



## AudioNav EF Keypad

AudioNav EF is an assistive USB device enabling software navigation by means of audio direction.

Users with impaired vision, reading difficulties or impaired fine motor skills can navigate through menus or directories that would typically be presented on a visual display or touch screen. Screen content is described by recorded or synthesized language via a headset or handset. Menu pages and available options can then be navigated and selected using this responsive and highly tactile keypad device.

The EF product designation refers to Extended Functionality denoting that this device includes provision for adjustment of both sound volume and speed of audio playback. For applications requiring voice reception the device also supports the use of headsets and handsets with integrated microphones.

AudioNav EF is intended for use as the tactile/audio interface for any ADA or EN301-549 compliant application such as ATMs, kiosks, ticketing machines, vending machines etc.

- Enumerates as a combination HID keyboard/Advanced Audio device.
- Highly visible with integrated illumination for those with 'low vision'.
- Highly tactile for ease of use by those with impaired vision or limited reading ability.
- Keytop surfaces, with embossed tactile symbols are raised above surrounding surfaces.
- Responsive keys move with a positive tactile dynamic.
- 3.5mm Audio jack socket with integrated microphone support, illuminated for ease of location.
- Integrated sound volume and audio playback speed control.
- Designed for fixed, under-panel, installation in host equipment.
- Connection to host via a single USB cable (supplied separately).
- Robust, water resistant construction, for use in exposed or semi-supervised applications.
- Compliant with current accessibility mandates.

Storm Assistive Technology Products provide improved system accessibility for those with impaired vision, restricted mobility, limited dexterity or reading difficulties.



### Performance

Vibration & Shock: ETSI 5M3  
 Impact Resistance: IK09 (10J rating)  
 Certification: CE / FCC / UL  
 EMC: EN55032 Class B (Emissions)  
 EN55035 (Immunity)  
 FCC: CFR47:2008 (Part 15 Sub Part B)  
 ESD Immunity: 15kV Contact and Air  
 EN 301 549 / ADA: Compliant

### Environmental

Operational temperature: -20°C to +70°C  
 Weather Resistance: IP65 (when panel mounted)

### Specification

O/S Compatibility: Windows 10 / Windows 8 / Windows 7  
 Rating: 5V ± 0.25V (USB 2.0)  
 Connection: Mini USB B Socket  
 Audio: 3.5mm Audio Jack Socket (Illuminated)  
 Underpanel depth: 28mm

AudioNav EF Keypad	Part Numbers
AudioNav EF, 9 Key, USB Audio (for vertical installation)	1409-34011
AudioNav EF, 9 Key, USB Audio (for horizontal installation)	1409-34013
USB 2.0 Cable, 90cm long, angled mini-B male connector to Type A male connector	4500-01

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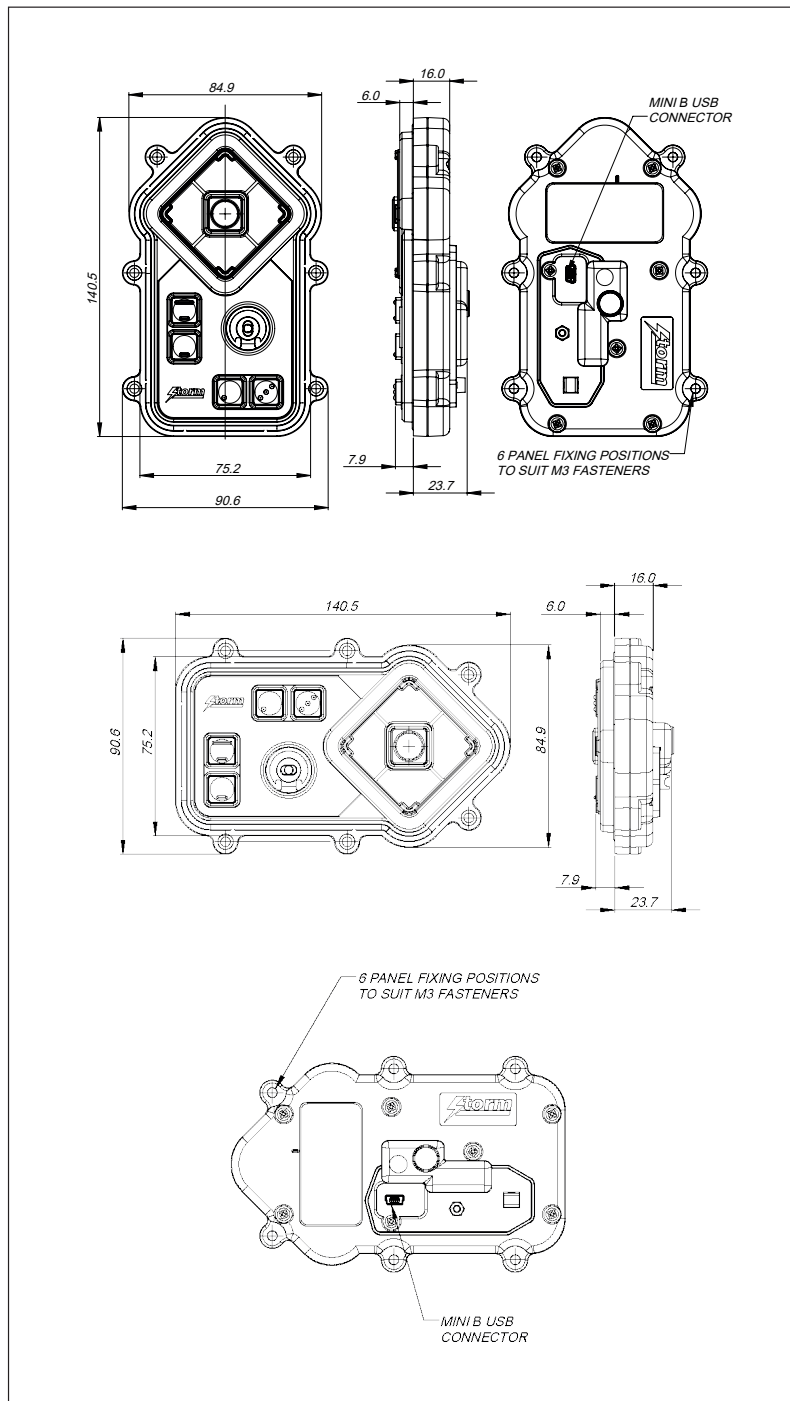
For more information & to order visit:  
[www.storm-interface.com](http://www.storm-interface.com)

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Whilst every effort is made to ensure details are correct at time of print, specifications are subject to change without notice.



All dimensions are in mm. Dimensions are the same for both the horizontally and vertically configured versions of AudioNav EF.



The AudioNav EF is designed for underpanel installation. Both vertical and horizontal versions are available.

When connected to a PC, the keypad is detected by the operating system and enumerates as a combination HID/ Advanced Audio device without the requirement for any additional drivers.

Speech volume is controlled within Windows Multimedia in response to key presses. The speech rate control is as set and controlled by the host application in response to key presses.

PC based software utility and API are available to set/control:

- Audio output volume is controlled by Windows Multimedia in response to key presses on the AudioNav device. The speed of audio program playback is controlled by the host application in response to key presses on the AudioNav device.
- Code tables (USB keycodes can be modified to suit your application)
- A software utility (running on PC) and API are available to configure and control:-
  - Integral illumination of the AudioNavEF device. (By default all LEDs illuminate when an audio jack-plug is connected).
  - Pre-set key press codes. (USB /Hex codes can be modified to suit specific applications).

KEY PRESS FUNCTIONALITY	OUTPUT CODES	
	Hex	USB Description
Right	0x4F	Right Arrow
Left	0x50	Left Arrow
Down	0x51	Down Arrow
Up	0x52	Up Arrow
Select	0x28	Enter
Jack IN	0x6A	F15
Jack OUT	0x6B	F16
Increase Volume	01 02	Windows Multimedia Codes
Decrease Volume	01 04	
Increase Playback Speed	0x72	F23
Reduce Playback Speed	0x73	F24

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