

SDC-TR03

Control Keyboard

User Manual

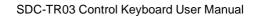


Document No. SD-MA-060 Document Version: 01



Contents

| Over | rview1 |
|-------|--------------------|
| 1. | Key Features1 |
| 2. | Specification2 |
| 3. | Accessory2 |
| 4. | Panel Layout3 |
| 5. | Login Interface |
| 6. | Home interface |
| 7. | Main functions6 |
| 7.1. | PTZ6 |
| 7.1.1 | PTZ Setting9 |
| 7.2. | TV Wall9 |
| 7.3. | Setting10 |
| 7.3.1 | Camera List10 |
| 7.3.2 | 2 Sequence |
| 7.3.3 | Sequence Setting13 |
| 7.3.4 | Factory Debug14 |
| 7.3.5 | 6 Camera Record14 |
| 7.5.6 | 5 Version15 |
| 7.5.7 | ' Account15 |





Overview

SDC-TR03 control keyboard is a new generation of Android-based PoE-enabled touchscreen keyboard for controlling up to 2048 network cameras. Featuring a 7-inch capacitive touch screen and user-friendly UI, SDC-TR03 can provide a real-time preview on the keyboard and project the image onto an external display though its HDMI interface.

This control keyboard supports advanced video decoding capabilities, including H.265 single-channel 4K@60 and H.264 four-way 1080P@60. With its 4D joystick and function keys, SDC-TR03 can quickly locate targets and perform various control operations on the selected PTZ camera.

With the support of ONVIF, VISCA and NDI communication over LAN, SDC-TR03 is ideal for environments where multiple network units are installed, such as streets, schools, hospitals, hotels, and workshops that requires a large amount of control for network cameras.

1. Key Features

- 7-inch capacitive touch screen
- Support on-screen real-time preview
- Support one 4K@30 HDMI output for preview
- Support IP control via RJ45 and serial port control via RS232 and RS422/485
- Support H.265/H.264 decoding up to 4 split windows
- Support touchscreen, 4D joystick and function keys for PTZ control and setting
- Support layout switch
- Support on-screen access of PTZ camera WebUI
- Support up to 2048 network cameras
- Support camera looping
- Support PoE
- Support VISCA, ONVIF, NDI, PELCO-P, PELCO-D, VISCA over IP protocol
- Support photo capture and video recording of the network cameras
- Support 64GB on-board storage and external storage via USB stick or MicroSD

1



2. Specification

| Screen Size | 7-inch capacitive touchscreen |
|-----------------------------|--|
| Screen Resolution | 1024x600 |
| HDMI Output | 1x HDMI |
| HDMI Output Resolution | 4K@30 |
| Decoding | H.265: 1x 4K@60 H.264: 4x 1080P@30 |
| Communication Method | Network: RJ45 Serial Port: RS422, RS485 |
| Communication Protocols | Network: Onvif, Visca over IP, NDI Serial Port: Visca, Pelco-D, Pelco-P |
| Joystick | 4 Dimension (Control up, down, left, right, zoom, click joystick) |
| On-board Storage | 64GB |
| External Storage | USB Stick or MicroSD |
| Power | PoE or DC12V/2A |
| Power Consumption | <1.5W |
| Operation Temperature Range | -10°C-50°C |
| Operating Humidity Range | 10%-90% non-condensing |
| Storage Temperature Range | -40°C-60°C |
| Dimension | 365mm (L) X 245mm (W) X 155mm (H) |
| Net Weight | 1781g |
| Warranty | 2 years |

3. Accessory

| 1 | Download Card | 1 piece download card where user can find related manuals on our website. |
|---|---------------|---|
| 2 | Power adaptor | International plug inter-changeable power adapter, of which the plugs include Europe, US and UK standard. |



4. Panel Layout

4.1. Back Panel



| 1 | MicroSD port |
|---|--------------------------|
| 2 | USB 3.0 port |
| 3 | RS232 and RS422/485 port |
| 4 | HDMI output |
| 5 | RJ45 port (Support PoE) |
| 6 | DC 12V/2A power port |
| 7 | Power Switch |

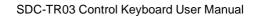
4.2. Front Panel





SDC-TR03 Control Keyboard User Manual

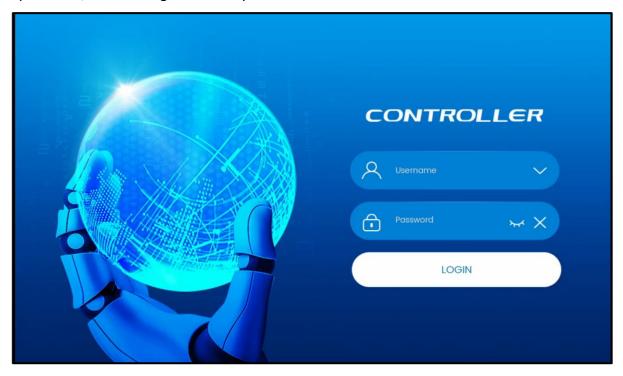
| P/T SPEED | Adjust moving speed of the PTZ camera |
|------------------|--|
| IRIS | Adjust IRIS of the PTZ camera |
| AUTO EXPOSURE | Automatically adjust exposure of the PTZ camera |
| R/B GAIN | Adjust gain of the PTZ camera |
| AUTO WB | Automatically adjust WB of the PTZ camera |
| BRIGHT +/- | Adjust Brightness of the PTZ camera |
| PATROL | Enable patrol on the PTZ camera (if support) |
| AUTO FOCUS | Automatically adjust focus of the PTZ camera |
| BACKLIGHT ON/OFF | Turn ON/OFF backlight of the PTZ camera |
| SCENE1-6 | To call saved scene, click SCENE1-6 and then click SET SCENE or CALL SCENE |
| SET SCENE | Save scene for the PTZ camera |
| CALL SCENE | Call scene for the PTZ camera |
| SET PRESET | Set preset position for the PTZ camera |
| CALL PRESET | Call preset position for the PTZ camera |
| FOCUS (NEAR/FAR) | Adjust focus of the PTZ camera |
| Number keys | To call preset position, enter a number between 0-9 and then click SET PRESET or CALL PRESET |
| CLEAR | Return |
| SETUP | Enter the setup page |
| MENU ON/OFF | Turn ON/OFF OSD menu of the PTZ camera |
| MENU ENTER/BACK | Enter/Return in the OSD menu of the PTZ camera |
| LOCK | Lock the keyboard to sleep mode |
| HOME | Return to home spot |
| HELP | Open the user manual |
| Joystick Button | Screenshot |
| | |





5. Login Interface

After the unit is switched on, the login interface will be shown as below. The default username is **admin** and the default password is **admin**. After entering the username and password, user can login to the keyboard.



6. Home interface

The time is displayed on the top-left of the home interface. There are three main functions on the home interface including, PTZ, TV Wall and Setting. User can use each button to enter the corresponding function.

| | | admin |
|-----------------------------|---------------|-------|
| 08:29 23.01.2024 Tuesday | TV Wall | |
| 6 | | |
| PTZ | کَکَ) Setting | |
| | | |



7. Main functions

7.1. PTZ

PTZ is mainly used for preview and control of network PTZ cameras. On the left of the PTZ interface, the added cameras are listed. To bind cameras to the windows on the right, simply drag the camera from the list on the left and drop it in the windows on the right.

| E PTZ | | | - | | | 0 | | | | |
|--------------------------|------|---|-----------|----------|----|------------|------|-------------|-----|-------------|
| cameral 192.168.1.163 | ۲ | | | | 41 | | | | | |
| camera2 192.168.1.184 | ۲ | | 24053440 | | | | - | | | |
| camera3 192.168.1.182 | ۲ | | | | | | N | | | |
| camera4 192.168.1.183 | ۲ | 7 | | i d | | | | | | |
| | | | | | | 27 | 1 | 10 | 1 | Y |
| • |) | | Ô | Ċ | HD | Ð | © | | 8-8 | C |
| Unbind | Layo | | Cave Save | HDMI Set | | ро uart | Lock | C Refres | h | (?) Help |

Note: If there are no cameras added yet, please refer to section 7.4.1 to add cameras.

♥

PTZ interface contains the following functions to control each camera including:

- 1. Play: Play the RTSP streaming of the selected camera.
 - a. Pause: Pause the RTSP streaming of the selected camera.
- 2. **Stop**: Stop the RTSP streaming of the selected camera.
- 3. Traction: Display the selected camera in full screen.
 - a. Restore: Restore the display of the selected camera.





- 4. **Screenshot**: Screenshot the selected camera and save it locally. This function will only be available when the camera is playing or paused.
- 5. **Record**: Record the selected camera.
 - a. Stop recording: Stop the recording and save the record locally. This function will only be available when the camera is playing or paused.
- 6. **Clarity**: Switch the selected camera between main-stream and sub-stream.
- 7. **Preset**: Add, save, delete, and recall preset positions for the selected camera.



8. **PTZ**: On-screen PTZ control of the selected camera, including direction, zoom, focus, exposure, etc.





- 9. **Colour**: Change parameters of the selected camera including brightness, gain, exposure, AWB and AE.
- 10. Channel: Obtain and switch the channel of the selected camera. Note that only multi-channel cameras or NVR devices are supported. After changing channels, click 'Save' to bind the channel to the window.



11. WebUI: Enter the WebUI management platform of the selected camera.



7.1.1 PTZ Setting

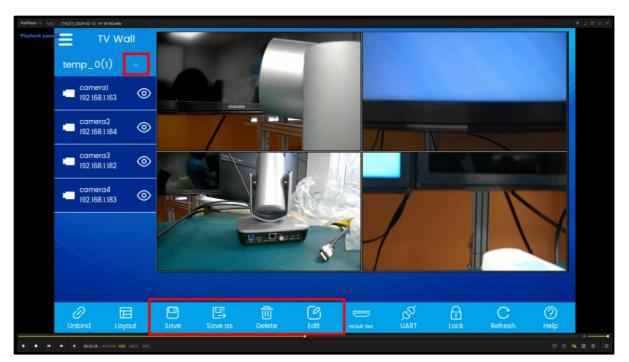


On the bottom of the PTZ interface, more functions are available.

- 1. **Unbind**: Unbind the selected camera from the window.
- 2. Layout: Switch the windows between 1x1 and 2x2. (The default will be 2x2)
- 3. **Save**: Save the bound cameras with the windows as a preset. The layout will then be saved. When the unit is rebooted, the PTZ mode will automatically recall the saved layout and enable preview on the keyboard for the cameras.

Note that if not saving, the cameras will be unbound with the windows after leaving the PTZ interface or after the keyboard is rebooted.

- 4. **HDMI Set**: Set the projected source through the HDMI interface between a realtime preview of the keyboard interface or a 1x1/2x2 preview of the cameras.
- 5. **UART**: Expand the serial port editing. The serial protocol can be changed between Pelco-D, Pelco-P and VISCA and parameters can also be changed.
- 6. **Lock**: Enter the sleep mode. This mode can be exited after user long presses the touchscreen. Note that HDMI output will not be affected under this mode.
- 7. **Refresh**: Refresh the screen if any camera is frozen.
- 8. Help: Display the SDC-TR03 User Manual.



7.2. TV Wall



TV Wall mode is mainly used for management of a large number of cameras. In addition to basic functions in PTZ mode, TV wall mode contains the following extra functions:

Saving/Saving as: Save the current bound cameras with the windows as a TV wall preset.

Editing: Edit the current preset, such as changing its name.

Delete: Delete the TV wall preset.

Switch (top-left): Switch between different TV wall presets.

Note that in TV Wall mode, the HDMI output can also be switched between different TV wall presets.

7.3. Setting

Setting interface contains multiple functions:

| - | Camera List | > | Saved | Devic | əs | | | Selec | t All Re | verse | Edit | Delete |
|---------|----------------|---|-------|--------|----|--------------|---------|---------------|----------|---------|------|--------|
| do. | Sequence | | | | q | cameral | | 192.168.1.163 | | | ß | 歃 |
| Ø | System Setting | | | | q | camera2 | | 192.168.1.184 | | | ß | 创 |
| 늆 | Factory Debug | | 0 | | ¢ | camera3 | | 192.168.1.182 | | | ß | 団 |
| ø | Camera Record | | 0 | 4 | q | camera4 | | 192.168.1.183 | | | Ø | 创 |
| \odot | Version | | | | | | | | | | | |
| ۴8 | Accounts | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | NDI | Search | | Onvif Search | | sca Search | Manu | ally Ad | d | |
| | | ì | Į | හු | | | Setting | ? | ÷ | | | |

7.3.1 Camera List

This function is used to add and edit cameras. The camera can be added via NDI search, Onvif Search and Visca Search. If any parameter is missed or incorrect, it can be changed via edit function or user can also manually add the camera by entering its parameters if necessary.



SDC-TR03 Control Keyboard User Manual

| | | Saved Devices | | Select All | | |
|------------|---------------|---------------|------------------|-----------------------|--|--|
| | | |) 第 | \checkmark \times | | |
| Ø | | Searched | | | | |
| ŵ | | 01 E477D4A663 | BF 192.168.1.163 | | | |
| ø | Camera Record | 11 RDC | 192.168.1.181 | | | |
| \odot | | 21 RDC | 192.168.1.183 | Added | | |
| F 8 | | | | | | |
| | | | | | | |
| | | | | | | |
| | f | e _ | Setti | ng (? | | |

| | | | | | Edit | Car | merc | a | | | | | ח | ٦ | × | | | | | e |
|-------|----------|-------|---|---|------|-------|------|-------|-------|----------|---------------|------------|---|---|----|----|---|---|-----|---|
| | | | | | | | adn | | | | | | | | | | | | | |
| ¢ĝi s | | | | | Pass | word | 1234 | 156 | | | | | | | | | | | | |
| ជិះ គ | actory I | Debuş | 9 | | Prof | tocol | Onv | if | | | | | | ` | ~ | Ma | | | | |
| | | | n | | Rts | p Url | rtsp | ://19 | 2.168 | .1.182:5 | 554/ <u>c</u> | <u>chl</u> | | | | | | | | |
| | 1903 | | | | CD | | | | | СН | | | 1 | | cm | | | | | Ŷ |
| 1 | | 2 | | 3 | | 4 | | 5 | | 6 | | 7 | | 8 | | 9 | | 0 | ⊠ | |
| | @ | | # | | £ | | % | | & | | - | | + | | (| |) | | Ø | |
| ~[< | ç | ١ | | = | | * | | II | | ' | | : | | ; | | ļ | | ? | ~[< | < |
| ABC | > | , | | _ | | | | | | | | | | | | / | | | ٢ | |

7.3.2 Sequence

View and edit sequences for the cameras, which will be looping at a certain time. User can then add cameras to this sequence, call it in the PTZ interface and loop between multiple cameras on screen. (Note that the display time must be over 30s for each camera.)



SDC-TR03 Control Keyboard User Manual

| Camera List | Sequence | | Select All | Reverse Add | Delete |
|--------------------|-----------------------------------|---------|------------|--------------|--------|
| C Sequence > | | | | | |
| 袋 System Setting | | | | | |
| ਜ਼ੌਜ Factory Debug | | | | | |
| to Camera Record | | | | | |
| Version | | | | | |
| FA Accounts | | | | | |
| | | | | | |
| | | | | | |
| | | | 0 | | |
| ↑ | <u>é</u> | Setting | ? | ÷ | |
| | New Sequence | (+) 凹 | \times | | |
| | New Sequence | | | | |
| 🖏 System Setting | Name <u>sequencel</u> | | | | |
| 予 Factory Debug | Seq Time(s) 30 | | | | |
| n | | | | \leftarrow | |
| | sequenced sequen | nces | sequencer | | Ŷ |
| 1 2 3 | 4 5 6 | 7 | 8 9 | 0 | ⊠ |
| @ # | £%& | - + | (|) | D |
| ~[< \ | = * " ' | | ; ! | ? | ~ [< |
| | | • | | | |
| ABC , | | | / | • | ٢ |
| | | | \times " | | Delete |
| | Add Resources | | | | |
| 🛱 System Setting | t cameral IP:192.168.1.163 | | 0 | | |
| ਜੁੰ Factory Debug | camera2 IP:192.168.1.184 | | 0 | | |
| to Camera Record | camera3 IP:192.168.1.182 | | 0 | | |
| | | | \bigcirc | | |
| Version | camera4 IP:192.168.1.183 | | | | |
| | camera4 IP:192.168.1.183 | | | | |
| ── ✓ Version | camera4 IP:192.168.1.183 | | | | |
| ── ✓ Version | t camera4 IP:192.168.1.183 | | | | |
| ── ✓ Version | Camera4 IP:192.168.1.183 | | | | |



| Playbackpause | ai Camera List | Sequence | | | Select All | Reverse Ad | dd Delete |
|---------------|-------------------|----------|-----------|---------|------------|--------------|--|
| Ċ | Sequence > | | Sequence1 | 30 | | | C 🖞 |
| Ø | System Setting | | | | | | |
| ឃិ | Factory Debug | | | | | | |
| ø | Camera Record | | | | | | |
| \odot | Version | | | | | | |
| පෙ | Accounts | | | | | | and the second s |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | ń | Ø | | Setting | ? | \leftarrow | |

7.3.3 System Setting

This function contains basic setting for the SDC-TR03 control keyboard.

| • | Camera List | | System Settir | ng | | | Key-Touch Sound | |
|---------|----------------|---|---------------|---------|---------|------------|-----------------|--|
| Ċ | Sequence | | 🔶 Network S | setting | | | | |
| Ø | System Setting | > | | Setting | | | | |
| ជិ | Factory Debug | | 다) Sound Se | tting | | | | |
| ø | Camera Record | | 💼 Clear Date | a | | | | |
| \odot | Version | | C Time Sett | ing | | | | |
| E8 | Accounts | | 👄 HDMI Sett | ing | | | | |
| | | | 🖵 Display Se | etting | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | ń | Ì | Ø | | Setting | \bigcirc | \leftarrow | |

- 1. Network Setting: Change network parameter for the keyboard.
- 2. Language Setting: Change the language of the keyboard.
- 3. **Sound Setting**: Change the volume of the keyboard.
- 4. Clear Data: Factory reset.
- 5. Time Setting: Set up the time displayed on the home screen.
- 6. **HDMI Setting**: Switch HDMI output between main and sub stream for cameras.
- 7. **Display Setting**: Adjust the HDMI output from the keyboard, such as brightness and resolution.



8. **Keyboard Sound (top-right)**: Enable the beep sound when pressing buttons on the keyboard.

7.3.4 Factory Debug

For development only. User can use sound function to check the working status of each function key on the keyboard.

| | Camera List | Test keyboard |
|---------|-----------------|---|
| eb. | Sequence | |
| Ø | System Setting | |
| ជិ | Factory Debug > | |
| ø | Camera Record | |
| \odot | Version | |
| ۴8 | Accounts | |
| | | |
| | | Enable sound Disable sound Clear Text Udpate MCU Version Buzzer |
| | n | ≅ ⊆ Setting ⑦ ← |

7.3.5 Camera Record

Screenshot and video recordings can be displayed in this function. User can also export the files onto external MicroSD or USB sticks.





7.5.6 Version

User can view the current firmware of the unit and upgrade its firmware via '**App Update**' by using an external USB stick or a MicroSD.

| - | Camera List | Version | | | | |
|------------|----------------|---------|----------------|-----------------------|------------|----------------------------|
| Ċ | Sequence | | | | | |
| ¢} | System Setting | | Software Info: | 1.4.8_2024012603 | 2624 | |
| ជិ | Factory Debug | | | | | |
| Ø | Camera Record | | Hardware Info: | 11 RD2A.211001.002 er | ng.lsc.202 | 240123.162717 release-keys |
| \odot | Version | | Serial Number: | 036971cfa4c2cf37 | | |
| F 8 | Accounts | | | | | |
| | | | | App Update | | System Update |
| | | | | | | |
| | | 凰 | | Setting | 0 | ~ |

7.5.7 Account

User can modify the password of the current login account or logout.

| - | Camera List | User info | | Admin |
|---------|----------------|-----------|---------------------|--------------|
| Ċ | Sequence | | | |
| Ø | System Setting | | | |
| ជ្ | Factory Debug | | admin | |
| Ø | Camera Record | | Number of Devices:4 | |
| \odot | Version | | | |
| ۴8 | Accounts > | | Modify Password | |
| | | | logout | |
| | | | | |
| | n | <u>ف</u> | Setting ⑦ | \leftarrow |