MECHA Quick Reference Card

MECHA is a wireless controlled motor that can rotate and trigger a camera or other devices. Use the **I** and **D** buttons to specify the direction of rotation to the left and to the right, respectively.

Update the firmware to the latest version available.

Firmware Update Using a Hot-spot

- First, set up a hot-spot with the name **MECHA-UPDATE** and password **87654321**.
- Power on MECHA (in case of DAC, MECHA-H first).
- When MECHA is idle, enter the code **312123**<. In case of DAC, enter the code in MECHA-H. When MECHA connects to the previously created hot-spot, you will hear two beeps. This code will update the firmware of both DAC units.

Do not turn off MECHA while updating the firmware!



Checking the Battery Level

Short-press the 🕑 button when MECHA is idle. The battery level is also displayed on the LEDs immediately after powering on MECHA. To understand what MECHA shows on LEDs, see the table below.



!!! means that the Internet is not available for MECHA.

Set MECHA in AP, STA, AP+STA Mode

A few seconds after powering on, at splitting lights, -=-=-=:



press 1 to set MECHA in **AP** mode, press 2 to set MECHA in **STA** mode, press 3 to set MECHA in **AP+STA** mode.

When MECHA is in **AP** or **AP+STA** mode, it broadcast a SSID to which your smartphone can be connected.

Access the UI with Your Smartphone

- Set MECHA in **AP** mode.
- Tap Settings icon on your device. Under Wireless and Networks, make sure Wi-Fi is turned on, then tap Wi-Fi. Tap the nettwork that contains MECHA in its name (MECHA-H-DAC in case of DAC), to connect the smartphone to MECHA (or to DAC).
- The default password for MECHA's network is **12345678**.
- Access MECHA's UI on the smartphone's browser at: 192.168.8.1

This is the *New* page by default. At the top of this page, notice the current firmware version.

The Configuration page: 192.168.8.1/config

The **user** and default **password** for the *Configuration* page are: **admin** and **Mecha**, respectively.

Turning on IR Remote

Connect the receiver to the AUX port, then check the checkbox:

Use Nodal Ninja IR Remote.

Set the default mode

Enter AP, STA, or AP+STA in the **Default Mode** field. This will be the current mode for MECHA after powering on.



Use Nodal Ninja IR Remote.

Change the SSID password

Enter the new password in the **SSID Password** field.

Disabling MECHA during charging

Select Turn OFF from the When Charging select list.

Tap the **[Apply]** button to save the new settings.

The Row page: 192.168.8.1/row

info A3 Row

UI Tooltips

Tap the *[info]* button at the top of the *Row* page to find out more details about the functions of the UI controls.

Running and saving Presets

Select a preset from the *Presets* list and tap the *[Load]* button to load it in A (*Advanced*) display levels, or just select the preset, and it will load automatically in S (*Simple*) display levels. To run the preset, tap either the *[RIGHT]* or *[LEFT]* button.

Tap **[Save 1]**, **[Save 2]**, or **[Save 3]** button to assign a preset to MECHA's buttons. Tap **[Save]** for normal save.

Optional, add a *preset power code* to the beginning of the name, to be able to run the preset using MECHA's buttons. The first digit of the code must be 0 (zero), and the next sequence of maximum six digits must be a combination of the digits 1, 2, or 3, so that two identical digits are not in consecutive positions (e.g: 01, 0123).

Focus and Shutter timing

In order to trigger camera, for some Sony cameras, you have to set an *AF* (*Auto-Focus*) value greater than zero, even if the camera focus is set to manual. Also, set a proper *E* (*Exposure*), and other delays, like *A* (*After delay*), according to your preferences. Find the *AF*, *E* and *A* on *Row* page.

Using Buttons to Run a Preset

Presets assigned to MECHA's buttons Press 1, then, quickly,
or
. Similarly for 2 and 3. Preset name preceded by a preset power code Enter the preset power code, then press
or
. Ex: to run 01 MyPreset, press
(1) (to enter zero), then 1, then
(1) or
.

MECHA's Simple Scripting – MSS

Enter the **focal length** (10mm to 200mm) in the **Shoots** field, on *Row* page, and MECHA will produce the appropriate script, or preset, for that focal length, for **Level** position. Tap the **[LEFT]** or **[RIGHT]** button to run the preset. Save this preset for future use.

Automatic Shooting Pattern

For rectilinear lens from 10 to 200 mm (FF equiv).

- Position the vertical rail in **Level** position.
- Place a sheet of paper in front of MECHA to fill the frame.
- Set the camera and lens as for shooting the actual panorama.
- Enter the code 31< on MECHA (MECHA-H, in case of DAC) and when U starts flashing:
 - Press 🕑 to trigger the camera.
 - Press again 🕑 after the camera was triggered.
- While MECHA rotates slowly to the right, press U right after the sheet of paper is out of the camera's frame.
- While MECHA tilts down slowly, press again U when the sheet of paper is out of the camera's view.
- Press 1, 2, or 3 when the LEDs 1, 2 and 3 under the battery symbol start flashing, to assign the computed preset to that particular button. To cancel, press 1 instead.

zLM2 – Automatic Pairing Using Two Buttons

- Power on only the horizontal MECHA and, at splitting lights, press 1 for 3 seconds (until multiple beeps are heard).
- Let the horizontal MECHA running, then power on the other MECHA and, at splitting lights, press 2 for 3 seconds (until multiple beeps are heard).

On successful pairing, MECHA-H has the middle LED on, and MECHA-V has the two middle LEDs on. Otherwise, power off



and on both MECHAs again, preferably MECHA-H first.

If a **red** LED is lit on MECHA-V, this indicates that it is not the same firmware version in both units, and it is recommended to update it.

Enter codes when MECHA is idle. Before pressing the last button, check the entered sequence on LEDs. Short-press U to cancel, and enter the code again, if necessary.

Codes to Rotate to Level, Parked, Raised

>1, <1 a 45° rotation to the right and to the left, respectively.

>2, <2 a 90° rotation, e.g. to go from **Parked** to **Level**, and back.

>3, <3 a 180° rotation, e.g. to go from **Parked** to **Raised**, and back. Enter >2, <2, >3, and <3 on MECHA-V. You can set other values, and also the speed, on *Configuration* page, in *Arrow buttons interval...* fields.

Codes to Set the Rotator Model 23131< to set E1 / 23132< to set E2 / 23121< to set P1.

Codes to Test Single MECHA 131<, 131> and 132<, 132> for 6 / 12 shots around.

Codes to Test DAC – Dual Axis Combo



Enter the following codes on MECHA-H to execute a panorama to the left or right, 12 shots around, 3 rows – at 0, +/- 45 degrees – plus zenith and nadir:

1313<, 1313> for Level position.

1312<, 1312> for Parked position.

1321<, **1313>** for **Raised** position.

Other Codes

21 < toggles the *Pause Mode*.

23<	disables / enables the motor's movement.
232<	disables / enables all LEDs, useful during night photography.

- **321**< shows the last part of the IP address (**323**<, full).
- **3212**< shows the firmware version.
 - **13**< shows the battery percentage.
- **231**< turns everything OFF, for faster battery charge.
- **2313**< changes the sense of rotation when done using the and buttons.
- **12321**< for backlash compensation calibration.

For more information, please see MECHA User's Guide: https://www.nodalninja.com/Manuals/mecha.pdf

For support and troubleshooting, please visit our forum: https://forum.nodalninja.com/



MECHA SSID Sticker

MECHA ACCESS POINT IP http://192.168.8.1/

Developed and manufactured by **Fanotec International Limited**. https://www.fanotec.com

MY NOTES:

When MECHA units are paired, the camera can be connected to any of them.