

## Advanced Features



# 22 X INDOOR PTZ DOME CAMERA

Model RELPTZ22-1  
12 VDC/650 mA NTSC

Publication No. RELPTZ22-10AF

# Safety 1st

REVO America wants to ensure that your installation experience is a safe and pleasant one. Please read and adhere to these Safety Instructions.



## CAUTION

Model RELPTZ22-1 is an indoor camera and not meant for outdoor use. Doing so will void the warranty.

1. **Never perform any installation procedure or open the camera case with power on.**
2. **Pay attention to the Warnings and Cautions in the instructions. They are there for your safety and to ensure that the equipment does not get damaged.**
3. **Do not discard this manual after installation. You may need to reference it in the future.**
4. **Use a Certified/Listed Class 2 power supply only.**
5. **Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.**
6. **Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.**
7. **Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, DO NOT MODIFY THE PLUG OR OUTLET. Consult an electrician for replacement of the obsolete outlet.**
8. **Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.**
9. **Only use attachments/accessories specified by the manufacturer.**
10. **Do not submerge the camera in water or any liquid.**
11. **Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, submerged in liquid, does not operate normally, or has been dropped.**

Model RELPTZ22-1

## FCC Compliance

**FCC INFORMATION:** This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Improper operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his or her own expense.

**CAUTION:** Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This Class A digital apparatus complies with Canadian ICES-003.  
Cet appareil numérique de la classe a est conforme à la norme NMB-003 du Canada.

## CE Compliance

**WARNING:** This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.



### WARNING

The lightning flash within an equilateral triangle is intended to alert the user to the presence of dangerous voltage that may be of significant magnitude to constitute a risk of electric shock.



### CAUTION

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating or maintenance instructions that should be noted to avoid damage to the equipment or loss of data.

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# Advanced Features

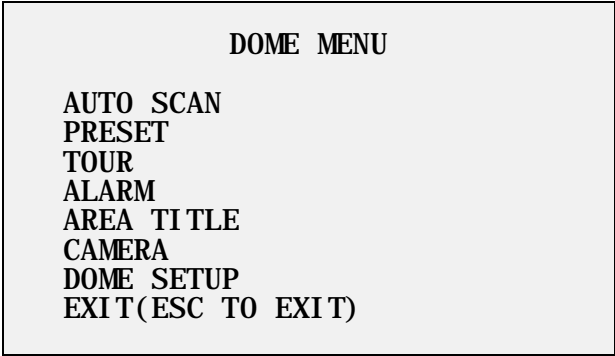
This manual describes the advanced features of your 22X indoor dome camera. The User manual should be followed for installation and basic setup of the camera. This manual assumes that the camera has been installed and set up using that manual, RELPTZ22-10B. In this manual you will learn how to set up Auto Scans, Presets, Tours, Alarms and Area Titles. You will do this using the DOME MENU and the submenus and a control device such as a keyboard controller or DVR.

In addition, Appendix A of this manual provides Camera Address settings for up to 255 cameras. It also provides a shortcut key list that provides the shortcut keys you can use on the REVO keyboard controller to initiate various camera functions.

For the purposes of describing the commands and configurations available on the camera, all commands and operation of the camera will be initiated using a REVO America keyboard controller. This is the ideal setup and offers the greatest flexibility and ease of operation. However, a REVO America DVR may also be used to control the camera, as well as non REVO America keyboard controllers or DVRs, which may be used providing you set the protocols correctly using the User manual. See the Settings section in that manual. If using another device, refer to the applicable user manual to determine the equivalent command keys.

Access the camera menu as follows:

1. Log into keyboard controller by entering the administrator's password. On the REVO America keyboard controller, the default password is: 9999.
2. Select camera by pressing the camera number, for example 1, and then the **CAM** key on the keyboard controller.
3. Press the **MENU** key on the keyboard controller. The DOME MENU displays.



You can make selections on the menu by using the keyboard controller, DVR or non REVO device.

<b>Function</b>	<b>Keyboard Controller Key</b>
Call the on-screen menu utility	<b>MENU</b>
Navigate through the menu items.	<b>Joystick up or down</b>
Go into the sub-menu items.	<b>Joystick left or right</b>
Change value. Enter the editing title mode.	<b>Joystick left or right or Zoom handle twist</b>
Change value of angle	<b>CTRL + Joystick</b>
Escape (EXIT)	<b>ESC</b>

## The Advanced Features on the Dome Menu

- Auto Scan** Enables you to set a programmed scan of an area such as a room. You can set the camera to start in one location and move to another location and then back to the starting location at a preconfigured speed. Up to 5 different Auto Scans may be configured.
- Preset** Enables you to create presets, which are programmed video scenes, based on specific pan, tilt, zoom, and focus settings. For example, one preset may be a close up view of the back door, while another may be a window in the same room. Think of a preset as if you had a camera in your hand and were taking photos of various objects in a room. Up to 120 Presets may be programmed for this camera.
- Tour** This menu provides the options for creating tours, which are a programmed sequence of Presets, Auto Scans, Patterns and even other Tours. Up to 4 tours may be programmed.
- Alarm** This menu manages input alarms, which will trigger camera action and output alarms, which may be used to trigger an audio or visual alarm indication.
- Area Title** A user defined name for a specific area that the camera views that has a specific pan and tilt range. This menu guides you through the process of defining and naming the area.

### Titling

Many of the features provide the ability to create titles that appear on the monitor when the camera reaches a specific position, or to label an Auto Scan, Preset, Tour, etc. Rather than describe the procedure to create a title in every description, the instructions are provided here. The titling procedures are the same for all functions. The amount of characters allowed for titles do change depending upon the function. Maximum characters allowed are noted in each description. Note that Presets must be created before you create the title.

To create a title, proceed as follows:



1. Navigate to the TITLE EDIT MENU and move joystick to the right to select it.
2. Using the joystick, move over the letter or number that you want to use in the title. You can also twist the joystick right or left to scroll through the characters.
3. Press the **CTRL** key to select the character.
4. Continue selection until you have created the title.
5. Select EXIT with the joystick and move to the right or left to exit the menu or press **ESC** on the keyboard controller.

To delete the title and create a new one, select ALL DELETE and move the joystick right or left.

## Home Function

Another function that you will use often with the Advanced Features is the Home Function. The Home Function defines the camera's normal operation when left unattended. The Home Function, once programmed, will return the camera to its normal or programmed operation after manual control of the camera has stopped. For example, if you are using the keyboard controller or DVR to manually zoom, pan or tilt the camera to view something of interest, setting the Home Function to one of the functions will program the camera to automatically begin one of the following: None/Tour/Auto Scan/Preset, after a user defined waiting time.

The Home Function is located on the DOME SETUP menu, which is described in the User manual. To access the Home function, navigate to the DOME SETUP menu and select the HOME FUNCTION SETUP menu.



**HOME FUNCTION SETUP**

HOME FUNCTION : Preset  
FUNCTION NUMBER : 10  
WAITING TIME : 120 SEC  
FUNCTION ENABLE : ON  
SAVE AND EXIT(ESC TO CANCEL)

In the example shown above, the camera will go to Preset 10, 120 seconds after manual control has stopped, when Function Enable is set to ON. If None is selected, nothing will happen.

**HOME FUNCTION:** None/Tour/Auto Scan/Preset.

**FUNCTION NUMBER:** The number of the Tour, Auto Scan or Preset that you want to start.

**WAITING TIME:** The amount of time the system will wait before starting the Home Function. You can set it for 10-240 seconds.

**FUNCTION ENABLE** ON/OFF. Set to ON to enable the Home Function.

**SAVE AND EXIT** To save the selection, move the joystick to the right. To exit without saving changes, press the **ESC** key.

## Auto Scan

The Auto Scan Setup menu enables you to set a programmed scan of an area such as a room. You can set the camera to start in one location and move to another location and then back to the starting location at a preconfigured speed. Up to 5 different Auto Scans may be configured.

```
AUTO SCAN SETUP

NUMBER      : 01
TITLE       : A01
SPEED       : 05 STEP
START ANGLE : -----
END ANGLE   : -----
SCAN DIR    : CCW
SWAP        : OFF
DWELL       : 03 SEC
SAVE AND EXIT(ESC TO CANCEL)
```

- NUMBER:** 01-04. 09 is Auto Pan mode, which will cause endless panning.
- TITLE:** Allows you to create a unique name for each auto scan. Up to 12 characters.
- SPEED:** 01-13. With 01 as the slowest speed and 13 as the fastest speed.
- START ANGLE:** Defines the starting point for the Auto Scan.
- END ANGLE:** Defines the ending point for the Auto Scan.
- SCAN DIR:** Defines the scan direction. CW: clockwise. CCW: counterclockwise.
- SWAP:** Swaps the starting and ending points.
- DWELL:** Sets the time that the camera stays on the start and end points before scanning. 01-99 seconds.

To create an Auto Scan, proceed as follows:

1. Press the **SCAN** key on the keyboard controller to enter the Auto Scan menu directly. Or press the **MENU** key to display the main menu on the monitor. Scroll to Auto Scan and move the joystick to the right.
2. Select NUMBER and set the desired number by moving the joystick to the left or right.
3. Select TITLE and twist the joystick to enter the title edit mode. Refer to the *Titling* procedure.
4. Select SPEED. Use a medium range speed at first, then experiment. Speeds that are too slow or too fast may not produce the results that you want.
5. Select START ANGLE. Hold down the **CTRL** key while selecting the horizontal start position using the joystick. The current position will be displayed. Release the **CTRL** key to complete the selection. Move to the vertical position and repeat the procedure. Select the zoom position by rotating the joystick right or left.
6. Select END ANGLE. Hold down the **CTRL** key while moving the joystick to select the horizontal end position. The end position angle should be larger than start position. Release the **CTRL** key to complete the selection. Move to the vertical position and repeat the procedure. Select the zoom position by rotating the joystick right or left.
7. Set SCAN DIR either CCW or CW.
8. Select SWAP and set to ON to exchange the start angle and the end angle. Otherwise, skip over it.
9. Set DWELL TIME from 01-99 seconds.
10. Select SAVE AND EXIT and move the joystick to the right. Press the **ESC** to exit the program without saving.



**CAUTION**

Pressing the **HOME** key will delete stored data at the angle field.

11. To store the Auto Scan that you created as the default programmed action for the camera, navigate to the DOME SETUP menu and select HOME FUNCTION. Refer to the *Home Function* procedure.

## Preset

The Preset Setup menu enables you to create presets, which are programmed video scenes, based on specific pan, tilt, zoom, focus and auto exposure settings. For example, one preset may be a close up view of the back door, while another may be a window in the same room. Think of a preset as if you had a camera in your hand and were taking photos of various objects in a room. Up to 120 Presets may be programmed for this camera. In addition, Presets may be assigned to an alarm action or as the Home position for the camera.

There are two pages of Preset menu. Each page has 60 Presets. Pages can be scrolled by moving the joystick to the left or right on the first or last No. of Preset.

```

          PRESET SETUP

NUMBER   : 001
TITLE    : ---
CAMERA SET
DWELL    : --- SEC
          12345678901234567890
00 ■**-----
02 -----
04 -----
NEXT PAGE
SAVE AND EXIT(ESC TO CANCEL)
    
```

- NUMBER:** 001-120. Presets.
- TITLE:** Allows you to create a unique name for each Preset. Up to 12 characters. The Preset must be created first.
- CAMERA SET:** Once you have defined a Preset, this menu selection will become active and will display the PRESET CAMERA SETUP menu.
- DWELL:** Once you have defined a preset, this menu selection will become active and you can define a dwell time for the Preset from 03-99 seconds.

To create a Preset, proceed as follows:

- : blank Preset position
- \* : position has the Preset
- : current cursor position

Follow the steps below to store the Preset positions:

1. Press the **PRST** key on the keyboard controller to enter the Preset menu directly. Or press the **MENU** key to display the main menu on the monitor. Scroll to Preset and move the joystick to the right.
2. Select a blank Preset position by moving the joystick to one of the rows that start with 00, 02, 04, etc. Any position that has an asterisk displayed already has a preset stored.
3. After selecting a blank position, press and hold the **CTRL** key. Use the joystick to select the camera view you want to set.
4. Release the **CTRL** key. The cursor will move to the TITLE field and an asterisk will display in the Preset position that you selected. Create a unique title for the preset as directed in the *Titling procedure*.
5. Select CAMERA SET and move the joystick to the left or right to display the Preset Camera Setup menu.

```
PRESET CAMERA SETUP

FOCUS      : AUTO
MOTION     : OFF
MOTION SETUP
AE SETUP
SAVE AND EXIT(ESC TO CANCEL)
```

**FOCUS:** AUTO/MANUAL/ONE PUSH. Select which focus setting you wish to use.

**MOTION:** OFF/ON. Select ON if you want the camera to detection motion.

6. Select MOTION SETUP to fine tune motion detection. The Motion Setup menu displays.

MOTION SETUP

SENSITIVITY : 06  
POSITION : ALL  
DELAY : 00 SEC  
OUTPUT : OFF  
HOLD TIME : 03 SEC  
EXIT(ESC TO EXIT)

- SENSITIVITY:** 01-10. the higher the number, the greater the sensitivity.
- POSITION:** ALL/CENTER. Selects detection across the entire frame or just the center.
- DELAY:** 0-5 sec. Sets the time the camera will wait before triggering an alarm.
- OUTPUT:** OFF/ON. Alarm output on or off.
- HOLD TIME:** 03-99 sec. Sets the time the alarm will be held.

7. To select the next page of Presets, scroll the page by moving the joystick to the left on the first and last columns of the menu.
8. Repeat steps 2 through 7 for each additional Preset position.
9. Select EXIT and move the joystick to the right to exit, or press the ESC key.
10. Navigate to a Preset position that has been set up. Highlight the \* and press the **PRST** key on the keyboard controller. The camera will show the stored Preset scene as shown below.

PRESET AREA SETUP  
(CTRL KEY)

NUMBER 001  
PAN TILT  
000.0 000.0  
EXIT(ESC TO EXIT)

11. Hold down the **CTRL** key while selecting the desired scene with the joystick. The current position will be displayed. Release the **CTRL** key to complete.

12. To delete a Preset, press the **HOME** key at programmed Preset position.
13. To store the Preset that you created as the default programmed action for the camera, navigate to the DOME SETUP menu and select HOME FUNCTION. Refer to the *Home Function* procedure.



**TIP**

You can use a keyboard controller shortcut to create Presets on the fly.

### Keyboard Controller Shortcut

1. Select a scene that you want to save as a Preset.
2. Press number 1 to 120 on the numeric keypad.
3. Press **CTRL** then press **PRST**. The current view will be stored to the selected Preset number if the Preset number is empty.
4. If the selected Preset number is not empty, the OVER WRITE message will be displayed on the monitor. Select the OK and move the joystick to the right to overwrite.

**Example:** 1 , 0 , 1 + **CTRL** + **PRST** keys will store the current view as Preset no. 101. In this case, focus will be programmed as Auto, dwell time will be set to 3 seconds, and the current AE mode will be programmed.

## Tour

This menu provides the options for creating Tours, which are a programmed sequence of events for the camera. A tour can include up to 42 Presets and save them. Up to 4 Tours may be programmed.

```

          TOUR SETUP

NUMBER      :    01
TITLE       :    T01
DWELL       :    -- SEC
  001 003   --- --- --- ---
  --- --- --- --- --- ---
  --- --- 002 --- --- --- ---
  --- 004   --- --- --- ---
  --- --- --- --- --- ---
  --- --- --- --- --- ---
SAVE AND EXIT(ESC TO CANCEL)
    
```

**NUMBER:** 01-04. Selects the Tour number to be programmed.

**TITLE:** Tour title that will display when this tour is selected.

**DWELL:** 03-99 sec. Sets the dwell time for the tour actions.

**Tour Actions:** - - -: Blank position  
**003:** Indicates Preset number 3. You can select 42 of the 120 available Presets to use in a Tour.

Follow the steps below to program the Tours:

1. Press the **MENU** key to display the main menu on the monitor. Scroll to Tour and move the joystick to the right to enter the Tour menu. Or, just press the **TOUR** key on the keyboard.
2. Select NUMBER and set the desired Tour number by pushing the joystick to the left or right.
3. Choose a blank position to be programmed by moving the joystick up, down, right, or left.
4. To add a stored Preset, twist the joystick then the stored Preset number displays. Continue adding Presets as required.



5. You can also overwrite the programmed number and to remove a stored number from the Tour. Press the **HOME** key on the stored number, a blank position mark (---) will be displayed.
6. Repeat steps 2 through 5 for each desired Preset position. Each title will be displayed on top of the line.
7. To create a unique title, refer to the *Titling procedure*.
8. Select SAVE AND EXIT and move the joystick to the right. Press the **ESC** key to exit the program without saving.
9. To store the Tour that you created as the default programmed action for the camera, navigate to the DOME SETUP menu and select HOME FUNCTION. Refer to the *Home Function procedure*.

## Alarm

The Alarm Setup menu enables you to set alarm inputs and outputs to and from the camera.

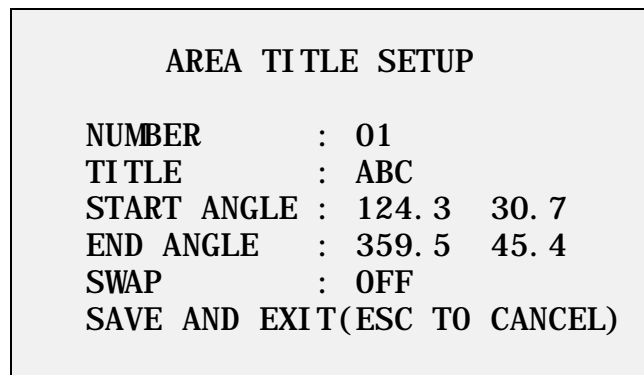
ALARM SETUP						
NO	PRI	FUN	IN	OUT	HLD	LATCH
01	1	001	NC	ON	03	OFF
SAVE AND EXIT(ESC TO CANCEL)						

- NO:** There is one input Alarm available.
- PRI:** The input Alarm has a priority of 1.
- FUN:** Function. Stored Preset number to be called by alarm.
- IN:** Input. Specifies the type of input that will trigger the alarm.  
**NO:** Normally open.  
**NC:** Normally closed.  
**OFF:** Ignore input.
- OUT:** Output. Specifies the alarm output from the camera.  
**ON:** 5 V TTL output on.  
**OFF:** No output
- HLD:** Hold. Alarm will be held for programmed time (03 to 99 seconds).

**LATCH:**                   **ON:** Alarm message will remain on the screen even though alarm input is deactivated.  
**OFF:** Alarm message will disappear on the screen after programmed hold time when alarm input is deactivated.

## Area Title

The Area Title Setup menu enables you to label up to eight different areas for various camera angles that the camera will view. For example, as shown in the screen below, when the camera points to an angle between 124.3° (PAN), 30.7° (TILT) to 359.5° (PAN), 45.4° (TILT), ABC will be displayed on the screen.



**NUMBER:**               01-08. Eight different titles are available.

**TITLE:**                 Allows you to create a unique name for each title. Up to 12 characters.

**START ANGLE:**        Defines the starting point for the area title.

**END ANGLE:**         Defines the ending point for the area title.

**SWAP:**                Swaps the Start and End points.

To create area titles, proceed as follows:

1. Select **NUMBER** and set the desired number by moving the joystick to the left or right.
2. Edit the title as described in the *Titling* section.
3. Select **START ANGLE**. Hold down the **CTRL** key while selecting the start position using the joystick. Current panning position will be displayed. Release the **CTRL** key to complete the selection of the start position. To fine adjust at the 0.1 degree interval, twist the joystick at the pan field and the tilt field.

- 
4. Select **END ANGLE**. Hold down the **CTRL** key while moving the joystick to select the end position. Release the **CTRL** key to complete the selection of the end position.

# Appendix A

## Setting Camera Addresses for Large Systems

Each camera requires a unique camera address so that the control device knows which camera is at your back door and which camera is monitoring your driveway. Think of the camera address as a telephone number. In order for the video system to work with multiple cameras, it has to know which one is which. In the User manual, instructions were provided for setting up to 8 cameras. However, the camera is capable of expansion up to 255 cameras. This will require the use of multiplexers. When installing multiple dome cameras using a multiplexer, it is suggested that the dome camera address match the multiplexer port number.

**Example:** Port 1 = Dome 1, Port 2 = Dome 2 ... Port 16 = Dome 16. If more than 16 dome cameras are installed using two or more multiplexers, the ID of the dome camera should be ID of MUX x No. of camera IN. (e.g. multiplexer ID= n, Camera IN= m then ID of Dome =16x(n-1)+m )

DIP switch S1 is used to set the camera address. Apply the settings for each camera in your video system as shown in the following table.



### NOTE

This is an important step. If you do not set the camera addresses correctly, there will be communication errors.



S1 Settings

CAMERA ID	SWITCH NUMBER							
	1	2	3	4	5	6	7	8
1	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
2	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF
3	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF
4	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF
5	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF
6	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF

CAMERA ID	SWITCH NUMBER							
	1	2	3	4	5	6	7	8
7	ON	ON	ON	OFF	OFF	OFF	OFF	OFF
8	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF
9	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF
10	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF
11	ON	ON	OFF	ON	OFF	OFF	OFF	OFF
12	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF
13	ON	OFF	ON	ON	OFF	OFF	OFF	OFF
14	OFF	ON	ON	ON	OFF	OFF	OFF	OFF
15	ON	ON	ON	ON	OFF	OFF	OFF	OFF
16	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF
17	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF
18	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF
19	ON	ON	OFF	OFF	ON	OFF	OFF	OFF
20	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF
21	ON	OFF	ON	OFF	ON	OFF	OFF	OFF
22	OFF	ON	ON	OFF	ON	OFF	OFF	OFF
23	ON	ON	ON	OFF	ON	OFF	OFF	OFF
24	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF
25	ON	OFF	OFF	ON	ON	OFF	OFF	OFF
26	OFF	ON	OFF	ON	ON	OFF	OFF	OFF
27	ON	ON	OFF	ON	ON	OFF	OFF	OFF
28	OFF	OFF	ON	ON	ON	OFF	OFF	OFF
29	ON	OFF	ON	ON	ON	OFF	OFF	OFF
30	OFF	ON	ON	ON	ON	OFF	OFF	OFF
31	ON	ON	ON	ON	ON	OFF	OFF	OFF
32	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF
33	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF
34	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF
35	ON	ON	OFF	OFF	OFF	ON	OFF	OFF
36	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF
37	ON	OFF	ON	OFF	OFF	ON	OFF	OFF
38	OFF	ON	ON	OFF	OFF	ON	OFF	OFF
39	ON	ON	ON	OFF	OFF	ON	OFF	OFF
40	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF
41	ON	OFF	OFF	ON	OFF	ON	OFF	OFF
42	OFF	ON	OFF	ON	OFF	ON	OFF	OFF
43	ON	ON	OFF	ON	OFF	ON	OFF	OFF
44	OFF	OFF	ON	ON	OFF	ON	OFF	OFF
45	ON	OFF	ON	ON	OFF	ON	OFF	OFF
46	OFF	ON	ON	ON	OFF	ON	OFF	OFF
47	ON	ON	ON	ON	OFF	ON	OFF	OFF
48	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF

CAMERA ID	SWITCH NUMBER							
	1	2	3	4	5	6	7	8
49	ON	OFF	OFF	OFF	ON	ON	OFF	OFF
50	OFF	ON	OFF	OFF	ON	ON	OFF	OFF
51	ON	ON	OFF	OFF	ON	ON	OFF	OFF
52	OFF	OFF	ON	OFF	ON	ON	OFF	OFF
53	ON	OFF	ON	OFF	ON	ON	OFF	OFF
54	OFF	ON	ON	OFF	ON	ON	OFF	OFF
55	ON	ON	ON	OFF	ON	ON	OFF	OFF
56	OFF	OFF	OFF	ON	ON	ON	OFF	OFF
57	ON	OFF	OFF	ON	ON	ON	OFF	OFF
58	OFF	ON	OFF	ON	ON	ON	OFF	OFF
59	ON	ON	OFF	ON	ON	ON	OFF	OFF
60	OFF	OFF	ON	ON	ON	ON	OFF	OFF
61	ON	OFF	ON	ON	ON	ON	OFF	OFF
62	OFF	ON	ON	ON	ON	ON	OFF	OFF
63	ON	ON	ON	ON	ON	ON	OFF	OFF
64	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF
65	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF
66	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF
67	ON	ON	OFF	OFF	OFF	OFF	ON	OFF
68	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF
69	ON	OFF	ON	OFF	OFF	OFF	ON	OFF
70	OFF	ON	ON	OFF	OFF	OFF	ON	OFF
71	ON	ON	ON	OFF	OFF	OFF	ON	OFF
72	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF
73	ON	OFF	OFF	ON	OFF	OFF	ON	OFF
74	OFF	ON	OFF	ON	OFF	OFF	ON	OFF
75	ON	ON	OFF	ON	OFF	OFF	ON	OFF
76	OFF	OFF	ON	ON	OFF	OFF	ON	OFF
77	ON	OFF	ON	ON	OFF	OFF	ON	OFF
78	OFF	ON	ON	ON	OFF	OFF	ON	OFF
79	ON	ON	ON	ON	OFF	OFF	ON	OFF
80	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF
81	ON	OFF	OFF	OFF	ON	OFF	ON	OFF
82	OFF	ON	OFF	OFF	ON	OFF	ON	OFF
83	ON	ON	OFF	OFF	ON	OFF	ON	OFF
84	OFF	OFF	ON	OFF	ON	OFF	ON	OFF
85	ON	OFF	ON	OFF	ON	OFF	ON	OFF
86	OFF	ON	ON	OFF	ON	OFF	ON	OFF
87	ON	ON	ON	OFF	ON	OFF	ON	OFF
88	OFF	OFF	OFF	ON	ON	OFF	ON	OFF
89	ON	OFF	OFF	ON	ON	OFF	ON	OFF
90	OFF	ON	OFF	ON	ON	OFF	ON	OFF

CAMERA ID	SWITCH NUMBER							
	1	2	3	4	5	6	7	8
91	ON	ON	OFF	ON	ON	OFF	ON	OFF
92	OFF	OFF	ON	ON	ON	OFF	ON	OFF
93	ON	OFF	ON	ON	ON	OFF	ON	OFF
94	OFF	ON	ON	ON	ON	OFF	ON	OFF
95	ON	ON	ON	ON	ON	OFF	ON	OFF
96	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF
97	ON	OFF	OFF	OFF	OFF	ON	ON	OFF
98	OFF	ON	OFF	OFF	OFF	ON	ON	OFF
99	ON	ON	OFF	OFF	OFF	ON	ON	OFF
100	OFF	OFF	ON	OFF	OFF	ON	ON	OFF
101	ON	OFF	ON	OFF	OFF	ON	ON	OFF
102	OFF	ON	ON	OFF	OFF	ON	ON	OFF
103	ON	ON	ON	OFF	OFF	ON	ON	OFF
104	OFF	OFF	OFF	ON	OFF	ON	ON	OFF
105	ON	OFF	OFF	ON	OFF	ON	ON	OFF
106	OFF	ON	OFF	ON	OFF	ON	ON	OFF
107	ON	ON	OFF	ON	OFF	ON	ON	OFF
108	OFF	OFF	ON	ON	OFF	ON	ON	OFF
109	ON	OFF	ON	ON	OFF	ON	ON	OFF
110	OFF	ON	ON	ON	OFF	ON	ON	OFF
111	ON	ON	ON	ON	OFF	ON	ON	OFF
112	OFF	OFF	OFF	OFF	ON	ON	ON	OFF
113	ON	OFF	OFF	OFF	ON	ON	ON	OFF
114	OFF	ON	OFF	OFF	ON	ON	ON	OFF
115	ON	ON	OFF	OFF	ON	ON	ON	OFF
116	OFF	OFF	ON	OFF	ON	ON	ON	OFF
117	ON	OFF	ON	OFF	ON	ON	ON	OFF
118	OFF	ON	ON	OFF	ON	ON	ON	OFF
119	ON	ON	ON	OFF	ON	ON	ON	OFF
120	OFF	OFF	OFF	ON	ON	ON	ON	OFF
121	ON	OFF	OFF	ON	ON	ON	ON	OFF
122	OFF	ON	OFF	ON	ON	ON	ON	OFF
123	ON	ON	OFF	ON	ON	ON	ON	OFF
124	OFF	OFF	ON	ON	ON	ON	ON	OFF
125	ON	OFF	ON	ON	ON	ON	ON	OFF
126	OFF	ON	ON	ON	ON	ON	ON	OFF
127	ON	ON	ON	ON	ON	ON	ON	OFF
128	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON
129	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON
130	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON
131	ON	ON	OFF	OFF	OFF	OFF	OFF	ON
132	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON

CAMERA ID	SWITCH NUMBER							
	1	2	3	4	5	6	7	8
133	ON	OFF	ON	OFF	OFF	OFF	OFF	ON
134	OFF	ON	ON	OFF	OFF	OFF	OFF	ON
135	ON	ON	ON	OFF	OFF	OFF	OFF	ON
136	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON
137	ON	OFF	OFF	ON	OFF	OFF	OFF	ON
138	OFF	ON	OFF	ON	OFF	OFF	OFF	ON
139	ON	ON	OFF	ON	OFF	OFF	OFF	ON
140	OFF	OFF	ON	ON	OFF	OFF	OFF	ON
141	ON	OFF	ON	ON	OFF	OFF	OFF	ON
142	OFF	ON	ON	ON	OFF	OFF	OFF	ON
143	ON	ON	ON	ON	OFF	OFF	OFF	ON
144	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON
145	ON	OFF	OFF	OFF	ON	OFF	OFF	ON
146	OFF	ON	OFF	OFF	ON	OFF	OFF	ON
147	ON	ON	OFF	OFF	ON	OFF	OFF	ON
148	OFF	OFF	ON	OFF	ON	OFF	OFF	ON
149	ON	OFF	ON	OFF	ON	OFF	OFF	ON
150	OFF	ON	ON	OFF	ON	OFF	OFF	ON
151	ON	ON	ON	OFF	ON	OFF	OFF	ON
152	OFF	OFF	OFF	ON	ON	OFF	OFF	ON
153	ON	OFF	OFF	ON	ON	OFF	OFF	ON
154	OFF	ON	OFF	ON	ON	OFF	OFF	ON
155	ON	ON	OFF	ON	ON	OFF	OFF	ON
156	OFF	OFF	ON	ON	ON	OFF	OFF	ON
157	ON	OFF	ON	ON	ON	OFF	OFF	ON
158	OFF	ON	ON	ON	ON	OFF	OFF	ON
159	ON	ON	ON	ON	ON	OFF	OFF	ON
160	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON
161	ON	OFF	OFF	OFF	OFF	ON	OFF	ON
162	OFF	ON	OFF	OFF	OFF	ON	OFF	ON
163	ON	ON	OFF	OFF	OFF	ON	OFF	ON
164	OFF	OFF	ON	OFF	OFF	ON	OFF	ON
165	ON	OFF	ON	OFF	OFF	ON	OFF	ON
166	OFF	ON	ON	OFF	OFF	ON	OFF	ON
167	ON	ON	ON	OFF	OFF	ON	OFF	ON
168	OFF	OFF	OFF	ON	OFF	ON	OFF	ON
169	ON	OFF	OFF	ON	OFF	ON	OFF	ON
170	OFF	ON	OFF	ON	OFF	ON	OFF	ON
171	ON	ON	OFF	ON	OFF	ON	OFF	ON
172	OFF	OFF	ON	ON	OFF	ON	OFF	ON
173	ON	OFF	ON	ON	OFF	ON	OFF	ON
174	OFF	ON	ON	ON	OFF	ON	OFF	ON



CAMERA ID	SWITCH NUMBER							
	1	2	3	4	5	6	7	8
175	ON	ON	ON	ON	OFF	ON	OFF	ON
176	OFF	OFF	OFF	OFF	ON	ON	OFF	ON
177	ON	OFF	OFF	OFF	ON	ON	OFF	ON
178	OFF	ON	OFF	OFF	ON	ON	OFF	ON
179	ON	ON	OFF	OFF	ON	ON	OFF	ON
180	OFF	OFF	ON	OFF	ON	ON	OFF	ON
181	ON	OFF	ON	OFF	ON	ON	OFF	ON
182	OFF	ON	ON	OFF	ON	ON	OFF	ON
183	ON	ON	ON	OFF	ON	ON	OFF	ON
184	OFF	OFF	OFF	ON	ON	ON	OFF	ON
185	ON	OFF	OFF	ON	ON	ON	OFF	ON
186	OFF	ON	OFF	ON	ON	ON	OFF	ON
187	ON	ON	OFF	ON	ON	ON	OFF	ON
188	OFF	OFF	ON	ON	ON	ON	OFF	ON
189	ON	OFF	ON	ON	ON	ON	OFF	ON
190	OFF	ON	ON	ON	ON	ON	OFF	ON
191	ON	ON	ON	ON	ON	ON	OFF	ON
192	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON
193	ON	OFF	OFF	OFF	OFF	OFF	ON	ON
194	OFF	ON	OFF	OFF	OFF	OFF	ON	ON
195	ON	ON	OFF	OFF	OFF	OFF	ON	ON
196	OFF	OFF	ON	OFF	OFF	OFF	ON	ON
197	ON	OFF	ON	OFF	OFF	OFF	ON	ON
198	OFF	ON	ON	OFF	OFF	OFF	ON	ON
199	ON	ON	ON	OFF	OFF	OFF	ON	ON
200	OFF	OFF	OFF	ON	OFF	OFF	ON	ON
201	ON	OFF	OFF	ON	OFF	OFF	ON	ON
202	OFF	ON	OFF	ON	OFF	OFF	ON	ON
203	ON	ON	OFF	ON	OFF	OFF	ON	ON
204	OFF	OFF	ON	ON	OFF	OFF	ON	ON
205	ON	OFF	ON	ON	OFF	OFF	ON	ON
206	OFF	ON	ON	ON	OFF	OFF	ON	ON
207	ON	ON	ON	ON	OFF	OFF	ON	ON
208	OFF	OFF	OFF	OFF	ON	OFF	ON	ON
209	ON	OFF	OFF	OFF	ON	OFF	ON	ON
210	OFF	ON	OFF	OFF	ON	OFF	ON	ON
211	ON	ON	OFF	OFF	ON	OFF	ON	ON
212	OFF	OFF	ON	OFF	ON	OFF	ON	ON
213	ON	OFF	ON	OFF	ON	OFF	ON	ON
214	OFF	ON	ON	OFF	ON	OFF	ON	ON
215	ON	ON	ON	OFF	ON	OFF	ON	ON
216	OFF	OFF	OFF	ON	ON	OFF	ON	ON

CAMERA ID	SWITCH NUMBER							
	1	2	3	4	5	6	7	8
217	ON	OFF	OFF	ON	ON	OFF	ON	ON
218	OFF	ON	OFF	ON	ON	OFF	ON	ON
219	ON	ON	OFF	ON	ON	OFF	ON	ON
220	OFF	OFF	ON	ON	ON	OFF	ON	ON
221	ON	OFF	ON	ON	ON	OFF	ON	ON
222	OFF	ON	ON	ON	ON	OFF	ON	ON
223	ON	ON	ON	ON	ON	OFF	ON	ON
224	OFF	OFF	OFF	OFF	OFF	ON	ON	ON
225	ON	OFF	OFF	OFF	OFF	ON	ON	ON
226	OFF	ON	OFF	OFF	OFF	ON	ON	ON
227	ON	ON	OFF	OFF	OFF	ON	ON	ON
228	OFF	OFF	ON	OFF	OFF	ON	ON	ON
229	ON	OFF	ON	OFF	OFF	ON	ON	ON
230	OFF	ON	ON	OFF	OFF	ON	ON	ON
231	ON	ON	ON	OFF	OFF	ON	ON	ON
232	OFF	OFF	OFF	ON	OFF	ON	ON	ON
233	ON	OFF	OFF	ON	OFF	ON	ON	ON
234	OFF	ON	OFF	ON	OFF	ON	ON	ON
235	ON	ON	OFF	ON	OFF	ON	ON	ON
236	OFF	OFF	ON	ON	OFF	ON	ON	ON
237	ON	OFF	ON	ON	OFF	ON	ON	ON
238	OFF	ON	ON	ON	OFF	ON	ON	ON
239	ON	ON	ON	ON	OFF	ON	ON	ON
240	OFF	OFF	OFF	OFF	ON	ON	ON	ON
241	ON	OFF	OFF	OFF	ON	ON	ON	ON
242	OFF	ON	OFF	OFF	ON	ON	ON	ON
243	ON	ON	OFF	OFF	ON	ON	ON	ON
244	OFF	OFF	ON	OFF	ON	ON	ON	ON
245	ON	OFF	ON	OFF	ON	ON	ON	ON
246	OFF	ON	ON	OFF	ON	ON	ON	ON
247	ON	ON	ON	OFF	ON	ON	ON	ON
248	OFF	OFF	OFF	ON	ON	ON	ON	ON
249	ON	OFF	OFF	ON	ON	ON	ON	ON
250	OFF	ON	OFF	ON	ON	ON	ON	ON
251	ON	ON	OFF	ON	ON	ON	ON	ON
252	OFF	OFF	ON	ON	ON	ON	ON	ON
253	ON	OFF	ON	ON	ON	ON	ON	ON
254	OFF	ON	ON	ON	ON	ON	ON	ON
255	ON	ON	ON	ON	ON	ON	ON	ON

## Shortcut Keys

If you are using the REVO America keyboard controller you can use a shortcut key to perform operations requiring the joystick and/or other keys.

Short Cut Key		Function	
<b>PRST</b>		Access Preset setup menu.	
<b>TOUR</b>		Access Tour setup menu.	
<b>PTRN</b>		Access Pattern setup menu.	
<b>SCAN</b>		Access Auto Scan setup menu.	
<b>No.+ CTRL+ PRST</b>		Store the current view at the selected number.	
Short Cut Key	Function	Short Cut Key	Function
<b>7 + ON</b>	Change FOCUS to AUTO	<b>7 + OFF</b>	Change FOCUS to manual
<b>8 + ON</b>	Change AE to AE1	<b>8 + OFF</b>	Change AE to manual
<b>9 + ON</b>	Change Night Shot to AUTO		
<b>10 + ON</b>	Night Shot on (go to the manual mode)	<b>10 + OFF</b>	Night Shot off (go to the manual mode)
<b>11 + ON</b>	BLC on (AE auto1 mode)	<b>11 + OFF</b>	BLC off (AE auto1 mode)
<b>12 + ON</b>	Digital Zoom on (According to digital zoom setting)	<b>12 + OFF</b>	Digital Zoom off
<b>13 + ON</b>	Dome OSD on	<b>13 + OFF</b>	Dome OSD off
<b>14 + ON</b>	Dome Area Title Display on	<b>14 + OFF</b>	Dome Area Title Display off

Short Cut Key	Function	Short Cut Key	Function
<b>15 + ON</b>	View Direction on	<b>15 + OFF</b>	View Direction off
<b>104 + ON</b>	WDR ON	<b>104 + OFF</b>	WDR off
<b>150 + ON</b>	Image Flip ON	<b>150 + OFF</b>	Image Flip off
<b>151 + ON</b>	Origin Check		
<b>152 + ON</b>	Place the camera in the 0° area horizontally.		
<b>153 + ON</b>	Go to the slow speed mode	<b>153 + OFF</b>	Go to the normal speed mode
<b>154 + ON</b>	Display System Information		
<b>155 + ON</b>	Flip the camera in the 180° area horizontally.		
<b>250 + PRST</b>	Factory setup menu (Tour dwell time, Answer delay)		
<b>888 + ENTER</b>	Night Shot on (in the global mode only)		
<b>999 + ENTER</b>	Night Shot off (in the global mode only)		



# 22 X INDOOR PTZ DOME CAMERA