Windows Utility

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 www.storm-interface.com/downloads, double click on the downloaded .exe file and the Setup Wizard will launch

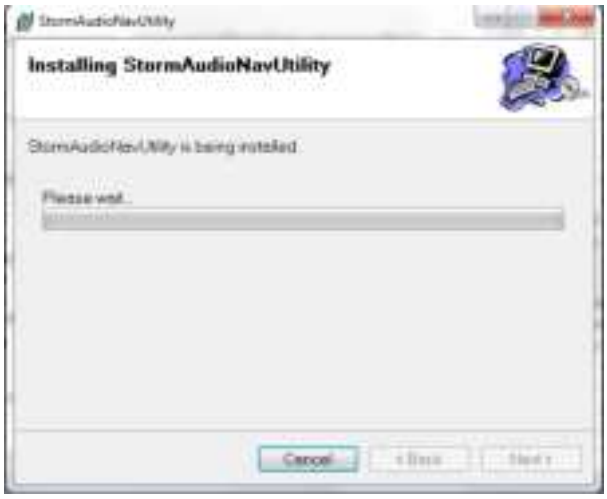
Click on “Next”

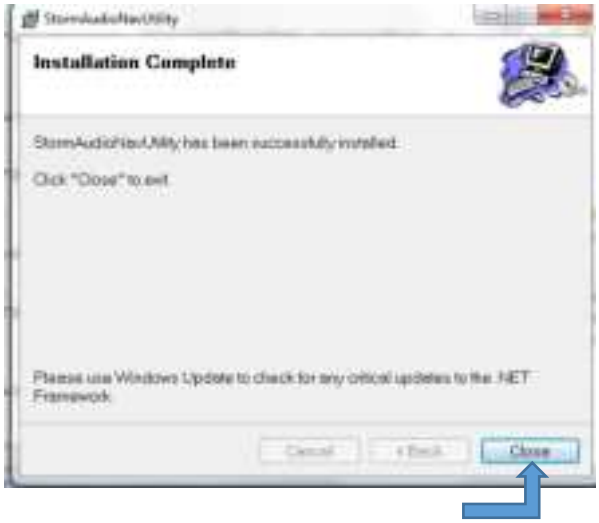
Select “I Agree” and Click on “Next”

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.



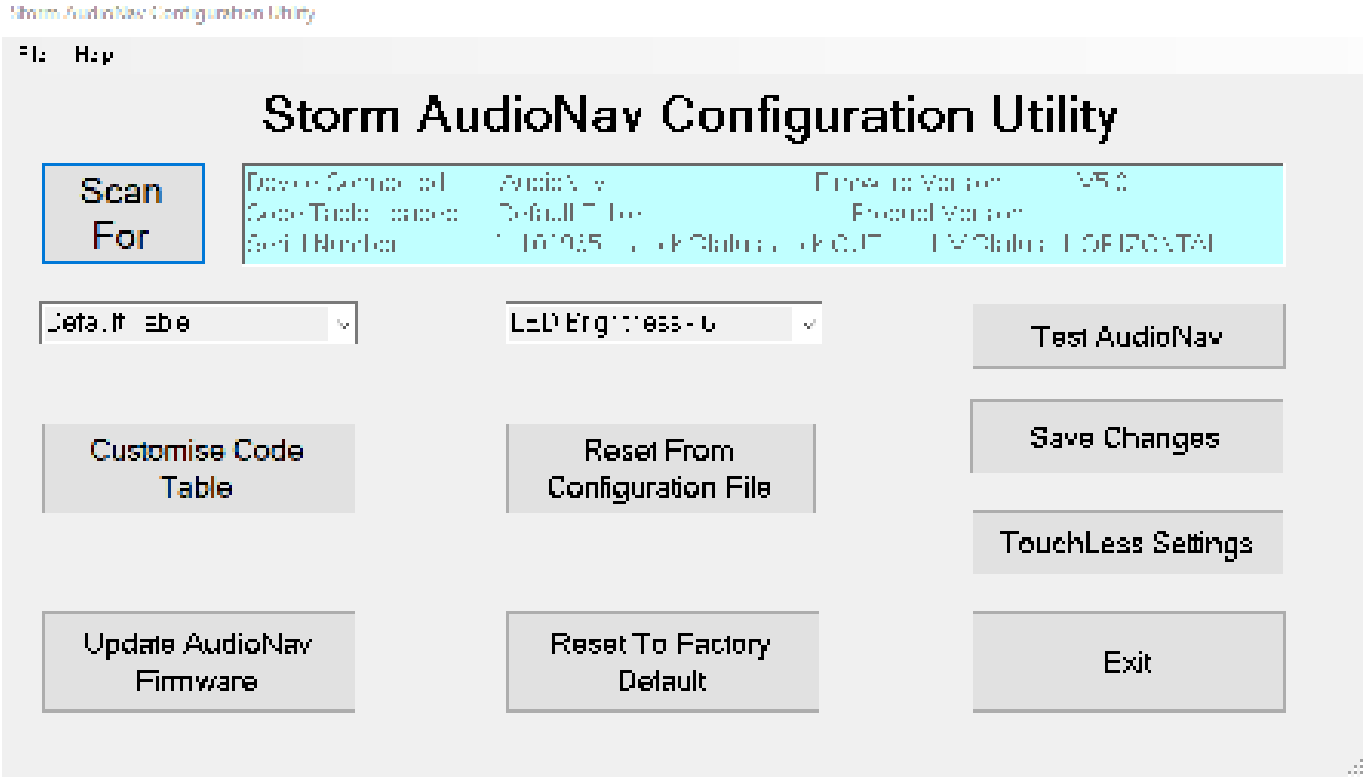


Click on “Close” for successful installation.

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



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

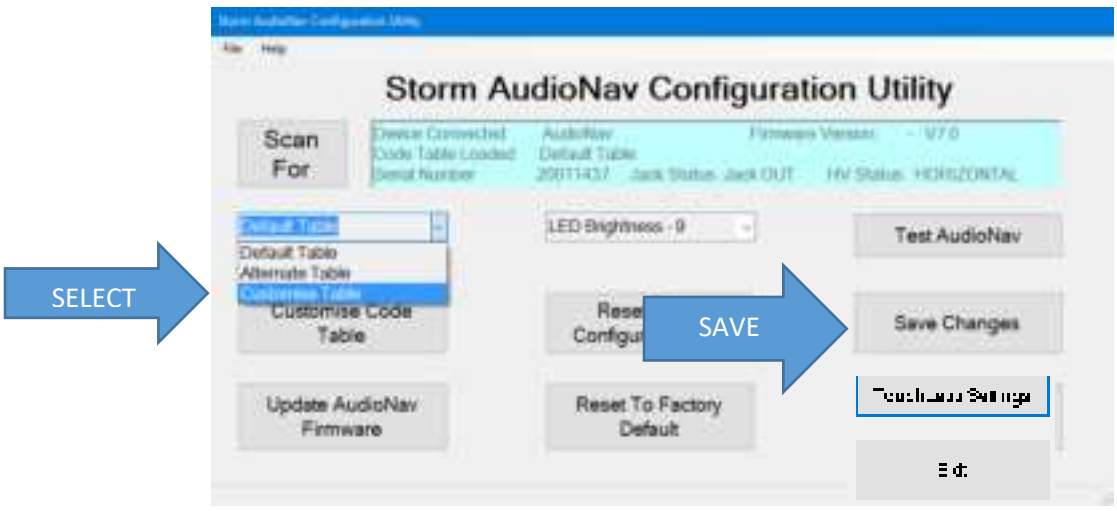
Select a Code Table

The user can select from three standard tables:

	FACTORY DEFAULT OUTPUT CODE TABLE		ALTERNATE CODE TABLE		CUSTOMISED CODE TABLE
Function	**Hex**	**USB Description**	**Hex**	**Description**	
Right	0x4F	Right Arrow	0x4F	Right Arrow	Set initially to the factory default values
Left	0x50	Left Arrow	0x50	Left Arrow	
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

First select Customise table

Note that Multimedia Control Codes (Vol Up / Down) are not available in Customised Table.

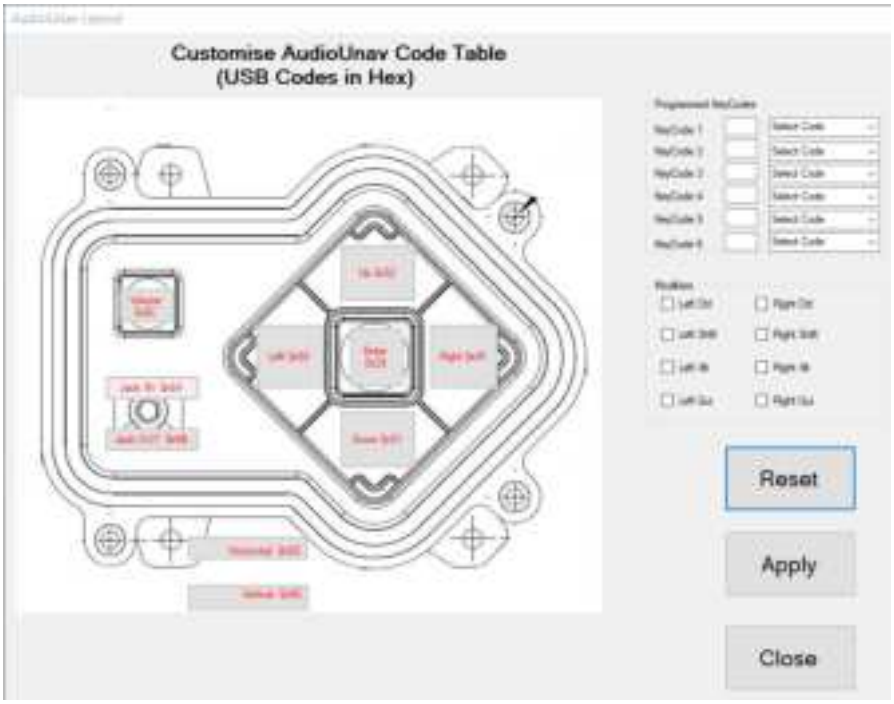
Please note: JACK IN/OUT and Horizontal/Vertical codes can also be customised.

Click on ‘Customise Code table.

(or if more than 1 code is required select MultiCode)

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

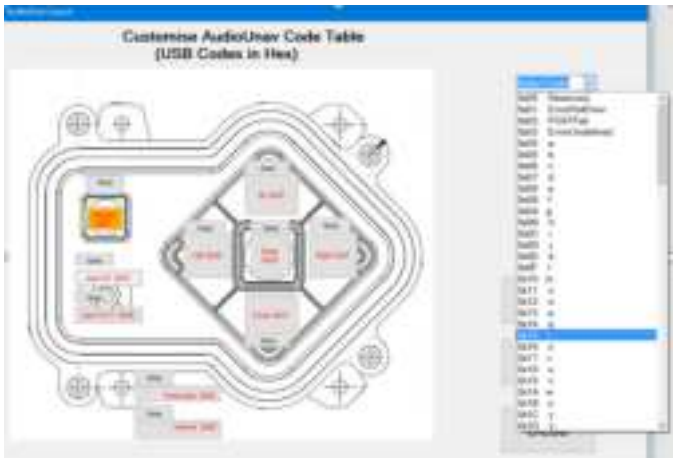
The current customised code table will be displayed from memory on the keypad.
Attached to each key is another button (“NONE”), this shows the modifier for each key.

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”

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.

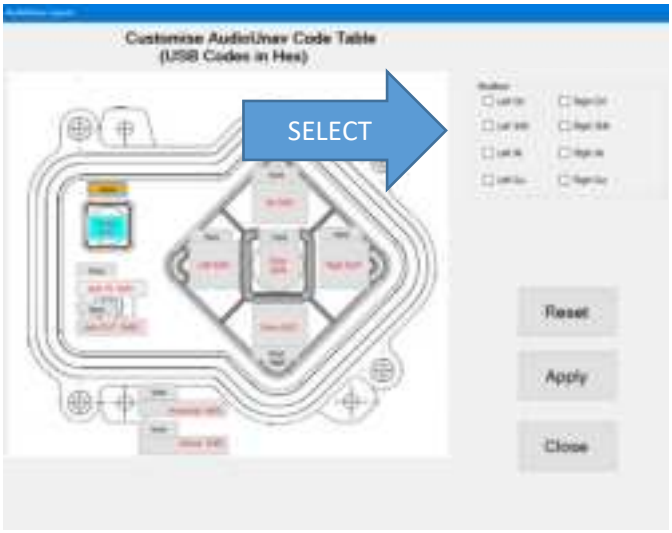
Press the “Apply” button and the code will be
sent to the AudioNav.

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

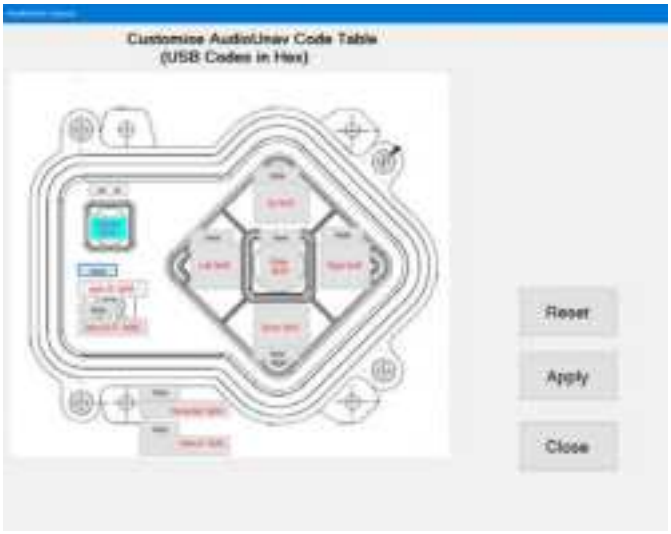
Adding a modifier

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

Tick the modifier for that key.

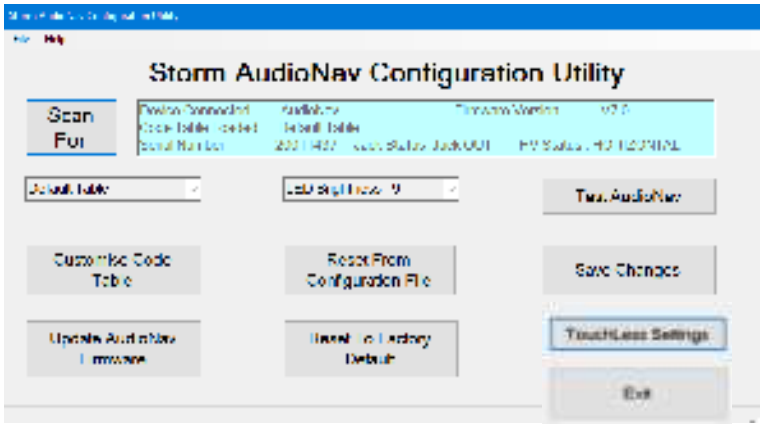


The selected Right SHT modifier is now displayed on the button and background colour changed to grey. Now if you click on “Apply” and if successfully transferred then pressing “down” on keypad will display “E” (uppercase).



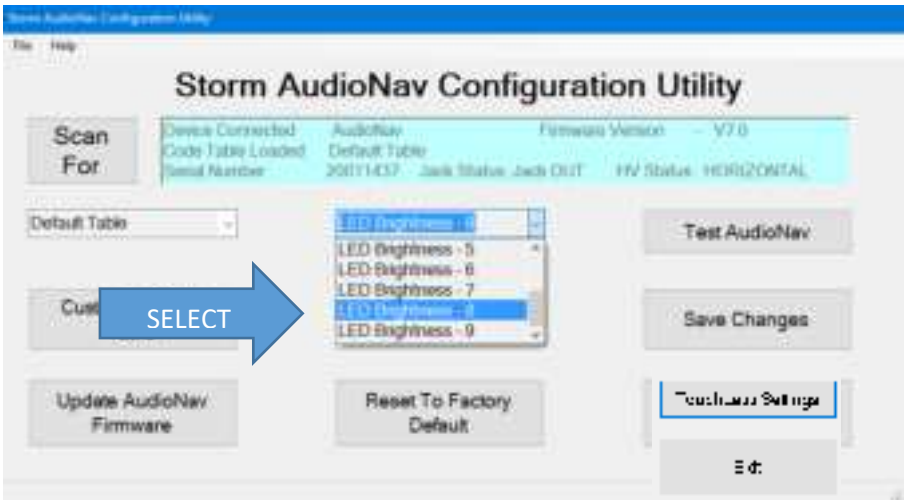
If you did not want the current setting then click on “Reset” then all buttons will revert to original coding and then click on “apply” to send this coding to the AudioNav keypad. “Close” will exit the customize form .

Press “Save Changes”



LED Brightness

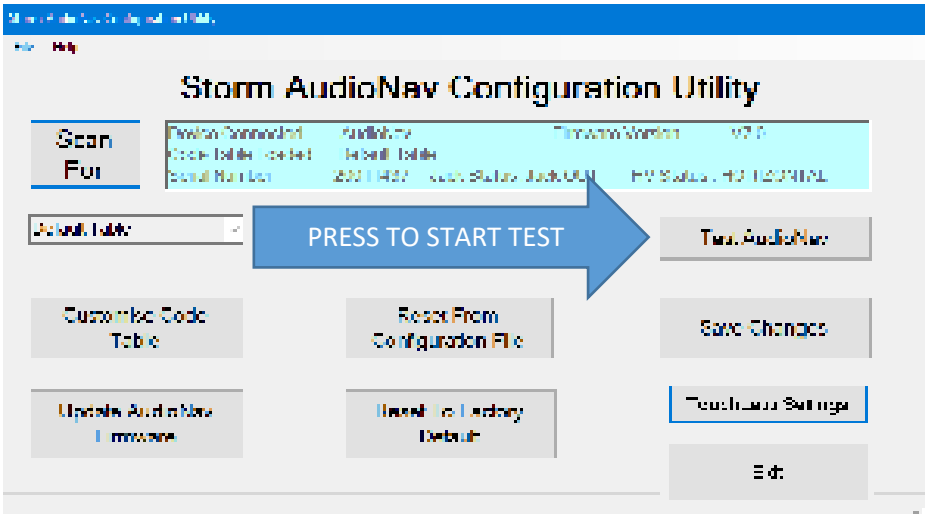
This will set the brightness of the LEDs. The selection is from 0 to 9.



Test the AudioNav

This will test all the functions :-.

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

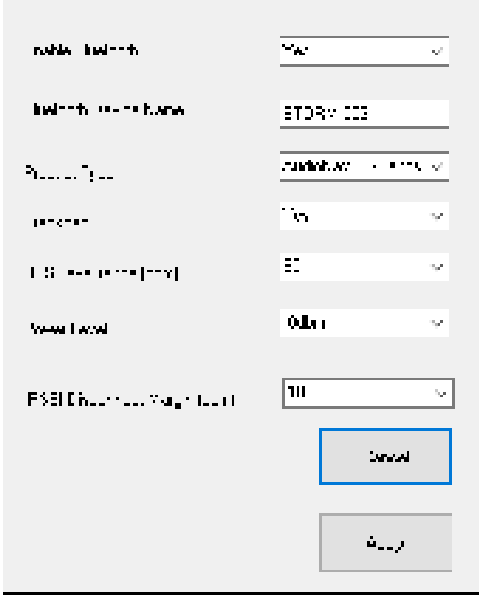


First test the audio (make sure it is set as the default device).
If the AudioNav supports mic input then you will be prompted to test the mic

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

Press close when finished.

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 :-

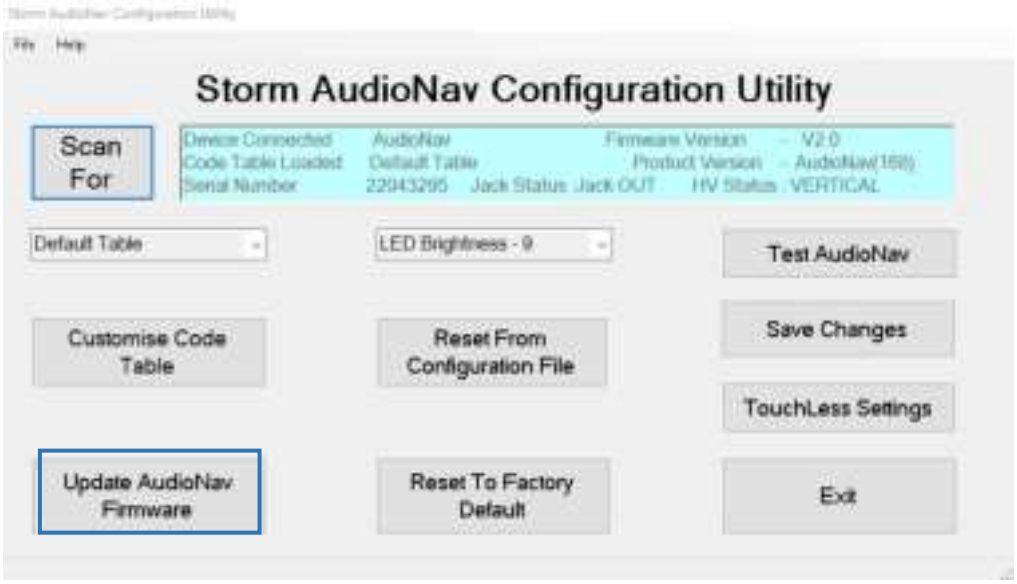
- It looks for Storm Bluetooth devices
- If it detects one and the RSSI level is greater than the level set then it will connect
- It records the initial signal strength on connection
- The signal strength will decrease when the user walks away from the kiosk
- When the signal strength drops by the figure 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 initial 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

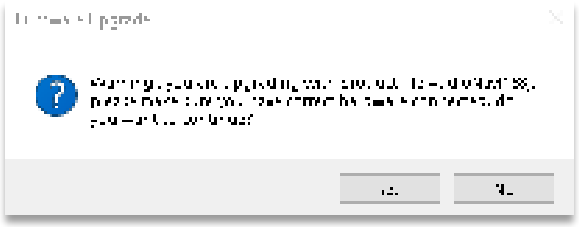
If Bluetooth has been disabled then you can re-enable it

Update the Firmware



Check the correct hardware device is connected

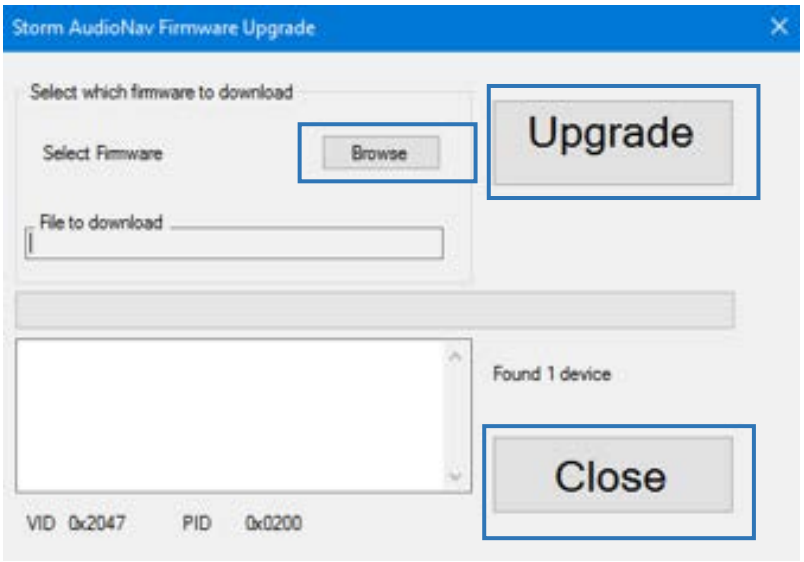
Press Yes



BROWSE for the file

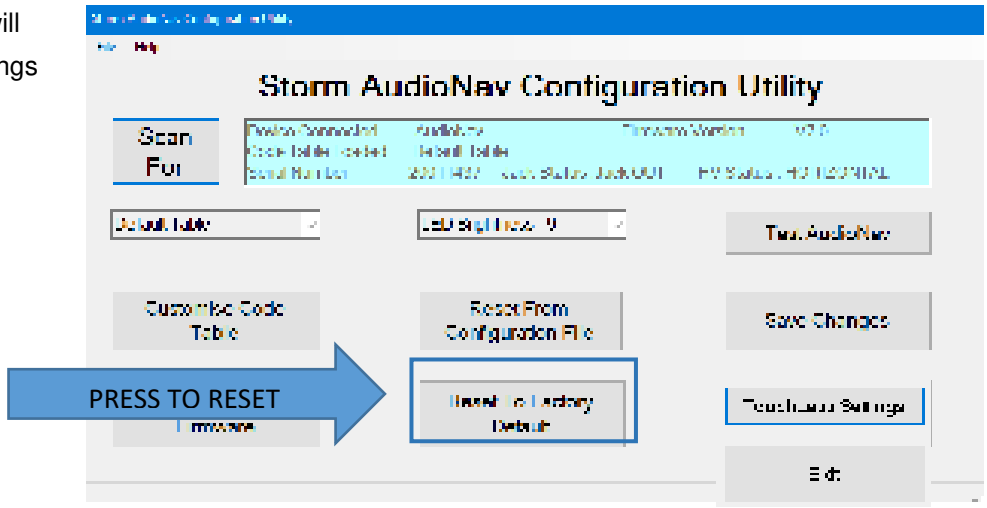
press UPGRADE

and CLOSE



Reset the AudioNav to Factory Defaults

Clicking on “Factory Default” will reset the keypad to factory settings
Code Table – Default
LED brightness – 9

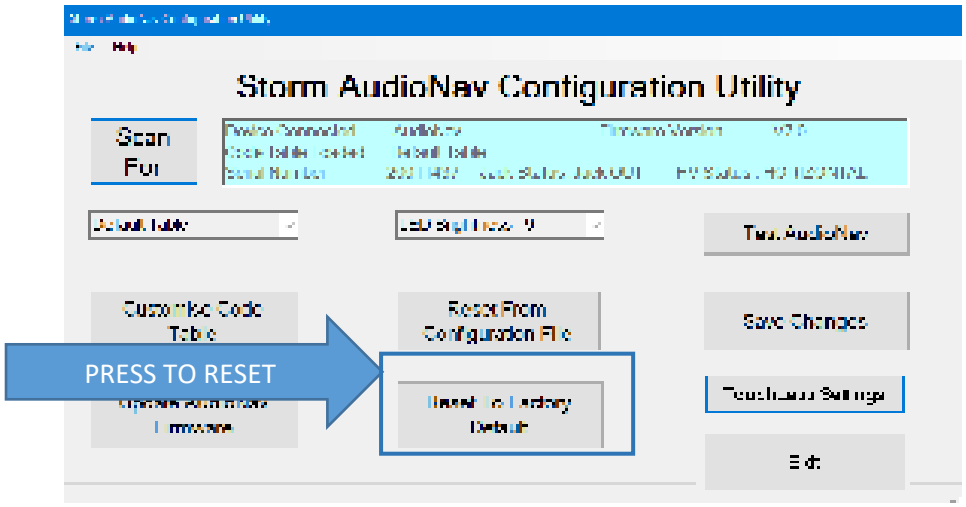


Reset the AudioNav from a saved Configuration

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

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



Change History

Instructions for	Date	Version	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	Version	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