CSS EVO GUI 3.0.10

USER MANUAL

September 2024 • 1.1 • English

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2 Imprint

Original version.

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Content

CSS EVO GUI 3.0

1. Foreword

Based on the architecture of the TRINITY 2 GUI and the valuable feedback from SRH-3, SRH-360, EVO 360 and TRINITY 2 users, the new CSS EVO GUI 3.0 has been developed.

The new CSS EVO GUI 3.0 offers a standardized operating concept for easy programming and adaptation of the EVO 360 and TRINITY 2 to the shooting conditions and personal working methods and preferences.

The CSS EVO GUI 3.0 is also the prerequisite for using the TRINITY 2 Pan Axis Module.

A clear architecture with a flat hierarchical structure allows quick access to the parameters and functions of the 360 EVO and the TRINITY 2 without having to maneuver deep into nested menu structures.
In addition to the controller of the stabilized remote head, focus, iris and zoom, as well as other functions, can not only be parameterized, but also grouped into combined programs that can be called up again and again with precision.

The CSS EVO GUI 3.0 masters LBUS, FS CAN bus and network communication and is therefore ideally equipped for future work requirements and processes.

Thanks to this uniform GUI for the 360 EVO and the TRINITY 2 system, wishes and suggestions from two entirely different application areas can be creatively implemented in this architecture.

2. Power Supply

NOTICE
Please follow the instructions on the subject of power supply in the 360 EVO and TRINITY 2 manual.

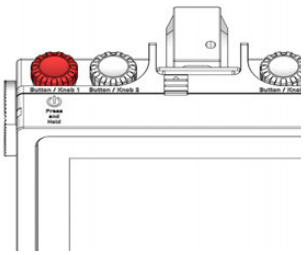
Only a power supply that meets the requirements can ensure the flawless functioning of the remote control.

CSS EVO GUI 3.0

3. Initializing the RCP / System

3.1 Power Up RCP-2 EVO

Press and hold the power button for t**hree seconds** to switch on the remote control panel.

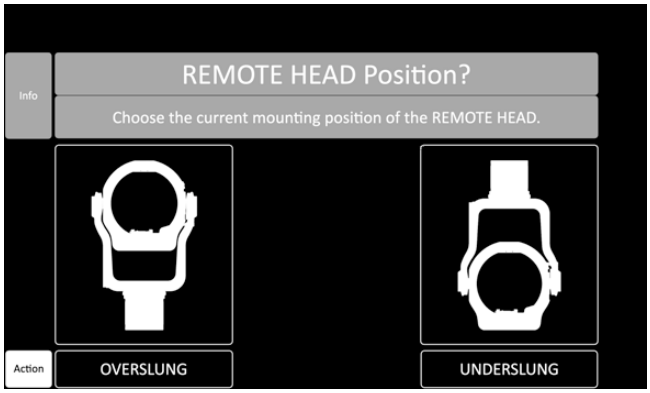


3.2 Power Up RCP-3

Press the Power button momentarily to switch the hand unit on.

3.3 Head Position

Once the connection to the remote head has been successfully established, the following prompt appears.



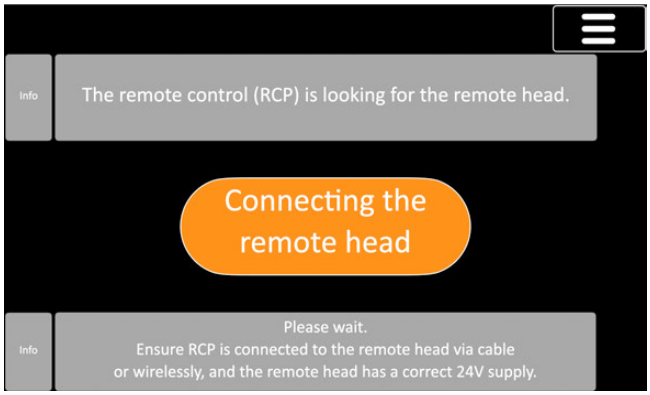
Select **OVERSLUNG** if the head is standing on a dolly, bazooka or hard mount.

Select **UNDERSLUNG** if the head is suspended from a crane, Spidercam, or hard-mount.

NOTICE
An incorrectly selected position can lead to reduced performance of the stabilized remote head and other undesirable effects.

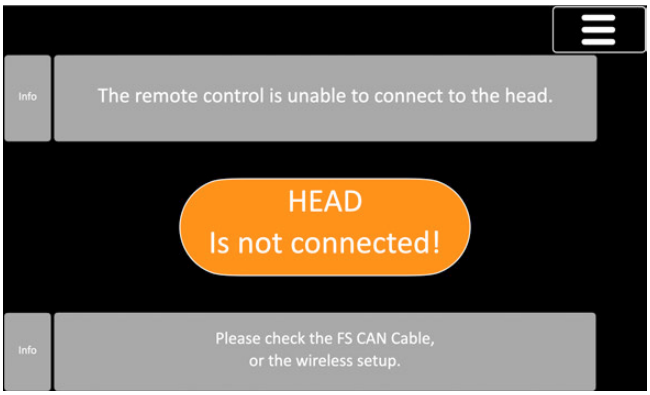
3.4 Connecting the Remote Head

After the actual boot process, which can take a few seconds, the following information appears.



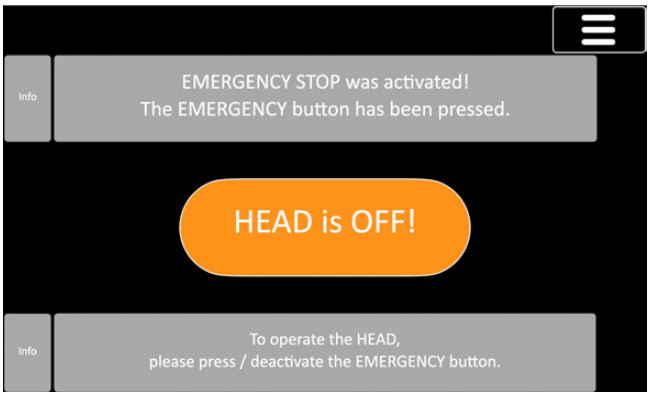
3.5 Head is not connected Message

Check the FSCAN cable and replace it if necessary.
If you are using a wireless connection, check the wireless setup



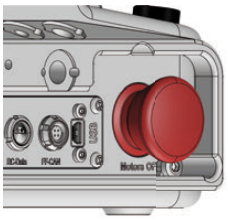
3.6 Head Off Message

First, make sure that the power supply to the remote head is correct.



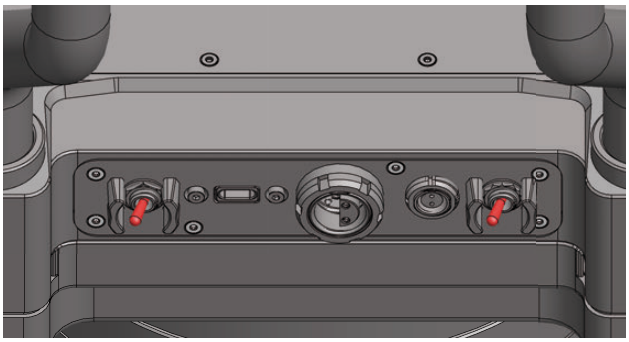
3.6.1 360 EVO

If this message is displayed, please verify that the two emergency stop switches on the RCP and remote control head are deactivated.



3.6.2 TRINITY 2 Pan Axis Module

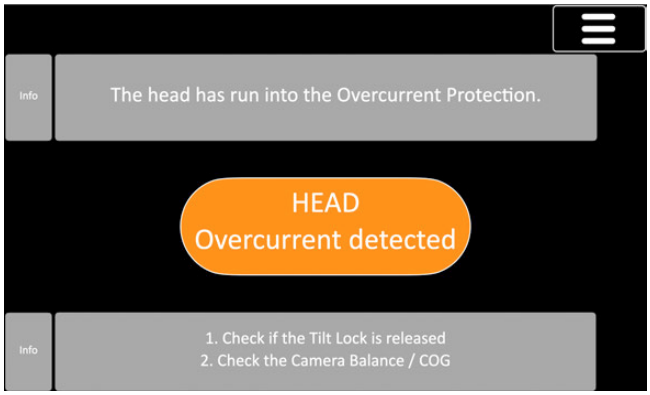
If this message is displayed, make sure that the Power On/Off and Stabilizer On/Off switches are set to **On**.



3.7. HEAD Overcurrent detected Message

This message primarily appears if the tilt lock is still engaged.

Or if the camera balance / COG is extremely outside the optimum range.



3.8 Switch Off Head Message

If you do not respond to the previous message promptly, this message will appear.
You must now immediately turn off the power to the remote head.

Otherwise, there is a significant risk of major damage to the motors.

4.0 Home Screen

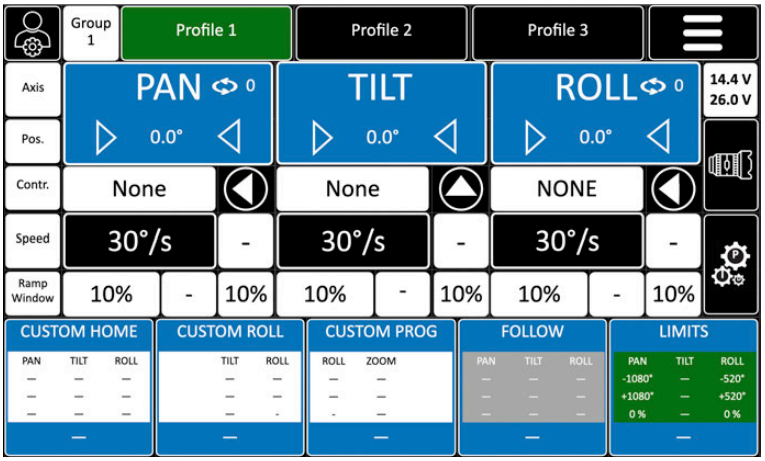
4.1 Foreword

The home screen consists of four elements:
At the top, access to the user profiles and user profile groups, such as access to the main menu.

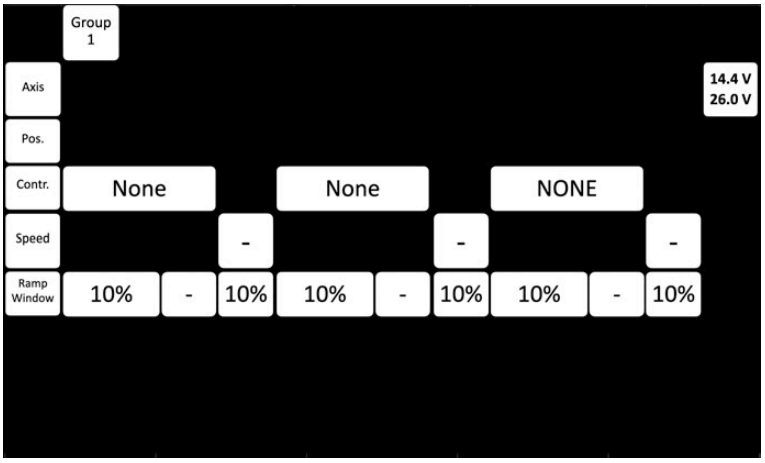
On the left, a cross-system arrangement of the function names.
This arrangement of function names can be found in all submenus.

On the right is the status information for the power supply of the remote head and the RCP, as well as access to the FIZ (Focus, Iris, Zoom) and PID submenus.

Five freely programmable programs are available at the bottom.



4.2 Color Scheme

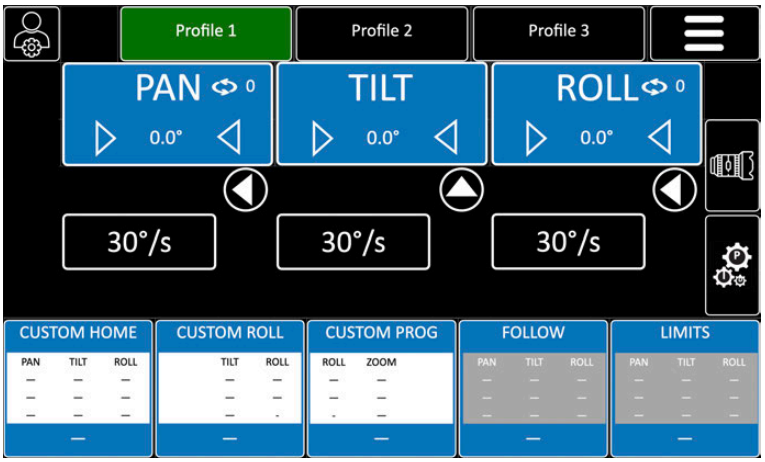


White areas with black lettering are for information purposes only.

This means that functions and current values are displayed.
The white areas do not react to touch!

Black and green areas with a white border not only display functions and values, but can also be changed directly by touching them or allow the respective submenu to be accessed.

The large blue areas of PAN, TILT, ROLL, FOCUS, IRS, and ZOOM only respond when pressed for longer than two seconds.
The respective submenu then opens.



The five program fields at the bottom of the home screen are an exception.
There is a combination here:

If you tap and hold the field for more than two seconds, you get a submenu where you can make the actual program.

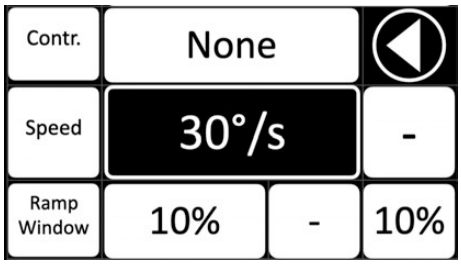
The previously programmed custom program will be executed if you touch the field briefly.

4.3 Type of Information

4.3.1 Axis

1 Axis (Pan, Tilt, Roll, Focus, Iris, Zoom, …)
2 Amount of turns in the same direction (Pan & Roll)
3 Position and direction

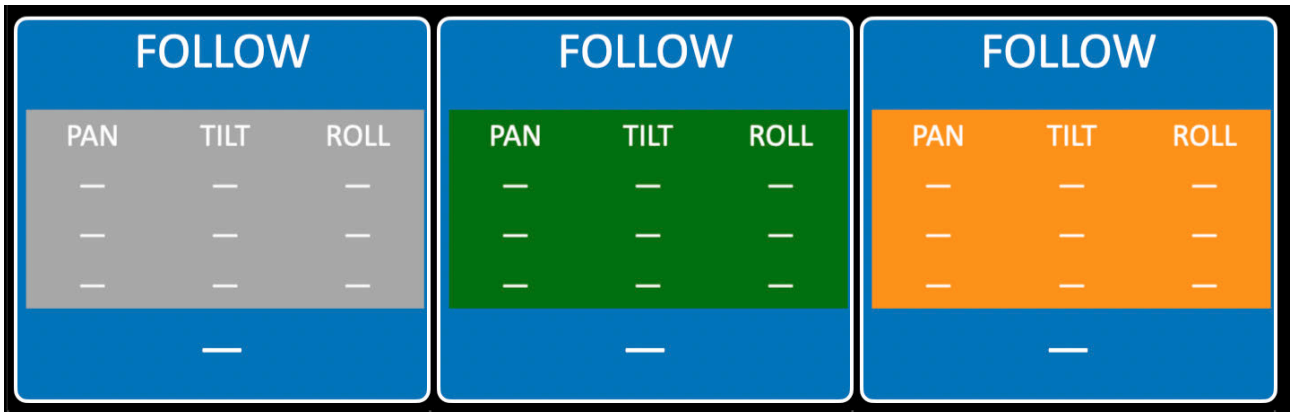
4.3.2 Speed, Ramp, Window



1 Assigned Controller
2 Direction of the controller (Joystick, Wheels,…)
3 Speed in degrees per second
4 Assigned controller for the speed value
5 Ramp
6 Assigned controller for the ramp value
7 Window

4.3.3 Follow & Limits

The FOLLOW and LIMITS functions follow this color coding:



Grey FOLLOW and LIMITS have not yet been programmed or single axis are **disabled**.

Green FOLLOW and LIMITS are programmed and **active**.

Orange FOLLOW and LIMITS are programmed but **deactivated**.

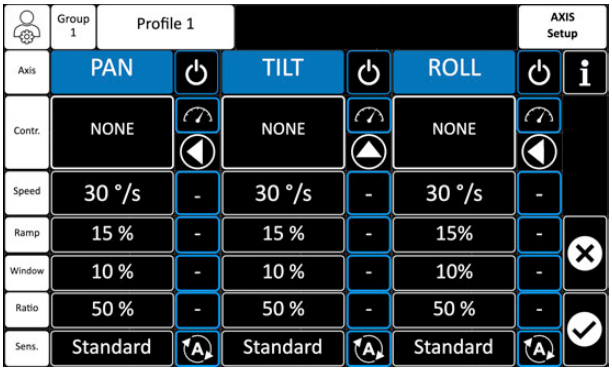
5.0 Controllers

5.1 AXIS Setup

Touch the desired axis on the home screen to open the AXIS Setup submenu.

To ensure a comprehensive overview, all axes are presented simultaneously in the axis submenu.

This allows the values of the respective axes to be placed into a meaningful relationship with each other more rapidly.



5.2 Assigning Controllers

You can assign a controller by touching the desired field.

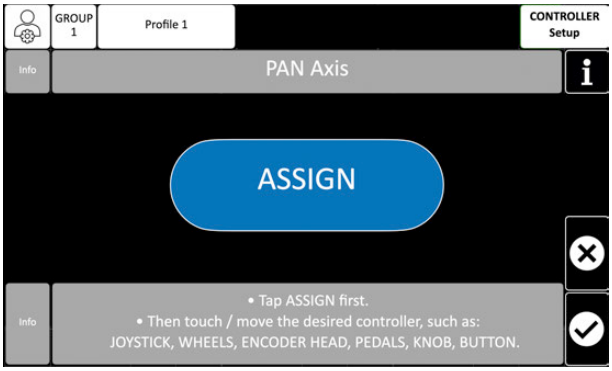
NONE means that no controller has yet been assigned to this axis.

Let's assign a controller for the PAN axis.

Tap on the field under PAN, where **NONE** is displayed.

Now the controller assignment submenu will show up.

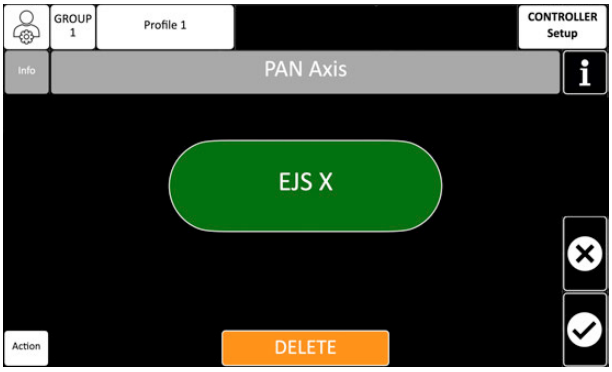
Tap **ASSIGN** first
Then touch / move the desired controller, such as:
JOYSTICK, WHEELS, ENCODER HEAD, PEDALS, KNOB, BUTTON.



After we preset the ARRI Wheel to PAN and rotated it after pressing the ASSIGN button, the ARRI Wheel DRW-1 Pan was automatically assigned to the PAN axis.

Press ✓ when you have selected the correct controller.

To assign another controller, press **DELETE** and repeat the process with another controller.



NOTICE
To cancel the assign process, press ✕.

5.3 Available Controllers

5.3.1 RCP-2 EVO Controller (intern)

STJ	Standard Joystick
MFJ	Micro Force Joystick
BCJ	Broadcast Joystick
IFW	Internal Focus Wheel
IZR	Internal Zoom Rocker
B	Button (e.g. RCP B1)
K	Knob (e.g. RCP K1)

5.3.2 RCP-3 Controller (intern)

B	Button (e.g. RCP B1)
K	Knob (e.g. RCP K1)

5.3.3 LBUS Controller (extern)

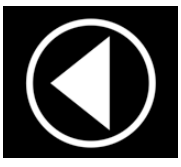
EJS-1	External Joystick (Broadcast) (e.g. EJS X for Pan, EJS Y for Tilt, EJS Z for Roll)
MGT Joysticks	Master Grip TRINITY (e.g. MGT J1 for Tilt, MGT J2 for Roll)
MGT Buttons	Master Grip TRINITY Buttons (e.g. MGT B1)
DRW	Digital Remote Wheels
DEH	Digital Remote Head
DEP	Digital Encoder Paddles (e.g. DEP O for Roll)
OCU	Operator Control Unit
OCU Buttons	Operator Control Unit Buttons (e.g. OCU B1)
MGR	Master Grip Zoom Rocker
MGW	Master Grip Focus Wheel
EJW	External Jog Wheel (e.g. EJW B1 for Button 1, EJW K1 for Knob)
CMZ	cmotion Pan Bar Zoom

5.4 Controller Setup

Different value settings are required for the three available Joysticks, the ARRI Wheels, ARRI Pedals, and other LBUS controllers like the OCU-1 or Master Grips.

5.5 Automatic Controller Setup

After the controller has been assigned, tap this field for **two seconds** to call up the appropriate basic settings for the connected controller.



5.6 Directions

You can change the direction by tapping on this field.

5.7 Angle / Speed Mode

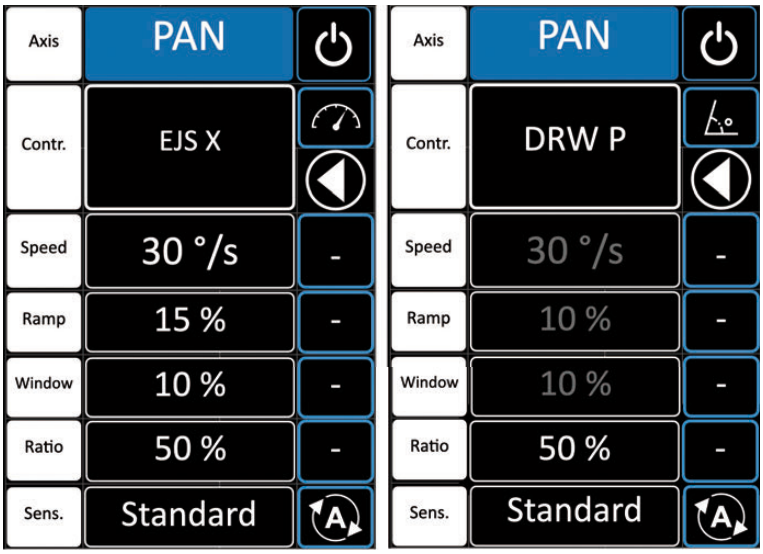
Each controller has a preferred operating mode.
There are two different modes of operation:

5.7.1 Speed Mode (left)

Available adjustments:
Speed
Ramp
Window
Ratio
Sensitivity

5.7.2 Angle Mode (right)

Available adjustments:
Ratio
Sensitivity



5.7.3 Speed Mode

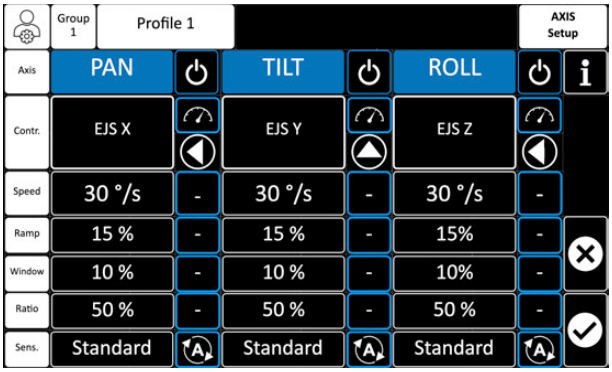
In Speed Mode, the dynamic values of the controller will be utilized to control the movement of the remote head.
Controlling the remote head feels more intuitive and direct.
The Speed Mode setting is the appropriate choice when shooting in highly dynamic situations involving rapidly moving targets.

NOTICE
Speed mode is required for all available joysticks and the ARRI Pedals DEP-1.

5.7.4 Angle or Position Mode

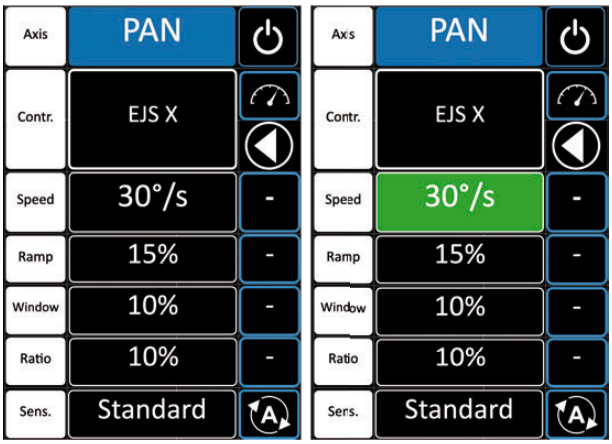
The controller generates precise position data in degrees and transmits it to the remote head.
Controllers, such as the ARRI Wheels DRW-1, and digital encoder heads, such as the DEH-1 and DEH-2, operate on this principle.
If the controller is brought to an angle or position of 60°, for instance, and held there, the remote head follows a one-to-one pattern, with the controller's movement terminating precisely at 60°.
If you want the remote head to move exactly the same way as the controller and to move to a certain position repeatedly, angle or position mode is recommended.

To switch between the two modes, tap on this field.



6.0 Basic Controller Settings

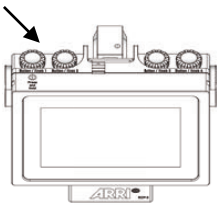
In this sub-menu you can set all the necessary values for the assigned controller, such as speed, ramp, window, ratio and sensitivity .

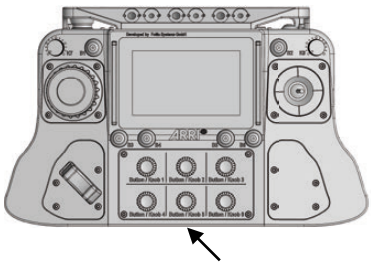


6.1. Speed (Speed Mode only)

As soon as you tap on the speed value in the black field, the field turns **green**.

The speed value changes when you turn one of the jog wheels on the RCB-2 EVO or RCP-3.





If you turn one of the four jog wheels of the RCP-3 or one of the six jog wheels of the RCP-2 EVO and then press it, the speed or all other values, such as ramp and so on, are set and confirmed.

6.2 Ramp (Speed Mode only)

The **Ramp** value in remote heads refers to the rate at which the speed of the camera movement changes. It determines how quickly the camera accelerates or decelerates during a pan, tilt, or other movement.

When adjusting the Ramp value, you are essentially controlling the smoothness and speed of the camera movement. A higher Ramp value will result in a more gradual acceleration and deceleration, creating smoother and more cinematic movements.
On the other hand, a lower Ramp value will cause the camera to accelerate and decelerate more abruptly, resulting in quicker movements.

By adjusting the Ramp value, operators can fine-tune the camera's movements to achieve the desired effect for a particular shot or scene. This level of control is essential for creating professional-looking and visually appealing footage.

NOTICE
A Ramp value that is too high can be counterproductive and is therefore not recommended, as the previously set speed value may not be achieved.

6.3 Window / Dead Band (Speed Mode only)

The Window value in remote heads refers to a parameter that controls the sensitivity of the joystick or control device used to operate the camera. It determines the amount of movement required before the camera begins to respond to the input.
A smaller Window value means that even slight movements of the joystick will result in immediate response from the camera, making it more sensitive and responsive to subtle inputs.
On the other hand, a larger Window value requires more significant joystick movements before the camera starts to move, making it less sensitive and allowing for more precise control.

NOTICE
It's not recommended to set a Window value too high, as the controller may react too late and the final available range of the controller may not be sufficient to execute the desired movement.

6.4 Ratio

The ratio value in remote heads refers to the relationship between the movement of the control device, such as a joystick, and the resulting movement of the camera. It determines how much the camera moves in response to the input from the control device.
A higher ratio value means that a small movement of the control device will result in a larger movement of the camera, providing more rapid and dynamic camera movements.
Conversely, a lower ratio value will cause the camera to move less in response to the same input, resulting in slower and more subtle movements.

CAUTION
Too high ratio values can lead to extremely fast movements of the remote head.

6.5 Sensitivity

The sensitivity value in remote heads refers to the parameter that controls how responsive the camera is to the input from the control device, such as a joystick or a remote control.

It determines the degree to which the camera responds to the movement of the control device.

A higher sensitivity value makes the camera more responsive to small movements of the control device, resulting in quicker and more pronounced camera movements.

On the other hand, a lower sensitivity value reduces the camera's responsiveness to small movements, resulting in slower and more subtle camera movements.

Controllers such as the Joysticks, the DEP-1 Pedals, or Rocker, which only work in Speed mode, can be adjusted in a way that feels more analog.

If you want to change the setting or feel of the controller in Speed Mode, tap this field.

NOTICE
LOW gives the best "analog" feeling.

7.0 PID Settings

The **PID** (Proportional, Integral, Derivative) values in remote heads refer to the parameters that control the behavior of the motorized system used to move and stabilize the camera. These values are part of a control algorithm that helps regulate the movement and positioning of the camera.

Proportional (P): The **P**-value determines how much the motor responds to the current error, which is the difference between the desired position and the actual position of the camera.
A higher **P**-value results in a stronger response to this error, leading to faster but potentially more oscillatory movements.

Integral (I): The **I**-value considers accumulated past errors over time and helps eliminate any residual error that may persist after applying proportional control. It helps ensure that the camera reaches and maintains its desired position accurately.

Derivative (D): The **D**-value considers the rate of change of the error, helping to dampen rapid changes in movement and reduce overshooting or oscillations.

By adjusting these PID values, operators can fine-tune the responsiveness, stability, and precision of the camera's movements. Properly tuned PID values can help achieve smooth and accurate camera motions, especially in dynamic shooting situations where precise control is essential. However, finding the optimal PID values often requires experimentation and tuning based on specific equipment and shooting conditions.

NOTICE
It is imperative to comprehend and acknowledge that all essential steps, including camera setup, attachment of the remote head to the crane, and PID settings, must be executed accurately in order to obtain optimal performance from the entire system.

Before you start changing the PID values, make sure that:

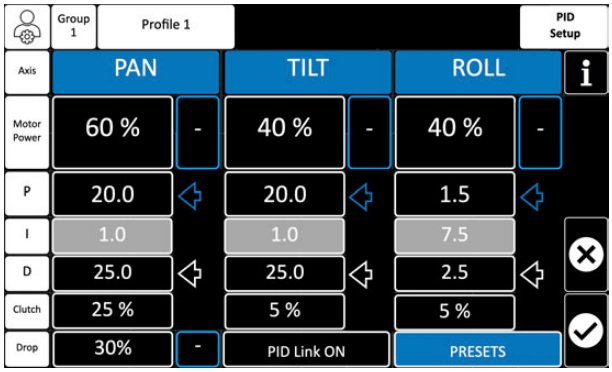
1. There is a solid camera setup.
2. All necessary parts are securely fastened to the camera.
3. Do not use tape or Velcro to attach components to the camera.
4. Make sure all the clamps, mounts, and brackets are securely fastened and secure.

7.1 PID Setup Submenu

To access the PID settings menu, merely tap on the PID field located on the home screen.

You can choose between preset or manual settings for the PID settings.

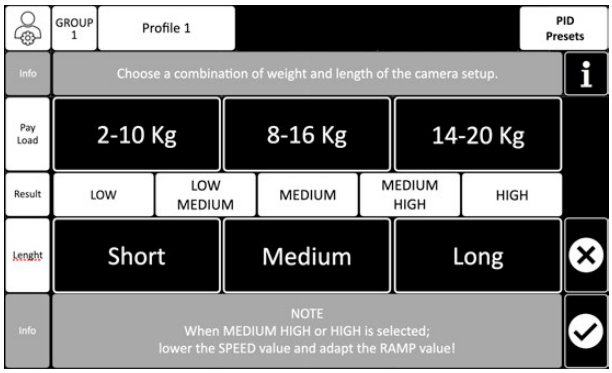
It is the quickest way to use the preset option first and then fine tune the PID values manually.



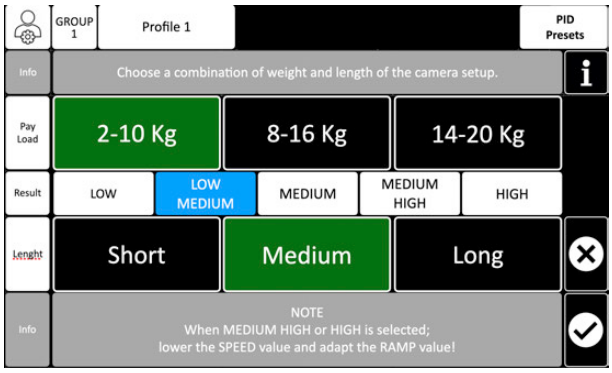
7.2 Presets

To open the PID PRESET sub menu, tap the **PRESETS** field.

Now select the combination of fields that best matches the length and weight of the camera equipment.



The result is displayed with a blue background. In this case, it is LOW / MEDIUM.



If you have accidentally selected the wrong field, simply touch the desired field to implement the desired value.

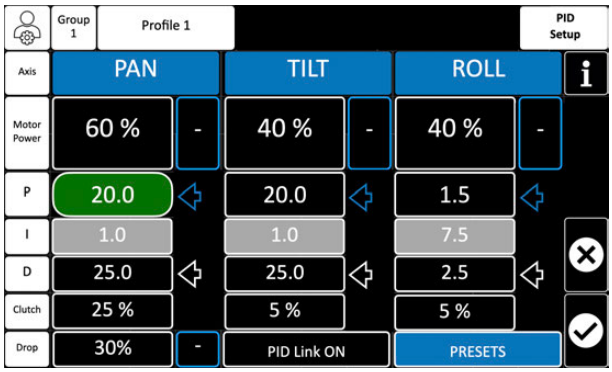
7.3 PID Link

Tap **PID Link On / OFF** to activate the PID Link.

To further simplify manual fine-tuning and, above all, to prevent the **D**-value from being forgotten and the I-value from being changed accidentally, it is advisable to activate the PID Lock function.

If, for example, the **P**-value of the PAN axis is changed, the **D**-value is automatically adjusted by a fixed factor in relation to the **P**-value.

The arrows next to the **P** and **D**-values indicate that the settings are not linked to each other.



7.4 Clutch

The **Clutch** function prevents excessive correction of the head when it departs from the intended position.

This function has different settings that can be changed from 5% to 90%

A low value is recommended for slow applications such as dolly and studio crane, whereas a higher value is suitable for more dynamic applications such as rapid car movements.

Tap the **Clutch** field to change the value.

7.5 Drop

Adaptive background adjustment (Drop) is a function specially developed for the Top Shot that automatically adjusts all settings in the background.

This function facilitates precise fine-tuning by utilizing a scale system that ranges from 0% (no adjustment) to 100% (maximum adjustment)

The normal working range remains unaffected and is still ± 70° so that the function.
can be seamlessly integrated into the workflow.

Tap the **Drop** field to change the value.

CCS EVO GUI 3.0

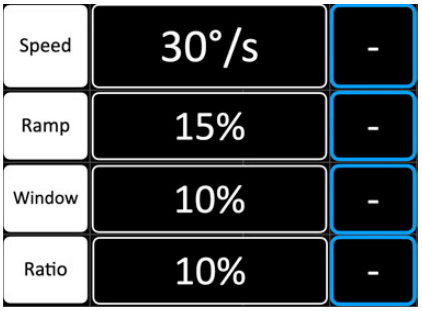
8.0 Customizing

CSS EVO GUI 2.0 offers a wide range of options for users to interact with the respective functions and parameters.

8.1 Assignment of Jog-Wheels to Values

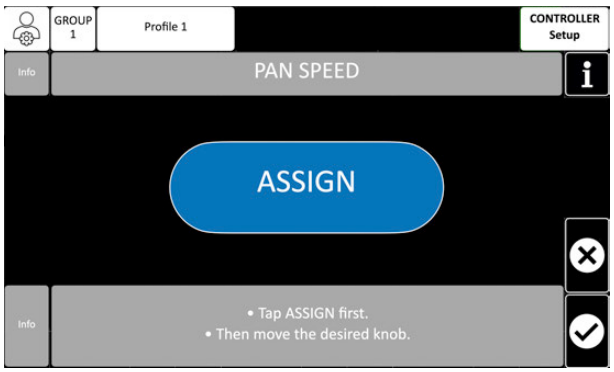
The majority of the value modifications in this graphical user interface can be attributed to a rotary control of a Jog-wheels.

If you tap on a field with a blue border next to a value for two seconds, a submenu for the assignment opens.

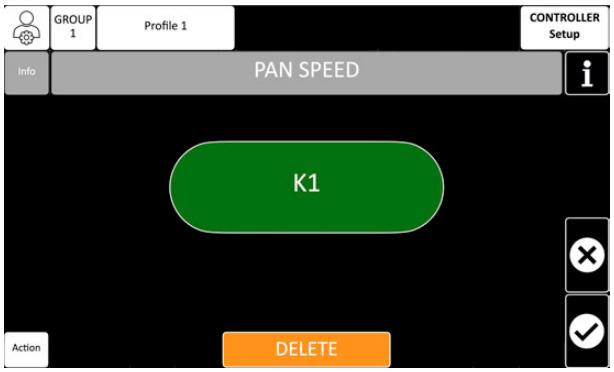


Tap **ASSIGN** first.

Then turn one of the digital Jog-Wheels on the RCP-2 EVO, RCP 3 or EJW-1.



Once the jog-wheel is recognized, it will be assigned to the speed value.



Press ✔ if you're happy with the choice of controller.

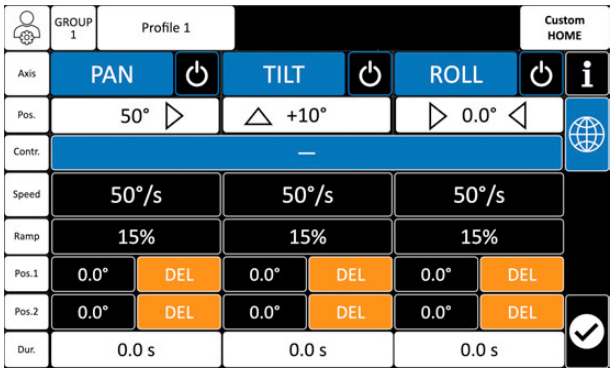
If you still want to assign another controller, press **DELETE** and do it again with another controller.

NOTICE
To cancel the assign process, press ✖.

8.2 Assignment of Jog-Wheels to Programs

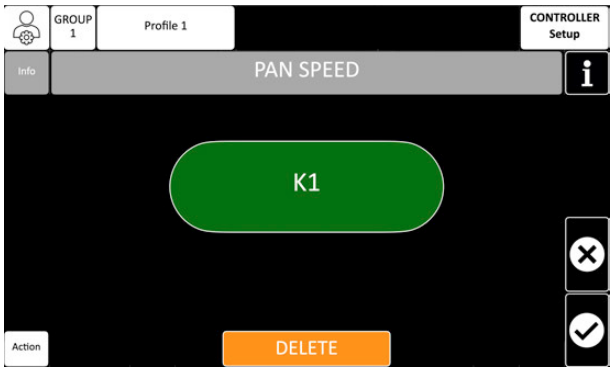
Every function or custom program in this graphical user interface can be attributed to a push control of a Jog-wheels.

Tapping the wide blue controller bar, will open a submenu for the assignment.



Tap **ASSIGN** first.

Then click one of the digital Jog-Wheels on the RCP.



Press ✔ if you're happy with the choice of controller.

If you still want to assign another controller, press **DELETE** and do it again with another controller.

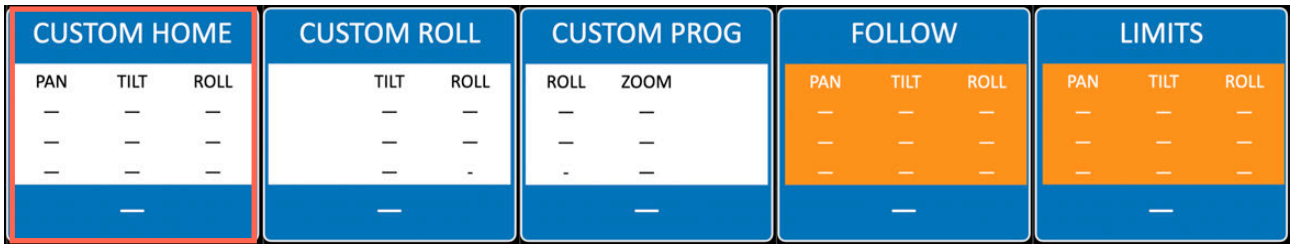
NOTICE
To cancel the assign process, press ✖ .

9.0 Programs

CSS EVO GUI 3.0 offers the possibility for the operator to program individual sequences in which the movements of the remote head can also be combined with FIZ of the lens control.

The sequences are always programmed according to the same pattern.

9.1 Custom Home

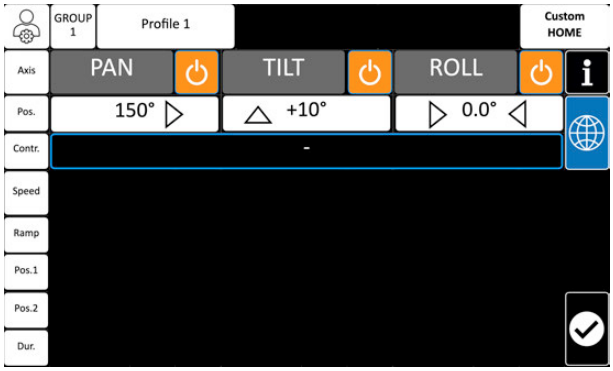


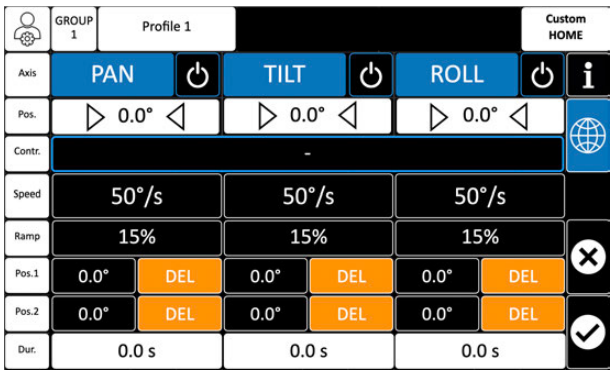
On the home screen, tap **CUSTOM HOME** for two seconds to call up the submenu.

9.2 Custom Home ON / OFF

The entire **Custom Home** function is currently disabled.

To initiate the desired axes, merely tap the **ON / OFF** field for a duration of two seconds.





NOTE
By factory preset all axis are set to 0.0°

9.3 Global Home

If you tap on the Global Home field, the three axes slowly move to the actual physical zero position of the remote head. The display will then show all axes at 0°.

9.4 Two different Home Positions

You may now need a different home position for the PAN axis, for example.

As soon as you set a value in Pos.2, and you trigger the assigned controller, the remote head will move to position 1 and move to position 2 if it is triggered again and back to position 1 if it is triggered again.

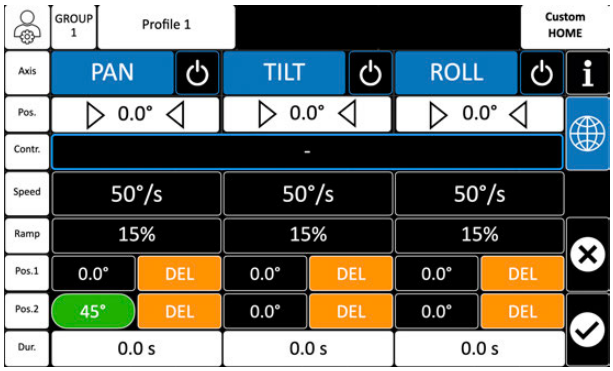
9.5 Setting a second Home Position

The desired axis can be moved using the joystick and then pressed SET to confirm the position.

Or tap a position value in the second line, which will highlight the field in green, and then utilize one of the jog wheels to move until the desired position value is established.

The selected position is accepted by pressing the jog wheel.

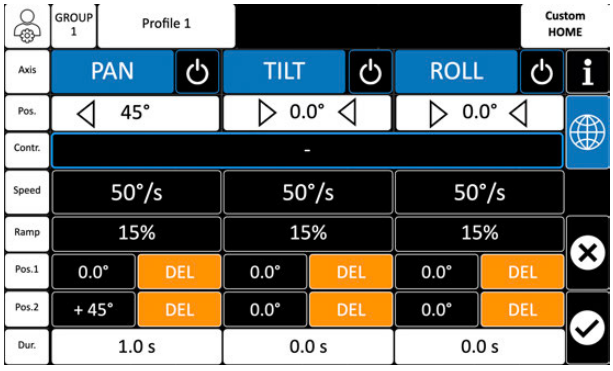
The current HOME position has been set when **DEL** appears next to the position angle.



9.6 Position / Speed Information

While the remote head is moving, the current position angle is displayed continuously in the **Pos.** field.

Depending on the set speed, the remote head moves faster or slower to the desired positions. The time required is displayed below in degrees per second.

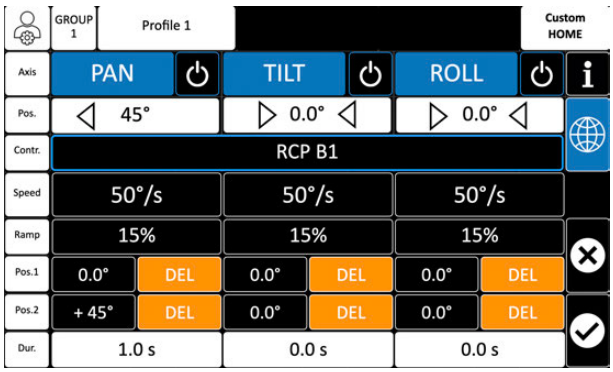


9.7 Assigning a Controller

You can use the touch screen on the home screen to start this pre-programmed Home Position movement.

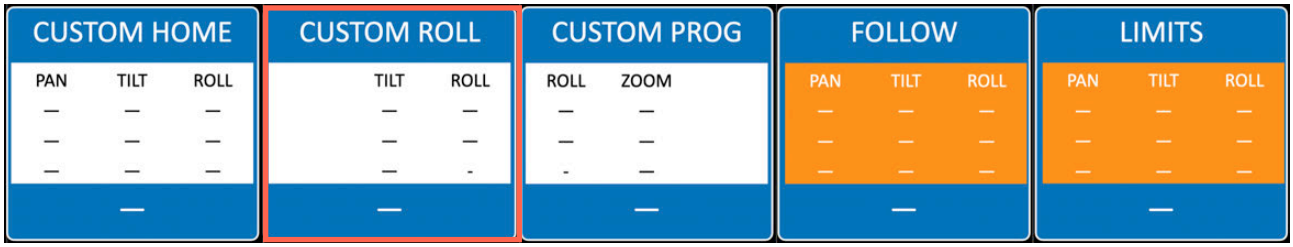
Or you assign a controller to trigger the Home Position program.

Tapping the wide controller bar, will open the already known assignment submenu.



10.0 Custom Roll

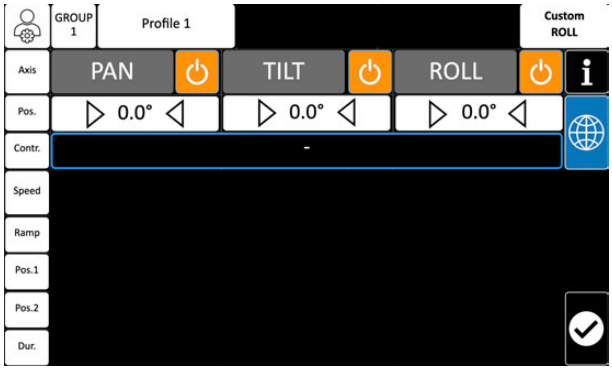
Custom Roll is used and programmed in the same way as described above for **Custom Home**.



On the home screen, tap **Custom Roll** for **two seconds** to call up the submenu.

10.1 Custom Roll

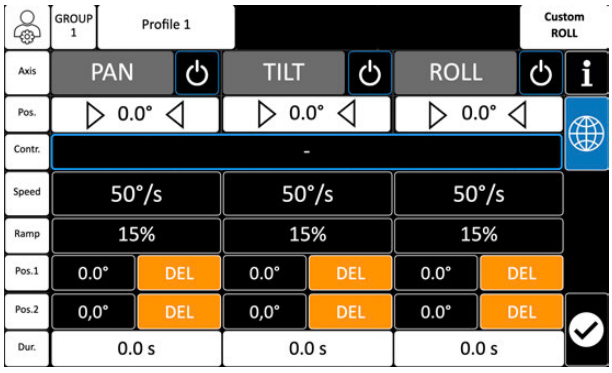
With CUSTOM ROLL, you can combine the pan, tilt and roll axes into a programmed movement. In this way, all axes can be precisely synchronized to repeat the same exact movements again and again as required.



10.2 Custom Roll ON / Off

The entire **Custom Roll** function is currently disabled.

To initiate the desired axes, merely tap the **ON / OFF** field for a duration of two seconds.

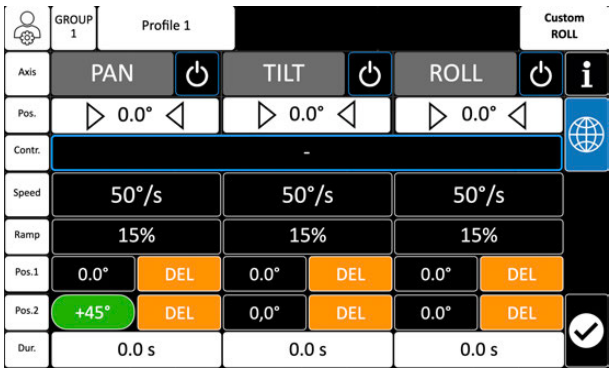


10.3 Setting a Start and Stop Position

The desired axis can be moved using the joystick and then pressed SET to confirm the position.

Or tap a position value in the first and second line, which will highlight the field in green, and then utilize one of the jog wheels to move until the desired position value is established.

The selected position is accepted by pressing the jog wheel.



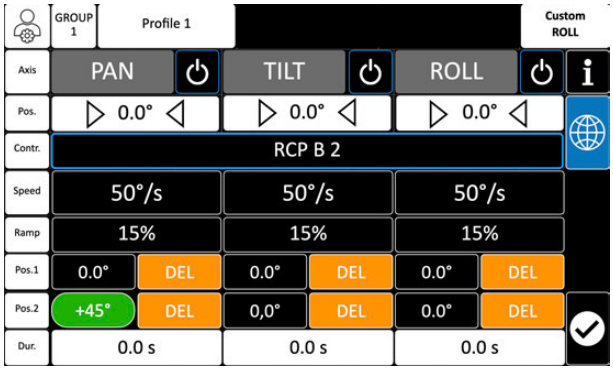
The current HOME position has been set when **DEL** appears next to the position angle.

10.4 Assigning a Controller

You can use the touch screen on the home screen to start this pre-programmed CUSTOM ROLL movement.

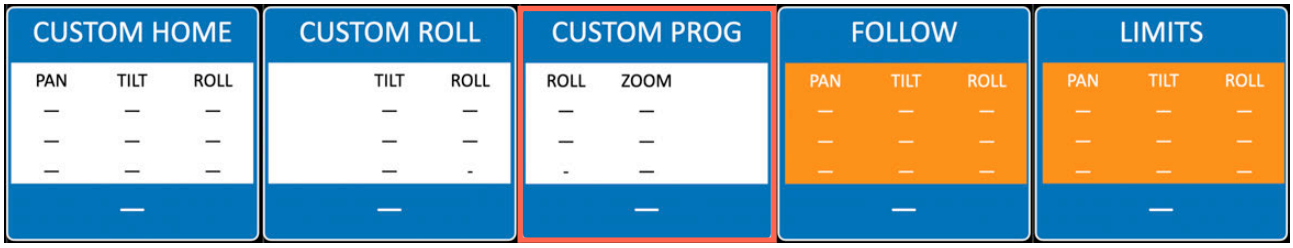
Or you assign a controller to trigger the CUSTOM ROLL program.

Tapping the wide controller bar, will open the already known assignment submenu.



11.0 Custom Program

Custom Program is used and programmed in the same way as described above for Custom Home.



On the home screen, tap **Custom Program** for **two seconds** to call up the submenu.

11.1

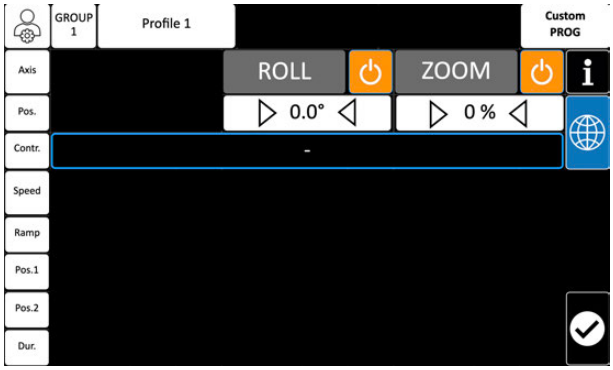
With **Custom Program**, you can combine the Roll axis and the ZOOM control into a programmed movement.

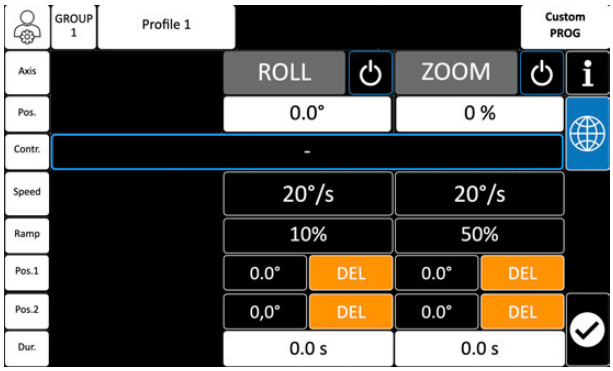
In this way, all axes can be precisely synchronized to repeat the same exact movements again and again as required.

11.2 Enable Custom Program

The entire **Custom Program** function is currently disabled.

To initiate the desired axes, merely tap the **ON / OFF** field for a duration of two seconds.





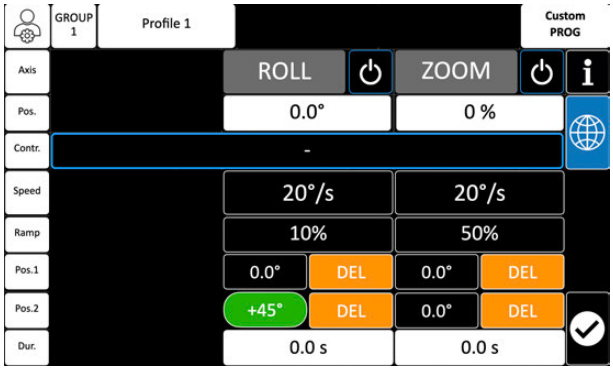
11.3 Setting a Start and Stop Position

The desired axis can be moved using the joystick and then pressed **SET** to confirm the position.

Or tap a position value in the first and second line, which will highlight the field in green, and then utilize one of the jog wheels to move until the desired position value is established.

The selected position is accepted by pressing the jog wheel.

The current position has been set when **DEL** appears next to the position angle.

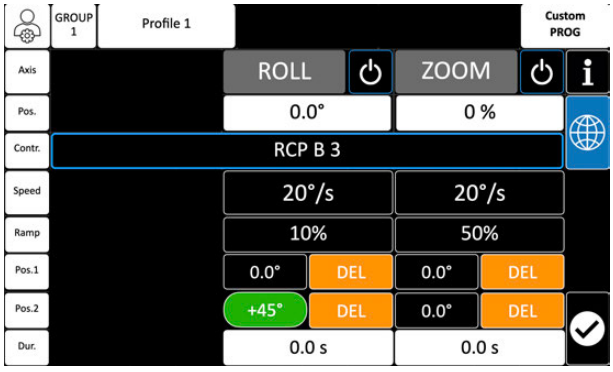


11.4 Assigning a Controller

You can use the touch screen on the home screen to start this pre-programmed CUSTOM PROGRAM movement.

Or you assign a controller to trigger the CUSTOM PROGRAM program.

Tapping the wide controller bar, will open the already known assignment submenu.

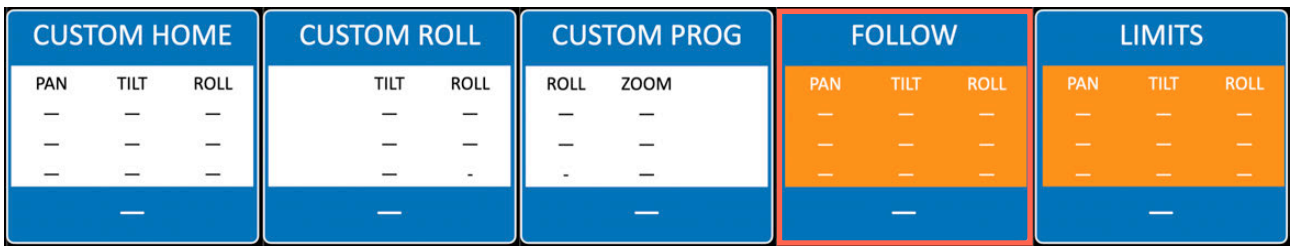


12.0 Follow

The Follow function on the PAN or TILT axis of the 360 EVO remote head, or the TILT axis of the TRINITY 2 allows the operator to automatically point the camera at a specific object or person while it is moving.
This can be particularly useful if the camera is mounted on a moving tripod or drone and the target object is to be followed. The Follow function ensures that the object always remains in focus and the camera follows it, even if it is moving.

For the **360 EVO** the **Follow** function is recommended for the **Pan** axis.
This way the movement of the crane can be synchronized with the Pan axis of the remote head.

For the **TRINITY 2** the **Follow** function is recommended for the **Tilt** axis.
This way the TRINITY acts like a regular artemis camera stabilizer system.



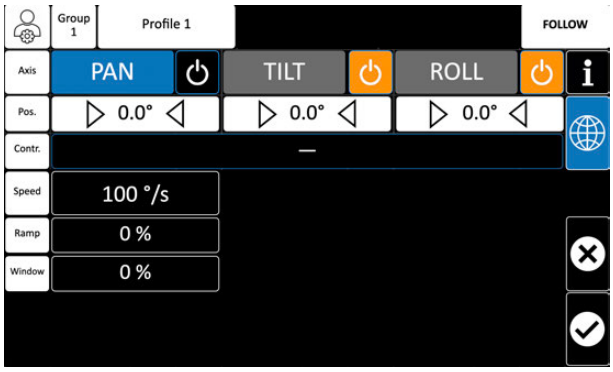
On the home screen, tap **Follow** for **two seconds** to call up the submenu.

12.1 Follow ON / OFF

The entire **Follow** function is currently disabled for all axis.

To initiate the desired axes, merely tap the **ON / OFF** field for a duration of two seconds.

12.2 Follow on Pan axis

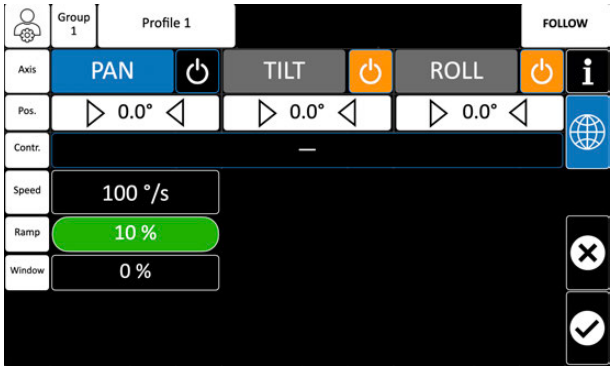


In this 360 EVO / TRINITY 2 with Pan Axis Module related setup, only the **PAN** axis had been stopped to FOLLOW Mode.

NOTICE
On the 360 EVO / TRINITY 2 with pan axis module, it is recommended to use the **Follow** function for the **Pan** axis.

When using the **Follow** mode on a TRINITY 2, it is recommended to use the **Tilt** axis to emulate a classic Steadicam™ behavior.

12.3 Speed, Ramp, Window



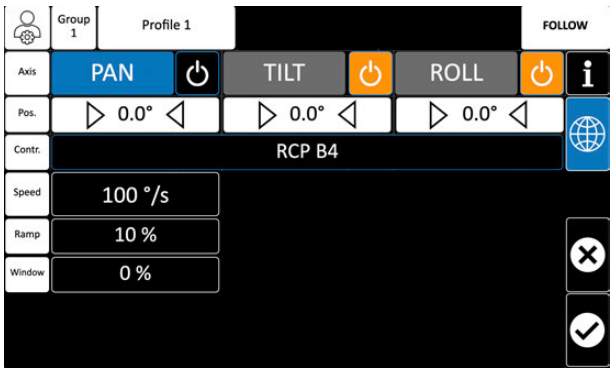
The speed / synchronization between the crane's movement and the remote head can be adjusted by altering the **Speed** values.

You can adjust the way in which the remote head reacts to the movement of the crane by changing the **Ramp** values.

By altering the **Window** value, it can be determined when the remote head responds to the crane's movement.

NOTICE
As higher the speed value as more direct the remote head will follow the crane, for example.
A **speed** value that is **too low** and **ramp** value that is **too high** can have a **negative impact** on how the remote head follows the crane or the TRINITY 2 the movement of the center post.

12.4 Assigning a Controller



You can use the touch screen on the home screen to trigger the FOLLOW function.
Or you assign a controller to trigger the FOLLOW function.

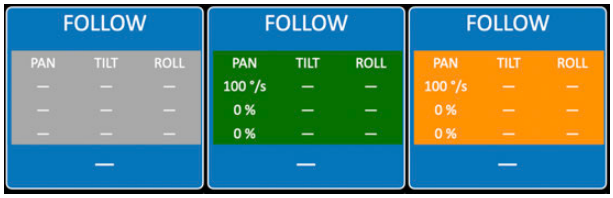
Tapping the wide controller bar, will open the already known assignment submenu.

12.5 Status Follow Function

Grey background indicates that all axes are **deactivated** or that no values have been set.

Green background indicates that at least one axis is programmed and the **Follow** function is **enabled**.

Orange background indicates that the **Follow** function is **disabled**.

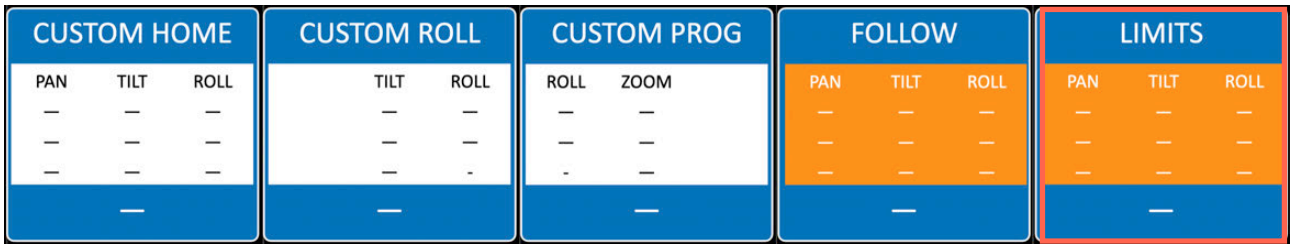


13.0 Limits

The Limits function allows the user to set certain limits for the movement of the camera.

This means that the camera can only be moved within a certain range and not beyond.
This is useful to ensure that the camera is not accidentally moved to an unwanted position or to ensure that it stays within a defined frame.

The Limits function can also help to ensure safety and prevent damage to equipment.



On the home screen, tap **Limits** for **two seconds** to call up the submenu.

13.1 Limits ON / OFF

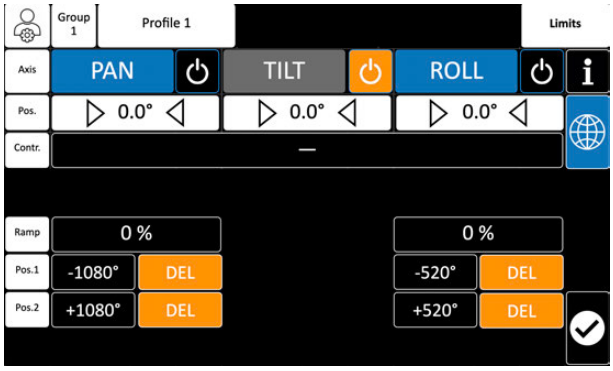
The entire **Limits** function is currently disabled.

To initiate the desired axes, merely tap the **ON / OFF** field for a duration of two seconds.

13.2 Setting Start and End Limits

In this setup, only the **Pan** and **Roll** axis had been activated.

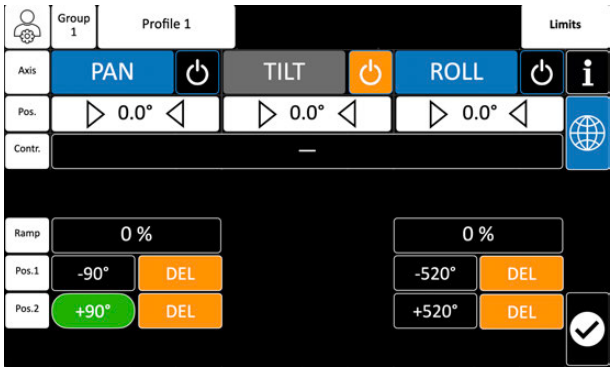
The desired axis can be moved using the joystick and then pressed **SET** to confirm the position.



Or tap a position value in the first and second line, which will highlight the field in green, and then utilize one of the jog wheels to move until the desired position value is established.

The selected position is accepted by pressing the jog wheel.

The current position has been set when **DEL** appears next to the position angle.

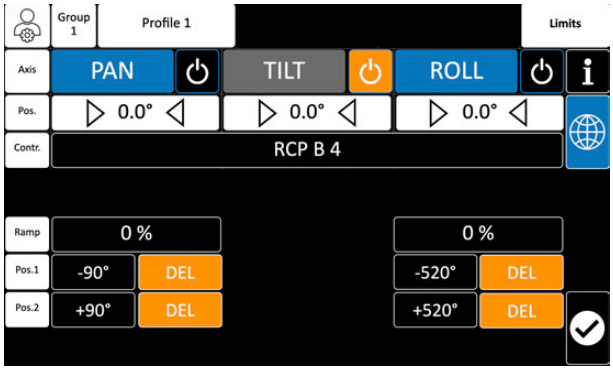


13.3 Assigning a Controller

You can use the touch screen on the home screen to trigger the **Limits** function.

Or you assign a controller to trigger the **Limits** function.

Tapping the wide controller bar, will open the already known assignment submenu.



13.4 Status Limits Function

Grey background indicates that all axes are **deactivated** or that no values have been set.

Green background indicates that at least one axis is programmed and the **Limits** function is **enabled**.

Orange background indicates that the **Limits** function is **disabled**.

14.0 FIZ Focus Iris Zoom

The CSS EVO GUI 3.0 provides **LBUS** communication.

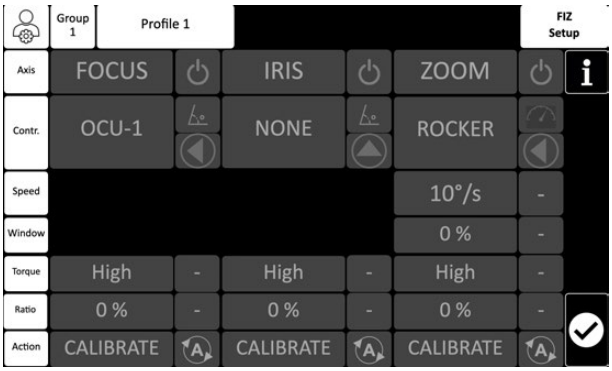
Both cinema and broadcast lenses can be controlled via the remote control panel, and can be included in pre-programmed sequences.

NOTICE
It is important to ensure that the latest software is installed on any LBUS components before attaching them to the RCP and remote head.

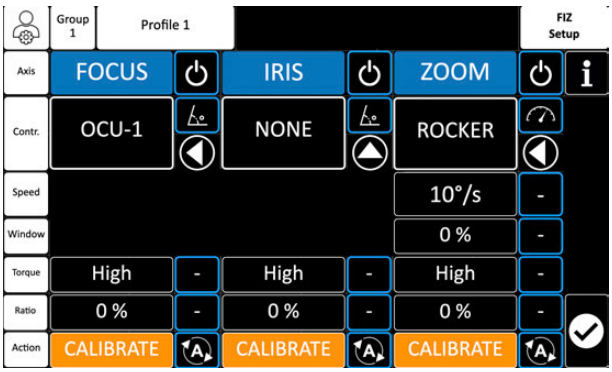
14.1 FIZ Screen

A greyed out screen/axis indicates that no LBUS motors such as cforce mini motors or a LCUBE CUB-2 have been connected to the LBUS input of the remote head.

NOTICE
LBUS devices that are directly connected to the camera are not recognized.



The FIZ screen displays the device / axis when it is connected to the LBUS input of the remote head.

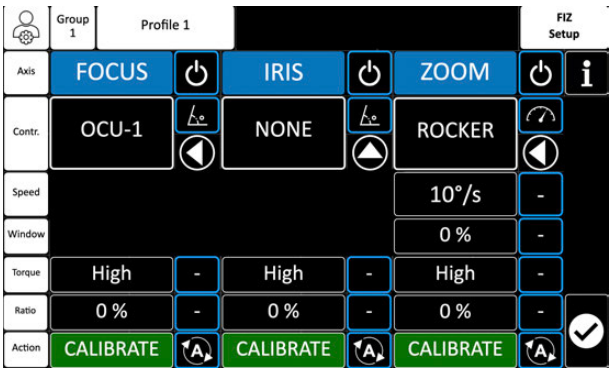


14.2 Calibration

The **orange Calibration** field indicates that the motor / axis needs to be calibrated.

The calibration procedure can be done be started right at the motor, or by taping the calibration field on the FIZ screen.

A **green Calibration** filed indicates that the motor / axis had been calibrated.

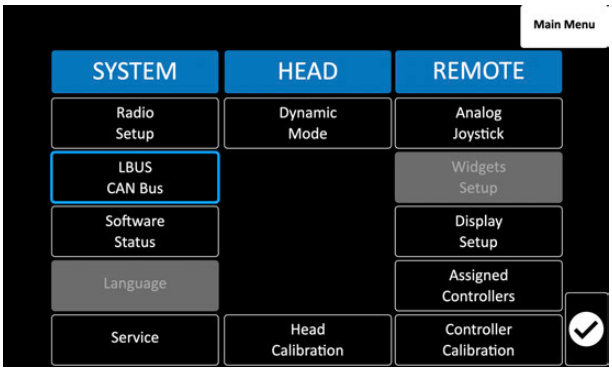


14.3 Changing Values

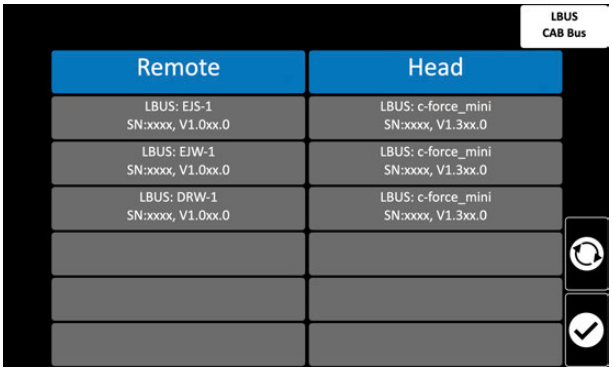
The FIZ submenu follows the same operating pattern for changing values and other settings as the PAN, TILT and ROLL setup submenu.

NOTICE
Different setting options are offered depending on whether the controllers are operating in speed or angle mode.

14.4 LBUS Status



NOTICE
If you encounter issues with one of the connected LBUS devices, please go to the Main Menu and select **LBUS / CAN Bus** under the SYSTEM column.



You can find the current software status of the respective LBUS component there.

The LBUS status of the single devices can be updated by tapping on the refresh field.

15.0 User Profiles

NOTICE
Every change, such as swapping the controller, or direction, updating values such as speed, ramp, etc., are always automatically saved in the current profile.

You can see which profile from which group is currently being used on the Home Screen, and you can switch between the three profiles by touching them.

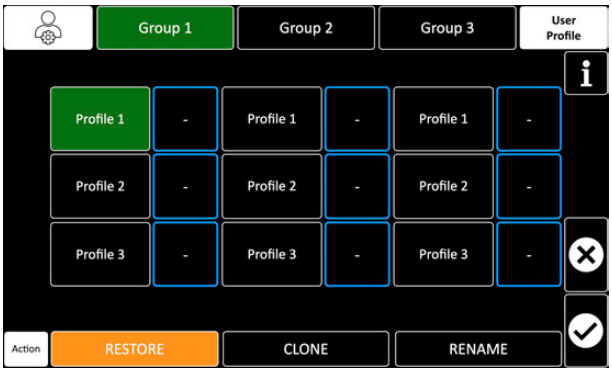
In this case, profile 1 of group1 is in use.

If you want to change the group or rename, clone, or restore any of the profiles, tap here.

15.1 User Profiles sub menu

The CSS EVO GUI 2.0 provides the user with the ability to save six user profiles in three distinct groups. This implies that a total of nine user profiles are currently available.

The green highlighted fields indicate which group and which profile is currently in use.

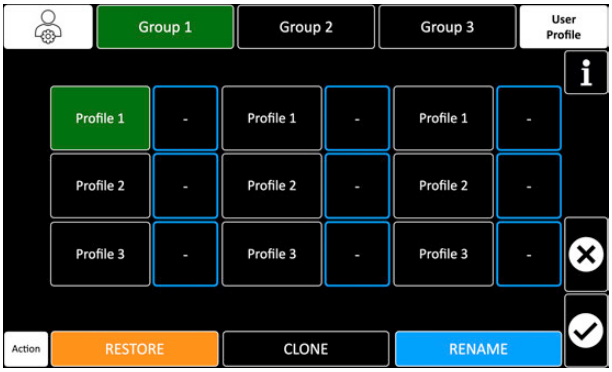


15.2 Rename

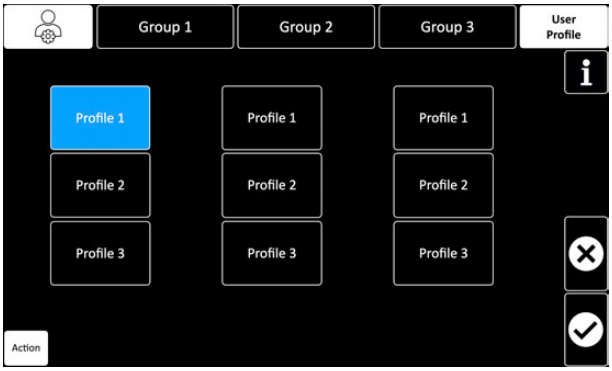
By default, the user profiles are just called: Profile 1, Profile 2, and Profile 3, respectively.

You can also give each profile a unique name.

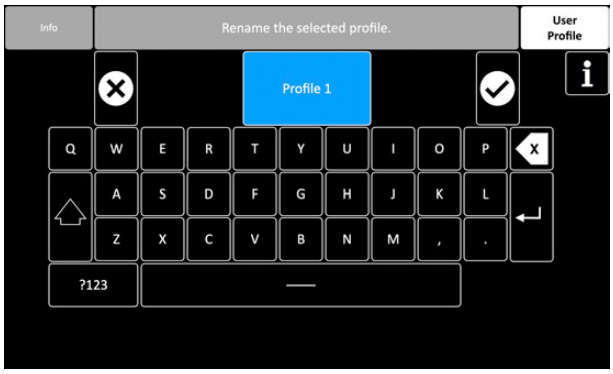
To achieve this, tap **RENAME** and choose the profile you want to rename.



Now choose the profile you would like to change the name of.

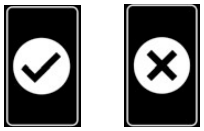


Use the keyboard to enter the desired name.



Please tap the **OK** button to apply the new name.

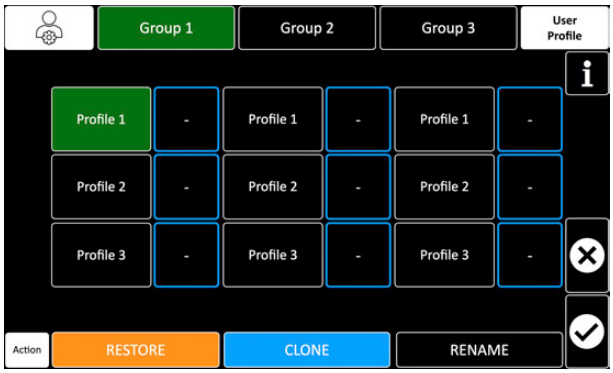
To cancel the entry, press **Cancel**.



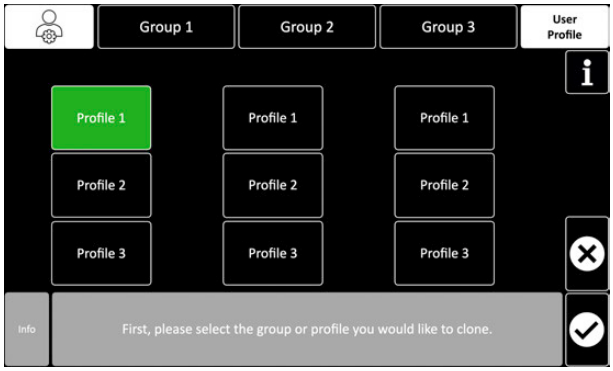
15.3 Clone

Once you have a good setup that you really want to keep, you should immediately create a copy / clone.

One may also opt to save the clone in a distinct group to prevent accidental alterations.



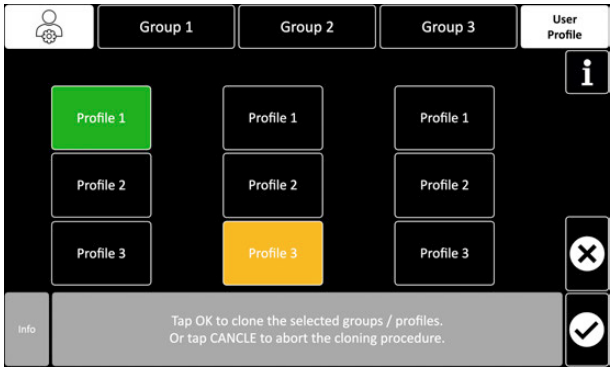
Tap **CLONE** and choose the single profile, or an entire group you would like to clone.



Please select the group or profile into which you would like to clone the original profile.

Tap **OK** to clone the selected groups / profiles.

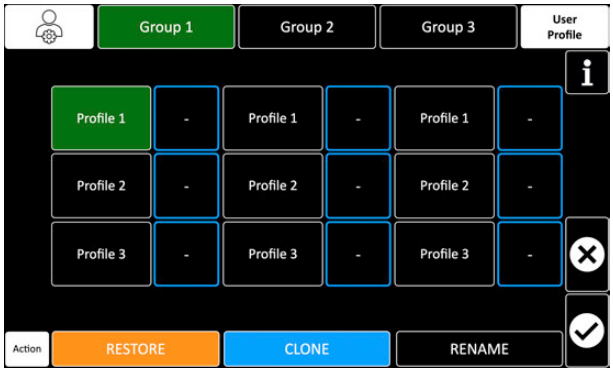
Or tap **CANCEL** to abort the cloning procedure.



15.4 Restore

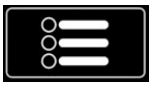
To restore individual profiles or an entire group to the factory settings, first tap on Restore and then on the desired profile or an entire group.

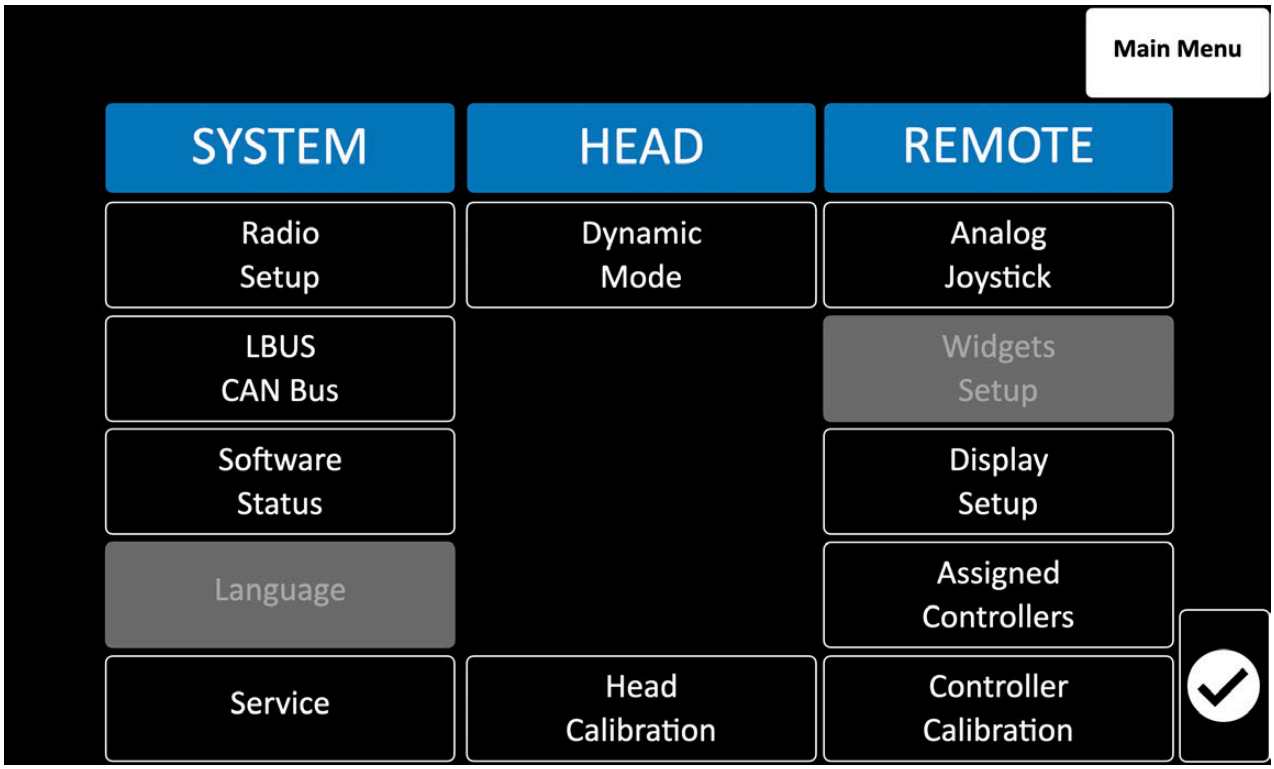
NOTICE
As soon as you tap OK, the profile or the entire group is irretrievably deleted!



16. Main Menu

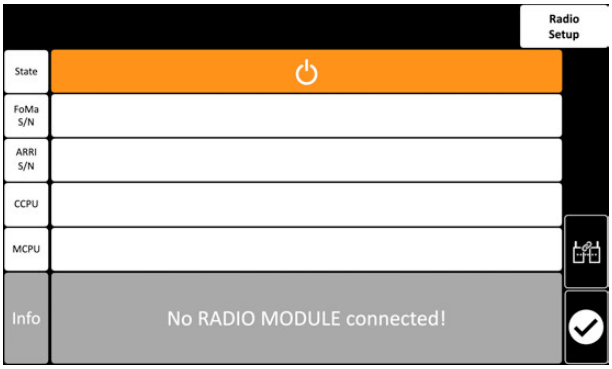
To enter the main menu, tap the main menu icon on the home screen.





17.0 Working Hard Wired (no radios)

NOTICE
If you are working **without a radio** module / hard-wired, **ensure** that the **radio** system is **deactivated!**



18.0 Working Wireless

The CSS EVO GUI 3.0 allows the use of the:

ERM-2400 2.4 GHz RXD-TXD Pro Set, SRH (KK.0040049)
and
ERM-900 MHz RXD-TXD Pro Set, SRH (KK.0040050), with the 360 EVO and TRINITY 2.

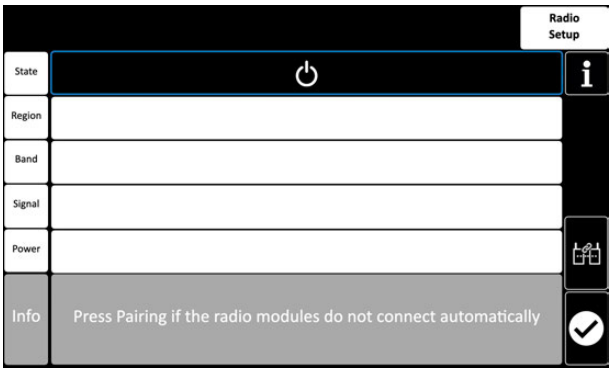
As also the
TRINITY 2 RF-2400 Radio Set (K0.0044373) with the TRINITY 2.

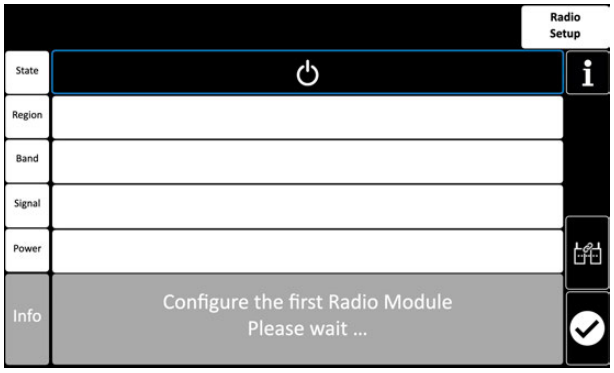
18.1 Radio Setup

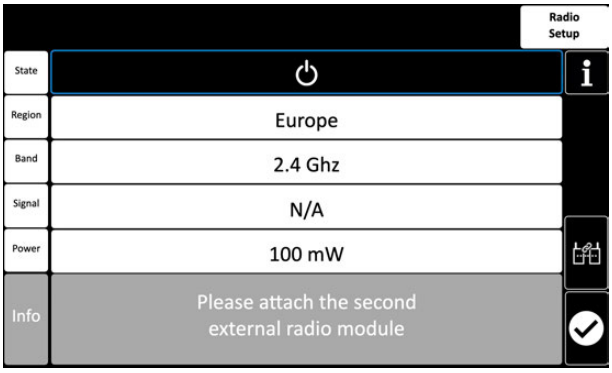
NOTICE
The external radio modules like the ERM and TRINITY 2 RF-2400 can only be paired with the RCP-2 EVO or RCP-3.
During the pairing process, the external wireless modules are connected to the RCP one after the other during the pairing process.
The pairing process doesn't require either the 360 EVO Remote Head or the TRINITY 2.

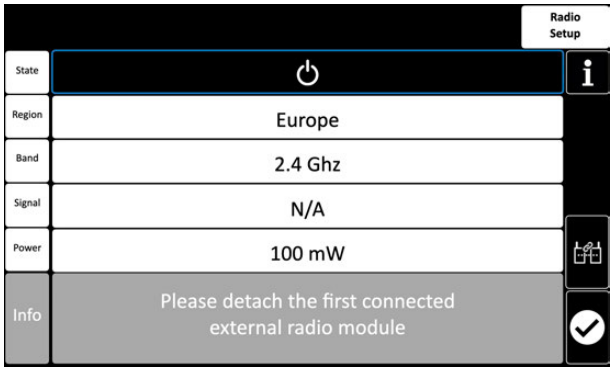
18.2 Pairing

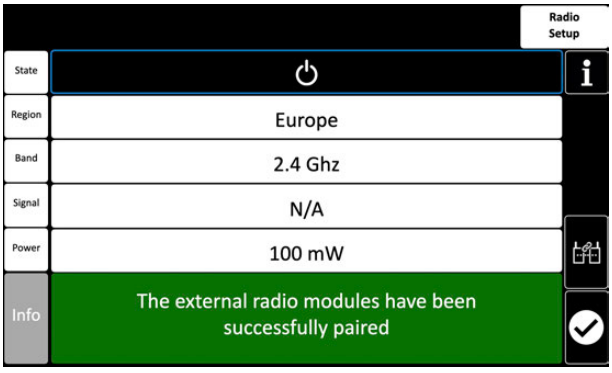
- To activate the radio system, first tap the **ON / OFF** field.
- Then tap the pairing field on the right side of the menu screen.
- Please follow the instructions displayed on the screen.



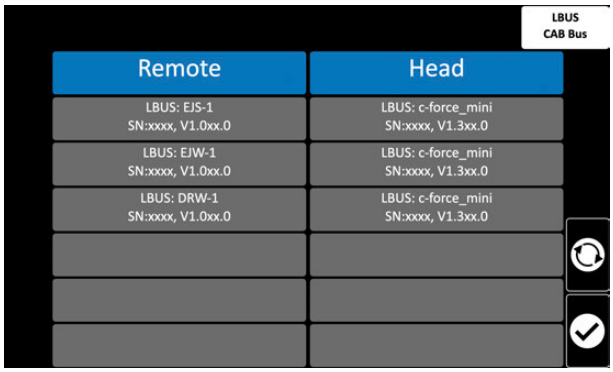








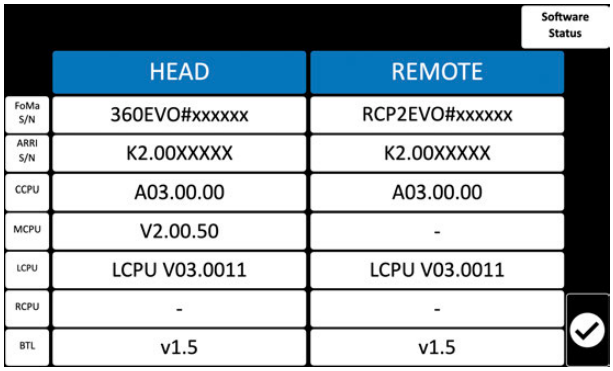
19.0 LBUS / CAN Bus



You can find the current software status of the respective LBUS or CAN Bus devices there.

The LBUS or CAN Bus status of the single devices can be updated by tapping on the refresh field.

20.0 Software Status



Here you can see the actual software status of the remote head and the remote control panel.

NOTICE
After a software update has been completed, please ensure that all components of the system have been updated properly.

NOTICE
Also have the serial number and software status information ready when contacting ARRI Service.

21.0 Language

As soon as alternative Languages are available, this function will be turned on.

22.0 Service

The service menu is password protected and is only accessible by authorized service staff.

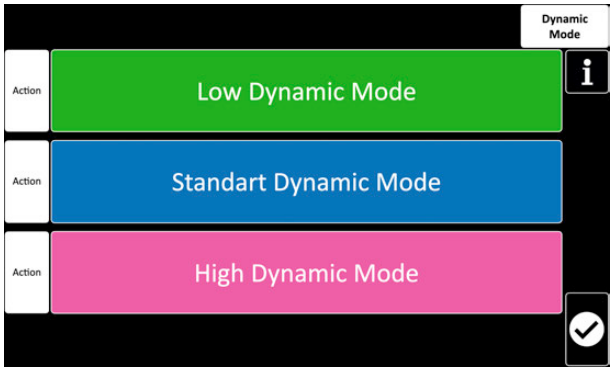
23.0 Dynamic Modes

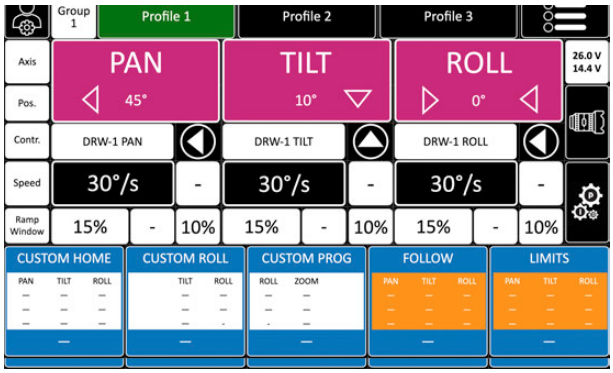
When using the 360 EVO Remote head, or the TRINITY 2 with the Pan Axis Module, the CSS EVO GUI 3.0 offers three different Dynamic Modes.

Low Dynamic Mode
The Low Dynamic Mode is ideal for situations where the remote head is mounted on a tripod or dolly, and it's crucial that the head doesn't sway too much.

Standard Dynamic Mode
Standard dynamic mode is used, which ensures the best overall performance for the average daily shooting scenarios.

High Dynamic Mode
When the remote head is used in extreme centrifugal conditions, the overall stabilization performance is maximized by activating the High dynamic mode.





As soon as a dynamic mode other than the standard dynamic mode is activated, the background color in the home screen also changes.

NOTICE
The process of activating or deactivating the Low and High dynamic modes can take up to two minutes.

It is imperative that the remote head is not touched or moved until the dynamic mode activation or deactivation process has been completed.

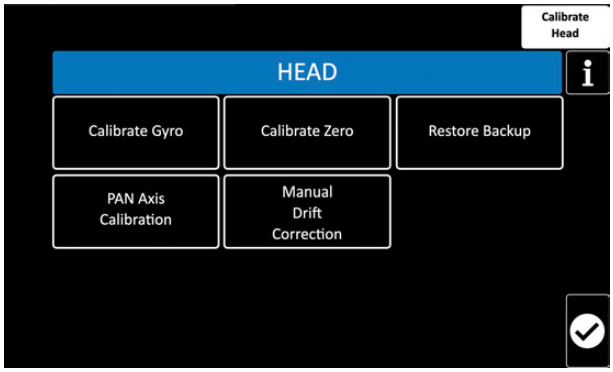
24.0 Head Calibration

24.1 Calibrate Gyro

If the remote head behaves strangely, you can solve the problem by calibrating the gyro.

It is also recommended to conduct calibration when the head has been transported over extended distances.
The remote head was last used in a city, and it is currently being used in the mountains.

Tap Gyro Calibration to carry out the camera gyros calibration.
Follow the instructions displayed on the screen.



CAUTION
Secure the camera!
Since the motors of the remote head are switched off during the calibration process, the camera may tilt over the tilt axis.

24.2 Calibrate Zero

This feature enables the reset of the physical zero of the remote head.

24.3 Restore Backup

This function deletes all the settings and values saved in the Remote Head that are sent from the RCP to the Remote Head permanently.

The remote head has been temporarily reset to factory settings.

As soon as the RCP talks to the remote head again, all the current settings and values of the RCP will be refreshed and sent to the remote head.

This procedure can be very helpful if the head suddenly behaves strangely.

Don't worry, no RCP settings or values are gone.

24.4 PAN Axis Calibration

Automatic Calibration for the TRINITY 2 Pan Axis Module.

NOTICE
Even if the pan axis module has already been calibrated, this procedure can be helpful if a new physical zero point for the pan axis is required.

24.5 Manual Drift Correction

If a certain drift remains noticeable even though you have calibrated the gyro and the controller, the manual drift correction is a quick and easy solution to correct the drift via a so-called OFF set.

25.0 Analog Joystick

Tapping this field for two seconds switches the analogue joystick function on or off so that TRINITY 2 operators can use the analogue TRINITY Gen. 1 joystick.

26.0 Widget Setup

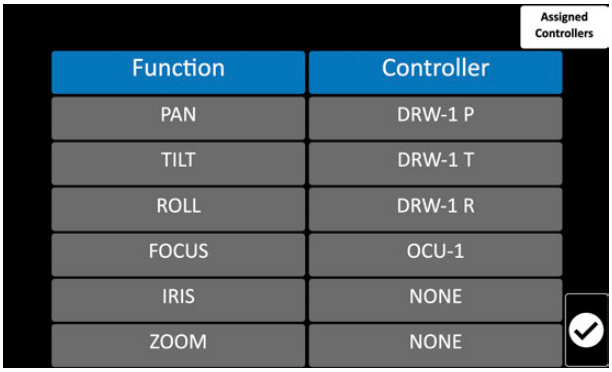
The function will be turned on once this feature is available.

27.0 Display setup

In this menu, you can adjust the display brightness and display orientation.

28.0 Assigned Controllers

This menu will provide an overview of the controllers currently being used and the functions they do control.



29.0 Controller Calibration

The phenomenon of a certain drift in controllers that are first connected to the system is not uncommon.
This is especially noticeable with so-called micro force joysticks.

NOTICE
Before you attempt to compensate for a drift in the joystick by increasing the window or ramp values, you should rather recalibrate the controller.