

Security Management System Configuring Infinova 2117 CCTV Keyboard (21.05.23.01)

(A) Introduction

This document explains the configuration of Configuring Infinova 2217 CCTV Keyboard for use in the Security Management System.

The Infinova 2117 CCTV Keyboard can be configured for the Security Management System server software or for the Security Management System client software.

Notes –

1. Infinova 2117 CCTV Keyboard can be configured with only one software instance at a time. Hence it can be either Security Management System server software or Security Management System client software.
2. During the deployments, no videos are expected to be opened in the server software, hence during the deployments, the Infinova 2117 CCTV Keyboard is expected to be configured for the Security Management System client software. Hence this document explains the steps for using Infinova 2117 CCTV Keyboard with Infinova 2217 VMS Client software
3. If CCTV Keyboard is expected to be used with multiple Security Management System client software instances (which would be installed on multiple client workstation computers), multiple Infinova 2117 CCTV Keyboard devices need to be included in the solution; one for each client workstation computer.

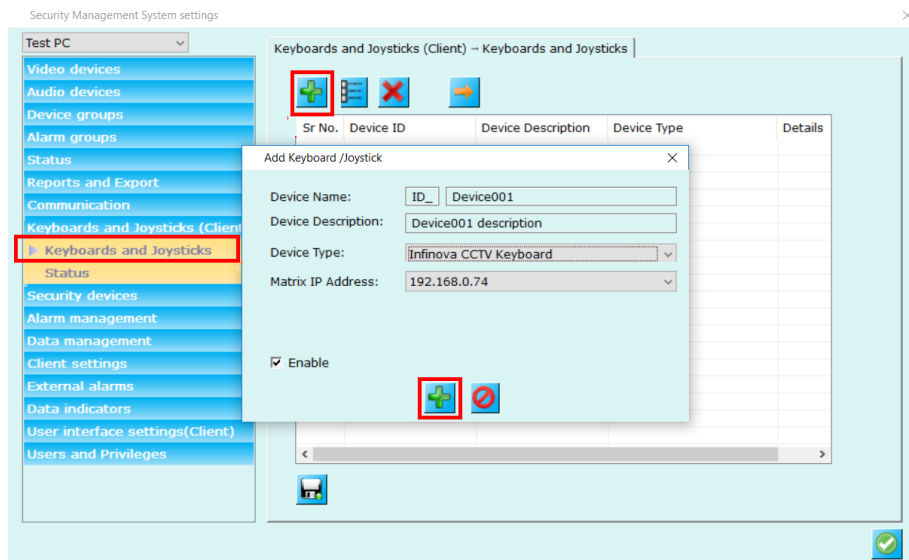
(B) Installing UDP Chip

1. Infinova 2117 CCTV Keyboard needs to have UDP chip installed in it, to be able to communicate with the Security Management System. Please communicate with the Infinova 2117 CCTV Keyboard vendor to confirm that the CCTV keyboard device has the UDP chip installed

Note – This is important requirement. If UDP chip is not installed, Infinova 2117 CCTV Keyboard will not work with Security Management System software

(C) Configuring 'Security Management System Client' software

1. Open and connect 'Security Management System Client' software to the 'Security Management System Server' software.
2. Click on the 'Settings->Settings' menu. This will pop up the 'Settings dialog box'.
3. Navigate to the 'Keyboards and Joysticks (Client) -> Keyboards and Joysticks' page from the left-hand side navigation menu.
4. Click on the add button. This will pop up the 'Add Keyboard / Joystick' dialog box.



5. On the 'Add Keyboard/Joystick' dialog box,

Please type the 'Device Name', next to the 'ID_' textbox; it can contain any characters or digits. Usually it's a short ID string. The 'Device Name' should be unique for every new keyboard/Joystick added to the system. You can also keep it default, as the software generates unique names automatically for every new device added

Please enter short description.

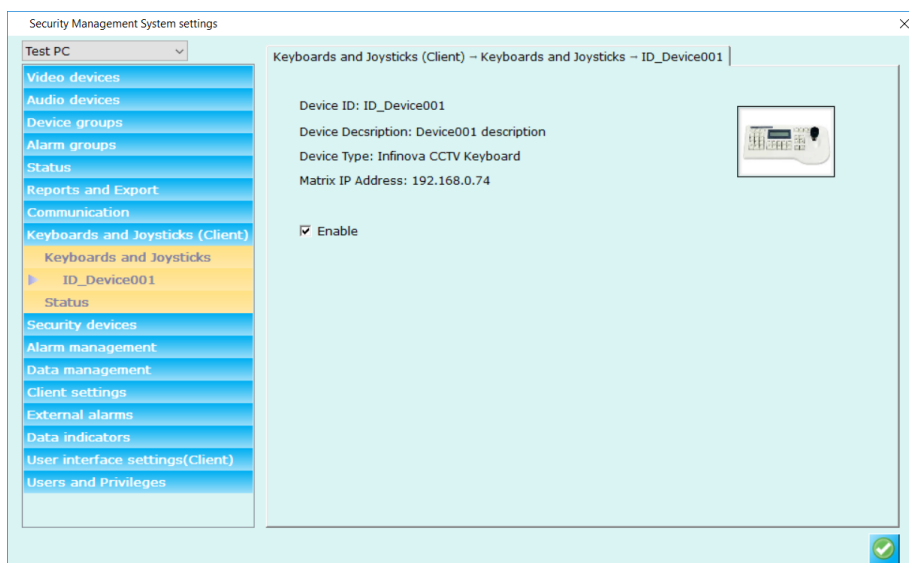
Please select 'Device Type' as 'Infinova CCTV Keyboard' from the available options.

Select Matrix IP address from the listed IP addresses. This will be the IP address of the machine where 'Security Management System Client' software (this software) is running.

This will be the same IP address that will be configured in the Infinova IP CCTV keyboard in section '(C) One Time Configuration in CCTV Keyboard' from this document.

6. Click on add button to complete adding the keyboard into the system, and to close the 'Add Keyboard/Joystick' dialog box.

'Security Management System Client' software will show the link related to the newly added device in the left-side navigation menu.

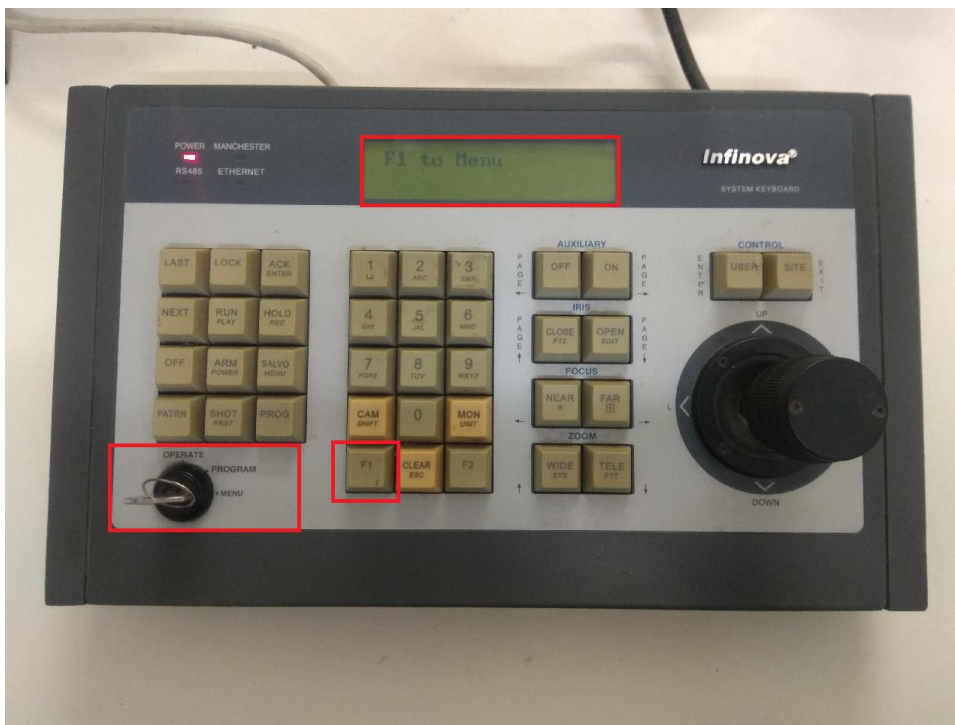


7. The Infinova IP CCTV keyboard is now configured and can be used with the 'Security Management System Client' software.

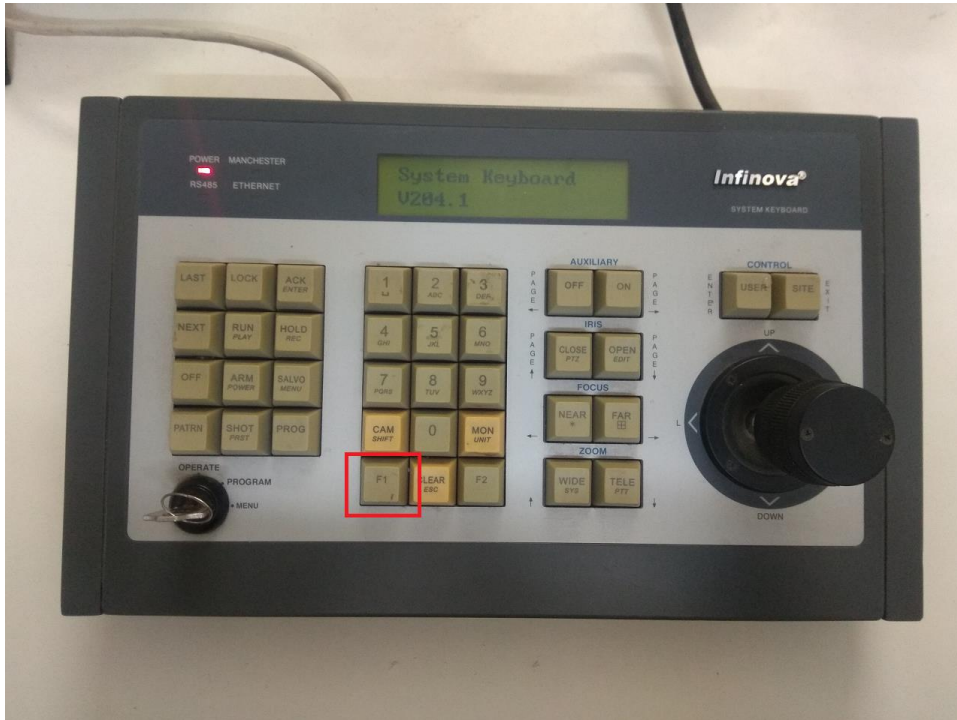
(D) One Time Configuration in CCTV Keyboard

One-time configuration includes setting up Infinova 2117 CCTV Keyboard for communicating through 'Ethernet' and setting the Keyboard local IP address, Keyboard matrix IP address. Following are the configuration steps for the same -

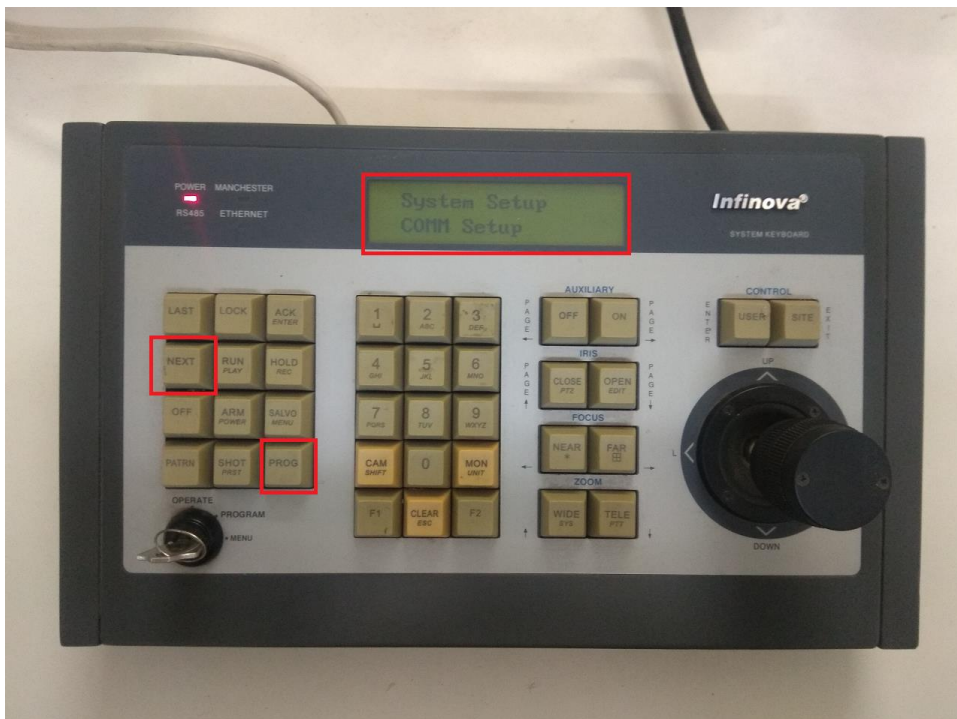
1. Connect 'Infinova IP CCTV keyboard' to the network. 'Ethernet' port is available on the keyboard for network connection.
2. Rotate the control key to set 'MENU' mode.



3. Press 'F1' button on the keyboard to enter into the menu.



4. Press 'PROG' key to get menu list.
Use 'NEXT' button to navigate through menus. Select 'COMM setup' menu
(Note - 'COMM setup' may be the first menu displayed)

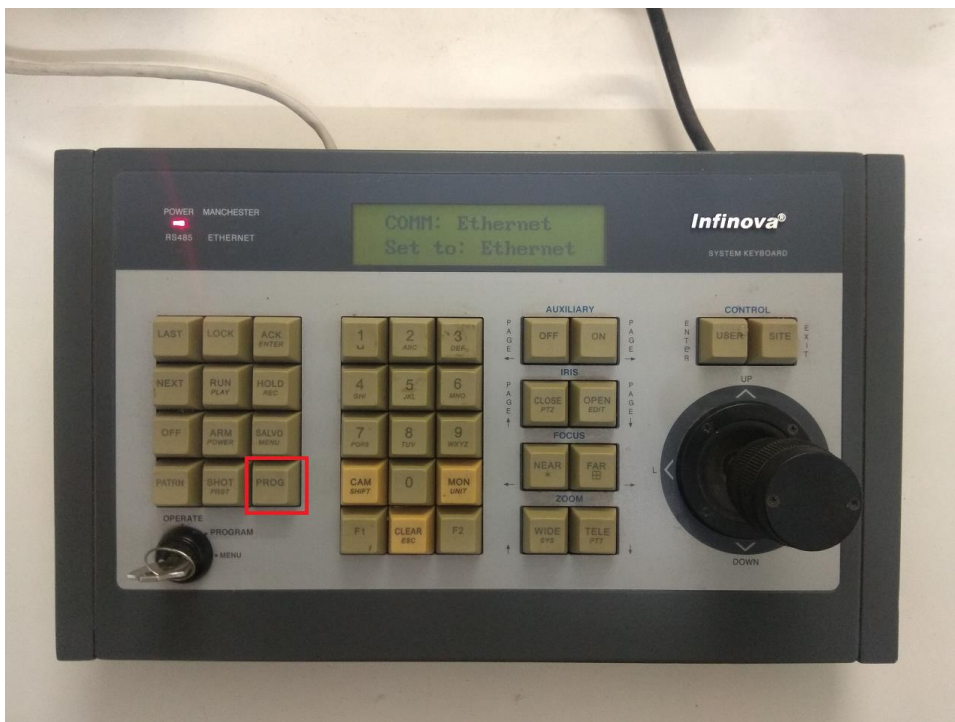


5. Press 'PROG' button.

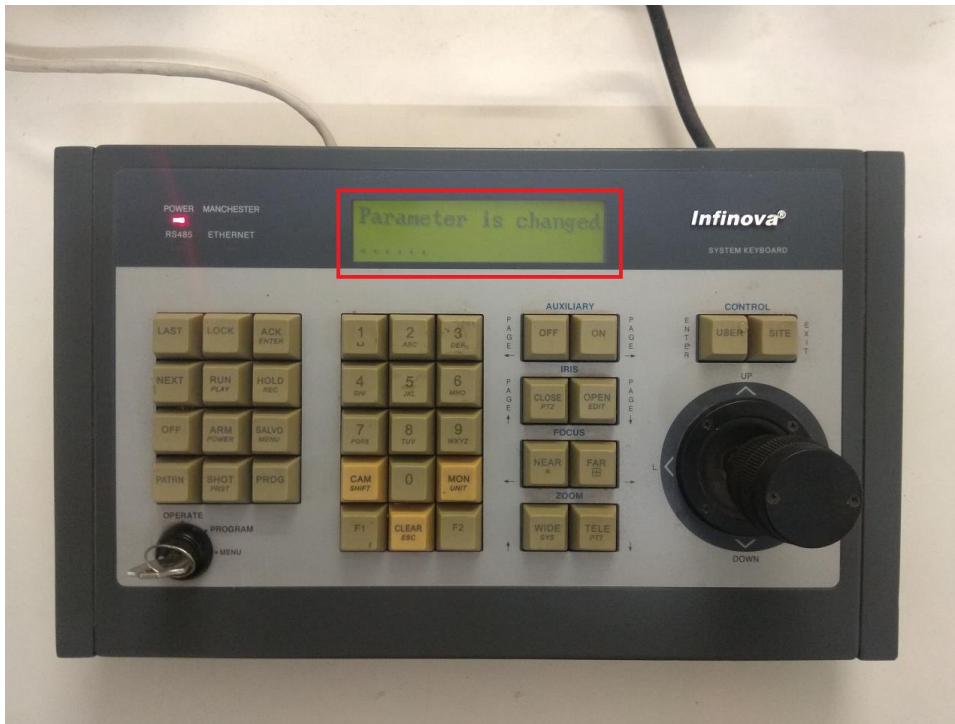
6. Select 'COMM Select' menu and press 'PROG' menu to program communication setup.



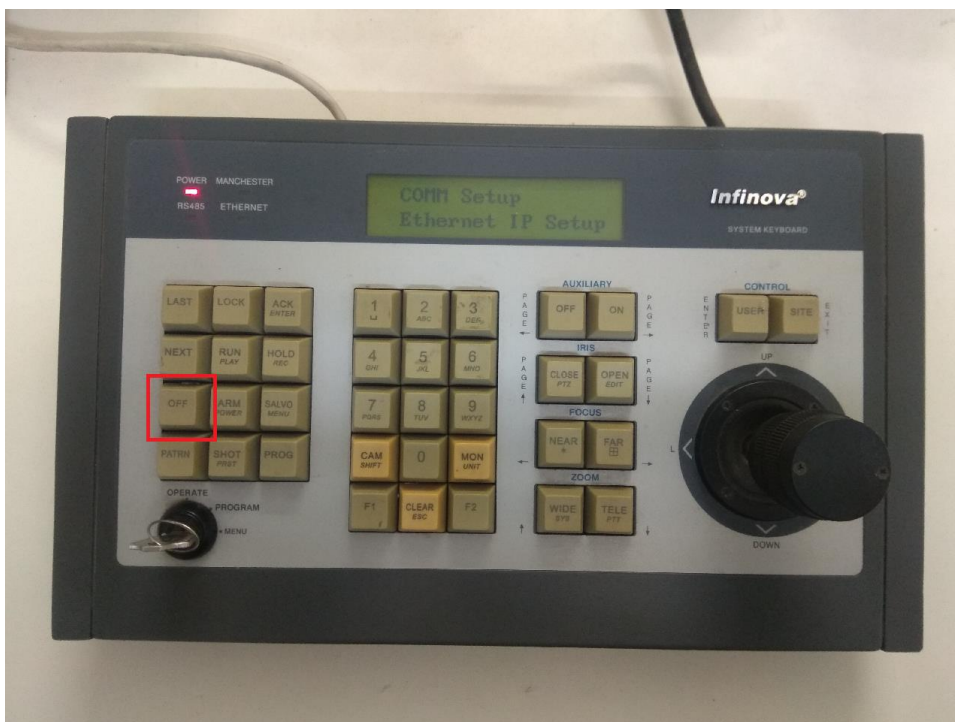
7. Select 'COMM' to 'Ethernet' – use 'ACK' button to navigate and 'PROG' button to confirm.



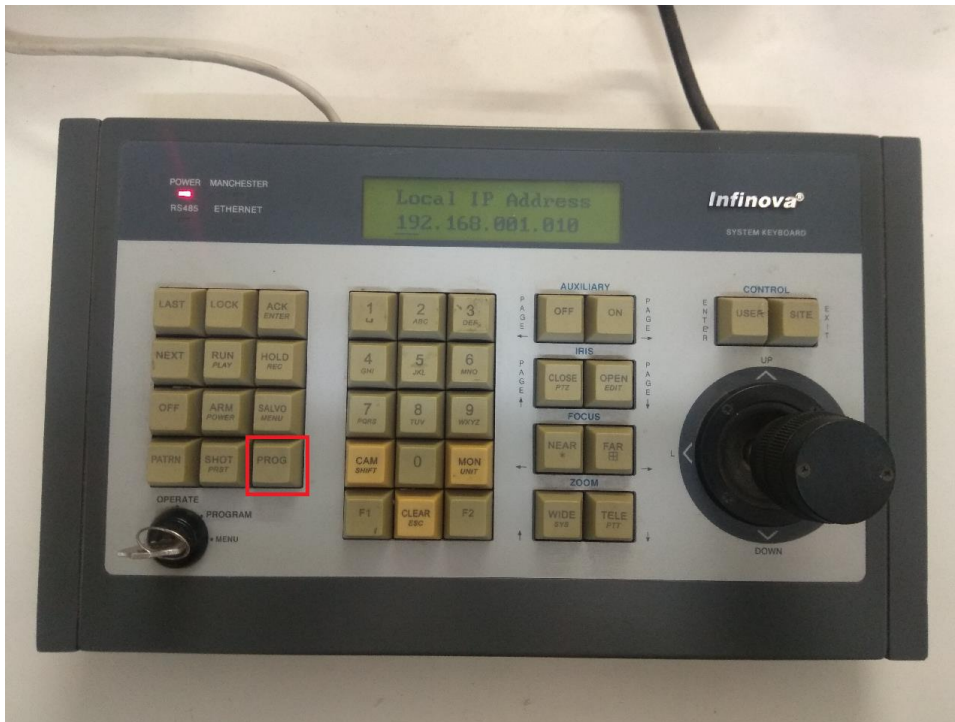
8. The keyboard will show 'Parameter is changed...' message on the display.



9. Press 'OFF' button to come back to the previous menu and then press 'NEXT' few times until 'Ethernet IP Setup' menu is selection is indicated on the display.



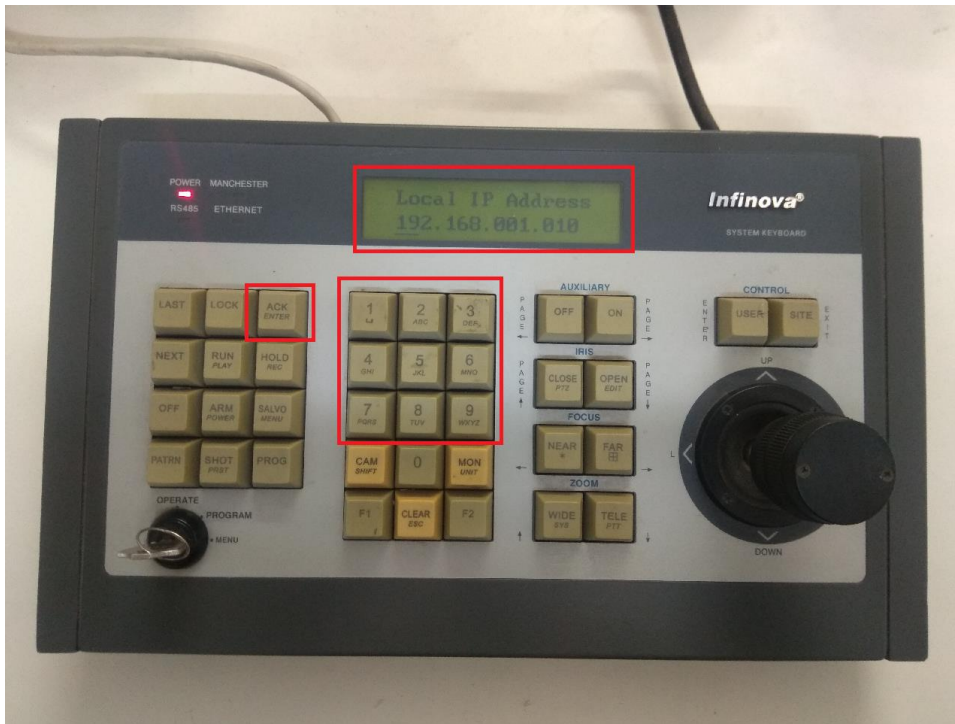
10. Press 'PROG' button



11. 'Local IP address' is any IP address of the Infinova 2117 IP CCTV keyboard.

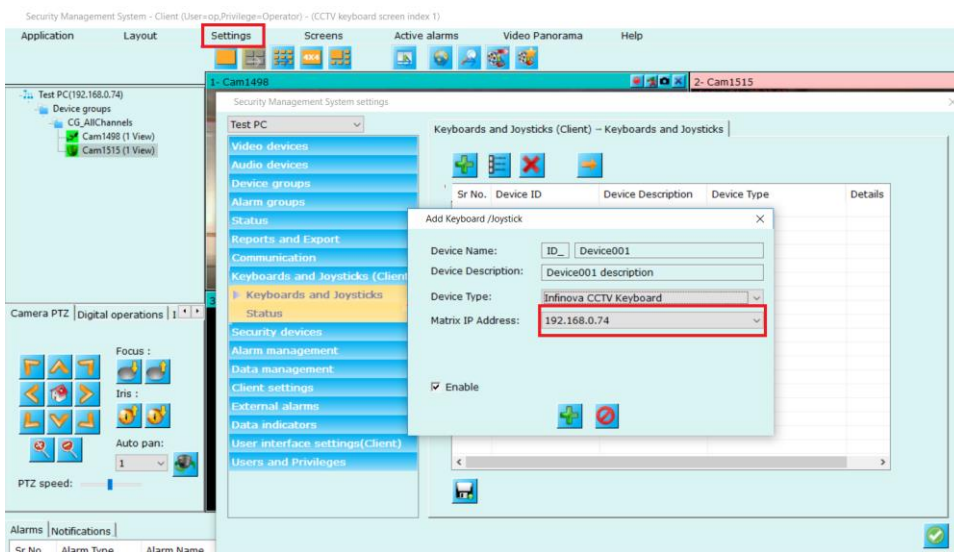
The 'Local IP address' can be set using number buttons available on the keyboard. The display also shows the cursor

Enter desired numbers using the number keys and press ACK button to change the number at the cursor. Figure below shows cursor below number 010

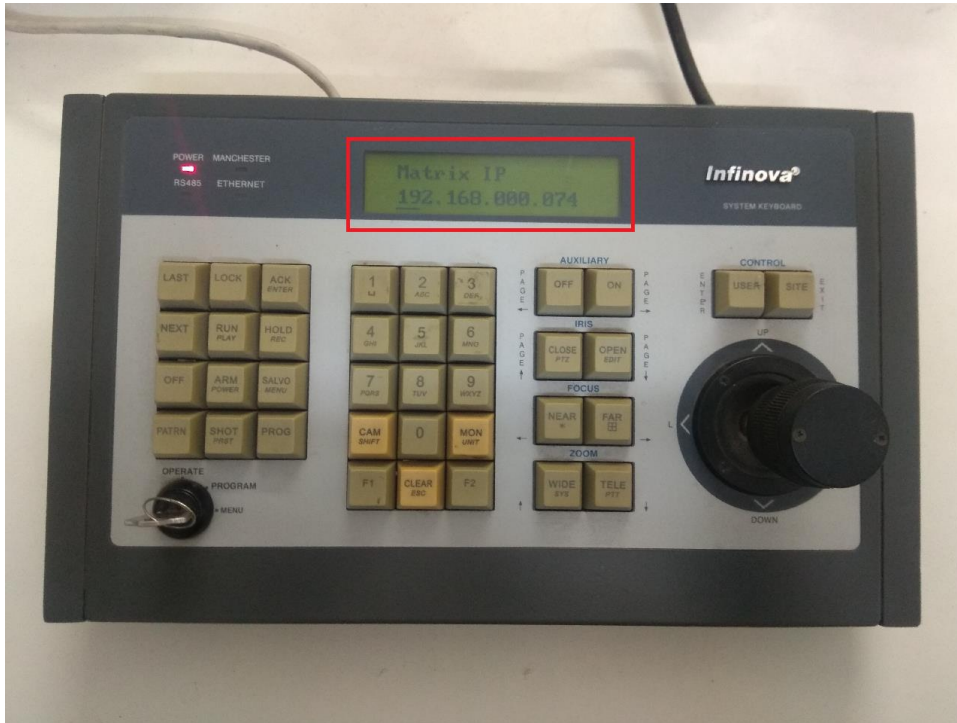


As an example, to set IP address to 192.168.1.10, following key sequence needs to be used - 192ACK168ACK001ACK010ACK

12. After setting 'Local IP Address', press 'NEXT' button to configure 'Matrix IP'
13. Matrix IP address must be same as one selected while configuring CCTV keyboard in Security Management System Client application, see image below. See step number 5 in section '(C) Configuring 'Security Management System Client' software'

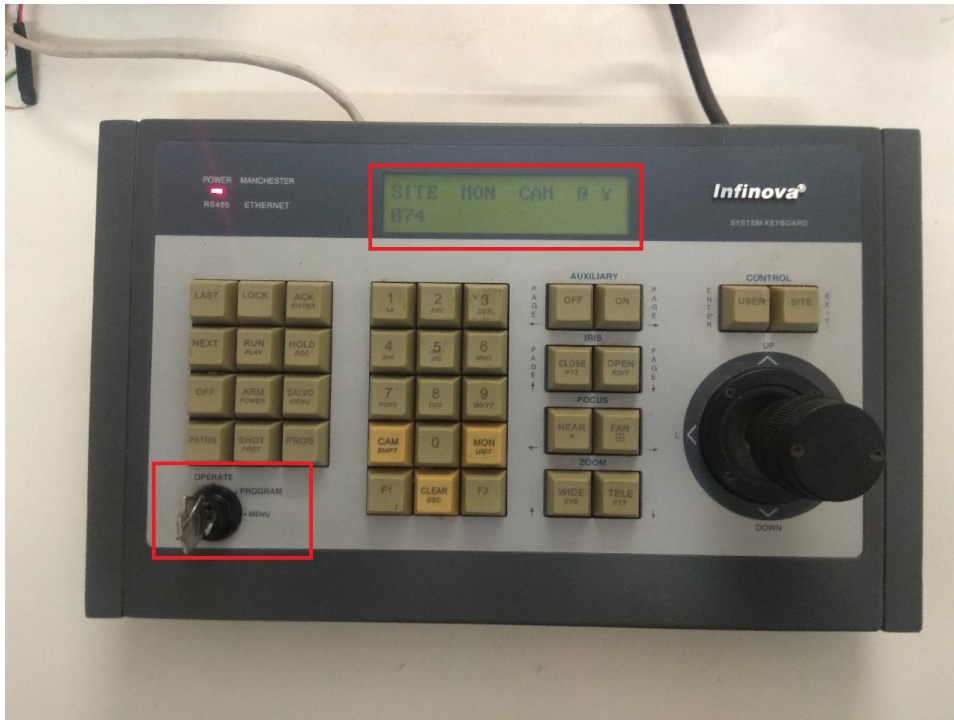


14. Use number buttons and ACK button to configure 'Matrix IP'. As an example, it can be set to 192.168.0.74 using 192ACK168ACK000ACK074ACK key sequence



(E) Using the Keyboard

Move the KEY to OPERATE mode. The keyboard display will show that the keyboard is configured for SITE 074 (It is the last section of the 'Matrix IP').



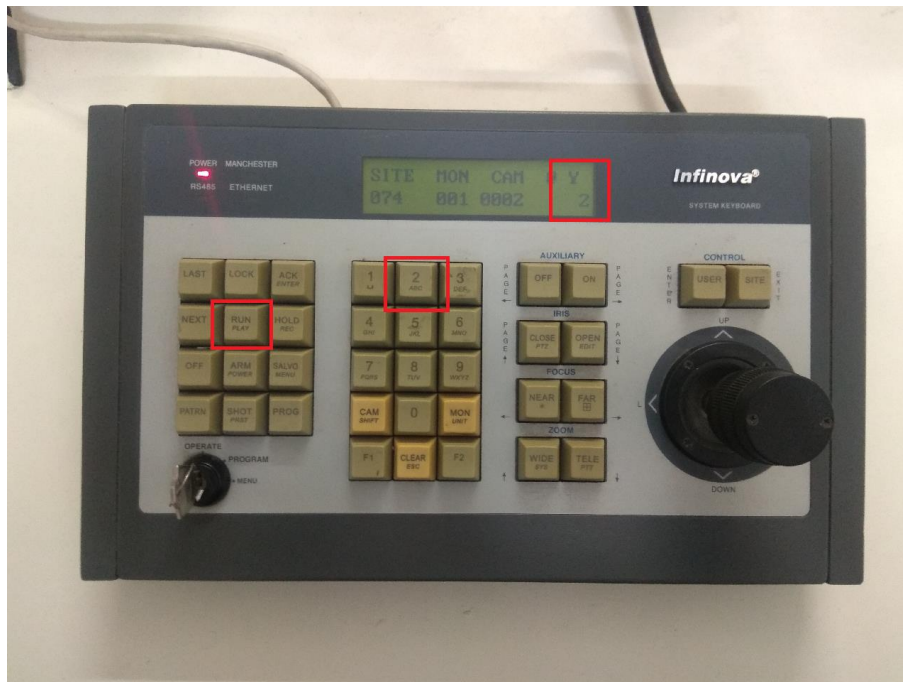
1. CCTV keyboard control mode

Infinova 2117 CCTV keyboard can be used in one of the following two control modes –

- (a) 'Camera pan, tilt and zoom' mode – in this mode, the joystick controls the pan, tilt and zoom for the selected camera. This is the default mode.
- (b) 'Screen/grid selection and invoke camera' mode – in this mode, the joystick is used to select video screens and to select video grid panel. This mode also supports 'invoking target camera', which indicates starting video display of target camera in currently selected video grid panel.

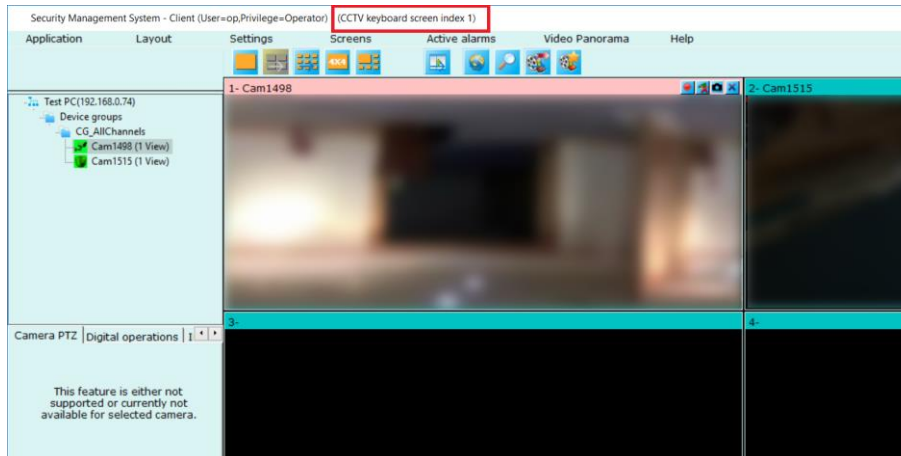
To change the 'CCTV keyboard control mode' to 'Camera pan, tilt and zoom'; please press key number '1' and then press button 'RUN'.

To change the 'CCTV keyboard control mode' to 'Screen/grid selection and invoke camera'; please press key number '2' and then press button 'RUN'.



2. Select video screen – Using CCTV keyboard buttons

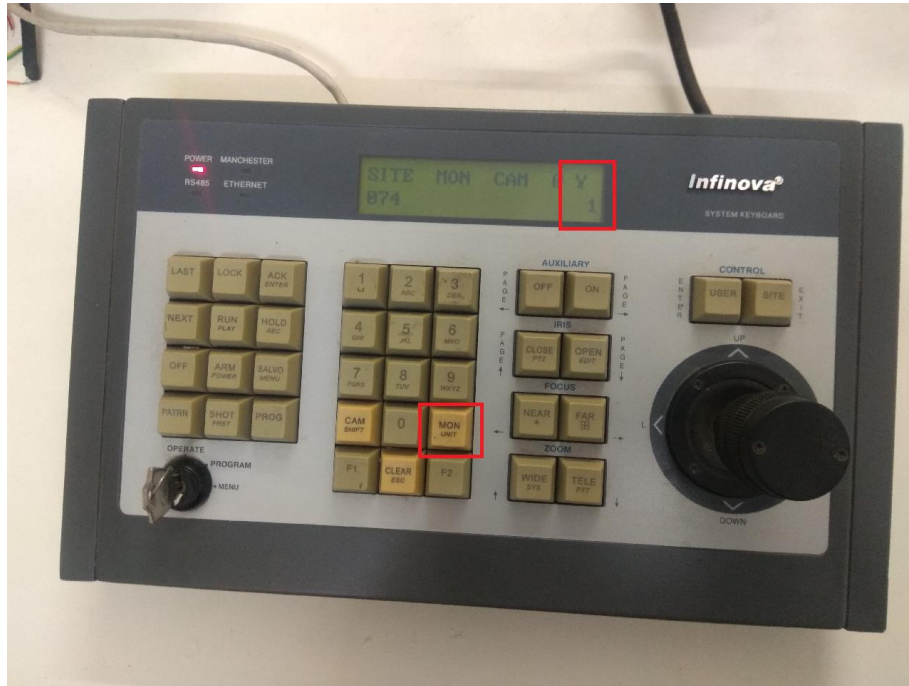
Every video screen in ‘Security Management System Client’ software has unique CCTV index associated with it. This index is mentioned onto the title bar of the video screen.



To select video screen, type its index number using number keys and the press ‘MON’ key. The video screen will get selected. The selected video screen window will become active window on the display / monitor.

Please note that, to select any video screen, it has to be already opened by the user. This function does not open the requested video screen, instead it will pop up the error message which will be auto closed in sometime.

E.g. to select main screen in the client software, press number 1 in the keyboard and then press MON key.

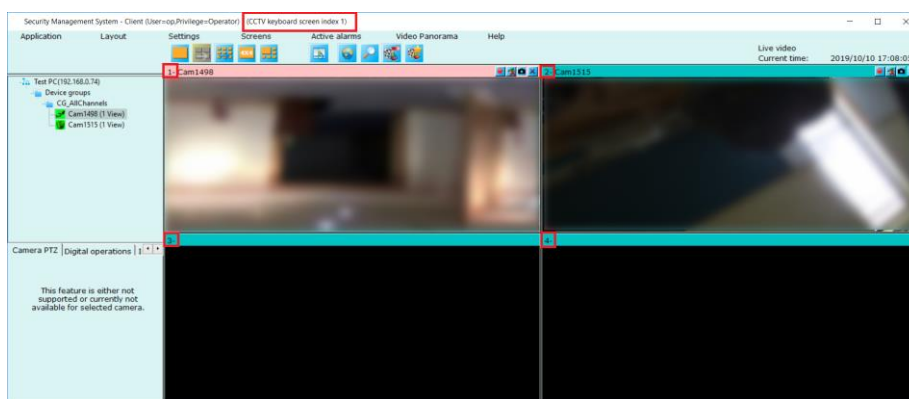


3. Select video grid panel / Select camera

Note – this feature is available only when the ‘CCTV keyboard control mode’ is set to ‘Camera pan, tilt and zoom’.

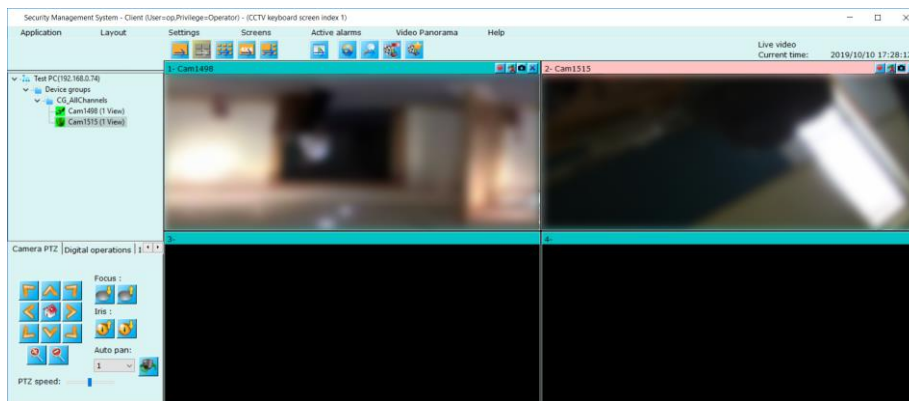
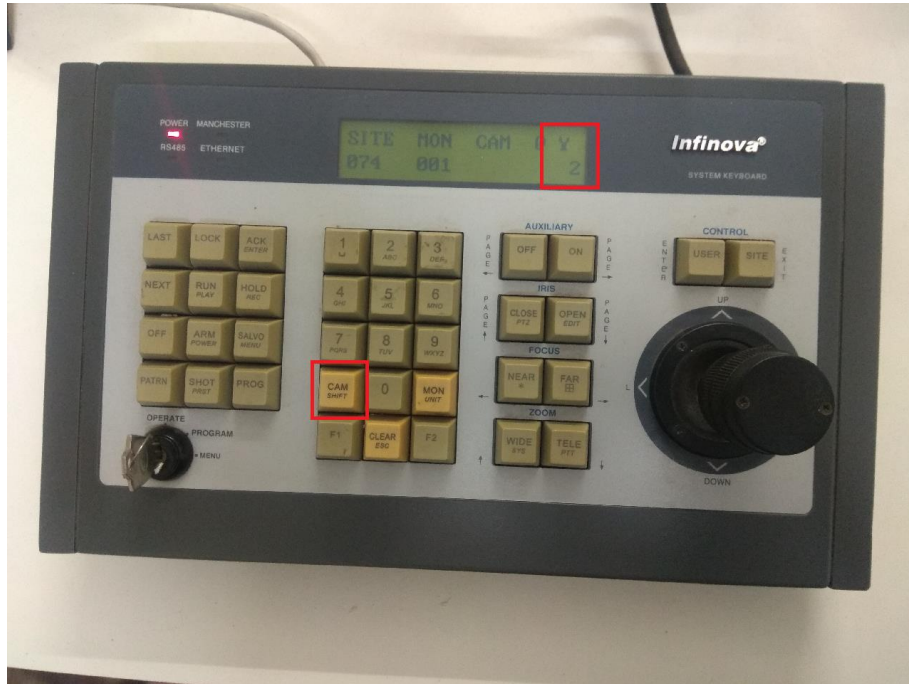
Please refer to the ‘CCTV keyboard control mode’ section from this document, for details about setting the ‘CCTV keyboard control mode’.

Each video window in the currently selected screen is numbered in the video screen. To select any camera, user needs to type the number and press ‘CAM’ button. Figure below shows four video windows with numbers written onto their title bar (see red color highlighted rectangles in below image).



E.g. Currently, video grid panel 1 (which displays camera ‘Cam1498’) is selected. Selected video grid panel title is RED colored.

To select video grid panel 2 (which displays camera named ‘Cam1515’), press number key 2 and then press CAM button.



4. Screen/grid selection – Using joystick

Note – this feature is available only when the ‘CCTV keyboard control mode’ is set to ‘Screen/grid selection and invoke camera’.

Please refer to the ‘CCTV keyboard control mode’ section from this document, for details about setting the ‘Screen/grid selection and invoke camera’.

Selecting next video screen –

Use joystick knob and rotate it in **clockwise direction** to select next video screen. Release the knob to stop changing the selection and to finalize the currently selected screen.

Selecting previous video screen –

Use joystick knob and rotate it in **counter-clockwise direction** to select previous video screen. Release the knob to stop changing the selection and to finalize the currently selected screen.

Selecting video grid panel –

Use joystick knob and move to right / left / up or down, to select video grid panel. Release the knob to stop changing the selection and to finalize the currently selected video grid panel.

5. Camera pan, tilt, and zoom control

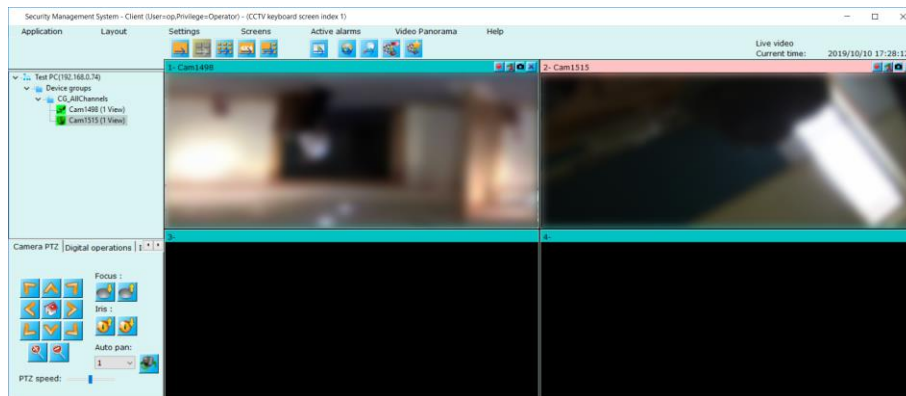
Note – this feature is available only when the ‘CCTV keyboard control mode’ is set to ‘Camera pan, tilt and zoom’.

Please refer to the ‘CCTV keyboard control mode’ section from this document, for details about setting the ‘CCTV keyboard control mode’.

Camera PTZ control will work on the currently selected camera from the currently selected video screen in the ‘Security Management System Client’ software.

The selected camera is shown in the light RED color.

E.g. Camera ‘Cam1515’ is the currently selected camera in the currently selected video screen.



Camera Pan –

Use joystick knob and move it to left or right direction to move or pan camera in left or right direction

Camera Tilt –

Use joystick knob and move it to up or down direction to move or tilt camera in up or down direction

Camera Pan-Tilt –

Use joystick knob and move it diagonally to left-up or left-down or right-up or right-down directions to move camera diagonally in the desired direction.

Zoom in-

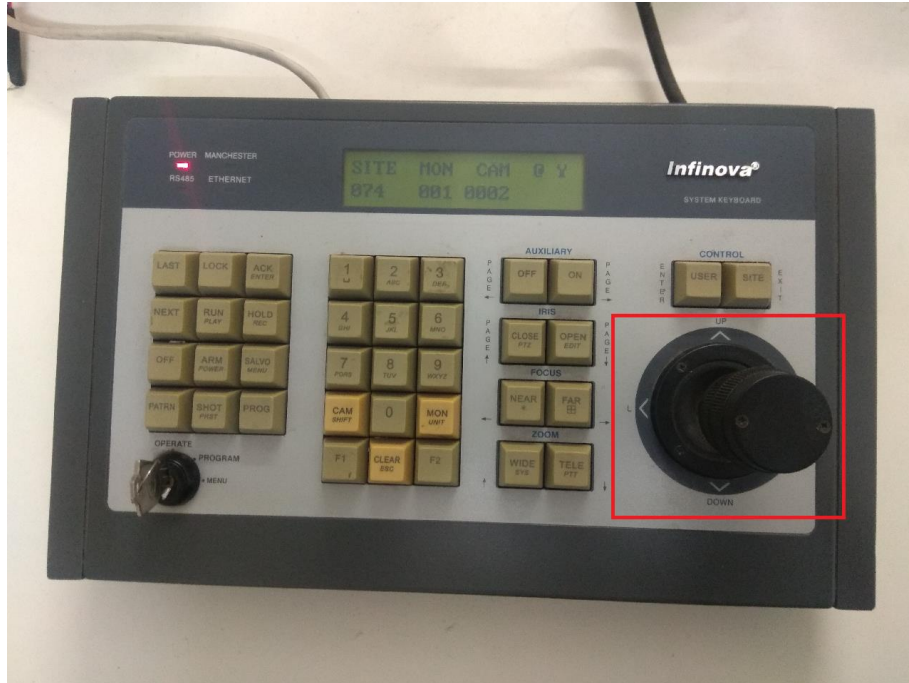
Use joystick knob and rotate it in **clock wise** direction to zoom-in in the selected camera.

Alternatively, you can use WIDE button for this purpose. Keep WIDE button pressed for zoom-in feature.

Zoom out –

Use joystick knob and rotate it in **counter clock wise** direction to zoom-out in the selected camera.

Alternatively, you can use TELE button for this purpose. Keep TELE button pressed for zoom-out feature.



6. Invoke camera

Note – this feature is available only when the ‘CCTV keyboard control mode’ is set to ‘Screen/grid selection and invoke camera’.

Please refer to the ‘CCTV keyboard control mode’ section from this document, for details about setting the ‘Screen/grid selection and invoke camera’.

This feature uses the ‘camera number’ from the “Camera Number for ‘CCTV Keyboard - Invoke Camera’” configuration processed in ‘Security Management System Server’ software.

The “Camera Number for ‘CCTV Keyboard - Invoke Camera’” configuration involves assigning unique ‘camera number’ to each camera added to ‘Security Management System Server’ software.

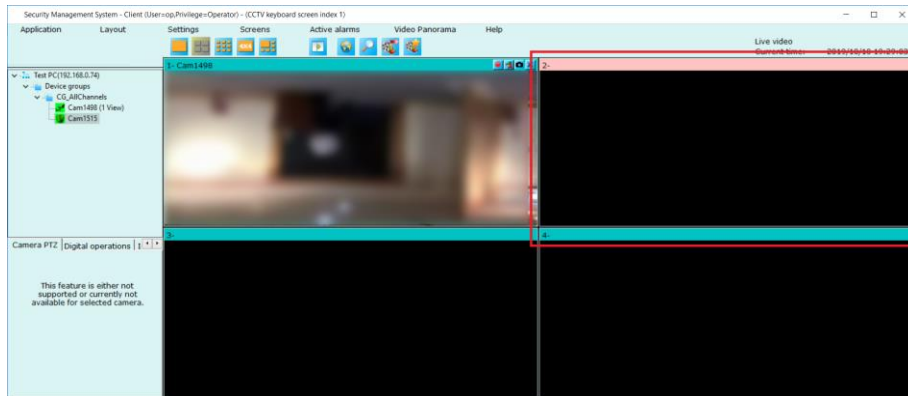
By default, ‘camera number’ is NOT assigned to any of the cameras added to ‘Security Management System Server’ software. This one-time configuration needs to be done for each camera added to ‘Security Management System Server’ software. The configuration is described in the “Camera Number for ‘CCTV Keyboard - Invoke Camera’” section of this document.

Note – before using this feature from Infinova 2117 CCTV Keyboard, please configure ‘camera number’ for target cameras / all cameras in the ‘Security Management System Server’ software.

‘Invoking target camera’ indicates starting video display of target camera in currently selected video grid panel.

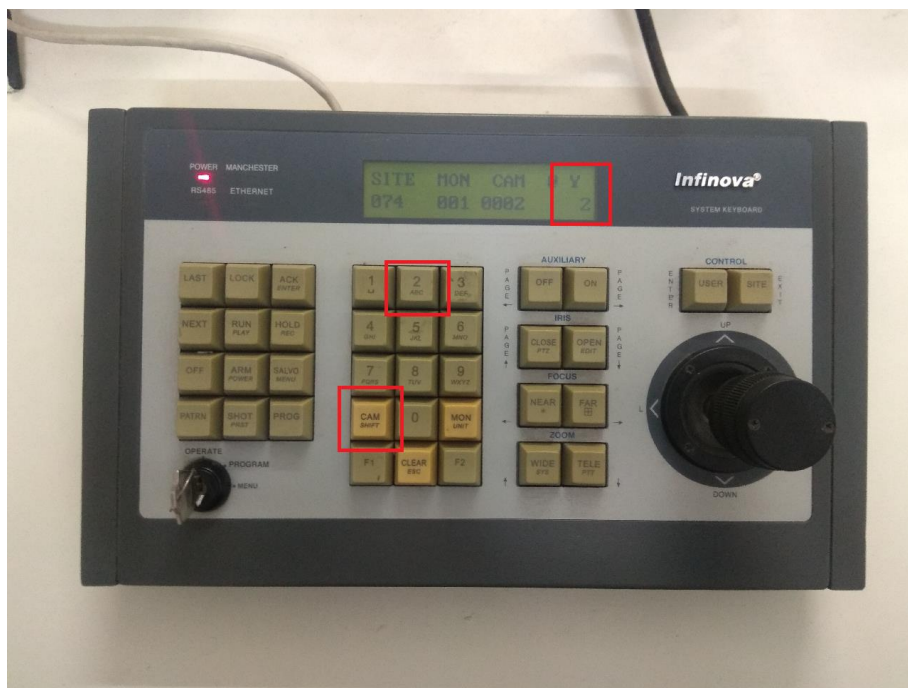
Please select the video screen and the video grid panel in it.

E.g. Image below shows selected video grid panel which does not have any camera assigned to it, and hence is not displaying video

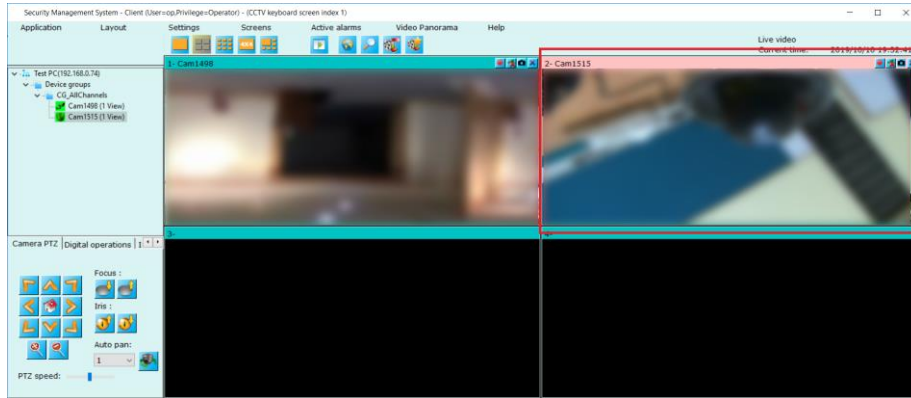


To invoke camera, type 'camera number' ("Camera Number for 'CCTV Keyboard - Invoke Camera'") for the target camera and press 'CAM button'.

If 'camera number' '2' is configured for 'Cam1515' in 'Security Management System Server' software, press '2' key on the keyboard and then press 'CAM' button.

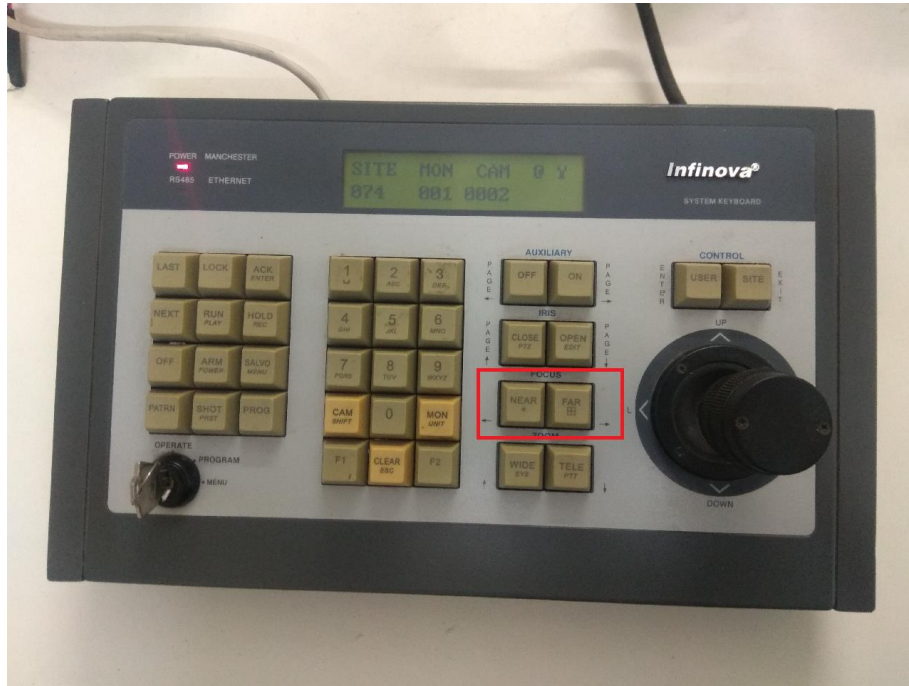


The camera 'Cam1515' will be assigned to the selected video grid panel and video for 'Cam1515' will be displayed in the selected video grid panel



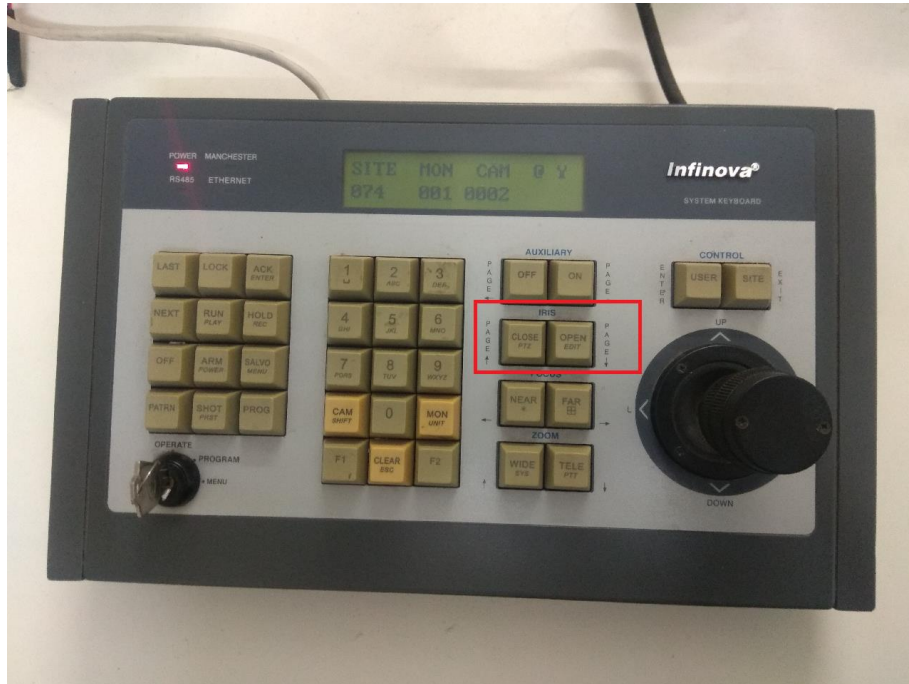
7. Camera FOCUS control

Use NEAR and FAR buttons to control camera focus for the currently selected camera.



8. Camera IRIS control

Use CLOSE and OPEN buttons to control camera iris for the currently selected camera.



9. Move to 'Home' preset

To move the currently selected camera to HOME preset, use F1 key



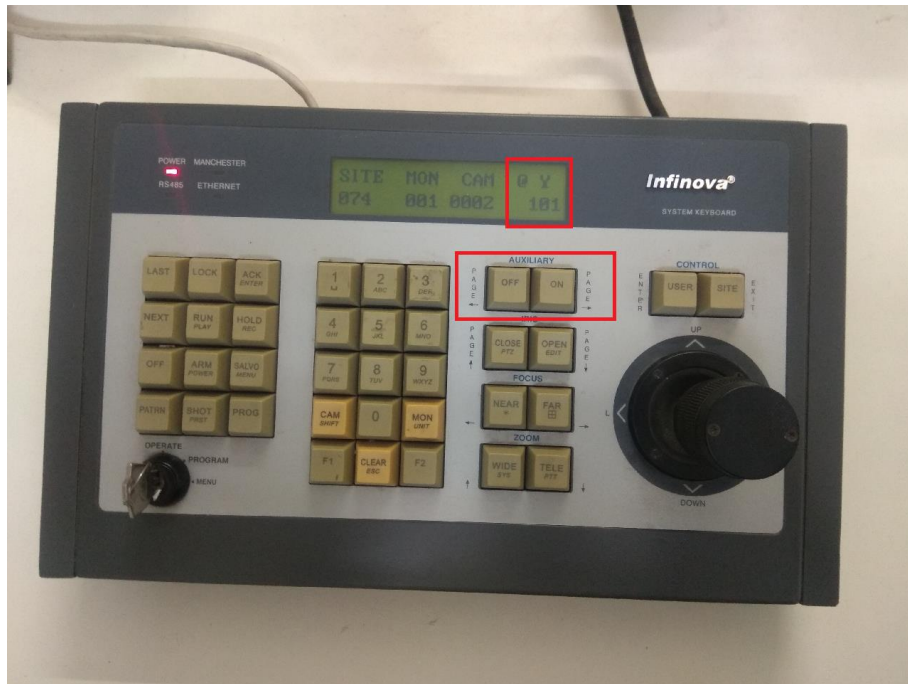
10. IR On/Off/Auto

To control the IR function of the currently selected camera -

For IR ON – use key number combination of '101' and press button 'ON'

For IR OFF – use key number combination of '101' and press button 'OFF'

For IR AUTO – use key number combination of '102' and press button 'ON'

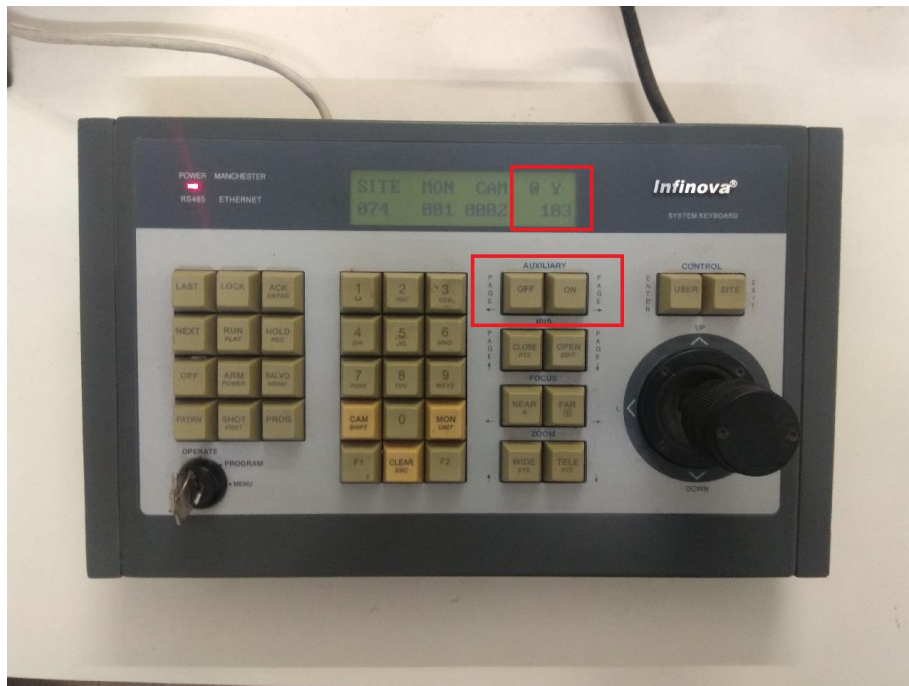


11. Output1 On/Off

To control the 'Output relay 1' of the currently selected camera -

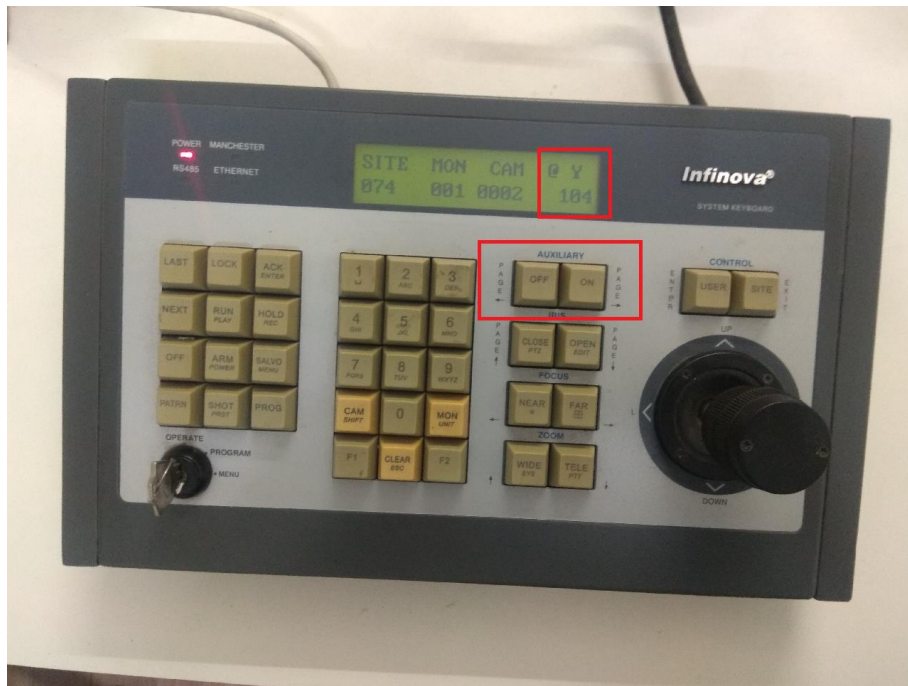
For Output1 ON - use key number combination of '103' and press button 'ON'

For Output1 OFF - use key number combination of '103' and press button 'OFF'



12. Wiper On/Off

To control the wiper function of the currently selected camera -
For Wiper ON - use key number combination of '104' and press button 'ON'
For Wiper OFF - use key number combination of '104' and press button 'OFF'



13. Wash-wipe Activate/Abort

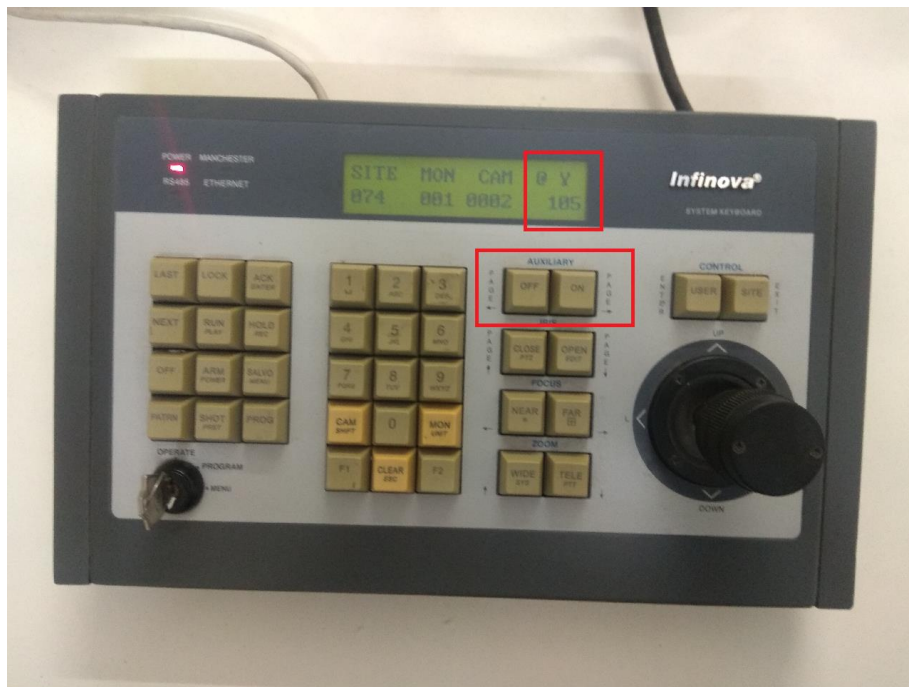
To control the wash-wipe function of the currently selected camera -

For Wash-wipe Activate –

Use key number combination of '105' and press button 'ON'

For Wash-wipe Abort –

Use key number combination of '105' and press button 'OFF'



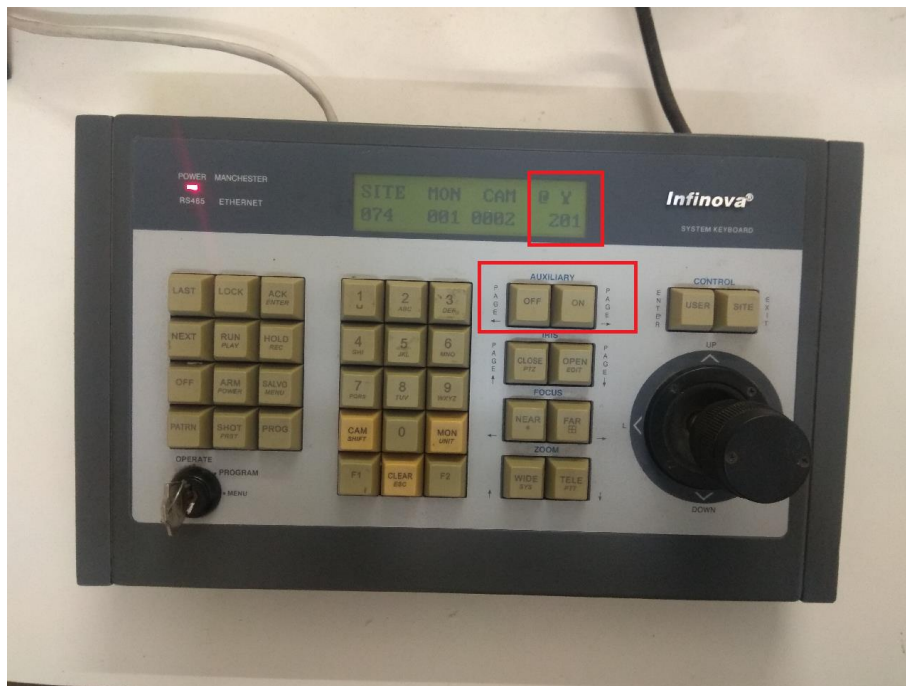
14. High resolution window Open/Close

To open high-resolution window associated with currently selected camera –

Use key combination of '201' and press 'ON' key.

To close high-resolution window-

Use key combination of '201' and press 'Off' key.



15. Move to preset

'Security Management System' software uses 'Preset name' while adding new preset for any camera. This is a text string.

The 'Infinova 2117 CCTV Keyboard' however uses 'Preset index' for 'Move to preset' function.

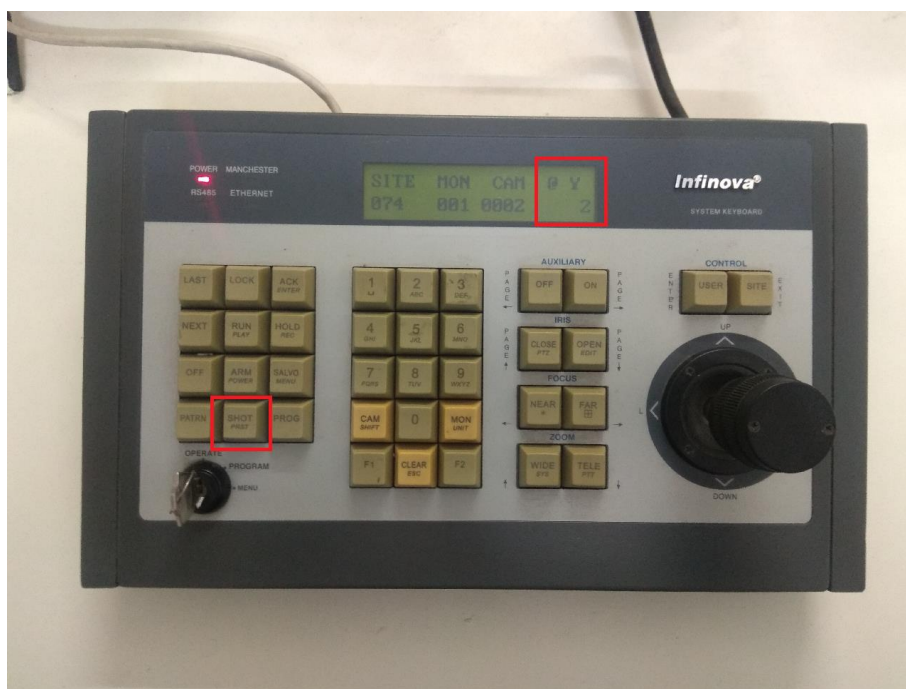
Hence to use 'Move to preset' feature from 'Infinova 2117 CCTV Keyboard', the 'Preset names' in the 'Security Management System' software should be configured, as per the pre-defined preset naming conventions for preset names.

Please refer to the 'Security Management System - Preset Name and Preset Index' section from this document for details about the pre-defined preset naming conventions for preset names.

Note – only the presets matching the pre-defined preset naming conventions for preset names, can be accessed from 'Infinova 2117 CCTV Keyboard', 'Move to preset' feature

To move the currently selected camera to target preset –

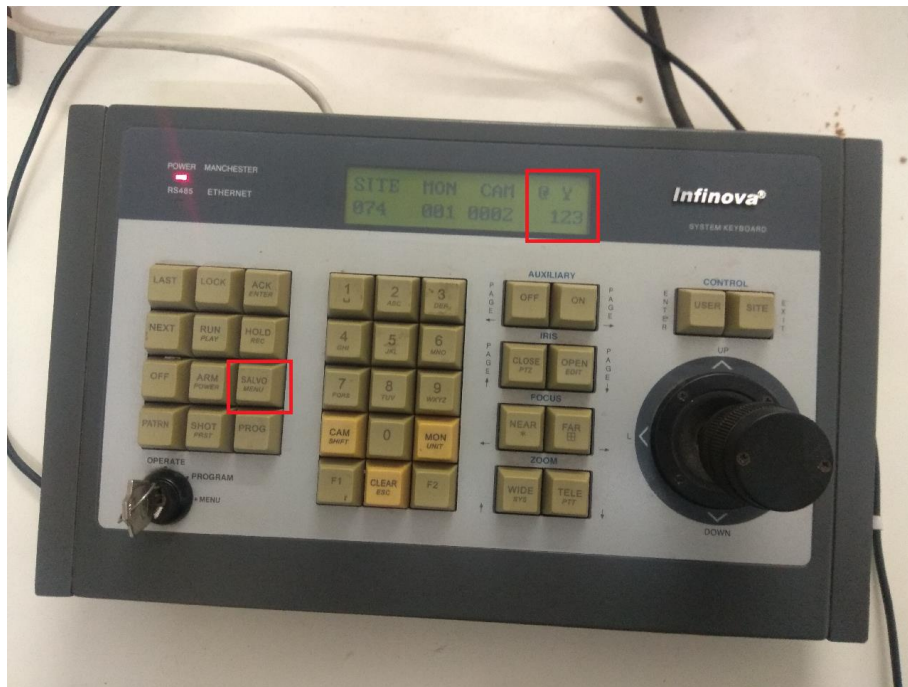
- (a) Please extract the 'preset index' number, from the 'preset name' of the target preset defined for the currently selected camera.
- (b) On the 'Infinova 2117 CCTV Keyboard', use the keyboard buttons to type the extracted 'preset index' number, and press the 'SHOT' button



16. Global home position

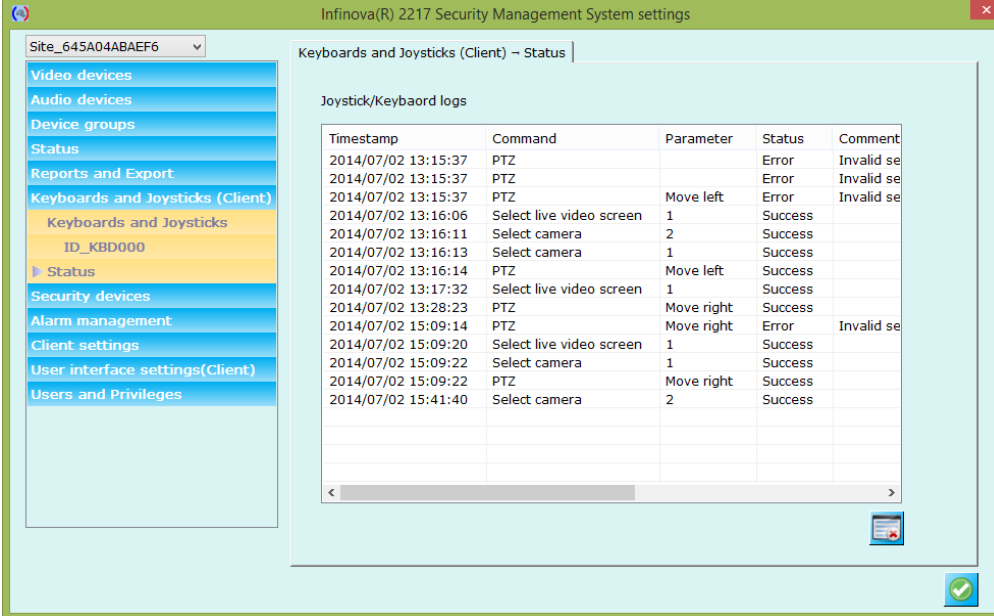
'Global home position' feature is targeted to all cameras accessible from the 'Security Management System Client' software. This means all cameras which are listed in the camera list tree in any video screen.

To move all the cameras to 'Home' preset, press key number combination of '123' and the press SALVO button.



(F) Keyboard/Joystick – Status

Status of all the commands executed for the added keyboards and joysticks can be viewed using 'Settings->Settings' menu. Select 'Keyboards and Joysticks (Client) -> Status' tab.



The screenshot shows the 'Infinova(R) 2217 Security Management System settings' window. The left sidebar contains a navigation menu with the following items: Site_645A04ABAEF6 (dropdown), Video devices, Audio devices, Device groups, Status, Reports and Export, Keyboards and Joysticks (Client) (selected), Keyboards and Joysticks (sub-menu), ID_KBD000, Status (sub-menu), Security devices, Alarm management, Client settings, User interface settings(Client), and Users and Privileges. The main content area is titled 'Keyboards and Joysticks (Client) - Status' and contains a 'Joystick/Keyboard logs' table.

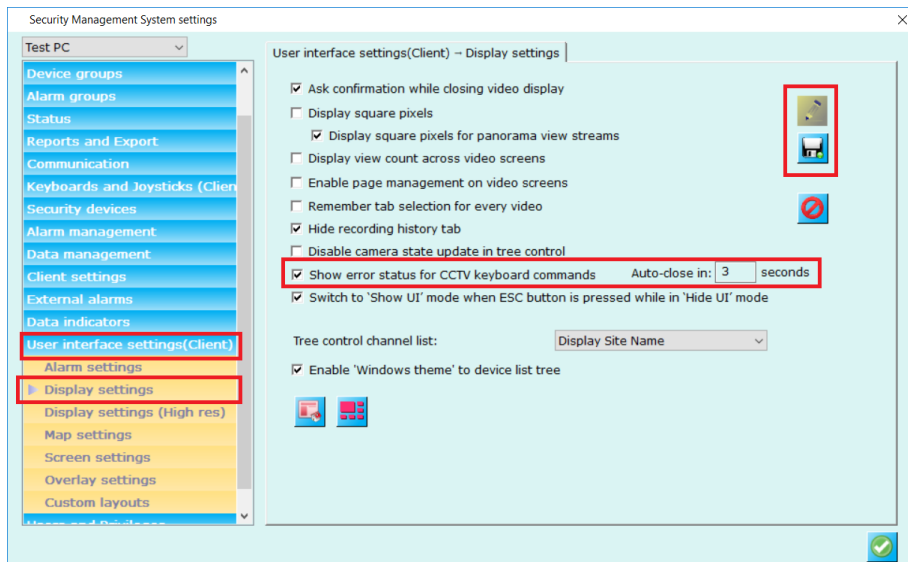
Timestamp	Command	Parameter	Status	Comment
2014/07/02 13:15:37	PTZ		Error	Invalid se
2014/07/02 13:15:37	PTZ		Error	Invalid se
2014/07/02 13:15:37	PTZ	Move left	Error	Invalid se
2014/07/02 13:16:06	Select live video screen	1	Success	
2014/07/02 13:16:11	Select camera	2	Success	
2014/07/02 13:16:13	Select camera	1	Success	
2014/07/02 13:16:14	PTZ	Move left	Success	
2014/07/02 13:17:32	Select live video screen	1	Success	
2014/07/02 13:28:23	PTZ	Move right	Success	
2014/07/02 15:09:14	PTZ	Move right	Error	Invalid se
2014/07/02 15:09:20	Select live video screen	1	Success	
2014/07/02 15:09:22	Select camera	1	Success	
2014/07/02 15:09:22	PTZ	Move right	Success	
2014/07/02 15:41:40	Select camera	2	Success	

(G) Keyboard/Joystick – Error Status Window

‘Security Management System Client’ software can display error status window when any error is observed from operations from CCTV keyboard.

This error status window can be ‘Enabled’ and duration for which error status should be displayed can be configured.

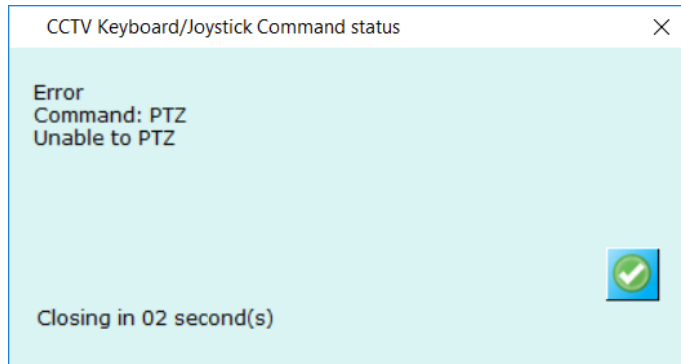
1. In the ‘Security Management System Client’ software, please click on the ‘Settings’ menu from main screen and click on the ‘Settings’ sub-menu.
2. This will open the ‘Settings’ dialog box.
3. Please navigate to ‘User interface settings (Client) -> Display settings’ page from the left hand side navigation panel.



4. Enable checkbox for ‘Show error status for CCTV keyboard commans’ and enter time duration (in seconds) for which the error status window should be displayed under ‘Auto-close in’.
5. Click on the ‘Save’ button to save the changes to the configuration.
6. Close the ‘Settings’ dialog box.

After this configuration, whenever error is observed in any operation from CCTV keyboard, ‘Security Management System Client’ software will display error status window.

For example, if user is trying to PTZ camera which does not support PTZ; the error status window will be displayed as follows -

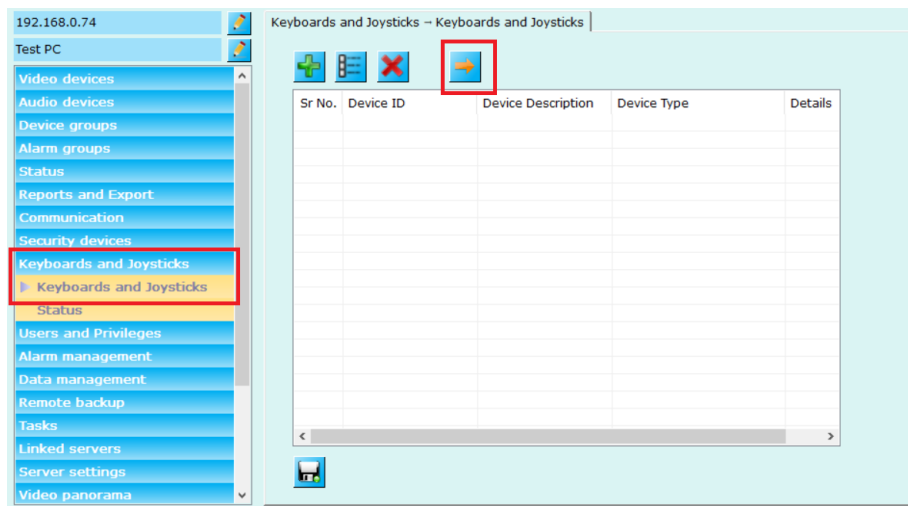


(H) Camera Number for 'CCTV Keyboard - Invoke Camera'

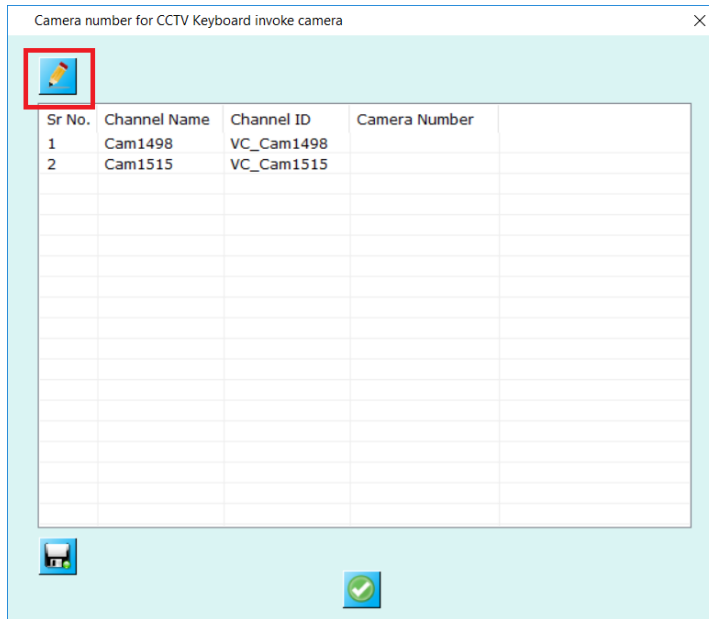
For using 'Invoke camera' feature from CCTV keyboard, unique 'Camera number' needs to be assigned to each camera. This can be configured from 'Security Management System Server' software.

This section describes the steps to configure 'Camera number' for 'CCTV keyboard – Invoke camera' feature.

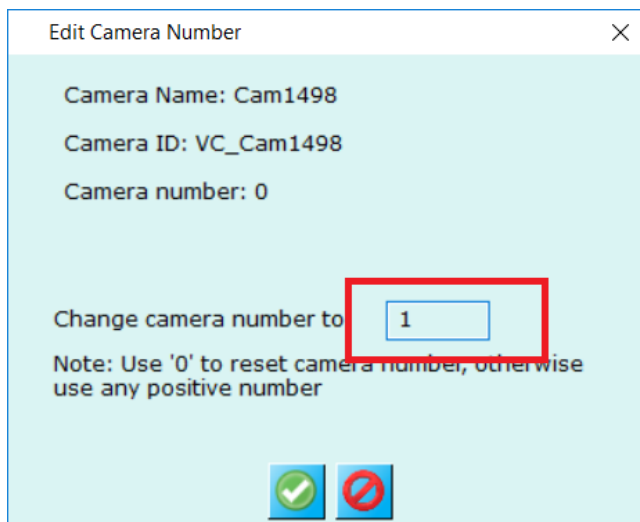
1. In 'Security Management System' server software, navigate to the 'Keyboards and Joysticks -> Keyboards and Joysticks' page from the left side navigation panel
2. Click on the 'Camera number for CCTV Keyboard invoke camera...' button



3. This will open 'Camera number for CCTV Keyboard invoke camera' dialog box.
4. Select a camera from the list and click on the 'Change camera number' button.



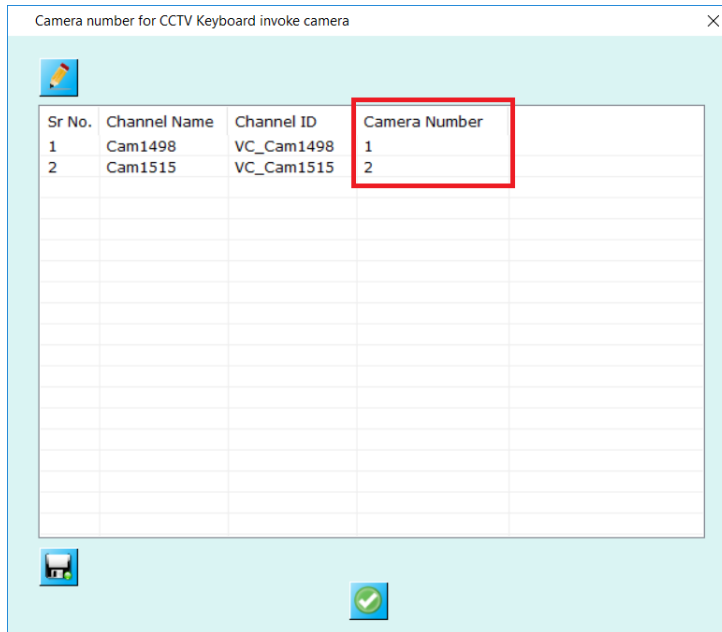
5. This will pop up the 'Edit Camera Number' dialog box.



6. Type 'Camera number' and click 'Ok' button to save; and to close the 'Edit Camera Number' dialog box.

Note – The 'Camera number' should be unique for each camera. 'Security Management System Server' software validates the camera number uniqueness across all cameras added to the server software. However, if the deployment site has multiple server computers; the user needs to manually manage the uniqueness of camera numbers across all the servers.

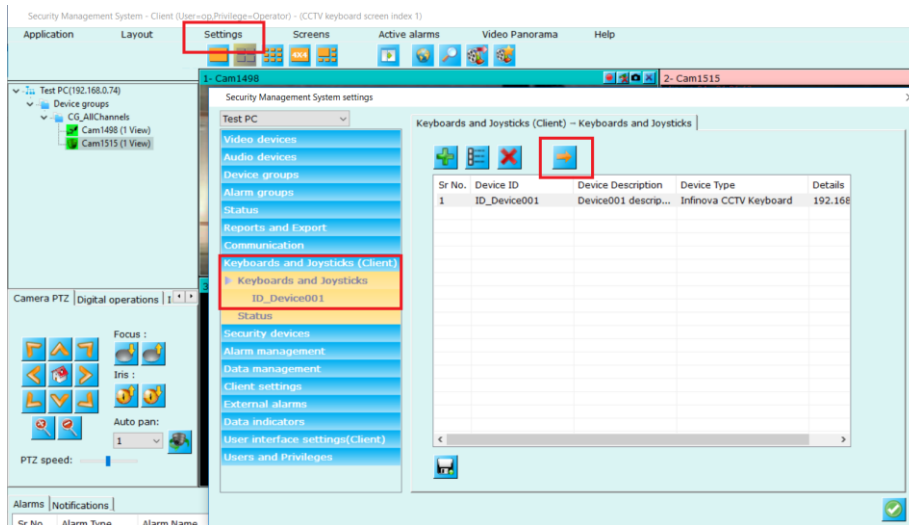
7. This will set 'Camera number' for a single camera. Follow the same steps to set 'camera number' for additional cameras.



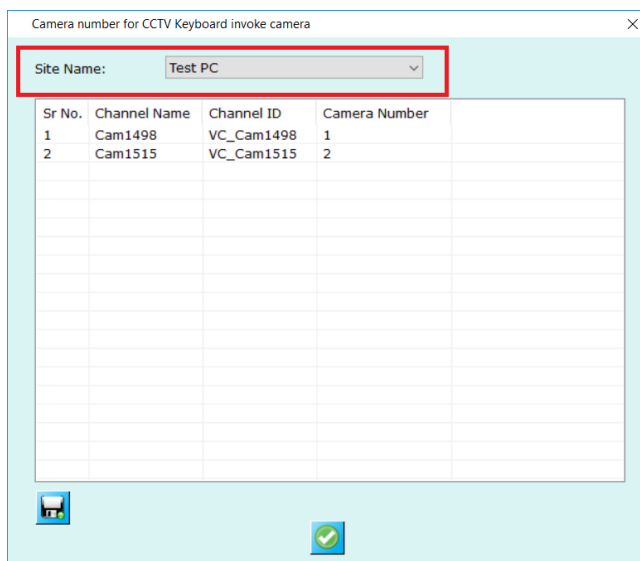
8. Click on the 'Ok' button to close the 'Camera number for CCTV Keyboard invoke camera' dialog box

The camera numbers configured in 'Security Management System Server' software will get reflected in the connected 'Security Management System Client' software too.

1. To view the camera numbers in the 'Security Management System Client' software, Click on the 'Settings->Settings' menu.
2. This will pop up the 'Settings' dialog box.
3. Navigate to the 'Keyboards and Joysticks (Client) -> Keyboards and Joysticks' page.



4. Click on the 'Camera number for CCTV keyboard invoke camera...' button.
5. This pop up the 'Camera number for CCTV keyboard invoke camera' dialog box.



6. Select 'Site Name' to view list of cameras and associated camera numbers, for the selected site

(I) Security Management System - Preset Name and Preset Index

To use 'Move to preset' feature from 'Infinova 2117 CCTV Keyboard', the 'preset names' for presets configured for the PTZ cameras should follow pre-defined preset naming convention.

Following is the preset naming convention

'P<XXX>-<Text>' – where <XXX> is any number and <Text> is any text

Example 1 – P1-Lobby is a valid preset name

Example 2 – P21-Parking is a valid preset name

Example 3 – P1921-Floor1 is a valid preset name

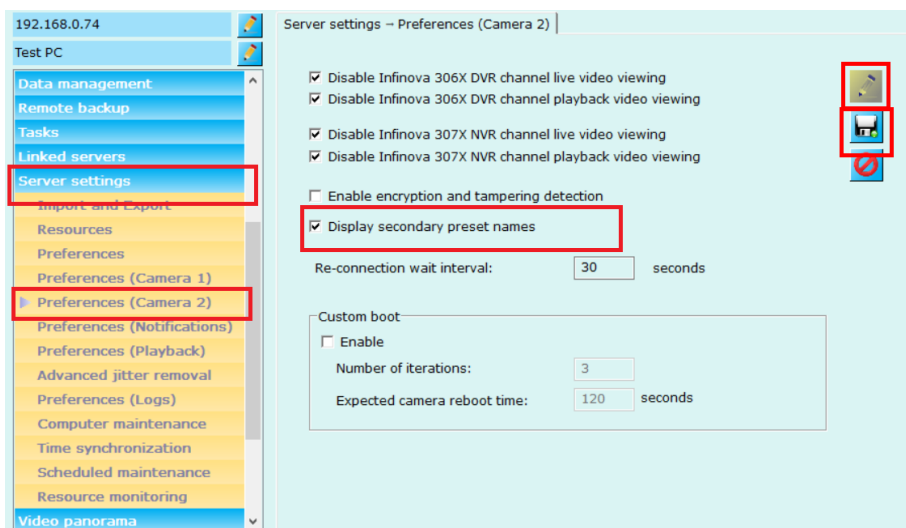
Note – there should be no 0 characters before the preset number, in the preset name text configured in Infinova 2217 VMS server software.

Example – 'P02-Basement' is incorrect preset name. It should be 'P2-Basement'

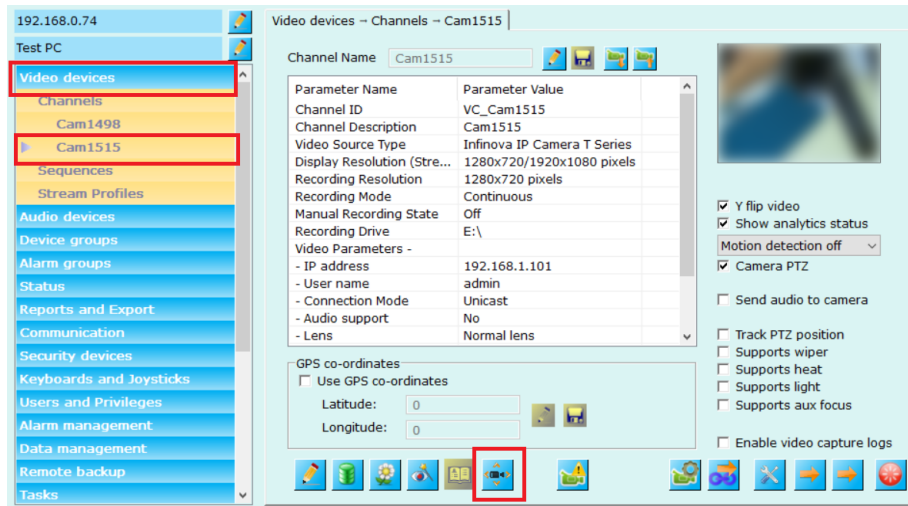
'Security Management System Server' software provides 'Preset secondary name' feature; which may be useful in easier management of preset names to follow the pre-defined preset naming convention

Following are the steps to configure 'Preset secondary names'

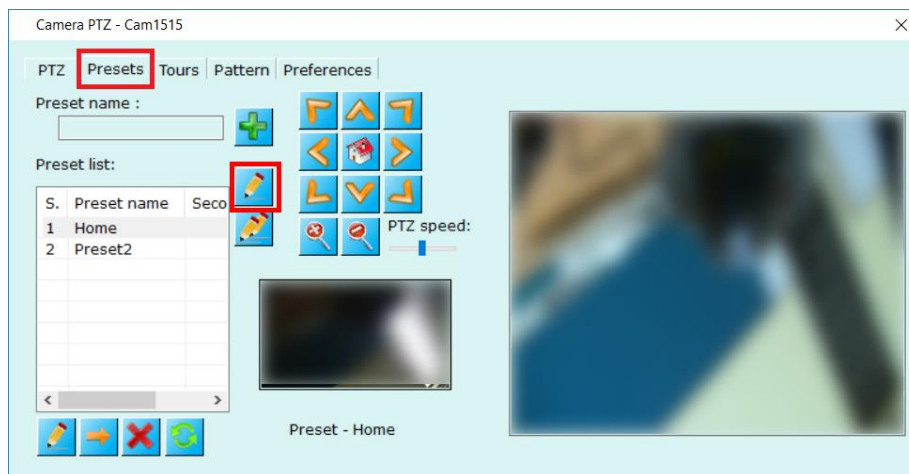
1. Preset 'Secondary name' feature is disabled by default. It needs to be enabled in the 'Security Management System Server' software. To enable it, please access 'Server settings->Preferences (Camera 2)' page from the left side navigation panel.



2. Click on the 'Edit' button to enable the GUI
Enable 'Display preset secondary names' check-box
Click on the 'Save' button to save the settings
3. Preset secondary names are configured for one camera at a time. Please navigate to the camera details page from the left side navigation panel 'Video devices -> Channels -> <Camera name>'. The <Camera name> is the camera name of the target camera.



4. Click on 'Camera PTZ...' button and select 'Preset' tab.



5. Select a preset from the list of presets and click on 'Change secondary name for selected preset...' to set secondary name.
6. This will pop up the 'Edit Secondary Name for Preset' dialog box

Edit Secondary Name for Preset



Preset Name: Home

Secondary Name: P1-Home

Note:
Secondary name format 'P<XXX>-<Text>' where
<XXX> is any number and <Text> is any text
There should be no 0 characters before the number.

Example:
Example 1: 'P1-Lobby' is a valid name
Example 2: 'P02-Parking' is a invalid name, it should be
'P2-Parking'

Secondary Name can be kept blank to reset it

7. Type the 'Secondary name'. The preset secondary name should follow the preset naming convention.
Click 'Okay' button to save the secondary name.
8. Please follow the same steps to set 'Preset secondary names' for other presets.
9. Alternatively, click on 'Change secondary names for all presets' button to automatically set secondary names for all available presets.