

Setup Guide

for use of XL Motion Controller with Canon[®] XC protocol
Remote Camera Controllers

Version 1.1

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1. Introduction

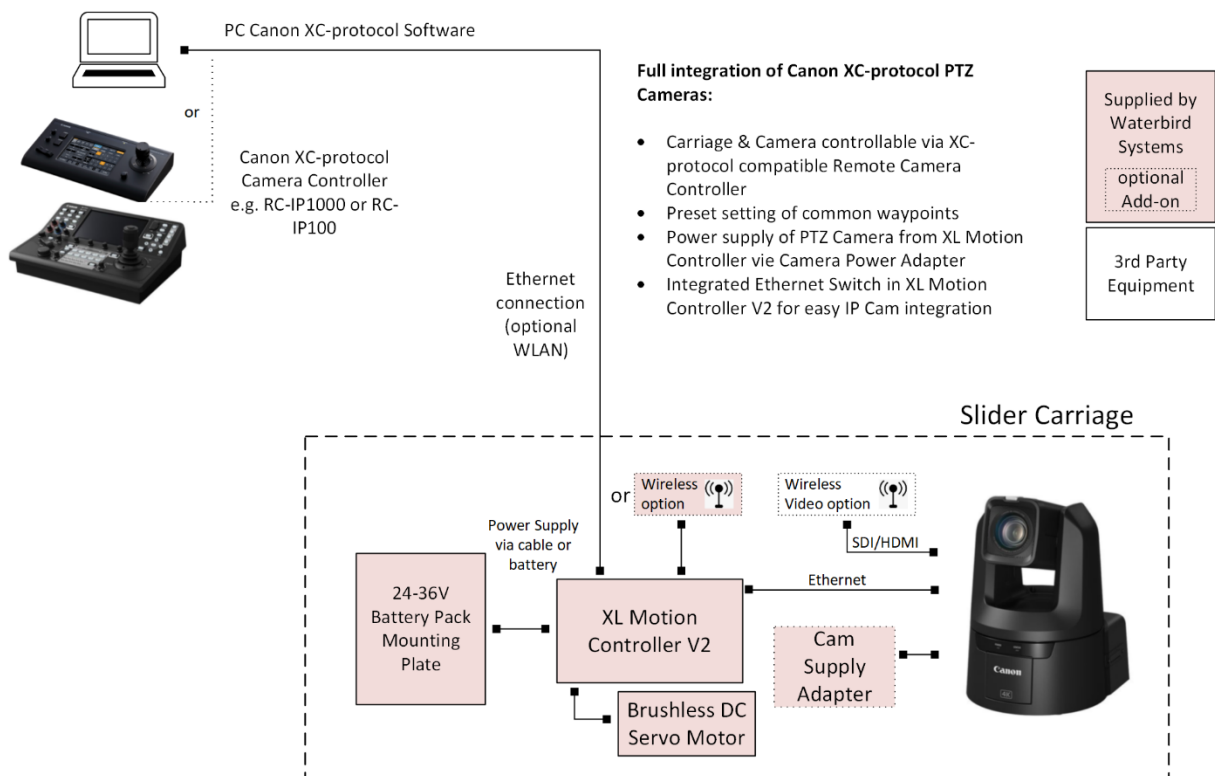
The XL Motion Controller is capable of being controlled via Canon XC-protocol compatible Remote Camera Controllers like the Canon® RC-IP100 or RC-IP1000 via Ethernet Interface from XL Motion Controller Firmware Version 959 and later.

Before setup the System, make sure the License Option is activated in your XL Motion Controller (Canon XC License).

The License status can be checked via Control Unit Config Tool found on <https://waterbird.at/support/> or the Motion Control Software. Also, the activation code can be entered via Control Unit Config Tool if you purchased the License Code separately.

Check also Chapter “Control via Ethernet” in the XL Motion Controller Manual that can be found here: <https://waterbird.at/support/>

Multi Slider XL – Canon® PTZ Camera Integration



2. RC-IP100 Remote Controller

2.1 Preparation

- 1) The newest Firmware Version shall be installed on the Camera Remote Controller.

Please visit Canon® Homepage for updates of your Camera Remote Controller.

- 2) Make sure all Devices (PTZ Camera, RC-IP100 and XL Motion Controller) are in the same Network and set to the same IP Subnet. (standard preconfigured subnet mask is 255.255.255.0)

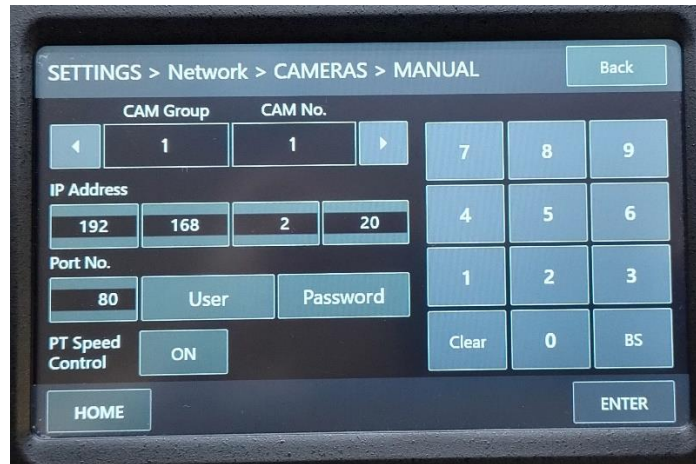
XL Motion Controllers Standard IP is 192.168.2.20. You can use the Control Unit Config Tool for setting to another IP address.

Please refer to XL Motion Controllers User Manual how to change IP address. (Manual and Config Tool to be found here: <https://waterbird.at/support/>)

2.2 Setup

- 1) On the RC-IP100 go to Settings / Network / Cameras / Manual and enter the IP address assigned to the XL Motion Controller on the Slider. (default value is 192.168.2.20) Port number is 80. No User and Password is required.

In this manual the slider is assigned to Cam No. 1. But you can assign to any number you like.



- 2) The slider should be recognized and connected after you set the IP settings.



- 3) After successful connection the slider Reference Run can be started by selecting “Camera Control” and pushing the White balance AUTO button.

During Reference Run the AUTO button will be orange and will go back to grey when finished.

Hint: Pressing the AUTO button if the slider is doing the Reference Run or is already referenced will cause the slider to Stop and De-initialize. After this a new Reference Run is necessary.



4) Now you are good to go to use the slider as described in the next chapter.

2.3 Operation of the Slider

By selecting the Camera Number of the Slider (in this example Nr 1) you can move the Slider via moving the Joystick left and right. The sensitivity of the Joystick can be adjusted via the “F4” knob left to the Joystick. Via the PT Speed you can see what speed is selected.



The acceleration (ramp) can be controlled by Sharpness settings. Values from 0 (lowest acceleration) to 10 (highest acceleration) are possible to set.



2.4 Memory Positions

Also saving and recalling of preset positions is possible, like a PTZ camera via Store and Recall function. Please refer to the manual of RC-IP100 on how to store, recall and delete preset positions.

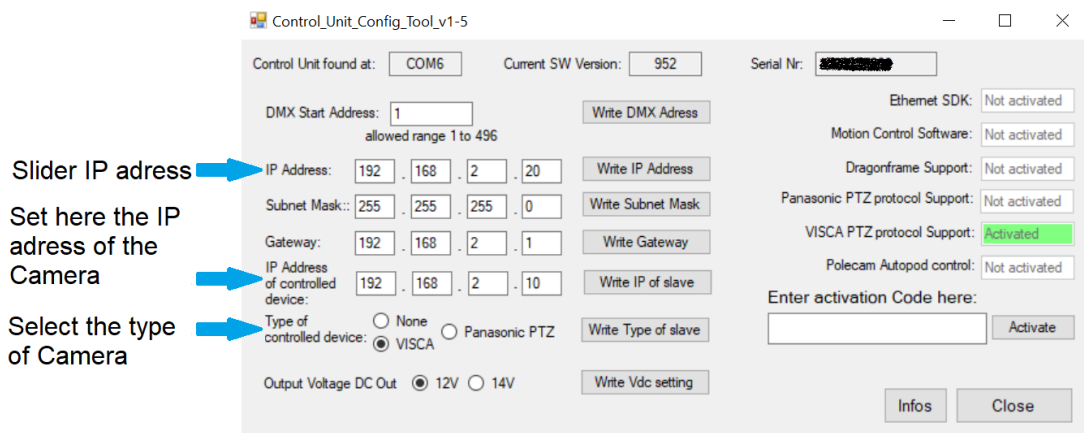
The speed during recall of memory positions and pingpong movements, can be set via the ND setting. (0 is the slowest, 1/64 the fastest speed)



2.5 Combined Positions of Camera & Slider

As the PTZ console is not capable of saving and recalling positions from multiple devices at the same time the following workaround was integrated into the XL Motion Controller:

The camera IP address must be stored in the XL Motion controller via Control Unit Config Tool:



Now, if a position is stored, deleted or recalled by sending the command to the XL control unit the controller is executing the command by itself and in addition forwarding the command to the camera.

This way both devices can be moved to a preset point at the same time.

For this always use the save, recall and delete commands of the XL Motion Controller. (in the example of the chapters before its CAM 1) for memory position control.

2.6 Automatic Movement Modes

2.6.1 Normal Ping-Pong Mode

With this mode the Slider can go from one End to the other End and back all the time. This can be useful for steady shooting during different Applications e.g. an Interview and afterwards cutting between different camera positions.

This simple Ping-Pong Mode can be activated by selecting the Slider Camera Nr. (in this example Cam Nr. 1) and then pressing the Shutter AUTO button.

To deactivate the automatic movement, you can press the Stop button (in this picture assigned to User 2 button) or again press the Shutter AUTO button press or start a manual move by using the joystick or selecting a Preset.

The Shutter AUTO button will be orange as long the Ping-Pong Mode is activated.

The speed of the slider during ping pong movement can be selected like for presets via ND setting.



2.6.2 Advanced Ping-Pong Mode

This Mode allows to set up an automatic movement between the Memory position 1 and 2. Not only the Slider movement is triggered, but also the movement of the optionally connected PTZ camera and motorized Pole. In this mode the movement is not only between the end points, but between previously set positions which can be useful for certain applications.

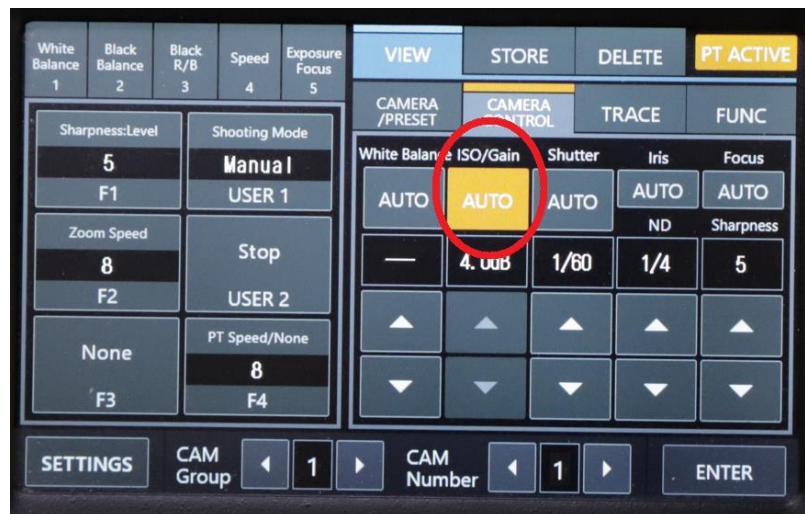
This advanced Ping-Pong Mode can be activated by selecting the Slider Camera Nr. (in this example Cam Nr. 1) and then press the Iso/Gain AUTO button.

To deactivate the automatic movement, you can press the Stop button (in this picture assigned to User 2 button) or again press the Iso/Gain AUTO button or start a manual move by using the joystick or selecting a Preset.

The Iso/Gain AUTO button will be orange as long the advanced Ping-Pong Mode is activated.

The speed of the slider during ping pong movement can be selected like for presets via ND setting.

Note: camera will only move together with slider & pole if set up correctly, see chapter 2.5 .



3. RC-IP1000 Remote Controller

3.1 Preparation

- 3) The newest Firmware Version shall be installed on the Camera Remote Controller.

Please visit Canon® Homepage for updates of your Camera Remote Controller.

- 4) Make sure all Devices (PTZ Camera, RC-IP1000 and XL Motion Controller) are in the same Network and set to the same IP Subnet. (standard preconfigured subnet mask is 255.255.255.0)

XL Motion Controllers Standard IP is 192.168.2.20. You can use the Control Unit Config Tool for setting to another IP address.

Please refer to XL Motion Controllers User Manual how to change IP address. (Manual and Config Tool to be found here: <https://waterbird.at/support/>)

3.2 Setup

- 5) On the RC-IP1000 go to System / Camera Connect. Details and enter the IP address assigned to the XL Motion Controller on the Slider to the Camera Number you would like to assign the Slider. (default Slider IP address is 192.168.2.20) Port number is 80. No User and Password is required.

In this manual the slider is assigned to Cam No. 2. But you can assign to any number you like.



- 6) The slider should be recognized and connected after you set the IP settings.



3.3 Operation of the Slider

3.3.1 As separate Camera

By selecting the Camera Number of the Slider (in this example Nr 2) you can move the Slider via moving the Joystick left and right. The sensitivity of the Joystick can be adjusted via the “SPEED” knob left to the Joystick.



The acceleration (ramp) can be controlled by “GAIN Blue” setting. Values from -50 (lowest acceleration) to +50 (highest acceleration) are possible to set.

The value affects the manual movement via Joystick, as well as automatic movements via Ping-Pong and Preset recalls.



3.3.1 As “Ext Cam” in Combination with a Camera

For this select the Camera Nr. of the Camera that is mounted on the carriage, and you would like to control in combination with the slider. (in this example Camera is assigned to Cam 1 and Slider is connected as Cam 2).

The Slider can be moved by using the F5 twist wheel on top of the Joystick and the Camera can be controlled by moving the Joystick. This way simultaneous operation of Camera and Slider is possible.



To make this possible the Slider must be assigned as ExCam:

1. Push Button “SYSTEM”
2. Select tab “Camera Connect. Details”
3. In first row select the Camera Number your Camera is assigned to
4. In second row in field “ExCAM” select the Cam Nr. The Slider is assigned to



5. Select Tab “Assign” and choose the F5 field in the last row. The F5 should be assigned to “ExCAM Pan” for controlling the Slider (or “ExCAM Tilt” if you rather like to control the optional motorized Pole)



3.4 Memory Positions

Also saving and recalling of preset positions is possible, like a PTZ camera via Store and Recall function. Please refer to the manual of RC-IP1000 on how to store, recall and delete preset positions.

The speed during recall of memory position and pingpong movements, can be set via the “GAIN Blue” setting. (-50 is the slowest, +50 the fastest speed)



3.5 Combined Positions of Camera & Slider

The RC-IP1000 is capable of saving and recalling positions from multiple devices at the same time, so Camera and Slider (including optional motorized Pole) can be saved/recalled with just one command.

For this the Slider must be selected as “ExCAM” and “Preset Link” must be switched “On”.

This way if you save/recall a preset on your Cam (Cam 1 in this example) the command is also forwarded to the Slider (Cam 2 in this example).



3.6 Automatic Movement Modes

3.6.1 Normal Ping-Pong Mode

With this mode the Slider can go from one End to the other End and back all the time. This can be useful for steady shooting during different Applications e.g. an Interview and afterwards cutting between different camera positions.

This simple Ping-Pong Mode can be activated by selecting the Slider Camera Nr. (in this example Cam Nr. 2) and then pressing the “SHUTTER” button. The “SHUTTER” button will light up in orange while the automatic ping-pong is active.

To deactivate the automatic movement, you can press the “SHUTTER” button again or start a manual move by using the joystick or selecting a Preset.

The speed of the slider during ping pong movement can be selected like for presets via “GAIN Blue” setting.



3.6.2 Advanced Ping-Pong Mode

This Mode allows to set up an automatic movement between the Memory position 1 and 2. Not only the Slider movement is triggered, but also the movement of the optionally connected PTZ camera and motorized Pole. In this mode the movement is not only between the end points, but between previously set positions which can be useful for certain applications.

This advanced Ping-Pong Mode can be activated by selecting the Slider Camera Nr. (in this example Cam Nr. 2) and then pressing the “AGC” button. The “AGC” button will light up in orange while the automatic ping-pong is active.

To deactivate the automatic movement, you can press the “AGC” button again or start a manual move by using the joystick or selecting a Preset.

The speed of the slider during ping pong movement can be selected like for presets via “GAIN Blue” setting.

Note: camera will only move together with slider & pole if set up correctly, see chapter 2.5 .

