SKYVIEW-DIVR MKII: OPERATOR AND WEBMIN GUIDE

Overview

This guide provides detailed information on how to configure, operate, and administer your SkyView-DIVR MKII system. For general overview information on system components, setup, capabilities and limitations, and general usage guidance, please refer to the separate SkyView-DIVR MKII Overview Guide.

SkyView-DIVR MKII Web-Admin

IMPORTANT: ***For remote computers and/or tablets, you will need to obtain and install a web certificate file from Verus Technology Group to take full advantage of all the web-based features of your SkyView system. Please send a request to skyviewsupport@verustechnologygroup.com to obtain a certificate and instructions for configuration.***

SkyView-DIVR MKII Version 3.0 provides a browser-based application for both real-time monitoring and alerting as well as administrative and configuration SkyView CAUS system. Some common functions that can be performed with the new browser-based tools include:

The Web Client, the primary HMI for real-time monitoring and alerting of sUAS detections

Configuration of SkyView Detection Options

Downloading of Detection Reports

System Documentation

System Upgrade Functions

Downloading of System Logs (Offline Issue Investigation)

Network Configuration for SkyView and external ECM Systems

System Clock Configuration

System Location Configuration (Dynamic GPS or Fixed)

Scheduled Reboots

System Power and Restart Functions

External ECM "Jammer" Integration. This allows the SkyView system to initiate external CUAS ECM system including L3/Harris EGON CUAS ECM and SNC MODI systems.

Connections and Using the Web-Admin Tool

The SkyView-DIVR MKII Web Admin tool can only be access remotely:

- **Remote Access (Networked)**: Remote access with remote computer via modern web-browser with network connectivity to the SkyView-DIVR MKII system

Remote Network-Based Access to the Web-Admin Tool

SkyView-DIVR MKII is equipped with a standard RJ45 Network Interface Port. By default, SkyView software is configured with the following Network configuration. NOTE: Your system may have a different IP address.

IP Address: 192.168.1.217
Netmask: 255.255.255.0
Gateway: 192.168.1.1
Hostname: skyview
DNS: 192.168.1.1

Using a computer equipped with a standard IPv4 Network interface port, make a connection between the computer and the SkyView-DIVR MKII system with the appropriate Network interface cable. On the computer that is connected to the SkyView CUAS system, you will need to establish an IP address that can reach the default SkyView-DIVR MKII system. An example of valid IP settings for the remotely connected computer are below:

IP Address: 192.168.1.**210**
Netmask: 255.255.255.0
Gateway: 192.168.1.1

NOTE: On the remote computer, avoid using an address that is currently assigned (e.g., Do not use SkyView-DIVR MKII's address of 192.168.1.217).

Once the network settings of the remote computer have been configured/validated, test connectivity to the SkyView-DIVR MKII system by using a simple ping command. Assuming a Linux-based computer, ping can be executed as follows:

```
ping 192.168.1.217
```

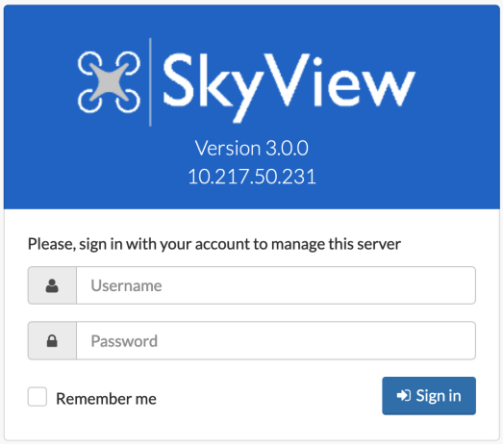
If the ping command is successful, you can then use a standard web browser to view the Web-based administration console located at: https://192.168.1.217:10000.

- **IMPORTANT**: You'll need to request and install a web certificate file from Verus Technology Group to take full advance of all the web-based features of your SkyView system. The certificate and instructions on how to install the certificate are available on your SkyView-DIVR MKII processor. Open a browser to http://192.168.1.217/certs.html. If you have any questions about the required certificate, please send a request to skyviewsupport@verustechnologygroup.com to obtain a certificate and instructions for configuration.
- Once the application starts, you'll be prompted to enter login credentials. Use the following values to login.
    - User: admin
    - Password: password

Using the Web-Admin Tool

Open the web-based administration tool using one of the methods described earlier.

Login Page



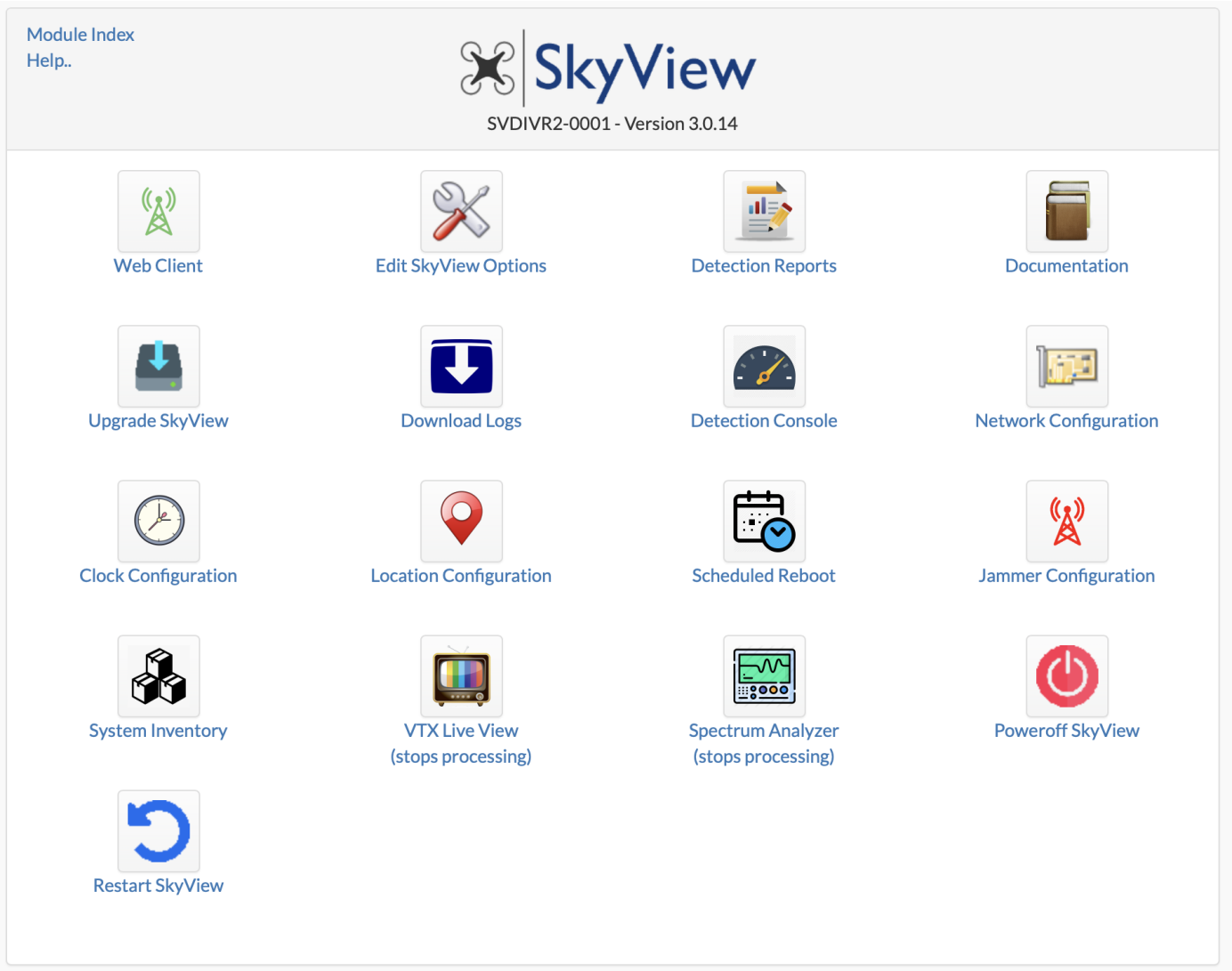
On the Login Page, you can use the following credentials to enter the administration console:

user: admin
password: password

Select the “Sign in” button to login to the console.

NEW: Version 3.0 provides a mechanism to change the admin password. Please contact support at skyviewsupport@verustechnologygroup.com for instructions.

Webmin Functions:



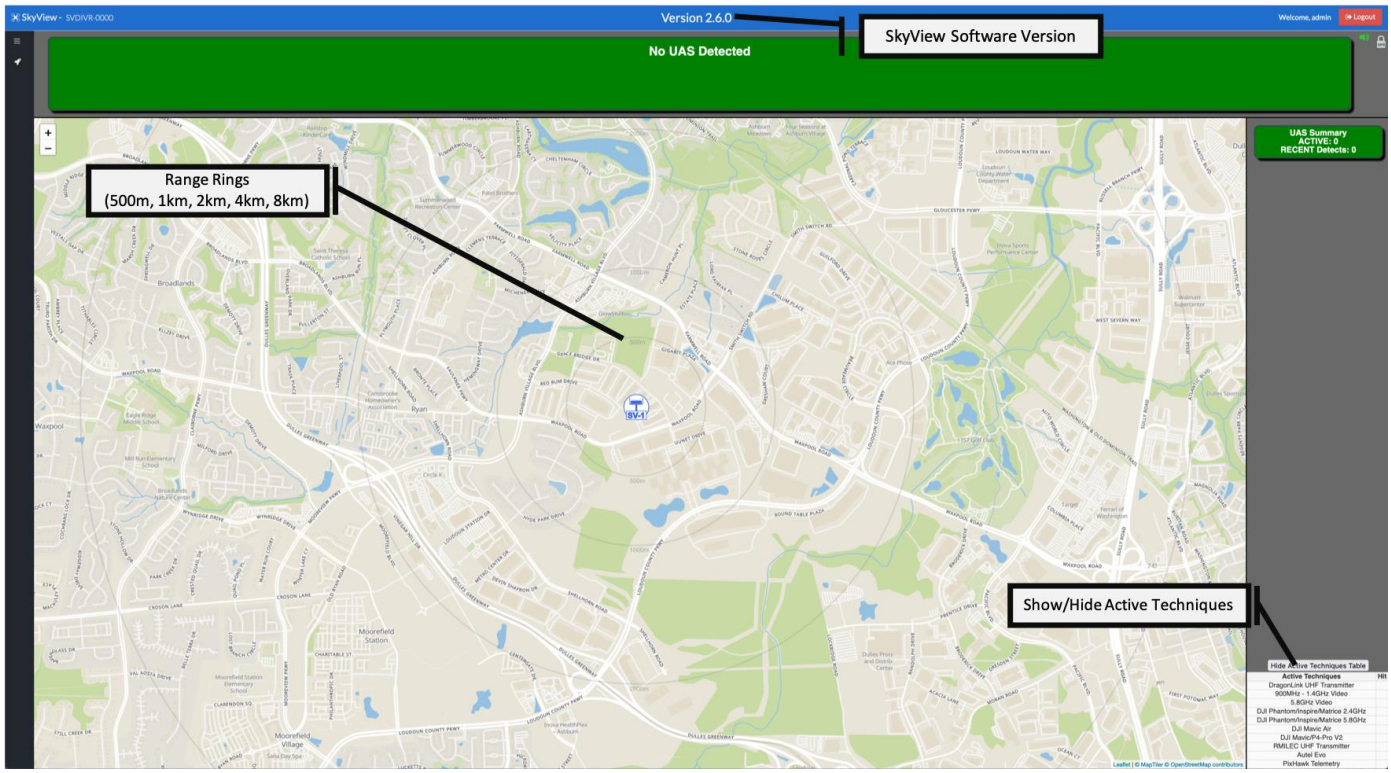
Once logged in, a menu is displayed on the left. Select “Servers/SkyView Server” to see the various functions of the SkyView-DIVR MKII Web Admin console

- **Web Client**: SkyView’s Web-Based MAP User Interface. This is the primary end user application for operators to monitor all SkyView’s detection events. It provides audible and visual alerts as well as map-based sUAS tracking functions for support platforms. NOTE: For older systems, you’ll need to install regional map data as systems did not initial ship with map data. Please contact Verus support to obtain map data installation packages for your region: skyviewsupport@verustechnologygroup.com
- **Edit SkyView Options**: Provides version-specific detection and operating preferences.
- **Detection Reports**: Provides function to download detection event reports to CSV. You can also clear out current detections. NOTE: Detections are automatically purged after 180 days to align with persistent data management policies.
- **Documentation**: Provides direct access to SkyView-DIVR MKII Guides
- **Upgrade SkyView**: Upload new SkyView-DIVR MKII software and tools to the SkyView-DIVR MKII system
- **Download Logs**: Download SkyView System-level Logs (Installation and Processing)

- **Detection Console**: This provides a basic detection status display for network connected devices
- **Network Configuration**: Set SkyView-DIVR MKII's and external ECM Network configuration
- **Clock Configuration**: Set SkyView-DIVR MKII's Internal Clock Source, Time-zone, and Time
- **Location Configuration**: Set SkyView-DIVR MKII's Location Information (GPS, Fixed LAT/LON)
- **Scheduled Reboot**: Configure SkyView's auto-reboot features (on/off, reboot time)
- **Jammer Configuration**: Configure SkyView's external ECM integrated Jammer functions. SkyView provides both user-initiated and detection-initiated execution of L3/Harris EGON and SNC MODI (requires network connectivity to external ECM system)
- **System Inventory:** Provides a detailed system inventory information that can be used for diagnostics.
- **VTX Live View:** This feature allows you to take the SkyView sensor out of detect mode and view real-time NTCS analog video
- **Spectrum Analyzer:** This feature allows you to take the SkyView sensor out of detect mode and view the RF environment via a PSD and falling Raster display.
- **Power-off/Restart:** Functions to power-off or restart SkyView-DIVR MKII

Web Client

This is the primary detection monitoring user interface. It provides audible and visual indicators for sUAS detection events. Version 3.0 adds a version label for easy access to software version number, a map overlay with range rings, and a new Show/Hide techniques.



Edit SkyView Options Panel (Not All Options Selected with Default Installation)

In this configuration panel, users can configure key options that drive the system's detection functions. Below are images of SkyView options available as of SkyView version 3.0.4. Previous/Future versions may have slightly different options, but the user interactions will remain the same. Most settings are self-explanatory and have relatively few options (on/off, etc.). For any changed settings to take effect, scroll to the bottom and hit the "SAVE" button. **NOTE: Some functions may require a system restart to take effect. You can restart the system from the main admin panel.**

Consumer/Prosumer Multi-Rotor Group 1 UAS

- Autel EVO (EVO/EVOII)
- Autel Skylink
- DJI Multi-Rotor (Phantom, Mavic, Mavic Air, Matrice, Inspire)
- DJI Phantom GCS
- Fimi
- Graupner
- RemoteID Bluetooth
- SwellPro (Splash, Fisherman)
- Yuneec Typhoon

Advanced DIY / RCMA Technologies

Signal Name
Digi (Xbee, Xtend)
DragonLink UHF
Freewave UHF
Microhard UHF (Pico/Nano)
RMILEC UHF

Group 2/3 UAS

- HERO Loitering Munition
- Orlan Series UAS (Orlan-10/30)

DIY / RCMA Technologies

- Crossfire UHF
- Express LRS
- FrSky X8R
- Futaba FASST
- Futaba FHSS
- Herelink Video System
- Low-Band VTX
- Mid-Band VTX
- High-Band VTX
- Pixhawk (3DR, Holybro, RFD)
- SIYI
- Spektrum

Experimental Signals

- Extended Express LRS
- Extended Band VTX (4.9GHz)
- Supercam
- Zala Lancet UAS

Save Detections: (defaults to ON) Saves all detections for download from the "Detections Reports" tab. Note: this feature has always been available as enabled but can now optionally been turned off.

Enable Processor Logging: (defaults to OFF) Saves logs from the running processors to disk. If you are experiencing trouble with your system, Verus may ask you to turn this feature on to assist in troubleshooting.

Reduced Range Mode: (defaults to OFF) Set to "On" if you want SkyView-MP to globally reduce receiver gain levels for sUAS detection algorithms. In many cases, this will result in reduced detection range.

SIGNAL OPTIONS

Multi-Target Support: SkyView Version 3.0.4 provides multi-target support. During a detection event, SkyView will continue to scan for other sUAS signatures. If a signal is detected, SkyView will prioritize the detection signal but allocate resources to continue to scan for new signals simultaneously.

Consumer/Prosumer Multi-Rotor Group 1 UAS

Autel EVO (EVO/EVOII): Set to "On" if you want SkyView-MP to detect Autel EVO I and EVO II multi-rotor sUAS systems. In some instances, SkyView-MP is able to perform precision location processing on these devices. Precision processing will vary based on FW versions of the UAS and detection range.

Autel Skylink: Set to "On" if you want SkyView-MP to detect Autel Nano/Micro family UAS.

DJI Multi-Rotor: Set to "On" if you want SkyView-MP to detect the DJI Family of UAS.

DJI Phantom/Inspire/Matrice: DJI Lightbridge equipped UAS that use 2.4GHz frequencies. DJI Lightbridge is a long-range video/C2 transmission technologies employed by the most common DJI consumer and prosumer multi-rotors. This includes most DJI Phantom series drones, DJI Inspire series drones, and DJI Matrice multi-rotors. In some instances, SkyView-MP is able to perform precision location processing on these devices. Precision processing will vary based on FW versions of the UAS and detection range.

DJI Phantom 4 Pro 5.8GHz: DJI Lightbridge equipped UAS that use 5.8GHz frequencies. DJI Lightbridge is a long-range video/C2 transmission technology employed by the most common DJI consumer and prosumer multi-rotors. The 5.8GHz variant is used in pro-series DJI Phantom series drones, some DJI Inspire series drones, and some DJI Matrice multi-rotors. In some instances, SkyView-MP is able to perform precision location processing on these devices. Precision processing will vary based on FW versions of the UAS and detection range.

DJI Mavic: DJI OcuSync equipped UAS. DJI OcuSync is a long-range video/C2 transmission technology employed by the most common DJI consumer and prosumer multi-rotors and operates in both 2.4GHz and 5.8GHz. The OcuSync technology is employed by DJI Mavic Pro, DJI Mavic 2, DJI Phantom 4-Pro V2, and modern DJI Matrice multi-rotors. SkyView-MP is able to perform precision location processing on most DJI OcuSync devices, often with very good range (beyond the precision processing range for DJI Lightbridge devices).

DJI Mavic-Air Extended WIFI: DJI UAS equipped with DJI's "Extended WIFI" transmission technology. It's a medium-range video/C2 transmission technology employed DJI entry-level consumer drones such as DJI Mavic-Air and the recently released DJI Mavic-Mini.

DJI Phantom GCS: Set to "On" if you want SkyView-MP to detect DJI Handsets for the Phantom series UAS.

Feiyu: Set to "On" if you want SkyView-MP to detect Feiyu Tech series UAS.

Fimi: Set to "On" if you want SkyView-MP to detect Fimi series UAS.

Graupner: Set to "On" if you want SkyView-MP to detect Graupner series UAS.

RemoteID Bluetooth: Set to "On" if you want SkyView-MP to detect UAS broadcasting RemoteID Bluetooth.

Splash: Set to "On" if you want SkyView-MP to detect Splash series UAS.

Yuneec Typhoon: Set to "On" if you want SkyView-MP to detect Yuneec Typhoon series multi-rotor UAS. The Yuneec Typhoon detection technique is effective against a number of UAS including the Typhoon 4K, Typhoon Q500, Typhoon H, as well as the Blade Chroma series multi-rotors.

DIY / RCMA Technologies

CrossFire UHF: Set to "On" if you want SkyView-MP to detect Team BLACKSHEEP (TBS) Crossfire UHF systems.

Express LRS (R9M, Crossfire): Set to "On" if you want SkyView-MP to detect UAS using Express LRS control link.

FrSky X8R: Set to "On" if you want SkyView-MP to detect FrSky's 2.4GHz ACCST C2 systems.

Futaba FASST: Set to "On" if you want SkyView-MP to detect Futaba's FASST C2 systems.

Futaba FHSS: Set to "On" if you want SkyView-MP to detect Futaba's FHSS C2 systems.

Herelink Video System: Set to "On" if you want SkyView-MP to detect Herelink video transmitters.

NTSC Low-Band VTX: Set to "On" if you want SkyView-MP to detect high-powered analog video transmitters operating in the 900MHz-1.3GHz frequency range.

NTSC Mid-Band VTX: Set to "On" if you want SkyView-MP to detect high-powered analog video transmitters operating in the 2.4GHz frequency range.

NTSC High-Band VTX: Set to "On" if you want SkyView-MP to detect high-powered analog video transmitters operating in the 5.8GHz frequency range.

PixHawk (3DR, Holybro, RFD): Set to "On" if you want SkyView-MP to detect PixHawk UHF (433Mhz, 868MHz 915MHz) telemetry radio systems. SkyView's version 2.5.0 detection and precision tracking for PixHawk has improved for increased resiliency to variances in end-user configuration and hardware devices, however, some configurations may not be supported.

SIYI : Set to "On" if you want SkyView-MP to detect SIYI's family of UAS.

Spektrum: Set to "On" if you want SkyView-MP to detect Spektrum C2 systems.

Advanced DIY / RCMA Technologies

Digi (Xbee, Xtend): Set to “On” if you want SkyView-MP to detect DigiXbee and DigiXtend long-range UHF systems. When connected to PixHawk autopilot systems, SkyView will extract precision tracking information.

Dragonlink UHF: Set to “On” if you want SkyView-MP to detect Dragonlink High-Powered UHF C2 transmitters. DragonLink is a high-powered UHF C2 extender technology that is a ground-based transmitter. Unlike most SkyView detection techniques, this technique is designed to detect the handset, not the UAS.

Freewave UHF: Set to “On” if you want SkyView-MP to detect Freewave UHF C2 transmitters. Unlike most SkyView detection techniques, this technique is designed to detect the handset, not the UAS.

Microhard UHF (Pico/Nano): Set to “On” if you want SkyView-MP to detect Microhard UHF C2 transmitters. Unlike most SkyView detection techniques, this technique is designed to detect the handset, not the UAS.

RMILEC UHF: Set to “On” if you want SkyView-MP to detect RMILEC High-Powered UHF C2 transmitters. RMILEC is a Chinese-made high-powered UHF C2 extender technology that is a ground-based transmitter. Unlike most SkyView detection techniques, this technique is designed to detect the handset, not the UAS.

Group 2/3 UAS

Hero Loitering Munition: Set to “On” if you want SkyView-MP to detect HERO Loitering Munition UAS weapon systems.

Orlan Series UAS: Set to “On” if you want SkyView-MP to detect Orlan-10/30 series sUAS.

Experimental Signals

Extended Express LRS: Set to “On” if you want SkyView to detect Express LRS in 750MHz – 1GHz.

Extended Band VTX: Set to “On” if you want SkyView to detect VTX in 4.9GHz.

Supercam: Set to “On” if you want SkyView to detect Supercam UAS.

Zala Lancet UAS: Set to “On” if you want SkyView to detect ZALA Lancet UAS.

WIFI Signal Options

RemoteID WIFI: Set to “On” if you want SkyView-MP to detect UAS broadcasting RemoteID WIFI telemetry.

DJI WIFI: Set to “On” if you want SkyView-MP to detect UAS manufactured by DJI that make use of pure WIFI technologies. In some instances, SkyView-MP will be able to provide precision location information for DJI WIFI-equipped UAS, however, this capability will vary based on model and UAS configuration.

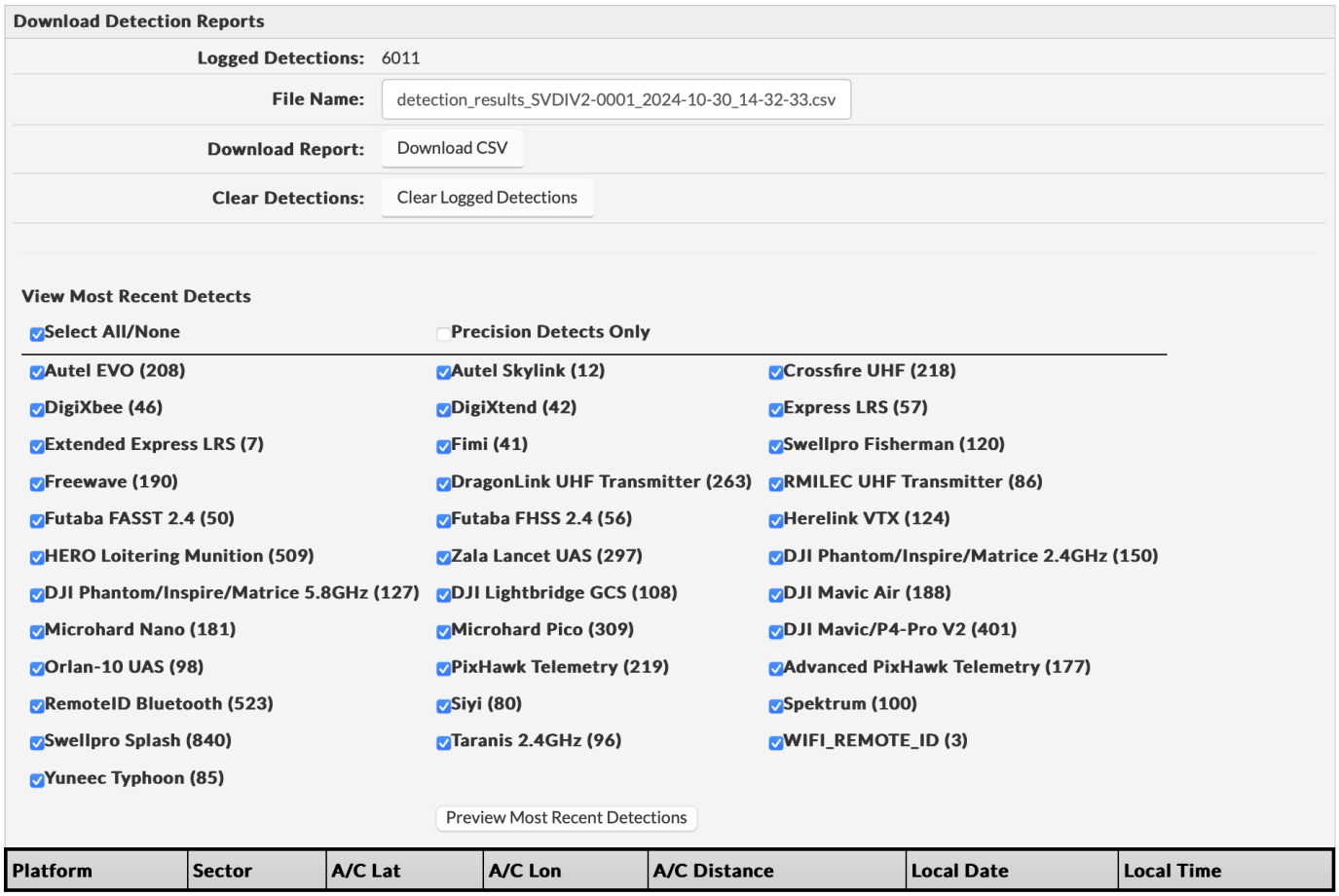
Detect 3DR SOLO WIFI: Set to “On” if you want SkyView-MP to detect UAS manufactured by 3DR that make use of pure WIFI technologies.

Detect Parrot WIFI: Set to “On” if you want SkyView-MP to detect UAS manufactured by Parrot that make use of pure WIFI technologies. This technique is effective against the Parrot Bebop and Parrot Anafi series WIFI-based UAS.

Detect Yuneec WIFI: Set to “On” if you want SkyView-MP to detect UAS manufactured by Yuneec that make use of pure WIFI technologies.

Detect Skydio WIFI: Set to “On” if you want SkyView-MP to detect UAS manufactured by Skydio that make use of pure WIFI technologies.

Detection Reports Panel with Preview Feature



This panel provides a function to download SkyView-DIVR MKII detection reports to a standard comma-separated value file. The panel has the following features and functions:

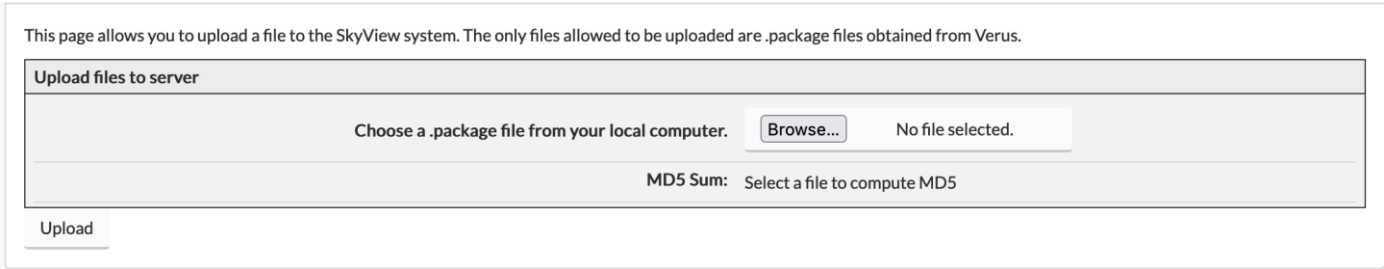
- Logged Detections: Shows the number of current detection events within the system's detection event log.
- File Name: This is an auto-populated filename based on the system's serial number and system date/time. Users can change this as needed before downloading detection log data.
- Download Report: Select this button to download the detection event log. Detection files will be placed in the browser's "download" file area and can be copied to any location the user specifies (external media, etc..)
- Clear Logged Detections: Select this button to "flush" or clear out the system's current detection log. When this is pressed, the Logged Detections will now be reset to 0.

Version 3.0 and higher includes a detection event preview function that allows for quick analysis of detection events without the need to download the data. Individual signals can be included/excluded by modifying the filter checkboxes, checkboxes will only show for signals for which there are already detection records recorded.

Documentation Panel

This panel provides a function download operator and administrator guides for the SkyView-DIVR MKII system. Click on the appropriate link to download/view the respective document.

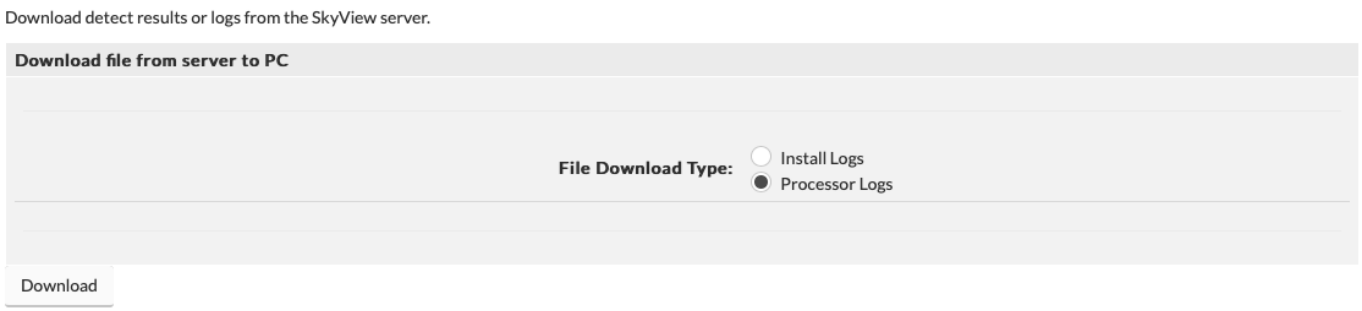
Upgrade SkyView Panel



In this configuration panel, administrators can perform software upgrades. Software upgrades will be published by Verus Technology Group periodically. Upgrades may require specific instructions; however, most installations will make use of this web-based upload function to perform routine upgrades. Generally, a signed upgrade ".package" file will be distributed to administrators. The digitally signed ".package" upgrade file can be loaded in this panel and the upgrade will be automatically executed to install new SkyView-DIVR MKII software. To perform an upgrade, an administrator can select a valid .package file (either local or from a USB media stick) using the "Choose File" button. Once a .package file has been selected, select the "Upload" function to perform the update.

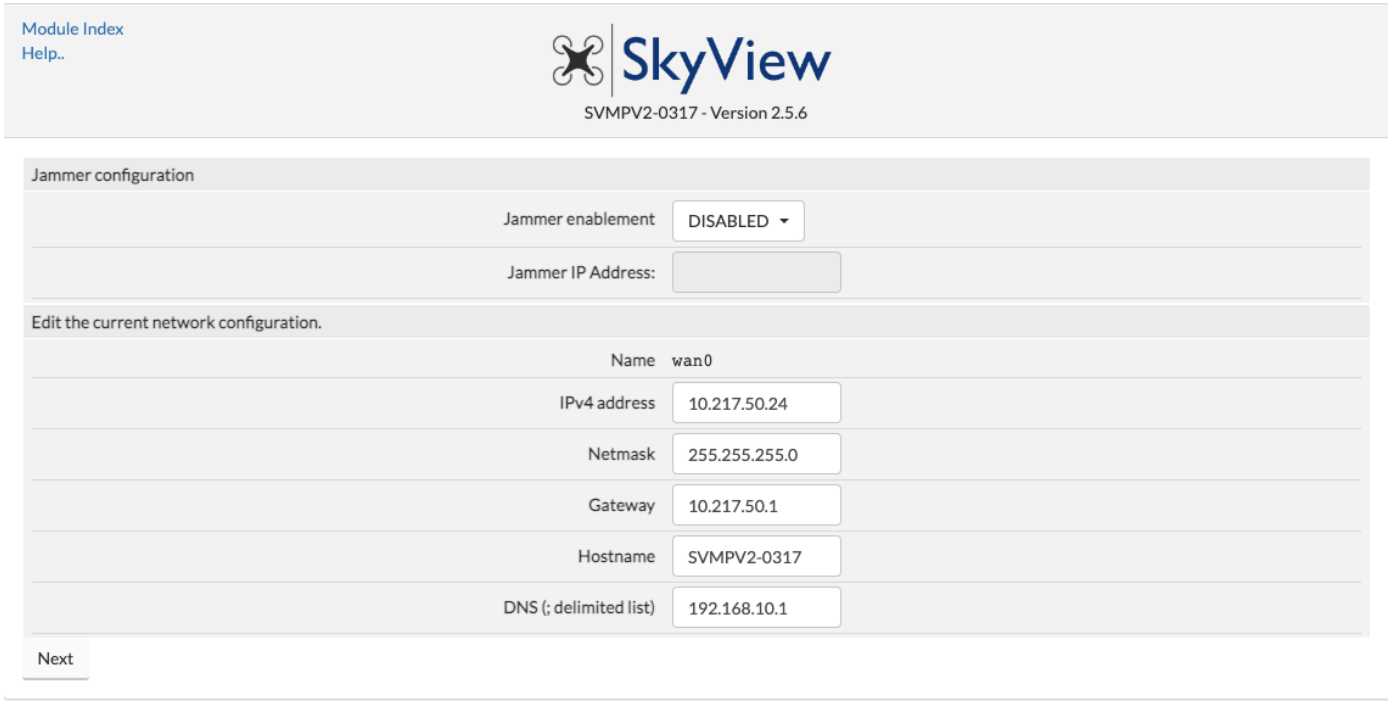
NEW: The upgrade window now features a build-in MD5 checksum feature. This provides operator with an easy-to-reference MD5 on software upgrade packages that can be verified with information provided by Verus. The calculated MD5 should match the MD5 provided by Verus for the specific upgrade package. If it doesn't, do not attempt to complete the upgrade and request a new software installation package.

Download Logs Panel



This panel provides a function to download system logs (Installation or Processor). Select the type of logs to download and click the “Download” button to download an archive of logs. These logs are generally designed to support technical support functions in coordination with a technical representative from Verus Technology Group.

Network Configuration Panel



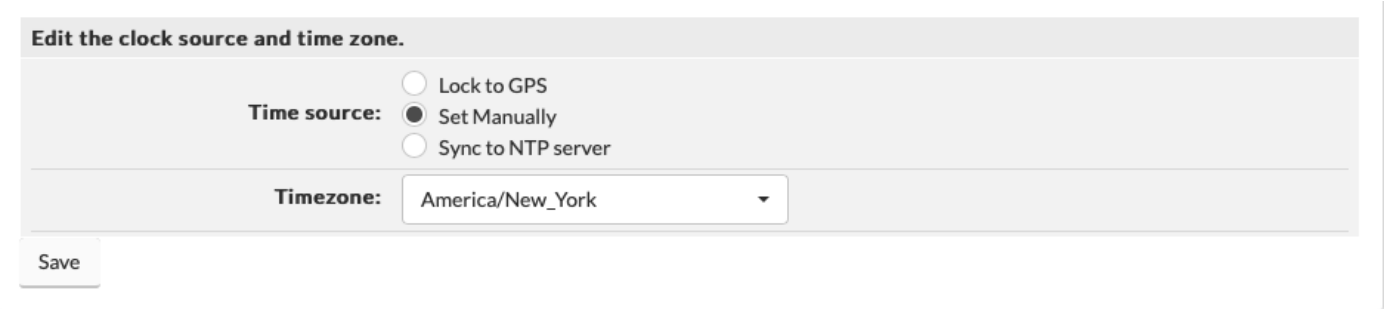
SkyView's network configuration will require additional information to successfully integrate with ECM systems. If you plan to configure SkyView with an external ECM system, you must first select the type of system in the Jammer enalbled. By default, this is disabled, and SkyView currently supports EGON and MODI.

When selecting EGON, many of the network settings will be pre-populated as these external systems have specific IP settings that are not mutable. When selecting MODI, you'll need to know the IP address of the MODI before continuing with this configuration.

For the general Network Configuration (bottom panel) Users can specify the network configuration of the system These settings work in conjunction with SkyVIew-MP's API to allow for remote-based access as well as network-integrated applications where SkyView-MP serves as an external RF CUAS sensor to multi-sensor CUAS systems. The network configuration panel allows administrators to specify the following values: IPv4 Address, NETMASK, GATEWAY, HOSTNAME, DNS.

Once all values have been specified as desired, click the "Save" button to save your settings. **NOTE: After values have been saved, a system restart is required to ensure all features are updated with the new settings. You can issue a restart using the restart button on the main web admin panel (see page 4 of this document).**

Clock Configuration Panel



This panel provides administrators with functions to set the system's clock source, time, and time-zone. Based on the selections made by the administrator, additional configuration entries will be presented.

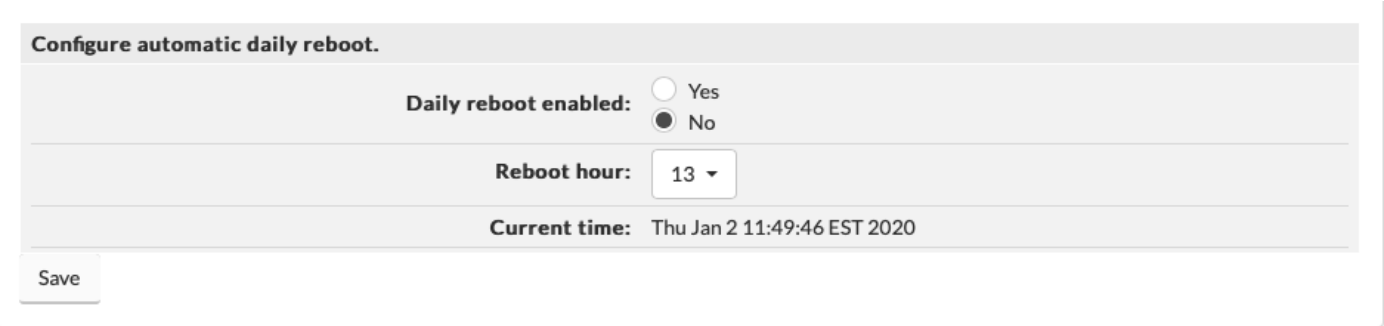
- Lock to GPS: Locks the system's clock to a time determined by the system's GPS processor. NOTE: If there is not a quality GPS signal (no antenna, indoors, etc), the SkyView-DIVR MKII's system time will not be updated dynamically.
- Set Manually: This allows you to set the time manually. If you select this and click save, a configuration panel will be updated to allow administrators to enter the time manually.
- Sync to NTP Server: This allows you to set the time using an external NTP server. If you select this and click save, a configuration panel will be updated to allow administrators to set primary/secondary NTP server IP/host information.
- Timezone: Set the time-zone of the SkyView-DIVR MKII system using the available timezones.

Location Configuration Panel

This panel provides a function to specify how SkyView-DIVR MKII processes location-based reporting functions. This configuration directly influences precision detection features including distance/bearing alerts and reporting. The following options are available:

- Lock to GPS: Locks the system's location to the location determined by the system's on-board GPS processor. NOTE: If there is not a quality GPS signal (no antenna, indoors, etc), the SkyView-DIVR MKII's system time will not be updated dynamically.
- Set Manually: This allows administrators to set the location of the system manually. This setting should be used in instances where the SkyView-DIVR MKII system is stationary or the unit is placed indoors (e.g., fixed-site configuration). If you select this and click save, a configuration panel will be updated to allow administrators to set the LAT/LON values for the desired location.

Scheduled Reboot Panel



Updated ***Jammer Configuration Panel***

Network based counter measures:

Enabled Network Jammer:	MODI
Jammer IP Address:	10.217.50.169
Connection Status:	CONNECTED

Edit Network

Global settings:

Default Loadset:	AllOn
Default Duration Seconds:	300
Auto Trigger Network Jammer:	ON
Auto Trigger Delay Seconds:	15

Signal specific settings:

GCS/UAS type	Auto Trigger	Loadset	Duration (seconds)
DJI Phantom/Inspire/Matrice:	OFF	AllOn	300
DJI Phantom 4-Pro 5.8GHz:	OFF	AllOn	300
DJI Mavic:	ON	AllOn	10
DJI Mavic-Air Extended WiFi:	ON	AllOn	25
RMILEC UHF:	OFF	AllOn	300
DragonLink UHF:	ON	AllOn	30
900MHz-1.3GHz Video:	OFF	AllOn	300
5.8GHz Video:	OFF	AllOn	300
Pixhawk UHF:	OFF	AllOn	300
Crossfire UHF:	OFF	AllOn	300
Autel EVO:	OFF	AllOn	300
FrSky 900 C2:	OFF	AllOn	300
Yuneec Typhoon:	OFF	AllOn	300
HERO Loitering Munition:	OFF	AllOn	300
DigiXtend:	OFF	AllOn	300
Microhard:	OFF	AllOn	300
DJI WIFI:	OFF	AllOn	300
3DR SOLO WIFI:	OFF	AllOn	300
Parrot WIFI:	OFF	AllOn	300
Yuneec WIFI:	OFF	AllOn	300
Skydio WIFI:	OFF	AllOn	300

Save

SkyView-DIVR MKII has been equipped to fully integrate with the EGON and MODI CUAS counter measure systems (e.g., Jammer). SkyView does not have any native RF jamming capabilities currently. This panel provides user-selectable configuration settings that can be used to determine how SkyView-DIVR MKII's Jammer interface is engaged when connected to compatible systems.

The top portion of the configuration panel provides network-related information that indicates what the SkyView system has been configured with, the connection status, and the external ECM's IP address. This information is populated based on the network configuration settings previously established (See Network Configuration Panel on Page 12).

Default Loadset: This value and type is dependent upon the external ECM system that you're connected to. For EGON systems, this s is a numeric value for the loadset that SkyView-DIVR MKII will instruct the EGON to use when the Jammer is activated. For MODI systems, this field will have a drop down of named loadsets that are configured on the connected MODI system. This may vary from configuration to configuration. As a result, system specific settings should be re-examined in instances where SkyView and/or the MODI system in which is connected to are modified.

Default Duration Seconds: This is a numeric value that determines the duration of time that SkyView will use to automatically disengage the external counter measure system. When a SkyView user activates the Jammer through SkyView's interface, SkyView will instruct the Jammer to activate and send a deactivation request after this duration of time has passed. User's can always interrupt active counter measures through SkyView's UI, directly on the Jammer system, or through the Jammer's remote module.

Auto-Trigger Network Jammer: Select this option to configure SkyView to automatically trigger external ECM "jamming" CUAS counter measures when SkyView detects an sUAS signature. When selected, SkyView will use the pre-defined signature-specific settings to determine the jamming behaviors for a given detection type. **NOTE**: When this option is selected, SkyView will only auto-trigger the jammer if you've selected Auto Trigger for a signature in the Signal specific settings.

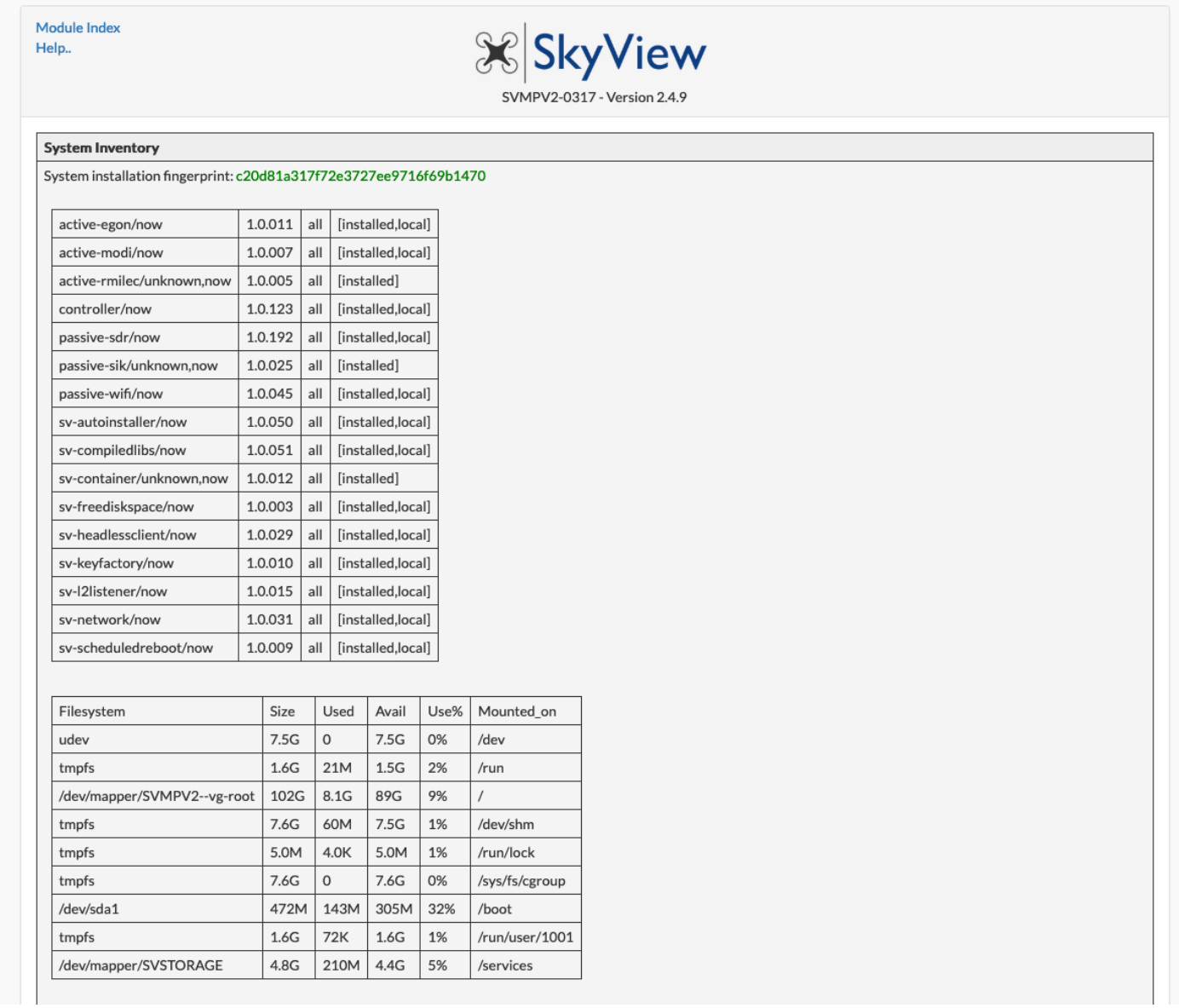
Auto-Trigger Delay Seconds: Specifies the number of seconds that SkyView-DIVR MKII will delay an auto-trigger of external ECM "jamming". In some instances, SkyView-DIVR MKII will be able to extract precision telemetry information from a detection signal, but this usually takes additional processing time after the initial detection. By selecting a delay period, SkyView-DIVR MKII will continue detection extraction until the delay period expires and then initiate the auto-trigger.

***Signal Specific Settings Panel*:** SkyView-DIVR MKII can perform signal specific triggers for the external ECM "Jammer". The settings for each signal type include:

- Auto Trigger: Check for On, Otherwise Auto-Trigger will not be used for that signal
- Loadset: The external-ECM specific loadset to be triggered
- Duration (Seconds): This establishes the amount of time that SkyView will wait to send a deactivate command to the Jammer if SkyView-DIVR MKII initiated the counter-measure. NOTE: If an external method was used to engage the Jammer, SkyView-DIVR MKII's auto-trigger and duration logic will not be utilized. Finally, the SkyView-DIVR MKII UI allows for operators to manually cancel a pending Auto Trigger. If an auto-trigger is manually cancelled by a SkyView operator, auto-trigger functionality will be disabled and have to be re-enabled in this configuration panel to resume auto-trigger functionality.

System Inventory

This web function provides a detailed listing of the various system components, software versions, and disk utilization values for a SkyView system. This feature is only provided to support system issue resolution in conjunction with remote technical support provided by Verus Technology Group. Version 2.4.9 introduces a “system installation fingerprint” that provides a unique ID that can be used to validate the state of a given installation.



active-egon/now	1.0.011	all	[installed,local]
active-modi/now	1.0.007	all	[installed,local]
active-rmilec/unknown,now	1.0.005	all	[installed]
controller/now	1.0.123	all	[installed,local]
passive-sdr/now	1.0.192	all	[installed,local]
passive-sik/unknown,now	1.0.025	all	[installed]
passive-wifi/now	1.0.045	all	[installed,local]
sv-autoinstaller/now	1.0.050	all	[installed,local]
sv-compiledlibs/now	1.0.051	all	[installed,local]
sv-container/unknown,now	1.0.012	all	[installed]
sv-freediskspace/now	1.0.003	all	[installed,local]
sv-headlessclient/now	1.0.029	all	[installed,local]
sv-keyfactory/now	1.0.010	all	[installed,local]
sv-l2listener/now	1.0.015	all	[installed,local]
sv-network/now	1.0.031	all	[installed,local]
sv-scheduledreboot/now	1.0.009	all	[installed,local]

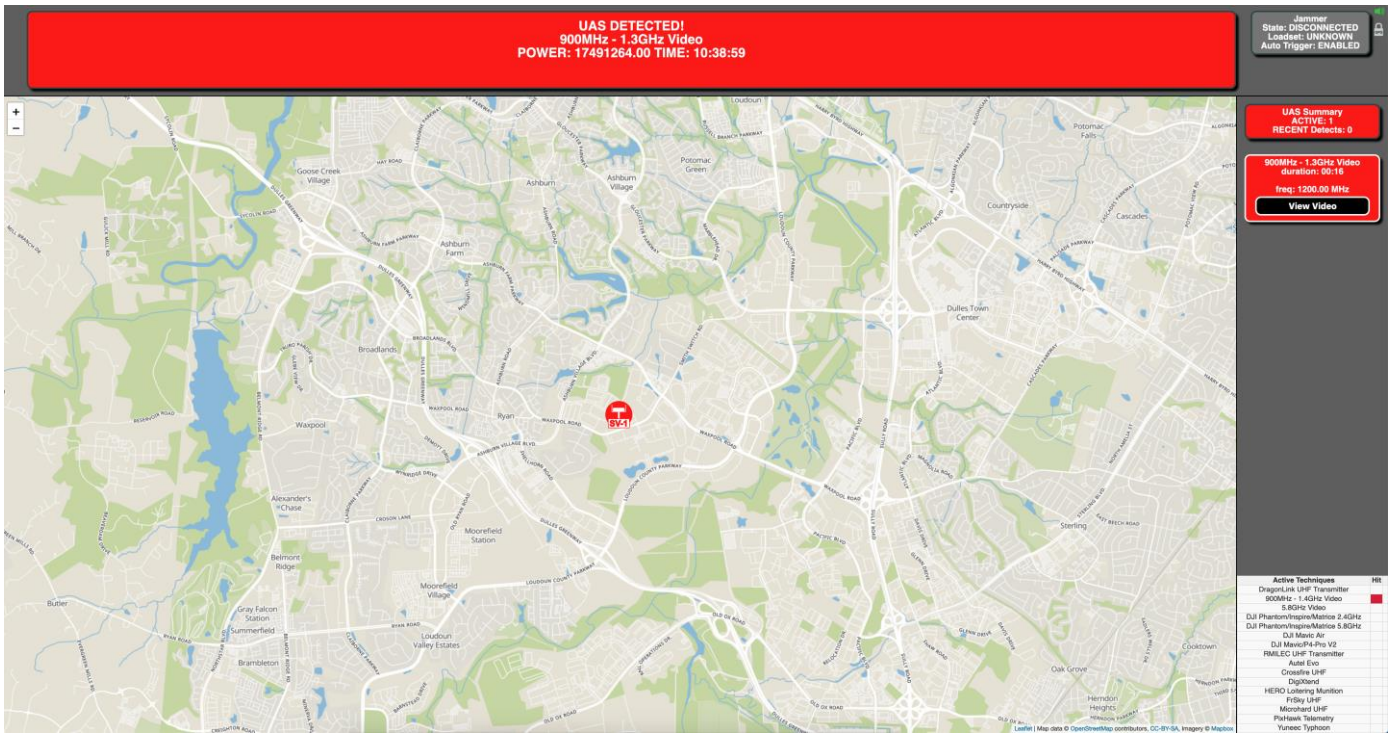
Filesystem	Size	Used	Avail	Use%	Mounted_on
udev	7.5G	0	7.5G	0%	/dev
tmpfs	1.6G	21M	1.5G	2%	/run
/dev/mapper/SVMPV2--vg-root	102G	8.1G	89G	9%	/
tmpfs	7.6G	60M	7.5G	1%	/dev/shm
tmpfs	5.0M	4.0K	5.0M	1%	/run/lock
tmpfs	7.6G	0	7.6G	0%	/sys/fs/cgroup
/dev/sda1	472M	143M	305M	32%	/boot
tmpfs	1.6G	72K	1.6G	1%	/run/user/1001
/dev/mapper/SVSTORAGE	4.8G	210M	4.4G	5%	/services

Poweroff / Restart Functions

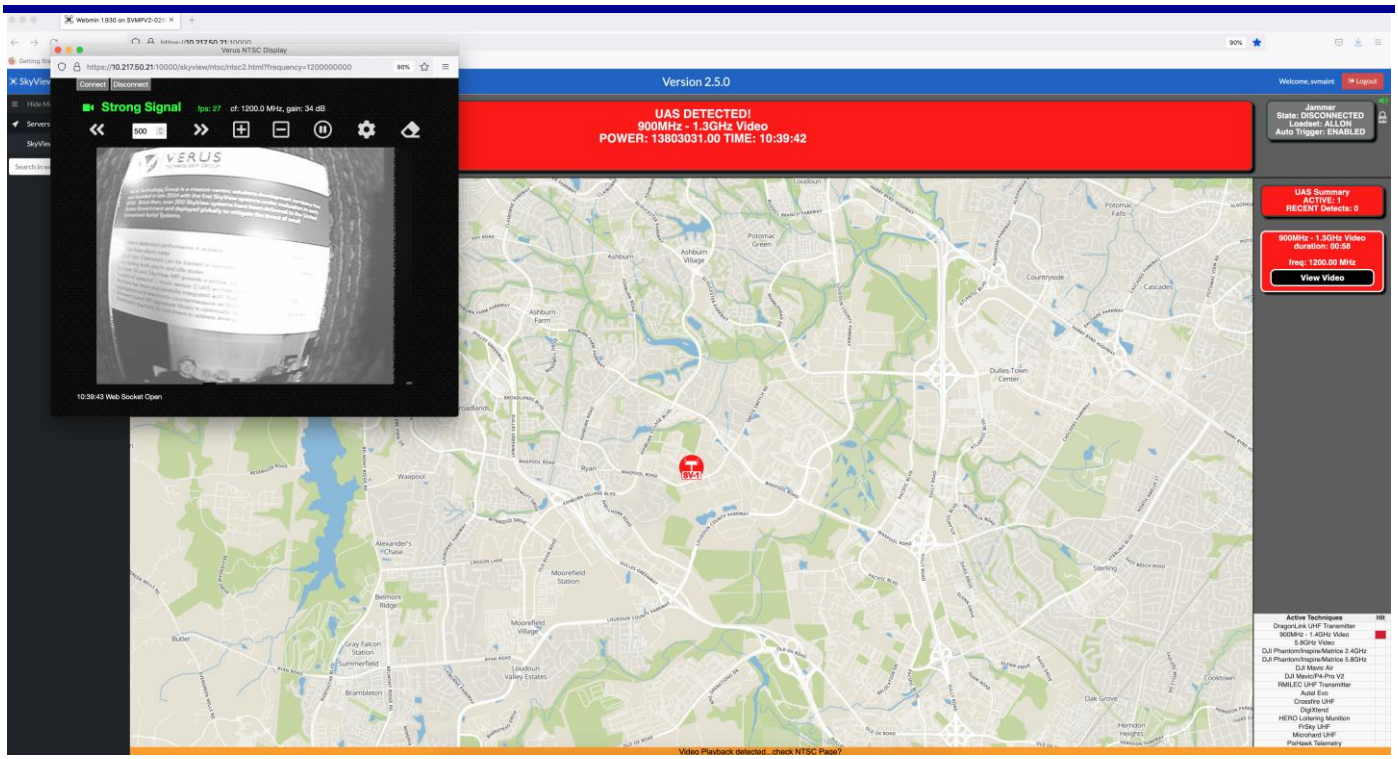
Many functions may not take full effect without the system being restarted. As a precautionary measure, once you’ve made changes and saved them within the Admin console, use the “Restart” button to fully restart the system. If you want to power the device off (for transport or scheduled outage), you can either directly power the device off or use the “PowerOff” button. NOTE: Power will still be distributed to the SkyView-DIVR MKII system, however, the system will not be powered if the “PowerOff” button has been selected.

New SkyView Functions: Preview for Live Video (Analog NTCS only)

SkyView Version 3.0's web client now has the ability to launch a live video processing display for analog video signals detected by the system. Your RF environment will impact performance and in some cases you may detect a signal that is not within range to fully process for real-time video analysis. The live video processing feature can be launched directly from the main detection interface as illustrated below.



When an analog video signal is detected by SkyView, the detection card will provide the primary center frequency of the signal detected and a "View Video" button. The "View Video" button can be selected by the operator to launch SkyView's real-time video viewer. For SkyView-DIVR MKII, once a connection is made to the video viewer, detection status and scanning will be suspended.



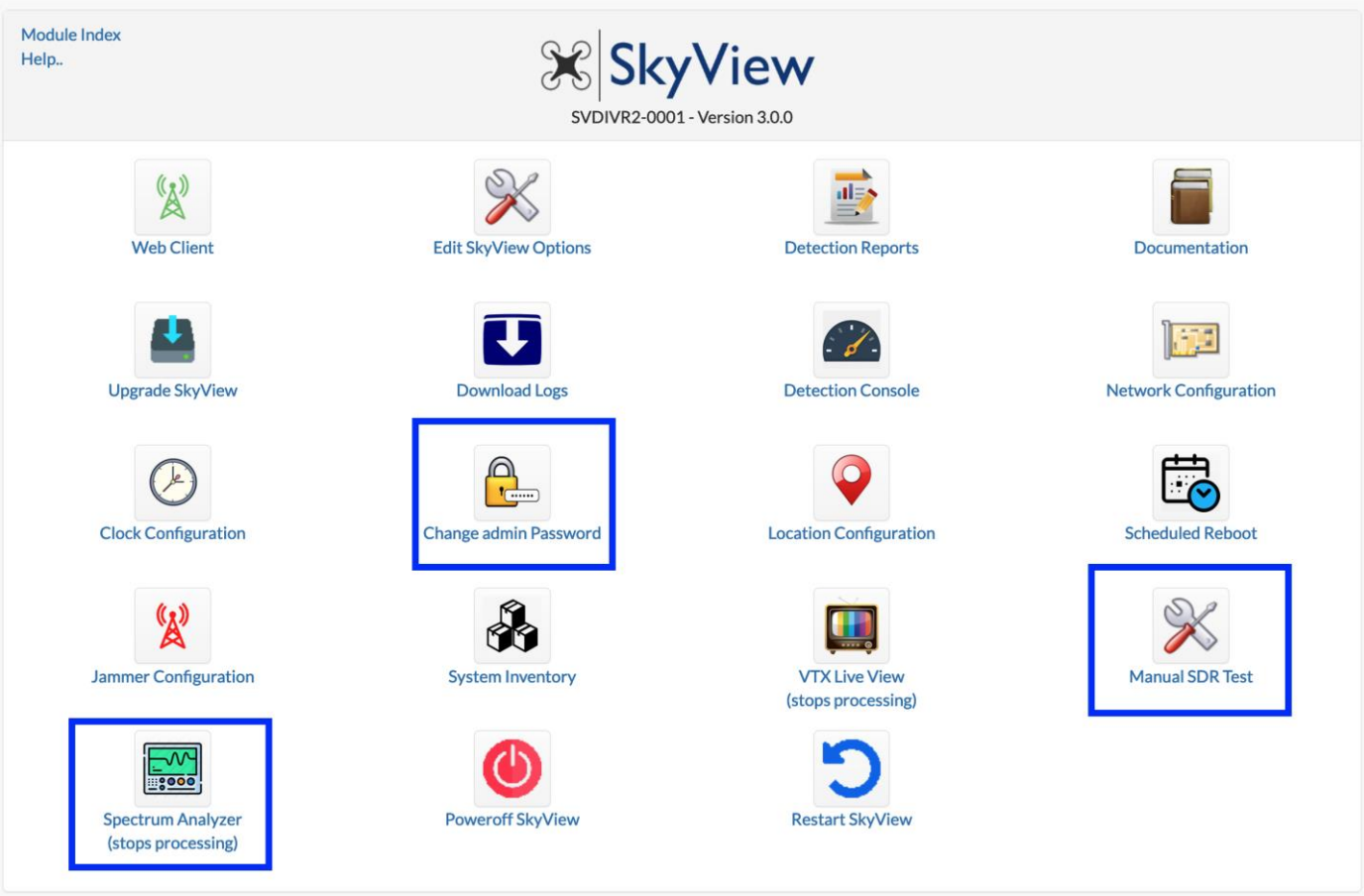
The video viewer control is launched and automatically tuned to the center frequency where the system has detected the primary signal. You may have to resize the window for your particular display. The video viewer window has a number of tuning controls that can be used to optimize the signal for video processing. A brief description of the controls and there functions are provided below

Connect / Disconnect: Use these buttons to Connect/Disconnect to the video processing capability of the SkyView system. When connected, SkyView will not be scanning and detection sUAS signals.

NOTE: **THE DISCONNECT BUTTON MUST BE SELECTED TO RESUME NORMAL DETECTION!** Please ensure that the disconnect button is selected before closing the video viewer window.

New SkyView Functions: Maintenance and Analysis

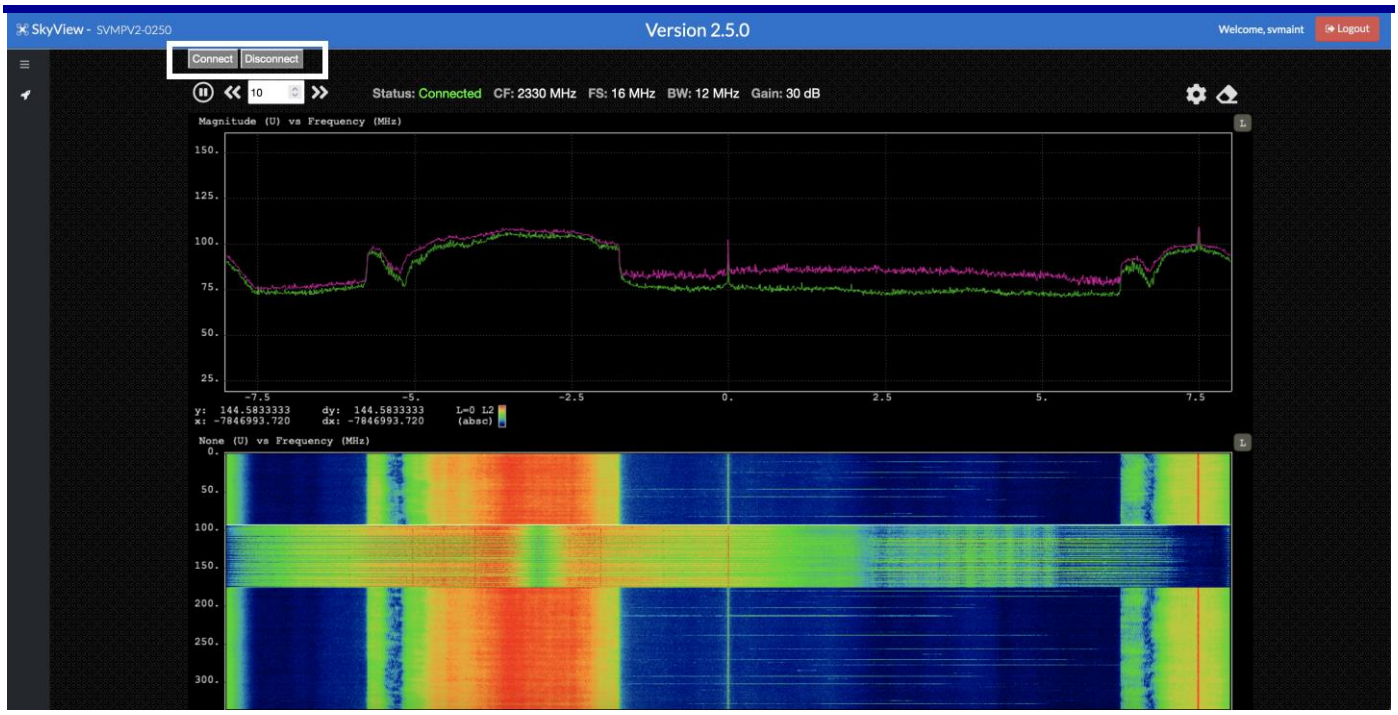
SkyView Version 3.0 has a number of new maintenance functions that allow the system to enter into specific test and evaluation modes.



The Manual SDR Test provides a mechanism to evaluate the performance of specific detection routines. This mode can be used evaluate detection performance against expected norms. For specific guidance on how to engage this test mode, please contact support at skyviewsupport@verustechnologygroup.com.

NEW: Change admin Password. This can be used to set a different admin password that is used for logging into SkyView's web-based admin tool.

NEW: The Spectrum Analyzer function provides advanced operators with a live spectrum analyzer function. When this feature is activated, all detection processing is suspended. After clicking on the Spectrum Analyzer application launcher, a spectrum visualization console will be opened. Use the "Connect" and "Disconnect" buttons to connect to the SkyView radio. It will take approximately 10 seconds to connect and data will start to be displayed.


SkyView - SVMPV2-0250
Version 2.5.0
Welcome, svmaint
Logout
Connect
Disconnect
Status: Connected CF: 2330 MHz FS: 16 MHz BW: 12 MHz Gain: 30 dB
Magnitude (U) vs Frequency (MHz)
150.
125.
100.
75.
50.
25.
-7.5
-5.
-2.5
0.
2.5
5.
7.5
y: 144.5833333 dy: 144.5833333 L=0 L2
x: -7846993.720 dx: -7846993.720 (absc)
None (U) vs Frequency (MHz)
0.
50.
100.
150.
200.
250.
300.

Clicking the “gear” on the top right of the spectrum analyzer page opens a configuration window where tuning and display parameters can be set. Once your settings have been selected, click the “Update” button to apply your settings. To resume normal detection functionality, you can either use the “Disconnect” button on the top left, or reboot the system. **NOTE:** The SkyView spectrum analyzer is designed to support simple spectrum analysis functions, not advanced RF studies where dedicated equipment may be more appropriate.