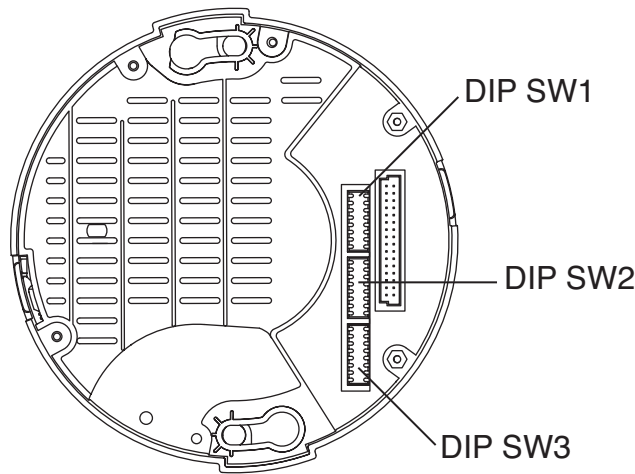


When Controlling TOA Cameras using Other Makers' Controllers

C-CC514, C-CC564
C-CC714, C-CC764

DIP Switch Settings



	DIP SW1	DIP SW2	DIP SW3
No.1	Camera address setting switch 1	Communication speed setting switch 1	Firmware update switch 1
No.2	Camera address setting switch 2	Communication speed setting switch 2	Firmware update switch 2
No.3	Camera address setting switch 3	OSD switch	Firmware update switch 3
No.4	Camera address setting switch 4	Protocol selection switch	Unused
No.5	Camera address setting switch 5	Protocol selection switch	Unused
No.6	Camera address setting switch 6	Communication method selector switch	Unused
No.7	Camera address setting switch 7	Unused	Memory clear switch
No.8	Camera address setting switch 8	Termination switch	Unused

Protocol selection switch (DIP SW2 : No.4, 5)

	TOA	Pelco D	BOSCH	PANASONIC
No.4	OFF	ON	OFF	ON
No.5	OFF	OFF	ON	ON

Notes

- Set the unused DIP switches to the “OFF” position.
- If the DIP switches are not set correctly, the camera does not operate correctly.

Note

Manufacturers may change their product specifications without prior notice. TOA cameras are designed to be controlled by other manufacturers' controllers as well other than those made by TOA, however other manufacturers' specifications may have changed after TOA confirmed their controllers could be used in conjunction with TOA cameras. Therefore, before purchasing and installing a large number of TOA cameras, it is highly recommended that customers prepare one camera for test purposes in order to see if it can be operated by other manufacturers' controllers.

OPERATION USING THE PELCO D PROTOCOL

Dip Switch Settings

Cameras can be set for control using the Pelco D protocol by setting SW2 DIP switches No. 4 to ON and No. 5 to OFF. (Both switches are factory-preset to OFF.)

Set SW2 No. 1 to ON and No. 2 to ON when controlling at the transmission rate of 2,400bps. (Both switches are factory-preset to OFF.)

Set SW2 No. 1 to OFF and No. 2 to ON when controlling at the transmission rate of 9,600bps. (Both switches are factory-preset to OFF.)

Turning on the power after setting the switches as shown above permits control by the Pelco D protocol.

Note

When the Pelco controller is connected, only one-way control can be performed, making it impossible for the camera to return responses to the controller. Note the correct polarity of the controller's data output terminal and the camera's control terminal before making connections.

Controllable Functions

- Pan, tilt, zoom, and focus operations can be performed using the controller's joystick.
- Preset patterns 1-82 can be stored and played back.
- Activating presets 83-88 allows Tour Sequence 1-6 to be operated.
- Functions programmed into the Auto key can be operated by activating preset 89.
- Operations of Tour Sequence 1-6 and functions programmed into the Auto key can be stopped by activating preset 90.
- The camera menu can be displayed by activating preset 95. Activating preset 95 while the menu is displayed exits the menu.
- Activating presets 1-82 while the menu is displayed permits confirmation of each item (i.e. provides the same operation as when the C-RM500's Set key is pressed). Also, among the items provided for numerical entries, the numbers entered while activating presets are input. Activating preset 83 in the items provided for numerical entries causes "0" to be entered.
- Activating preset 90 while the menu is displayed returns the display to the previous operation (i.e. provides the same operation as when the C-RM500's Clear key is pressed).
- If the menu screen is displayed when returned to the previous operation, each item can be selected using the joystick. If the item for setting pan, tile, zoom, or focus functions is displayed, such functions can be operated with the joystick.
- Activating preset 99 during camera alarm activation resets the alarm.

Function vs. Command Table

	Function	PELCO D	Remarks
1	PAN/ TILT/ ZOOM/ FOCUS	STANDARD COMMAND SET	
2	Preset playback	Go To Preset 1-82	
3	Preset memory	Set Preset 1-82	Can be set on TOA's camera menu.
4	Preset erase	Clear Preset 1-82	Can be cleared on TOA's camera menu.
5	Menu screen display, exit	ON : 95 Go To Preset OFF : 95 while the menu is displayed Go To Preset	
6	Menu : set	1-82 while the menu is displayed, 83 Go To Preset	83 : "0" to be entered
7	Menu : Clear	90 while the menu is displayed Go To Preset	
8	Menu : Up/ Down/ Left/ Right	STANDARD COMMAND SET PAN/ TILT	
9	Menu : PAN/ TILT/ ZOOM/ FOCUS	STANDARD COMMAND SET	
10	Alarm reset	99 during camera alarm activation Go To Preset	
11	Tour 1-6	Go To Preset 83-88	
12	Auto key operation start	Go To Preset 89	
13	Auto operation stop, Tour stop	Go To Preset 90	

OPERATION USING THE BOSCH PROTOCOL

Dip Switch Settings

Cameras can be set for control using the BOSCH protocol by setting SW2 DIP switches No. 4 to OFF and No. 5 to ON. (Both switches are factory-preset to OFF.)

Set SW2 No. 1 to ON and No. 2 to ON when controlling at the transmission rate of 2,400bps. (Both switches are factory-preset to OFF.)

Set SW2 No. 1 to OFF and No. 2 to ON when controlling at the transmission rate of 9,600bps. (Both switches are factory-preset to OFF.)

Turning on the power after setting the switches as shown above permits control by the BOSCH protocol.

Note

When the BOSCH controller is connected, only one-way control can be performed, making it impossible for the camera to return responses to the controller. Note the correct polarity of the controller's data output terminal and the camera's control terminal before making connections.

Controllable Functions

- Pan, tilt, zoom, and focus operations can be performed using the controller's joystick.
- Preset patterns 1-82 can be stored and played back.
- Activating presets 83-88 allows Tour Sequence 1-6 to be operated.
- Functions programmed into the Auto key can be operated by activating preset 89.
- Operations of Tour Sequence 1-6 and functions programmed into the Auto key can be stopped by activating preset 90.
- The camera menu can be displayed by activating Auxiliary ON No.8. Activating Auxiliary ON No.8 while the menu is displayed exits the menu.
- Activating presets 1-82 while the menu is displayed permits confirmation of each item (i.e. provides the same operation as when the C-RM500's Set key is pressed). Also, among the items provided for numerical entries, the numbers entered while activating presets are input. Activating preset 83 in the items provided for numerical entries causes "0" to be entered.
- Activating preset 90 while the menu is displayed returns the display to the previous operation (i.e. provides the same operation as when the C-RM500's Clear key is pressed).
- If the menu screen is displayed when returned to the previous operation, each item can be selected using the joystick. If the item for setting pan, tile, zoom, or focus functions is displayed, such functions can be operated with the joystick.
- Activating preset 99 during camera alarm activation resets the alarm.

Function vs. Command Table

	Function	BOSCH	Remarks
1	PAN/ TILT/ ZOOM/ FOCUS	Opcode 8	
2	Preset playback	Opcode 7 (Pre-position SHOW) 1-82	
3	Preset memory	Opcode 7 (Pre-position SET) 1-82	Can be set on TOA's camera menu.
4	Menu screen display, exit	ON : Opcode 7 (Auxiliary ON No.8) OFF : Opcode 7 while the menu is displayed (Auxiliary ON No.8)	
5	Menu : set	Opcode 7 while the menu is displayed (Pre-position SHOW) 1-82, 83 Go To Preset	83 : "0" to be entered
6	Menu : Clear	Opcode 7 while the menu is displayed (Pre-position SHOW) 90	
7	Menu : Up/ Down/ Left/ Right	Opcode 8 PAN/ TILT	
8	Menu : PAN/ TILT/ ZOOM/ FOCUS	Opcode 8	
9	Alarm reset	Opcode 7 (Pre-position SHOW) 99	
10	Tour 1-6	Opcode 7 (Pre-position SHOW) 83-88	
11	Auto key operation start	Opcode 7 (Pre-position SHOW) 89	
12	Auto operation stop, Tour stop	Opcode 7 (Pre-position SHOW) 90	

OPERATION USING THE PANASONIC PROTOCOL

Dip Switch Settings

Cameras can be set for control using the PANASONIC protocol by setting SW2 DIP switches No. 4 to ON and No. 5 to ON. (Both switches are factory-preset to OFF.)

Set the transmission rate as shown below. (Both switches are factory-preset to OFF.)

SW2	2400bps	4800bps	9600bps	19200bps
No.1	OFF	ON	ON	OFF
No.2	OFF	ON	OFF	ON

Turning on the power after setting the switches as shown above permits control by the PANASONIC protocol.

Note

When the PANASONIC controller is connected, only one-way control can be performed, making it impossible for the camera to return responses to the controller. Note the correct polarity of the controller's data output terminal and the camera's control terminal before making connections.

Controllable Functions

- Pan, tilt, zoom, and focus operations can be performed using the controller's joystick.
- Preset patterns 1-50 can be stored and played back.
- Activating presets 51-56 allows Tour Sequence 1-6 to be operated.
- Functions programmed into the Auto key can be operated by activating preset 58.
- Operations of Tour Sequence 1-6 and functions programmed into the Auto key can be stopped by activating preset 59.
- The camera menu can be displayed by activating preset 64. Activating preset 64 while the menu is displayed exits the menu.
- Activating presets 1-59 while the menu is displayed permits confirmation of each item (i.e. provides the same operation as when the C-RM500's Set key is pressed). Also, among the items provided for numerical entries, the numbers entered while activating presets are input. Activating preset 60 in the items provided for numerical entries causes "0" to be entered.
- Activating preset 63 while the menu is displayed returns the display to the previous operation (i.e. provides the same operation as when the C-RM500's Clear key is pressed).
- If the menu screen is displayed when returned to the previous operation, each item can be selected using the joystick. If the item for setting pan, tile, zoom, or focus functions is displayed, such functions can be operated with the joystick.
- Activating preset 62 during camera alarm activation resets the alarm.

Function vs. Command Table

	Function	PANASONIC	Remarks
1	PAN/ TILT/ ZOOM/ FOCUS	PTZ Control (Conventional)	Pan/ Tilt speed : 2-steps
2	Preset playback	Preset Position Call command (01-50)	
3	Preset memory	—	Can be set on TOA's camera menu.
4	Menu screen display, exit	ON : Preset Position Call command (64) OFF : Preset Position Call command (64) while the menu is displayed	
5	Menu : set	Preset Position Call command (01-60) while the menu is displayed	60 : "0" to be entered
6	Menu : Clear	Preset Position Call command (63) while the menu is displayed	
7	Menu : Up/ Down/ Left/ Right	PTZ Control (Conventional)	
8	Menu : PAN/ TILT/ ZOOM/ FOCUS	PTZ Control (Conventional)	
9	Alarm reset	Preset Position Call command (62) during camera alarm activation	
10	Tour 1-6	Preset Position Call command (51-56)	
11	Auto key operation start	Preset Position Call command (58)	
12	Auto operation stop, Tour stop	Preset Position Call command (59)	