

QTrack™ Antenna

Quick Start Guide

Quasonix, Inc.
6025 Schumacher Park Dr.
West Chester, OH 45069
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1 Required Items

1.1 Hardware

- A computer with wired ethernet interface.
- QTrack™ Antenna Controller
- QTrack™ Antenna Positioner
- Ethernet cable

1.2 Software

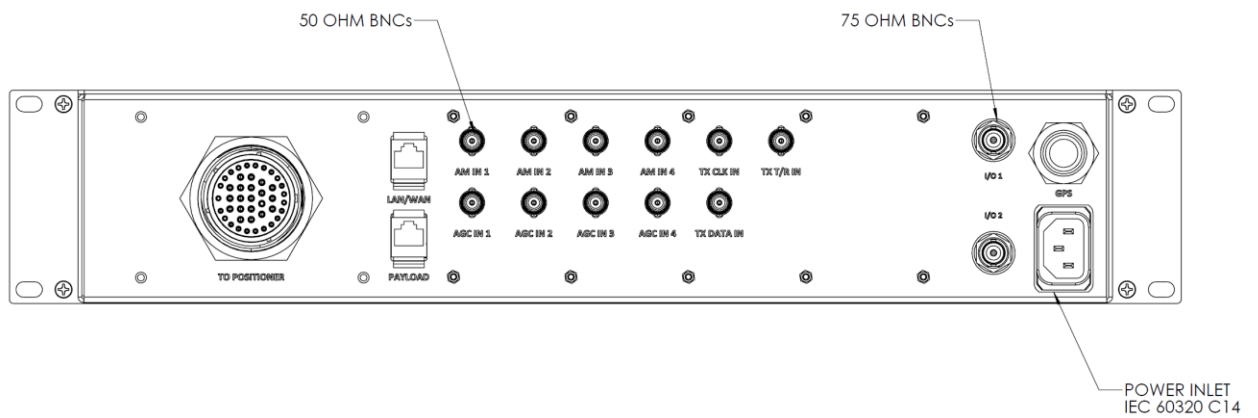
- Web Browser (Firefox preferred since it supports camera video)
- QTrack™ Client Software (<http://www.quasonix.com/>)

2 Initial Hardware Setup

1. Connect the Positioner control cable to the positioner on the connector labelled “Port 1”.



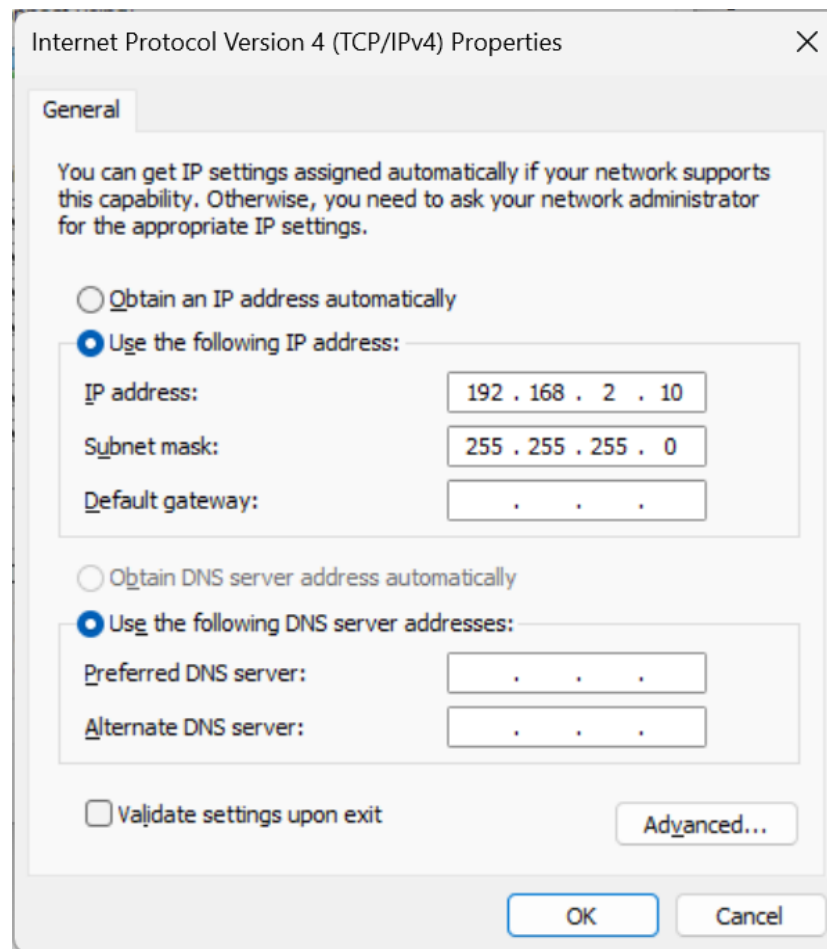
2. Connect the Positioner control cable to the rear of the QTrack™ Antenna Controller to the connector labelled “To Positioner”.



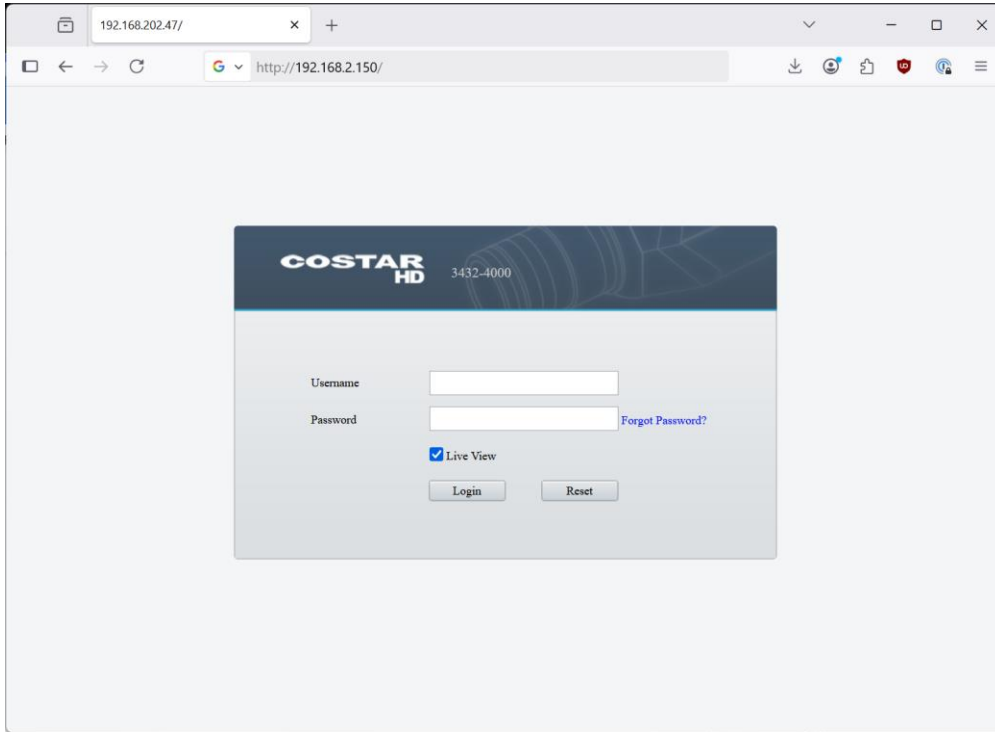
3. Connect power to the controller.
4. Turn the controller on using the front panel rocker switch.

3 IP Camera Configuration

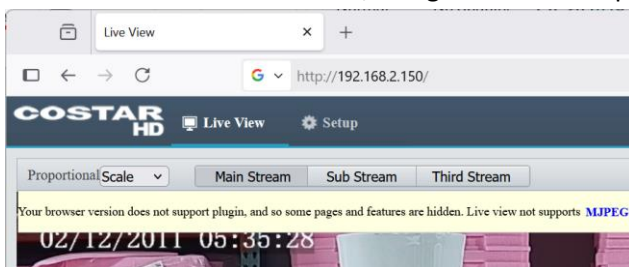
1. Ensure the QTrack™ Antenna Controller is powered on.
NOTE: *The camera is powered by the controller.*
2. Connect an ethernet cable directly between a computer and the “Payload” ethernet on the rear panel of the QTrack™ Antenna Controller.
3. Ensure the computer is disconnected from all other networks (wireless or wired) to avoid IP address and network conflicts.
4. Configure the computer’s network to use the following configuration:
 - a. IP Address: 192.168.2.10
 - b. Netmask: 255.255.255.0



5. Open a web browser (Firefox preferred) and direct it to <http://192.168.2.150/>
NOTE: *Firefox is the only browser that supports video playback without any additional plugins or configuration.*



6. Login using the default administrator credentials.
Username: admin
Password: admin
7. You will be asked to setup a strong password. Updated the password and record the new password for your records.
8. In the Camera's web interface, navigate to the setup page.



- On the setup page, navigate to Common → Network and configure the network settings for your network. Press the “Save” button.

The screenshot shows a web browser window with the address bar displaying `http://192.168.2.150/`. The browser tab is labeled "Common". The web interface has a dark blue header with the "COSTAR HD" logo, a "Live View" button, and a "Setup" button. On the left side, there is a sidebar menu with the following items: "Common", "Network", "Video", "Presets", "Image", "Intelligent", "Events", "Storage", "Security", and "System". The "Common" menu item is currently selected, and its sub-menu is open, showing "Basic Info", "Network", "Time", "Server", "OSD", and "User". The "Network" sub-menu item is highlighted. The main content area displays the "Network" configuration page. It includes the following settings: "Obtain IP Address" set to "Static", "IP Address" set to "192.168.2.150", "Subnet Mask" set to "255.255.255.0", "Default Gateway" set to "0.0.0.0", "IPv6 Mode" set to "DHCP", "MTU" set to "1500", "Port Type" set to "FE Port" (with a lock icon and a question mark icon), and "Operating Mode" set to "Auto-negotiation". A blue "Save" button is located at the bottom of the configuration area.

- Connect the QTrack™ Antenna Controller to you network and access it from a web browser using the updated IP address.

Figure 1 - CostarHD IP Camera URLs

| | | |
|-------------------------------|--------------------|--|
| RTSP/RTP and RTSP Interleaved | | |
| | Connection String: | rtsp://<ipaddress>/media/<Presentation Name> |
| | Presentation Name: | video1, video2 or video3 |
| | Example: | rtsp://192.168.2.150/media/video2 |
| | | |
| RTP Multicast | | |
| | Connection String: | rtsp://<ipaddress>/media/<Presentation Name>/multicast |
| | Presentation Name: | video1, video2 or video2 |
| | Example: | rtsp://192.168.2.150/media/video1/multicast |
| | | |
| HTTP | | |
| | Connection String: | http://<ipaddress>/media/<Presentation Name> |
| | Presentation Name: | video1, video2 or video3 |
| | Example: | http://192.168.2.150/media/video3 |

4 Quasonix Receiver Configuration

- From the Receiver front panel menu, select “AM Menu” and press enter.

| Main Menu | | Ch:C |
|----------------|----------|------|
| Clock Polarity | Normal | |
| Equalizer | Off | |
| DQ Encaps. | Disabled | |
| Derandomizer | Off | |
| Mod Scaling | Acquire | |
| Mod Persist | Off | |
| HyperTrack | Disabled | |
| AGC Menu | | |
| AM Menu | | |

- Press enter on “AM Bandwidth”

| AM Menu | | Ch:C |
|--------------|----------|------|
| AM Bandwidth | 100.0000 | |
| AM Polarity | Positive | |
| Scale | 1.00000 | |
| AGC Comp | Enabled | |

- When prompted, set the AM bandwidth to 15000 Hz.
- Return to the “Main Menu”

5. From the main menu, select “AGC Menu”

| Main Menu | | Ch:C |
|----------------|----------|------|
| Data Polarity | Normal | |
| Clock Polarity | Normal | |
| Equalizer | Off | |
| DQ Encaps. | Disabled | |
| Derandomizer | Off | |
| Mod Scaling | Acquire | |
| Mod Persist | Off | |
| HyperTrack | Disabled | |
| AGC Menu | | |

6. Press enter on “AM Scale (dB/V)”

| AGC Menu | | Ch:C |
|------------------|----------|------|
| Polarity | Positive | |
| AGC Scale (dB/V) | 10.0 | |
| Time Constant | 100.0 | |
| AGC Freeze | Off | |
| AGC Zero Mode | Manual | |
| Zero AGC | | |

7. When prompted, enter 20.0

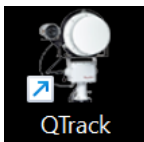
5 QTrack™ Controller Configuration

5.1 Hardware Configuration

1. Ensure the controller is powered off.
2. Connect the positioner control cable.
3. Connect receiver combiner AM & AGC to the controller.
4. Connect ethernet to the “WAN” ethernet port
5. If equipped, connect the GPS control cable.
6. Power on the controller.
7. Configure the WAN network.
 - a. From the QTrack™ Antenna Controller front panel main menu, press “Network”
 - b. On the “Network” menu, press “WAN”.
 - c. Configure the network settings (IP, Netmask, and Gateway) for your network.
8. Set the date and time.
 - a. From the front panel main menu, press “Tools”
 - b. On the “Tools” menu, press “Date & Time”.
 - c. Press on the arrow to the right of the Date to set the date.
 - d. Press on the arrow to the right of the Time to set the time.
9. Press back until returned to the main menu.
10. Press “Power” and select “Restart” to reset the controller.

5.2 Client Configuration

1. Download the client software from <http://www.quasonix.com/>
2. Unzip the client download.
3. Run the client installer MSI.
4. Start the client using the desktop icon created during the installation.



- The application will start with a system selection dialog that will auto populate detected receivers if the connected network supports multicast UDP messages. If not, click “+ Add” in the upper left and manually add the controller’s name and IP address.

Server Selection

+ Add

Saved Controllers:

Detected Controllers:

| | |
|---------------------|----------------------------|
| Name: | Quasonix QTrack |
| Hardware ID: | 40020000-016BDC61-157101C5 |
| URI: | 192.168.102.231:50051 |

Exit

6. Select the desired system and press connect.

Server Selection

[+ Add](#)

Saved Controllers:

Detected Controllers:

| | | |
|---------------------|----------------------------|-------------------------|
| Name: | Quasonix QTrack | Connect |
| Hardware ID: | 40020000-016BDC61-157101C5 | |
| URI: | 192.168.102.231:50051 | |

[Exit](#)

- Once connected, you will be prompted for user credentials. Use the default credentials.

Username: admin

Password: admin

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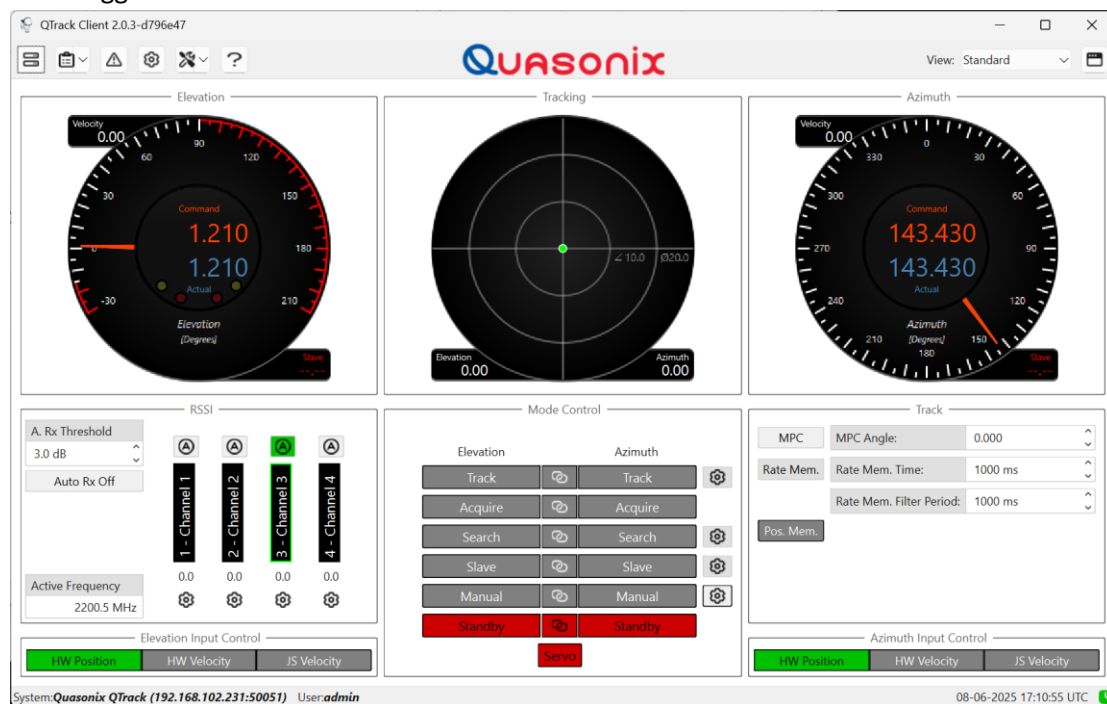
Please enter your user credentials.


Username: admin

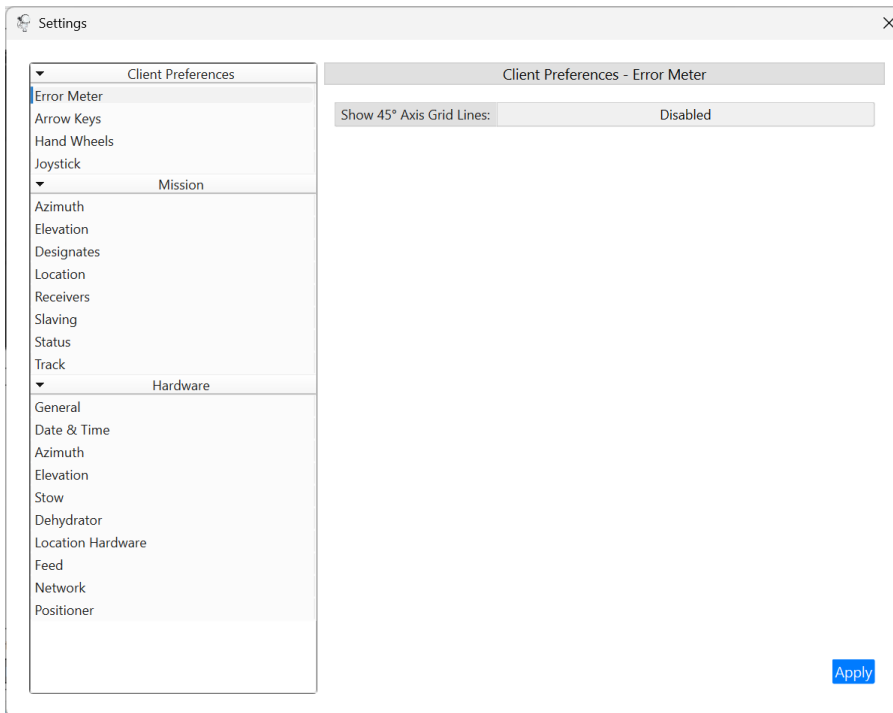
Password: •••••

Login Cancel

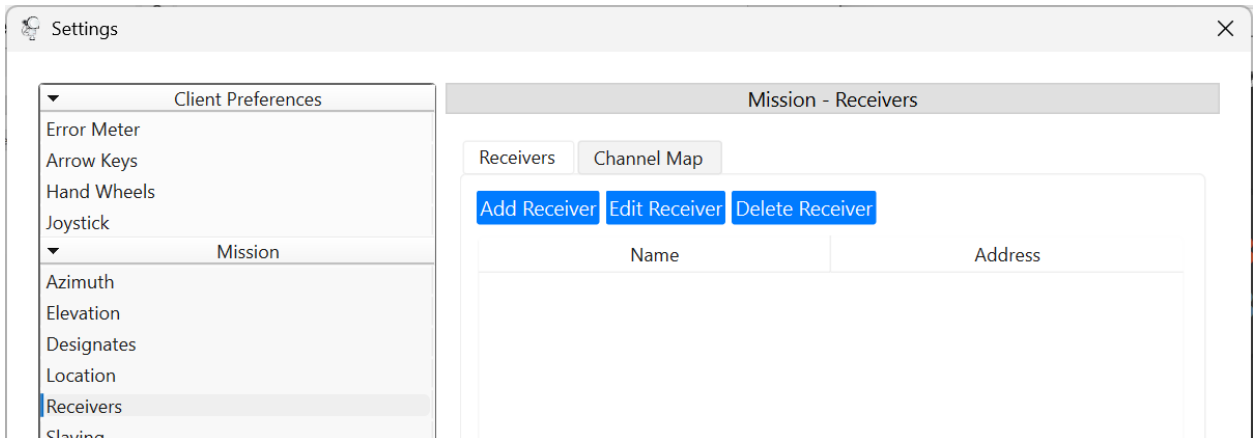
- Once logged in the GUI should look similar to below.



9. From the main toolbar, click on the “Settings”  to open the settings dialog.

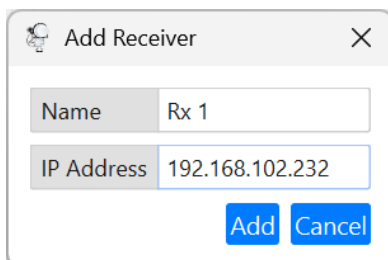


10. Under the “Mission” group, click “Receivers”.



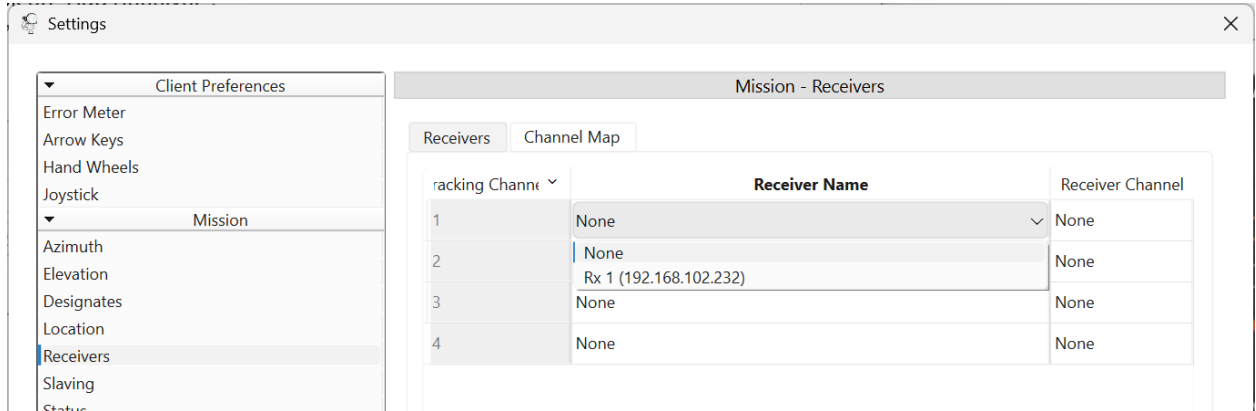
11. On the right side, click on “Add Receiver”.
 12. In the “Add Receiver” dialog, add your receiver’s network ip and give the receiver a name.

NOTE: The receiver name is for reference only within the QTrack GUI.

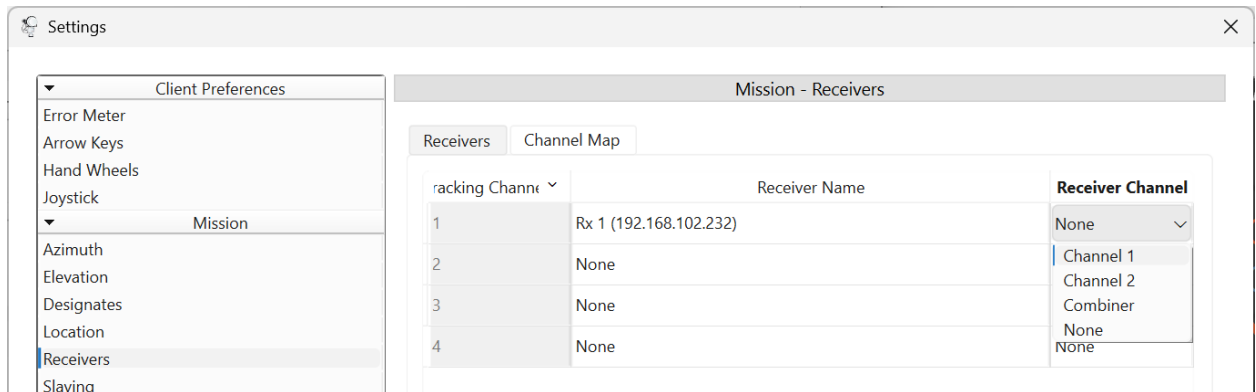


13. Click on the “Channel Map” tab.

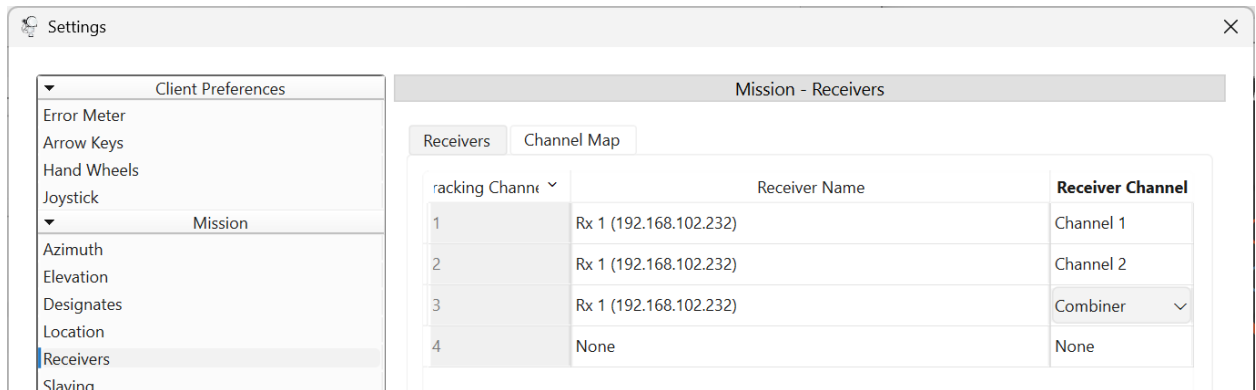
14. Double click on the “Receiver Name” column to set the receiver connected to the selected channel.



15. Double click on the “Receiver Channel” column to set the receiver channel that is connected to the select “Tracking Channel”.



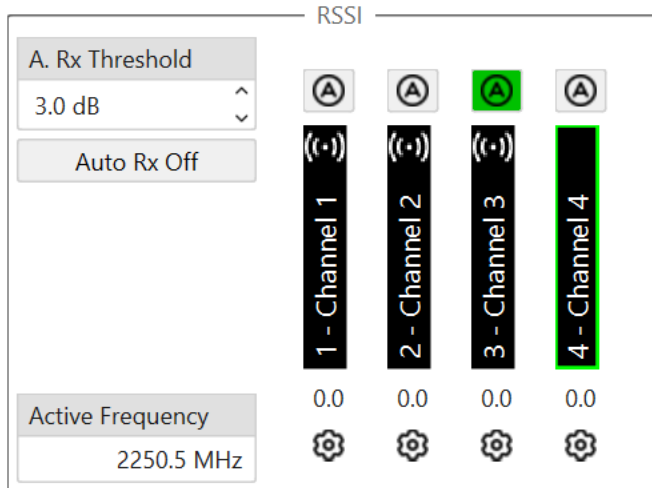
16. Repeat steps 14 and 15 until all connected channels have been mapped.



17. When the controller has connected to the receiver for status the AGC/RSSI bar will display



at the top to indicate it has connected to the associated receiver channel.



18. The system is now ready.