**Note:**
In order to avoid electrical shock or fire, please use proper power according to the manual.

**WARNING**

**Note:** Only professional technicians are allowed to open the front or back cover of this camera.

**ADVERTENCIA**

**Nota:** Solo técnicos profesionales pueden abrir las cubiertas frontal o posterior de esta cámara.

**Not:*
Para prevención de choques electricos o fuego, por favor use la corriente apropiada, acorde con el manual.
Precautions

1. In case of smoke or strange smell originating from the camera, immediately disconnect the power and consult your vendor.

2. If the camera seems to be malfunctioning, disconnect it and consult your vendor.

3. Keep unit away from sharp or flammable objects.

4. Keep unit away from high moisture or water.

5. Do not drop the unit or subject it to strong shock or vibration.

6. Do not install this unit close to magnetic fields; the magnetic fields may damage the products performance.

7. Do not install the unit where there is greasy smoke or steam, where the humidity may get too high, or where there is a lot of dust.

8. Do not install close to heat sources (e.g., spotlights, stoves, direct sunlight, etc.), as this could damage the product. For the same reason refrain from installing close to the ceiling or in a kitchen or a boiler room, because the high temperature may damage the product.

9. To clean the product from dust or stains use a dry soft cloth then a damp soft cloth then immediately dry with a dry cloth.

10. Do not use benzene, thinner or other chemical products, as the cabinet may be damaged. Before using a chemical cloth, make sure to read all accompanying instructions. Make sure that no plastic or rubber material makes contact with the cabinet for a long period of time, as this may cause peeling of the paint.

Note:

In order to avoid electrical shock or fire, please use proper power according to the manual.
Connecting the RS-485 to the camera

1) Connect the 2 cables (+/-) of the camera to the B- and A+ of the RS485 on the PTZ Dome Controller.
2) Connect the 12VDC power supplier to the PTZ Dome Controller.
3) Connect camera to the electricity with the attached power supplier.
4) Connect a BNC (Rj-59) to the camera from the device your using(DVR or any other recording system).

Remote Control Function List

- Up/Down/Left/Right - Control the pan and tilt of camera.
- Enter – Stop current movement and a confirmation key after a command.
- Keys number 0 – 9 – For inputting desired number when needed.
- C – Clear (backspace) when needed to correct last number input.
- /-- – stats +10 mode or go back to normal mode, in normal mode you can only input number between 0 – 9. In 10+ mode you can input numbers between 0-255.
- ESC – at any time press this to go back to address input mode.
- CAM – Change camera address.
- SHOT – Go to preset button.
- HOME A / B – Shortcut for presets.
- P1 – P8 – Shortcuts for presets.
- PRESET – Set preset mode.
Protocol and Baud rate

You can check current baud rate and protocol or change them. You can choose between Pelco/D or Pelco/P protocol and select between baud rate 1200/2400/4800/9600.
This 2 parameters needs to be set like the camera’s baud rate and protocol – check manufacture’s user manual.
Our Mini-PTZ camera default baud rate and protocol are the same as our IR remote control unit:
Protocol: Pelco/D.
Baud Rate: 2400.

If you press DISP button on the remote control display shows “U008 or U010”
Its means that software version is 8 or 18.
If you press DISP button again- display shows “d=24”

D - Refers to the protocol – Pelco/D.
24 – Refers to baud rate – 2400.

To set up protocol and baud rate

- Press the SETUP button on the remote control (Red button), Display shows “d=24”.
- To change baud rate use ◄ or ► (1200/2400/4800/9600).
- To change protocol use ▲ or ▼ (P=PELCO/P , D=PELCO/D).
- Press the ENTER button to save configurations.

You can set different baud rate and protocol for each camera address.
For example:
You can set address 1 with Pelco/D and baud rate 2400,
Then choose address 2 and set it as Pelco/P and baud rate 9600.

• DELETE – To clear a preset point – press and hold 3 seconds.
• AUTO – start auto cruise mode.
• SPEED – Set speed of camera’s movement.
• S1 – S4 – Shortcut for movement speed (S1=8[slow] , S2=40 , S3=51 , S4=63[fast]).
• FOCUS + - focus far.
• FOCUS - - focus near.
• OPEN – open iris.
• CLOSE – close iris.
• ZOOM+ - Zoom In.
• ZOOM - - Zoom Out.
• PATTERN – Start/Stop pattern learn.
• RUN – run pattern.
• DISP – Display software version.
• SETUP – Set protocol and baud rate.
• F1 – F4 – User define keys.
Camera ID – Selecting camera

When powered on, the display will mark the camera’s ID A001, Example - “A001”
“A” = Represents the cameras ID address, means it shows you that current camera being controlled is #001.

To change camera press CAM on the remote, If the camera number is higher than 9, press the -/-- button, and write the camera number.
Example: CAM - -/-- - 9 - 0 - ENTER - To select camera number 90.

Pan/tilt speed

You can control the speed of pan/tilt movement.
When pressing SPEED on the remote, the display shows “S-63”.
S=Speed, 63 speed value, you can change the value between 1 to 63, when 63 is the fastest.

To change the speed:
- Press SPEED button and then a number between 1 to 63.
- When using a value higher then 9, press the -/-- button, and write the camera number.
- Press ENTER to confirm.

Presets

To set a preset:
- Press and hold PRESET button for 3 second or until display shows “SET”
- Enter a number between 1-9, if you want to use higher number then 9, Press the -/-- button after pressing PRESET
- After typing a number press “ENTER” to confirm.
Example: PRESET - -/-- - 1 - 5 - ENTER - To set preset 15.

To switch between presets press SHOT, Then press the desired preset number.

To move to the preset you programmed
- Press SHOT on the remote and then the desired preset number.
- If you want to use higher number then 9, Press the -/-- button after pressing SHOT.
Example To call preset 15 SHOT - -/-- - 1 - 5.

Home Point

When pressing HOME on the remote control the display shows HOME
You can set a home point preset, so that when you press HOME on the remote control, the camera will move to your pre-selected home point from any position she is in.

To set a home point:
- Move the camera to desired location.
- Press and hold PRESET button on the remote control.
- When the display shows “SET”, press HOME.

Line Scan

You can set 2 points for the camera to perform a scan between them. These two points are A and B on the remote control.
When pressing A on the remote- display shows “LF-A”
When pressing B on the remote- display shows “LF-B”

To set the left/right limits:
- Set the camera to the desired location.
- Press and hold PRESET button for 3 seconds until display shows “SET”.

You can control the speed of pan/tilt movement.
- Then press A for settings first limit.
- Move the camera to the other location you want to set as second limit and repeat the last 2 lines using B button instead of A

**To start line scan**
- Press AUTO button on the remote control, the camera will move between the 2 points A and B back and forward.
To stop the line scan press ◄/►/▲/▼.

**To delete a preset or a home point or left/right limit**

You can delete presets or home point using the “DELETE” button on the remote control.
When pressing and holding DELETE on the remote control, display shows “Clr”
“Clr-“= Clear.
- Press and hold DELETE button on the remote control.
  When display shows “Clr” inserts number of preset that you want to delete or press HOME for deleting the home point, you can also delete A/B points.

If the preset number is more then 9, press the -/-- button, And write the preset number.
**Example:** DELETE – -/-- – 2 - 5 - To delete preset 25.

**PATTERN**

You can set up a pattern from the selected presets and in the order you wish. You can set up to 16 presets in the pattern.
You can also press RUN without selecting a certain pattern- that will start a pattern between all presets from 1 to 16.

- The default time between preset to preset (Including the camera’s movement until the preset) is **8 seconds**.
The speed of camera movement and the stop time (dwell time) between preset to preset are adjustable.

**Setting up a PATTERN**

When pressing **PATTERN** for 3 seconds on the remote control
- Display shows “PSTA”
  That means that Pattern track setup mode is on. At this mode
  - input the presets you want to include in the pattern (the order of inputting the presets is the order which the camera will move between them).
  - Input the presets by pressing PRESET button and then the preset number. After inputting all presets
  - Press PATTERN button again for 3 seconds
  - Display shows “PST0”- means that pattern track setup mode is off.
Example:
To set up a pattern that will move between presets 1-5-3 in a loop.
**PATTERN** (3sec’) – **PRESET** – 1 – **PRESET** – 5 – **PRESET** – 3 – **PATTERN** (3sec’)

To start the pattern press **RUN** on the remote control,
To stop the pattern press “**RUN**” again.

**Note:** After pressing **RUN** camera will only move between the selected presets for the pattern.

**Dwell Time**

In a pattern, after setting all desired presets - you can change the holding time between preset to preset.
Dwell time - the time spaces between preset to preset – The time the camera will stay on the preset before moving to the next one.
You can set a different time between each preset or the same time for all presets.

For setting up the same time to all presets

- Press **Preset** button for 3 seconds to set preset number 242.
- Press **Preset** button for 3 seconds to set preset number 245.
- Press **Preset** button for 3 seconds to set preset number between 224 to 239, each preset represents holding time as described beneath:

  - Press 224 refers to _______2 seconds
  - Press 225 refers to _______4 seconds
  - Press 226 refers to _______6 seconds
  - Press 227 refers to _______8 seconds
  - Press 228 refers to _______16 seconds
  - Press 229 refers to _______24 seconds
  - Press 230 refers to _______32 seconds
  - Press 231 refers to _______48 seconds
  - Press 232 refers to _______64 seconds
  - Press 233 refers to _______80 seconds
  - Press 234 refers to _______96 seconds
  - Press 235 refers to _______112 seconds
  - Press 236 refers to _______128 seconds
  - Press 237 refers to _______176 seconds
  - Press 238 refers to _______208 seconds
  - Press 239 refers to _______255 seconds

- After selecting dwell time, you will need to call the presets you want to set up with the dwell time. To call a preset press on **SHOT** button and then the desired presets you want to configure with this dwell time.
- Press preset button for 3 seconds to set preset number 243.

**Example to set dwell time for presets 1,2,3,4 for 6 seconds.**
For setting up different time to each preset

- Press **Preset** button for 3 seconds to set preset number 242.
- Press **Preset** button for 3 seconds to set preset number 245.
- Press **Preset** button for 3 seconds to set preset number between 224 to 239, each preset represents holding time as described beneath:

  - preset 224 refers to 2 seconds
  - preset 225 refers to 4 seconds
  - preset 226 refers to 6 seconds
  - preset 227 refers to 8 seconds
  - preset 228 refers to 16 seconds
  - preset 229 refers to 24 seconds
  - preset 230 refers to 32 seconds
  - preset 231 refers to 48 seconds
  - preset 232 refers to 64 seconds
  - preset 233 refers to 80 seconds
  - preset 234 refers to 96 seconds
  - preset 235 refers to 112 seconds
  - preset 236 refers to 128 seconds
  - preset 237 refers to 176 seconds
  - preset 238 refers to 208 seconds
  - preset 239 refers to 255 seconds

- Now call preset 1 – to set the dwell time for preset 1 as selected.
- Set preset number 245.
- Set any preset between 224 to 239.
- Call preset 2

The last 3 steps are repeating themselves until all desired preset are programmed.

- Press **Preset** button for 3 seconds to set preset number 243 to end Cruise settings.

Example to set dwell time for preset 1 – 8 seconds, for preset 5 – 4 seconds, for Preset 2 – 2 seconds.

Preset (3 sec’) 242 – Preset (3 sec’) 245 - Preset (3 sec’) 227 - SHOT 1 – Preset (3 sec’) 245 - Preset (3 sec’) 225 – SHOT 5 – Preset (3 sec’) 245 - Preset (3 sec’) 224 – SHOT 2.

• In cases of more presets then showed – continue to set up all presets and only in the end set preset 243 to end cruise setup.

Resetting all to factory default

Set preset 240.