## MECHA

# IR REMOTE COMMANDER & RECEIVER



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#### MECHA IR Remote Commander & Receiver

Download the latest version of this guide from

https://www.nodalninja.com/Manuals/mecha-ir-remote.pdf

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## Introduction

IR Remote Commander and Receiver for MECHA is a kit specially designed by Fanotec to work with MECHA C1 and C2 Controllers. It allows basic controls and execution of program presets wirelessly without touching the camera, controller or any smart device.

MECHA C1 Controller



Commander (Transmitter)



MECHA C2 Controller



Although both controllers have their own buttons, they cannot be used when mounted on a high pole, such as Fanotec Carbon Fiber Pole Series 3 – 9.25m extended, or even on the Travel Pole – 2.9m extended.

In this case, remote control is very helpful and the only solution at the same time.

However, occasionally you may not want to touch the controller for some reason, or it may be much more comfortable to use the remote control than the controller or a smart device.

Use it with MECHA to rotate a turntable, and your life will be much easier.

## **Before First Use**

- First, remove the battery cover on the back of the Commander and insert two AAA batteries paying attention to polarity.
- To be able to use the IR Remote Commander and Receiver for MECHA, connect the Receiver to the **AUX Port** of the C1 or C2 Controller used.





#### https://youtu.be/ufIbFlvhHT4

#### Using a Smartphone to Access the MECHA User Interface for Dual Axis and **Single Axis Controllers**

Access the Configuration (/config) page of MECHA at:

#### 192.168.8.1/config

User:	admin
Password:	Mecha

Next check the following checkbox – **required**: *Use Nodal Ninja IR Remote*.



Then click the [Apply] button to save the new settings.

- Alternatively, the use of the remote control can be enabled/disabled:
  - o with the code: **3232<**, when using a C1 Controller;
  - with the **USE NN IR** option in the *Config Menu*, when using a C2 Controller.
  - Check the following checkbox on the *Configuration* page if you prefer to press the Commander power button twice to power off MECHA: **Double** press the Nodal Ninja IR Remote power button for power OFF.

☑ Double press the Nodal Ninja IR Remote Power button for power OFF.



https://youtu.be/94oIpK7xwJQ

Using IR Remote Commander and Receiver to Launch Presets - MECHA DAC and Single Axis

## **Functions**

The functions of the Commander buttons are similar to the functions of the C1 and C2 Controller buttons. Some functions are listed below.

#### **Power Button**

- The power button has many functions and can be used as follows:
  - To power off MECHA:
    - Long press is required, unless otherwise set on the *Configuration* page.
    - Press the power button twice if the **Double press the Nodal Ninja IR** Remote Power button for power OFF checkbox is checked on the Configuration page.

To power on MECHA, use the U button on the C1 or C2 Controller used.

- To confirm or cancel some operations, for example:
  - If you enter a code and notice on C2's display, or on C1's LEDs, that the code is wrong, before confirming or specifying the direction, you can cancel the code with the power button and enter the code again.
- Use the power button to exit the C2's Menu Mode (in Advanced Mode).

- o Use the power button to check the battery level when MECHA is idle.
- It is also the equivalent of the number 0 (zero) when power codes are entered.

Power codes are codes that start with zero. They can be used as shortcuts for launching a preset. For example, you can easily launch a preset named **01 PresetName** using the **U**1 button combination.

Please note that the power button, , can always be used as an emergency stop, if necessary, except for the speed calibration procedure (code: 123123<).

#### **Menu Button**

• Use this button to show or switch between the C2 Controller menus and to show information about parameters in edit mode.

#### **Directional Buttons**

- Use the left and right arrow buttons to navigate in C2's OLED menus, or manually rotate the system to the left and to the right, respectively, and also to specify the direction when launching a preset using the Commander buttons, as terminator for codes (similar to the Enter key).
- The up and down arrow buttons can be used to navigate in C2's OLED menus and to control the up and down movement of the upper rotator, when two rotators are used.

#### **Trigger Button**

• The button located between the arrow buttons has camera trigger and confirmation functions. During a *Pause*, by pressing on Commander, or by clicking *[SHOOT]* on the User Interface, MECHA will trigger the number of shots specified by *[TRG]* in presets. This can be used for extra shots for a particular position.

#### **Pause Button**

- Pause button is the equivalent of [Pause] UI button.
- If MECHA is paused during the execution of a preset, it will pause before every position, resulting in a step-by-step movement.
  - You can press on the C1/C2 Controller, or on Commander, or [PAUSE/NEXT] on the User Interface to continue to the next position.
  - If, instead, is pressed on the C1/C2 Controller, or Commander,
     MECHA will continue to the next position and switch on/off the step-by-step mode.

#### **Numerical Buttons**

- Use it to enter the number 1. Use [Save 1] button in UI to save a preset and assign it to this button.
  - o Press 11 to execute the *Button 1* preset to the left.
  - Press 1 b to execute the Button 1 preset to the right.

- Any directional button in combination with the 1 button can be used to perform simple (by default) 45° rotations.
- Use it to enter the number 2. Use [Save 2] button in UI to save a preset and assign it to this button.
  - o Press 2 to execute the *Button 2* preset to the left.
  - o Press 2 to execute the *Button 2* preset to the right.
  - Any directional button in combination with the 2 button can be used to perform simple (by default) 90° rotations.
- 3 Use it to enter the number 3. Use [Save 3] button in UI to save a preset and assign it to this button.
  - o Press 3 to execute the *Button 3* preset to the left.

  - Any directional button in combination with the 3 button can be used to perform simple (by default) 180° rotations.
- The plus and minus buttons can be used in C2's edit mode to adjust some settings, although the controller buttons are more suitable for this purpose.

## **Specifications**

- Use two AAA batteries for Commander. User supplied.
- 10m (33 ft) of reach. Since light is used to transmit signals, line of sight is required for outdoor, meaning an unobstructed path between Commander and Receiver.
- The IR Receiver has five infrared sensors to easily detect the infrared light from Commander.
- SKU: F9988.



## **Testing the IR Remote Commander & Receiver**



https://youtu.be/agfwRVSfII8

IR Remote Test - C1 and C2 MECHA Controllers

Do this test to check if your IR Remote Commander and Receiver for MECHA is working properly.

- First, connect the Receiver to the AUX Port of the C1 or C2 Controller used, then power on MECHA as usual, by long pressing the button.
- The next step is to start the test by deactivating the usual functions of the Commander buttons.

If you are using a C1 Controller, enter the code 3231. by pressing the following buttons on the C1 Controller, one by one: 3 2 3 1. Make sure you have entered it correctly (MECHA shows the entered codes on its LEDs), then use the 4 button to confirm. This deactivates the functions of the Commander buttons, and - an important detail - it automatically enables the *Use Nodal Ninja IR Remote* option. With firmware versions older than 02372, you need to enable this option manually, either on the */config* page (after connecting to MECHA's Wi-Fi network) or using the code: 3232 (this code allows you to switch between the enabled and disabled state).

- If you are using a C2 Controller, to deactivate the functions of the Commander buttons, access the *Config Menu* and navigate to the *IR REMOTE TEST* option, then press the button. This also enables the *USE NN IR* option. With firmware versions older than 12372, you need to enable this option manually, in the *Config Menu*, before starting the test.
- After deactivating the functions of the Commander buttons, MECHA no longer executes remote control commands. Instead, when you press a Commander button, MECHA beeps and shows the code of the pressed button (after the button is released):
  - on its LEDs, when using a C1 Controller;

0

READY!

o or on the OLED display, when using a C2 Controller.

Button	Code	Button	Code
	33		26
2	32		24
3	31		23
	29		30
	28		25
<b>±</b>	27		22
<b>U</b>	21		

- The code is also shown over the battery symbol on the User Interface.
- So press the Commander buttons, one by one, and check if the beeps are heard and if the code of the pressed button is displayed as mentioned above. The button code is not so important, it just needs to be displayed.

Please note that the codes of the buttons on the early Commander models may be different from the current ones; this does not affect the operation of the system.

- All of the buttons must pass the test, in order for the test to be considered successful.
- To end the test, you need to press the button on the C1 or C2 Controller used.

## **Troubleshooting**

- If none of your Commander buttons are working, but its red light at the top is flashing when a button is pressed:
  - $_{\circ}$  end the test by pressing the  $oldsymbol{oldsymbol{\upsilon}}$  button on the controller,
  - and make sure the Receiver is properly connected to the AUX Port of the controller,
  - o then perform the test again.
  - Now you should see a red light flashing on the Receiver as well, when a button is pressed on the Commander.
- Also, if none of your Commander buttons are working, and there is no red light at the top when a button is pressed, then it could be a battery issue.
  - o End the test by pressing the button on the controller, and try replacing the batteries of the Commander with new ones,
  - o then perform the IR REMOTEE TEST again, to see if the problem is fixed.
- You can also launch the live view of your camera, or use a phone, and frame
  the tip of the Commander. When pressing a button on the Commander, you
  should see another, big, LED flashing, besides the red one you can see with
  the naked eye.

# Appendix

## Particular Use

### Shutter Release Confirmation and IR **Remote Control**

When creating a preset in the *User Interface* or in *C2's Preset (P) Menu*, you can specify the *Exposure (E)* in seconds or you can select a Shutter/Button Confirmation option – E: SHT C., E: SHT C1, E: BTN > C, E: BTN > C1 (see the User *Interface* chapter in MECHA User Guides for more details).



https://youtu.be/X25c13rsBYE

Shutter Release Confirmation Basics – MECHA C1 and C2 Controllers

To be able to use the shutter release confirmation feature, use the **Mecha** 3.5mm to Male PC Sync Cable (for shutter release confirmation, F9981) to connect the AUX Port of the MECHA C1 or C2 Controller used to the PC Sync Port of your camera.

If your camera does not have a PC Sync Port, then you need a *Flash Shoe to PC* Sync Adapter (such as F9982, F9983 or F9984).

Shutter release confirmation and IR remote control are possible simultaneously by using the *IR Remote Commander and Receiver for MECHA* (F9988). In this case, connect the receiver to the AUX Port of the C1 or C2 Controller used, and

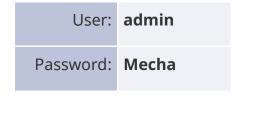
connect the cable for shutter release confirmation (F9981) to the female jack of the receiver.



## **Use Two IR Receivers (DAC ONLY)**

This is an option you can find on the *Configuration* page of MECHA at:

#### 192.168.8.1/config



■ Use Two IR Receivers (DAC ONLY).

*Use Two IR Receivers (DAC ONLY)* — This option allows you to use one receiver on the MECHA-H and one on the MECHA-V. Only one Commander is needed to control the two units:

- o the commands sent by using the and buttons will be interpreted and executed only by the MECHA-H unit,
- o while the commands sent by using the and buttons will be interpreted and executed only by the MECHA-V unit.

Using two receivers improves the performance of DAC (Dual Axis Combo), as the vertical unit receives commands directly from the Commander and not wirelessly, as is the case when a single receiver is used on the horizontal unit.

You may already know that when we mention the *Configuration* (/config) page, we are referring to the MECHA-H configuration page in DAC. However, the MECHA-V *Configuration* page can also be accessed after connecting to MECHA-V using your phone, by clicking on a link at the bottom of the page.

If you have enabled the *Use Nodal Ninja IR Remote* option on the */config* page of your MECHA-V, you now need to disable it for the two receivers to work.

**Use Nodal Ninja IR Remote** option should only be enabled on the /config page of MECHA-H, as should the **Use Two IR Receivers (DAC ONLY)** option.

If you have never accessed the *Configuration* page of your MECHA-V, most likely the settings are the default ones and no checks or changes are needed.

## What is New

- Version 1.2.2 2022.11.24:
  - Updated: Before First Use, Functions, Testing the IR Remote Commander & Receiver.
  - o Added: Links to youtube videos.
- Version 1.2.1 2022.07.27:
  - Updated: Useful Links.
- Version 1.2 2022.07.20:
  - o Changes to the formatting of the guide.
- Version 1.1 2021.12.09:
  - o Added: Links to youtube videos.
  - Added: Shutter release confirmation and IR remote control, Use Two IR Receivers (DAC ONLY).

## **Useful Links**



https://www.nodalninja.com/Manuals/mecha-card.pdf

MECHA Quick Reference Card



https://www.nodalninja.com/manual

Quick reference guides and complete manuals



https://www.youtube.com/user/NodalNinja

Nodal Ninja YouTube Channel



https://forum.nodalninja.com/

Nodal Ninja's Panoramic Photography Forum



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