

79068-Auto20

In-Field Setup Guide

After installation of the 79068-Auto20 Auto-Tracking Camera, a first-time setup process must be performed to ensure the camera tracks properly. This setup is done using the CameraCMS software. This camera **DOES NOT** have a web GUI and all configuration of the camera **MUST** be done using the CameraCMS software.

Step 1: Download Camera Configuration Software¹

Before downloading, verify that the laptop to be used for this process has a working Ethernet port; camera setup **CANNOT** be done over a wireless network connection. Software and documentation on the camera can be found at <https://www.tekvox.com/?wpdmdl=5620>. Download the file, then run the executable. Follow the on-screen prompts to install the program. **Note:** This step should be done **BEFORE** going on-site.

Step 2: Verify Camera Installation

Before beginning the setup process, the camera **MUST** be fully-installed. Verify that the camera is securely mounted in its intended position, and that its power, video output, and Ethernet ports are connected according to the system schematic. Check that the camera has power, and is able to move freely.

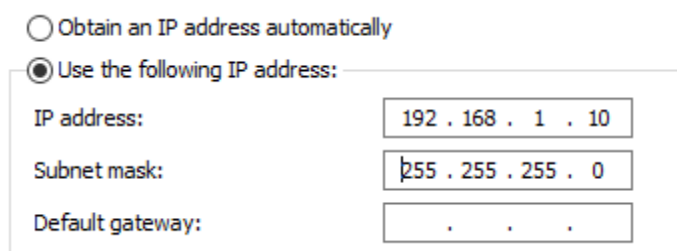
Step 3: Connect to Camera Network

Step 3.1: For Cameras on a TEKVOX Local Network

Use an Ethernet cable to connect the laptop to the TEKVOX local network. Make sure that the laptop's IP Assignment is set to Automatic (DHCP) to avoid communication errors.

Step 3.2: For Connecting Directly to Camera

If the camera is installed without a local TEKVOX network, or if for any reason the local network cannot be used, setup can be completed by connecting to the camera directly. Use an Ethernet cable to connect the laptop to the Ethernet port of the 79068-Auto20. In the laptop's IP settings, set it to Manual/Static. The camera's default IP address is **192.168.1.88**, so the laptop's IP address **MUST** be set to something in the same range (i.e. **192.168.1.X**).



The screenshot shows a network configuration window with two radio buttons at the top. The first is 'Obtain an IP address automatically' (unselected). The second is 'Use the following IP address:' (selected). Below this are three input fields: 'IP address:' containing '192 . 168 . 1 . 10', 'Subnet mask:' containing '255 . 255 . 255 . 0', and 'Default gateway:' containing three dots.

¹ This step is only necessary once; after the software is installed on a computer, it does not need to be re-installed each time.

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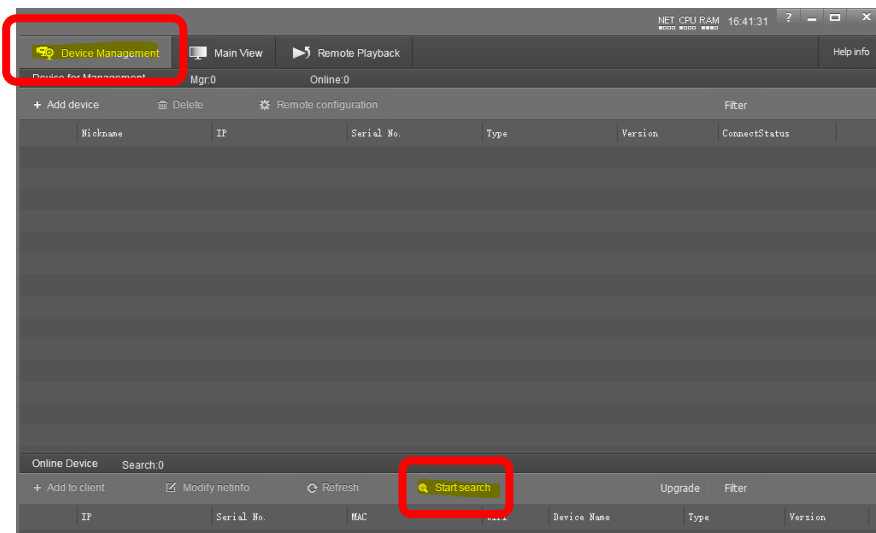
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Step 4: Locate Camera in CameraCMS

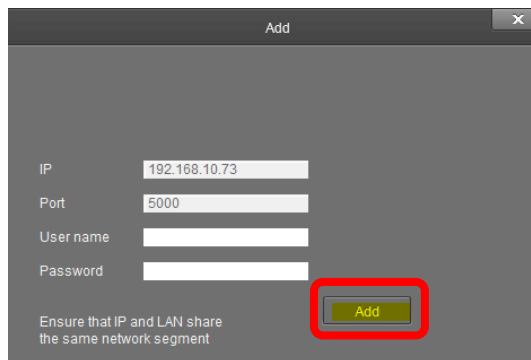
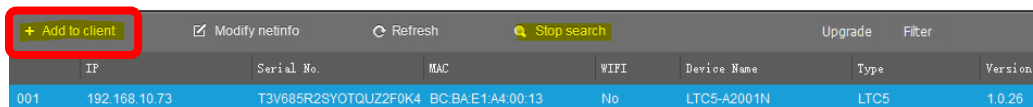
Open the CameraCMS program installed on the laptop in Step 1: Download Camera Configuration Software. If a window opens prompting you to authorize the program, click “Yes.”



Once the program is open, select the “Device Management” tab at the top. In the bottom “Online Device” section of the screen, click “Start search.” The connected camera should appear with its IP Address, Serial Number, MAC Address, Name, Type, and Version listed.



Once the camera is found, select it and click “Add to client”. In the pop-up window that opens, click “Add” in the bottom right. The camera should appear in the “Device for Management” device list in the center of the screen, and its “ConnectStatus” should show as “connected.”



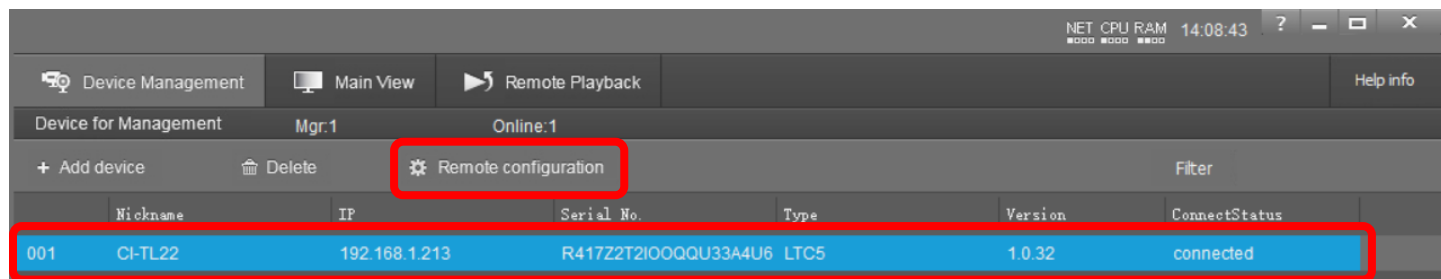
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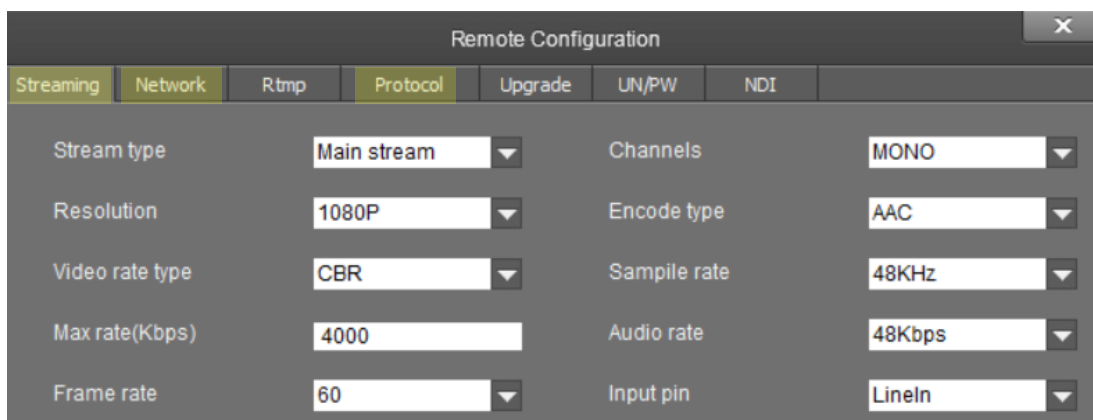
Once the camera has been successfully added, click “Stop search”. **Note:** If the search does not find the camera, go back to Step 2: Verify Camera Installation and double-check the connection and setup.

Step 5: Verify Camera Settings

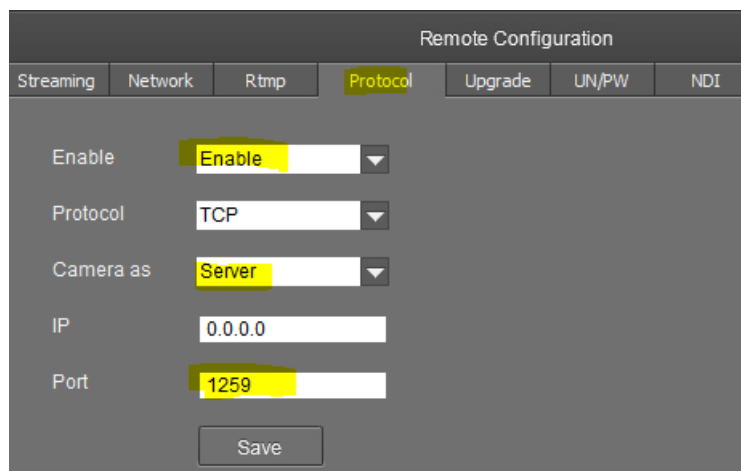
Select the camera from the Device for Management list, then click “Remote Configuration” and confirm that all settings are configured as appropriate for system and installation.



Select the “Streaming” tab to change video and audio settings. Select the “Network” tab to view Static/Dynamic IP settings; for systems with MAC-bound IP addresses, the camera should be set to DHCP. Select the “Protocol” tab to enable/disable VISCA control over IP.



To enable VISCA over IP, enable it in the “Protocol” tab, and make sure that “Camera as” is set to “Server” and that “Port” is set to 1259 for TEKVOX applications. Click “Save” to apply any changes.

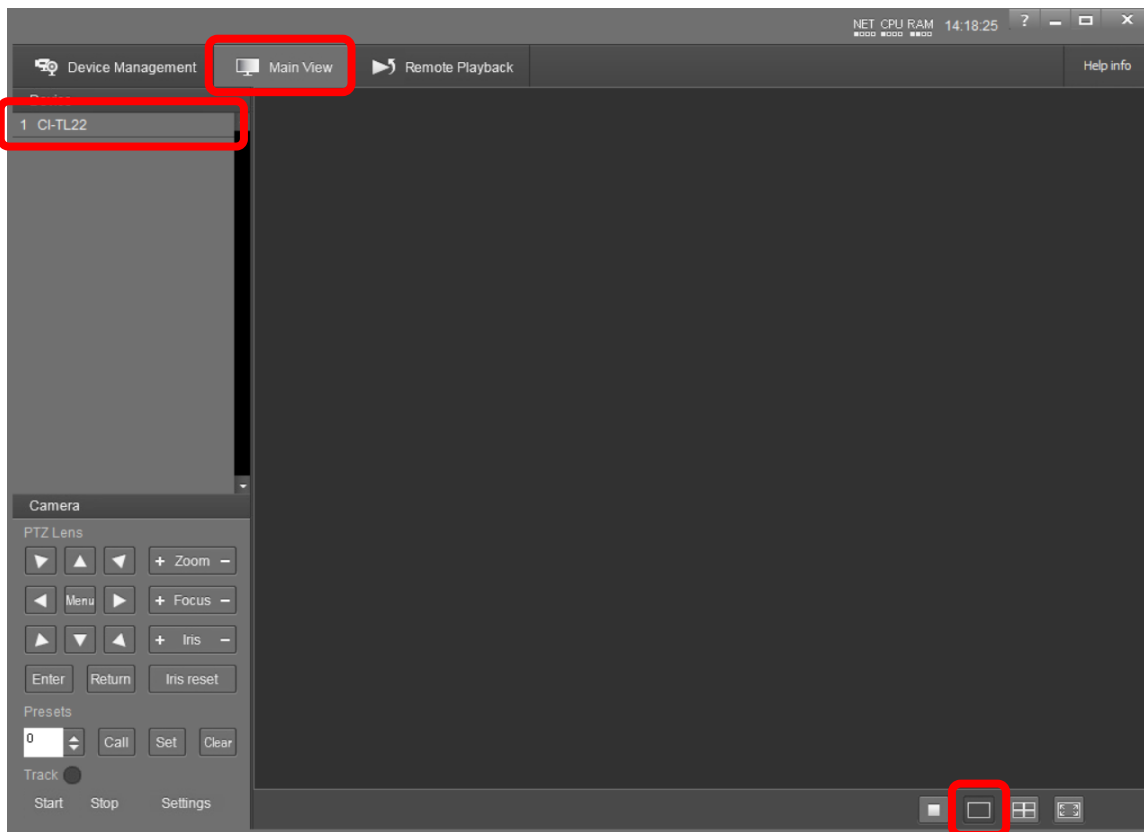


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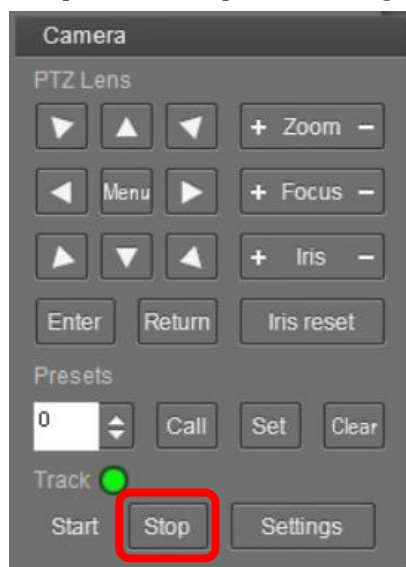
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Step 6: Configure Auto-Tracking Settings

Select the “Main View” tab at the top of the window. Double-click the camera’s name under “Device” on the left side, then click the Fullscreen button in the bottom right corner of the window (second from the left).



Step 6.1: Stop Tracking



Before adjusting any auto-tracking parameters, auto-tracking MUST be disabled. To disable auto-tracking, Press “Stop” in the camera controls menu.

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Step 6.2: Set Home Preset (Preset 0)

Use PTZ controls (including zoom) to position camera so that it captures the instructor and their desk or podium in a wide view. This is the preset the camera will return to when the tracking target is lost. To set the preset, change the number under “Presets” to “0”, then click “Set.”

Step 6.2: Set Tracking Preset (Preset 1)

Use PTZ controls (including zoom) to position camera so that it captures a zoomed-in view of the instructor. The zoom level of this preset will determine how far the camera will zoom in when tracking. Set this position as Preset 1. **Note: The zoom level of Preset 0 and Preset 1 MUST be different to avoid conflicts.**

Step 6.3: Set Left and Right Bound Presets (Presets 8 & 9)

From Preset 1, pan the camera to the desired left limit; if the tracking target goes beyond this limit, the camera will return to Preset 0. Set this left limit as Preset 8. Follow the same process with the right limit, setting it to Preset 9.

Step 6.4: Set Lower Tracking Boundary

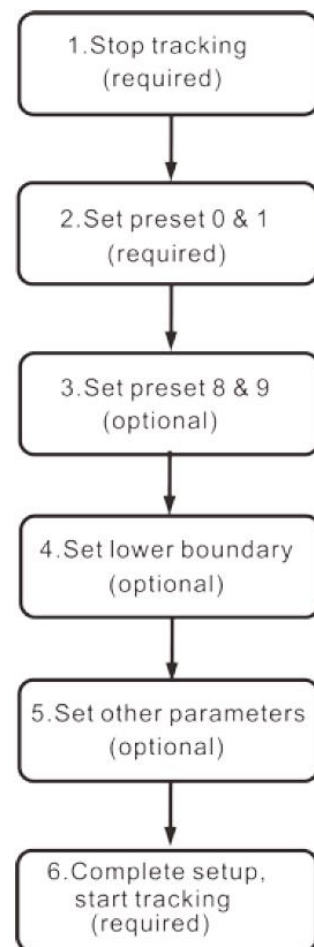
Press “Settings” to access additional tracking settings, then select the “Basic1” tab. Click “Lower Bound” to display the vertical tracking limit as a green line on the camera video preview. The camera will not acquire or follow tracking targets below this limit; it should be set to exclude everything between the camera and presenter, including furniture, equipment, and the backs of audience members’ heads. Use the up and down arrows to adjust the limit to the desired level, click “OK”, then click “Return” to save the setting.

Step 6.5: Adjust Tracking Parameters

Select the “Basic2” tab to access advanced tracking parameters.

1. Tilt Motion

When this option is enabled, the camera will tilt up and down to track presenters vertically as well as horizontally. Disable this option to keep the camera at a fixed height while it’s tracking.



Preset	Function
0	Full-View
1	Tracking
8	Left-bound tracking preset
9	Right-bound tracking preset
80	Turn on tracking
81	Turn off tracking
93	Cruise, camera switches among saved 0~29 presets repeatedly and sequentially in fixed interval.
95	Open menu
96	Delete all presets
99	Reboot the camera

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2. Track Sens.

This setting controls the camera tracking's sensitivity to the presenter's movements. The higher the setting, the less movement is required from the presenter before the camera will adjust its position. The default value is 3. This setting should be left as set by TEKVOX.

3. Track Speed

This setting controls how quickly the camera will move while tracking the presenter. The higher the setting, the faster the camera will move. The default value is 3. This setting should be left as set by TEKVOX.

4. Lost Timeout

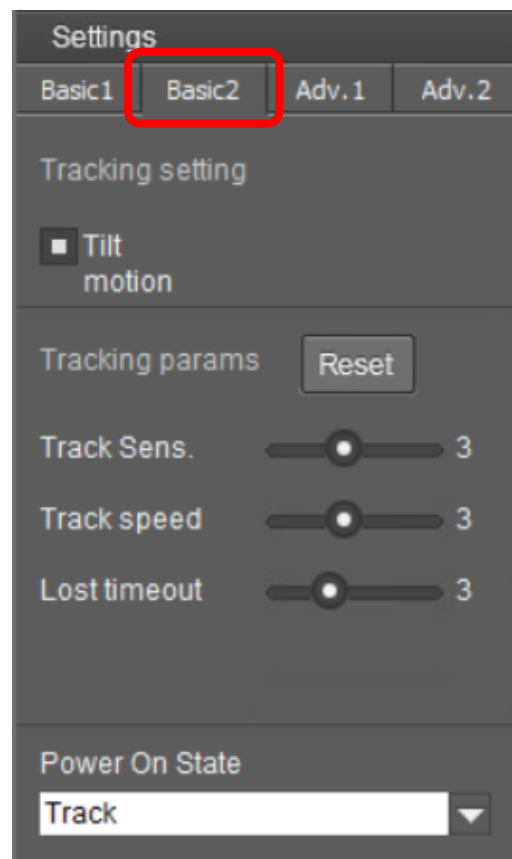
This setting controls how long the camera will wait after losing its tracking target before returning to Preset 0. The higher the setting, the longer the camera will wait before returning to its Home position. The default value is 3. This setting should be left as set by TEKVOX.

5. Power On State

This setting controls what mode of operation the camera defaults to when it powers on. This setting should be left as set by TEKVOX.

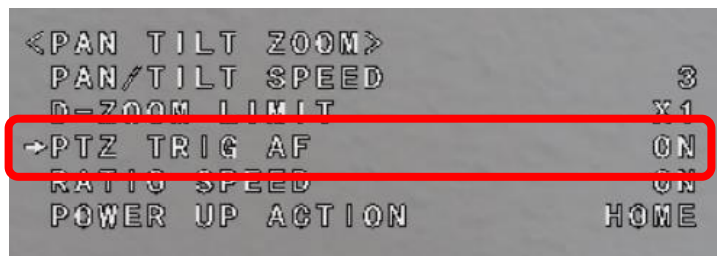
Track: The camera will automatically track presenters by default

Do Not Track: The camera will not track by default, and auto-tracking will need to be enable manually after a power cycle.



The "Adv.1" and "Adv.2" menus are unused. Once these settings are configured as desired, click "Save" at the bottom to apply the settings. Press "Exit" to close the camera's advanced tracking parameters.

Step 7: Enable Auto-Focus when Tracking



In the Main View tab, press "Menu" under "Camera" to bring up the camera's OSD. Click the PTZ down arrow until "Pan Tilt Zoom" is selected, then click "Enter." Navigate to "PTZ Trig AF" in the menu, and confirm that it is set to "On."

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Step 8: Test Operation

Test that each preset is set to the correct position by selecting the corresponding numbers—0, 1, 8, and 9—using the drop-down menu under “Presets,” then clicking “Call” to send the camera to that position. Preset 0 should be a wide view, Preset 1 should be a zoomed-in view, Preset 8 should be the left limit, and Preset 9 should be the right limit.

Press “Start” to put the camera back in auto-tracking mode. The camera will go to Preset 0 and begin seeking a target to track. Walk into the camera’s field of view, in the area where the presenter will appear; the camera should zoom in to the level of Preset 1 and begin tracking. Confirm that the camera follows properly while moving around the space normally, and that it stops tracking once the target moves beyond its left and right limits. Confirm that the front row of the audience does not interfere with the tracking (a second person is helpful for this step).

If the camera’s performance is not as desired, repeat previous steps to adjust parameters.