

**Ganz CORTROL Mobile**



User Manual

## 1. CORTROL Mobile Client

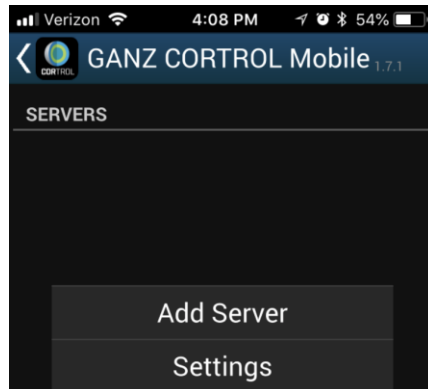
Install the CORTROL Mobile application from Google Play (for Android users) or iTunes (for iOS users).

### Supported OS:

Android 2.2 or higher & iOS 6.1 or higher

### Demo Server

By default, the CORTROL Demo server connection is already configured.



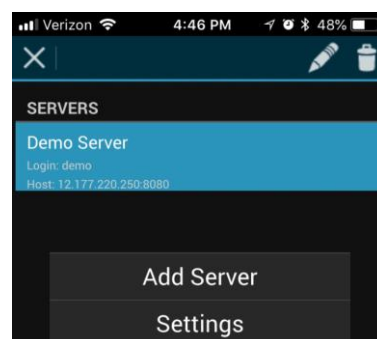
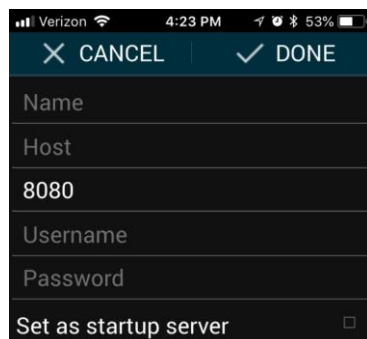
## 2. Add a Server

Tap the *Add Server* button on the bottom panel to create a new server connection. The following parameters should be filled in:

- **Name:** Enter a server friendly name, example: "Demo Server"
- **Host:** Enter the server IP or URL (www.DemoServer.com).
- **Port:** Default is 8080. The HTTP port use by the CORTROL Server (Prime/Premier/Global/Recording Server).
- **Username:** The user account ID to connect to the Ganz CORTROL server.
- **Password:** The user account password to connect to the Ganz CORTROL server.
- **Set as startup Server:** select if you wish to automatically connect to the target server upon starting the application.
  - On startup, the app will load the server list and try to connect to the selected server automatically.

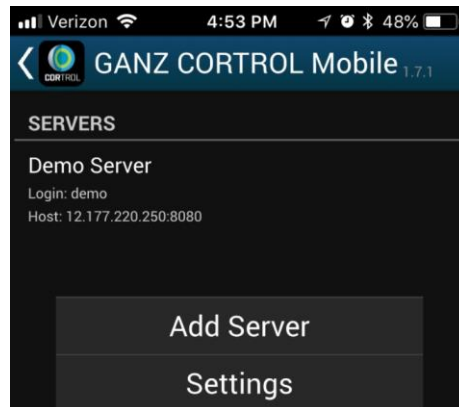
When ready, tap *Done* to save and exit the dialog box, or tap *Cancel* to discard the changes made and go back to the main menu.

To edit the existing server settings, tap and hold the server name in the list, then release and then tap the pencil icon that appears in the upper-right-hand corner. The existing server configurations can also be removed by tapping the trashcan icon.



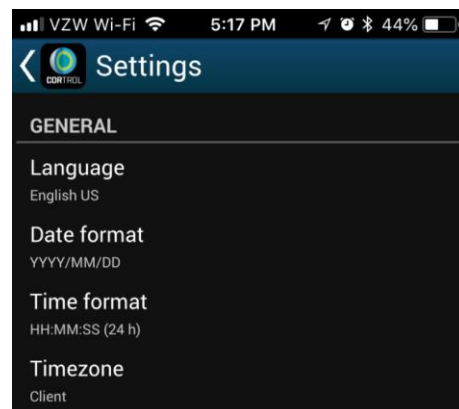
### 3. Settings



Tap the Settings button on the bottom panel to edit the function parameters of the mobile app.  
Note that these settings are global to the mobile app, and effective for all servers.

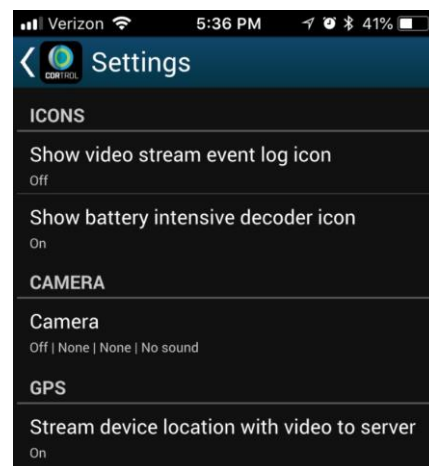
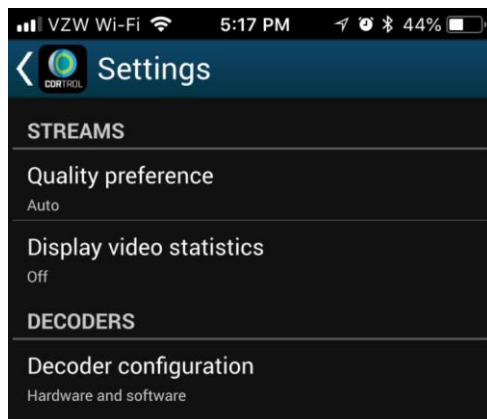



- **General**

- **Language:** set application localization here
- **Date Format:** set the date presentation format you want the application to use, e.g.,
- **Time Format:** set the time presentation format you want the application to use, e.g.,
- **Timezone:** choose between your mobile client or connected server time zone

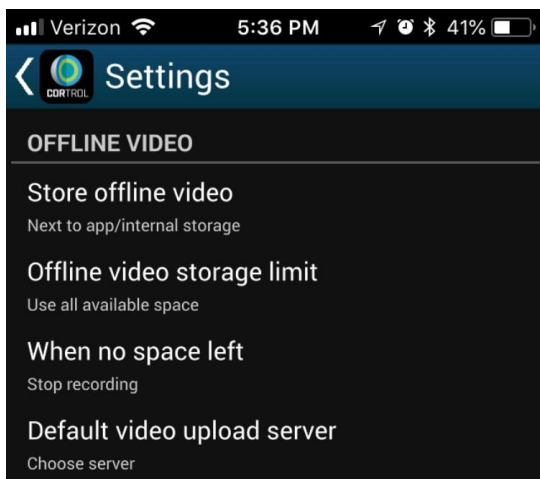


- **Streams**
  - **Quality preference**
    - Auto: Based on bandwidth availability, the most appropriate stream will be displayed
    - Main: Only the first (main) stream, the larger resolution, will be used
    - Sub stream: Only the secondary (sub) stream, the smaller resolution will be used
  - **Display video statistics**
    - ON/OFF: defines if video stream properties are shown for the incoming streams
- **Decoder configuration:** choose how the incoming streams will be decoded
  - **Hardware and software:** Hardware for h.264, and software for h.265 (warning: h.265 is battery intensive!)
  - **Hardware only:** Hardware for h.264 only, h.265 not hardware supported
  - **Per codec configuration:** choose decoding settings individually for each of the expected codecs
- **Icons**
  - **Show video stream event log icon** : On/Off - the icon will appear when in "On"
  - **Show battery intensive decoder icon** : On/Off - the icon will appear when in use
- **Camera**
  - **Camera preferences for the reverse streaming**
    - Off: choose this if you do not plan to stream device's video to the server
    - Back Camera: Resolution preference/FPS preference/Microphone On-Off /Preview
    - Front Camera: Resolution preference/FPS preference/Microphone On-Off /Preview
    - Camera preview: Scroll up to review the live camera stream
- **GPS**
  - **Stream device location with video to server:** On/Off (Requires CORTROL 1.8.x Geo location service)



 When enabling camera and sound, you may be asked to confirm permissions for the app to access your phone's camera(s) and microphone. Select YES to grant access to these components if you wish to be able to stream video and audio from your phone to the server and clients connected to it.

- **Offline Video**
  - **Store offline video:**
    - Next to app/internal storage (iOS/Android)
    - On emulated external storage (Android)
  - **Offline video storage limit:**
    - Use all available space
    - 20GB, 10GB, 5GB, 2GB, 1GB, 500MB, 200MB, 100MB
  - **When no space left:**
    - Overwrite oldest video
    - Stop recording
  - **Default video upload server:**
    - Choose server
    - Selection from a list of entered CORTROL Recording Servers
- **Widgets**
  - **Widget update interval**
    - Automatically load new frame every 30 seconds
    - Automatically load new frame every 1, 2, 5, 10, 15 or 30 minutes
    - Automatically load new frame every 1 hour
- **Network**
  - **Allow app to use**
    - WiFi only (includes VPN)
    - WiFi and mobile data
  - **Allow widgets to use**
    - WiFi only (includes VPN)
    - WiFi and mobile data
- **About**
  - **Build version:** Application version information
  - **Legal info:** Tap to view

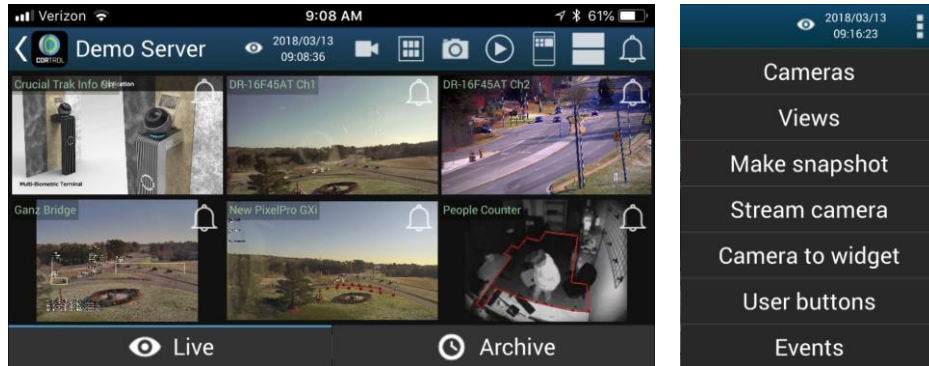



## Menu Controls

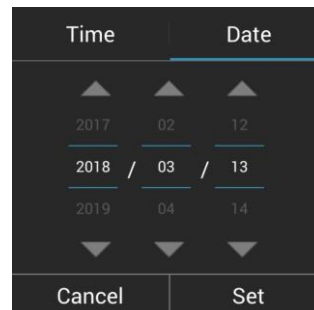
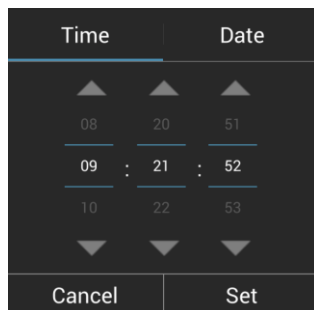
You can find several controls in the upper right corner.


For landscape orientation, the menu controls spread across the screen, indicating each function by icon.

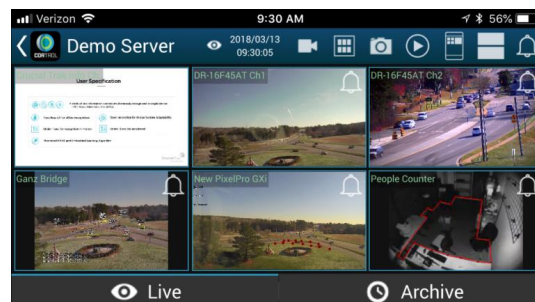
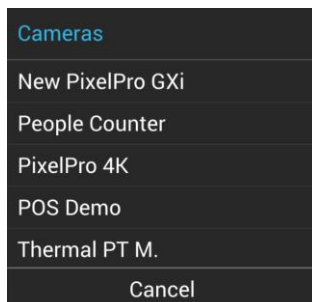
For portrait orientation, all menu controls (except for the timer) collapse into a single three button drop-down list.




- **Eye - Date/Time**  2018/03/13 09:16:23: Shows current server time, and acts as the archive playback function
  - **Eye - Date/Time:** Tap the icon to select a specific time and date
  - **Timer/Date:**
    - Tap the UP/DOWN arrows or swipe UP/DOWN to change the value of each position
    - Switch between the *Time* and *Date* tabs by tapping them
    - Press *Cancel* to go back to Live mode, or tap *Set* to proceed with playback

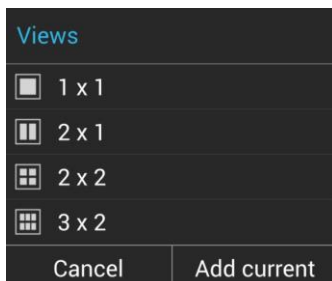



- **Cameras:** Tap the camera icon  to select a camera from the available camera list.
  - Tap a camera to select it, and all channels will highlight blue for selection, tap a channel.
  - A camera can only be mapped once; a second attempt will result in placement on the new position and removal from the old one.

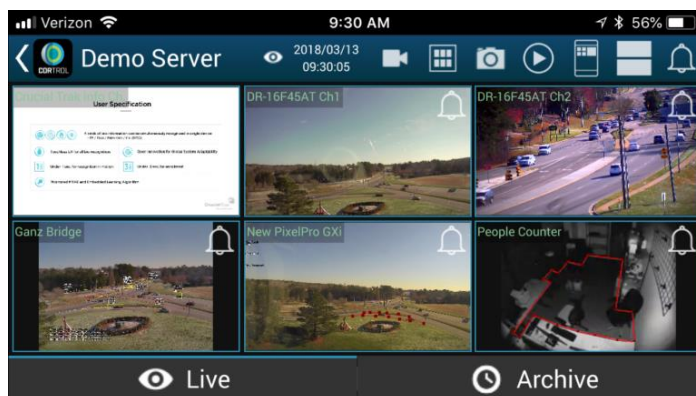





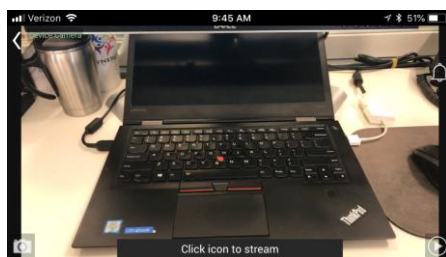
- **Views:** Tap the views icon  to open the layout selection.
  - Currently available layouts are 1x1, 2x1, 2x2, and 3x2.
  - "Add Current," allows saving current layout under user specified name.
  - If a larger layout is selected, existing cameras are mapped automatically, as extra channels are blank.




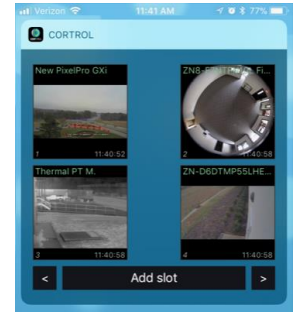
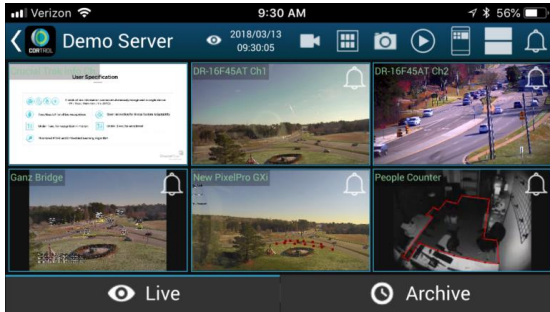
- **Snapshot:** Tap the snapshot icon  to save a snapshot to the gallery.
  - When snapshot is selected, all channels will highlight blue for selection.
  - Tapping a channel will save a snapshot of it to the local mobile device.




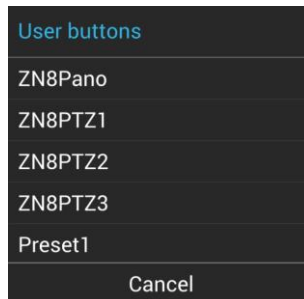
- **Stream Mobile Camera:** Tap the stream icon  to stream either the front or back camera to the recording server.
  - A preview of the camera view will appear, with the option to "Click icon to stream"
  - Once the stream icon is selected, the stream will be sent by either Wi-Fi or Cellular to a recording server.
  - Skip to the section "Streaming the Camera" for instructions of setting up and authorizing the camera stream.




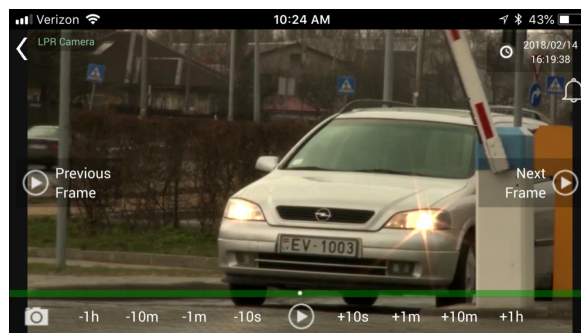
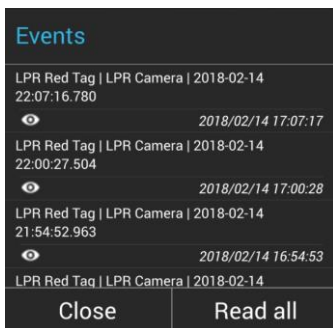
- **Camera to Widget:** Tap the widget icon  then select a camera to send to the widget.
  - When sent to widget is selected, all channels will highlight blue for selection.
  - Selecting a channel will then request selecting a widget slot.
  - Skip to the section “Widget” for instructions of using the widget function.



- **User buttons:** Tap the user buttons icon  then select one of the predefined user buttons from the list.
  - The list of User buttons that appears is directly from predefined user buttons within CORTROL.
  - Selecting a user button will activate the programmed function of that user button.
  - A message will appear indicating that the button has been pressed, and the function activated.



- **Events:** Tap the events icon  and the events list will appear.
  - From the list, scroll up/down to review the events.
  - Selecting an event will bring up the archive playback for the selected event.
  - Skip to the section “Archive Playback” for instructions of using the archive playback function.





## 4. Streaming the Camera

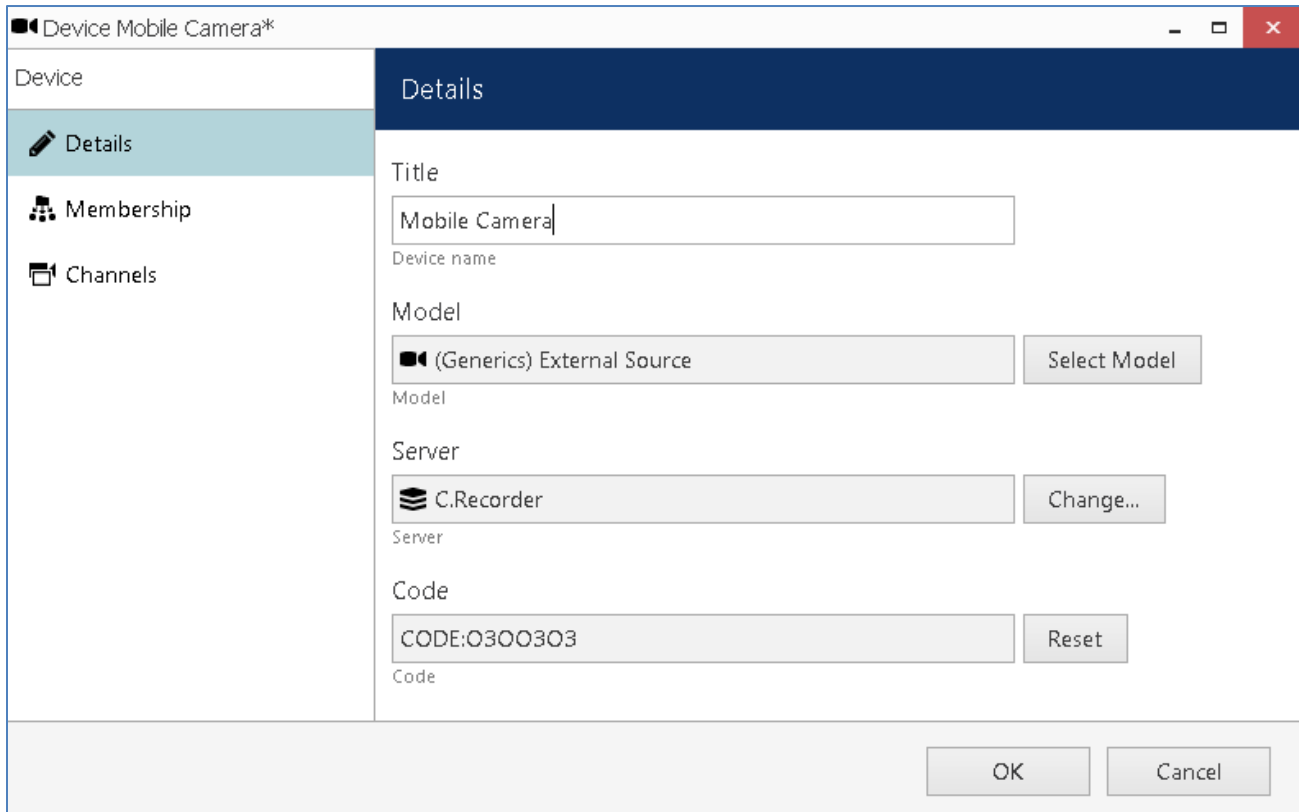
GANZ CONTROL Mobile Application offers the option to stream the video captured by mobile devices front or back camera to a CONTROL Recording Server with the intent to record, and or live view on connected clients. To do so, the mobile device needs to be add to the CONTROL devices, and authorized for streaming back to the server.

### Device Registration Token:

For the mobile device to stream to CONTROL, a device registration token must be created.

- Launch the CONTROL Management Console
- Go to the Configuration section and choose Devices from the menu on the left
- On the upper panel, click the + New device button to create a new device entry
- Enter the desired name and set the Model to (Generics) - External Source
- Select the Recording Server to which the steam will be sent to
- At this point, note the code generated, but do not enter it into the mobile app yet
- Click OK to confirm the new device entry in CONTROL

Note: a token can only be used once per device, as each device requires a unique code



Device Mobile Camera\*

Device

Details

Details

Membership

Channels

Title

Mobile Camera

Device name

Model

(Generics) External Source

Select Model

Model

Server

C.Recorder

Change...

Server

Code

CODE:0300303

Reset

Code

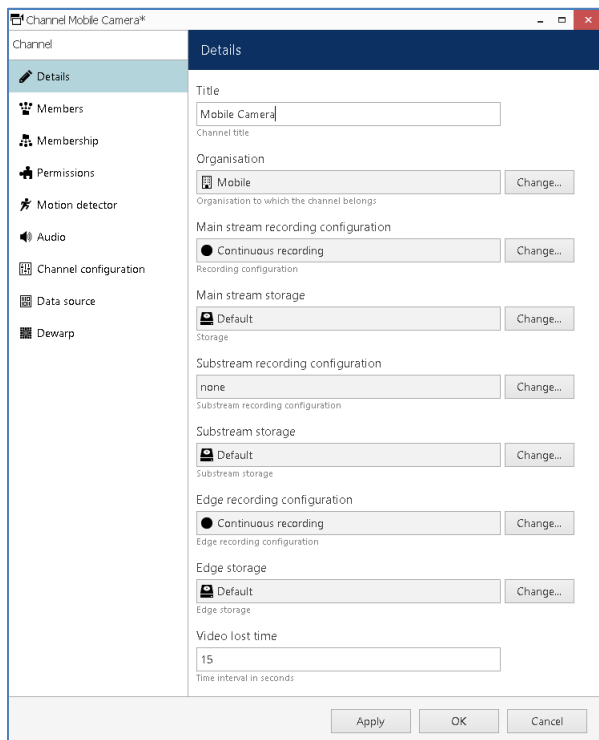
OK

Cancel

### Channel setup:

For the mobile device to stream to CONTROL, the channel must be configured.

- Launch the CONTROL Management Console
- Go to the Configuration section and choose Channels from the menu on the left
- Scroll through the channels and select the mobile device channel entry
- Select and change the following channel options to match policy requirements;
  - Organization: Select the organization to which the mobile device will belong to
  - Main stream recording configuration: Set to record continuously, or server-side motion detection
  - Main stream storage: Select the storage location for recorded video from the mobile device
  - Substream recording configuration: N/A – Mobile devices do not offer a substream
  - Substream storage: N/A – Mobile devices do not offer a substream
  - Edge recording configuration: Set to record continuously, or server-side motion detection
  - Edge storage: Select the storage location for recorded video from the mobile device
  - Video lost time: Select the allotted time when there is no stream before an event would trigger.
- Select Membership and associate the mobile device to the required group, or groups.
  - It is assumed that all user rights might be assigned directly to a group object
  - If user rights are not assigned by way of a group, select Permissions, and assign as required



**Channel Mobile Camera\***

Channel

**Details**

Title: Mobile Camera

Channel title

Organisation: Mobile

Organisation to which the channel belongs

Main stream recording configuration: Continuous recording

Recording configuration

Main stream storage: Default

Storage

Substream recording configuration: none

Substream recording configuration

Substream storage: Default

Substream storage

Edge recording configuration: Continuous recording

Edge recording configuration

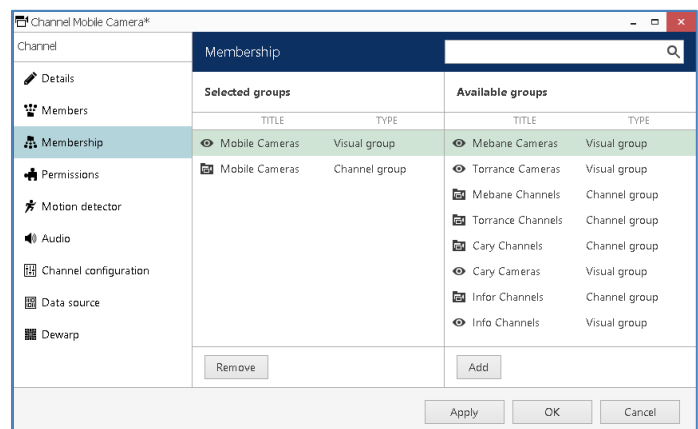
Edge storage: Default

Edge storage

Video lost time: 15

Time interval in seconds

Apply OK Cancel



**Channel Mobile Camera\***

Channel

**Membership**

Selected groups		Available groups	
TITLE	TYPE	TITLE	TYPE
Mobile Cameras	Visual group	Mebane Cameras	Visual group
Mobile Cameras	Channel group	Torrance Cameras	Visual group
		Mebane Channels	Channel group
		Torrance Channels	Channel group
		Cary Channels	Channel group
		Cary Cameras	Visual group
		Infor Channels	Channel group
		Info Channels	Visual group

Remove Add

Apply OK Cancel


### Mobile device setup:

For the mobile device to stream to CORTROL, the issued registration token must be entered into the mobile app.


Go to the mobile app -> Server list -> Settings -> Camera

In the camera list choose the required video preferences; note options may vary depending on the device capabilities:

- Camera: back/front
- Resolution: will vary per device capabilities
- FPS: from 10 up to max allowed by device
- Camera Microphone: disable/enable sound

 For Android 6.0 and newer, go to the mobile device's system permissions and explicitly allow Ganz CORTROL Mobile to use the camera. If permission is not configured, Android will deny access to this component.

Once the camera of the mobile device is configured, select a CORTROL Recording Server from the server list, and connect.

Assuming the mobile device is in landscape mode, tap the stream icon  to stream the camera.

A camera preview and a message in the bottom saying Click icon to stream will appear.

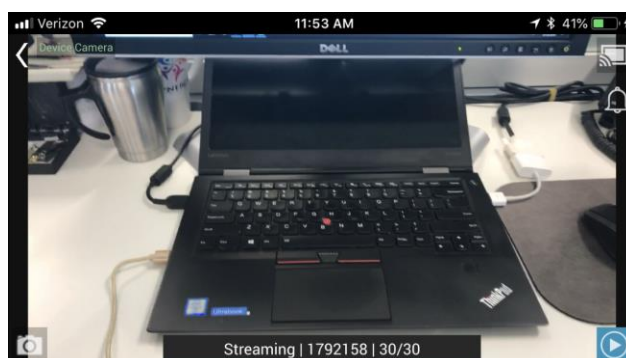
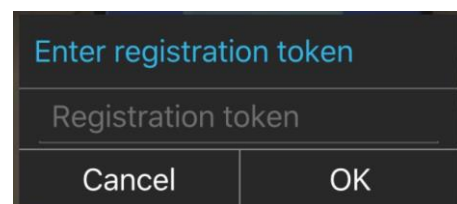
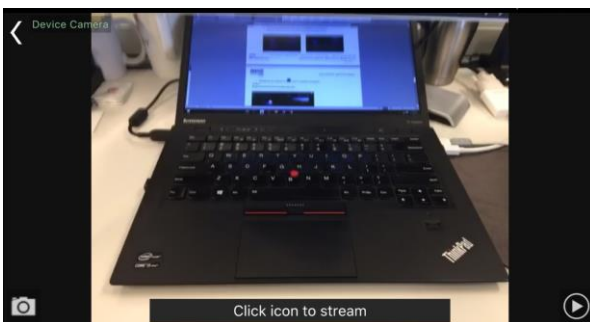
Click the stream icon  in the bottom right corner to initiate streaming (the button will turn blue)

The “Enter registration token” dialog box will appear.


Enter the code from the Ganz CORTROL Console in the registration token dialog box, and select “Ok”.

The Mobile app will start streaming and the stream should be visible from the CORTROL Client

The message in the bottom line will change to Streaming and will show statistics. In order to stop streaming, tap the stream icon once again.



## 5. Archive Playback

To switch to Archive mode, tap the *Archive* option .

- Alternatively, tap the eye/timer icon to go to a specific time: choose a point in time to begin playback at, then tap *Set*.

Timer can be manipulated in the following manner:

- Use UP/DOWN arrows or swipe UP/DOWN to change the value of each position
- Switch between the *Time* and *Date* tabs by tapping them
- Press *Cancel* to go back to Live mode, or tap *Set* to proceed with playback

When switching to Archive mode from a multiple camera view: all viewports will be highlighted blue - tap a camera to select it. Note that this mode enables you to view one camera at a time: selecting a larger layout will result in an automatic switch to live view.

Archive timeline controls:

- Green** colour represents data, **maroon** means there is no recorded data for that period
- Tap the **Next/Previous Frame** arrows on the sides to go to the next/previous available picture
- Use the **Play** button in the center to start/pause playback
- Tap the +/- labels to jump back/forward by ten seconds, one minute, ten minutes or an hour
- Tap the camera icon in the bottom-left-hand corner to save a **snapshot**
- Tap the Date/Time icon to specify a date/time to begin playback from.

Swipe left/right to switch between cameras within the current layout; tap and hold the image to bring up the available camera list (just as in the camera selection menu, this will exit the current layout and switch to single camera layout). Use the timeline below to browse the recorded video and use the play/stop buttons to control the playback.



## 6. Widgets


Widgets are information elements that can be placed on the home screen on Android devices and in the Today view on iOS devices. Individual channels that require frequent monitoring can be placed as Ganz CORTROL Mobile widgets with moderate or low (from twice per minute down to four times per hour) refresh rate so that you do not have to open the whole app each time you need to check the channel.

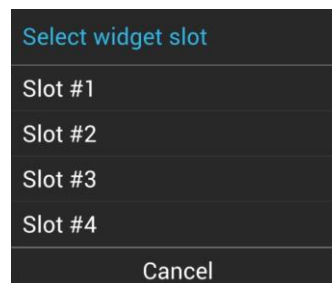
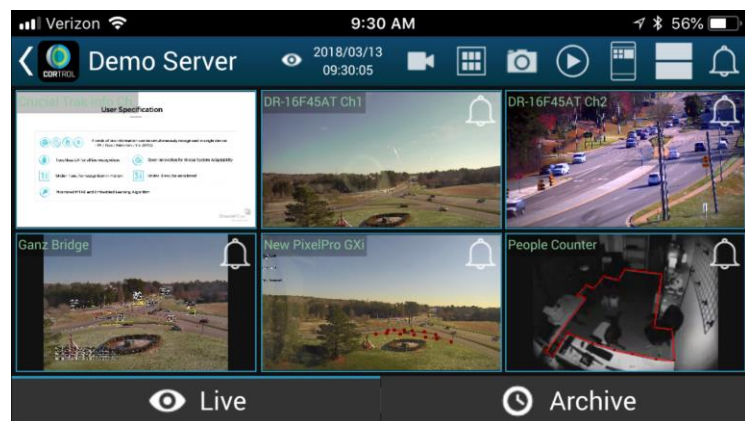
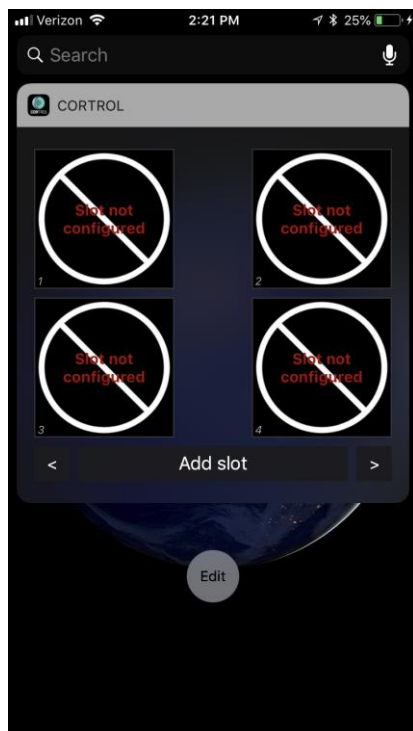
For channels accessible via Internet, this means you can monitor them even if you are in a remote location on cellular. Relatively low frame refresh frequency does not use much bandwidth. You can also limit widgets to use WiFi connection only.

General steps to add and use a widget are the following:


- Add as many widgets as you need, one widget per channel,
- Go to Ganz CORTROL Mobile app settings and set widget preferences (for details, see the *Settings* section above or 'Camera to Widget' below).
- Assign channels to widgets.



- **Camera to Widget:** Tap the widget icon  then select a camera to send to the widget.
  - When sent to widget is selected, all channels will highlight blue for selection.
  - Selecting a channel will then request selecting a widget slot.
  - Skip to the section "Widget" for instructions of using the widget function.




To add a widget on an **Android device**:

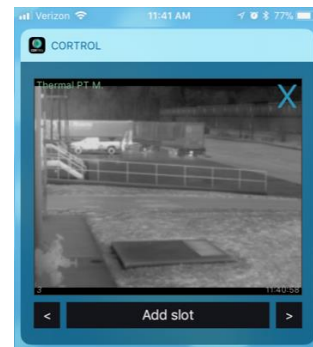
- Tap on a blank space on the home screen and hold for a couple of seconds until the menus appear,
- Tap the *Widgets* menu at the bottom of the screen, locate Ganz CORTROL Mobile widget and then drag to place it onto the desired place. Widget of default size (2x2 cells) will appear with a *Slot not configured* message inside:
  - Drag the orange borders to adjust the widget size, then tap outside the widget to exit the adjustment mode (you can change the widget position and size at any time later by long tapping the widget and then moving it)
  - Tap the widget once: Ganz CORTROL Mobile application will open, allowing you to choose the channel,
- In the Ganz CORTROL Mobile app:
  - Go to the app settings before connecting to the server and choose how frequently the widgets will be refreshed, and their network usage preference (see the *Settings/widgets* section above for details)
  - Connect to a server, choose *Camera to widget*  from the main menu, then tap a channel to choose it
    - All channels will be highlighted with blue frames, swipe left or right to choose from more channels
    - Choose a widget slot from the list by tapping it, (a slot may be empty or already contain a channel)
- Go back to the home screen: the assigned channel should now be present in the widget
  - The channel name in the top left corner
  - The slot number in the bottom left corner
  - The last refresh time in the bottom right corner



To replace the channel, follow the steps 3-4 above; to remove the widget, simply tap and hold it until the menus appear and then drag and drop it onto the Recycle bin icon. Tapping a widget will result in opening the corresponding app, as described above.




- Swipe to the right, to bring up the “Today View” screen.
- Scroll to the bottom to reach for the Edit menu, tap *Edit*
- Locate the Ganz CORTROL Mobile app and tap the (+) sign to the left of it: the app will be added to the list above
- Tap *Done* when finished; the widget will appear under Widgets, allowing you to add slots
- Tap any slot to open the Ganz CORTROL Mobile app,
- In the Ganz CORTROL Mobile app:
  - Go to the app settings before connecting to the server and choose how frequently the widgets will be refreshed, and their network usage preference (see the *Settings/widgets* section above for details)
  - Connect to a server, choose *Camera to widget*  from the main menu, then tap a channel to choose it
    - All channels will be highlighted with blue frames, swipe left or right to choose from more channels
    - Choose a widget slot from the list by tapping it, (a slot may be empty or already contain a channel)
- Go back to the Today view: the assigned channel should now be present in the widget
  - The channel name in the top left corner
  - The slot number in the bottom left corner
  - The last refresh time in the bottom right corner
- Tap on a channel to expand to a single channel.
- Tap on the expanded channel, to launch directly into the CORTROL Mobile App.



## 7. User Buttons

User buttons are software buttons, controls used in Ganz CONTROL Client and for manual event triggering: upon clicking or tapping a user button, the action associated with it is triggered. The action, the user button itself and the rule that makes the user button work are all pre-configured via Ganz CONTROL Console; see corresponding sections of the server management manual for details.

If you are connected to a server that has configured user buttons and your user account has permissions to use them, the buttons will be available in the app. To access them, tap the main menu and choose *User buttons* (vertical view) or simply tap the corresponding button  on the top panel (horizontal screen orientation). Then, choose the button you want to use and tap it: the associated action will be triggered and you will receive a confirmation in the bottom of the screen.

### Events

Ganz CONTROL Mobile app allows you to receive push notifications from the Ganz CONTROL server once they have been set up via Ganz CONTROL Console *Event & Action* management.

In order to do this, create an action of the *Send event to client* type via Ganz CONTROL Console and enable the *Display event in mobile application* option, then attach this action to your desired event in the *Rules* section. When creating the rule, do not forget to set the target channel for it: the notifications will appear for that particular channel and their availability can be controlled via channel access permissions. It is possible to limit the reception of the notifications to certain user profile or user group. You will find more details on how this is done in the *Events & Actions* section, under *Actions*.

Triggered notifications will immediately appear on the mobile device(s) that have Ganz CONTROL Mobile app installed with the target Ganz CONTROL server configured (connected user account must have permissions for the target channel). The app itself may be not running: events will pop up as regular text message notifications. If the target mobile device is offline, the notifications will arrive shortly after it re-connects to a network that provides required server connection.