



BG-UPTZ

Control4 Driver User Manual

Universal 1080P60 PTZ Camera (12x / 20x / 30x Zoom) with H.264 Streaming, Presets and Focus

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Statement

Please read these instructions carefully before connecting, operating, or configuring this product. Please save this manual for future reference.

Safety Precaution

- To prevent damaging this product, avoid heavy pressure, strong vibration, or immersion during transportation, storage, and installation.
- The housing of this product is made of organic materials. Do not expose to any liquid, gas, or solids which may corrode the shell.
- Do not expose the product to rain or moisture.
- To prevent the risk of electric shock, do not open the case. Installation and maintenance should only be carried out by qualified technicians.
- Do not use the product beyond the specified temperature, humidity, or power supply specifications.
- This product does not contain parts that can be maintained or repaired by users. Damage caused by dismantling the product without authorization from BZBGear is not covered under the warranty policy.
- Installation and use of this product must strictly comply with local electrical safety standards.

Introduction

This guide covers the Control4 driver for the BZBGear BG-UPTZ universal PTZ camera (12x / 20x / 30x zoom options). The driver is built on the Control4 DriverWorks SDK using the Camera proxy, so Control4 shows the camera's live H.264 video and provides on-screen pan, tilt, zoom, home and preset controls in the Navigator and touch panels.

Beyond the standard camera controls, the driver adds focus (Auto / Manual / One Push plus manual near/far). The camera is reached over two connections on one IP address: live video over RTSP, and pan/tilt/zoom/focus/presets over its HTTP CGI. The driver manages both; only the IP address and credentials are required. The BG-UPTZ has no tally light and no auto-tracking, so there is no VISCA connection to configure.

Installation

Copy the driver (.c4z) into your Control4 driver folder, then in Composer Pro use Driver -> Add or Update Driver... and add it to your project. On the Connections page, bind the sources and displays as described under Connections (Bindings).

1. In System Design, add the "BZBGear BG-UPTZ PTZ Camera" driver to your project (BZBGear manufacturer, Camera / Security category).
2. On the Properties page, enter the camera's IP address in Camera IP Address. Set Username and Password if they differ from the factory default (admin / admin).

3. Open the camera device (the Camera proxy). Its address, HTTP Port (80) and RTSP Port (554) pre-fill from the driver; confirm them and use the Test button to preview the live H.264 stream.

4. Use the H264 Stream property to select Main (full resolution, live/av0) or Sub (lower resolution, live/av1) for the Navigator video.

5. Tune PTZ Speed (1-100) and PTZ Step Duration (50-3000 ms) so one press of an on-screen arrow moves a comfortable amount.

Connection reference:

Setting	Value
Camera IP Address	The IP address of the camera (set on the Properties page). Factory default is 192.168.5.163.
HTTP Port	80 (factory default) - pan/tilt/zoom/focus/presets.
RTSP Port	554 (factory default) - live H.264 video.
Username / Password	admin / admin (factory default).

Properties

The driver exposes the following properties on the Composer Properties page. Read-only properties reflect live status reported by the device.

Property	Access	Description
Camera IP Address	Editable	IP address or hostname of the BG-UPTZ camera. Also set as the camera's network address in the camera device settings so the RTSP stream URL is built.
Username	Editable	HTTP/RTSP username. Factory default is admin.
Password	Editable	HTTP/RTSP password. Factory default is admin.
HTTP Port	Editable	TCP port of the camera HTTP CGI. Factory default is 80.
RTSP Port	Editable	TCP port of the camera RTSP server. Factory default is 554.
H264 Stream	Editable	Which RTSP stream Control4 uses for live video. Main is the full-resolution stream (live/av0); Sub is the lower-resolution stream (live/av1).
PTZ Speed	Editable	Pan/tilt/zoom speed for nudge moves (1-100).
PTZ Step Duration	Editable	How long (milliseconds) a single pan/tilt/zoom/focus nudge runs before it is stopped. Larger values move farther per button press.
Connection Status	Read-only	Result of the most recent HTTP command to the camera.
Last Device Error	Read-only	Most recent error returned by the camera.
Debug Mode	Editable	Diagnostic output. Automatically returns to Off after one hour.
Driver Version	Read-only	Driver version.

Actions

The following actions are available on the Composer Actions tab.

Action	Description
Go To Home Position	

Programming Commands

The following device-specific commands are available in the Composer Programming tab. Parameters are chosen from drop-down lists unless noted.

Command	Parameters	Description
Recall Preset	Preset	Move the camera to preset PARAM1
Save Preset	Preset	Save the current position to preset PARAM1
Clear Preset	Preset	Clear preset PARAM1
Go Home	-	Move the camera to its home position
Set Focus Mode	Mode	Set the focus mode to PARAM1
Focus Near	-	Nudge focus nearer
Focus Far	-	Nudge focus farther
Pan Left	-	Nudge the camera left
Pan Right	-	Nudge the camera right
Tilt Up	-	Nudge the camera up
Tilt Down	-	Nudge the camera down
Zoom In	-	Nudge zoom in (tele)
Zoom Out	-	Nudge zoom out (wide)
Send Raw HTTP	JSON	Send a raw ajaxcom szCmd JSON payload, e.g. {"SysCtrl":{"PtzCtrl":{"nChanel":0,"szPtzCmd":"go_home","byValue":0}}}

Events & Variables

Events (available as "when" triggers in Programming):

This driver defines no custom events; the standard camera proxy state is available.

Variables (available for programming and conditionals):

Variable	Type	Description
CAMERA_IP	String	The camera IP address the driver is currently using.

Connections (Bindings)

On the Composer Connections page, bind the following. Unused bindings are hidden automatically on Control4 OS 3.3.0 and later.

Binding	Type	Description
Camera	Camera	The Control4 camera proxy binding - provides the live H.264 video and on-screen PTZ / preset controls. No physical AV cabling to bind; the camera is reached over the network.

Camera Control Reference

The driver speaks two protocols to the camera, both captured live from the hardware. Pan/tilt/zoom/focus/presets use the HTTP CGI (basic auth); live video is H.264 over RTSP. The BG-UPTZ has no tally or auto-tracking, so there is no VISCA. The following summarizes the key messages for reference; day-to-day control uses the on-screen buttons and the programming commands above.

Live Video (RTSP, port 554)

Command	Description
rtsp://<ip>:554/live/av0	Main stream (full resolution)
rtsp://<ip>:554/live/av1	Sub stream (lower resolution)

PTZ / Focus / Presets (HTTP ajaxcom, port 80)

Command	Description
left / right / up / down (_start, _stop)	Pan and tilt; start then stop after PTZ Step Duration
zoomadd / zoomdec (_start, _stop)	Zoom in (tele) / out (wide)
focusadd / focusdec (_start, _stop)	Focus far / near
go_home	Recenter the camera
preset_call / preset_set / preset_clean	Recall / save / clear a preset (byValue; 10 via the driver, up to 255 via Send Raw HTTP)
emAFMode 2 / 3 / 4	Focus mode Auto / Manual / One Push

Tech Support

For technical support, please contact BZBGear:

- Email: support@bzbgear.com
- Phone: +1(888)499-9906
- Address: 830 National Drive #140, Sacramento, CA 95834, USA

Warranty

BZBGear products are backed by a limited product warranty. For full warranty details, please visit www.bzbgear.com or contact BZBGear support.

Mission Statement

BZBGear is dedicated to providing high-quality, professional-grade AV equipment that delivers exceptional performance and reliability for both commercial and residential applications.

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