TapCMS for Android

(Central Monitoring Software)

User's Manual

TapCMS

Multi-DVR
N-streaming
Live/playback
Crystal video
Alarm I/O
PTZ

TapCMS-Android-M11040E

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1. Product Overview

The TapCMS (Central Monitoring Software) for Android (**Android SDK 2.3 or above**) is designed to be installed in Android mobile phone/tablet for use with DVRs (Digital Video/Audio Recorders) or IP cameras. With state-of-the-art CMS technology for Android, virtually unlimited number of DVRs and IP cameras can be monitored and controlled.

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1.1 Features

- ■ **Remote monitoring and control for virtually unlimited number of DVRs and IP-cameras**
- ■ **Up to 8MP H.265/H.264 decode capability**
- ■ **Dynamic dual-streaming video**
- ■ **Two-way audio**
- ■ **Support P2P and QR code**
- ■ **Remote video, audio, and alarm input, including IP-Cameras', monitoring**
- ■ **Remote (push) alarm notification**
- ■ **Remote alarm output, including IP-Cameras', control**
- ■ **Remote PTZ control**
- ■ **Versatile live/playback display formats: 1, 4, 9, and 16 split windows**
- ■ **Remote playback search by time or event (alarm, motion, & video loss)**
- ■ **Support playback of archived files**
- ■ **Playback operations: Play, Pause, Fast Forward, Fast Backward, Single Step, etc.**
- ■ **Support mirror function**
- ■ **Remote log display**
- ■ **Snapshot live or recorded video**
- ■ **Password to access DVRs and IP cameras**
- ■ **Operations in Landscape mode supported**
- ■ **Multi-DVR/IPCAM cameras supported in split window view**
- ■ **Support calculator for recording table**
- ■ **Support Google Maps**
- ■ **Support multi-language**
- ■ **Support URL Scheme**

2. Download From Play Store / Android Market

In Android mobile phone, please tap Google Play Store icon ( ) or Market icon ( ) to run Google Play Store / Android Market. In Google Play Store / Android Market, please tap Search icon (/), and then enter TapCMS in the Search Text Field to search and display TapCMS.
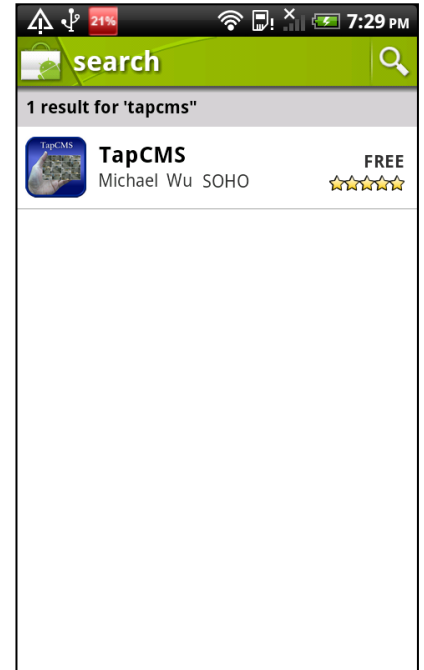
3. Operations

3.1 Run

Tap **TapCMS** icon ( ) or use URL scheme **tapcms://open** to run the TapCMS in your Android mobile phone/tablet. The **Device List** display will be shown.

In Device List display, if a DVR is connected, the icon will be shown on the left; otherwise, the icon will be shown.

Tap "Custom/Multiple" to custom multiple devices in the split windows display. After tap "Custom/Multiple", select the channel in split window to focus window first, then tap CH button to select the channel from a different device.

Please note that if Alarm Notification is enabled (in Alarm I/O) and alarm is triggered, the mobile phone will be notified (similar to SMS). The user may select the alarm notification as shown below, and then tap on "OK" to run TapCMS and play the alarm video.
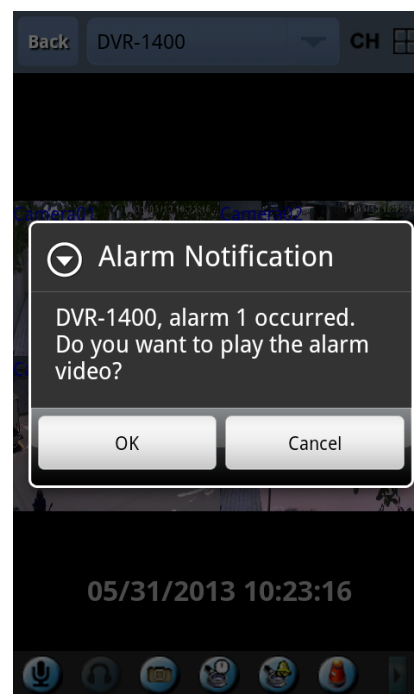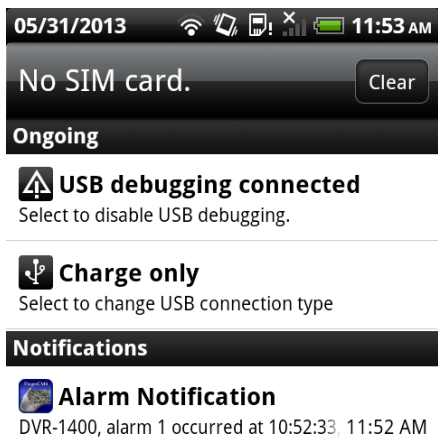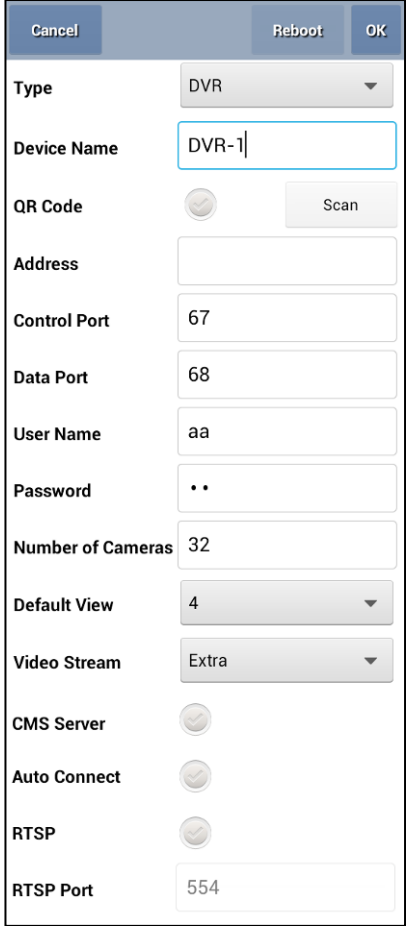
3.2 Configure Device List

■ **Add / Modify**

Tap ![Add] button to add a DVR/IPCAM in the Device List, or tap ![icon] icon to modify the device properties of the corresponding DVR/IPCAM. The Detailed Device Properties display will be shown. Tap ![OK] to exit and save, or ![Cancel] to exit without saving. The user may tap ![Reboot] button to reboot the device remotely.

Following is a brief description for each item:

■ **Type** – DVR or IPCAM.

■ **Device Name** – any meaningful name for the device.

■ **QR Code** – if enabled, users can scan or manually input the QR code of the DVR device (in Network Setup).   To use QR code, please make sure TCP hole punching is working for the DVR or App.

■ **Address** – IP address (EX. 210.242.162.30) or URL domain name of the device if QR code is disabled.   It should be the same as the IP address or URL in Network Setup for the DVR/IPCAM device.

■ **Control Port** – the control port of the (DVR) device if QR code is disabled.

■ **Data Port** – the data port of the (DVR) device if QR code is disabled.

■ **User Name** – the login user name for the device. It must be in the list in Password Setup of the device. Please note that **different levels of users have different available operations in Mobile CMS.** Please refer to Password Setup in the manual for the DVR or IPCAM for the available operations of each level.

■ **Password** – the corresponding password for the login user name for the device.

■ **Number of Cameras** – number of cameras for the (DVR) device.

■ **Default View** – default split window display for the (DVR) device.

■ **Video Stream** – "Record" – live video same as recording stream, or "Extra" – extra network stream if dual streaming is supported for the (DVR) device.

■ **CMS Server** – Check this item if the device is a CMS server.   Switch OFF for DVR device.

■ **Auto Connect** – whether the user wants to connect automatically to this (DVR) device when the TapCMS is running.

■ **RTSP** – whether to use RTSP to connect to the (DVR) device.

- **RTSP Port** – the RTSP port of the device.

- **ONVIF** – switch ON for use ONVIF protocol.

- **ONVIF Port** – the ONVIF port of the (IPCAM) device.

■ **Delete**

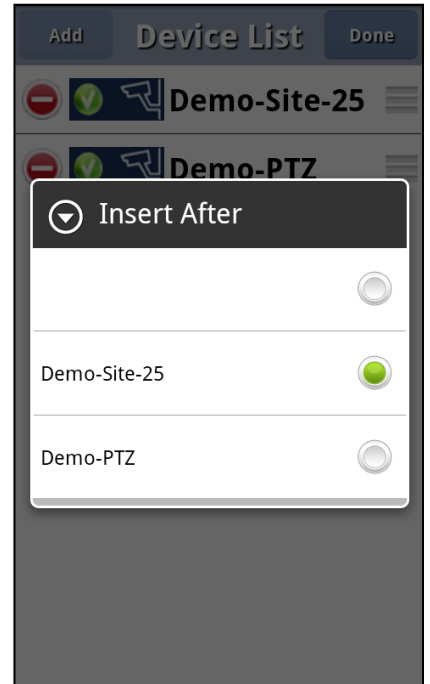Tap [Edit] button, ⊖ icon, and then [Delete] button to delete the selected device from the device list. Tap [Done] button when you're done.

■ **Change Order**

Tap [Edit] button, and then tap ≡ icon to select the device and display the Insert After dialog as shown. Tap a device to insert the formerly selected device after the latter selected device. Tap [Done] button when you're done.

■ **Set Default Device**

Tap [Edit] button, and then the Device Name to set the device as "Default". An asterisk (*) will be shown in front of the Device Name. Tap the Device Name again to unset it. Tap [Done] button when you're done. If there's Default Device in the device list, the Default View of the Default Device will be shown when you run the application.

■ **Import/Export**

Tap Import/Export button, and the device list can be restored from / saved to the directory CMS_Device_List of the mobile device. In this way, multiple mobile devices can share the same CMS_Device_List by copying it to/from the other mobile devices, including iOS mobile devices, and Import/Export it.

■ **Calculator (for H.264 Only)**

Tap **Calc.** button, and the **Calculator** will be shown. There are two kinds of calculation, based on **disk space** or based on **recording days**. Please tap on **Mode** to change the method. Please change the contents, including high/normal compression, number of cameras, recording quality, and frame rate of different resolutions, etc., and the **estimated recording days** or **estimated disk space** will be updated accordingly. Please tap on **Clear** to clear the contents.
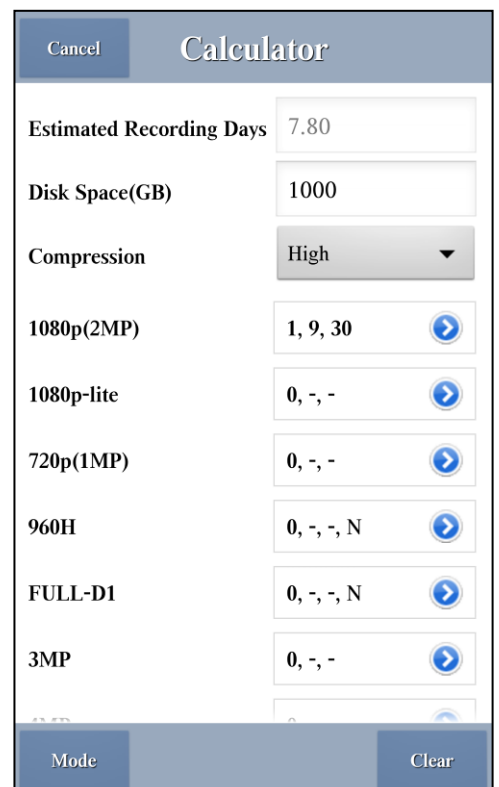
3.3 Split Window Display

In Device List, tap the device name, and the split-window display of the corresponding device will be shown. In split-window display, the user may rotate Android mobile phone/tablet for Landscape display. For TapCMS in Landscape mode, users may tap on the top/bottom area to show the operable icons.

The operations are as below:

■ **Back** button

Tap this button to escape from this screen, and return to Device List display.

■ **Device Name button (EX.** Demo-Site-25 **)**
Tap this button to display the available DVR/IPCAMs. Please select one of the devices in the Device picker to switch to the split-window display of the selected device.

■ **CH** button
Tap this button to (1) switch to 1-W display of the selected channel if there's no focus window, or (2) change the channel of the focus window. **Please note that (2) can be used to select the channel from a different device if the Device Name is "Custom/Multiple".** The user may also tap twice on the display window to switch to its 1-W display.

■ button
Tap this button to select the **split-window** display (1-W, 4-W#1, 4-W#2, 4-W#3, 4-W#4, 9-W, or 16-W) or **Google Maps** display. **Please note that scroll view is supported for 1/4-W display.**

■ **Zoom in**
Please note that this operation is only supported in 1-W display.

■ button
Tap this button to enable/disable the Audio input of the Android mobile phone. The device will be able to hear the Android mobile phone if Audio-In is enabled (button down).

■ button
Tap this button to enable/disable the Audio output of the Android mobile phone. The user will be able to hear the audio of the focus camera of the device if Audio-Out is enabled (button down).

■ button
Tap this button to Snapshot the video. The snapshot picture will be saved in "Photo" of the Android mobile phone.

■ button
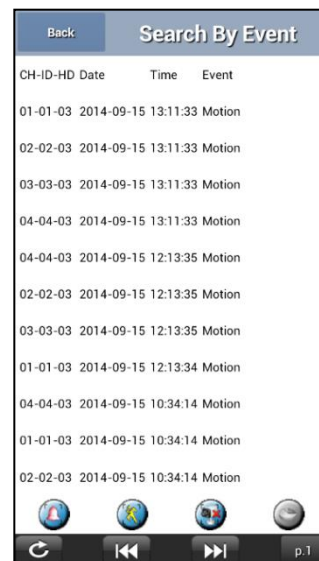Tap this button to display the "**Search By Time**" dialog.
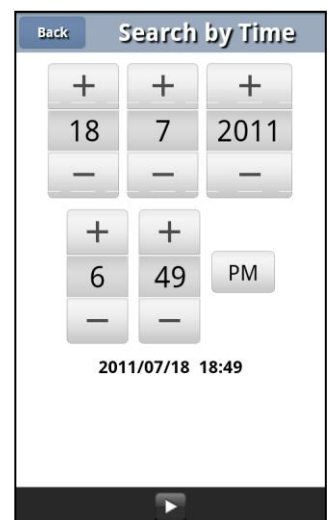
Please select the time (Year, Month, Date, Hour, and Minute), and then tap ▶ button to search for playback, or tap **Back** button to return to split-window display without playback.

■ 🔔 **button**
Tap this button to display the "**Search By Event**" dialog.
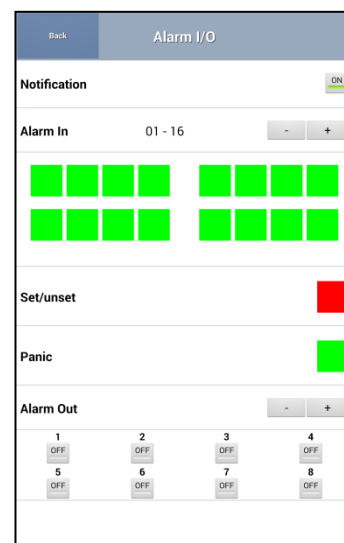
For **Alarm/Motion/Video** events, the display format of each event is "**Camera ID – Source ID – HDD ID**" "**Date**" "**Time**" "**Event Type**"; for **System** events, the display format of each event is "**Date**" "**Time**" "**Details**". Tap **Refresh** button(🔄), **Page Up** button(⏮), or **Page Down** button (⏭) to update the event logs. Tap **Alarm** icon(🔔), **Motion** icon(🔨), and/or **Video Loss** icon(📷) to uncheck/check the corresponding event type. Tap **System** icon(🌐) to check system event and uncheck the other event types, or uncheck system event and check the other event types. Tap the desired event log for playback, or tap **Back** button to return to split-window display without playback. **Users can tap the current "Page No." to call up "Search By Event - Page" dialog, and then enter the desired page number.**

Back	Search By Event		
CH-ID-HD Date		Time	Event
01-01-03	2014-09-15	13:11:33	Motion
02-02-03	2014-09-15	13:11:33	Motion
03-03-03	2014-09-15	13:11:33	Motion
04-04-03	2014-09-15	13:11:33	Motion
04-04-03	2014-09-15	12:13:35	Motion
02-02-03	2014-09-15	12:13:35	Motion
03-03-03	2014-09-15	12:13:35	Motion
01-01-03	2014-09-15	12:13:34	Motion
04-04-03	2014-09-15	10:34:14	Motion
01-01-03	2014-09-15	10:34:14	Motion
02-02-03	2014-09-15	10:34:14	Motion

■ 🔔 **button**
Tap this button to display the "**Alarm I/O**" dialog.

The alarm notification, alarm inputs (row 1 : 1-4, 5-8, row-2 : 9-12, 13-16) and alarm outputs (1-8) of the DVR/NVR will be shown. Please note that the actual number of input/output may be more or less. The user may tap the Notification switch to ON/OFF alarm notification of the TapCMS. The user may also tap the Alarm Out switch to On/OFF the corresponding alarm output. Tap **+/-** button to switch to the next alarm input/output page if there're more than 16 alarm inputs or 8 alarm outputs. Tap **Back** button to return to split-window display.

Alarm I/O

Notification		ON
Alarm In	01 - 16	- +
Set/unset		(red)
Panic		(green)
Alarm Out		- +

1 OFF	2 OFF	3 OFF	4 OFF
5 OFF	6 OFF	7 OFF	8 OFF

■ 🔺 **button**
Tap this button to mirror/flip/rotate the video of the focus window.

■ 📱 **button**
Tap this button to display the documents for the mobile device, select the archived file(s) to be replayed, and then tap OK to start playback. Please note that multiple files can be selected, and the app will display the appropriate split windows for playback. To copy the archived files to the mobile device, please just connect the mobile device to PC, and then copy the files from PC.

■ ⛶ **button**
Tap this button to display full video while in landscape mode.

- ■ **button**

  Tap this button to select record stream video or dual stream video while in 1-W display.
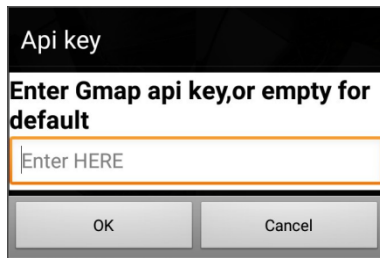
- ■ **button**

  Tap this button to the Backup display.

  - ■ : Set Backup file path.
  - ■ Start Time: Set the start time of the backup file.
  - ■ End Time: Set the end time of the backup file.
  - ■ Main/Sub: Set to backup Main Stream (Main) or Sub Stream (Sub) video.
  - ■ Channel: Set the backup camera channel.
  - ■ : Click this button to start backing up files. When the backup is completed, a popup message will be displayed.
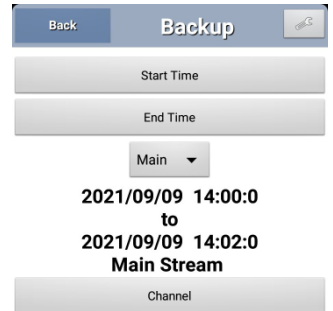
- ■ **button**

  Tap this button to input the Google Map API Key.

3.4 Playback Operations

At playback mode, the playback buttons will be shown on the lower corner. The user may tap button to display the main operation buttons. (**Please note that the user must be at least Supervisor level to be able to playback DVR video.**)

- ■ **button**

  Tap this button to play the recorded video/audio at forward speed 1X, or pause the playback. If the playback is paused, tap this button again to resume playing. Note that audio can only be played at forward speed 1X.

- ■ **button**

  Tap this button to stop playing. The split-window display will return to live monitoring mode.

- ■ **button**
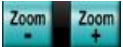
  Tap this button for fast forward playback at different speed.

- ■ [◀◀] **button**

  Tap this button for fast backward playback at different speed.

- ■ [▶|] **button**

  Tap this button to play the recorded images frame by frame.

- ■ [|◀] **button**

  Tap this button to go back a few seconds for playback.

3.5 PTZ Operations

In 1-W live display, if the camera is a PTZ camera, the user may tap [▶] button to display the PTZ operation buttons. In PTZ operation mode, the user may tap [◀] button to display the main operation buttons, or tap [▶] button to display the other PTZ operation buttons. The detailed operations are as below:

- ■ **▲▼**

  Press in the upper/lower area of the video window to tilt up/down the camera, release to stop.

- ■ **◄►**

  Press in the left/right area of the video window to pan left/right the camera, release to stop.

- ■ [Zoom -] [Zoom +] **button**

  Press these buttons to zoom out/in the camera. Release these buttons to stop.

- ■ [Goto] **button**

  Tap this button to move the camera to the preset position.
  Tap numeric buttons **0-5** to move the camera to the corresponding preset position, or tap **More** button([icon]) to call up Goto dialog, and then enter the preset position.

- ■ [Auto Pan] **button**

  Tap this button to start/stop Auto Pan.

- ■ [SEQ] **button**

  Tap this button to start/stop PTZ SEQ mode. If SEQ mode is on, the camera will go to available preset positions 0-9 (or 1-10) sequentially.

- ■ [Focus -] [Focus +] **button**

  Press these buttons to focus near/far the camera, release to stop.

- ■ [Iris -] [Iris +] **button**

  Press these buttons to decrease/increase iris of the camera, release to stop.

- ■ [Set Preset] [Clear Preset] **button**

  Press these buttons to set/clear preset position of the camera.