

# ClearOne BMA 360 Camera Tracking Module for Crestron

## Products Supported

- [CONVERGE Pro 2](#)
- [BMA 360](#)

## Overview

This document describes the functions of the ClearOne Crestron Camera Tracking Module. Multiple instances of this module can be supported in the same Crestron program slot. Each instance of the module will be assigned to a single BMA 360 and provide real time reporting of active beam status and related preset controls for up to two cameras.

## Supported Devices

Equipment	Control Type
CONVERGE® Pro 2 DSP	RS-232 or Telnet
BMA 360	Via DSP
UNITE® 200 Camera	Telnet or VISCA
VISCA Enabled PTZ Camera	VISCA

The module controls the above listed ClearOne devices and provides options to assign camera presets to zones related to talker positional reporting cues.

## Module Connections Description

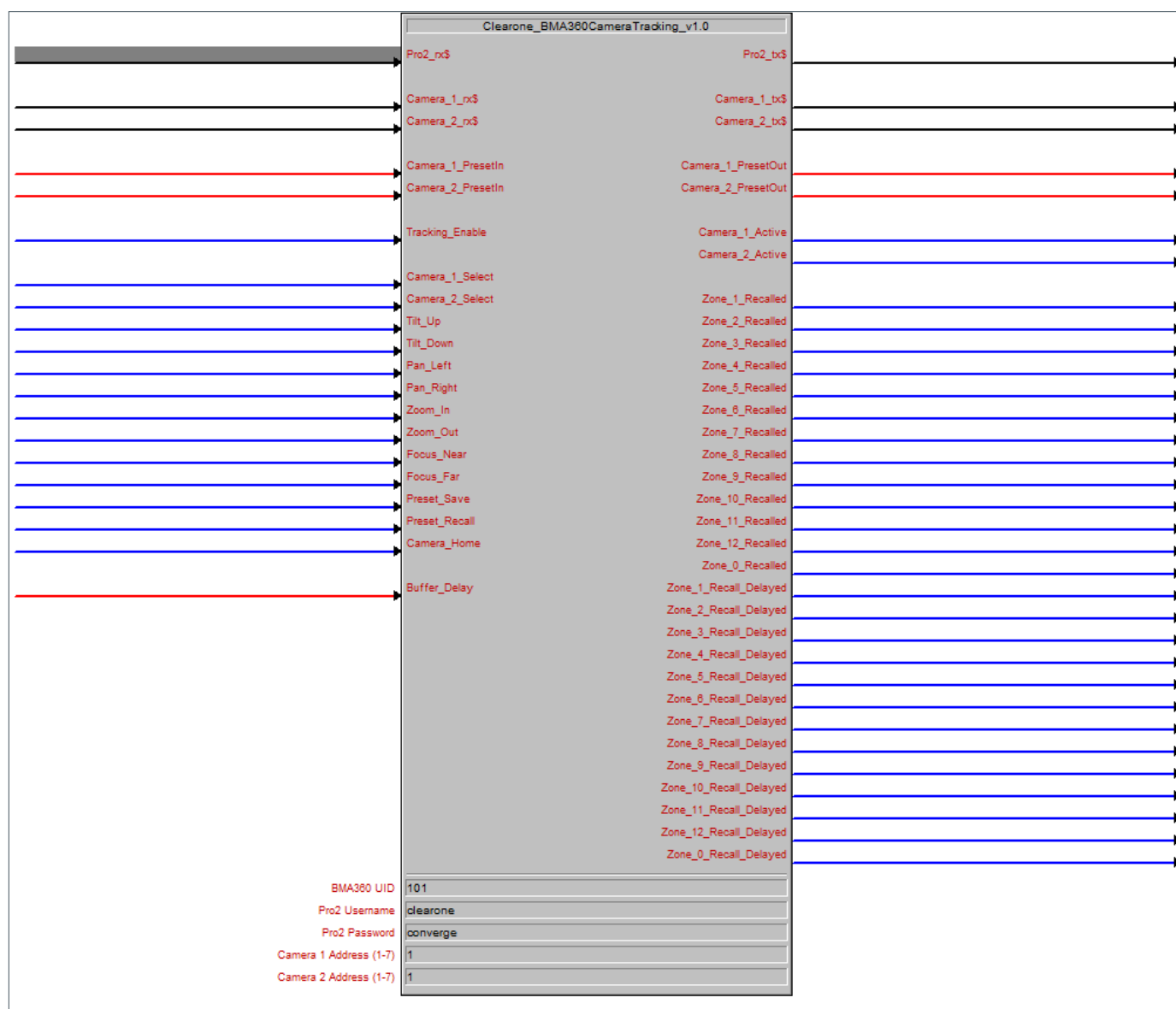


Figure 1. Module Diagram

## Parameters

BMA 360 UID#	Setting to indicate the unique ID of the BMA 360
Pro 2 Username	Setting to indicate the username of CONVERGE Pro2. The default is "clearone".
Pro 2 Password	Setting to indicate the password of CONVERGE Pro2. The default is "CONVERGE".
Camera 1 Address (1-7)	Setting to indicate the VISCA address of Camera 1. Valid values are 1-7.
Camera 2 Address (1-7)	Setting to indicate the VISCA address of Camera 2. Valid values are 1-7.

## Control

Pro2_rx\$	Serial signal from the CONVERGE Pro2.
Camera_1_rX\$	Serial signal from the Camera 1 (Unite 150 or 200).
Camera_2_rx\$	Serial signal from the Camera 2 (Unite 150 or 200).
Camera_1_PresetIn\$	Serial value which is the currently selected Camera 1 Preset.
Camera_2_PresetIn\$	Serial value which is the currently selected Camera 2 Preset
Tracking_Enable	Set this input to High to enable the auto tracking mode of the cameras.
Camera_1_Select	Set this input to High to select Camera 1.
Camera_2_Select	Set this input to High to select Camera 2
Tilt_Up/Down	Press and hold to the tilt the currently selected camera.
Pan_Left/Right	Press and hold to the pan the currently selected camera.
Zoom_In/Out	Press and hold to the zoom the currently selected camera.
Focus_Near/Far	Press and hold to the focus the currently selected camera.
Preset_Save	Pulse to save the currently selected preset for the camera.
Preset_Recall	Pulse to recall the currently selected preset for the camera.
Camera_Home	Pulse to recall the Home preset for the currently selected camera.
Buffer_Delay	Analog value to set the delay time for camera movement based on zone activation.

## Feedback

Pro2_tx\$	Serial signal to the CONVERGE Pro2.
Camera_1_tX\$	Serial signal to the Camera 1.
Camera_2_tx\$	Serial signal to the Camera 2.
Camera_1_PresetOut\$	Serial value which indicates the currently active camera 1 preset
Camera_2_PresetOut\$	Serial value which indicates the currently active camera 2 preset
Camera_1_Active	Set to high when the Camera 1 is active.
Camera_2_Active	Set to high when the Camera 2 is active.
Pro2_Is_Communicating	Set to high when the CONVERGE Pro2 is communicating.
Camera_1_Is_Communicating	Set to high when the camera 1 is communicating.
Camera_2_Is_Communicating	Set to high when the camera 2 is communicating.
Zone_1_Recalled (1-10)	Set to high when Zone 1-12 is recalled via the Beam report.

## XPanel UI Description

The XPanel file associated with this module provides a working example of how to control and view module data.

Below are the pages of the UI which also help explain the functionality of the module.

### Home Page- Initial XPanel page

Displays navigation option to the user.

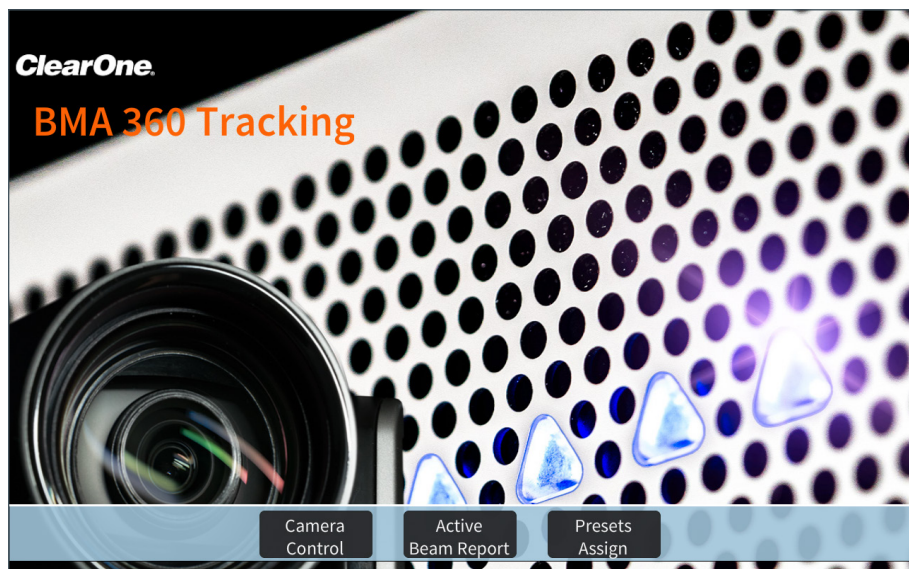


Figure 2. XPanel Home Page

### Camera Control Page (Tracking Disabled)

Allows the user to select the camera to be controlled. The selected camera can then be manually positioned via Pan, Tilt, Focus and Zoom controls. Users can save or recall presets and adjust the global variable tracking buffer delay.

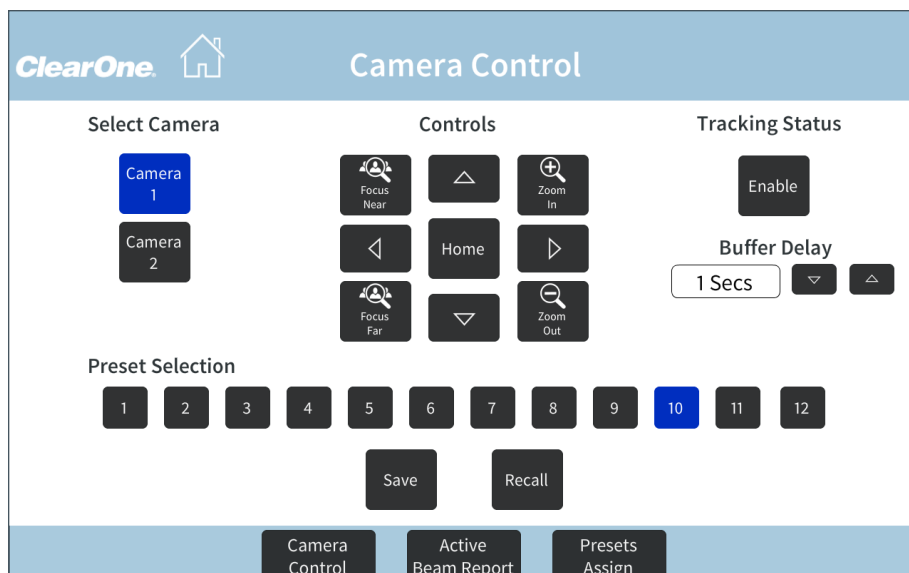


Figure 3. XPanel Active Camera Control Page

### Camera Control Page (Tracking Enabled)

Enabling Tracking Status deactivates camera selection and controls and activates automated camera tracking. To regain access to manual camera control options, Tracking Status must be disabled.

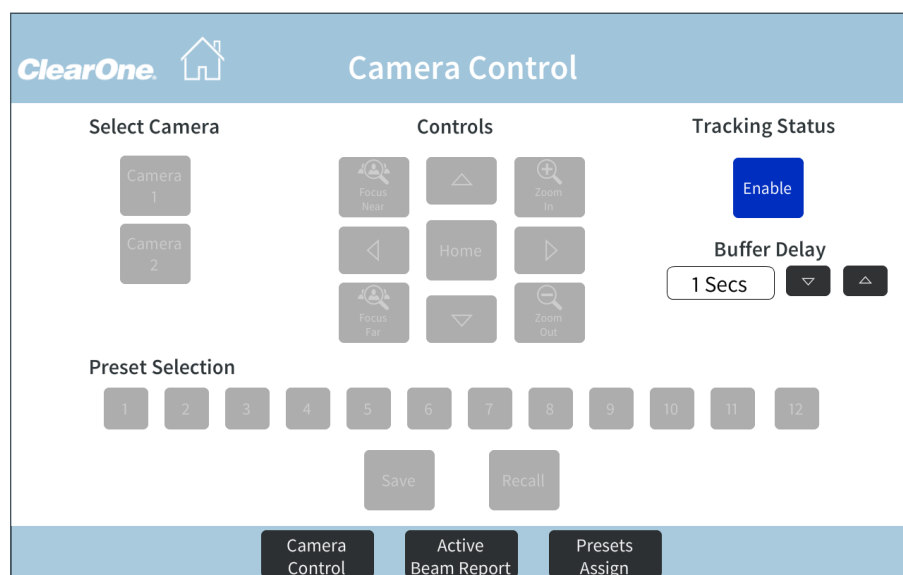


Figure 4. XPanel Camera Control Page with Tracking Enabled

### Active Beam Report Page

Allows users to view the currently active BMA 360 Zones and the related camera preset calls as they occur within the Module. The top section of this page also represents which camera last executed a preset and is considered the "Active" camera.

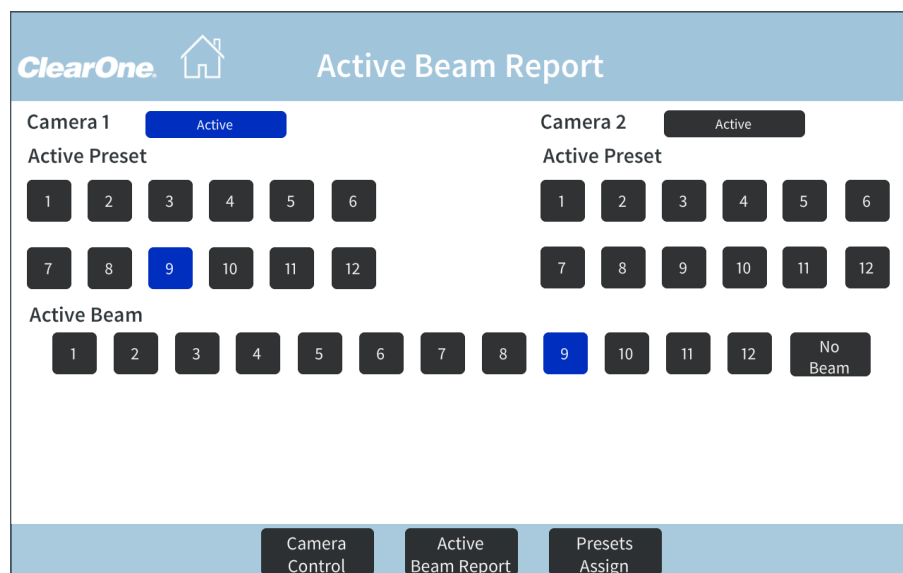


Figure 5. XPanel Active Beam Report Page

Presets Assignment Page

Allows for the assignment and un-assignment of any BMA 360 Zone to any camera preset. The “No Beam” zone option allows for a camera position to be assigned if no Zone is active.

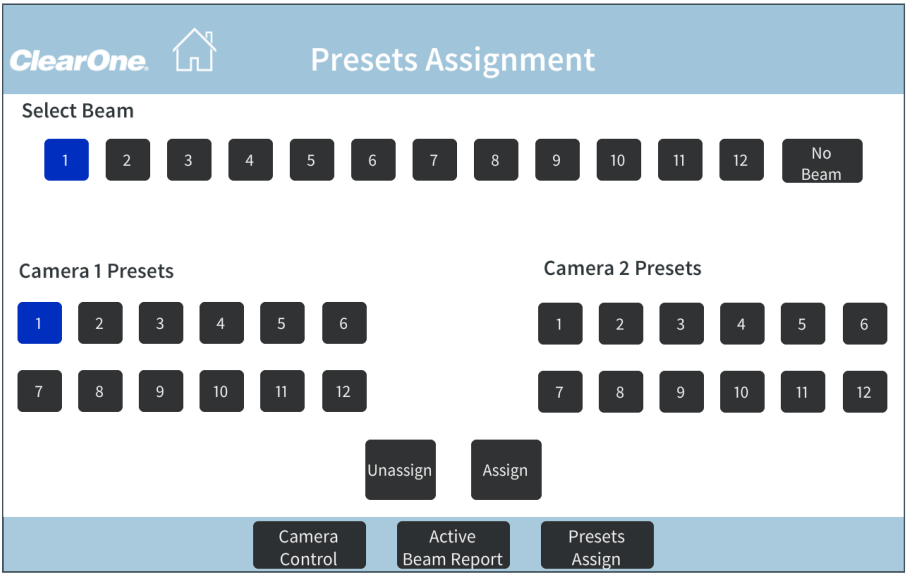


Figure 6. XPanel Presets Assignment Page

SALES AND INQUIRIES

Headquarters

5225 Wiley Post Way Suite 500  
Salt Lake City, UT 84116

Headquarters

Main: +1.801.975.7200

Sales

Tel: +1.801.975.7200  
[sales@clearone.com](mailto:sales@clearone.com)

Tech Support

Tel: +1.801.974.3760  
[audiotechsupport@clearone.com](mailto:audiotechsupport@clearone.com)