GUI Version 3.1.0.2
MAXIMA and TRINITY

USER MANUAL

Date 29. Jan. 2018
Scope

The third generation of the MAXIMA and TRINITY graphic user interface, the so called GUI can be used with all exiting MAXIMA and TRINITY units. The redesigned graphic user interface is focusing on easy use of the software and a fast setup of the MAXIMA and TRINITY.

Disclaimer

Before using the products described in this manual, be sure to read and understand all the respective instructions.
Otherwise the customer must contact ARRI before using the product.
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1 For your safety

Before use, please ensure that all users comprehensively read, understand, and follow the instructions in this document.

Risk levels and alert symbols

Safety warnings, safety alert symbols, and signal words in these instructions indicate different risk levels:

<table>
<thead>
<tr>
<th>DANGER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Danger indicates an imminent hazardous situation which, if not avoided, will result in death or serious injury.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Warning</th>
</tr>
</thead>
<tbody>
<tr>
<td>WARNING indicates a potentially hazardous situation which, if not avoided, may result in death or serious injury.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NOTICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOTE explains practices not related to physical injury. No safety alert symbol appears with this signal word.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NOTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provides additional information to clarify or simplify a procedure.</td>
</tr>
</tbody>
</table>
Controls and adjustments operated
directly on the MAXIMA and TRINITY

2.1 Changing Profiles

By pressing MODE one time, you will recall profile number ONE.

By pressing MODE twice, you will recall profile number TWO.

And so on...

2.1 Changing the Joystick Direction

Operated directly on the TRINITY

• Press OK until Joystick is displayed

• Press OK

• Select: Normal - Inverted - Off by pressing UP or DOWN

• Press OK to confirm your selection

2.3 Paring the Wireless Remote Control

Operated directly on the TRINITY

• First switch Off the Remote Control!

• Press OK

• Press Down until you see Remote Pairing

• Press OK

• Now the MAXIMA will start a 10 sec. count down.

• After 5 sec. the MAXIMA will beep.

• Switch ON the wireless Remote Control.

• Now the Remote will be paired
3 Default User Presets

3.1 MAXIMA

The MAXIMA supplied with this five Default User Presets, which are programmed for camera setups up to 10 Kg / 22 lb.

<table>
<thead>
<tr>
<th>Profile</th>
<th>Motor Power</th>
<th>Tilt</th>
<th>Pan</th>
<th>Feels</th>
<th>Good for</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>45</td>
<td>Follow</td>
<td>Follow</td>
<td>Very</td>
<td>Handheld Look</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>direct</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>45</td>
<td>Follow</td>
<td>Follow</td>
<td>Very</td>
<td>Handheld Look</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>direct</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>45</td>
<td>Follow</td>
<td>Follow</td>
<td>Less</td>
<td>Easy Rig / running shots</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>direct</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>45</td>
<td>Follow</td>
<td>Follow</td>
<td>Less</td>
<td>Easy Rig / running shots</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>direct</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>45</td>
<td>Fully Stabilized</td>
<td>Fully Stabilized</td>
<td>Very</td>
<td>To be used with the wireless control or wheels</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>direct</td>
<td></td>
</tr>
</tbody>
</table>

3.2 TRINITY

The TRINITY supplied with five Default User Presets, which are programmed for camera setups up to 10 Kg / 22 lb.

<table>
<thead>
<tr>
<th>Profile</th>
<th>Motor Power</th>
<th>Tilt</th>
<th>Pan</th>
<th>Feels</th>
<th>Good for</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>35</td>
<td>Fully Stabilized</td>
<td>regular</td>
<td></td>
<td>TRINITY moves</td>
</tr>
<tr>
<td>2</td>
<td>35</td>
<td>Follow</td>
<td>regular</td>
<td>Very</td>
<td>Classic Steadicam™ feel</td>
</tr>
<tr>
<td>3</td>
<td>35</td>
<td>Follow</td>
<td>goofy</td>
<td></td>
<td>TRINITY moves</td>
</tr>
<tr>
<td>4</td>
<td>35</td>
<td>Fully Stabilized</td>
<td>goofy</td>
<td>Very</td>
<td>Classic Steadicam™ feel</td>
</tr>
<tr>
<td>5</td>
<td>35</td>
<td>Follow</td>
<td>regular</td>
<td>Very</td>
<td>Roll and Tilt is in Follow Mode</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>direct</td>
<td></td>
</tr>
</tbody>
</table>

NOTE
To be able to change any of this adjustment, you need to install the FoMa Control software and you need to read the User Manual GUI.

The manual is available on the USB stick and on the ARRI CSS web page in the download area.
4. Installing the GUI / Software

**NOTE**
The latest GUI and Windows drivers can be found at the [ARRI CSS web page](https://www.arri.com).

The **Control Software, the so called GUI** will only work on a PC with Windows 8 or 10, or a Windows Tablet with Windows 8 or 10, or on a Mac running Parallels.

**NOTE**
The software does not need a powerful computer.

<table>
<thead>
<tr>
<th>CAUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Install the USB driver first!</strong></td>
</tr>
<tr>
<td>Than you can run the FoMa_Control_Setup.exe</td>
</tr>
<tr>
<td><strong>Check</strong> first if windows is running in <strong>32</strong> or <strong>64 bit</strong> mode.</td>
</tr>
</tbody>
</table>

- Click onto the Windows Logo in the lower left corner
- Right click and navigate to system, to see if you are running 32 or 64 bit system.
- If you are running a **32 bit system** install the **CP210xVCPInstaller_x86.exe**.
- If you are running a **64 bit system**, install the **CP210xVCPInstaller_x64.exe**.
- Then install The FoMa Control Setup V.exe
- **NOTE**
  While installing the software, you can create a desktop shortcut, click in the box.

5. Starting the GUI / software the first time

This is the first tab you will see after you have launched the FoMa Control program.
6 Changing from Standard to Advanced Mode

The GUI normally will start in the standard mode. To change the GUI from standard to advanced mode, go to setting.

Click on **Mode** and change between **Standard** and **Advanced** mode.

**NOTE**
For the beginning stay in the **Standard** mode.

---

7 Connecting the USB Cable

To connect the MAXIMA / TRINITY to a PC or Tablet computer, a USB cable with a **MINI USB** connector on one end is needed.

Location of the USB sockets

The USB socket on the MAXIMA is located at the right side of the housing.

The USB socket of the TRINITY is located on the right side of the base plate.
8 Connecting the MAXIMA / TRINITY to the PC

- To start the GUI, double click on the FoMa CONTROL icon located on the desktop.

- Connect the USB cable to the PC / Tablet and the MAXIMA / TRINITY.

- The MAXIMA / TRINITY display will switch off for a short moment.

- Wait until the display comes back on again.

- Select the USB port (it will be COM3 most of the time)

- Press Connect

- Now all profiles of the MAXIMA / TRINITY will be uploaded into the GUI / software.

9 The Home Screen

You will see this tab after connecting successfully.
10 Motor Power and the three payload groups

The fastest way to set up the motor power of the MAXIMA and TRINITY, is to divide the possible cameras setups into three weight groups.

<table>
<thead>
<tr>
<th>Camera Setup</th>
<th>Up To</th>
<th>Motor Power Tilt &amp; Pan</th>
<th>Roll</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light</td>
<td>10 Kg / 22 lb.</td>
<td>35° / 45° (Default setting)</td>
<td>4</td>
</tr>
<tr>
<td>Medium</td>
<td>15 Kg / 33 lb.</td>
<td>80</td>
<td>5</td>
</tr>
<tr>
<td>Heavy</td>
<td>30 Kg / 66 lb.</td>
<td>110</td>
<td>6</td>
</tr>
</tbody>
</table>

* TRINITY / **MAXIMA

**NOTE**

The adjustable payload ranges, light, medium and heavy, allow an offset of 2.5 Kg / 5.5lbs. You do not need to be 100% on the spot.

10.1 Light camera setups up to 10 Kg / 22 lb.

This ALEXA MINI setup will be within this 10Kg / 22lb. payload range:

- ALEXA MINI Body
- ALURA LWZ ZOOM 15.5-45 mm K2.47934.0 (m), K2.47935.0 (ft)
- SAM2 Plate K2.0014215
- ARRI Rod Mounting Bracket RMB-3 K2.0006186
- Support Rods 240 mm (9.4 inch), Ø 19 mm K2.66270.0
- cforce Mini (Basic Set) K2.0006355

**NOTE**

To get the perfect vertical position for the MINI, please use the SAM-2 Stabilizer Adapter Mount for ALEXA Mini / K2.0014215
10.2 Medium camera setups up to 15 Kg / 33 lb.

An AMIRA setup with a LWT Zoom and Motors will be within the 15 Kg / 33lb. payload range.

**NOTE**
To get the perfect vertical position for the AMIRA, please use the SAM-3 Stabilizer Adapter Mount for AMIRA / K2.0014630

10.3 Heavy camera setups up to 30 Kg / 66 lb.

An Alexa setup with a Prime Lens and Motors will be at the lower end of the 33 Kg / 33lb. payload range.

**NOTE**
To get the perfect vertical position for the ALEXA, please use the SAM-1 Stabilizer Adapter Mount for ALEXA / K2.0014022

11 Adjusting the Motor Power (Standard Mode)

To change the motor power to a higher value, you can:
- Click on the + and - buttons
- Place the cursor into the number field and type in the number
- On a tablet you can slide the blue bar with your finger tips

11.1 The light setup will look like this:

![Motor Power Interface]

**NOTE**
In the standard mode the GUI shows the most effective motor power range for Tilt and Pan, which goes from 20 to 110. If higher values than 110 are needed, you need to change into the **Advance Mode**.
11.2 The Medium setup will look like this:

![Medium setup diagram]

11.3 The heavy setup will look like this:

![Heavy setup diagram]

**NOTE**

If you need to fine trim the motor power, changing the values by steps of five up and down, will be the best way to find the right motor power adjustment.

11.3 Adjusting PID (Advanced Mode)

Proportional – Integral – Derivative controller (PID controller)

In the Advanced Mode, you can adjust the Motor Power more accurate by using the PID adjustments.
11.4. PID Quick Guide

**NOTE**
Start with a solid camera setup

- Set Ramp and Damp to ZERO on the Joystick (Pan & Tilt)
- Physical test the Tilt axis.
- Touch the Tilt axis and try move the camera down and check if the camera slipping. If the tilt axis is slipping, you need to higher \( P \) for the Pan axis
- Select a point in the set.
- Use the joystick to tilt and stop the head and see if the camera: stops at the selected point or if it is over driving the point 4.3 or if it is bouncing left and right
- If the heads over driving or bouncing, you need to lower the P and D value of the Tilt axis by steps of five.
- Same process for Pan axis
Uploading adjustments to the MAXIMA and TRINITY

**NOTE**
After changing any of the settings, you have to **upload / write** the settings to the MAXIMA and TRINITY.

---

**Click on Write to Device**

The (*) indicates that there had been changes in the user profile and that these changes have **not** been uploaded to the MAXIMA / TRINITY. After the upload the (*) will disappear.

**NOTE**
As long you see the (*) the changes will not be affective.
13 Cloning Settings

If you want to have the same motor power adjustments in all five user profiles, click on All Profiles.

You will get a new tab in which you can program the motor power and other adjustments like joystick and follow mode for all 5 user profiles.

Repeat step 6.0 for changing the motor power and press Write to Device step 7.0.
Now you will have the same motor power adjustments in all five user profiles.
Why is the MAXIMA / TRINITY vibrating?

14.1 Reason 1

Not suitable or loose components. If the System vibrates, make sure that:

- The dedicated camera dovetail plate is mounted (Sam 1, 2 or 3)
- All screws clamps are fully tighten
- That no carbon fibre or stainless steel 15mm rods are used (aluminum rods are the best)
- That long lenses are supported with the dedicated lens support.
- That the matte box is not loose or causing vibrations.
- That the batteries sitting tight in the battery mount.

14.2 Reason 2

If the System still vibrates, lift the MAXIMA up from the table, case or the stand (the TRINITY of the docking stand) to see if the vibrations will stops.

NOTE

Gimbals are made for elastic mounts, like humans, spring arms and so on. Stands or tables are too stiff, that is why Gimbals start to vibrate.

14.3 Reason 3

The motor power is too high.

The right Motor Power

If the system is still vibrating, you will need to adjust the motor power of the Tilt and Pan axis. Go back to step 6.0 or 7.0 and decrease the motor power value by five steps.

NOTE

Press Write to Device and check if the change will give you the expected improvement and has removed the vibrations.
16 Adjusting the Joystick to your personal preferences

To ensure the best control of the MAXIMA and TRINITY and to create your personal style of moving the device, you need to adjust the touch and feel of the Joystick.

16.1 Adjustments and Functions

- **Direction:** Sets the direction in which the pan and tilt axis will go. The pan and tilt direction can also be opposite to the joystick direction.

- **Speed**
  - Sets the speed of the pan and tilt axis.
  - The real speed of the pan and tilt axis can be much higher than the speed of the joystick.
  - *NOTE* With the TRINITY you can only access the Tilt speed.

- **Delay**
  - Sets the acceleration and the deceleration of the pan and tilt axis.
  - Or how fast the pan and tilt axis will reach the adjusted speed when the movements starts and how soft the movement will stop.
  - *NOTE* A low value will ensure that the head will stop right away, when the joystick movement stops. A higher value will add a smooth movement after the joystick movement had stopted. Higher values will make operating the MAXIMA / TRINITY more and more indirect.

- **Deadband**
  - Sets the starting point of the Joystick. This value controls when the Joystick will react after you touched it.
  - The lower the value, the more direct the joystick will react.
  - The higher the value, the slower the joystick will react.
  - *NOTE* If you want to do a running shot with a lot of body movement, you should set the Deadband to a value higher than 5. This ensures that, if you touch the Joystick accidentally that there will be no unwanted movement in the head.

- **Ramp**
  - Sets how much ramp will be on the joystick movement.
  - This value allows you to set a ramp, or how direct the joystick will react.
  - A low value will make the joystick very direct, while a higher value will add a soft ramp to the joystick movement.
17 Delay, Deadband, Ramp

17.1 Speed

Sets the acceleration and the deceleration of the pan and tilt axis. Or how fast the pan and tilt axis will reach the adjusted speed when the movements starts and how soft the movement will stop.

17.2 Deadband and Ramp

Deadband sets the starting point of the Joystick. This value controls when the Joystick will react after you touched it. Ramp sets how much ramp will be on the joystick movement.

NOTICE
All three parameters are related to each other.

If the speed is adjusted to a value below 50, keep the ramp value as low as possible. If the value is too high, there will be more or less NO movement in the end.
18  **Defining Endstops**

Depending on the size of the camera setup, the frame of the MAXIMA only allows certain amount of camera movement.

**NOTE**
Setting end stops will help to avoid the lens or camera colliding with the frame of the MAXIMA or the base plate of the TRINITY.

This adjustment will be performed in the **Device** settings. After clicking on **Device** you will see this tab.
Here you can later dial in the needed values in degrees for the single axes.

To define the required angle for each axis, use the Joystick and move the camera setup carefully into the required end position.

While moving the camera, you can see the white arrow moving and indicating the value.

To transfer the values, you can use + and - to move the red cursor to the tip of the white arrow.

Or you type in the values, which are shown in lower left and right corners.
Follow or Fully Stabilized Mode

19.1 MAXIMA Modes

<table>
<thead>
<tr>
<th>Follow Mode</th>
<th>Fully Stabilized Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handheld</td>
<td>Handheld</td>
</tr>
<tr>
<td>Easyrig</td>
<td>Remote Controlled</td>
</tr>
<tr>
<td>With artemis Vest &amp; Arm</td>
<td>Hard Mounted on Crane or Dolly</td>
</tr>
</tbody>
</table>

19.2 TRINITY Modes

<table>
<thead>
<tr>
<th>Fully Stabilized Mode</th>
<th>Follow Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRINITY moves</td>
<td>Classic Steadicam™ Mode</td>
</tr>
<tr>
<td>MSP-1 mounted with Easyrig</td>
<td>Remote Controlled</td>
</tr>
<tr>
<td>Remote Controlled</td>
<td>MSP-1 mounted with Easyrig</td>
</tr>
<tr>
<td>Hard Mounted on Crane or Dolly</td>
<td></td>
</tr>
</tbody>
</table>

19.3 Follow Mode default preset MAXIMA

<table>
<thead>
<tr>
<th>Preset</th>
<th>Axes</th>
<th>Follow</th>
<th>Speed</th>
<th>Deadband</th>
<th>Ramp%</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tilt</td>
<td>On</td>
<td>180</td>
<td>1,0</td>
<td>20</td>
<td>Both axes will follow fast and very directly.</td>
</tr>
<tr>
<td></td>
<td>Pan</td>
<td>On</td>
<td>180</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Tilt</td>
<td>Off</td>
<td>180</td>
<td>1,0</td>
<td>20</td>
<td>Only the Pan axis will follow fast and very directly, while the Tilt axis is fully stabilized.</td>
</tr>
<tr>
<td></td>
<td>Pan</td>
<td>On</td>
<td>180</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Tilt</td>
<td>On</td>
<td>50</td>
<td>6,0</td>
<td>50</td>
<td>Both axes will follow later and more indirectly.</td>
</tr>
<tr>
<td></td>
<td>Pan</td>
<td>On</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Tilt</td>
<td>Off</td>
<td>50</td>
<td>6,0</td>
<td>50</td>
<td>Only the Pan axis will follow later and more indirectly, while the Tilt axis is fully stabilized.</td>
</tr>
<tr>
<td></td>
<td>Pan</td>
<td>On</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Tilt</td>
<td>Off</td>
<td>180</td>
<td>5</td>
<td>50</td>
<td>Both axes are fully stabilized. This is the mode you will need for wheels, like the PLC Wheels.</td>
</tr>
<tr>
<td></td>
<td>Pan</td>
<td>Off</td>
<td>180</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTE
If the camera setup is in the Heavy Payload range, please use user preset 3 and 4 when you need Follow Mode.
19.4 Follow Mode default preset TRINITY

<table>
<thead>
<tr>
<th>Preset</th>
<th>Axes</th>
<th>Follow</th>
<th>Speed</th>
<th>Deadband</th>
<th>Ramp%</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tilt</td>
<td>Off</td>
<td>180</td>
<td>5</td>
<td>30</td>
<td>User preset 1 is the so called TRINITY mode, a fully stabilized mode.</td>
</tr>
<tr>
<td>2</td>
<td>Tilt</td>
<td>On</td>
<td>180</td>
<td>0.0</td>
<td>5</td>
<td>User presets 2 and 3 is the classic Steadicam™ mode, but with a stabilized roll axis for a steady horizon.</td>
</tr>
<tr>
<td>3</td>
<td>Tilt</td>
<td>On</td>
<td>180</td>
<td>0.0</td>
<td>20</td>
<td>User presets 2 and 3 is the classic Steadicam™ mode, but with a stabilized roll axis for a steady horizon.</td>
</tr>
<tr>
<td>4</td>
<td>Tilt</td>
<td>On</td>
<td>0</td>
<td>1.0</td>
<td>50</td>
<td>User preset 4 is TRINITY mode with a locked Roll axis. The roll axis can be Dutched.</td>
</tr>
<tr>
<td>5</td>
<td>Tilt</td>
<td>On</td>
<td>180</td>
<td>0.0</td>
<td>50</td>
<td>User preset 5 is a fully locked classic Steadicam™ mode.</td>
</tr>
</tbody>
</table>

NOTE
In all modes you can use the wired or wireless Joystick to control and to support the camera movement and the framing.

19.5 Changing the Modes

To change from **Follow** to **Fully Stabilized Mode** switch the Follow **On** to **OFF**.

Both axes in Follow Mode

Both axes in Fully Stabilized Mode

Tilt in Fully Stabilized Mode and Pan in Follow Mode
19.6 Adjusting the Values

**Speed**
Sets the speed how fast the camera will be pulled out of the deadband zone.

**Deadband**
Sets the angle of the starting point when the camera will follow the MAXIMA / TRINITY movement.
- The lower the value, the faster the camera will follow.
- The higher the value, the later the camera will follow.
- **NOTE**
  - If you want to do a running shot with a lot of body movement, you should set the Deadband to a value higher than 5.

**Ramp %**
Sets how smooth the camera will be pulled after the camera left the deadband zone.
- A low value, will let the camera engage fast and direct.
- A higher value, will let the camera engage very smooth and indirectly.

19.7 MAXIMA application settings

<table>
<thead>
<tr>
<th>Applikation</th>
<th>Action</th>
<th>Mode</th>
<th>Speed</th>
<th>Deadband</th>
<th>Ramp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handheld Direct</td>
<td>Lot of body movement</td>
<td>Follow</td>
<td>180</td>
<td>1,0</td>
<td>20</td>
</tr>
<tr>
<td>Handheld Indirect</td>
<td>Lot of body movement</td>
<td>Follow</td>
<td>50</td>
<td>6,0</td>
<td>50</td>
</tr>
<tr>
<td>Easyrig Direct</td>
<td>Lot of body movement</td>
<td>Follow</td>
<td>180</td>
<td>1,0</td>
<td>20</td>
</tr>
<tr>
<td>Easyrig Indirect</td>
<td>Lot of body movement</td>
<td>Follow</td>
<td>50</td>
<td>6,0</td>
<td>50</td>
</tr>
<tr>
<td>artemis arm and vest</td>
<td>Lot of body movement</td>
<td>Follow</td>
<td>50</td>
<td>6,0</td>
<td>50</td>
</tr>
<tr>
<td>Black Arm</td>
<td>Hard mounted</td>
<td>Fully Stabilized</td>
<td>180</td>
<td>1,0</td>
<td>10</td>
</tr>
</tbody>
</table>
20 Saving and Loading Profiles

20.1 Saving Profiles

You should store your settings on the drive, USB stick or into a cloud. Click on Save to File and the window below will appear. Name the profile and store it.

NOTE
If you are in one of the five profiles and you press STORE, only the actual profile will be stored. If you want to store all 5 profiles in one single file, you need to press first ALL PROFILES and than you need press STORE, to save the file.

20.2 Load Profiles

You can load any stored profile to any of the 5 profiles of the connected MAXIMA / TRINITY. To load profiles from a drive, USB or a cloud drive, click on Load from File. Click on Load from File and the window below will appear.

NOTE
If you do not own the computer that you are using for these setups, then you should save the profiles onto an USB stick.

NOTE
Make sure that the profiles had been programmed on the same GUI / software version.
21  Troubleshooting

21.1 Service Information

For Service and Remote Access we will need to know the firmware version and serial number.

- Press OK
- Press DOWN until Info is displayed
- Press OK to confirm
- Now you can see the required information

21.2 Restore Sensors

If the MAXIMA or TRINITY is hard to control or having troubles holding its position, it will be helpful to reset the sensors.

- Press OK
- Press DOWN until Restore is displayed
- Press OK to confirm
- Press DOWN until Sensors is displayed
- Press OK to confirm

⚠️ CAUTION

Do not touch or move the MAXIMA or TRINITY while you restore the Setting! Wait until the TRINITY is back in operation.

21.3 Restore Settings

If you are working with a rental unit, it will make sense to restore the MAXIMA / TRINITY to factory setup. This will ensure that you will not be confronted with any unknown settings.

- Press OK
- Press DOWN until Restore is displayed
- Press OK to confirm
- Press DOWN until Setting is displayed
- Press OK to confirm

⚠️ CAUTION

Do not touch or move the MAXIMA or TRINITY while you restore the Setting! Wait until the TRINITY is back in operation.

21.4 Remote Access

The service team can remotely access the MAXIMA or TRINITY. To enable us to access your MAXIMA or TRINITY, you need to install the „TeamViewer“ software on your PC first.

https://www.teamviewer.com

Then you need to contact the ARRI service.

NOTE

You will need a stable internet connection.
22 Pan Lock

Using the MAXIMA Pan Lock

22.1 Preparing the MAXIMA GUI

NOTE
Before you can use the MAXIMA Pan Lock (K2.0014908), you have to switch OFF the Pan axis.

![Pan Lock GUI](image)

22.2 Mounting the MAXIMA Pan Lock

- Open both Clamps and place the bracket onto the rods.
- Move the bracket under the outer ring and tighten the clamp screws

⚠️ CAUTION

Before using the Pan Lock, you need to switch OFF the Pan Motors using the GUI!

Using the Pan Lock with an active motor will cause over heating and possible failure of the Pan motors.
23 Setting up the PLC wheels

**CAUTION**
For working with the external PLC wheels, the MAXIMA and TRINITY need to be specially adjusted.

**NOTE**
Use User Preset five for the wheels setup.

You need to set the Tilt and Pan axis to Fully Stabilized Mode.

### 23.1 Joystick Values

You need to adjust the Joystick values to the settings below.

<table>
<thead>
<tr>
<th>Axis</th>
<th>Speed</th>
<th>Delay</th>
<th>Deadband</th>
<th>Ramp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tilt</td>
<td>150</td>
<td>1,0</td>
<td>10</td>
<td>0 %</td>
</tr>
<tr>
<td>Pan</td>
<td>150</td>
<td>1,0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTE**
Before you can start using the wheels, you need to read the PLC manual, which can be found here:
23.2 Paring the Wheels

- First power **Off** the PLC wheel, by removing the power cable
- Press the **OK** key
- Press **Down** until **Remote Pairing** is displayed
- Press the **OK** key
- Now the MAXIMA / TRINITY will start a 10 sec. count down.
- After **5 sec.** the MAXIMA / TRINITY will **beep**.
- **Plug** the power cable into the PLC wheels.
- Now the PLC will be paired

23.3 Using the 3. Wheel for the Roll axis

If you want to control the Roll axis by a third wheel, you need to go first into the **Advance Mode**.
(Revere to Changing from Standard to Advanced Mode)

For the Roll axis you have to change from **Angle to Speed**.