PAINTAUDIO MIDI Captain NANO 4

PAINTAUDIO MIDI Captain NANO 4 Foot Controller User Manual

Model: MIDI Captain NANO 4

1. INTRODUCTION

The PAINTAUDIO MIDI Captain NANO 4 is a versatile and compact foot controller designed for musicians and producers. It offers extensive control over MIDI-compatible devices, Digital Audio Workstations (DAWs), synthesizers, and effects software. With its programmable switches and various command transmission capabilities, it enhances your workflow and performance.

Figure 1: The MIDI Captain NANO 4 Foot Controller, a compact and robust device for MIDI control.

Key features include:

- **4 Multi-function Switches:** Each switch is programmable to send single or multiple MIDI commands.
- **Mixed Command Transmission:** Ability to combine multiple MIDI channels and various command types (PC/CC/NOTE).
- **Various Switch Trigger Timings:** Commands can be sent on press, release, hold, or at multiple timings.
- **USB-MIDI Support:** Control DAW software, synthesizers, and effects software on a computer.
- **USB-HID Support:** Simulate keyboard keys or mouse clicks for mixed control.
- **Multi-state Switch Cycling:** Configure switches to send different commands with multiple presses, enabling multiple functions from one switch.
- **99 Configuration Pages:** Pre-configure up to 99 distinct switch function pages for quick access to different setups.
- **Compact and Durable Design:** Lightweight metal body suitable for various hardware devices or computer connections.
- **Multiple Power Supply Methods:** Can be powered via USB cable, standard pedal power adapter, or battery.

2. SETUP

2.1 Unpacking and Initial Inspection

Carefully unpack your MIDI Captain NANO 4. Ensure all components are present and undamaged. The package typically includes the MIDI Captain NANO 4 unit and a USB cable.

Accessories

Figure 2: Included accessories, typically a USB cable and the MIDI Captain NANO 4 unit.

2.2 Powering the Device

The MIDI Captain NANO 4 offers flexible power options:

- **USB Cable:** Connect the unit to a computer or a USB power adapter using the provided USB cable.
- **Standard Pedal Power Adapter:** Use a 9V DC, center-negative power adapter (not included).
- **Battery Power:** The unit can also be powered by internal batteries (not included).

2.3 Connections

The MIDI Captain NANO 4 features various ports for connectivity:

- **MIDI IN:** For receiving MIDI signals (Embedded 5V 50mA Output).
- **MIDI OUT:** For sending MIDI signals (Embedded 5V 50mA Output).
- **USB-B Port:** For USB-MIDI communication with a computer and optional powering.
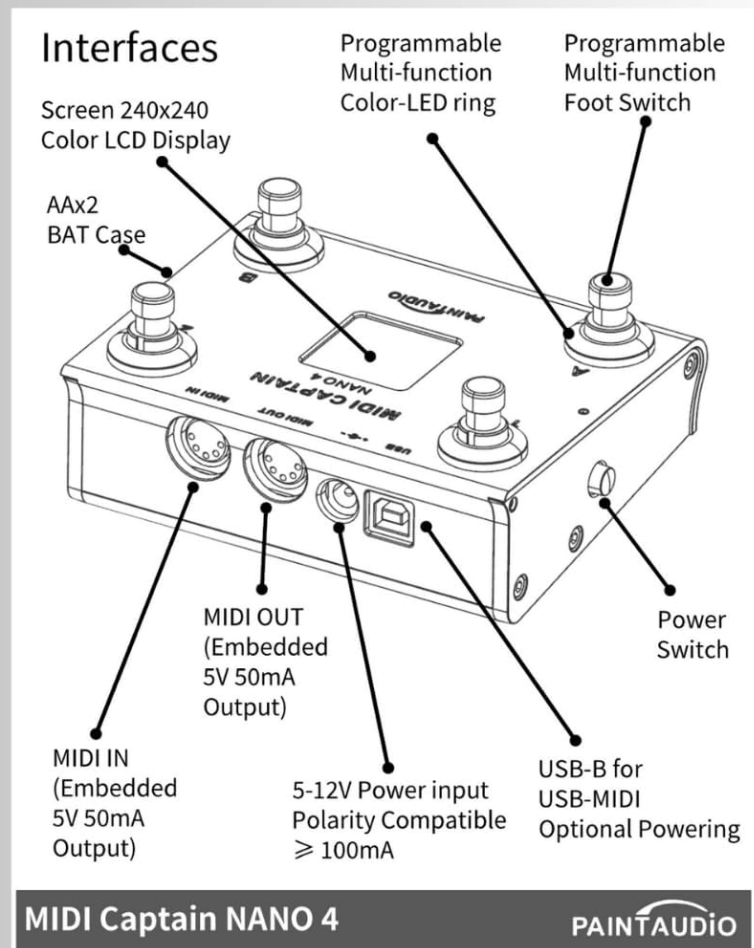- **Power Input:** 5-12V power input, polarity compatible (≥100mA).

Figure 3: Diagram illustrating the various interfaces and connections on the MIDI Captain NANO 4.
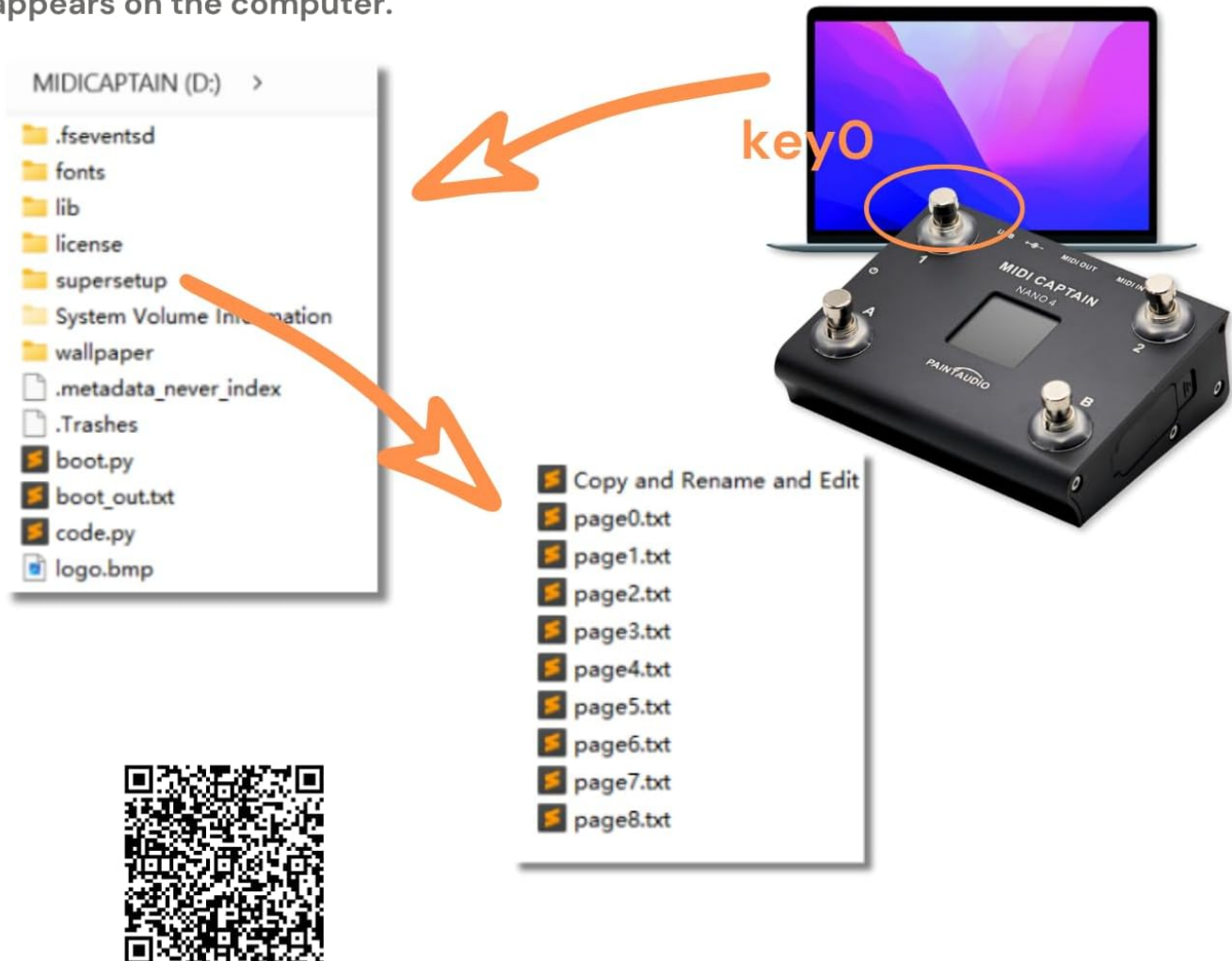
2.4 USB Setup Mode for Configuration

To configure the MIDI Captain NANO 4, connect it to a computer (Windows or Mac) in USB Setup Mode:

1. While holding down the top-left switch (labeled 'key0' or '1' in some diagrams), connect the USB cable from the MIDI Captain NANO 4 to your computer.
2. The device will appear as an external drive (e.g., "MIDICAPTAIN") on your computer.
3. Inside this drive, you will find text files (e.g.,*page0.txt*, *page1.txt*) corresponding to the configuration pages. You can edit these files to customize switch functions.

Figure 4: Instructions for entering USB Setup Mode and accessing configuration files.

For detailed configuration instructions and the Super Mode manual, please refer to the official documentation. You can access it by scanning the QR code shown in Figure 4 or by visiting: Super Mode V1.2 Manual (PDF).

3. OPERATING THE MIDI CAPTAIN NANO 4

The MIDI Captain NANO 4 offers advanced control capabilities through its programmable switches and flexible command options.

3.1 Programmable Switches and Command Types

Each of the four switches can be programmed to send various types of commands:

- **PC (Program Change) Commands:** Used to change presets or programs on MIDI devices.
- **CC (Control Change) Commands:** Used to control parameters like volume, pan, or effects.
- **NOTE Commands:** Used to trigger notes, often for drum machines or samplers.

- **USB HID Commands:** Simulate keyboard keys or mouse clicks for computer control.

The unit supports *mixed command transmission*, allowing you to send multiple MIDI channels and different command types simultaneously with a single switch press.

Figure 5: The MIDI Captain NANO 4 in action, demonstrating its super mode control capabilities with various devices.

3.2 Switch Trigger Timings and Multi-State Cycling

Commands can be configured to trigger at different moments of a switch interaction:

- **Pressing:** Command sent when the switch is initially pressed down.
- **Release:** Command sent when the switch is released.
- **Long Press:** Command sent when the switch is held down for a specified duration.
- **Long Release:** Command sent when the switch is released after a long press.

The *Multi-state Switch Cycling* feature allows a single switch to perform multiple functions. With successive presses, the switch can cycle through different commands or command sets, enabling complex control with fewer physical switches. This can be configured for up to 9 states.

Figure 6: Visual representation of how the MIDI Captain NANO 4 redefines footswitch capabilities, including multi-state cycling and various trigger timings.

3.3 USB-HID Functionality

Beyond MIDI, the NANO 4 supports USB-HID, allowing it to simulate common keyboard keys or mouse clicks. This enables integrated control of both USB HID and MIDI functions, useful for controlling DAW transport, software parameters, or even gaming applications.

USB HID Support

Keyboard / Mouse Click Simulation
Works together with MIDI Control

- **Arrow L/R/U/D**
- **Play/Pause**
- **Gaming**
- **......**

Mouse_L	Enter	F8	A	P
Mouse_R	Table	F9	B	Q
Ctrl	Home	F10	C	R
Shift	Ins	F11	D	S
Alt	Del	F12	E	T
Esc	PrintS	1	F	U
Space	Pause	2	G	V
Caps	BackSpace	3	H	W
PageUp	F1	4	I	X
PageDown	F2	5	J	Y
Up	F3	6	K	Z
Down	F4	7	L	
Left	F5	8	M	
Right	F6	9	N	
End	F7	0	O	

Figure 7: Illustration of USB-HID support, showing how the controller can simulate keyboard and mouse inputs.
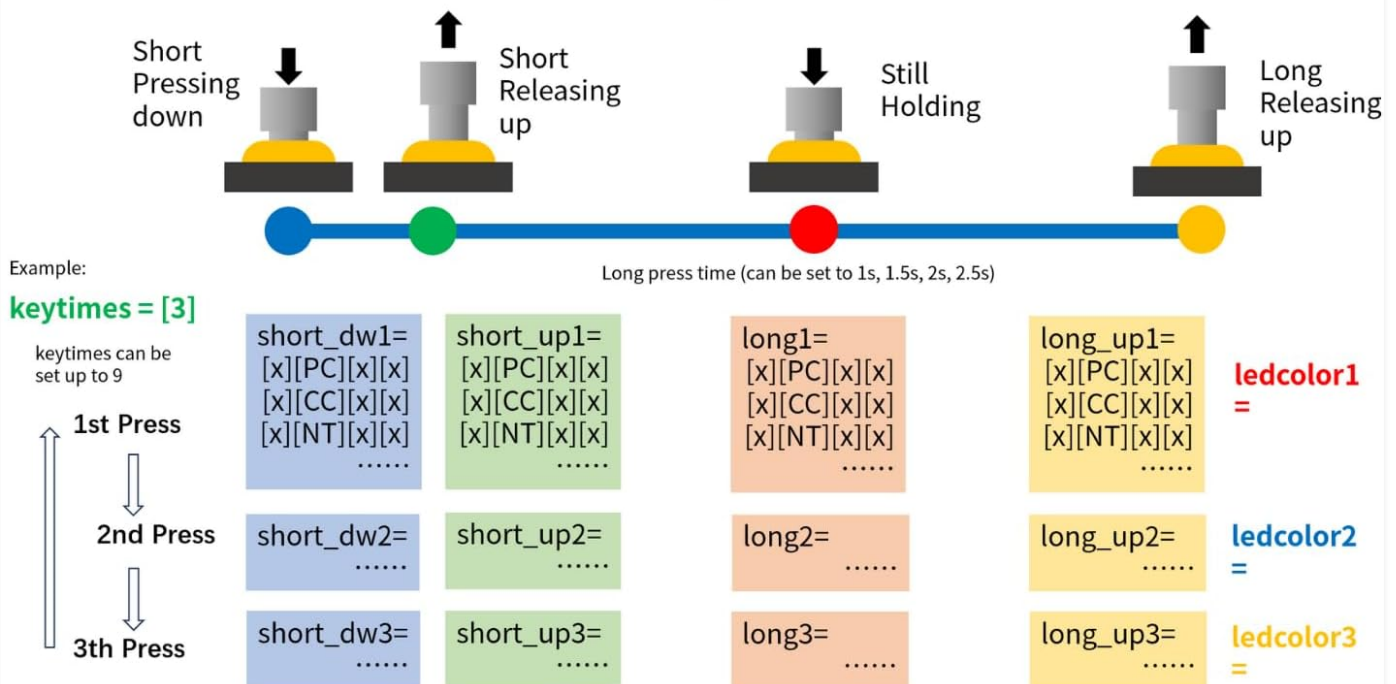
3.4 Super Mode Firmware

The latest Super Mode firmware integrates multi-state buttons, multi-command MIDI control combinations, and USB-HID simulation. This provides extensive and flexible configuration options to meet the control needs of most host devices and software/apps with MIDI IN control.

SUPER MODE (The Latest MIDI Captain Firmware)

Super Mode Control : The **four action types** and the **keytimes** loop

Short Pressing down

Short Releasing up

Still Holding

Long Releasing up

Long press time (can be set to 1s, 1.5s, 2s, 2.5s)

Example:

keytimes = [3]

keytimes can be set up to 9

1st Press

| short_dw1=
[x][PC][x][x]
[x][CC][x][x]
[x][NT][x][x]
...... | short_up1=
[x][PC][x][x]
[x][CC][x][x]
[x][NT][x][x]
...... | long1=
[x][PC][x][x]
[x][CC][x][x]
[x][NT][x][x]
...... | long_up1=
[x][PC][x][x]
[x][CC][x][x]
[x][NT][x][x]
...... | **ledcolor1** = |

2nd Press

| short_dw2=
...... | short_up2=
...... | long2=
...... | long_up2=
...... | **ledcolor2** = |

3th Press

| short_dw3=
...... | short_up3=
...... | long3=
...... | long_up3=
...... | **ledcolor3** = |

Super Mode integrates multi-state buttons, multi-command MIDI control combinations, and simulation functions for USB-HID keyboards and mouse click. It offers extremely rich and flexible configuration capabilities, meeting the control needs of most host devices or software/Apps with MIDI IN control

PAINTAUDIO

Figure 8: Detailed explanation of the Super Mode firmware, including action types and keytimes loop for advanced programming.

For comprehensive details on programming and utilizing Super Mode, refer to the dedicated Super Mode manual linked in Section 2.4.

4. MAINTENANCE

To ensure the longevity and optimal performance of your MIDI Captain NANO 4, follow these general maintenance guidelines:

- **Cleaning:** Use a soft, dry cloth to wipe down the unit. Avoid abrasive cleaners, solvents, or excessive moisture.
- **Storage:** Store the unit in a cool, dry place away from direct sunlight and extreme temperatures.
- **Handling:** While the unit features a sturdy metal body, avoid dropping or subjecting it to strong impacts.
- **Connections:** Periodically check all cable connections for secure fit and signs of wear.

5. TROUBLESHOOTING

If you encounter issues with your MIDI Captain NANO 4, consider the following common troubleshooting steps:

- **No Power/Unit Not Turning On:**

    - Ensure the power source (USB, adapter, or battery) is correctly connected and functional.
    - If using a power adapter, verify it meets the 5-12V, ≥100mA specifications and has the correct polarity.

- **MIDI Commands Not Being Sent/Received:**

    - Check all MIDI cables for secure connections.
    - Verify that the MIDI IN/OUT settings on both the NANO 4 and your receiving device (DAW, synth) are correctly configured.
    - Ensure the NANO 4 is not in USB Setup Mode during normal operation.
    - Review your configuration files (*pageX.txt*) to ensure the correct MIDI commands are programmed for each switch.

- **USB Connection Issues (for configuration or USB-MIDI):**

    - Try a different USB port on your computer.
    - Ensure you are holding the 'key0' button while connecting the USB cable to enter Setup Mode.
    - Restart your computer.
    - Ensure your operating system drivers are up to date.

- **Signal Noise When Daisy Chaining Power:**

    - If experiencing noise when daisy-chaining power with other pedals, consider using a dedicated power supply for the MIDI Captain NANO 4.

For more advanced troubleshooting or specific programming issues, consult the Super Mode manual (linked in Section 2.4) or contact PAINTAUDIO customer support.

6. SPECIFICATIONS

Feature	Detail
Model Name	MIDI Captain NANO 4
Brand	PAINTAUDIO
Item Weight	1.12 pounds (approx. 0.51 kg)
Package Dimensions	7.95 x 5.67 x 4.06 inches (approx. 20.19 x 14.40 x 10.31 cm)
Country of Origin	China
Compatible Devices	PC (Windows/Mac), MIDI-compatible hardware
Connector Type	5-pin DIN MIDI (IN/OUT), USB-B
Hardware Interface	USB
Supported Software	Ableton Live (and other DAWs/MIDI software)
Material Type	Alloy Steel

Feature	Detail
Musical Style	Electronic
Number of Keyboard Keys	8 (referring to internal mapping capabilities, not physical keys)
Connectivity Technology	USB
Special Feature	Keyboard Controller, Multi-function Switches, USB-HID Support
Power Supply	USB, 5-12V DC adapter, Battery

7. WARRANTY AND SUPPORT

7.1 Warranty Information

Specific warranty details for the PAINTAUDIO MIDI Captain NANO 4 are typically provided at the point of purchase or within the product packaging. Please retain your proof of purchase for warranty claims. For the most accurate and up-to-date warranty information, please refer to the official PAINTAUDIO website or contact their customer service directly.

7.2 Customer Support

For technical assistance, product inquiries, or support regarding your MIDI Captain NANO 4, please contact PAINTAUDIO customer support. You can typically find contact information on the official PAINTAUDIO website or through the retailer where you purchased the product.
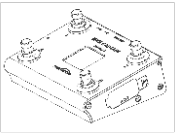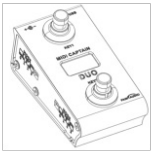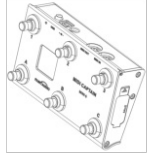
When contacting support, please be prepared to provide your product model (MIDI Captain NANO 4) and a detailed description of the issue you are experiencing.

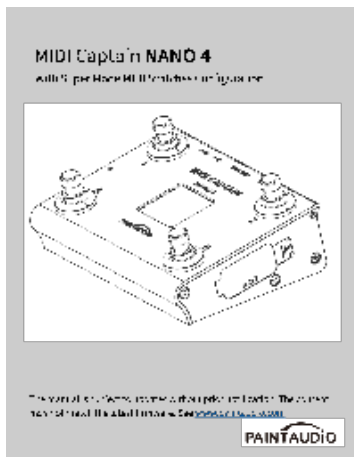**Related Documents -** **MIDI Captain NANO 4**

[PAINTAUDIO MIDI Captain Super Mode: Functionality and Configuration Guide](#)
Explore the advanced Super Mode firmware for PAINTAUDIO MIDI Captain controllers. This guide details functionality, configuration options, MIDI and HID command emulation, and provides practical examples for models like ONE, DUO, NANO 4, MINI 6, and 10-switch versions.

	[PAINTAUDIO MIDI Captain Series Recovery Guide](#) Comprehensive guide to recovering PAINTAUDIO MIDI Captain series devices from error prompts or boot failures. Includes step-by-step instructions for various scenarios.
	[MIDI Captain NANO 4: Super Mode MIDI Switches Configuration Guide](#) A comprehensive guide to configuring the MIDI Captain NANO 4 with Super Mode MIDI Switches, detailing its interfaces, firmware, and configuration language.
	[MIDI Captain DUO: Super Mode MIDI Switches Configuration Guide](#) A comprehensive guide to configuring the MIDI Captain DUO with Super Mode MIDI Switches, detailing its features, interface, firmware, and special reminders for optimal use.
	[PaintAudio MIDI Captain MINI 6 User Manual and Configuration Guide](#) Comprehensive guide to the PaintAudio MIDI Captain MINI 6, covering its features, interfaces, configuration language, and firmware. Learn how to customize foot switches and utilize Super Mode for advanced MIDI control.
	[MIDI CAPTAIN PC/CC/NOTE MIDI Foot Controller User Manual](#) Comprehensive user manual for the PaintAudio MIDI CAPTAIN, a PC/CC/NOTE MIDI Foot Controller with TIME ENGINE function. Covers connection, controls, screen display, operations, time engine functions, setup items, USB deep setup, factory presets, backup/restore, firmware updates, and specifications.

Documents - PAINTAUDIO – MIDI Captain NANO 4

[PAINTAUDIO MIDI Captain Series Recovery Guide](#)
Comprehensive guide to recovering PAINTAUDIO MIDI Captain series devices from error prompts or boot failures. Includes step-by-step instructions for various scenarios.
lang:en score:31 filesize: 580.71 K page_count: 5 document date: 2024-03-09

[MIDI Captain NANO 4: Super Mode MIDI Switches Configuration Guide](#)
A comprehensive guide to configuring the MIDI Captain NANO 4 with Super Mode MIDI Switches, detailing its interfaces, firmware, and configuration language.
lang:en score:22 filesize: 845.79 K page_count: 9 document date: 2024-01-18