display		
Car		Set display location Car - Car Operating Panel Landing - Landing Panel - Set Landing Address between 1-128
Landing/ Address		
	1-128	

Technical Specifications

SCREEN SIZE

10.4"

Model No.	ATOML-104-1-G0-940
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DISPLAY

LCD Display Type	Thin Film Transistor (TFT)
Colour Depth	True Colour (24-bit colour)
Resolution	800 x 600
Aspect Ratio	4:3
Viewing Area (W x H) (mm)	211 x 159
Horizontal Viewing Angle (°)	+80/-80
Vertical Viewing Angle (°)	+65/-75
Luminance	350
Contrast Ratio	800:1

ELECTRICAL & ENVIRONMENTAL

Operating Voltage (VDC)	24 (Main Screen) 12 (Aux Screen)
Typical Current Consumption (A)	0.6 (Main Screen) 0.5 (Aux Screen)
Typical Power Consumption (W)	14 (Main Screen) 6 (Aux Screen)
Operating Temperature (°C)	0 < 50
Humidity Range (%RH)	10 < 90
Backlight MTBF (Hrs)	50,000

MECHANICAL

Mounting options	Flush Mount
Overall Dimensions ⁴ (W x H x D mm)	280x234x 39
	Main Screen
	280x234x29
	Auxiliary Screen , if required

COMMUNICATION & I/O INTERFACES

Signal Interface	Dewhurst 4-Wire
Network Interface	N/A
I/O Interface	DC-In, DC-Out, HDMI, USB, Audio-Out