Storm EZB Series NavBar and Audio Module User Manual

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Storm EZB Series NavBar and Audio Module User Manual

Product Features

Kiosks, ATMs, ticketing machines and voting terminals usually present Information about available products and services via a visual display or touch screen. The NavBar™ is a highly tactile interface that have been designed to facilitate audio navigation of software applications by those with sensory or mobility impairment. An audio description of available menu options can transmitted to the user through a plug-in audio headset. When the desired page or menu option is located, it can then be selected by the press of a distinctive tactile button.

An important feature of the module is that it provides compliance as far as is practicable with various country standards for equipment use by disabled people, including the Americans with Disabilities Act (ADA – USA) , the Disabilities Discrimination Act (DDA – EUR) & the Equality Act (UK)

Internal colour coded illumination makes location of individual keys much easier for those with partial vision. The keytop's distinctive shape and tactile symbols provide the primary means of identifying a key's specific function. The intensity of keytop illumination can be adjusted or turned off when not in use. By use of the NavBar™ utility software, default illumination status and 'wake-up' behaviour can be selected. The USB codes can also be changed. Connection to the host is via a single USB cable.

NavBar

- Keypad can be specified with coloured keys or white illuminated
- Illuminated keys can be individually controlled in software
- Reverse printed silver or black colour front
- Designed for both top fixing or under panel installation to a 2mm – 2mm panel only.
- Mini USB socket for connection to host

Audio Module

- Available for Vertical or Horizontal installation underpanel
- Raised Headphone symbol
- Volume up/down rocker key
- Illuminated 5mm audio jack socket (illumination under software control)
- Supplied with a 75m ribbon cable to allow easy connection to the NavBar™.

USB Interface

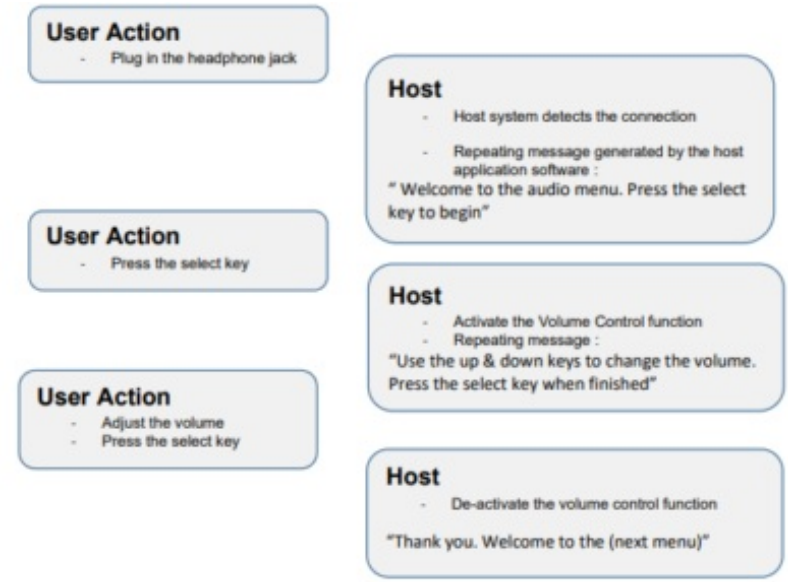
- HID keyboard
- Supports standard modifiers, e. Ctrl, Shift, Alt
- HID consumer controlled device
- Advanced audio device
- No special drivers required
- Audio Jack Insert / Removal sends USB code to host

Support

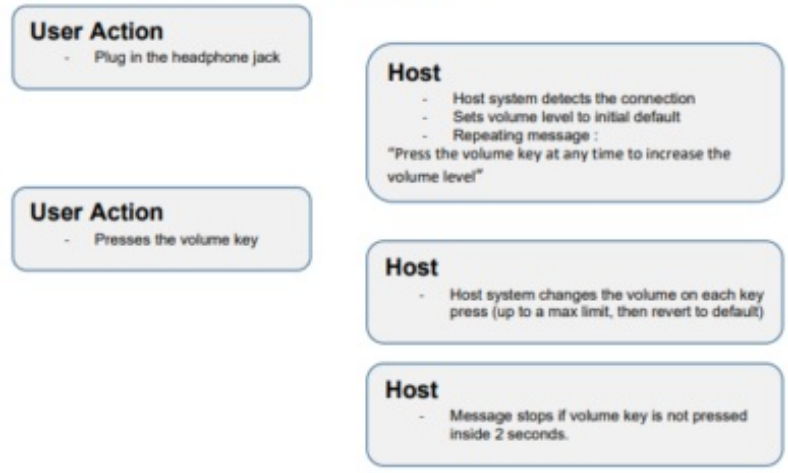
- Windows Utility for changing the USB Code Tables
- API for custom integration
- Remote Firmware update support

Please note: The audio processor is contained within the NavBar™ (not within the Audio Module itself).

Typical method for audio module volume control using the API



Alternate method for audio volume control using the API



Product Range

Storm ATP NavBar™,
Silver with White Keys,
Surface or Under panel Install

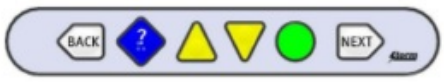
EZB6-5300

Storm ATP NavBar™,
Black with White Keys,
Surface or Under panel Install

EZB6-6300

Storm ATP NavBar™,
Black with Coloured Keys,
Surface or Under panel Install

EZB6-7300



Storm ATP NavBar™,
Silver with Coloured Keys,
Surface or Under panel Install

Audio Module

Audio Module
Silver or Black Label,
Horizontal or Vertical Orientation

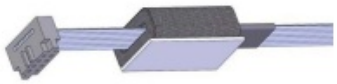
Product Range: Part Numbers

EZB6-43000 Storm ATP NavBar™, Silver with White Keys, Surface Fix EZB6-43002 Storm ATP NavBar™, Silver with White Keys, Under panel
EZB6-53000 Storm ATP NavBar™, Black with White Keys, Surface Fix EZB6-53002 Storm ATP NavBar™, Black with White Keys, Under pane
EZB6-63000 Storm ATP NavBar™, Black with Coloured Keys, Surface Fix EZB6-63002 Storm ATP NavBar™, Black with Coloured Keys, Under panel
EZB6-73000 Storm ATP NavBar™, Silver with Coloured Keys, Surface Fix EZB6-73002 Storm ATP NavBar™, Silver with Coloured Keys, Under panelEZB2-40500 Audio Module (Vertical) Silver, with Interconnect Cable EZB2-405H0 Audio Module (Horizontal) Silver, with Interconnect Cable
EZB2-50500 Audio Module (Vertical) Black, with Interconnect Cable EZB2-505H0 Audio Module (Horizontal) Black, with Interconnect Cable

Accessories / Cables

Description	Stock Code

Description	Stock Code
SPARE INTERCONNECT CABLE 0.75m	EZB2-01



USB CABLE MINI-B TO TYPE A, 0.9m	4500-01

Specifications

Rating	**5V ±0.25V (USB 2.0)**
Connection	**mini USB B socket**
Audio	**3.5mm audio jack socket (illuminated)**
Ground	**150mm ESD ground wire fitted to audio module**
USB Cable	**Not Included**
Interconnect cable	**0.75m cable (NavBar to Audio Module) included with Audio Module**

Dimensions (mm)	**W x**	**H x**	**D**	**Packed**	**W x**	**H**	**x**	**D**	**Kilos**
NavBar™ ABOVE PANEL	208	37	16	>	230	50		30	0.16
NavBar™ UNDER PANEL	211.5	53	29	>	230	50		30	0.16
Audio Module	107.5	32.5	26	>	140	70		40	0.16

Mechanical

Operational Life	4 **million cycles (min) per key**

Performance/Regulatory

Operational Temp	**20°C to +70°C**
Impact Rating	**1K09 (10J)**
Vibration & Shock	**ETSI 5M3**
Water / Dust sealed	**IP65**
Certification	**CE / FCC / UL**

Connectivity

The USB interface comprises an internal USB hub with connected keyboard and audio module. This is a composite USB device and no additional drivers are required.
Wake-up behaviour: NavBar™ keys are illuminated when audio jack inserted. (and then dim when jack is removed)
PC based software utility and API are available to set/control: –

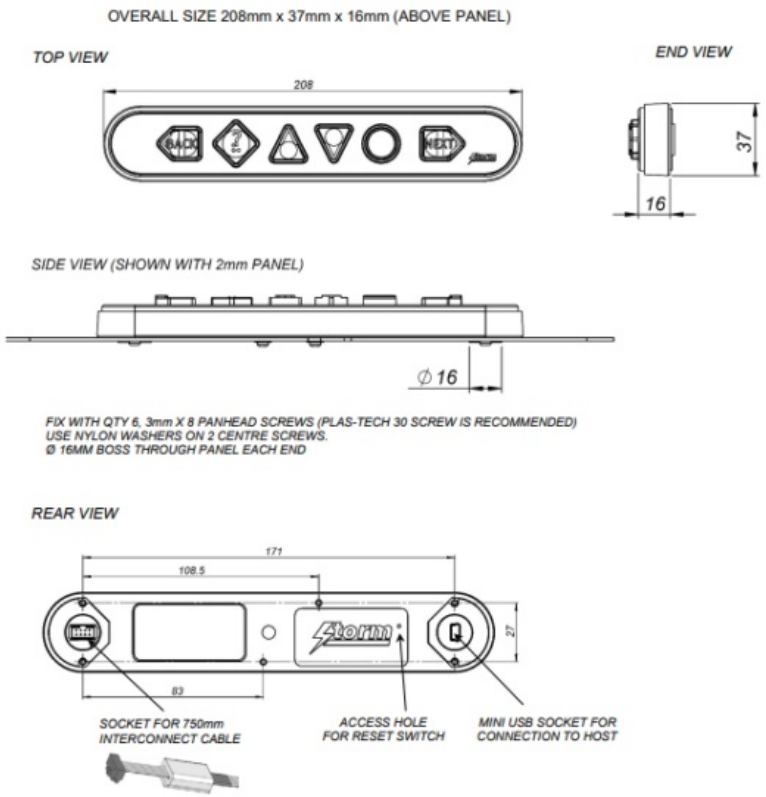
- Volume key function
- Illumination level / selectively control for individual keys
- Customise the USB codes

Installation

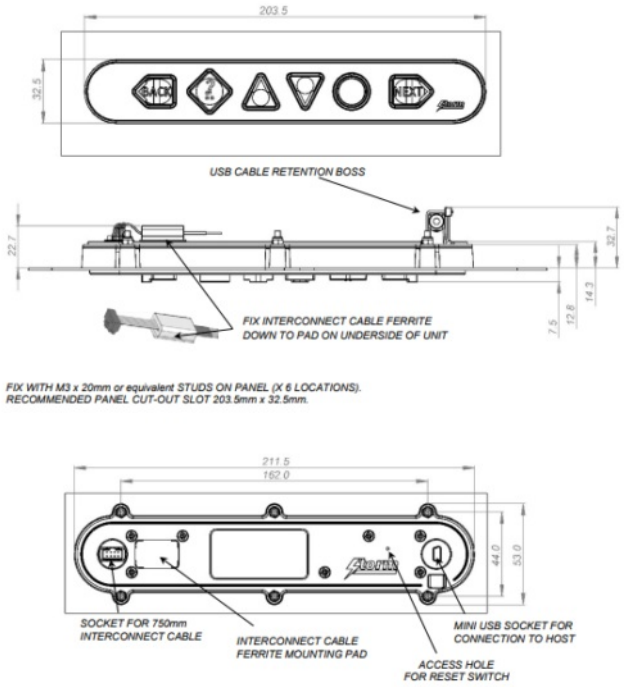
The NavBar™ can be supplied as a surface fix or under panel install product (panel thickness of 1.2mm – 2mm only.) Ensure that you purchase the correct version for your application. Note that the Audio Module is under panel installation only.

NavBar™ ABOVE PANEL

DIMENSIONAL DETAILS



FIX WITH QTY 6, 3mm X 8 PANHEAD SCREWS (PLAS-TECH 30 SCREW IS RECOMMENDED) USE NYLON WASHERS ON 2 CENTRE SCREWS.
Ø 16MM BOSS THROUGH PANEL EACH END

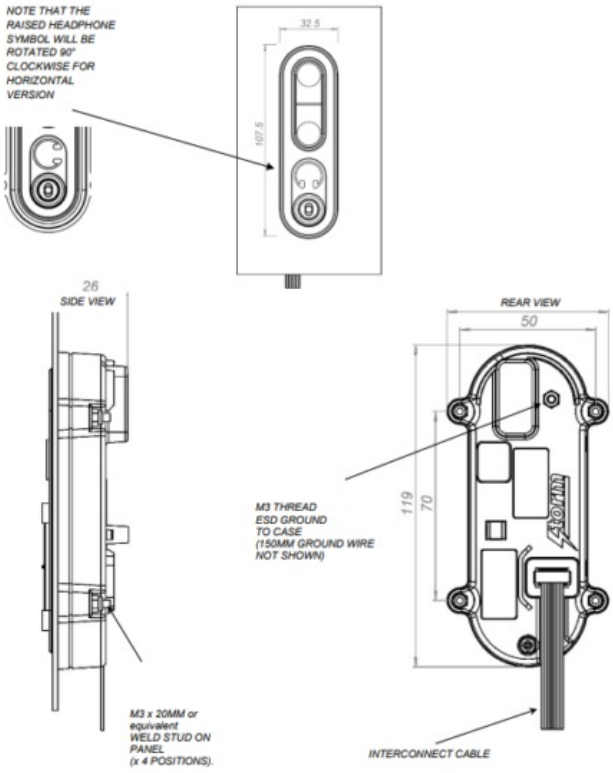


Installation

NavBar™ UNDER PANEL

DIMENSIONAL DETAILS

OVERALL SIZE 211.5mm x 53mm x 29mm RECOMMENDED PANEL THICKNESS 1.2mm TO 2mm



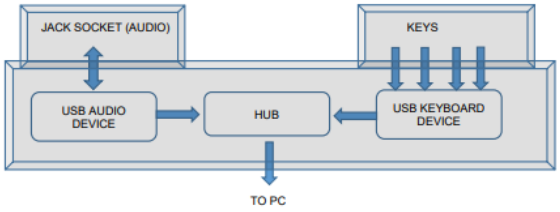
Installation

AUDIO MODULE – UNDERPANEL ONLY

SB Device Information

USB HID

The USB interface comprises a USB HUB with keyboard device and audio device connected.



The following VID/PID combinations are used:

For USB HUB: For Standard Keyboard/Composite HID/ Consumer Controlled device For USB Audio device

• VID – 0x0424	• VID – 0x2047	• VID – 0x0D8C
• PID – 0x2512	• PID – 0x09D0	• PID – 0x0170

This document will concentrate on the Standard Keyboard/Composite HID/Consumer Controlled device. This interface will enumerate as

- Standard HID Keyboard
- Composite HID-datapipe Interface
- HID Consumer Controlled device

One of the advantages of using this implementation is that no drivers are required.
The data-pipe interface is used to provide the host application to facilitate customisation of the product.

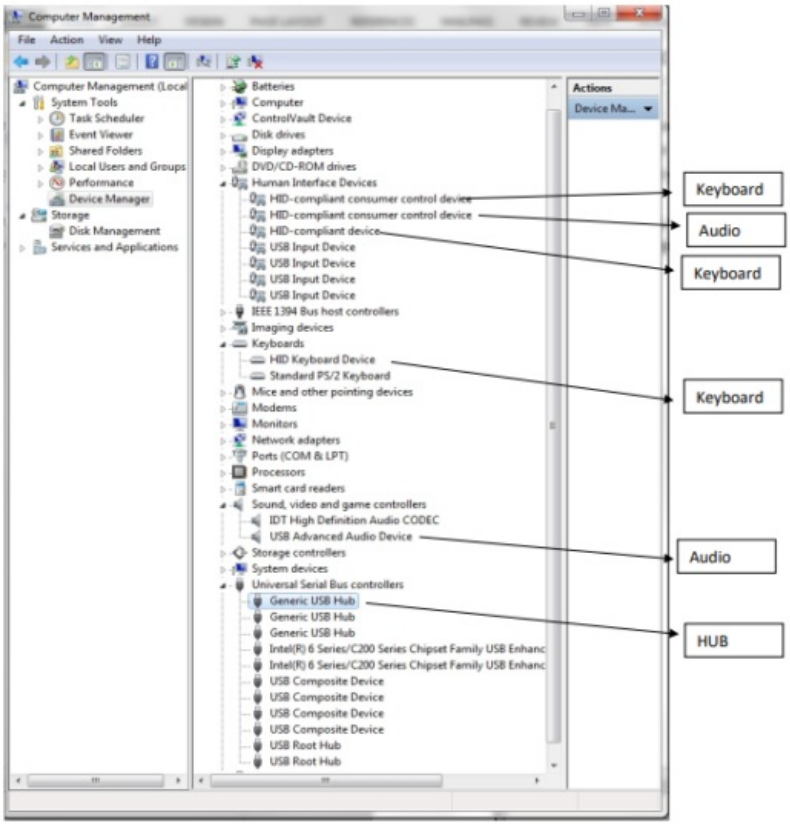
Supported Audio Jack Configurations

The following jack configurations are supported

Notes: Application software should always ensure the same audio is present on both Left and Right Channels for correct mono operation. Headsets with microphones can be used but there is no microphone support.

Device Manager

When connected to a PC, the keypad should be detected by the operating system and enumerated without drivers. Windows shows following devices in the Device Manager:
(Note that other audio devices will need to be disabled in Device Manager otherwise they will take priority).



Code Tables

The factory defaults are shown below. The customer can use the utility or API to assign any HID USB code and if volume up/down is selected the keys will act as multi-media volume up/down.

White Keys **Coloured Keys**

Change History

Technical Manual	Date	Version	Details
	17 Oct 16	1.0	First Release
	17 Nov 16	2.0	Updated
	03 Mar 17	2.1	Minor change – Config Utility updated (see below) + Firmware update.
	04 Jul 17	2.2	Added new part numbers.
	08 Sep 17	2.3	Added Remote Update Instructions
	25 Jan 18	2.3	Added RNIB logo
	03 Apr 19	2.4	Updated RNIB logo + corrected pic on front page
	10 Feb 20	2.4	WARF info removed page 1 – no issue change
	29 Apr 20	2.5	Product is now NavBar (not Nav-Bar)
	18 Sep 20	2.6	Added note regarding Reset Switch location
	15 Aug 24	2.7	Split out Config / API / Downloader instructions int o separate docs.

Product Firmware	Date	Version	Details
	17 Oct 16	3.0	First Production Release
	03 Mar 17	4.0	Improve stability
	07 Nov 17	5.0	Jack In debounce reduced to 200 msec, improve d recovery, 8 digit SN support

Read More About This Manual & Download PDF:

Documents / Resources

	**Storm EZB Series NavBar and Audio Module** [pdf] User Manual EZB Series NavBar and Audio Module, EZB Series, NavBar and Audio Module, Audio Module, Module

References

- **User Manual**