



Synerion Horizon Front Panel Installation Guide

Version 1.4 - July 2025

Synerion Horizon Front Panel Installation



GENERAL

The Synerion Horizon Data Collection Terminal is a modular design which can be customised by adding easy to install optional modules to the terminal. The Synerion Horizon terminal includes an inlay which can include customized artwork (subject to minimum order quantities).

- Mains or PoE Power Supply
- Reader module (Proximity and/or Swipe)
- Biometric module
- Enterprise grade WiFi module

Front Indicators



Memory Card Slot

Supports SD flash card

Wireless Module Indicators

- BT Indicator**
- Indicates Bluetooth Enabled (requires supporting module)
- WiFi Indicator**
- Indicates WiFi Enabled

M.2 Port

Supports WiFi extension modules.

USB Ports

Six USB2 full size sockets for devices such as memory stick, barcode scanner, extension modules.

USB Debug Port

For development use, allows loading of applications.

Swipe Reader Module Connector

Reader Modules include

- Mag Swipe
- Barcode Swipe

Speakers (one each side)

2W per channel stereo
High efficiency class D amplifier

Proximity Reader Module Connector

Reader Modules include

- HID Prox and iClass
- Generic Prox 5V or 12V

Camera and Microphone Module

Camera and microphone may be removed by extracting the two screws and withdrawing the module.

Stress Relief Clip*

Self-adhesive clip to protect DC jack socket if/when panel is removed from the wall.

Power over Ethernet (PoE) Module Position

Optional module enables terminal to be powered via the Ethernet cable using IEEE802.3af or IEEE802.3at Ethernet switch or mid-span injector.

Note: It is strongly recommended that POE+ (IEEE802.3at) is used to ensure sufficient power is available for the device.

Battery Connector

For connection of the Li-Ion Battery Pack

EM-BB-2HR-A
Provides up to 2 hour runtime

Battery backup may be used with all power options including PoE.

Warning: Only fit battery pack specified, failure to observe may result in fire hazard.

Battery Housing

Housing for 2 hour battery with securing strap.

Ethernet Connector

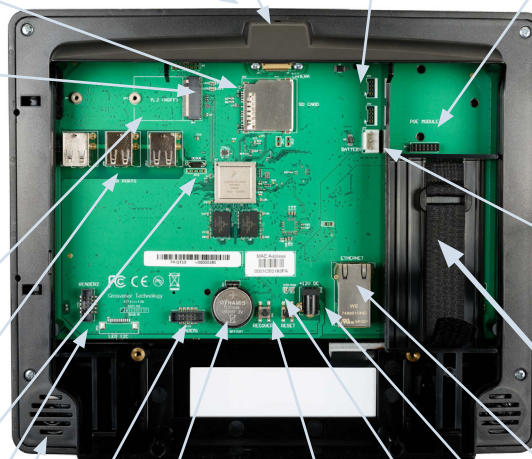
10/100/1000baseT
Full duplex, auto crossover, supports PoE (when optional module fitted)

Power IN Connector (2.1mm)

12V DC External PSU (centre positive) 12V±5% with minimum 2A capacity (refer to Power Loading for current calculation).

PWR Indicator

Indicates 12V power present



RTC Backup Battery

Real Time Clock Backup Battery maintains time during power disconnection. 10 year lifespan.

RECOVERY Switch

Press the Recovery button for Factory Reset.

RESET Switch

Press to initiate hardware reset, terminal will reboot.

*Stress relief clip

To use the clip and protect the DC/Jack socket:

- Twist the cable to create a loop
- Thread the loop through the clip

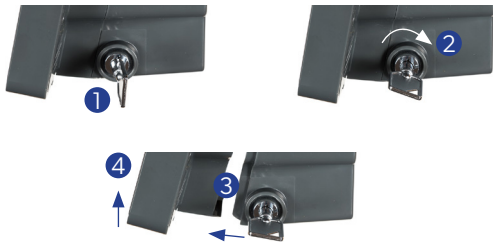


0°C - 35°C (32°F to 95°F) max continuous
Humidity: 5-90% non condensing Weight 1.5Kg (3.3lb)
Power Loading: 620mA @12V Power IN

Synerion Horizon Front Panel Installation

Opening & Fitting Front Panel to Back Panel

1. Insert the key
2. While pressing the key in, rotate clockwise
3. Front panel bottom can now be pulled forward
4. When separated, lift front panel to remove



Fitting Reader Modules

IT series Proximity Reader Modules may be fitted using the two mounting screws provided. Connect the ribbon cable and apply power to the terminal.

The reader type will be automatically detected. Within the Settings menu select Readers & Peripherals to access Reader settings.

Installing the Synerion Horizon

Secure to a vertical surface

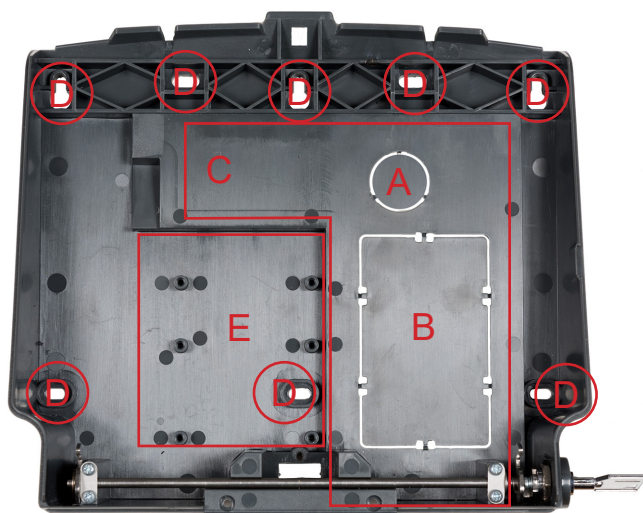
Before mounting the back panel, first fit any Biometric Reader options as these need access from the rear of the unit.

Bring in any cables through snip-out apertures (A or B). Cables may be routed within the cabling cavity between the back panel and mounting surface (C).

For installations in the US, the unit may be mounted over a power outlet with PSU (wall wart) inside the case. For this type of installation snip-out the large aperture (B).

Fix the back panel to a flat vertical surface at a height that will be comfortable for users to see and touch the screen observing any national regulations. Use suitable screws through any of the fixing points (D) circled to firmly secure the device taking care to not overtighten the screws or distort the case.

Extension Modules e.g. EM-IO-USB-IT may be fitted in the area (E)



Synerion Horizon Configuration

To access the Settings menu allow the Terminal to boot then select 'Admin'. A PIN is required to enter setup mode, the default is 1905. From the Apps menu select 'Settings' then select 'Readers & Peripherals'.

