

# COMBINATION DOME CAMERA SYSTEMS

NTSC

## Combination Dome Cameras

For Outdoor Use



**C-CC774**  
**C-CC764**  
multi-function type  
**C-CC714**  
standard type

For Indoor Use



**C-CC574**  
**C-CC564**  
multi-function type  
**C-CC514**  
standard type

with Ceiling Mount  
Cover C-BC511C

## Brackets and Covers

For Outdoor Use



**C-BC711P**  
Ceiling Suspension  
Bracket



**C-BC711PM**  
Pole Mounting  
Bracket



**C-BC511C**  
Ceiling Mount  
Cover



**C-BC511P**  
Ceiling Suspension  
Bracket



**C-BC511U**  
Flush Ceiling  
Mounting Bracket



**C-BC511A**  
Ceiling Mounting  
Bracket



**C-BC711W**  
Wall Mounting  
Bracket



**C-A711DM**  
Smoked Dome  
Cover



**C-BC511C-S**  
Ceiling Mount  
Cover (Smoked)



**C-BC511W**  
Wall Mounting  
Bracket



**C-BC511U-S**  
Flush Ceiling Mounting  
Bracket (Smoked)

## Remote Controllers



**C-RM500**  
Remote Controller  
for Camera and Multiplexer



**C-RM1000**  
Remote Controller  
for Camera and Digital Video Recorder



# Combination Dome Cameras

## Configuring a perfect surveillance system.

### Higher resolution delivers better images.

TOA cameras now feature a higher horizontal resolution of 540\*1 lines to deliver images of enhanced quality.

### All points coverage at high speed.

TOA's new combination dome cameras help to improve monitoring environments with an ideal coverage area that is made possible with a 360° rotation range to cover any possible position. Capable of a maximum rotating speed (panning/tilting) of 360°/second, these versatile cameras allow rotation speed to be slowed down as desired.



### Expanded zooming ability.

TOA cameras are capably equipped for zooming as needed. C-CC574 and C-CC774 incorporate a 35X ultra wide-angle zoom lens for better coverage of a desired image. If even more zooming is required, 12X digital zooming can be activated, resulting in an extraordinary combined zoom factor of up to 420X\*.

\* C-CC574 and C-CC774 cameras are equipped with a high-speed, wide-angle lens having a 35X zoom while C-CC564 and C-CC764 cameras are equipped with a high-speed, wide-angle lens having a 23X zoom (C-CC514 and C-CC714 having a 22X zoom). With the 12X digital zoom activated, a total 420X zoom is possible for C-CC574, 276X zoom for C-CC564 and C-CC764 cameras and 264X zoom for C-CC514 and C-CC714 cameras.

### Electronic Image Stabilizer.\*1

Using the camera at high zoom settings makes it very susceptible to wind. Even if the camera shakes slightly, images blur. TOA incorporates an image stabilization feature in the camera that minimizes movement-induced blurring to maintain stable images. In addition, the camera is also equipped with an angle-speed sensor that can maintain stable images even if monitoring low-light locations.

### Sophisticated autofocus modes add versatility.

TOA cameras are equipped with advanced auto-focusing. Three independent modes are offered: Auto focus for normal operation is activated with a single push. Stop Auto Focus activates if the camera view or viewing angle changes. To keep auto focus working continuously, the Continuous auto focus can be engaged.

### Intelligent image optimizing using the Wide Dynamic Range function.\*2

If the area of coverage exhibits varying brightness levels, it causes various problems that prevent achieving superb image quality. These problems pose severe difficulties for cameras that utilize conventional technology for dealing with brightness variations. The following two examples illustrate the problem.



Placing the focus on the outdoors results in the indoors being too dark to see well. (Photo A)



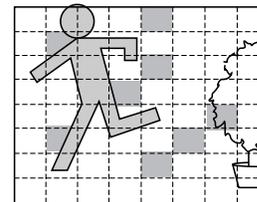
However, setting the focus on the indoors now "whites out" the outdoor area. (Photo B)



TOA Combination Dome Cameras incorporate a special Digital Signal Processor (DSP) that works to optimize image, producing a single image of exceptional clarity that is comparable to the same image when viewed with human eyes.

### Motion detection function initiates operation.\*2

When a moving object enters a camera's field of view, the camera will initiate a preprogrammed operation or a series of operations. The camera's view can be monitored onscreen with a window that is divided into 64 segments and from these, 8 areas can be selected as motion detection zones.



### Color image clarity maintained with sensitivity boost.

In night or dark lighting conditions, the camera's shutter speed is automatically reduced so that more light can enter. This function effectively increases the camera's sensitivity so that dark areas can be made up to 32 times brighter.

## Day/Night operation improves low light performance.\*2

Combination dome cameras also incorporate a separate B/W mode. At night, as light intensity decreases, this mode automatically activates, boosting camera sensitivity and making it possible to capture clear images even in unsatisfactory light conditions. When light conditions are satisfactory, the camera will revert to its primary function as a color camera. Used together, the sensitivity boost and B/W modes allow TOA combination dome cameras to efficiently function for 24-hour monitoring.

Note: B/W mode allows monitoring target areas that are not possible in normal light conditions.



Sensitivity boost allows cameras to provide good color image quality for dark areas.



(color image)



B/W mode.



(B/W image)

## Protecting privacy.

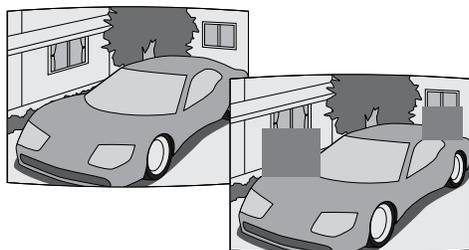
### a) Privacy Masking function.\*2

Depending on system use requirements, there may be several areas that the system administrator decides does not require surveillance for whatever reason. Users are allowed to select in advance the locations they wish to be excluded from surveillance in a camera's field of view.

Onscreen selected areas can be masked with a rectangle and a maximum of 8 areas can be masked for privacy.

\*C-CC564/C-CC764: 2 masked area/screen

\*C-CC574/C-CC774: 4 masked area/screen



### b) Restricting camera movement.

In addition to masking areas for privacy, a hardware-oriented method is also available. A camera's rotation range in both horizontal and vertical directions can be restricted to exclude areas from surveillance.

## Outdoor installation ready. (meets IP66 standards)

C-CC714, C-CC764 and C-CC774 utilize a waterproof and dustproof design that fully conforms to IP66 standards and can be safely installed outdoors. Cameras are cased in a special housing that withstands outdoor conditions, allowing them to be installed outdoors, even if the location is directly exposed to rain.

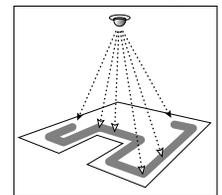
## Withstands cold weather conditions.

C-CC714, C-CC764 and C-CC774 incorporate a heating circuit that allows operation in severe temperatures down to  $-40^{\circ}\text{C}$  ( $-40^{\circ}\text{F}$ ). Heating is automatically turned on when ambient temperatures go below  $0^{\circ}\text{C}$  ( $32^{\circ}\text{F}$ ) and will automatically switch off when the temperatures rise.

Note: Turning the camera on when the camera interior is below  $0^{\circ}\text{C}$  ( $32^{\circ}\text{F}$ ) may not result in producing an immediately viewable image. Once the camera interior temperature rises above  $0^{\circ}\text{C}$  ( $32^{\circ}\text{F}$ ), images will be viewable.

## Route tracing facilitates subject monitoring.

In order to make it easy to follow a subject along a route, the camera can be set to automatically monitor preset points for up to 60 seconds. Two different routes can be programmed.



## Configuring programmable tours.

Through combinations of the 255 preset positions and trace function, a camera can be programmed to automatically and continuously repeat a travel pattern as a tour. Up to 16 tour patterns can be programmed. Any tour program is able to have a different travel pattern that can be activated by an alarm input or timer.

## Programmable camera operation initiated by alarm input.

A useful Alarm function allows programming camera operation that can be activated by an alarm input. Desired camera operations such as position replay, touring, tracing, and control of the auxiliary terminal can be programmed to activate when the camera receives an alarm input. Each camera is equipped with three (C-CC564 and C-CC574 have eight) alarm inputs and each alarm input can be set to respond with different preprogrammed operation.

## Preset operation start with Timer program function.

A camera can conveniently be set to begin operation at a preset time with a built-in timer. Each camera has a clock function that can be set to initiate operation at a preset time. The timer can be set for a specific date, day of the week, or daily. Up to 16 different timer programs can be set.

\*1 C-CC574/C-CC774 only.

\*2 C-CC564/C-CC574/C-CC764/C-CC774 only.



## SETTING GUIDE

The camera menu screens are comprised of the following setting item screens.



### Setting Item

#### PRESET SETTING

Programs the camera position (camera orientation), displays setting status, and performs reset.

- MEMORY\*1** Programs the camera position.
- READJUST ALL POS** Corrects all preset camera positions.
- MEMORY RESET** Resets preset camera position.
- MEMORY ALL RESET** Resets all preset camera positions.
- AUTO RETURN** The camera returns to the preset position automatically when the preset period of time elapses by external control.
- HOME** Designates the program the camera automatically returns to.
- FREEZE PRESET\*3** Displays the still image during camera movement between preset positions.

#### ID SETTINGS

Sets the title.

- DISPLAY** Sets to display or hides the title.
- ID SETTING** Sets ID.
- LOCATION\*2** Sets title display position and its length.
- FRAME ADJUST** Sets the character display position.
- ZERO POINT** Sets the origin point of the angle display.

#### CAMERA SETTING

Sets camera properties.

- WHITE BALANCE\*2** Sets the camera's white balance.
- BACKLIGHT\*2** Sets the backlight compensation.
- BRIGHTNESS\*2** Adjusts the camera's brightness.
- DAY/NIGHT\*2 \*3** Sets to give operation priority to black & white mode or slow shutter mode depending on the subject's brightness.
- AUTO FOCUS** Sets Auto Focus mode.
- AGC\*2** Sets AGC.
- SLOW SHUTTER\*2** Sets slow shutter.
- SHUTTER SPEED\*2** Sets shutter speed.
- E- ZOOM** Sets a maximum enlargement of electronic zoom.
- ENHANCER\*2** Sets contour enhancement.
- CHROMA\*2** Adjusts the chroma.
- SYNC** Switches sync. system and adjusts phase.
- EIS\*5** Electronic Image Stabilization settings.
- SENSITIVITY\*5** Sensitivity-Up selection.
- RESET (CAM SETTING)** Return each item on the camera setting screen to the factory default status.

#### AUTO MODE

Sets automatic operation of Auto-Pan, Preset sequence, Trace and Tour.

- AUTO KEY** Assigns automatic functions to the Auto key.
- AUTO PAN** Sets the Auto-Pan operations.
- SEQUENCE** Sets the preset sequence order.
- TRACE** Stores trace movements.
- TRACE 1 PAUSE TIME** Sets the stop duration of trace movements.

- TRACE 2 PAUSE TIME** Sets the stop duration of trace movements.
- TOUR** Sets the operation to be programmed.

#### ALARM

Sets alarm operations.

- INPUT** Sets input number of alarm input.
- REPORT** Sets the terminal that transmits the alarm information.
- ACTIVE STATE** Selects whether to activate the alarm input with make or break contacts.
- PRIORITY** Sets whether to forcibly execute action or to set priority order to operation.
- ACTION** Sets camera operation when alarm signal is received.
- INTERVAL** Sets the period of time that alarm conditions are maintained.
- RESET ACTION** Sets camera operation when the alarm conditions are released.
- ALARM DATA** Verify alarm logs.

#### AUX

Sets contact output.

- AUX1** Sets contact output.
- AUX2\*4** Sets contact output.

#### TIMER

Sets the timer.

- PROGRAM** Sets predetermined operations to be performed at preset times.
- TIME DISPLAY** Sets time display to 12-hour or 24-hour display formats.
- DATE DISPLAY** Sets date display.
- ENTER TIMER** Sets the time.
- ENTER DATE** Sets the date.
- SUMMER TIME** Sets the summer time (Daylight saving time).

#### MANUAL

Individual settings.

- ZOOM SCALABLE P/T** Resets zoom interlocking.
- P/T LIMIT** Designate the pan and tilt rotation limits.
- P/T LIMIT SETTING** Sets the pan and tilt rotation limits.
- MAX P/T SPEED** Sets the maximum speed of pan and tilt operation.
- FLIP** Sets whether to set the tilt rotation range to 90 or over.
- UP LIMIT** Sets the tilt angle limit.

#### MAINTENANCE

Sets functions during maintenance.

- INITIALIZE** Corrects deviation of stepping motor.
- REFRESH** Corrects deviation of position.
- PASSWORD** Sets the password required when activating maintenance menu screen.
- MOTOR POWER** Improves deviation of preset position.
- FACTORY PRESET** Returns all setting to initial status set by the factory.
- AUTO ADJUST** Automatically corrects deviation of position.
- DATA BACKUP** Sets data writing and reading.
- MOTION DETECTION\*3** Sets motion detection.
- PRIVACY MASK\*3** Sets privacy masking area.

#### LANGUAGE

Selecting the language.

\*1 Setting for this item can be entered by the Main Menu screen not by the Camera Menu screen when the equipments other than the C-RM500 are connected.  
 \*2 Can also be changed for individual positions at the Camera setting screen for individual positions.  
 \*3 Can be only set for the C-CC564, C-CC574, C-CC764 and C-CC774.  
 \*4 Can be only set for the C-CC564 and C-CC574.  
 \*5 Can be only set for the C-CC574 and C-CC774.

# C-CC774/C-CC764/C-CC714

## COMBINATION DOME CAMERA (OUTDOOR USE)



### C-CC774 FEATURES

- 255 preset positions + Home position
- 420X zoom (optical 35X, electronic 12X)
- Electronic Image Stabilizer
- Tilt rotation range +5° to -185°(using Auto-Flip function)
- Pan rotation range continuous 360°
- Pan/tilt maximum rotating speed is 360°/sec
- 1/4 type CCD image device
- 540 lines high resolution
- Wide dynamic range
- Autofocus
- High-sensitivity function (color and B/W modes)
- Preset sequency function
- Privacy masking function
- Restricting camera movement
- Auto-trace function
- Auto-tour function
- Motion detection function
- Auto-pan function
- Preset image freeze function
- Dust/Water Protection: IP66
- RS-485 protocol compatible

### C-CC764 FEATURES

- 255 preset positions + Home position
- 276X zoom (optical 23X, electronic 12X)
- Tilt rotation range +5° to -185°(using Auto-Flip function)
- Pan rotation range continuous 360°
- Pan/tilt maximum rotating speed is 360°/sec
- 1/4 type CCD image device
- 480 lines high resolution
- Wide dynamic range
- Autofocus
- High-sensitivity function (color and B/W modes)
- Preset sequency function
- Privacy masking function
- Restricting camera movement
- Auto-trace function
- Auto-tour function
- Motion detection function
- Auto-pan function
- Preset image freeze function
- Dust/Water Protection: IP66
- RS-485 protocol compatible

### C-CC774 SPECIFICATIONS

<b>Power source</b>	24V AC 50/60Hz (2P loose end)
<b>Power consumption</b>	10W (normal operation), 80W max. (2.8A max.)
<b>Control</b>	RS-485 communications system (new protocol compatible)
<b>Video Output</b>	VBS 1.0V(p-p), 75Ω, BNC-R jack
<b>Camera Control Terminal</b>	RS-485 camera control connector, multi-pair cable 8P, loose end (3P of 8P)
<b>Alarm Input</b>	3 channels, no-voltage make contact input, open voltage: 18V DC, short-circuit current: Under 2mA (settable alarm action), multi-pair cable 8P, loose end (3P of 8P)
<b>Auxiliary Contact Output</b>	1 channel, open collector output, withstand voltage: 20V DC, permissible current: Under 100mA, multi-pair cable 8P, loose end (1P of 8P)
<b>Synchronization</b>	Internal synchronization/power synchronization (phase adjustable when in power synchronization mode)
<b>ID</b>	8 characters (alphanumeric and symbols) Camera, Position, Trace, Auto-pan, Tour, Home, Alarm, Sector, AUX
<b>No. of Preset Positions</b>	255 Positions + Home
<b>Automatic Operation</b>	Auto-pan, Preset sequence, Auto-trace (2 preset patterns (60s)), Tour (16 preset patterns)
<b>Timer</b>	Refresh: Starts at the preset time every day or every week by timer settings Program: Settable 16 actions
<b>Language</b>	Menu: English, German, French, Italian ID: English, German, French, Italian, Russian, Polish, Spanish, Portuguese
<b>Camera</b>	
<b>Image device</b>	1/4 type CCD
<b>Resolution</b>	Horizontal: 540 lines typ. (at center), 520 lines min
<b>S/N ratio</b>	50dB
<b>Minimum Illumination</b>	High-sensitivity function OFF: 1 lx (50 IRE), 0.3 lx (20 IRE) High-sensitivity function ON: 0.005 lx (50 IRE), 0.0015 lx (20 IRE) (Sensitivity-UP) High-sensitivity function OFF: 0.5 lx (50 IRE), 0.15 lx (20 IRE) High-sensitivity function ON: 0.0025 lx (50 IRE), 0.00075 lx (20 IRE)
<b>Backlight Compensation</b>	WIDE DYNAMIC/WIDE DYNAMIC 2/Pattern 1/Pattern 2/Pattern 3/OFF
<b>Dynamic Range</b>	52dB (backlight compensation: WIDE DYNAMIC operation)
<b>High-Sensitivity Function</b>	B/W mode and slow shutter mode (32 times max.)
<b>White Balance</b>	ATW/AWB
<b>Iris</b>	Automatic
<b>Flicker Reduction</b>	Automatic correction
<b>Electronic Zooming</b>	12x zooming
<b>Auto-Focus</b>	One push/stop AF/continuous
<b>Lens</b>	
<b>Zooming</b>	35x
<b>Effective Focal Length</b>	f = 3.4 – 119mm (35X)
<b>Effective Angle of View</b>	Horizontal: 55.8° (W) – 1.7° (T), Vertical: 43.3° (W) – 1.3° (T)
<b>Maximum Aperture</b>	F 1.4 (W) – F 4.2 (T)
<b>Zoom Speed</b>	WIDE end to TELE end Approx. 2s (preset operation), Approx. 3.2s (manual operation)
<b>Pan/Tilt Head</b>	
<b>Rotating Range</b>	Panning: Endless 360° rotation, Tilting: +5° to -185°
<b>Rotating Speed</b>	Panning/Tilting: 360°/s max. (preset operation), 360°/s max. (manual operation)
<b>Other Function</b>	
<b>Other Function</b>	Auto-Pan, Freeze Preset, Manual Limit, Privacy Masking (up to 8), Motion Detection (each 8 presets at each 4 positions), EIS
<b>Operating Temperature</b>	-40°F to 122°F (-40°C to +50°C)
<b>Operating Humidity</b>	Under 90% RH (no condensation)
<b>Application</b>	Indoors and outdoors (except seaside, industrial districts and locations exposed to fine particles, where the unit is subject to corrosion, and heights that expose the unit to strong wind pressure)
<b>Dust/Water Protection</b>	IP66
<b>Finish</b>	Case, top cover and decorative frame: PC resin, light gray Sunshade: Aluminum, light gray, paint, Dome cover: PC resin (transparent)
<b>Dimensions</b>	Camera section external diameter: ø9.06 × 13.39 (H)inch (ø230 × 340 (H)mm) Dome external diameter: ø 5.91inch (ø150mm)
<b>Weight</b>	9.70 lb. (4.4kg)
<b>Accessory</b>	Top cover mounting screw (Hexagon socket screw M4 × 8) × 3, CD-R (Camera controller software, manual (PDF)) × 1
<b>Option</b>	Wall mounting bracket: C-BC711W, Suspension bracket: C-BC711P, Pole mounting bracket: C-BC711PM, Smoked dome cover: C-A 711DM

### C-CC764 SPECIFICATIONS

<b>Power source</b>	24V AC 50/60Hz (2P loose end)
<b>Power consumption</b>	10W (normal operation), 80W max. (2.8A max.)
<b>Control</b>	RS-485 communications system (new protocol compatible)
<b>Video Output</b>	VBS 1.0V(p-p), 75Ω, BNC-R jack
<b>Camera Control Terminal</b>	RS-485 camera control connector, multi-pair cable 8P, loose end (3P of 8P)
<b>Alarm Input</b>	3 channels, no-voltage make contact input, open voltage: 18V DC, short-circuit current: Under 2mA (settable alarm action), multi-pair cable 8P, loose end (3P of 8P)
<b>Auxiliary Contact Output</b>	1 channel, open collector output, withstand voltage: 20V DC, permissible current: Under 100mA, multi-pair cable 8P, loose end (1P of 8P)
<b>Synchronization</b>	Internal synchronization/power synchronization (phase adjustable when in power synchronization mode)
<b>ID</b>	8 characters (alphanumeric and symbols) Camera, Position, Trace, Auto-pan, Tour, Home, Alarm, Sector, AUX
<b>No. of Preset Positions</b>	255 Positions + Home
<b>Automatic Operation</b>	Auto-pan, Preset sequence, Auto-trace (2 preset patterns (60s)), Tour (16 preset patterns)
<b>Timer</b>	Refresh: Starts at the preset time every day or every week by timer settings Program: Settable 16 actions
<b>Language</b>	Menu: English, German, French, Italian ID: English, German, French, Italian, Russian, Polish, Spanish, Portuguese
<b>Camera</b>	
<b>Image device</b>	1/4 type CCD
<b>Resolution</b>	Horizontal: 480 lines (at center)
<b>S/N ratio</b>	50dB
<b>Minimum Illumination</b>	High-sensitivity function OFF: 3 lx (50 IRE), 1 lx (20 IRE) High-sensitivity function ON: 0.03 lx (50 IRE), 0.01 lx (20 IRE)
<b>Backlight Compensation</b>	WIDE DYNAMIC/Pattern 1/Pattern 2/Pattern 3/OFF
<b>Dynamic Range</b>	46dB (backlight compensation: WIDE DYNAMIC operation)
<b>High-Sensitivity Function</b>	B/W mode and slow shutter mode (32 times max.)
<b>White Balance</b>	ATW/AWB
<b>Iris</b>	Automatic
<b>Flicker Reduction</b>	Automatic correction
<b>Electronic Zooming</b>	12x zooming
<b>Auto-Focus</b>	One push/stop AF/continuous
<b>Lens</b>	
<b>Zooming</b>	23x
<b>Effective Focal Length</b>	f = 3.6 – 82.8mm (23X)
<b>Effective Angle of View</b>	Horizontal: 54° (W) – 2.5° (T), Vertical: 41.6° (W) – 1.9° (T)
<b>Maximum Aperture</b>	F 1.6 (W) – F 3.7 (T)
<b>Zoom Speed</b>	WIDE end to TELE end Approx. 1.5s (preset operation), Approx. 2.9s (manual operation)
<b>Pan/Tilt Head</b>	
<b>Rotating Range</b>	Panning: Endless 360° rotation, Tilting: +5° to -185°
<b>Rotating Speed</b>	Panning/Tilting: 360°/s max. (preset operation), 360°/s max. (manual operation)
<b>Other Function</b>	
<b>Other Function</b>	Auto-Pan, Freeze Preset, Manual Limit, Privacy Masking (up to 8), Motion Detection (each 8 presets at each 4 positions)
<b>Operating Temperature</b>	-40°F to 122°F (-40°C to +50°C)
<b>Operating Humidity</b>	Under 90% RH (no condensation)
<b>Application</b>	Indoors and outdoors (except seaside, industrial districts and locations exposed to fine particles, where the unit is subject to corrosion, and heights that expose the unit to strong wind pressure)
<b>Dust/Water Protection</b>	IP66
<b>Finish</b>	Case, top cover and decorative frame: PC resin, light gray Sunshade: Aluminum, light gray, paint Dome cover: PC resin (transparent)
<b>Dimensions</b>	Camera section external diameter: ø9.06 × 13.01 (H)inch (ø230 × 330.5 (H)mm) Dome external diameter: ø 5.91inch (ø150mm)
<b>Weight</b>	9.70 lb. (4.4kg)
<b>Accessory</b>	Top cover mounting screw (Hexagon socket screw M4 × 8) × 3, CD-R (Camera controller software, manual (PDF)) × 1
<b>Option</b>	Wall mounting bracket: C-BC711W, Suspension bracket: C-BC711P, Pole mounting bracket: C-BC711PM, Smoked dome cover: C-A 711DM

## C-CC714 FEATURES

- 255 preset positions + Home position
- 264X zoom (optical 22X, electronic 12X)
- Tilt rotation range +5° to -90°
- Pan rotation range continuous 360°
- Pan/tilt maximum rotating speed is 360°/sec
- 1/4 type CCD image device
- 480 lines high resolution
- Autofocus
- High-sensitivity function (color mode)
- Preset sequency function
- Restricting camera movement
- Auto-trace function
- Auto-tour function
- Auto-pan function
- Dust/Water Protection: IP66
- RS-485 protocol compatible

## C-CC714 SPECIFICATIONS

<b>Power source</b>	24V AC 50/60Hz (2P loose end)
<b>Power consumption</b>	10W (normal operation), 80W max. (2.8A max.)
<b>Control</b>	RS-485 communications system (new protocol compatible)
<b>Video Output</b>	VBS 1.0V(p-p), 75Ω, BNC-R jack
<b>Camera Control Terminal</b>	RS-485 camera control connector, multi-pair cable 8P, loose end (3P of 8P)
<b>Alarm Input</b>	3 channels, no-voltage make contact input, open voltage: 18V DC, short-circuit current; Under 2mA (settable alarm action), multi-pair cable 8P, loose end (3P of 8P)
<b>Auxiliary Contact Output</b>	1 channel, open collector output, withstand voltage: 20V DC, permissible current: Under 100mA, multi-pair cable 8P, loose end (1P of 8P)
<b>Synchronization</b>	Internal synchronization/power synchronization (phase adjustable when in power synchronization mode)
<b>ID</b>	8 characters (alphanumeric and symbols) Camera, Position, Trace, Auto-pan, Tour, Home, Alarm, Sector, AUX
<b>No. of Preset Positions</b>	255 Positions + Home
<b>Automatic Operation</b>	Auto-pan, Preset sequence, Auto-trace (2 preset patterns (60s)), Tour (16 preset patterns)
<b>Timer</b>	Refresh: Starts at the preset time every day or every week by timer settings Program: Settable 16 actions
<b>Language</b>	Menu: English, German, French, Italian ID: English, German, French, Italian, Russian, Polish, Spanish, Portuguese
<b>Camera</b>	
<b>Image device</b>	1/4 type CCD
<b>Resolution</b>	Horizontal: 480 lines (at center)
<b>S/N ratio</b>	50dB
<b>Minimum Illumination</b>	High-sensitivity function OFF: 1 lx (50 IRE), 0.3 lx (20 IRE) High-sensitivity function ON: 0.03 lx (50 IRE), 0.01 lx (20 IRE)
<b>Backlight Compensation</b>	Pattern 1/Pattern 2/Pattern 3/OFF
<b>High-Sensitivity Function</b>	Slow shutter mode (32 times max.)
<b>White Balance</b>	ATW/AWB
<b>Iris</b>	Automatic
<b>Flicker Reduction</b>	Automatic correction
<b>Electronic Zooming</b>	12x zooming
<b>Auto-Focus</b>	One push/stop AF/continuous
<b>Lens</b>	
<b>Zooming</b>	22x
<b>Effective Focal Length</b>	f = 4.0 – 88mm (22X)
<b>Effective Angle of View</b>	Horizontal: 47.3° (W) – 2.2° (T), Vertical: 36.5° (W) – 1.7° (T)
<b>Maximum Aperture</b>	F 1.6 (W) – F 3.8 (T)
<b>Zoom Speed</b>	WIDE end to TELE end Approx. 1.3s (preset operation), Approx. 2.4s (manual operation)
<b>Pan/Tilt Head</b>	
<b>Rotating Range</b>	Panning: Endless 360° rotation, Tilting: +5° to -90°
<b>Rotating Speed</b>	Panning/Tilting: 360°/s max. (preset operation), 360°/s max. (manual operation)
<b>Other Function</b>	
<b>Operating Temperature</b>	Manual Limit -40°F to 122°F (-40°C to +50°C)
<b>Operating Humidity</b>	Under 90% RH (no due condensation)
<b>Application</b>	Indoors and outdoors (except seaside, industrial districts and locations exposed to fine particles, where the unit is subject to corrosion, and heights that expose the unit to strong wind pressure)
<b>Dust/Water Protection</b>	IP66
<b>Finish</b>	Case, top cover and decorative frame: PC resin, light gray Sunshade: Aluminum, light gray, paint Dome cover: PC resin (transparent)
<b>Dimensions</b>	Camera section external diameter: ø9.06 × 13.01 (H)inch (ø230 × 330.5 (H)mm) Dome external diameter: ø 5.91inch (ø150mm)
<b>Weight</b>	9.70 lb. (4.4kg)
<b>Accessory</b>	Top cover mounting screw (Hexagon socket screw M4 × 8) × 3, CD-R (Camera controller software, manual (PDF)) × 1
<b>Option</b>	Wall mounting bracket: C-BC711W, Suspension bracket: C-BC711P, Pole mounting bracket: C-BC711PM, Smoked dome cover: C-A 711DM

# Brackets and Dome Cover



## C-BC711P Suspension Bracket

The C-BC711P is exclusively designed to be used to suspend TOA's outdoor combination camera from a ceiling or eaves.

<b>Finish</b>	Base: Aluminum, light gray, paint Pipe: Stainless steel (SUS304)
<b>Dimensions</b>	5.51 (W) × 6.46 (H) × 7.87 (D)inch (140 (W) × 164 (H) × 200 (D)mm)
<b>Weight</b>	2.21 lb. (1kg)
<b>Accessory</b>	Camera mounting screw (M5×12, with washer) × 3

Note: pay attention to the strength of the attaching portion.



## C-BC711PM Pole Mounting Bracket

Using the optional YS-60B and C-BC711W, the C-BC711PM can mount the outdoor combination camera on a pole.

<b>Finish</b>	Stainless steel (SUS304)
<b>Dimensions</b>	5.51 (W) × 7.87 (H) × 2.36 (D)inch (140 (W) × 200 (H) × 60 (D)mm)
<b>Weight</b>	1.54 lb. (700g)

Note: Reinforce the pole mounting bracket and mounting band separately for security when installing the camera in locations exposed to vibration or strong winds.

Maintenance the unit, mounting bracket and mounting band periodically to ensure that there are no loose joint nor rickety parts.



## C-BC711W Wall Mounting Bracket

The C-BC711W is designed to be used to mount TOA's outdoor combination camera on a wall.

<b>Finish</b>	Base: Aluminum, light gray, paint Pipe: Stainless steel (SUS304)
<b>Dimensions</b>	5.51 (W) × 9.45 (H) × 7.41 (D)inch (140 (W) × 240 (H) × 188.1 (D)mm)
<b>Weight</b>	2.87 lb. (1.3kg)
<b>Accessory</b>	Camera mounting screw (M5×12, with washer) × 3

Note: pay attention to the strength of wall surface.



## C-A711DM Smoked Dome Cover

The C-A711DM Smoked Dome Cover is specially designed to be used in conjunction with TOA's Combination Cameras. The Dome Cover is used to make it difficult for individuals to see the camera's orientation.

<b>Transmissivity</b>	Approx. 30%*
<b>Finish</b>	Dome: PC resin, smoked Frame: PC resin, light gray
<b>Dimensions</b>	ø8.65 × 5.04 (H)inch (ø219.8 × 128 (H)mm) (Dome external diameter: ø5.91inch (ø150mm))
<b>Weight</b>	0.88 lb. (400g)

\*As a general guideline, the minimum object illumination of the camera equipped with the Smoked Dome Cover is approximately 3.3 times that of the camera without the cover.

Note: Be careful when installing the camera with this cover in low illumination location as the cover may cause camera sensitivity to decrease.

# C-CC574/C-CC564/C-CC514

## COMBINATION DOME CAMERA (INDOOR USE)



### C-CC574 FEATURES

- 255 preset positions + Home position
- 420X zoom (optical 35X, electronic 12X)
- Electronic Image Stabilizer
- Tilt rotation range +5° to -185° (using Auto-Flip function)
- Pan rotation range continuous 360°
- Pan/tilt maximum rotating speed is 360°/sec
- 1/4 type CCD image device
- 540 lines high resolution
- Wide dynamic range
- Autofocus
- High-sensitivity function (color and B/W modes)
- Preset sequency function
- Privacy masking function
- Restricting camera movement
- Auto-trace function
- Auto-tour function
- Motion detection function
- Auto-pan function
- Preset image freeze function
- RS-485 protocol compatible

### C-CC564 FEATURES

- 255 preset positions + Home position
- 276X zoom (optical 23X, electronic 12X)
- Tilt rotation range +5° to -185° (using Auto-Flip function)
- Pan rotation range continuous 360°
- Pan/tilt maximum rotating speed is 360°/sec
- 1/4 type CCD image device
- 480 lines high resolution
- Wide dynamic range
- Autofocus
- High-sensitivity function (color and B/W modes)
- Preset sequency function
- Privacy masking function
- Restricting camera movement
- Auto-trace function
- Auto-tour function
- Motion detection function
- Auto-pan function
- Preset image freeze function
- RS-485 protocol compatible

### C-CC574 SPECIFICATIONS

<b>Power source</b>	24V AC 50/60Hz
<b>Power consumption</b>	9W (normal operation), 19W max. (1.3A max.)
<b>Control</b>	RS-485 communications system (new protocol compatible)
<b>Video Output</b>	VBS 1.0V(p-p), 75Ω, BNC-R jack
<b>Camera Control Terminal</b>	RS-485 camera control connector
<b>Alarm Input</b>	8 channels, no-voltage make contact input, open voltage: 18V DC, short-circuit current: Under 2mA (settable alarm action)
<b>Auxiliary Contact Output</b>	2 channels, open collector output, withstand voltage: 20V DC, permissible current: Under 100mA, relay contact output, permissible voltage: 20V DC, permissible current: Under 1A
<b>Synchronization</b>	Internal synchronization/Power synchronization (phase adjustable when in power synchronization mode)
<b>ID</b>	8 characters (alphanumeric and symbols) Camera, Position, Trace, Auto-pan, Tour, Home, Alarm, Sector, AUX
<b>No. of Preset Positions</b>	255 Positions + Home
<b>Automatic Operation</b>	Auto-pan, Preset sequence, Auto-trace (2 preset patterns (60s)), Tour (16 preset patterns)
<b>Timer</b>	Refresh: Starts at the preset time every day or every week by timer settings Program: Settable 16 actions
<b>Language</b>	Menu: English, German, French, Italian ID: English, German, French, Italian, Russian, Polish, Spanish, Portuguese
<b>Camera</b>	
<b>Image device</b>	1/4 type CCD
<b>Resolution</b>	Horizontal: 540 lines typ. (at center), 520 lines min.
<b>S/N ratio</b>	50dB
<b>Minimum Illumination</b>	High-sensitivity function OFF: 1 lx (50 IRE), 0.3 lx (20 IRE) High-sensitivity function ON: 0.005 lx (50 IRE), 0.0015 lx (20 IRE) (Sensitivity-UP) High-sensitivity function OFF: 0.5 lx (50 IRE), 0.15 lx (20 IRE) High-sensitivity function ON: 0.0025 lx (50 IRE), 0.00075 lx (20 IRE)
<b>Backlight Compensation</b>	WIDE DYNAMIC/WIDE DYNAMIC 2/Pattern 1/Pattern 2/Pattern 3/OFF
<b>Dynamic Range</b>	52dB (backlight compensation: WIDE DYNAMIC operation)
<b>High-Sensitivity Function</b>	B/W mode and slow shutter mode (32 times max.)
<b>White Balance</b>	ATW/AWB
<b>Iris</b>	Automatic
<b>Flicker Reduction</b>	Automatic correction
<b>Electronic Zooming</b>	12x zooming
<b>Auto-Focus</b>	One push/stop AF/continuous
<b>Lens</b>	
<b>Zooming</b>	35x
<b>Effective Focal Length</b>	f = 3.4 – 119mm (35X)
<b>Effective Angle of View</b>	Horizontal: 55.8° (W) – 1.7° (T), Vertical: 43.3° (W) – 1.3° (T)
<b>Maximum Aperture</b>	F 1.4 (W) – F 4.2 (T)
<b>Zoom Speed</b>	WIDE end to TELE end Approx. 2s (preset operation), Approx. 3.2s (manual operation)
<b>Pan/Tilt Head</b>	
<b>Rotating Range</b>	Panning: Endless 360° rotation, Tilting: +5° to -185°
<b>Rotating Speed</b>	Panning/Tilting: 360°/s max. (preset operation), 360°/s max. (manual operation)
<b>Other Function</b>	
<b>Operating Temperature</b>	Auto-Pan, Freeze Preset, Manual Limit, Privacy Masking (up to 8), Motion Detection (each 8 presets at each 4 positions), EIS 14°F to 122°C (continuously active for operation at temperature below 32°F) (-10°C to +50°C (continuously active for operation at temperature below 0°C))
<b>Operating Humidity</b>	Under 90% RH (no condensation)
<b>Application</b>	Indoor used
<b>Finish</b>	Base: PC/ABS resin, cool gray, Camera: PC/ABS resin, black
<b>Dimensions</b>	ø6.61 × 9.21 (H)inch (ø168 × 234 (H)mm)
<b>Weight</b>	3.75 lb. (1.7kg)
<b>Accessory</b>	Camera mounting screw × 4, Safety wire × 1, CD-R (Camera controller software, manual (PDF)) × 1
<b>Option</b>	Ceiling mount cover: C-BC511C, C-BC511C-S Flush ceiling mounting bracket: C-BC511U, C-BC511U-S Ceiling suspension bracket: C-BC511P, Wall mounting bracket: C-BC511W Ceiling mounting bracket: C-BC511A

### C-CC564 SPECIFICATIONS

<b>Power source</b>	24V AC 50/60Hz
<b>Power consumption</b>	9W (normal operation), 19W max. (1.3A max.)
<b>Control</b>	RS-485 communications system (new protocol compatible)
<b>Video Output</b>	VBS 1.0V(p-p), 75Ω, BNC-R jack
<b>Camera Control Terminal</b>	RS-485 camera control connector
<b>Alarm Input</b>	8 channels, no-voltage make contact input, open voltage: 18V DC, short-circuit current: Under 2mA (settable alarm action)
<b>Auxiliary Contact Output</b>	2 channels, open collector output, withstand voltage: 20V DC, permissible current: Under 100mA, relay contact output, permissible voltage: 20V DC, permissible current: Under 1A
<b>Synchronization</b>	Internal synchronization/Power synchronization (phase adjustable when in power synchronization mode)
<b>ID</b>	8 characters (alphanumeric and symbols) Camera, Position, Trace, Auto-pan, Tour, Home, Alarm, Sector, AUX
<b>No. of Preset Positions</b>	255 Positions + Home
<b>Automatic Operation</b>	Auto-pan, Preset sequence, Auto-trace (2 preset patterns (60s)), Tour (16 preset patterns)
<b>Timer</b>	Refresh: Starts at the preset time every day or every week by timer settings Program: Settable 16 actions
<b>Language</b>	Menu: English, German, French, Italian ID: English, German, French, Italian, Russian, Polish, Spanish, Portuguese
<b>Camera</b>	
<b>Image device</b>	1/4 type CCD
<b>Resolution</b>	Horizontal: 480 lines (at center)
<b>S/N ratio</b>	50dB
<b>Minimum Illumination</b>	High-sensitivity function OFF: 3 lx (50 IRE), 1 lx (20 IRE) High-sensitivity function ON: 0.03 lx (50 IRE), 0.01 lx (20 IRE)
<b>Backlight Compensation</b>	WIDE DYNAMIC/Pattern 1/Pattern 2/Pattern 3/OFF
<b>Dynamic Range</b>	46dB (backlight compensation: WIDE DYNAMIC operation)
<b>High-Sensitivity Function</b>	B/W mode and slow shutter mode (32 times max.)
<b>White Balance</b>	ATW/AWB
<b>Iris</b>	Automatic
<b>Flicker Reduction</b>	Automatic correction
<b>Electronic Zooming</b>	12x zooming
<b>Auto-Focus</b>	One push/stop AF/continuous
<b>Lens</b>	
<b>Zooming</b>	23x
<b>Effective Focal Length</b>	f = 3.6 – 82.8mm (23X)
<b>Effective Angle of View</b>	Horizontal: 54° (W) – 2.5° (T), Vertical: 41.6° (W) – 1.9° (T)
<b>Maximum Aperture</b>	F 1.6 (W) – F 3.7 (T)
<b>Zoom Speed</b>	WIDE end to TELE end Approx. 1.5s (preset operation), Approx. 2.9s (manual operation)
<b>Pan/Tilt Head</b>	
<b>Rotating Range</b>	Panning: Endless 360° rotation, Tilting: +5° to -185°
<b>Rotating Speed</b>	Panning/Tilting: 360°/s max. (preset operation), 360°/s max. (manual operation)
<b>Other Function</b>	
<b>Operating Temperature</b>	Auto-Pan, Freeze Preset, Manual Limit, Privacy Masking (up to 8), Motion Detection (each 8 presets at each 4 positions) 14°F to 122°C (continuously active for operation at temperature below 32°F) (-10°C to +50°C (continuously active for operation at temperature below 0°C))
<b>Operating Humidity</b>	Under 90% RH (no condensation)
<b>Application</b>	Indoor used
<b>Finish</b>	Base: PC/ABS resin, cool gray, Camera: PC/ABS resin, black
<b>Dimensions</b>	ø6.61 × 9.21 (H)inch (ø168 × 234 (H)mm)
<b>Weight</b>	3.75 lb. (1.7kg)
<b>Accessory</b>	Camera mounting screw × 4, Safety wire × 1, CD-R (Camera controller software, manual (PDF)) × 1
<b>Option</b>	Ceiling mount cover: C-BC511C, C-BC511C-S Flush ceiling mounting bracket: C-BC511U, C-BC511U-S Ceiling suspension bracket: C-BC511P Wall mounting bracket: C-BC511W, Ceiling mounting bracket: C-BC511A

# Brackets and Dome Covers

## C-CC514 FEATURES

- 255 preset positions + Home position
- 264X zoom (optical 22X, electronic 12X)
- Tilt rotation range +5° to -90°
- Pan rotation range continuous 360°
- Pan/tilt maximum rotating speed is 360°/sec
- 1/4 type CCD image device
- 480 lines high resolution
- Autofocus
- High-sensitivity function (color mode)
- Preset sequency function
- Restricting camera movement
- Auto-trace function
- Auto-tour function
- Auto-pan function
- RS-485 protocol compatible

## C-CC514 SPECIFICATIONS

<b>Power source</b>	24V AC 50/60Hz
<b>Power consumption</b>	9W (normal operation), 19W max. (1.3A max.)
<b>Control</b>	RS-485 communications system (new protocol compatible)
<b>Video Output</b>	VBS 1.0V(p-p), 75Ω, BNC-R jack
<b>Camera Control Terminal</b>	RS-485 camera control connector
<b>Alarm Input</b>	3 channels, no-voltage make contact input, open voltage: 18V DC, short-circuit current: Under 2mA (settable alarm action)
<b>Auxiliary Contact Output</b>	1 channel, open collector output, withstand voltage: 20V DC, permissible current: Under 100mA
<b>Synchronization</b>	Internal synchronization/power synchronization (phase adjustable when in power synchronization mode)
<b>ID</b>	8 characters (alphanumeric and symbols) Camera, Position, Trace, Auto-pan, Tour, Home, Alarm, Sector, AUX
<b>No. of Preset Positions</b>	255 Positions + Home
<b>Automatic Operation</b>	Auto-pan, Preset sequence, Auto-trace (2 preset patterns (60s)), Tour (16 preset patterns)
<b>Timer</b>	Refresh: Starts at the preset time every day or every week by timer settings Program: Settable 16 actions
<b>Language</b>	Menu: English, German, French, Italian ID: English, German, French, Italian, Russian, Polish, Spanish, Portuguese
<b>Camera</b>	
<b>Image device</b>	1/4 type CCD
<b>Resolution</b>	Horizontal: 480 lines (at center)
<b>S/N ratio</b>	50dB
<b>Minimum Illumination</b>	High-sensitivity function OFF: 1 lx (50 IRE), 0.3 lx (20 IRE) High-sensitivity function ON: 0.03 lx (50 IRE), 0.01 lx (20 IRE)
<b>Backlight Compensation</b>	Pattern 1/Pattern 2/Pattern 3/OFF
<b>High-Sensitivity Function</b>	Slow shutter mode (32 times max.)
<b>White Balance</b>	ATW/AWB
<b>Iris</b>	Automatic
<b>Flicker Reduction</b>	Automatic correction
<b>Electronic Zooming</b>	12x zooming
<b>Auto-Focus</b>	One push/stop AF/continuous
<b>Lens</b>	
<b>Zooming</b>	22x
<b>Effective Focal Length</b>	f = 4.0 – 88mm (22X)
<b>Effective Angle of View</b>	Horizontal: 47.3° (W) – 2.2° (T), Vertical: 36.5° (W) – 1.7° (T)
<b>Maximum Aperture</b>	F 1.6 (W) – F 3.8 (T)
<b>Zoom Speed</b>	WIDE end to TELE end Approx. 1.3s (preset operation), Approx. 2.4s (manual operation)
<b>Pan/Tilt Head</b>	
<b>Rotating Range</b>	Panning: Endless 360° rotation, Tilting: +5° to -90°
<b>Rotating Speed</b>	Panning/Tilting: 360°/s max. (preset operation), 360°/s max. (manual operation)
<b>Other Function</b>	Manual Limit
<b>Operating Temperature</b>	14°F to 122°C (continuously active for operation at temperature below 32°F) (-10°C to +50°C (continuously active for operation at temperature below 0°C))
<b>Operating Humidity</b>	Under 90% RH (no condensation)
<b>Application</b>	Indoor used
<b>Finish</b>	Base: PC/ABS resin, cool gray, Camera: PC/ABS resin, black
<b>Dimensions</b>	ø6.61 × 9.21 (H)inch (ø168 × 234 (H)mm)
<b>Weight</b>	3.75 lb. (1.7kg)
<b>Accessory</b>	Camera mounting screw × 4, Safety wire × 1, CD-R (Camera controller software, manual (PDF)) × 1
<b>Option</b>	Ceiling mount cover: C-BC511C, C-BC511C-S Flush ceiling mounting bracket: C-BC511U, C-BC511U-S Ceiling suspension bracket: C-BC511P Wall mounting bracket: C-BC511W Ceiling mounting bracket: C-BC511A



### C-BC511A Ceiling Mounting Bracket

The C-BC511A is specially designed to mount TOA's Combination Cameras directly on the ceiling. The bracket facilitates mounting of the camera on the plasterboard in the double ceiling or other locations where the mounting screws cannot be installed securely.

<b>Finish</b>	Surface-treated steel plate, black, paint
<b>Dimensions</b>	5.20 (W) × 1.18 (H) × 2.76 (D)inch (132 (W) × 30 (H) × 70 (D)mm)
<b>Weight</b>	0.35 lb. (160g)
<b>Accessory</b>	Camera mounting screw × 4, Safety wire × 1, Pattern paper × 1



### C-BC511C Ceiling Mount Cover

The C-BC511C is a camera installation cover designed solely for mounting TOA's Combination Cameras. The cover is used when mounting the Combination camera directly to a ceiling or wall or suspending it from the ceiling.

<b>Finish</b>	Case: PC/ABS resin, cool gray, Dome cover: Acrylic resin, transparent
<b>Dimensions</b>	ø6.61 × 7.17 (H)inch (ø168 × 182.2 (H)mm) (Dome external diameter: ø4.92inch (ø125mm))
<b>Weight</b>	0.49 lb. (220g)



### C-BC511C-S Ceiling Mount Cover (Smoked)

The C-BC511C-S is a camera installation cover designed solely for mounting TOA's Combination Cameras. The cover is used when mounting the Combination camera directly to a ceiling or wall or suspending it from the ceiling. The cover is used to make it difficult for individuals to see the camera's orientation.

<b>Transmissivity</b>	Approx. 20%*
<b>Finish</b>	Case: PC/ABS resin, cool gray, Dome cover: Acrylic resin, smoked
<b>Dimensions</b>	ø6.61 × 7.17 (H)inch (ø168 × 182.2 (H)mm) (Dome external diameter: ø4.92inch (ø125mm))
<b>Weight</b>	0.49 lb. (220g)

\*As a general guideline, the minimum object illumination of the camera equipped with the Ceiling Mount Cover is approximately 5 times that of the camera without the cover.  
Note: Be careful when installing the camera with this cover in low illumination location as the cover may cause camera sensitivity to decrease.



### C-BC511U Flush Ceiling Mounting Bracket

The C-BC511U bracket is designed to be exclusively used for flush ceiling mounting of TOA's combination camera. Use this bracket when mounting the camera to the ceiling surface where the fixing screws cannot be securely installed, such as on the plaster panel of the dual-construction ceiling. Also, use this bracket to minimize the exposure of the camera.

<b>Finish</b>	Bezel: PC/ABS resin, cool gray, Dome cover: Acrylic resin, transparent, Bracket: Aluminum, black, paint, Surface-treated steel plate, black, paint
<b>Dimensions</b>	ø9.84 × 11.13 (D)inch (ø250 × 282.7 (D)mm) (Dome external diameter: ø4.92inch (ø125mm))
<b>Weight</b>	2.65 lb. (1.2kg)
<b>Accessory</b>	Safety wire × 1, Pattern paper × 1



### C-BC511U-S Flush Ceiling Mounting Bracket (Smoked)

The C-BC511U-S bracket is designed to be exclusively used for flush ceiling mounting of TOA's combination camera. Use this bracket when mounting the camera to the ceiling surface where the fixing screws cannot be securely installed, such as on the plaster panel of the dual-construction ceiling. Also, use this bracket to minimize the exposure of the camera. The bracket is used to make it difficult for individuals to see the camera's orientation.

<b>Transmissivity</b>	Approx. 20%*
<b>Finish</b>	Bezel: PC/ABS resin, cool gray, Dome cover: Acrylic resin, smoked, Bracket: Aluminum, black, paint, Surface-treated steel plate, black, paint
<b>Dimensions</b>	ø9.84 × 11.13 (D)inch (ø250 × 282.7 (D)mm) (Dome external diameter: ø4.92inch (ø125mm))
<b>Weight</b>	2.65 lb. (1.2kg)
<b>Accessory</b>	Safety wire × 1, Pattern paper × 1

\*As a general guideline, the minimum object illumination of the camera equipped with the Flush Ceiling Mounting Bracket is approximately 5 times that of the camera without the bracket.  
Note: Be careful when installing the camera with this bracket in low illumination location as the cover may cause camera sensitivity to decrease.



### C-BC511P Ceiling Suspension Bracket

The C-BC511P is a Ceiling Suspension Bracket designed solely for suspending TOA's Combination Cameras from the ceiling.

<b>Finish</b>	Top cover: PC/ABS resin, cool gray, Pipe: Stainless steel (SUS304), Bracket: Surface-treated steel plate, black, paint
<b>Dimensions</b>	ø5.91 × 9.17inch (ø150 × 233mm)
<b>Weight</b>	2.65 lb. (1.2kg)
<b>Accessory</b>	Top cover × 4, Safety wire × 1, Pattern paper × 1



### C-BC511W Wall Mounting Bracket

The C-BC511W Wall Mounting Bracket is specially designed to mount TOA's Combination Cameras to wall surfaces. Install the unit only in a location that can structurally support weight of the unit and camera.

<b>Finish</b>	Top cover: PC/ABS resin, cool gray, Pipe: Stainless steel (SUS304), Bracket: Surface-treated steel plate, black, paint
<b>Dimensions</b>	5.91 (W) × 7.99 (H) × 7.99 (D)inch (150 (W) × 203 (H) × 203 (D)mm)
<b>Weight</b>	2.43 lb. (1.1kg)
<b>Accessory</b>	Safety wire × 1, Top cover × 4, Paper pattern × 1

# C-RM500

## REMOTE CONTROLLER



The C-RM500 Remote Controller is designed for use in camera-based systems that allow remote control from up to 1.2km away over RS-485 communication lines. It allows video images to be switched remotely and can handle a maximum of 16 TOA's Combination Dome Cameras when used together with the TOA Multiplexer. Easy-to-see LEDs inform status of control, alarm, focus and other functions.

### FUNCTIONS

- Control up to 16 TOA's Combination Dome Cameras
- Instant position recall
- Controls Multiplexer
- Alarm capability
- 2 Location Control

### SPECIFICATIONS

<b>Power Source</b>	12 V DC
<b>Current Consumption</b>	150 mA
<b>Slave Remote Controller</b>	RS-485, screwless connector
<b>Camera Control</b>	RS-485, screwless connector (**)
<b>Switcher Control</b>	RS-485, screwless connector RS-232C, D-sub connector (9 pins, male)
<b>Alarm Input</b>	RS-232C, D-sub connector (9 pins, male)
<b>Alarm Output/ Control Input</b>	Alarm output: 16 channels, NPN open collector output, withstand voltage: 30 V DC, control current: 20 mA Alarm input: 1 channel, no-voltage make contact input, open voltage: 5 V DC, short-circuit current: 5 mA max. Home position selection input: 1 channel, no-voltage make contact input, open voltage: 5 V DC, short-circuit current: 5 mA max. D-sub connector (25-pins, female)
<b>Display</b>	LED indication of control status, alarm status, alarm hold status, still picture status, defroster, auxiliary setting, auto, auto focus, and lens speed LCD indication of key entry confirmation
<b>Alarm Signal</b>	Continuous alarm tone (can be turned on and off)
<b>Number of Unit Connections</b>	Up to 2 (one to be set for MASTER unit, another for SLAVE unit)
<b>Maximum Cable Distance</b>	1.2 km (***) (between the Remote controller and the Combination cameras)
<b>Operating Temperature</b>	32°F to 122°F (0°C to +50°C)
<b>Operating Humidity</b>	Under 90% RH (no due condensation produced)
<b>Finish</b>	Panel: Surface-treated steel plate, sand gray, paint Sides: Rubber
<b>Dimensions (W × H × D)</b>	12.83 × 2.44 × 7.29inch (326 × 62 × 185.2mm)
<b>Weight</b>	3.97 lb. (1.8 kg)
<b>Accessory</b>	D-sub connector (9 pins, male) × 1, D-sub connector(25 pins, male) × 1
<b>Applicable Model (option)</b>	Combination dome camera: C-CC504S/554S/514/564/574/ C-CC714/764/774 Switcher: C-MS161D, C-MS91D Slave remote controller: C-RM500 Interface unit: C-IF500 Alarm unit: C-AL80

(\*) Can connect up to 31 units mixing with combination cameras and interface units.

(\*\*) Applies to the system where the unit and combination camera are connected in a matched pair.

Represents the total of connected cable distances if multiple combination cameras or interface units are connected in the system (when the CPEV-S cable thicker than 0.65 mm in diameter is used).

# C-RM1000

## REMOTE CONTROLLER



The C-RM1000 Remote Controller is used to remotely control the 9-CH/16-CH Digital Video Recorder (C-DR091/161 Series). It can also control combination cameras connected to the Digital Video Recorder. A built-in 3-axis joystick allows main operations to be performed with one hand.

### FUNCTIONS

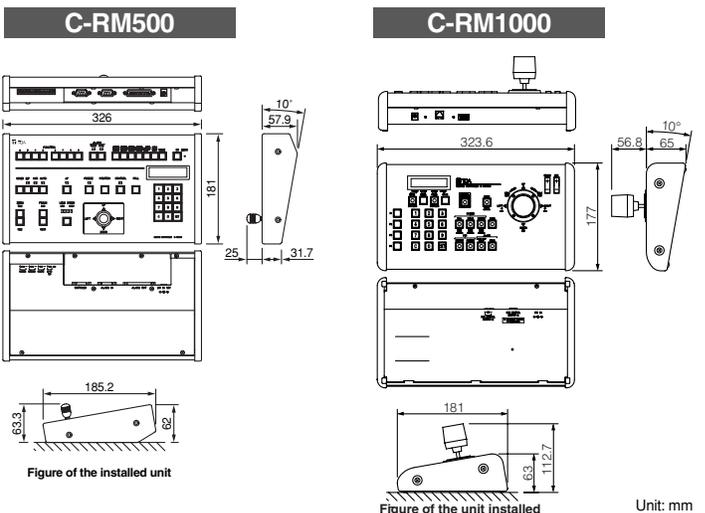
- Digital Video Recorder Control
- Screen Display Operation
- Combination Dome Camera Operation
- Preset Position Programming and Playback
- Quick Display Function
- Function Programming
- Digital Video Recorder Grouping
- Password Setting
- Monitor Locking
- Web Functions

### SPECIFICATIONS

<b>Power Source</b>	12V DC (Supplied from the included AC adapter or from the digital video recorder)
<b>Power Consumption</b>	80mA (use of the supplied AC adapter)
<b>Digital Video Recorder Control</b>	RS-485, RJ-11 (6P6C) (when the included 3-meter modular cable is used) RS-485 screwless connector (3 pins) (with cable length of 3 meters and more, or when C-RF1000 (option) is used)
<b>Alarm Signal</b>	Continuous alarm tone (can be turned on and off through the menu)
<b>Maximum Cable Distance</b>	1.2km*
<b>Function</b>	Password setting, DVR Group setting, Abbreviation function (512 types), Preset position setting, Language choice (English/French)
<b>Operating Temperature</b>	32°F to 104°F (0°C to +40°C)
<b>Operating Humidity</b>	Under 80% RH (no condensation)
<b>Finish</b>	Panel: Surface treated steel plate, silver, painted Sides: Rubber
<b>Dimensions (W × H × D)</b>	12.74 × 4.44 × 7.13inch (323.6 × 112.7 × 181mm)
<b>Weight</b>	3.53 lb. (1.6kg) (excluding AC adapter)
<b>Accessories</b>	AC adapter (1.8m) × 1, Modular cable (3m) × 1
<b>Applicable Model (option)</b>	Digital Video Recorder: C-DR091/C-DR161 Series Interface Unit: C-RF1000

\* Applies to the system where the unit and a digital video recorder are connected in a matched pair. Represents the total of connected cable distances if multiple digital video recorders or Interface units are connected in the system.

### APPEARANCE AND DIMENSIONAL DIAGRAM



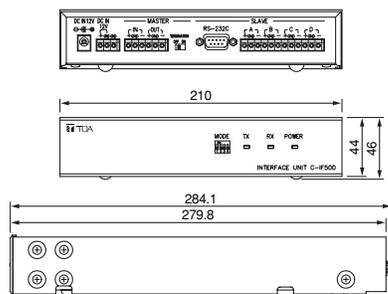
# C-IF500

## INTERFACE UNIT



A useful option for configuring camera systems, the C-IF500 functions as a splitter. It provides control over expanding a camera system when the distance is over 1.2km (max. 3km) between the dedicated C-RM500 Remote Controller and system cameras linked to it. It will also allow configuring a star connection. Receiving the RS-485 communication line serial signals, the C-IF500 splits the signals into 4-channel data for slave units and converts into RS-232C data to be used for public line or fiber optics communication. Data communication between master and slave terminals is bidirectional. The C-IF500 also allows easily setting the data communication speed by DIP switch to suit network requirements.

### APPEARANCE AND DIMENSIONAL DIAGRAM



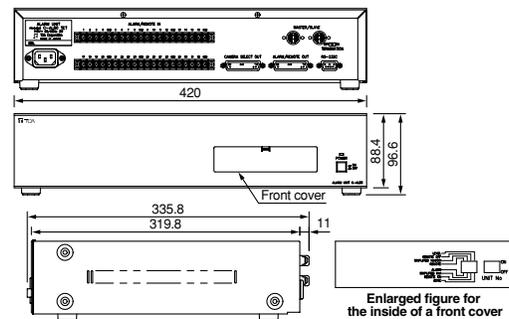
# C-AL80

## ALARM UNIT



The C-AL80 Alarm Unit serves as the main controller for the alarm requirements of a system by converting alarm signals initiated by externally connected equipment into RS-232C-compatible signal data. In addition to its 32 alarm or remote inputs, the C-AL80 can also be linked to a maximum of 8 other C-AL80 units in master/slave configurations. This provides a total of 256 alarm or remote inputs to be transmitted to the C-RM500 remote controller.

### APPEARANCE AND DIMENSIONAL DIAGRAM



### SPECIFICATIONS

<b>Power Source</b>	12 V DC
<b>Current Consumption</b>	100 mA
<b>External Control</b>	Master: RS-485, screwless connector terminating resistance (100 Ω) switch ON/OFF Slave(*): 4 channel, RS-485, screwless connector RS-232C, D-sub connector (9-pin, male)
<b>Display</b>	Power LED indicator, communication LED indicators (TX, RX)
<b>Maximum Cable Distance</b>	RS-485: 1.2 km (*) RS-232C: 10 m
<b>Communication Speed</b>	4800 bps, 9600 bps, 19200 bps, 38400 bps
<b>Operating Temperature</b>	14°F to 122°F (-10°C to +50°C)
<b>Operating Humidity</b>	Under 90% RH (no due condensation produced)
<b>Finish</b>	Panel: Aluminum, black, 30% gloss, paint Case: Pre-coated steel plate, 30% gloss, black
<b>Dimensions (W × H × D)</b>	8.27 x 1.73 x 11.18 inch (210 x 46 x 284.1 mm)
<b>Weight</b>	3.09 lb. (1.4 kg)
<b>Option</b>	Rack mounting bracket: MB-15B-BK (for rack mounting one C-IF500 unit) MB-15B-J (for rack mounting two C-IF500 units)

(\*1) Communications cannot be made between slave terminals.

Each slave terminal can connect up to 31 cameras. (except RS-232C port)

(\*2) Applies to the system where the unit and combination camera are connected in a matched pair.

Represents the total of connected cable distances if multiple combination cameras or interface units are connected in the system (when the CPEV-S cable thicker than 0.65 mm in diameter is used).

### SPECIFICATIONS

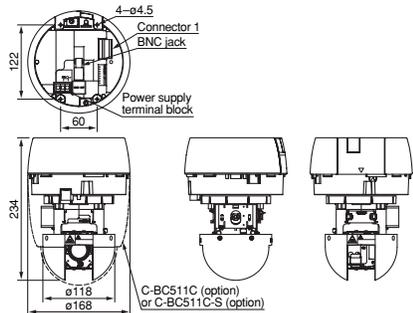
<b>Power Source</b>	110 – 120 V AC, 50/60 Hz
<b>Power Consumption</b>	Under 3 W (60mA)
<b>Alarm/Remote Input</b>	32 channels, no-voltage make contact input, open voltage: 5 V DC, short-circuit current: max. 5 mA, M3 screw terminal, distance between barriers: 7.62 mm
<b>Control Input/Output</b>	1 channel, RS-232C, D-sub connector (9 P, male) (only valid for master unit), fixed to 38,400 bps
<b>Master/sub Connection Terminal</b>	2 channels, RS-485, maximum cable length: 1200m, DIN connector (5 P)
<b>Alarm Reset Input</b>	1 channel, no-voltage make contact input, open voltage: 5 V DC, short-circuit current: max. 5 mA, D-sub connector (25 P)
<b>Setting Switches</b>	Master/Slave: 3-bit DIP switch (Selection of Master or Slave 1—7) Alarm/Remote: 1-bit DIP switch (Alarm/Remote selection) Alarm time: 1-bit DIP switch (Edge/Level selection) RS-485 terminal: Rear-mounted slide switch (RS-485 termination, Enable/Disable selection)
<b>Application</b>	Indoor use
<b>Operating Temperature</b>	32°F to 104°F (0°C to +40°C)
<b>Finish</b>	Panel: Aluminum extrusion, black, 30% gloss Case: Pre-coated steel plate, black, 30% gloss
<b>Dimensions (W × H × D)</b>	16.53 × 3.80 × 13.22 inch (420 × 96.6 × 335.8 mm)
<b>Weight</b>	7.94 lb. (3.6 kg)
<b>Accessory</b>	DIN plug × 2, RS-232C cable (2 m) × 1, D-sub connector (25 P) × 2, Power cord (2 m) × 1
<b>Option</b>	Rack mounting bracket: MB-23B
<b>Application Model</b>	Remote controller: C-RM500



# C-CC574/C-CC564/C-CC514

## APPEARANCE AND DIMENSIONAL DIAGRAM

### C-CC574/C-CC564/C-CC514



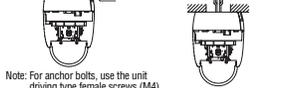
(View of an optional camera installation cover attached)



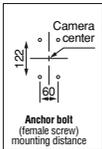
#### ■ INSTALLATION EXAMPLE

Mounting to a heavy-duty ceiling (such as a concrete ceiling)

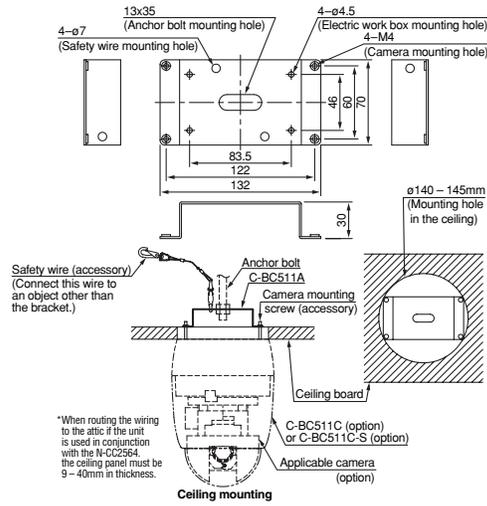
1. When routing both the coaxial, power cables and signal cable from the speaker side.
2. When routing both the coaxial, power cables and signal cable from the ceiling panel.



Note: For anchor bolts, use the unit driving type female screws (M4).

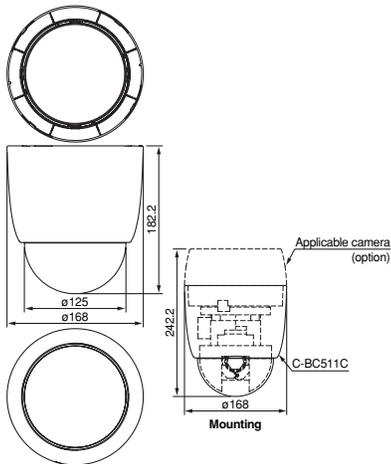


### C-BC511A

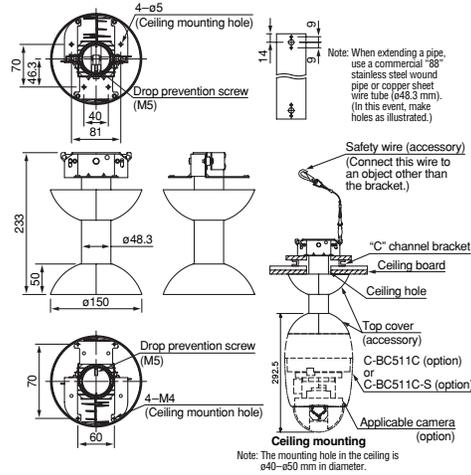


Ceiling mounting

### C-BC511C/C-BC511C-S

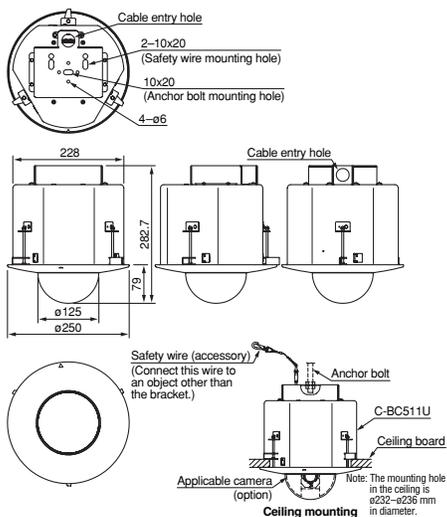


### C-BC511P



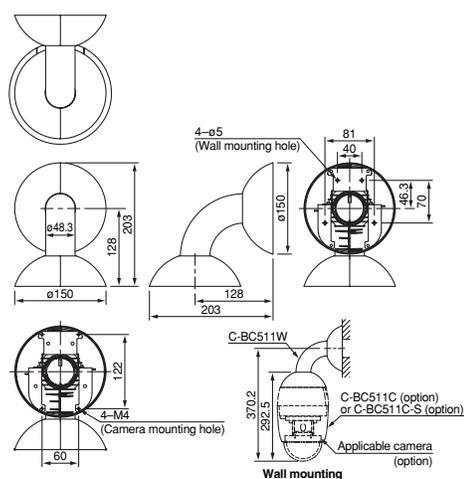
Note: The mounting hole in the ceiling is ø40-ø50 mm in diameter.

### C-BC511U/C-BC511U-S



Ceiling mounting

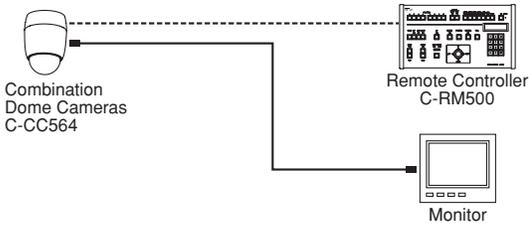
### C-BC511W



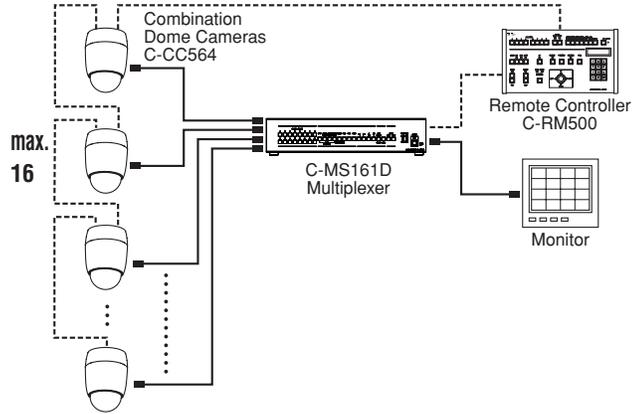
Wall mounting

# SYSTEM EXAMPLES

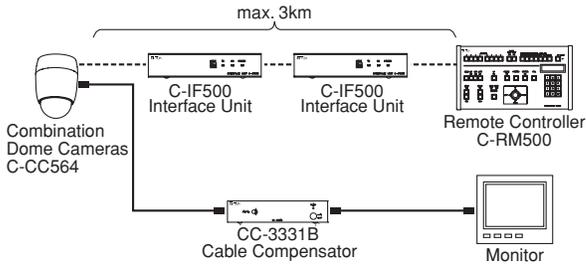
## 1. Combination Dome Camera (1 unit)



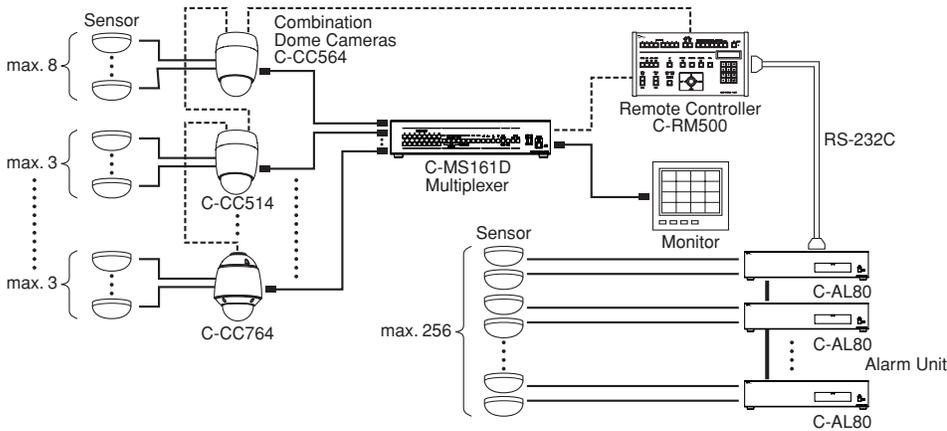
## 2. Combination Dome Camera (16 units)



## 3. When Combination Dome Camera and Remote Controller are separated by more than 1.2km.



## 4. Sensor-activated Dome Camera operation.



## 5. Digital Video Recorder System

