

AudioNav Config Utility



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System Requirements

The utility requires .NET framework to be installed on the PC and will communicate over the same USB connection but via the HID-HID data pipe channel, no special drivers are required.

Compatibility

Windows 11 ✓ Windows 10 ✓

The utility can be used to configure the product to

- Select Code Table
- LED brightness (0 to 9)
- Test AudioNav
- Create customised keypad table
- Configure Bluetooth settings
- Reset to factory default
- Load Firmware



Installing the Configuration Utility

To install the Configuration Utility download from <u>www.storm-interface.com/downloads</u>, double click on the downloaded .exe file and the Setup Wizard will launch

🖞 StormAudioNavUtility	😸 StormAudioNavUtility
Welcome to the StormAudioNavUtility Setup Wizard	License Agreement
The installer will guide you through the steps required to install StormAudioNavUtility on your computer.	Please take a moment to read the license agreement now. If you accept the terms below, click "I Agree", then "Next". Otherwise click "Cancel".
	User License Agreement and Intellectual Property Rights Notice for the Storm Interface Keypad Configuration Utility hereafter referred to as the "Software Product".
WARNING: This computer program is protected by copyright law and international treaties. Unauthorized duplication or distribution of this program, or any portion of it, may result in severe civil or criminal penalties, and will be	 This Storm Interface Software Product User License Agreement (hereafter referred to as the "ULA") is a legal agreement for the Software Product in which this ULA is contained. The Software Product includes computer software, digital images and associated media, printed
Cancel < Back Next>	I Do Not Agree O I Do Not Agree Cancel Agree

Click on "Next"

Select "I Agree" and Click on "Next"

😸 StormAudioNavUtility	😸 StormAudioNavUtility
Select Installation Folder	Confirm Installation
The installer will install StormAudioNavUtility to the following folder.	The installer is ready to install StormAudioNavUtility on your computer.
To install in this folder, click "Next". To install to a different folder, enter it below or click "Browse". Eolder: C:\Program Files (x86)\Storm Interface\StormAudioNav Disk Cost Install StomAudioNavUtility for yourself, or for anyone who uses this computer:	Click "Next" to start the installation.
© Just me	
Cancel KBack Next>	Cancel < Back Next>
Select if you would like to install for just you or	

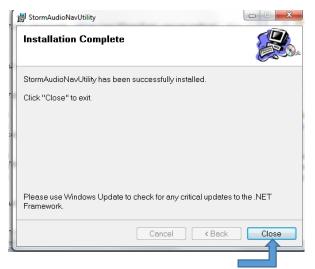
everyone and select location if you do not want to install at default location. Then click on "Next" Click on "Next" to confirm.

The "Disk Cost" shows available space at your chosen folder. The program requires 10MB of space.

AudioNav Config Utility



[1	StormAudioNavUtility	
	Installing StormAudioNavUtility	
	StormAudioNavUtility is being installed.	
1	Please wait	
1		
1		
	Cancel	<back next=""></back>



Click on "Close" for successful installation.

A shortcut will be installed on Desktop.



Double-click this to start the Utility..

If an AudioNav device is connected it will be detected automatically and the details displayed in the blue panel at the top

orm AudioNav Configura	tion Utility		
le Help			
	Storm Au	idioNav Configu	ration Utility
Scan For		Default Table	rmware Version - V5.0 Product Version - OUT HV Status : HORIZONTAL
Default Table	~	LED Brightness - 6 🗸 🗸	Test AudioNav
Customise Table		Reset From Configuration File	Save Changes
			TouchLess Settings
Update Aud Firmwa		Reset To Factory Default	E×it



The following functions are available and will be described on the following pages :-

- Select a Code table
- Create a customised code table
- Change the LED brightness
- Test the AudioNav
- Update the Firmware
- Reset the AudioNav to factory defaults
- Configure Bluetooth Touchless settings
- Reset the AudioNav from a saved configuration



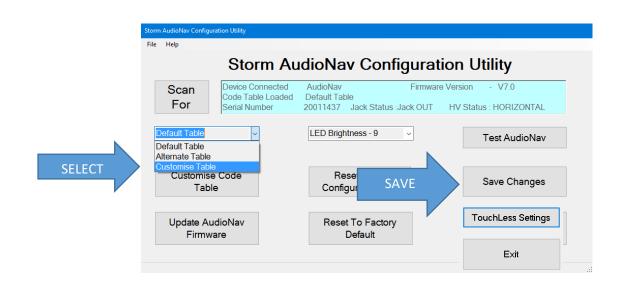
Select a Code Table

The user can select from three standard tables:

		DRY DEFAULT T CODE TABLE	=	TERNATE DE TABLE	CUSTOMISED CODE TABLE
Function	Hex	USB Description	Hex	Description	
Right	0x4F	Right Arrow	0x4F	Right Arrow	Set initially to the
Left	0x50	Left Arrow	0x50	Left Arrow	factory default values
Down	0x51	Down Arrow	<0x01><0x04>	Multimedia Vol Down	
Up	0x52	Up Arrow	<0x01><0x02>	Multimedia Vol Up	
Select	0x28	Enter	0x28	Enter	
Jack IN	0x6A	F15	0x6A	F15	
Jack OUT	0x6B	F16	0x6B	F16	
Volume	0x6C	F17	0x6C	F17	
Orientation	Switch				
Landscape	0x6D	F18	0x6D	F18	
Portrait	0x6E	F19	0x6E	F19	

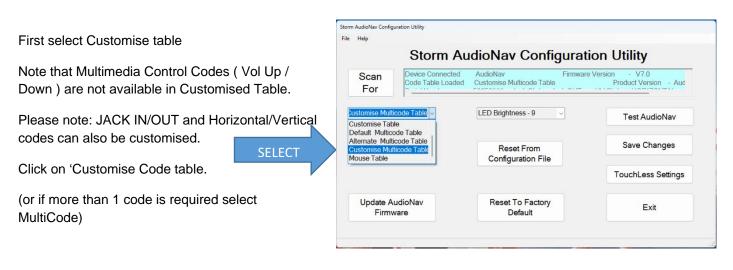
Once a table has been selected then the keypad will hold that configuration unless it is disconnected.

Once the keypad has been disconnected that configuration will be lost unless you save the configuration in memory by clicking on "Save Changes"



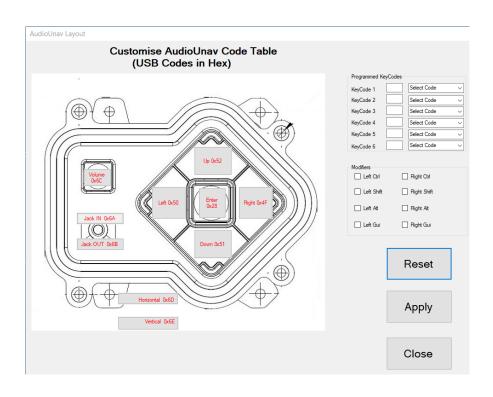


Create a Custom Code Table



The following will be displayed.

For each key you can assign one or more key codes, and also add modifier if required



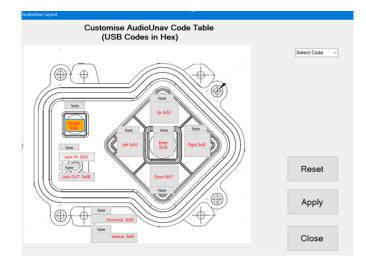


Choosing a USB Code

The current customised code table will be displayed from memory on the keypad. Attached to each key is another button ("NONE"), this shows the modifier for each key.

To customize a key, click on the key and Key Code combo box will appear, with "Select Code"

The button colour will change to "Orange"



Customise AudioUnav Code Table (USB Codes in Hex)

 \oplus

Now press on the down arrow on the combo box: This will display all the codes that can be selected.

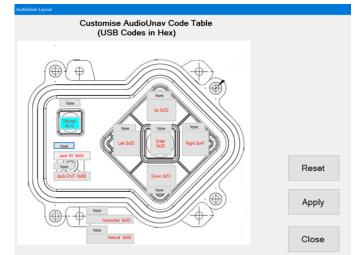
These codes are the ones defined by USB.org.

Once code is selected, the code will be displayed on the selected button.

In this example I have selected "e" and code is represented by 0x08 and button colour will change to Aqua.

Press the "Apply" button and the code will be sent to the AudioNav.

When you press key "Down" on keypad, "e" will be sent to the relevant application.

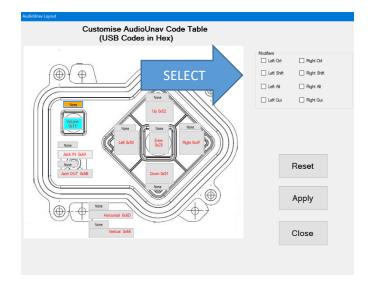




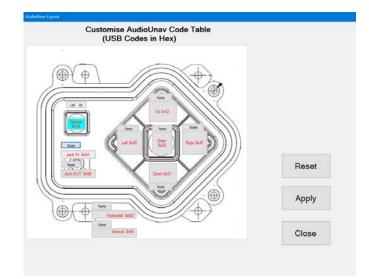
Adding a modifier

Now if you wanted a "E" (uppercase) then you need to add a SHIFT modifier for that key.

Tick the modifier for that key.



The selected Right SHT modifier is now displayed on the button and background colour changed to grey. Now if you click on "Apply" and if successfully transferred then pressing "down" on keypad will display "E" (uppercase).



If you did not want the current setting then click on "Reset" then all buttons will revert to original coding and then click on "apply" to send this coding to the AudioNav keypad. "Close" will exit the customize form .

Storm AudioNav Configur	ation Utility		
File Help			
	Storm Au	idioNav Configura	ation Utility
Scan For	Device Connected Code Table Loaded Serial Number	AudioNav Firmv Default Table 20011437 Jack Status :Jack OU	vare Version - V7.0 T HV Status : HORIZONTAL
Default Table	~	LED Brightness - 9 v	Test AudioNav
Customise Table		Reset From Configuration File	Save Changes
Update Au Firmwa		Reset To Factory Default	TouchLess Settings
			Exit

Press "Save Changes"



LED Brightness

This will set the brightness of the LEDs. The selection is from 0 to 9.

Help			
	Storm Au	dioNav Configu	ration Utility
Scan For	Device Connected Code Table Loaded Serial Number	Default Table	rmware Version - V7.0 DUT HV Status : HORIZONTAL
efault Table	, ,	LED Brightness - 9 LED Brightness - 5 LED Brightness - 6 LED Brightness - 7	Test AudioNav
Cust	SELECT	LED Brightness - 8 LED Brightness - 9	Save Changes
Update Au Firmw		Reset To Factory Default	TouchLess Settings
			Exit



This will test all the functions :-.

- illumination dimming levels
- Key test
- Jack in/out
- H/V Switch
- Audio test

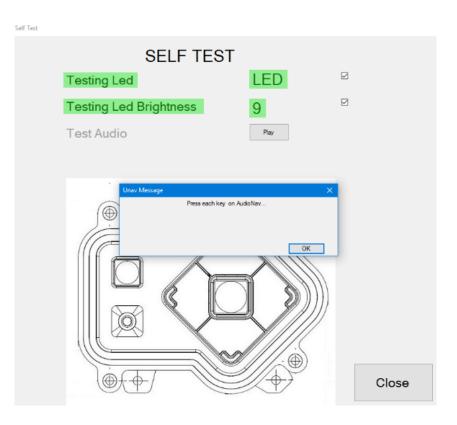
			Config Utilit
S	Storm AudioNav Configuration Utility		
	File Help		
	Stor	m AudioNav Configu	ration Utility
s	Scan For Device Co Code Tabl Serial Nun	e Loaded Default Table	rmware Version - V7.0
	Default Table ~	PRESS TO START TEST	Test AudioNav
	Customise Code Table	Reset From Configuration File	Save Changes
	Update AudioNav Firmware	Reset To Factory Default	TouchLess Settings
			Exit

AudioNav

First test the audio (make sure it is set as the default device).

If the AudioNav supports mic input then you will be prompted to test the mic

Now press each key on keypad, each key will light up on screen.



Press close when finished.



AudioNav Config Utility

Touchless Settings

If the AudioNav includes Bluetooth then with the utility you can :-.

- Enable / disable bluetooth functionality
- Rename the device this name appears when connecting.
- Product Type can be set to Landscape / Portrait
- Enable / disable Trackpad in the Touchless-CX app.
- Adjust the Bluetooth operation range

The Bluetooth range is set by a combination of

- Transmit power level (from the AudioNav)
- RSSI level (as seen in the Touchless-CX app)
- Signal strength drop (as seen in the Touchless-CX app).

The signal strength is monitored by the Touchless-CX app :-

- It looks for Storm Bluetooth devices
- If it detects one and the RSSI level is greater than the level set then it will connect
- It records the initial signal strength on connection
- The signal strength will decrease when the user walks away from the kiosk
- When the signal strength drops by the figure set in RSSI Disconnect margin and remains low for 10 seconds then the app will automatically disconnect.

The factory default settings give an effective range of 1.5m. They are as follows

RSSI level range (for initi	al connection) 90 dbm	If you reduce this figure the range will increase
Transmit Power level	2.5 dbm	If you increase this figure the range will increase
RSSI Disconnect Margin	5 dbm	If you increase this figure then you will need to move further away from the kiosk to initiate automatic disconnection

If Bluetooth has been disabled then you can re-enable it

Enable Bluetooth	Yes 🗸
Bluetooth Device Name	STORM 003
Product Type	AudioNav - Lands 🗸
Trackpad	Yes 🗸
RSSI level range (dbm)	80 ~
Power Level	0dbm ~
RSSI Disconnect Margin (dbm)	10 ~
	Cancel
	Apply



Update the Firmware

	ation Utility		
e Help			
	Storm Au	idioNav Configurati	on Utility
Scan For		/ daloridi	Version - V2.0 ct Version - AudioNav(168) HV Status : VERTICAL
Default Table	×	LED Brightness - 9 v	Test AudioNav
Customise		Reset From	Save Changes
Table	3	Configuration File	
Table	9	Configuration File	TouchLess Settings

Check the correct hardware device is connected

Press Yes

Firmwa	re Upgrade 🛛 🕹	
?	Warning!, you are upgrading with product file AudioNav(168), please make sure you have correct hardware connected. do you want to continue?	
	Yes No	

	Storm AudioNav Firmware Upgrade	×
ROWSE for the file ress UPGRADE nd CLOSE	Select which firmware to download Select Rimware File to download	Upgrade
	VID 0x2047 PID 0x0200	Found 1 device



Reset the AudioNav to Factory Defaults

Clicking on "Factory Default" will Help reset the keypad to factory settings Storm AudioNav Configuration Utility Code Table - Default V7.0 Firmware Version **Device Connected** AudioNav Scan LED brightness - 9 Code Table Loaded Default Table For Serial Number 20011437 Jack Status :Jack OUT HV Status : HORIZONTAL LED Brightness - 9 Default Table \sim \sim Test AudioNav Customise Code **Reset From** Save Changes Table Configuration File PRESS TO RESET Reset To Factory TouchLess Settings ⊢ırmware Default E×it

Reset the AudioNav from a saved Configuration

You can load the saved settings onto another AudioNav.

This is useful (for example) you have set up a customised table and you wish to load this table on a number of devices

e Help			
	Storm Au	udioNav Configura	ation Utility
Scan For	Device Connected Code Table Loaded Serial Number	AudioNav Firmw Default Table 20011437 Jack Status :Jack OUT	are Version - V7.0 HV Status : HORIZONTAL
Default Table	~	LED Brightness - 9 v	Test AudioNav
Customise Table		Reset From Configuration File	Save Changes
	e RESET ulorvav		Save Changes TouchLess Settings

Press to reset to load the saved settings from the previous device onto the device that is currently connected



Change History

Instructions for	Date	<u>Version</u>	Details
Config Utility	13 Sep 19	1.0	First release (split out from AudioNav tech manual
	02 Sep 20	1.1	Page numbers added to ToC
	06 Jan 21	1.2	Utility update
	01 Oct 21	1.3	Add Bluetooth options
	21 Feb 23	1.4	Updated screenshots
	19 Dec 23	1.5	New instructions for remote update
	07 Mar 24	1.6	New ver Utility 13
	15 Aug 24	1.7	Removed API (split out into separate document)
	18 Nov 24	1.8	Added screenshot for multicode

Configuration Utility	Date	<u>Version</u>	Details
	29 Jul 15	2.0	First Release
	08 Sep 17	3.0	Added Win 10 Compatibility
	20 Sep 20	4.0	Recompiled with Visual Studio 2017 (includes more system dll files)
	20 Nov 20	4.1	Bug fix ref PDR3477– image file was missing from package causing Exception Error in customise code function.
	06 Jan 21	5.0	Added test of mic function
	10 Jun 21	6.0	Added support for multicode key press
	02 Aug 21	7.0	Added Bluetooth option
	01 Sep 21	8.0	Added function to enable BLE
	17 Jan 22	9.0	New user license agreement & remove BLE timeout function
	05 Sep 22	10.0	Added additional orientations
	21 Feb 23	11.0	Added support for product type. Before firmware is upgraded the app warns customers to make sure correct hardware is plugged. It also reports what hardware version is connected.
	07 Mar 24	13.0	Now compatible with .NET8