

FirstVuTM HD

Operation Guide



Professional, Wearable, High Definition Digital Video Recording System

Table of Contents

SECTION - 1 INTRODUCTION	1-1
FIRSTVU™ HD FEATURES	1-1
FIRSTVU™ HD CONTROLS	1-1
STANDARD PARTS LIST	1-2
OPTIONAL ACCESSORIES LIST	1-2
SECTION - 2 GETTING STARTED	2-1
SOFTWARE UPDATES	2-1
BATTERY CHARGING INFORMATION	2-1
<i>Charging Using the Battery Charger (Preferred Method)</i>	2-1
<i>Charging from a Computer or optional Docking Station</i>	2-1
<i>Charging In a Vehicle</i>	2-1
<i>Charging Using an AC Power Outlet</i>	2-1
<i>FirstVu HD Charging and Battery Indicators</i>	2-1
CONNECTING THE CAMERA	2-2
SETTING THE DATE AND TIME	2-2
<i>Automatically setting the date and time</i>	2-2
<i>Manually setting the date and time</i>	2-2
SECTION - 3 DEVICE CONFIGURATION – VUVAULT	3-1
DEFAULT CONFIGURATION	3-1
USING VUVAULT TO CONFIGURE YOUR FIRSTVU HD	3-1
<i>Location</i>	3-2
<i>Settings</i>	3-2
<i>VuLink Setting</i>	3-3
<i>Data Transfer</i>	3-4
ASSIGNING A USER TO YOUR FIRSTVU HD	3-4
ACTIVATING YOUR FIRSTVU HD WITHIN VUVAULT	3-4
SECTION - 4 DEVICE CONFIGURATION – MINI CONFIGURATION MANAGER	4-1
DEFAULT CONFIGURATION	4-1
MINI CONFIGURATION MANAGER PC SOFTWARE	4-1
<i>Load Configuration File</i>	4-1
<i>Location</i>	4-2
<i>Settings</i>	4-3
<i>Save Configuration File</i>	4-4
SECTION - 5 OPERATION	5-1
POWERING ON/OFF	5-1
VIDEO RECORDING	5-1
<i>Start Recording</i>	5-1
<i>Stop Recording</i>	5-1
MARKING EVENTS	5-1
AUDIO RECORDING	5-1
UPLOADING FILES TO A COMPUTER	5-2
UPLOADING FILES USING VUVAULT	5-2
<i>Non-Secure USB Port method</i>	5-2
<i>Secure USB Port Method</i>	5-4
<i>Using the Docking Station</i>	5-7
VIDEO PLAYBACK AND MANAGEMENT	5-8
<i>Using VuVault</i>	5-8
<i>Using the Digital Ally Viewer</i>	5-8

<i>Toolbar Controls</i>	5-9
<i>Playback Controls</i>	5-9
<i>Playback Slider bar</i>	5-9
<i>View Selection and Options</i>	5-10
MEMORY & BATTERY ALERTS.....	5-10
<i>Memory Alert:</i>	5-10
<i>Battery Alerts:</i>	5-10
<i>Battery Replacement:</i>	5-10
SECTION - 6 STATUS INDICATORS	6-1
NORMAL MODE.....	6-1
COVERT MODE	6-2
SECTION - 7 SPECIFICATIONS	7-1
SECTION - 8 WARRANTY INFORMATION	8-1
SECTION - 9 CONTACT INFORMATION	9-1
SECTION - 10 REGULATORY	10-1

Section - 1 Introduction

The FirstVu™ HD is a Professional, Evidentiary, Wearable, Mountable, and Weather-Resistant Digital Video System.

Record video and audio, evidence wherever the job requires, day or night while also collecting useful information such as a date/time stamp, and marks (video bookmarks).

This Operation Guide is designed to get you up and running quickly with its basic features. For integration within the VuVault™ back office software, please refer to [Section 3](#). For integration with Digital Ally's VuLink™ in-car wireless link, please consult the "Vulink Operation and Installation Guide."

FirstVu™ HD Features

- Easy to Operate – One button start/stop record
- Small and Lightweight
- Easily and securely mounts almost anywhere
- High Quality 720p Video – H.264 codec – 1280 x 720 resolution, 30 frames per second (configurable for lower settings)
- Wide 130° Field of View
- Encoded videos may easily be viewed on standard PC video player software or
- Saves Metadata along with Video
- Up to 60 Seconds Pre-Event Record (when configured) – Capture the action before activating a recorded event
- 0.08 Lux Low light sensitivity for night time operation
- Instant Record ON while in Stand-by Mode
- User can insert a 'Mark' during a recording which records to Metadata
- Covert Mode – Vibratory notifications
- Secure 32GB of internal event record memory with easy download thru USB port
- Software Upgradeable via USB
- Up to 4.5 hours of continuous recording on a single charge
- Integrates with VuLink™ wireless in-car video link

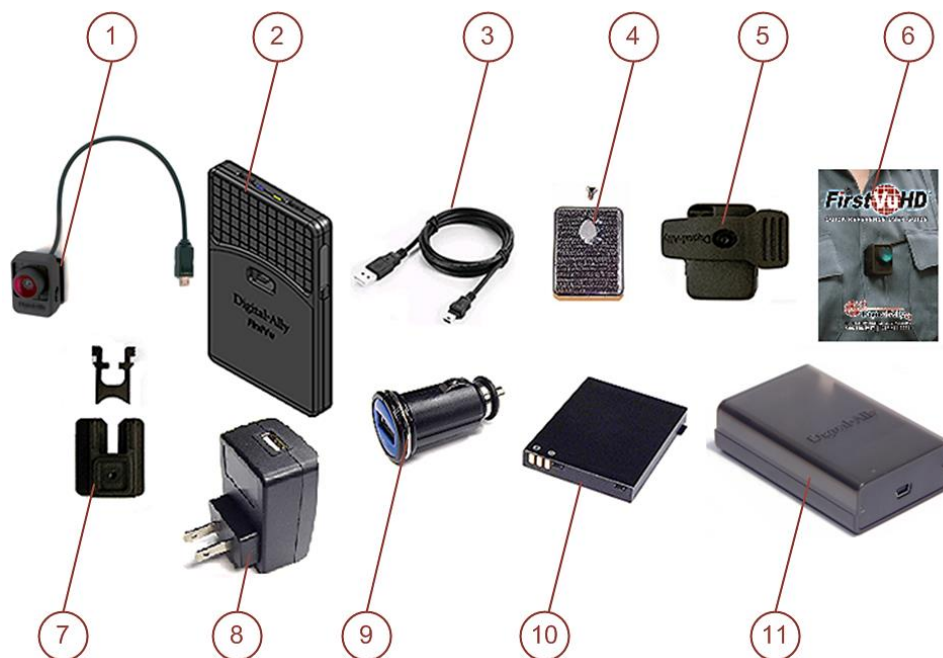
FirstVu™ HD Controls

1	Camera Port
2	Status LED's
3	Record Start / Mark / Record Stop
4	USB Port
5	Power On-Off
6	Battery Cover
7	Microphone ON / OFF



Standard Parts List

Standard Kit Part Number 001-00203-00



Standard Parts List			
Item	Part Number	Qty	Description
1	050-10110-00	1	Assembly, FirstVu HD Camera
2	050-10091-00	1	Assembly, FirstVu HD DVR
3	008-0100	2	Cable, USB 2.0 Type A to Mini-B, 3.3 ft.
4	050-10101-00	1	Kit, Velcro Mount
5	050-10090-00	1	Assembly, Fabric Clip
6	860-00182-00	1	FirstVu HD Quick Reference Guide
7	050-10096-00	1	Assembly, Button Mount
8	009-00004-00	1	Charger, 110Vac wall to USB Type A
9	009-00005-00	1	Charger, 12Vdc Auto Plug to USB Type A
10	135-00398-00	2	Battery, 3.7V 2200mAh Li-Po
11	009-00008-00	1	Charger, Battery

Optional Accessories List

Part Number	Description
001-00204-11-A	FirstVu HD Camera Kit, Audio Always On, 11" Camera Cable
001-00204-48	FirstVu HD Camera Kit, Audio Always On, 48" Camera Cable
001-05117-00	Assembly, FirstVu HD Car Mount Kit
002-05126-00	Assembly, FirstVu HD Belt Mount Kit
002-05131-00	Assembly, FirstVu HD Belt loop holster w/Extension Cable
002-05132-00	Assembly, FirstVu HD Leather Pouch w/Extension Cable
008-01435-00	Cable, FirstVu HD Camera Extension, 3ft.
001-0950-00	VuLink™ Standard Kit (wireless in-car video link)
001-0960-00	FirstVu HD Docking Station (supports 12 FirstVu + 12 batteries)

Section - 2 Getting Started

Software Updates

Log on to www.digitalallyinc.com/tech-support.php and register for an account to be an authorized user. By registering you will be able to download all the latest firmware/software updates and will be notified of future upgrades.

Battery Charging Information

The FirstVu HD should be fully charged before initial use using the AC power outlet or DC auto adapter. With the unit powered off, charge the unit initially for 12~16 hours. Subsequent charges should take approximately 4 hours. Use one of the methods below to charge your battery.



If the battery is 100% fully depleted, it cannot be charged within the Firstvu HD. For best results, remove the battery & use the external battery charger.

Charging Using the Battery Charger (Preferred Method)

Remove your battery from the FirstVu HD and insert into the supplied battery charger shown to the right (009-00008-00). Then plug your battery charger into an available USB port on your computer or one of the chargers illustrated below using the supplied USB cable. A status LED indicates the charging mode of the battery. When the LED is green, your battery is charged and ready for use.



Charging from a Computer or optional Docking Station

Plug the USB cable into the computer or docking station USB port. Insert the other end of the cable into the FirstVu USB port and the unit will begin charging.

Charging In a Vehicle

Plug the DC auto adapter into the vehicle's 12Vdc receptacle and the other end into the FirstVu HD USB port or charging cradle USB port; the unit will begin charging.



In some vehicles, the 12Vdc receptacle may be controlled by the position of the ignition switch. In such cases, the FirstVu™ HD will only charge when the ignition switch is in the "On" position.



Charging Using an AC Power Outlet

Plug the AC power adapter into an appropriate power outlet and the USB connector into the FirstVu USB port. The unit will begin charging.



FirstVu HD Charging and Battery Indicators

Charging with unit powered 'ON'

- Charging in progress is shown with a flashing blue status indicator.
- When charging is complete the blue status indicator is illuminated.
- For more information consult [Section 6](#).

Charging with unit powered 'OFF'

- The unit may be charged via USB cable with the power switch in the OFF position. However, no LED indicators will be present while it is charging.

Connecting the Camera

Connect your camera to the *camera port* on top of the DVR as shown to the right. The camera port can only be used with an approved Digital Ally camera. Never plug any other device or cable into the camera port. Doing so may cause permanent internal damage to your FirstVu HD.



Setting the Date and Time

Automatically setting the date and time

The date and time is set by the factory prior to shipment. However, you must also enter the correct UTC offset when configuring the device so that the time zone can be set properly. For example, USA Central Standard Time =UTC -6. If using VuVault™, the date & time are automatically synced to your computer during activation. For more information, consult the *Device Configuration* sections of this manual. USA time zones are listed below for reference.

PST = Pacific Standard Time (UTC - 8 hours)
MST = Mountain Standard Time (UTC - 7 hours)
CST = Central Standard Time (UTC - 6 hours)
EST = Eastern Standard Time (UTC - 5 hours)
AST = Atlantic Standard Time (UTC - 4 hours)
ALST = Alaskan Standard Time (UTC - 9 hours)
HST = Hawaiian Standard Time (UTC - 10 hours)

Manually setting the date and time

The date and time is set by the factory prior to shipment and should not need manual adjustment. However, date and time can still be set manually if needed. Follow the procedure below to manually set the date and time.

1. Open *Notepad* from your computer.
2. Inside Notepad, type in the **year, month, day, hour, and seconds** you wish to program into the FirstVu. Use the following format (YYYYMMDDHHMMSS) using 24 hour UTC time. You must also apply your time zone offset.

For example, If you live in the CST zone and the current date & time is 5/23/2013 10:47:50pm, you would enter 20130524044750. Since CST is UTC-6, you have to add 6 hours to the current time to reflect the UTC time.

3. Go to *File>Save As* and name the file "DATE.txt"
4. Connect your FirstVu HD via the supplied USB cable and transfer the DATE.txt file to the root drive.
5. Cycle the power on your FirstVu HD. The unit will apply the system date/time during boot up. When completed, the FirstVuHD will erase the .txt file.

Section - 3 Device Configuration – VuVault

The FirstVU HD contains a default configuration and can be used immediately. It may be reconfigured by activating the device using Digital Ally's optional *VuVault™* back-office software (recommended), or the *Mini Configuration Manager* application supplied on the FirstVu HD product DVD. If you are using *VuVault™*, follow the instructions in this section to configure and activate your FirstVu HD. **If you are not using VuVault, skip to [Section 4](#) to configure your device.**

Default Configuration

If the unit has never been activated, it will use the following default settings:

- Central Standard Time (UTC-6)
- Daylight Saving enabled
- Date format: Month/Day/Year
- Time format: 12-hour
- Pre-Event disabled
- 1280x720p record size/high record quality
- Pre-Event Audio disabled
- 30 frames per second
- Record LED enabled
- Secure USB port disabled

Using VuVault to Configure your FirstVu HD

NOTE

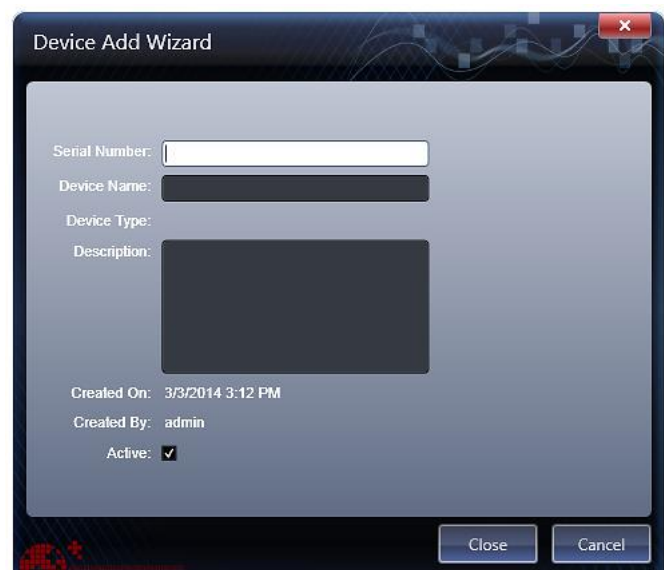
You must upgrade VuVault to *Version 4.2* (minimum) to configure and activate a FirstVu HD device. VideoManagerII and previous versions of VuVault will not work with the FirstVu HD.

VuVault is used to manage FirstVu HD settings as well as activate your device for use within the system.

Before you can configure your device for use within VuVault, the serial number must be added into the system. Select *Admin>Devices>Add Device* to add your device into VuVault.

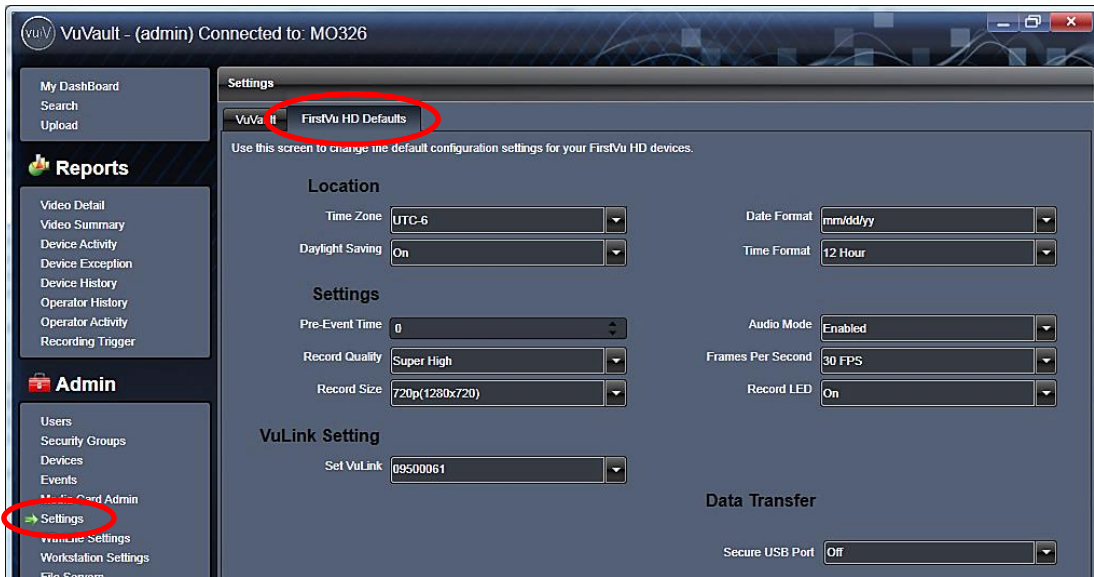
Type in your device serial number and assign it a name within the system. When done, select **Close**, then **Save**.

For more information consult the *VuVault Administrator's Guide "Adding Devices"* section.



The screenshot shows the 'Device Add Wizard' window. It has a title bar with a close button. The main area contains four input fields: 'Serial Number:' (a text box), 'Device Name:' (a text box), 'Device Type:' (a dropdown menu), and 'Description:' (a large text area). Below these fields, it shows 'Created On: 3/3/2014 3:12 PM', 'Created By: admin', and 'Active: ☒'. At the bottom right, there are 'Close' and 'Cancel' buttons.

A configuration field will be available in the *Admin>Settings* tab within VuVault once a valid FirstVu HD serial number has been added into the system. These global settings will define how all users will interface with the FirstVu HD.



Location

Time Zone

The local time zone is used to adjust the device when synchronizing to the Greenwich Mean Time. During device configuration, the local time from the PC real time clock will be used, and Central Standard Time is set by default.

Settings: UTC, UTC-6 (CST) [default]

Daylight Saving

When set to *On*, Daylight Saving setting time will be automatically adjusted for the configured Local Time Zone. If this is disabled, time will not be adjusted for Daylight Saving.

Settings: *Off*, *On* [default]

Date Format

The date format displayed on the event recordings is selected through this setting.

Settings: mm/dd/yy [default]; yy/mm/dd; dd/mm/yy

Time Format

This time format allows the device to be configured in a 12-hour format or a 24-hour format.

Settings

Pre-Event Time

The Pre-Event Time option allows you to set the amount of time for the pre-event buffer. The FirstVu HD will buffer the last 0-60 seconds of audio and video so it can be recorded during a record event. If set for 0 seconds, pre-event function will be disabled.

Settings: 0-60 seconds [default = 0 seconds]

Record Quality

The Record Quality parameter allows the video compression bit rate to be adjusted. Digital video is compressed by taking out data that remains constant from each frame, and only storing data that actually changes. This allows videos with still backgrounds to be much smaller than they would be if the background had to be present in every single frame.

The *bit rate* is the amount of bits that can be used in one second of video. The higher the *record quality*, the higher the bit rate and the size of the event files. The default setting is “*high*” for a good mix between video qualities and upload time, but can be lowered or raised to adjust quality and storage space. (VuVault 4.2 Update 2 or newer is required for the *super high* setting).

Settings: Standard (2Mbps), Medium (4Mbps), High (6Mbps) [default], Super High (12Mbps)

Record Size

The Record Size parameter allows the video image size to be adjusted from VGA (standard definition) to 720p (high definition). VGA has a picture size of 640x480 pixels, whereas 720p has a picture size of 1280x720 pixels. 720p will provide a larger & more defined video picture, but because of its larger size, will require about 3 times as much storage space as VGA. Also, the shape of the final video frame will be slightly different, with 720p being a longer and thinner frame (higher width ratio to height).

Settings: VGA (640x480), and 720p (1280x720) [default]

Audio Mode

The audio mode determines how audio will be recorded to your device. If enabled, audio information is recorded during the recorded event and during the configured *pre-event time*.

If enabled (w/o Pre-event), audio will be recorded during the event but not recorded during pre-event. If this option is disabled, no audio will be recorded.

Settings: Enabled, Disabled, Enabled (w/o Pre-Event) [default]

Frames Per Second

This parameter sets the number of frames per second the FirstVu HD will record. The higher the setting, the better the video quality, and the larger the size of the event files.

Settings: 5, 10, 15, 30fps [default = 30fps]

Record LED (covert mode)

The Red Record LED behavior on the camera can be configured to accommodate your desired operation. If disabled, the LED will not illuminate during a recorded event and will operate in covert mode.

Settings: Off, On [default]

VuLink Setting**Set VuLink**

Assign a VuLink™ device serial number for use with your FirstVu HD. A VuLink™ wireless link is required (see the “VuLink Operation and Installation Guide”, or call Digital Ally Inc. Technical Support for more information).

Data Transfer

Secure USB Port

This parameter determines if the USB port for secure data connections to a PC is enabled or disabled. This feature provides greater security to your recorded evidentiary data.


When *Secure USB Port* is enabled, it is impossible to view, edit, or delete files present on your FirstVu HD using a normal Windows computer. Video and metadata files can only be accessed when using the *upload* function within your VuVault stand-alone or networked environment.

VuVault creates a proprietary encryption key to restrict access to your FirstVu HD files when in secure mode. The only user-accessible information when the device is connected to a PC USB port on a normal Windows computer is the *dvminfo.log* file. The *dvminfo.log* file contains basic information about your device such as serial number and firmware version.

When *Secure USB Port* is disabled, video and data files will be accessible to any user when the device is plugged into a PC USB port. Event data can then be copied, erased, or uploaded with or without the use of VuVault.

Settings: On, Off [default]



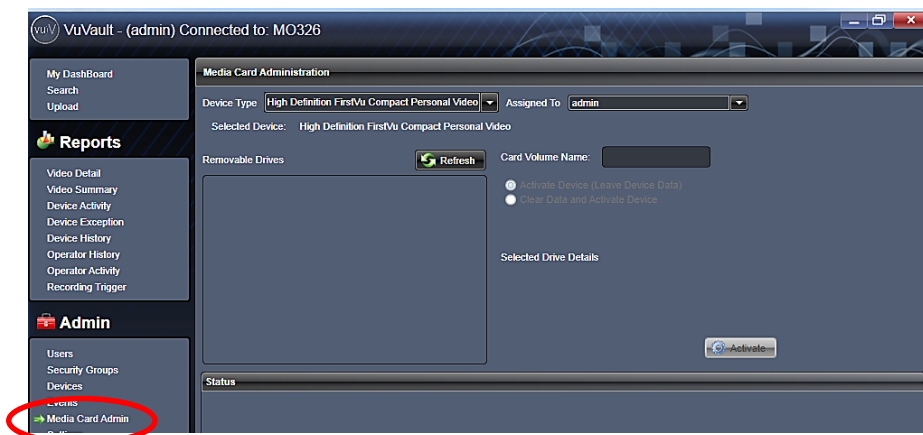
Once the desired settings have been entered, click  and proceed below to activate your device.

Assigning a User to your FirstVu HD

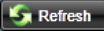
Assigning a user to your device is achieved during the VuVault activation process. When a user is assigned to the device, all uploaded video events will appear on his or her **My Dashboard** screen upon logging into VuVault. Users may be reassigned each time the FirstVu HD is activated. *Note: Firmware version 536 or higher is required to assign a user to your FirstVu HD.*

Activating your FirstVu HD within VuVault

The *Media Card Administration* function is used to erase, format, and activate the FirstVu HD internal memory to be ready for use with VuVault.



The FirstVu HD must be connected to a VuVault computer via USB port. Make sure it is powered on and in the Standby mode.

1. Select *Media Card Admin* from the Admin navigation bar.
2. Select the correct *Device Type* from the available options. You must select “High Definition FirstVu Compact Personal Video”.
3. Click the  button to detect the FirstVu HD from the available removable drives.
4. Select the drive letter assigned to the FirstVu HD.
5. In the *Assigned To* field, select a user to assign the device. All video events recorded after the activation will be associated to this user. The assigned user may be changed each time the device is activated. *Note: Firmware version 536 or higher is required to assign a user to your FirstVu HD.*
6. Note the *Card Volume Name* field. If there is a current volume name, it will show up automatically. If not, it will default to DA_DEVICE. This can be changed according to customer preference to whatever is deemed most appropriate.
7. Choose from one of two options to activate the device:
 - **Activate Device (Leave Data Intact)** – *this option simply activates the FirstVu by writing the “deviceconfig” file to internal memory. No existing video events located on the internal memory are altered.*
 - **Clear Data and Activate Device** – *this option erases any data on the internal memory and activates it.*



Always ensure that all relevant data has been previously uploaded to the system before deleting it from the FirstVu HD.

8. Click the **Activate** button. The *Status* field will indicate when the process has completed.

VuVault will create files named “deviceconfig” and “AssignedTo” and place into the root folder of the FirstVu HD. These and all other media files are accessible to the user only if [Secure USB Port](#) is disabled within the VuVault *Admin>Settings>FirstVu HD Defaults* Menu.

If [Secure USB Port](#) is enabled, the only accessible information is the *dvminfo.log* file. The *dvminfo.log* file contains basic information about your device such as serial number and firmware version. Video uploads and device configuration MUST be done through VuVault when this option is enabled.

9. Reboot your FirstVu HD by turning the power switch OFF, then ON.

The FirstVu HD is now activated and ready for use. For more information consult the VuVault Administrator's Guide *Media Card Administration* section.

Section - 4 Device Configuration – Mini Configuration Manager

The FirstVU HD contains a default configuration and can be used immediately. It may be reconfigured by activating the device using Digital Ally's optional VuVault™ back-office software (recommended), or the Mini Configuration Manager application supplied on the FirstVu HD product DVD. If you are **not** using VuVault™, follow the instructions in this section to configure and activate your device using the stand-alone *Mini Configuration Manager* software.

Default Configuration

If the unit has never been activated, it will use the following default settings:

- Central Standard Time (UTC-6)
- Daylight Saving enabled
- Date format: Month/Day/Year
- Time format: 12-hour
- Pre-Event disabled
- 1280x720p record size/high record quality
- Pre-Event Audio disabled
- 30 frames per second
- Record LED enabled

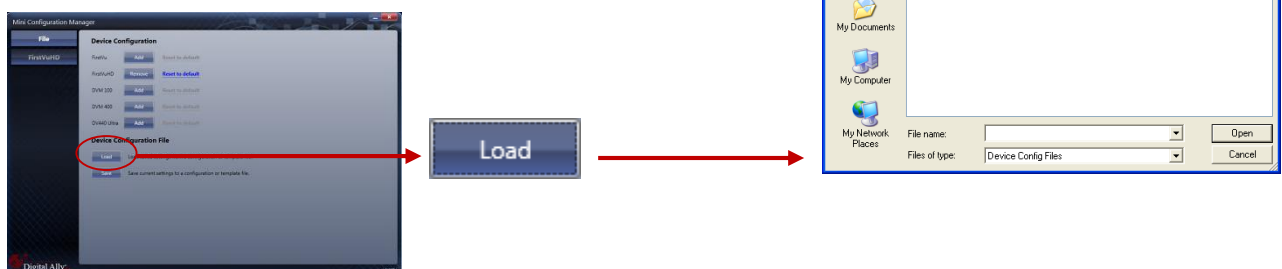
Mini Configuration Manager PC Software

The *Mini Configuration Manager* software is used to manage FirstVu HD settings as well as activate a FirstVU HD device or an external memory card for use in a FirstVu HD (non-VuVault installations). Various configurable items can be adjusted to meet your specific setting requirements. For VuVault integration, use the configuration options within the VuVault software program instead to configure your FirstVu HD (consult [Section 3](#) for more information).

The Mini Configuration Manager Installation software is located on your product DVD. Once installed, go to *Start Menu>Programs>Digital Ally>Mini Configuration Manager* to open the application.

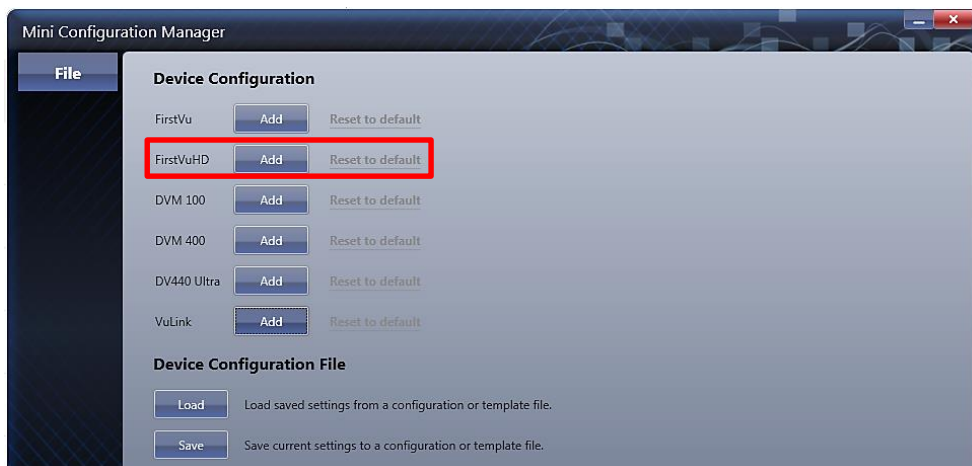
Load Configuration File

To import settings from your FirstVU HD device or data storage location you can press the Load button inside the "File" tab near the center of the software screen. This will bring up the Windows dialog box to navigate to the location of the file. The file is named "deviceconfig".

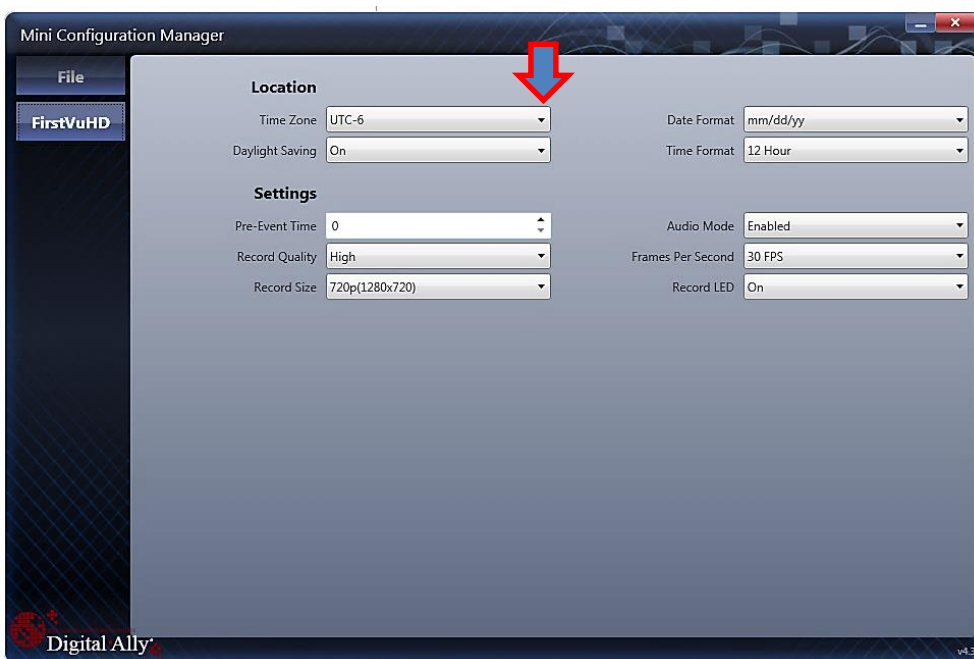


Device Configuration

Press the  button to create or edit a device configuration.



The default device configuration screen will then be available for editing. Use the drop down arrows to make your selections.



Location

Time Zone

The local time zone is used to adjust the device when synchronizing to the Greenwich Mean Time. During device configuration, the local time from the PC real time clock will be used, and Central Standard Time is set by default.

Settings: UTC, UTC-6 (CST) [default]

Daylight Saving

When set to *On*, Daylight Saving setting time will be automatically adjusted for the configured Local Time Zone. If this is disabled, time will not be adjusted for Daylight Saving.

Settings: On, Off [default]

Date Format

The date format displayed on the event recordings is selected through this setting.

Settings: mm/dd/yy [default]; yy/mm/dd; dd/mm/yy

Time Format

This time format allows the device to be configured in a 12-hour format or a 24-hour format.

Settings

Pre-Event Time

The Pre-Event Time option allows you to set the amount of time for the pre-event buffer. The FirstVu HD will buffer the last 0-60 seconds of audio and video so it can be recorded during a record event. If set for 0 seconds, pre-event function will be disabled. Enabling pre-event will reduce battery life to about 4.5 hours of standby time.

Settings: 0-60 seconds [default = 0 seconds]

Record Quality

The Record Quality parameter allows the video compression bit rate to be adjusted. Digital video is compressed by taking out data that remains constant from each frame, and only storing data that actually changes. This allows videos with still backgrounds to be much smaller than they would be if the background had to be present in every single frame. The *bit rate* is the amount of bits that can be used in one second of video. The higher the *record quality*, the higher the bit rate and the size of the event files. The default setting is “*high*” for excellent video quality, and can be lowered or raised to adjust the bit rate and storage space. (*Viewer 4.2 Update 2* or newer is required for the *super high* setting).

Settings: Standard (2Mbps), Medium (4Mbps), High (6Mbps) [default], Super High (12Mbps)

Record Size

The Record Size parameter allows the video image size to be adjusted from VGA (standard definition) to 720p (high definition). VGA has a picture size of 640x480 pixels, whereas 720p has a picture size of 1280x720 pixels. 720p will provide a larger & more defined video picture, but because of its larger size, will require about 3 times as much storage space as VGA. Also, the shape of the final video frame will be slightly different, with 720p being a longer and thinner frame (higher width ratio to height).

Settings: VGA (640x480), and 720p (1280x720) [default]

Audio Mode

The audio mode determines how audio will be recorded to your device. If enabled, audio information is recorded during the recorded event *and* during the configured *pre-event time*. If enabled (w/o Pre-event), audio will be recorded during the event but not recorded during pre-event. If this option is disabled, no audio will be recorded.

If the *Pre-Event Time* is set for 0, there cannot be pre-event audio.

Frames Per Second

This parameter sets the number of video frames per second the FirstVu HD will record. The higher the setting, the better the video quality, and the larger the size of the event files.

Settings: 5, 10, 15, 30fps [default = 30fps]

Record LED

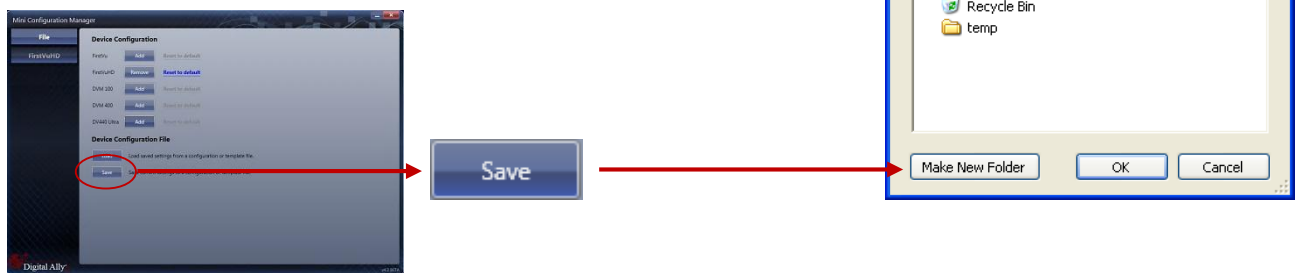
The Red Record LED behavior on the camera can be configured to accommodate your desired operation. If enabled, the red LED will illuminate while the FirstVu HD is recording. If disabled, the LED will not illuminate during a recorded event and will operate in covert mode.

Settings: Disabled, Enabled [default]

When done, go to the **File** tab and save your configuration file to a location on your computer.

Save Configuration File

To save the configured settings to your FirstVu HD or a data storage location, you can press the Save button near the center of the Mini Device Configuration software screen. This will bring up the *Browse for Folder* dialog box to select the location to save the file. After the configuration file has been transferred to your FirstVu HD, reboot the device by turning the power OFF then ON.



After the configuration file is copied, reboot your FirstVu HD. It is now configured & ready for use.



If you have also configured a VuLink device using the Mini-Configuration Manager, the necessary information to communicate with VuLink is also contained within the configuration file. For more information about VuLink, consult the "VuLink Installation and User Guide".

Section - 5 Operation

Powering On/Off

To power on, connect the camera to the camera port on top of the unit. Then slide the power switch to the 'ON' position to power the unit on. The blue and yellow LED's will flash alternatively and the device will vibrate once to indicate that it is powering on.

Once powered on, the unit is ready to start a recording.

To power the unit off, first stop any active recording or playback session and slide the power switch to the 'OFF' position.



The camera port can only be used with an approved Digital Ally camera module or extension cable. Never plug any other device or cable into the camera port. Doing so may cause permanent internal damage to your FirstVu HD and void your warranty.



Video Recording

Start Recording

Once the FirstVu HD is powered on, press and release the *Record Button* at any time. The DVR unit will emit a vibration pulse, and the red LED status indicator on top of the camera will be lit continuously (if configured) during the recording. If pre-event has been enabled through the device configuration, the unit will automatically include up to 30 seconds of video and audio prior to the event record trigger.



Stop Recording

Press and hold the *Record Button* for approximately 3 seconds to stop an active recording. The DVR will emit a vibration pulse and the unit will be ready to record the next event.

Marking Events

Once a recording has been initiated, markers can be placed in the recording to indicate when important events take place. This is done by momentarily pressing the Record button. Additional marks can be placed at any time during the recording.

Audio Recording

The FirstVu™ HD contains a microphone built into the face of the camera module. The position of the switch indicates whether the audio is enabled or muted.

Audio can be muted or activated by changing the position of the mute switch (*pictured right*). Audio is active when the switch is in the up (green) position. Audio is muted when the switch is in the DOWN position. Additionally, the audio mode must also be enabled within the [device configuration](#).



Depending on your purchased camera option, the audio switch may not be present. In this case, the user will not have the capability to mute the audio.

Uploading Files to a Computer

Using the supplied USB cable, connect your FirstVu HD to a computer using the USB port next to the power switch. Power the unit on and the FirstVu HD will appear on the computer as a removable storage drive. Double click on the drive and the video file folders will be listed. You may then drag and drop the files to your PC or open a selected folder to playback the .avi file using Windows Media Player.

To playback your videos and metadata using *VuVault* or the *Digital Ally Viewer*, refer to page [5-7](#).



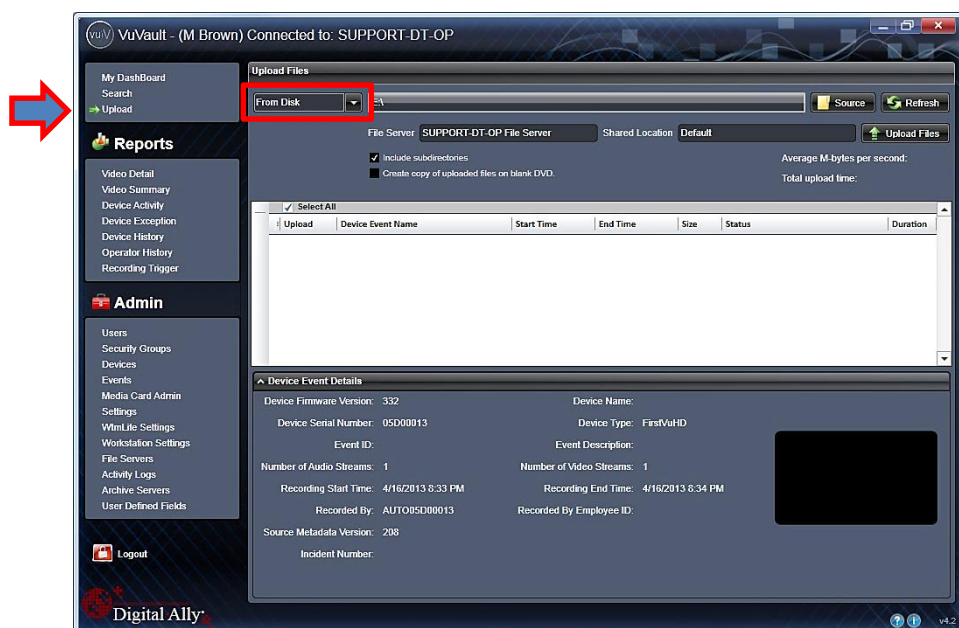
The FirstVu HD is capable of advanced security features which may restrict a user's access to recorded event files. These restrictions can be implemented by a system administrator only if using the VuVault back office software. If the *Secure USB port* feature has been enabled in the VuVault *Admin>Settings>FirstVu HD Defaults* tab (see page 3-4), video and metadata files will not be accessible through the USB port and can only be uploaded using VuVault. Additionally, each user must have *Upload New Videos* permissions within VuVault to transfer files from the FirstVu HD.

Uploading Files using VuVault

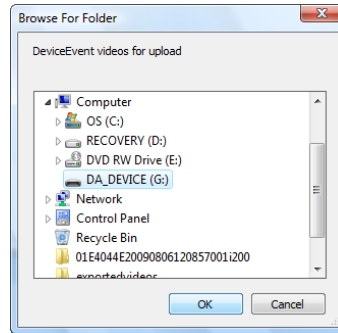
Non-Secure USB Port method

To upload video files from the FirstVu HD when the *Secure USB Port* is not enabled, plug the supplied USB cable into the computer USB port and insert the other end of the cable into the FirstVu™ HD USB port. Make sure your device is powered on.

1. Select *Upload* from the Main navigation bar. If the secure USB port feature has not been enabled, select *From Disk*.



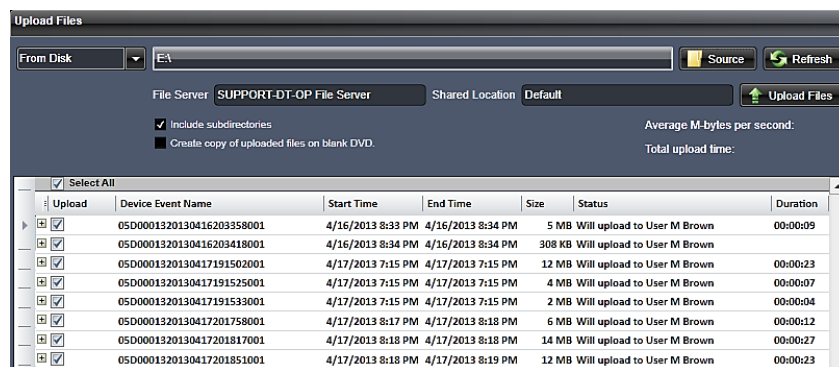
- Click the **Source** button. 'A dialogue box will appear allowing you to select the appropriate location of your FirstVu HD.



The system will verify the files to be uploaded. If event files are being uploaded from a device that is not recognized by the system, the user will be prompted to add them with the built-in *Add Device Wizard* by clicking on **Define Device** in the lower right-hand corner of the Device Event Details pane. Please refer to the VuVault User's Guide *Add Device Wizard* section for further details.

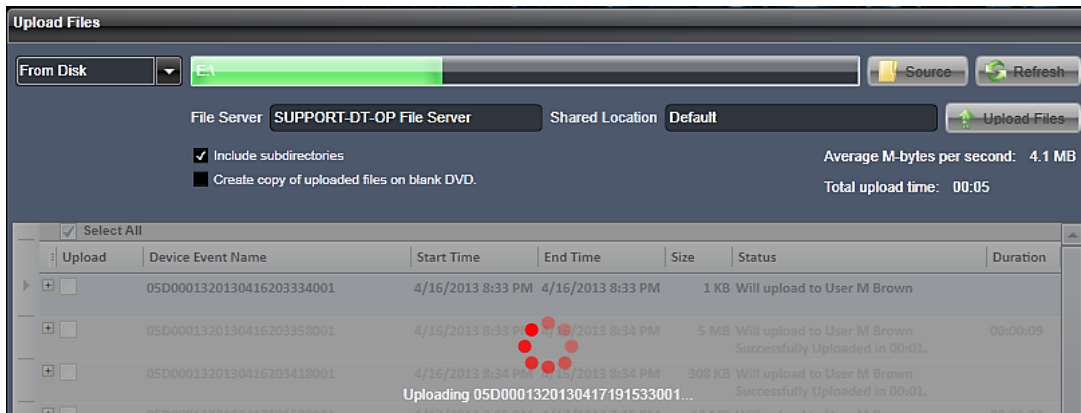


- Once the files have been verified, the system will automatically list and select all of the files for upload. If you don't wish to upload all available records, uncheck the **Select All** checkbox and then check the box next to each record you want to upload. The default *File Server* and *Share Location* are displayed. If additional file servers have been defined, select the desired destination using the dropdown menu. Click the **Upload Files** button to begin uploading data to the system.



If desired, the selected files can also be backed up to a DVD during the upload process. VuVault supports disc spanning, so if the total size of the files in the source location exceeds the space available on a single disc, the user will be prompted to insert additional discs until all of the files have been copied.

- A progress bar will move from left to right, and details of the upload process will be displayed in the window.

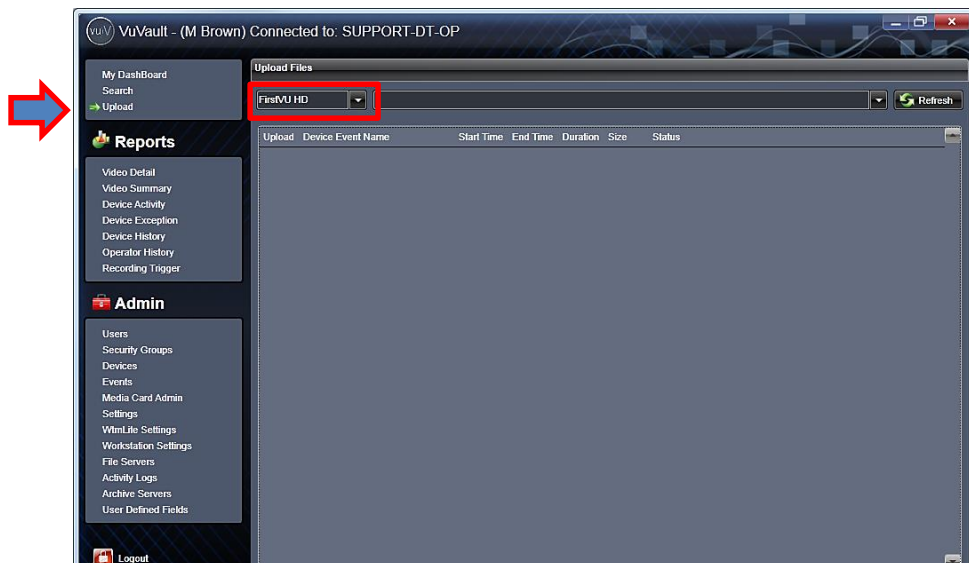


- After the upload process finishes, the uploaded files will be available for viewing in the *My Dashboard*, and *Search* screens. For more information, consult the *VuVault User's Guide*.

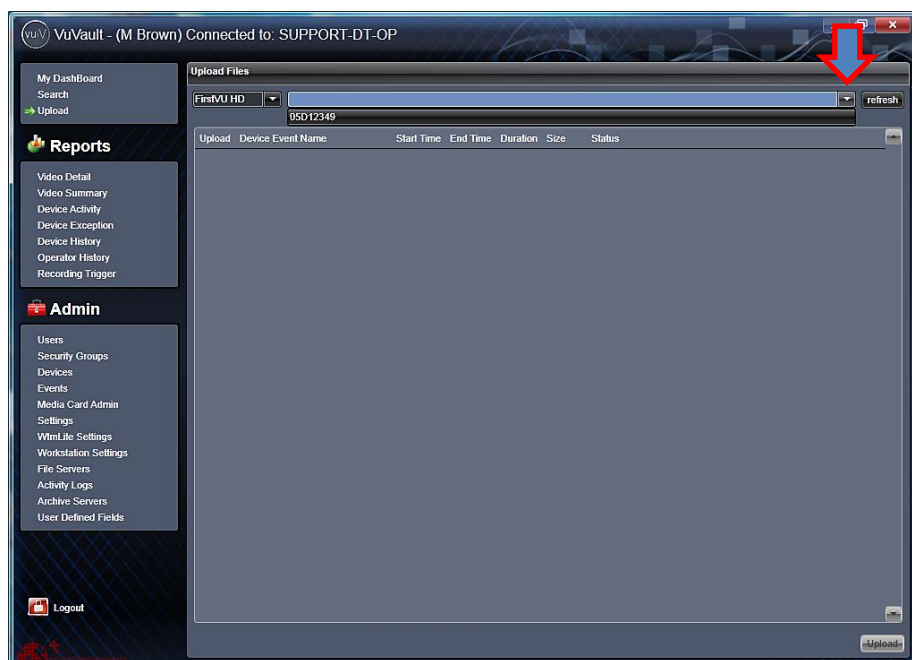
NOTE FirstVu™ HD cannot record while it is uploading or downloading files.

Secure USB Port Method

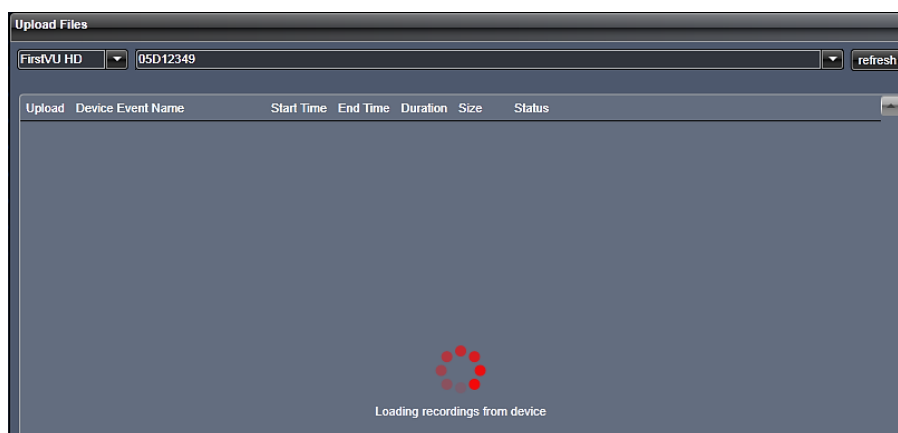
- To manually upload video files from the FirstVu HD when the Secure USB Port is enabled, plug the supplied USB cable into the computer USB port and insert the other end of the cable into the FirstVu™ HD PC USB port. Make sure your device is powered on. When *Secure Mode* is enabled, files cannot be removed from your FirstVu HD until they are first uploaded into VuVault.
- Select *Upload* from the Main navigation bar. When the secure USB port feature has been enabled, select *FirstVu HD*.



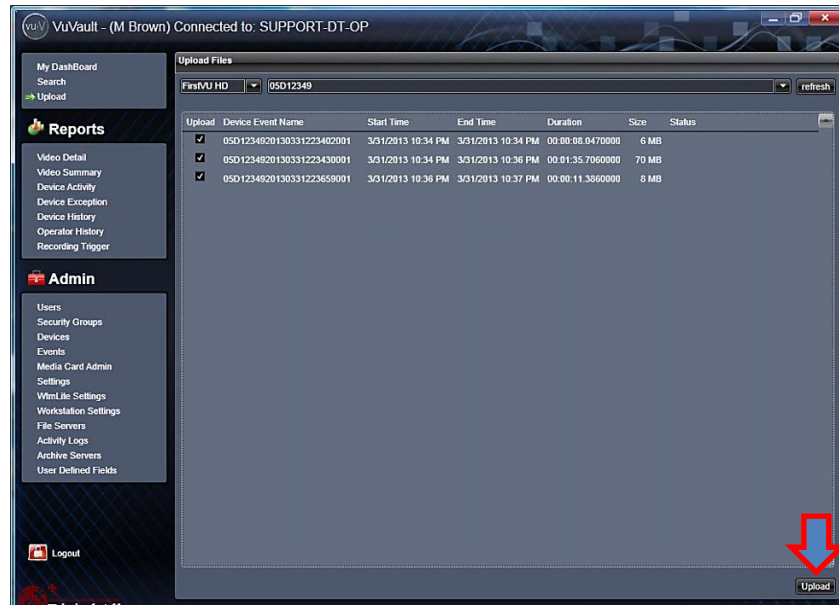
3. Use the arrow key to highlight and choose your device serial number. Then press *refresh*.



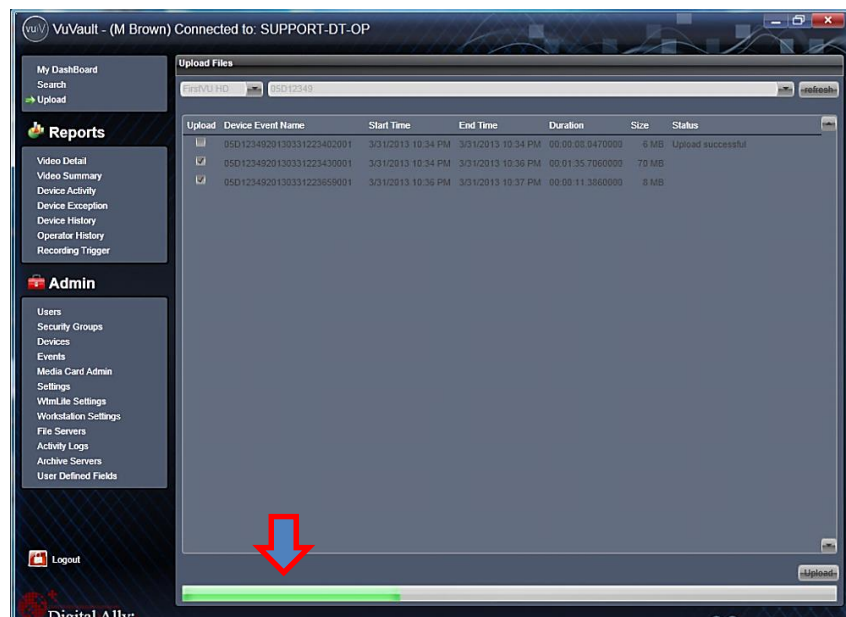
VuVault will load the available recordings from your device and verify the files to be uploaded. If event files are being uploaded from a device that is not recognized by the system, the user will be prompted to add them with the built-in *Add Device Wizard* by clicking on **Define Device** in the lower right-hand corner of the Device Event Details pane. Please refer to the *VuVault Administrator's Guide* for further details on how to add a device.



4. Once the files have been verified, the system will automatically list and select all of the files for upload. Check the box next to each record you want to upload. Click the **Upload** button to begin uploading data to the system.



5. A progress bar will move from left to right on the bottom of the screen, and details of the upload process will be displayed in the window.



6. After the upload process finishes, the uploaded files will be available for viewing in the *My Dashboard*, and *Search* screens. For more information, consult the *VuVault User's Guide*.
7. If configured in the *Admin>Settings* tab, VuVault will remove the files from the firstVu HD after the upload is complete. If you choose to remove the files, you **MUST** also unplug the FirstVu HD when finished to complete the delete process.

NOTE When using Secure USB Port Mode, the files will not be deleted until the FirstVu HD USB cable is unplugged from the computer.

Using the Docking Station

The optional FirstVu HD docking station provides automated, simultaneous uploading and charging for up to 12 FirstVu HD™ devices + 12 external batteries. Status LED's will inform you of the upload process and battery charging process for each attached device.

NOTE For more information on using the FirstVu HD docking station, please consult the "FirstVu HD Docking Station Installation and User Guide".

FirstVu HD Docking Station



Prerequisites

- VuVault™ back office software version 4.4 or newer.
- Docking station (part number 001-0960-00).
- FirstVu HD firmware 536 or higher.

Attaching devices to the Docking Station

Power on your FirstVu HD & place it into the docking station as shown to the right. Extend the USB cable from the dock and attach it to your FirstVu HD. The **Blue** status indicator on the FirstVu HD will be blinking as its internal battery is being charged.

Upload Process

Once your FirstVu HD is properly docked, the docking station will upload and store the files onto its internal hard drive. From there, the integrity of the files is checked and then they are automatically deleted from your FirstVu HD.



The docking station will then transfer the files into your *VuVault File Server* through your network. Once the file VuVault file server has received and validated the files, they are deleted from the docking station.

The files are not removed from the docking station until the file transfer into VuVault is complete. This is a simultaneous process for all docked devices.

If your FirstVu HD is removed from the docking station before the file transfer is complete, the file transfer will be resumed when reattached to the dock.

FirstVu HD status indicators

While your FirstVu HD is attached to the docking station, the Blue LED will indicate battery charging status and the Yellow LED will indicate upload status. See [Section 6](#) for more information on status indicators.

Video Playback and Management

Using VuVault

VuVault is Digital Ally's robust back-office video management solution. The VuVault media player can be opened by double-clicking on a video entry in *My Dashboard* or *Search* screens, or by selecting *Play* from the right-click menu. For more information about using the VuVault player, please consult the *VuVault User's Guide*.



Using the Digital Ally Viewer

The *Digital Ally Viewer* is a user-friendly software package to allow basic playback of video, audio, and metadata files, as well as many advanced features. The Digital Ally Viewer installer is located on your product DVD. Once installed, open the program by double clicking on the Digital Ally Viewer icon, or by selecting the program from the *Start Menu>Programs>Digital Ally>Digital Ally Viewer*. Once opened, the program will prompt you to navigate to your video storage location and select a video.



Toolbar Controls



Browse Media: Browse and select event files (.mtd) to playback.



Save Media: Save changes or segment a video event. Segmenting the video allows you to create a new video without altering the original video.



Media Details: Displays the details of the media file and allows adding additional information.



Edit Marks: Add/Edit Marks or Notes to the video event.



Image Capture: Save a snapshot of a frame of video.



Burn to CD/DVD: Create a data disc or movie DVD of the video event using this wizard. Simply follow the on-screen prompts to back up your recorded event.



Help: Displays help information and software version.

Playback Controls



Previous Mark: Click to skip to the Previous Mark.



Rewind: Click and hold to rewind.



Play/ Pause: Click to begin playback or pause video.



Fast Forward: Click and hold to Fast Forward.



Next Mark: Click to skip to Next Mark.



Start Over / Repeat: Click to Restart video from the beginning or Repeat playback.



Playback Speed Control: Adjust the Playback Speed (4x, 2x, 1x, 1/2x, 1/4x).

Playback Slider bar

The **Playback Slider bar** allows you to move forward or backward in the video event very quickly by dragging the slider.



Beginning of Video Flag: The Green Flag indicates the Beginning of the video event.



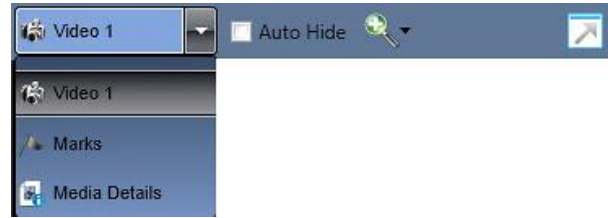
Start of Recording Flag: The Black Flag indicates the Start of video recording and any added Marks.



End of Video Flag: The Red Flag indicates the End of the video event.

View Selection and Options

The **View Selection** drop down box allows you to select the information that is displayed in each window such as **Video 1**, **Marks**, and **Media Details**. Point the mouse to the top of each window to display the following drop down bar. Then point on the window heading to display the View Selection drop down box.



Full Screen View: Click on the Full Screen icon or Double Click in the window to display full screen.



Auto Hide Window: Click this icon box to display or hide the view selection options.



Video Zoom Window: The video display window can be resized by using the slider bar.



Window Size Adjustment: You may increase or decrease the size of each field by hovering your mouse on the vertical divider between the two display windows.



Select Screen Layout: Select this button located on the bottom of the screen next to the playback controls to customize your view from a list of preset layouts.

Memory & Battery Alerts

Memory Alert:

- If the Yellow status indicator flashes once every 5 seconds and 1 vibratory pulse is emitted every 5 seconds; this indicates the memory is nearly full and has 15 minutes or less remaining.

Battery Alerts:

- 2 flashes of the Blue status indicator every 5 seconds and 2 vibratory pulses every 5 seconds indicates the user should take immediate action as there is approximately 15 minutes of recording time remaining based on battery power level.
- When the FirstVu HD is plugged into a USB port and power is turned on, a fast flash of the Blue status indicator indicates battery charging is in progress.
- When the FirstVu HD is plugged into a USB port and power is turned on, a constantly lit Blue status indicator indicates battery charging is complete.

Battery Replacement:

- Always power off the FirstVu HD prior to removing the battery. Replacement batteries may be obtained by contacting Digital Ally (PN# 135-00398-00).

Section - 6 Status Indicators

LED Status indicators and vibration pulses are used to indicate the operational status of the FirstVu HD. The status indicators are located on the top of the camera module and main module.



Normal Mode

	Red (Camera)	Blue (DVR)	Yellow (DVR)	Vibrate (DVR)
Power and Record				
Powering On	-	Alternating Flash		1 pulse
Event Recording	On	-	-	1 pulse / 15 seconds
Standby or Standby Pre-Event	Off	-	-	-
Memory Alerts				
15 minutes remaining	-	-	1 flash / 5 seconds	1 pulse / 5 seconds
Battery Alerts				
15% Charge remaining	-	2 flashes / 5 seconds	-	2 pulses / 5 seconds
Charge in Progress	-	Flash	-	-
Charging Complete	-	On	-	-
Data Transfer				
Transfer in Progress	-	-	Flash	-
Transfer complete	-	-	On	-
VuLink*				
Connected with VuLink	-	-	On	-
Error	-	3 flashes / 5 seconds		3 pulses / 5 seconds

NOTE When in a Data Transfer stage, wireless communications with VuLink are automatically disabled. This prevents an accidental recording while docked.

* VuLink is a secure wireless gateway which allows your FirstVu HD to interface with your vehicle's input triggers. Contact Digital Ally, Inc. at 1-800-440-4947 for more information.

Covert Mode

	Red (Camera)	Blue (DVR)	Yellow (DVR)	Vibrate (DVR)
Power and Record				
Powering On	-	Alternating Flash		1 pulse
Event Recording	-	-	-	1 pulse/15 seconds
Standby or Standby Pre-Event	-	-	-	-
Memory Alerts				
15 minutes remaining	-	-	-	1 pulse/5 seconds
Battery Alerts				
15% Charge remaining	-	-	-	2 pulses/5 seconds
Charge in Progress	-	Flash	-	-
Charging Complete	-	On	-	-
Data Transfer				
Transfer in Progress	-	-	Flash	-
Transfer complete	-	-	On	-
VuLink*				
Connected with VuLink	VuLink will display a flashing LED when searching for your FirstVu HD, and display a solid yellow LED when connected to your FirstVu HD.			
Error	-	-		3 pulses/5 seconds



When in a Data Transfer stage, wireless communications with VuLink are automatically disabled. This prevents an accidental recording while docked.

* VuLink is a secure wireless gateway which allows your FirstVu HD to connect to your vehicle's input triggers. Contact Digital Ally, Inc. at 1-800-440-4947 for more information.

Section - 7 Specifications

Operating Temperature	-20° to +70° C
Storage Temperature	-40° to +80° C
Dimensions	2 5/8"(w) x 4"(h) x 5/8"(d) (Main Recorder) 1 1/8"(w) x 1 1/2"(h) x 1.0"(d) (Camera Module)
Weight	3.1 oz. (Main Recorder) 0.8 oz. (Camera)
Humidity	10 -90% RH, non-condensing. IPX5 water resistant camera head
Internal Battery	3.7vDC 2,200mAh, Rechargeable Lithium Ion Polymer Battery Field replaceable, 2 batteries and chargers included
Record Time	Up to 4.5 hours continuous record or with pre-event enabled
Standby Time	Up 12 hours with pre-event disabled
Microphone	Internal (max. input SPL 110dB, sensitivity -42dBV)
Video Resolution	720p (1280x720) or VGA (640x480) H.264 codec with configurable quality settings
Audio	Mono, may be muted by user Multiple configuration options
Camera	0.08 Lux (minimum). Fixed focus lens
Field Of View	H=95°, V=80°, D=130°
Memory Capacity	32GB secure internal memory
Secure Media Access	May be configured so only designated computers can access recordings
Pre-Event Buffer	Up to 60 seconds, adjustable in 1 second increments
Covert Mode	Deactivates LEDs on the camera (vibrating confirmations and DVR LEDs remain on)
Wireless	Secure 802.11 WPA or WPA2 encryption. Used with VuLink™

Section - 8 Warranty Information

STANDARD LIMITED WARRANTY FIRSTVU HD™ HIGH DEFINITION COMPACT PERSONAL VIDEO RECORDER.

We warranty that our personal video recorder, Model FirstVu HD, will be free from defects in workmanship and material for a period of 12 months from the date of purchase by the original purchaser. If any defect is discovered through normal and proper use of the unit during this period, the defect will be repaired or the unit will be replaced at our factory or at one of our authorized service centers at no cost to the purchaser. The purchaser must return the defective unit to the factory or one of our authorized service centers, freight prepaid. We will pay for shipping charges for the return of the unit.

This warranty applies only to defects in a unit's internal electronic components and circuitry, and is void as to units that have been opened without prior authorization, have experienced unauthorized repairs, or have had unauthorized modifications. This warranty does not cover the following:

- Normal wear and tear on the unit such as batteries, frayed cables or wires, broken connectors, or scratched or broken cases.
- Damage caused by operator abuse or neglect.
- Damage caused by incorrect use of the unit, carelessness, unauthorized alterations to the unit, improper storage of the unit or unauthorized service, installation or repairs made to the unit.
- Damage caused by fire, flood, lightning, vandalism, collision, acts of God, or other events beyond the reasonable control of Digital Ally, Inc. or the purchaser.
- Damage to external parts of the unit such as buttons, wires, and cables, etc.
- Damage from use of the unit in hostile operating environments.

We reserve the right to charge for repairs to a unit during the warranty period made necessary because of any of the foregoing causes at our standard rates for repair of units not under warranty.

The purchaser assumes all risk of use from its purchase and use of the unit. Harmful personal contact with a unit might occur in the event of violent maneuvers, collisions, or similar circumstances, even if the unit was properly installed and used. We are not responsible for, and we specifically disclaim any liability for injury caused by a unit in such circumstances.

THIS WARRANTY IS GIVEN IN LIEU OF ALL OTHER WARRANTIES. THERE ARE NO WARRANTIES THAT EXTEND BEYOND THIS STATEMENT. ALL IMPLIED WARRANTIES ARE DISCLAIMED, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY, NON-INFRINGEMENT, FITNESS FOR A PARTICULAR PURPOSE, AND WARRANTIES IMPLIED FROM A COURSE OF DEALING, COURSE OF PERFORMANCE OR USAGE OF TRADE. THE PURCHASER'S SOLE AND EXCLUSIVE REMEDY FOR A WARRANTY CLAIM WILL BE THE REPAIR OR REPLACEMENT OF A UNIT.

Section - 9 Contact Information



9705 Loiret Blvd

Lenexa, KS 66219

Website: www.digitalallyinc.com

Support E-Mail: support@digitalallyinc.com

Sales E-Mail: sales@digitalallyinc.com

Phone: 913-814-7774

Fax: 913-814-7775

Sales / Support Toll Free: 1-800-440-4947



Section - 10 Regulatory



This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the user equipment and FirstVu HD.
- Connect the user equipment into an outlet on a circuit different from that to which the FirstVu HD is connected.
- Contact Digital Ally technical support.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

The CE Mark is a European marking of conformity indicating that a product complies with the essential requirements of the applicable European laws or Directives with respect to safety, health, environment, and consumer protection.

Changes or modifications not expressly approved by Digital Ally, Inc. could void the user's authority to operate the equipment.

