



MVA

User Manual

Legal Information

User Manual

©2018 Hangzhou Hikvision Digital Technology Co., Ltd.

About this Manual

This Manual is subject to domestic and international copyright protection. Hangzhou Hikvision Digital Technology Co., Ltd. ("Hikvision") reserves all rights to this manual. This manual cannot be reproduced, changed, translated, or distributed, partially or wholly, by any means, without the prior written permission of Hikvision.

Please use this user manual under the guidance of professionals.

Trademarks

HIKVISION and other Hikvision marks are the property of Hikvision and are registered trademarks or the subject of applications for the same by Hikvision and/or its affiliates. Other trademarks mentioned in this manual are the properties of their respective owners. No right of license is given to use such trademarks without express permission.

Disclaimer

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, HIKVISION MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, REGARDING THIS MANUAL. HIKVISION DOES NOT WARRANT, GUARANTEE, OR MAKE ANY REPRESENTATIONS REGARDING THE USE OF THE MANUAL, OR THE CORRECTNESS, ACCURACY, OR RELIABILITY OF INFORMATION CONTAINED HEREIN. YOUR USE OF THIS MANUAL AND ANY RELIANCE ON THIS MANUAL SHALL BE WHOLLY AT YOUR OWN RISK AND RESPONSIBILITY.




REGARDING TO THE PRODUCT WITH INTERNET ACCESS, THE USE OF PRODUCT SHALL BE WHOLLY AT YOUR OWN RISKS. HIKVISION SHALL NOT TAKE ANY RESPONSIBILITIES FOR ABNORMAL OPERATION, PRIVACY LEAKAGE OR OTHER DAMAGES RESULTING FROM CYBER ATTACK, HACKER ATTACK, VIRUS INSPECTION, OR OTHER INTERNET SECURITY RISKS; HOWEVER, HIKVISION WILL PROVIDE TIMELY TECHNICAL SUPPORT IF REQUIRED.

SURVEILLANCE LAWS VARY BY JURISDICTION. PLEASE CHECK ALL RELEVANT LAWS IN YOUR JURISDICTION BEFORE USING THIS PRODUCT IN ORDER TO ENSURE THAT YOUR USE CONFORMS THE APPLICABLE LAW. HIKVISION SHALL NOT BE LIABLE IN THE EVENT THAT THIS PRODUCT IS USED WITH ILLEGITIMATE PURPOSES.

IN THE EVENT OF ANY CONFLICTS BETWEEN THIS MANUAL AND THE APPLICABLE LAW, THE LATER PREVAILS.

Symbol Conventions

The symbols that may be found in this document are defined as follows.

Symbol	Description
 Danger	Indicates a hazardous situation which, if not avoided, will or could result in death or serious injury.
 Caution	Indicates a potentially hazardous situation which, if not avoided, could result in equipment damage, data loss, performance degradation, or unexpected results.
 Note	Provides additional information to emphasize or supplement important points of the main text.

Contents

Chapter 1 Introduction and Overview	1
1.1 Running Environment	1
1.2 Summary of Changes	1
Chapter 2 Video Playback	2
2.1 Search Video Files	2
2.1.1 Search Video Files from Disk	2
2.1.2 Search Video Files from Specified Folder	2
2.2 Play Video Files	3
2.3 View Vehicle Data	4
2.4 Download Video Files	5
2.4.1 Download Video Files by File	5
2.4.2 Download Video Files by Time	6
Chapter 3 Evidence Playback	8
3.1 Play Video Evidence	8
3.2 Play Picture Evidence	9
3.3 Download Video Evidence	9
Chapter 4 Pattern Playback	11
Chapter 5 Log Search	12
Chapter 6 System Configuration	13
6.1 Configure Enforcement Parameters	13
6.2 Configure Playback Parameters	13

Chapter 1 Introduction and Overview

MVA (Mobile Video Analysis) is the software installed on PC to analyze and handle the video files and information of Mobile DVR which is installed on the vehicle.

MVA can search the video files from the disk or from the specified folder in the local PC and play the videos. During playback, you can view the vehicle driving information, such as speed, acceleration, location. MVA can connect with mobile enforcement device to provide playback and other functions. MVA also provides playing the vehicle pattern. With the functions of MVA, the status of the vehicles can be restored accurately to supply reliable proof for traffic accident.

This user manual describes the functions and configurations of the software. To ensure the properness of usage and stability of the software, refer to the contents below and read the manual carefully before operation.

1.1 Running Environment

The followings are the recommended running environment for installing the client software.

Operating System

Microsoft Windows XP+SP4 (32-bit) / Windows 7 (32-bit / 64-bit) / Window 10 (64-bit)

CPU

Pentium IV or above

RAM

1GB or above

HDD

10GB or above

1.2 Summary of Changes

The followings are the changes between this version and the previous version.

- Support filtering the videos by setting recording type or time period, or entering keywords after searching. See ***Search Video Files from Disk*** for details.
- Support downloading by file. See ***Download Video Files by File*** for details.
- Support downloading by time. See ***Download Video Files by Time*** for details.
- Support downloading video evidence and picture evidence in a batch. See ***Download Video Evidence*** and for details.

Chapter 2 Video Playback

You can search the video file from the disk or the local folder and play the video files. During playback, you can view the vehicle data and gravity data. You can also download the video files in a batch.

2.1 Search Video Files

The video files stored in the disk or local PC can be searched. You can also set the time period or enter the keywords to filter the videos.

Two modes are available:

- **Disk:** The video files stored in the external disk or local disk can be searched.
- **Local:** The video files stored in a specified folder can be searched.

2.1.1 Search Video Files from Disk

You can search the video files stored in the disk (both external disk and local disk are available).

Before You Start

If you want to search in the external disk, you should connect the disk to your PC first.

Perform this task when you need to search video files from the disk.

Steps

1. Click **Playback** to enter the Video Playback page.
2. Select the **Disk** as the searching mode.
3. Check the disk.
4. Click **Search**.

All the video files stored in the disk will display.

5. **Optional:** Filter the video files if there're too many video files.
 - Select the video type: manual recording and scheduled recording.
 - Set the specified time period.
 - Enter the keywords.

2.1.2 Search Video Files from Specified Folder


You can search the video files stored in the specified folder in the local PC.

Before You Start

Store the video files in the specified folder first.

Perform this task when you need to search video files from the specified folder.

Steps

1. Click **Playback** to enter the Video Playback page.
2. Select the **Local** as the searching mode.
3. Click  and select one folder.
4. Click **Search**.
All the video files stored in the folder will display.
5. **Optional:** Filter the video files if there're too many video files.
 - Set the specified time period.
 - Enter the keywords.

2.2 Play Video Files



After searching the video files for the playback, you can play the video via timeline. You can also control the video playback, such as synchronous playback, adjusting volume, digital zoom, and so on.

Perform this task when you need to play the video files.

Steps



1. Click **Playback** to enter the Video Playback page.
2. Search the video evidence. See **Search Video Files** for details.
The searched video files will display.
3. Select one window.
4. Double-click the video to start playing and show the timeline.
The timeline indicates the time duration for the video files.
5. Drag the timeline forward or backward to play the video in specified time period.

Note

Click  /  , or use the mouse wheel to zoom in or zoom out on the timeline.

6. **Optional:** Perform the following operations after playing the videos.


Synchronous / Asynchronous Playback

Click  /  to start synchronous or asynchronous playback

Note

At least two videos should be played.


Window Information

Click  to show or hide the window information, such as window name, channel name, video time, and so on.

Window Division

Click  to set the screen layout.

Vehicle Location

Click  to locate the vehicle on the map.

Download Specified Video

Right-click the video and click **Download** to download the video. See **Download Video Files** for details. You can also configure the saving path for the video. See **Configure Playback Parameters** for details.




Note

Downloading is only available for the video files stored in the external disk.


Digital Zoom

Right-click the video and click **Digital Zoom** to enable the digital zoom function.

Start Clipping

Move the cursor to the playing window and click , or right-click the video and click **Start Clipping** to clip the video files. You can configure the saving path for the recorded videos. See **Configure Playback Parameters** for details.

Capture

Move the cursor to the playing window and click , or right-click the video and click **Capture** to capture the pictures. You can configure the saving path for the captured pictures. See **Configure Playback Parameters** for details.

2.3 View Vehicle Data

After playing the video files, the driving information of the vehicle is collected from the video files, including speed, turning left/right, reversing, location, etc. You can view the vehicle driving information.

The vehicle driving information shows on the Vehicle Data Analysis panel. You can view the vehicle dashboard information, including speed, left-turn/right-turn signal, brake light, stop light, reverse light, and alarm indicator, etc. You can also view the left/right acceleration, forward/backward acceleration, gravitational acceleration, driving direction, and vehicle location information.

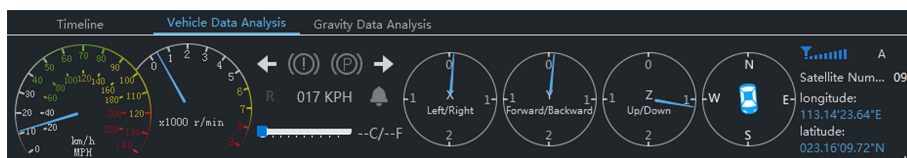


Figure 2-1 Vehicle Data

You can view the detailed data of left/right acceleration, forward/backward acceleration, gravitational acceleration, and speed on Gravity Data Analysis panel.

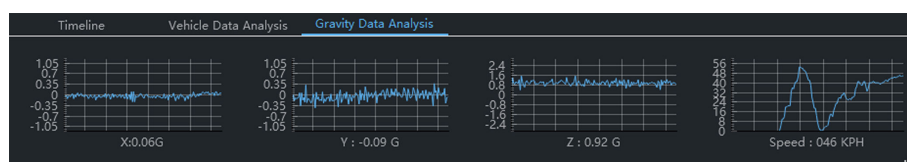


Figure 2-2 Gravity Data

2.4 Download Video Files

You can download the video files from the disk of mobile device via the software.

Two modes are available:

- Download by File: You can select the video files and download them in a batch.
- Download by Time: You can set the time period and video files in this time period can be downloaded.

2.4.1 Download Video Files by File

You can select one or more video files and save them to the local PC in a batch.

Before You Start

Connect the disk of mobile device to the PC which installs the MVA software.

Perform this task when you need to download video files by file.

Steps

1. Search the video files, see ***Search Video Files from Disk*** for details.

The searched video files will display.

2. Click **Batch Download** to open Download File (Batch Download) window.
3. Click **By File**.

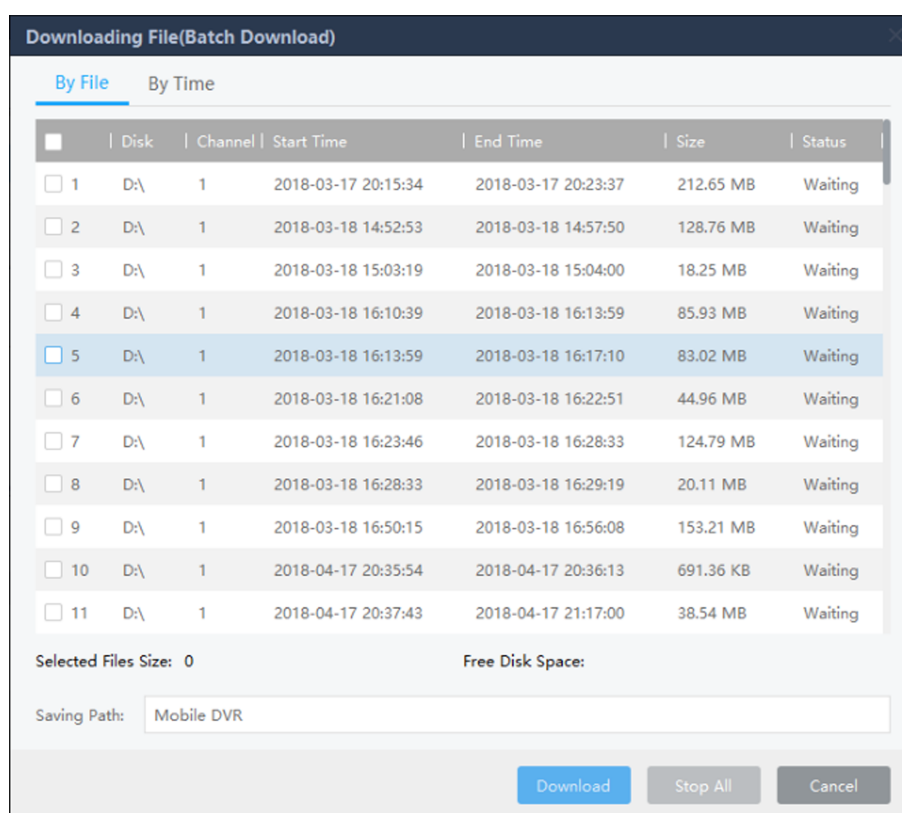


Figure 2-3 Download by File

4. Select one or more video files.

The size of the selected video files can be calculated.

5. Set the saving folder name.

6. Click **Download**.

Result

The video files can be saved to the local PC and the free disk size will decrease.

2.4.2 Download Video Files by Time

You can set time period and the video files in this time period can be downloaded in a batch.

Before You Start

Connect the disk of mobile device to the PC which installs the MVA software.

Perform this task when you need to download video files by time.

Steps

1. Search the video files, see **Search Video Files from Disk** for details.

The searched video files will display.

2. Click **Batch Download** to open Download File (Batch Download) window.

3. Click **By Time**.

The screenshot shows a dialog box titled "Downloading File(Batch Download)". It has two tabs: "By File" and "By Time", with "By Time" being the active tab. Under "By Time", there are four "Time Period" rows. Each row has a checkbox, a "Start Time" field, and an "End Time" field. All checkboxes are unchecked. Below the time periods, there is a section for selecting channels. The "All" checkbox is checked, and all individual channel checkboxes (Channel 01 through Channel 16) are also checked. At the bottom, there are fields for "Selected Files Size: 0" and "Free Disk Space:". Below these is a "Saving Path" field containing "Mobile DVR". At the very bottom are three buttons: "Download" (blue), "Stop All" (grey), and "Cancel" (grey).

Figure 2-4 Download by Time

4. Check the time period.

Note

Up to four time periods can be selected.

5. Set the start time and end time.

6. Select the channel(s) you want to download the video files from.

Note

By default, all the channels are selected.

The size of the video files in the time period(s) can be calculated.

7. Set the saving folder name.

8. Click **Download**.

Result

The video files can be saved to the local PC and the free disk size will decrease.

Chapter 3 Evidence Playback

You can play the vehicle video from disk or one specified folder, which contains some evidence, such as vehicle overspeed, reversing, lane change, etc., and the timeline will be marked with different colors. You can also view the picture evidence, which contains license plate information.

3.1 Play Video Evidence

The videos contain vehicle evidence, such as overspeed, reversing, etc., can be played. You can view the evidence type according to the color marked on the timeline. You can also control the video playback, such as synchronous playback, adjusting volume, digital zoom, and so on.

Perform this task when you need to play the video evidence.


Steps

1. Click **Evidence Playback** to enter the Evidence Playback page.
2. Search the video evidence. See **Search Video Files** for details.
3. Click **Video**.

The searched video evidences will display.



4. Select one window.
5. Double-click the video to start playing and show the timeline.

The timeline indicates the time duration for the video files, and the video files of different types are color coded.

6. Click  to view the color corresponding evidence.
7. Drag the timeline forward or backward to play the video in specified time period.





Note

Click  / , or use the mouse wheel to zoom in or zoom out on the timeline.

8. **Optional:** Perform the following operations after playing the videos.

Synchronous / Asynchronous Playback


Click  /  to start synchronous or asynchronous playback



Note

At least two videos should be played.


Window Information

Click  to show or hide the window information, such as window name, channel name, video time, and so on.

Window Division

Click  to set the screen layout.

Vehicle Location

Click  to locate the vehicle on the map.

Download Specified Video

Right-click the video and click **Download** to download the video. See **Download Video Files** for details. You can also configure the saving path for the video. See **Configure Playback Parameters** for details.




Note

Downloading is only available for the video files stored in the external disk.


Digital Zoom

Right-click the video and click **Digital Zoom** to enable the digital zoom function.

Start Clipping

Move the cursor to the playing window and click , or right-click the video and click **Start Clipping** to clip the video files. You can configure the saving path for the recorded videos. See **Configure Playback Parameters** for details.

Capture

Move the cursor to the playing window and click , or right-click the video and click **Capture** to capture the pictures. You can configure the saving path for the captured pictures. See **Configure Playback Parameters** for details.

3.2 Play Picture Evidence

You can view the picture evidence which contains vehicle license plate information.

Perform this task when you need to play picture evidence.

Steps

1. Click **Evidence Playback** to enter the Evidence Playback page.
2. Search the picture evidence. See **Search Video Files** for details.
3. Click **Picture**.

The picture evidences will display.

4. Double-click the picture evidence to view the large image.

3.3 Download Video Evidence

After searching the video evidence, you can download the videos and save the videos to the local PC in a batch.

Before You Start

Search the video evidence from the disk, see **Search Video Files from Disk** for details.

Perform this task when you need to download the video evidence.

Steps

1. Click Video.

All the searched videos will display.

2. Click Batch Download to open Downloading File (Batch Download) window.

3. Download the video files.

- Select the videos and download by file, see ***Download Video Files by File*** for details.
- Set the time period and the videos in the time period(s) can be downloaded. See ***Download Video Files by Time*** for details.

Chapter 4 Pattern Playback

You can search the video files stored in the disk of the mobile device and view the history driving pattern of the vehicle that installs the mobile device during the specified time period.

Perform this task when you need to play the vehicle driving pattern.

Steps

1. Click **Pattern Playback** to enter the Pattern Playback page.
2. Set the start time and end time.



Note

The time interval should be less than 24 hours.

3. Select the disk where stores the video files.
4. Click **Load Pattern** to start playing the vehicle driving pattern.

Chapter 5 Log Search

You can search the log files of alarms, exceptions, operations, and information which is generated in the device. You can view the log details, including operation time, log type, operator information, remote host IP address, and so on.

Perform this task when you need to search log files.

Steps

1. Click **Log** to enter the Log Search page.
2. Set the time period.



Note

Only log files within 30 days can be searched.

3. Select the disk which contains the videos.
4. Set the major type and its corresponding minor type.

Alarm

The alarm logs, such as motion detection started and ended, video tampering detection started and ended, etc., can be searched and viewed.

Exception

The exception logs, such as video loss, illegal login, HDD error, etc., can be searched and viewed.

Operation

The operation logs, such as two-way audio started and ended, adjust volume, etc., can be searched and viewed.

Information

The information logs, such as disk information, S.M.A.R.T information, etc., can be searched and viewed.

5. Click **Search**.

The matched log files will display in the list. You can view the operation time, log type, local operator, remote operator, remote host IP address, channel No., and disk No.

6. **Optional:** Click **Export** to save the log files to the local PC.

Chapter 6 System Configuration

You can configure the local saving path for the evidence pictures and videos for enforcement. You can also configure the playback parameters, such as the file saving path settings, overspeed alarm settings, and decoding frame settings.

6.1 Configure Enforcement Parameters

The recorded evidence videos and captured pictures during enforcement can be stored in the local PC. You can configure the saving path for the files.

Perform this task when you need to configure enforcement parameters.

Steps

1. Click **Settings** to enter the Settings page.
2. Click and select a local path for evidence videos and pictures.
3. Click **Save**.

6.2 Configure Playback Parameters

You can configure the playback parameters, including saving path for recorded videos, captured pictures, and downloaded files, decoding frame format and secret key, and overspeed alarm settings.

Perform this task when you need to configure playback parameters.

Steps

1. Click **Settings** to enter the Settings page.
2. Click and select a saving path for recorded videos, captured pictures, and downloaded files during video playback.
3. Select the decoding frame type.

Key Frame when Over 4x

When the playback speed is over 4x, only key frame will be decoded to improve the playback performance.

Key Frame when Over 8x

When the playback speed is over 8x, only key frame will be decoded to improve the playback performance.

4. Enter the secret key if the video is encrypted.
5. Enable overspeed alarm.
 - 1) Check **Overspeed Alarm**.
 - 2) Select the speed unit.
 - 3) Set the speed threshold.

4) Click and select the alarm sound file.

When the vehicle speed is over the configured threshold, the alarm will be triggered and prompt you with the alarm sound.

6. Click **Save**.



See Far, Go Further