Synerion Swift Front Panel Installation

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GENERAL

The Synerion Swift Data Collection Terminal is a modular design which can be customized by adding additional modules to the basic terminal front panel. For a minimum system the following items are necessary in addition to the Front Panel:

- Back Housing
- Power Supply

Additional modules can be added for further functionality:
- Card Reader Module (Proximity or Swipe)
- Biometric Module
- Battery Backup Module
- External Reader Module
- External I/O Relay Module

Real Time Clock Coin Cell
Maintains the RTC during power off situations. Under normal operating conditions the coin cell will have a service life of up to 10 years.

RECOVERY Switch
Press the Recovery button for Factory Reset.

RESET Switch
Press to initiate hardware reset, Terminal will reboot

Biometric Reader Connector
For Suprema Fingerprint Reader Module

Biometric Reader Position
For Suprema Fingerprint Reader Module

Reader Module Connector
Reader Modules Include
- HID Prox
- Generic Prox 5V
- Generic Prox 12V
- Mag Swipe
- Barcode Swipe

USB Connector
- USB 2 x 4
- Elatec reader modules
- Supports Flash memory stick USB Fingerprint Readers
- Other devices subject to drivers

Mounting points for Reader Module

Front cover fixing screw

Power over Ethernet (PoE) Module Position
Optional module enables terminal to be powered via the Ethernet cable using an IEEE802.3af or IEEE802.3 at Ethernet switch or mid-span injector.

Ethernet Connector
- 10/100baseT
- Full duplex
- Supports PoE (when module fitted)

Auxiliary Power Connector
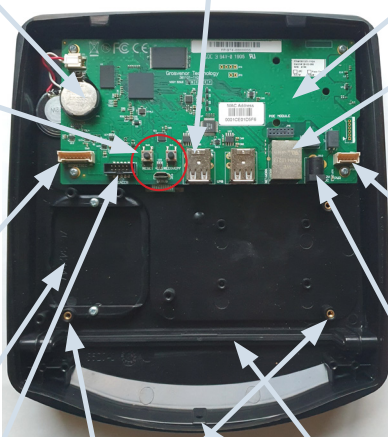For connection of Power Option Modules including
- Battery Backup Module

Power IN Connector (2.1mm)
- 12V DC +/- 10% External PSU (centre positive)
- Power Loading - 220mA @ 12V Power IN

Slot for Swipe Reader
Unit is supplied with slot filler bar
- Remove for Swipe readers
- Fit for Proximity readers

Power Supply

The Synerion Swift Front Panel can be powered from a 12V DC regulated supply via the 'Power In' socket (2.1mm type), using either the wall mount (AE-PSU-WM-12VDC) or the plug top (AE-PSU-NA-12VDC) versions of the power supply.

Further options for powering the device include the following;

Power over Ethernet with optional PoE Module (CM-POE-HC-IT)

A Battery Backup Module (EM-BB-HC-IT/RS) with rechargeable Lithium-Ion Polymer battery can be fitted within the housing to run the terminal during power fail conditions. Reader type and external load will vary backup duration but typically 2 hours can be achieved.

Note: The Battery Backup Module is considered to be a consumable item and will require periodic replacement to maintain functionality.

Refer to Option Module Installation Guide for connection details.

Configuration

Entering Terminal Setup Mode
When the Synerion Swift clock system is powered on, a bootloader runs which loads the Linux operating system. This runs start-up scripts to set up and configure the terminal and to start enabled services. When an application is installed and once the unit is fully booted, the initial screen gives you the opportunity to enter the Terminal Setup by pressing the F8 key. If no key is pressed, the system times out and automatically runs the installed application.

Setup
The setup of the terminal is divided into sections which are displayed in a scroll dialogue. Use the up and down arrows to display more items. An arrow to the right indicates sub-menus for further selections. Press the item in the list to select it.

Application Setup
The application section allows management of the user application running in the terminal including installation, removal, update etc. Additionally, the setup item within the Application section allows parameters within the application to be changed, for example enabling menu items, host communications settings, etc. These items are specific to the application and so will vary according to how the user application has been written.

Firmware Setup
The firmware section allows management of the terminal firmware - this is effectively the operating system that sits beneath the application and includes the Linux kernel, boot loader as well as functions and utilities. The firmware may be updated locally via USB or remotely by specifying a URL. If Automatic update is selected the terminal will periodically check the URL for an update and if a different version is found will perform the update and re-start itself.

Further options within the firmware section include setting the PIN for accessing the setup menu, a reset to factory default for all settings and terminal re-boot.

Services
This menu allows services to be enabled or disabled such as Telnet, NTP, SSH, AssistIT and VNC. Some of the services have security implications so by default only NTP is enabled. NTP is the recommended method of time synchronisation.

Settings
Here general settings for the terminal may be made including:

- Date and Time - Set date, time, timezone
- Region and Language
- Network - IP address, DHCP etc.
- Display - Brightness
- Sound - Volume and microphone level
- Reader - Select card reader type, the default is Auto Detect which uses the Plug and Play to detect the reader module installed. The decoder for the card data is also set here which may be specified or automatically detected. A utility is also included to test the reader and shows card data read
- Biometric - Configure the fingerprint reader, includes utilities for testing and clearing the biometric module.
- I/O Module - Test outputs and monitor input states

USB
This option runs a file explorer which allows viewing and execution of files on inserted USB memory devices.

On selecting this menu a list of inserted devices is displayed, select the required device and press the next button.

The file list is displayed with directories having an arrow to the right indicating that the item can be explored further by selecting.

If setup files are in the root directory a prompt is given to choose between running the setup file or exploring the device.

Installing an Application
The terminal is shipped with a factory application installed which allows easy setup. Installation of user applications can be done either via the network or from a USB memory stick. From the main screen select Net Setup or USB setup, note that the USB option only appears when a USB memory stick is inserted.

Net Setup
To use network setup the network parameters must have been setup and the terminal connected to a network with access to the Internet, if not connected to a network the Net Setup button will not appear.

Pressing the Net Setup
button will prompt for an ID number to be entered. This number identifies the application and setup to be loaded. Following entry of the ID, a PIN is required to be entered for authorization. Once the download is complete the terminal will restart with the new application.

USB Setup
With a memory stick installed the USB Setup button appears. Selecting this option shows the file found and prompts for confirmation. Continuing with the operation will load the file and restart the terminal with the new application.

From Application Setup
The application may be loaded using either of the above techniques from the Application Setup menu in Terminal Setup. If the factory application is no longer loaded it can be restored using Net Setup by using an ID of 0 and PIN 1905. To ensure the Net Setup is pointed to the default URL it may be necessary to first restore factory defaults in the Terminal Setup Firmware menu.

Embedded Software License
This product contains some open source software modules, a list of the software versions used can be found on website www.grosvenortechnology.com.

Copies of the General Public License (GPL) can be found at:http://www.gnu.org/licenses/gpl.html.

User Guide
Please refer to the user guide for full setup and configuration information.