COMBINATION DOME CAMERA SYSTEMS

Combination Dome Cameras



C-CC764 multi function type C-CC714 standard type



For Indoor Use

For Outdoor Use



C-BC711P Ceiling Suspension Bracket



C-BC711PM Pole Mounting **Bracket**



C-BC511C Ceiling Mount Cover



Brackets and Cover

C-BC511P Ceiling Suspension Bracket



C-BC511U Flush Ceiling Mounting Bracket



C-BC511A Anchor 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)

Controller and Units









Combination Dome Cameras

Configuring a perfect surveillance system.

■ Higher resolution delivers better images.

TOA cameras now feature a higher horizontal resolution of 480 lines (NTSC) 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-CC564 and C-CC764 incorporate a 23X 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 an 276X*.

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

■ Intelligent image optimizing using the Wide Dynamic Range function.*

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 buman eyes

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.

■ Motion detection function initiates operation.*

Incorporated into the C-CC564 and C-CC764 are a motion detection function. 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, eight 8 areas can be selected as motion detection zones.

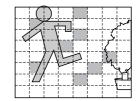


Image clarity maintained for day and night with sensitivity boost.

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.

■ B/W mode improves low light performance.*

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.



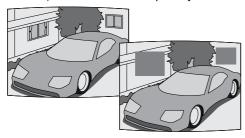
(B/W image)

■ Protecting user privacy.

a) Privacy Masking function.*

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 (a single screen can have 2 masked areas) can be masked for privacy.



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 and C-CC764 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.

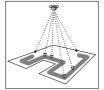
Withstands cold weather conditions.

C-CC714 and C-CC764 incorporate a heating circuit that allows operation in severe temperatures down to -40°C. Heating is automatically turned on when ambient temperatures go below 0°C and will automatically switch off when the temperatures rise.

Note: Turning the camera on if the camera interior is below 0°C may not result in producing an immediately viewable image. Once the camera interior temperature rises above 0°C, 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 has 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 an builtin 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.

Software for maintenance.

TOA cameras include dedicated software that allows easy titles to be set and to create a backup of parameters with a PC.

■ Flexible installation options.

TOA cameras can easily be installed on ceilings, walls or on poles thanks to the wide range of mounting brackets available.

I Titling options.

To facilitate camera use, various titles can be input and displayed on the monitor. In addition to camera and position titles, other titles for display include trace title, displayed while the trace function is on, tour title, displayed when tour function is activated, and alarm title displayed when an alarm input is received.

■ Other functions.

- Tilt (vertical) range: +5° -185°.*
- Auto flip function*
- Rotation speed can be varied to match lens zooming ratio in manual operation mode.
- Freeze preset function*

Displays the still image during camera movement between preset positions.

- Flicker-free operation
- The camera is equipped with 3 (C-CC564 has 8) alarm inputs and 1 auxiliary contact output.
- RS-485 protocol control.

Function Comparison Chart

	C-CC514	C-CC564	C-CC714	C-CC764
Minimum Illumination (High-Sensitivity: OFF)	1 lx (50 IRE) 0.3 lx (20 IRE)	3 lx (50 IRE) 1 lx (20 IRE)	1 lx (50 IRE) 0.3 lx (20 IRE)	3 lx (50 IRE) 1 lx (20 IRE)
Wide Dynaic Function	_	•	_	•
B/W Mode Function	_	•	_	•
Optical Zooming	22x	23x	22x	23x
Zoom Speed (WIDE end to TELE end)				
(preset operation) (manual operation)	Approx. 1.3s Approx. 2.4s	Approx. 1.6s Approx. 2.9s	Approx. 1.3s Approx. 2.4s	Approx. 1.5s Approx. 2.9s
Rotating Range (Tilting)	+5° to - 95°	+5° to 185°	+5° to -90°	+5° to −185°
Operating Temperature	−10°C t	0 +50°C	-40°C to +50°C	
Dust/Water Capability	_	_	IP	66
Auto Flip Function	_	•	_	•
Freeze Preset Function	_	•	_	•
Privacy Mask Function	_	Up to 8 (up to 2 each frame)	_	Up to 8 (up to 2 each frame)
Motion Detection Function	_	•	_	•

C-CC764/C-CC-714

COMBINATION DOME CAMERA (OUTDOOR USE)



C-CC764 FEATURES

- 255 preset positions
- 276X zoom (optical 23X, electronic 12X)
- Tilt rotation range +5° -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-CC714 FEATURES

- 255 preset positions
- 264X zoom (optical 22X, electronic 12X)
- Tilt rotation range +5° 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-CC764 SPECIFICATIONS

where the unit is subject to corrosion, and heights that expose the unit to strong wind pressure) Dust/Water Protection IP66	Power source	24V AC 50/60Hz (2P loose end)
Video Output	Power consumption	10W (normal operation), 80W max.
Camera Control Terminal RS-485 camera control connector, multi-pair cable 8P, loose end (3P of 8P) 3 channels, no-voltage make contact input, open voltage: 18V DC, short-circuit current; Under 27M, setable alarm action), multi-pair cable 8P, loose end (3P of 8P) 4 channel, open collector output, withstand voltage: 30V DC, permissible current: Under 100mA, multi-pair cable 8P, loose end (1P of 8P) 1 channel, open collector output, withstand voltage: 30V DC, permissible current: Under 100mA, multi-pair cable 8P, loose end (1P of 8P) 1 channel, open collector output, withstand voltage: 30V DC, permissible current: Under 100mA, multi-pair cable 8P, loose end (1P of 8P) 1 channel, open collector output, withstand voltage: 30V DC, permissible current: Under 100mA, multi-pair cable 8P, loose end (1P of 8P) 1 channel, open collector output, withstand voltage: 30V DC, permissible current: Under 100mA, multi-pair cable 8P, loose end (1P of 8P) 1 channel, open collector output, with standard output of the season of the season output of	Control	RS-485 communications system (new protocol compatible)
Alarm Input 3 channels no-voltage make contact input, open voltage: 18V DC, short-circuit current, Under 2mA setable alarm action), multi-spain cable 8ft, loss end (3F of 8ft) multi-spain cable 8ft, loss end (3F of 8ft) multi-spain cable 8ft, loss end (3F of 8ft) voltage; 30V DC, permissible current: Under 100mA multi-spain cable 8ft Nose end (1F of 8P) Synchronization Internal synchronization/power synchronization mode) ID 8 characters (alphanumeric and symbols) Camera, Position, Trace, Auto-pan, Tour, Home, Alarm, Sector, ALIX 256 Positions Automatic Operation Timer Auto-pan, Preset sequence, Auto-trace (2 preset patterns (60s)), Tour (16 preset patterns) Timer Auto-pan, Preset sequence, Auto-trace (2 preset patterns (60s)), Tour (16 preset patterns) Timer Auto-pan, Preset sequence, Auto-trace (2 preset patterns (60s)), Tour (16 preset patterns) Examera Limage device 1/4 type CCD Resolution Horizontal: 480 lines (at center) SAI ratio 50dB Minimum Illumination High-sensitivity function of Ft: 3 tx (50 IRE), 1 tx (20 IRE) High-sensitivity function of Pt: 3 tx (50 IRE), 1 tx (20 IRE) High-sensitivity Function Dynamic Range 46dB (backlight compensation: WIDE DYNAMIC operation) High-sensitivity Function White Balance WWWNB Ficker Reduction Auto-mail: Auto-race (32 times max.) White Balance Auto-Focus Desiry/WayB Ficker Reduction Lens Zooming 12x zooming 23x Effective Focal Length Effective Focal Length Effective Focal Length Fine For Foreize Preset, Manual Limit, Privacy Masking (up to 8), Molton Debect (each 8 preset and each 4 positions) Auto-Pan, Freeze Preset, Manual Limit, Privacy Masking (up to 8), Molton Debect (each 8 preset are each 4 positions) Operating Range Panning: Endless 360° rotation, Tilting: 45° to –185° Panning Tilting: 360°/s max. (manual operation) Dust/Water Protection Operating Humidity Lorder 90% RH (no due condensation produced) Under 90% RH (no due condensation produced) Dust/Water Protection Dimensions One external diameter: a 150mm Dome exte	Video Output	VBS 1.0V(p-p), 75Ω, BNC-R jack
short-circuit current, Under 2mA (setable alarm action), multi-pair cable 8P, loose end (3P of 8P) Auxiliary Contact Output I chamel, open collector output, withstand voltage; 30V DC, permissible current. Under 100mA, multi-pair cable 8P, loose end (1P of 8P) Internal synchronization power synchronization (phase adjustable when in power synchronization mode) B characters (alphanumeric and symbols), Camera, Position, Trace, Auto-pan, Tour, Home, Alarm, Sector, AUX No. of Preset Positions Automatic Operation Timer Automatic Operation Timer Auto-pan, Preset sequence, Auto-trace (2 preset patterns (60s)), Tour (16 preset patterns) Refresh: Starts at the preset time every day or every week by timer settings Program: Setable 16 actions Camera Image device 1/4 type CCD Resolution High-sensitivity function OFF: 3 tx (50 IRE), 101 tx (20 IRE) High-sensitivity function OFF: 3 tx (50 IRE), 0.01 tx (20 IRE) Backlight Compensation Dynamic Range 46dB (backlight compensation: WIDE DYNAMIC/Pattern 1/Pattern 2/Pattern 3/OFF Dynamic Range 46dB (backlight correction White Balance Flicker Reduction Lens 23x Effective Focal Length Electronic Zooming Auto-Focus One push/stop AF/continuous Lens Zooming 23x Effective Angle of View Horizontal: \$40* (W) - 2.5° (T), Vertical: 41.6° (W) - 1.9° (T) Maximum Aperture Zoom Speed WIDE of The Start (Source) Approx. 1.58 (preset operation), Approx. 2.98 (manual operation) Pan/Tilt Head Rotating Range Rotating Speed Panning: Endess 360° rotation, Tilting: +5° to -185° Rotating Speed Panning: Endess 360° rotation, Tilting: +5° to -185° Rotating Speed Panning: Findless 360° rotation, Tilting: +5° to -185° Rotating Speed Panning: Findless 360° rotation, Tilting: +5° to -185° Rotating Speed Panning: Endess 360° rotation, Tilting: +5° to -185° Rotating Speed Panning: Findless 360° rotation, Tilting: +5° to -185° Rotating Speed Panning: Findless 360° rotation, Tilting: +5° to -185° Rotating Speed Panning: Findless 360° rotation, Tilting: +5° to	Camera Control Terminal	RS-485 camera control connector, multi-pair cable 8P, loose end (3P of 8P)
permissible current: Under 100mA, multi-pair cable 8P, loose end (1P of 8P)		short-circuit current, Under 2mA (settable alarm action), multi-pair cable 8P, loose end (3P of 8P)
(phase adjustable when in power synchronization mode) 8 characters (alphanumeric and symbols) Camera, Positions 8 characters (alphanumeric and symbols) Camera, Positions Auto-pan, Freset saquence, Auto-trace (2 preset patterns (60s)), Tour (16 preset patterns) Timer Refresh: Starts at the preset time every day or every week by timer settings Program: Settable 16 actions Camera Image device Resolution Horizontal: 480 lines (at center) S/N ratio Sold Minimum Illumination High-sensitivity function OPF: 3 tx (50 IRE), 1 tx (20 IRE) High-sensitivity function ON: 0.03 tx (50 IRE), 0.01 tx (20 IRE) High-sensitivity function ON: 0.03 tx (50 IRE), 0.01 tx (20 IRE) High-sensitivity function ON: 0.03 tx (50 IRE), 0.01 tx (20 IRE) Backlight Compensation Dynamic Range High-Sensitivity Function White Balance High-sensitivity Function White Balance ATW/AWB Flicker Reduction Electronic Zooming Auto-Facus One push/stop AF/continuous Lens Zooming 23x Effective Angle of View Horizontal: 54° (W) – 2.5° (T), Vertical: 41.6° (W) – 1.9° (T) Maximum Aperture F 16 (W) – F.37 (T) Zoom Speed WIDE end to TELE end Approx. 1.5s (preset operation), Approx. 2.9s (manual operation) Operating Temperature Pan/Tilt Head Rotating Range Panning: Endless 360° rotation, Tilting: +5° to –185° Rotating Speed Panning: Fundless 360° s max. (preset operation), 360°/s max. (manual operation) Operating Temperature Operating Temperature Operating Temperature Operating Temperature Under 90% RH (no due condensation produced) 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) Dust/Water Protection Pinish Case, top cover mountling screw (Havagon socket screw M4 × 8) × 3, CC-B (Camera socition) exporation (POF) × 1 Common Camera section external diameter: 9150m Weight Accessory CD-PC Cover mountling screw (Havagon socket screw M4 × 8) × 3, CC-B (Camera socition) exposed cover protein planear (POF) × 1		permissible current: Under 100mA, multi-pair cable 8P, loose end (1P of 8P)
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Dynamic Range		High-sensitivity function ON: 0.03 lx (50 IRE), 0.01 lx (20 IRE)
High-Sensitivity Function B/W mode and slow shutter mode (32 times max.) White Balance ATW/AWB Flicker Reduction Automatic correction Electronic Zooming 12x zooming Auto-Focus One push/stop AF/continuous Lens 2ooming Zooming 1 = 3.6 - 82.8mm (23X) Effective Focal Length Horizontal: 54° (W) - 2.5° (T), Vertical: 41.6° (W) - 1.9° (T) Maximum Aperture F 1.6 (W) - F 3.7 (T) Zoom Speed WIDE end to TELE end Approx. 1.5s (preset operation), Approx. 2.9s (manual operation) Pan/Tiit Head Rotating Range Panning: Endless 360° rotation, Tilting: +5° to -185° Rotating Speed Panning: Endless 360° rotation, Tilting: +5° to -185° Rotating Speed Panning/Tilting: 360°/s max. (preset operation), 360°/s max. (manual operation) Other Function Auto-Pan, Freeze Preset, Manual Limit, Privacy Masking (up to 8), Motion Detect (each 8 presets at each 4 positions) Operating Temperature -40° C to +50° C Operating Humidity Under 90% RH (no due condensation produced) Application 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 st		
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Electronic Zooming		,
Auto-Focus One push/stop AF/continuous		
Lens Zooming 23x		9
Zooming		One push/stop AF/continuous
Effective Focal Length Effective Angle of View Horizontal: 54° (W) – 2.5° (T), Vertical: 41.6° (W) – 1.9° (T) Maximum Aperture Zoom Speed WIDE end to TELE end Approx. 1.5s (preset operation), Approx. 2.9s (manual operation) Pan/Tilt Head Rotating Range Rotating Speed Panning: Endless 360° rotation, Tilting: +5° to –185° Rotating Speed Panning: Filling: 360°/s max. (preset operation), 360°/s max. (manual operation) Other Function Auto-Pan, Freeze Preset, Manual Limit, Privacy Masking (up to 8), Motion Delect (each 8 presets at each 4 positions) Operating Temperature Operating Humidity Under 99% RH (no due condensation produced) 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) Dust/Water Protection Finish Case, top cover and decorative frame: PC resin, light gray Sunshade: Aluminum, light gray, paint Dome cover: PC resin (transparent) Dome cover: PC resin (transparent) Dimensions Camera section external diameter: ø230 × 330.5 (H)mm Dome external diameter: ø 150mm Weight 3.9kg Accessory Top cover mounting screw (Hexagon socket screw M4 × 8) × 3, CD-R (Camera controller software, manual (PDF)) × 1		
Effective Angle of View		
Maximum Aperture F 1.6 (W) − F 3.7 (T) Zoom Speed WIDE end to TELE end Approx. 1.5s (preset operation), Approx. 2.9s (manual operation) Pan/Tilt Head Rotating Range Panning: Endless 360° rotation, Tilting: +5° to −185° Rotating Speed Panning/Tilting: 360°/s max. (preset operation), 360°/s max. (manual operation) Other Function Auto-Pan, Freeze Preset, Manual Limit, Privacy Masking (up to 8), Motion Detect (each 8 presets at each 4 positions) Operating Temperature −40° C to +50° C Operating Humidity Under 90% RH (no due condensation produced) Application 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) Dust/Water Protection IP66 Finish Case, top cover and decorative frame: PC resin, light gray sunshade: Aluminum, light gray, paint Dome cover: PC resin (transparent) Dimensions Camera section external diameter: ø230 x 330.5 (H)mm Dome external diameter: Ø 150mm Weight 3.5kg Accessory Top cover mounting screw (Hexagon socket screw M4 x 8) x 3, CD-R (Camera controller software, manual (PDF)) x 1		· · · · · · · · · · · · · · · · · · ·
VIDE and to TELE and Approx. 1.5s (preset operation), Approx. 2.9s (manual operation)		
Approx. 1.5s (preset operation), Approx. 2.9s (manual operation)	•	
Rotating Range Panning: Endless 360° rotation, Tilting: +5° to −185° Rotating Speed Panning/Tilting: 360°/s max. (preset operation), 360°/s max. (manual operation) Other Function Auto-Pan, Freeze Preset, Manual Limit, Privacy Masking (up to 8), Motion Detect (each 8 presets at each 4 positions) Operating Temperature −40°C to +50°C Operating Humidity Under 90% RH (no due condensation produced) Application 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) Dust/Water Protection IP66 Finish Case, top, cover and decorative frame: PC resin, light gray Sunshade: Aluminum, light gray, paint Dome cover: PC resin (transparent) Dimensions Camera section external diameter: g3 230 x 330.5 (H)mm Dome external diameter: g 150mm Weight 3,9kg Accessory Top cover mounting screw (Hexagon socket screw M4 x 8) x 3, CO-H (Camera controller software, manual (PDF)) x 1	·	
Rotating Speed Panning/Tilting: 360°/s max. (preset operation), 360°/s max. (manual operation)		D
Other Function Auto-Pan, Freeze Preset, Manual Limit, Privacy Masking (up to 8), Motion Detect (each 8 presets at each 4 positions) Operating Temperature -40°C to +50°C Operating Humidity Under 90% RH (no due condensation produced) Application 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) Dust/Water Protection IP66 Finish Case, top cover and decorative frame: PC resin, light gray Sunshade: Aluminum, light gray, paint Dome cover: PC resin (transparent) Dimensions Camera section external diameter: ø230 × 330.5 (H)mm Dome external diameter: ø150mm Weight 3.9kg Top cover mounting screw (Hexagon socket screw M4 × 8) × 3, CD-R (Camera controller software, manual (PDF)) × 1		
Motion Delect (each 8 presets at each 4 positions)	Hotating Speed	Panning/Tilting: 360°/s max. (preset operation), 360°/s max. (manual operation)
Discretion Under 90% RH (no due condensation produced)	Other Function	Auto-Pan, Freeze Preset, Manual Limit, Privacy Masking (up to 8), Motion Detect (each 8 presets at each 4 positions)
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) IP66	Operating Temperature	
where the unit is subject to corrosion, and heights that expose the unit to strong wind pressure) Dust/Water Protection IP66	Operating Humidity	
Case, top cover and decorative frame: PC resin, light gray Sunshade: Aluminum, light gray, paint Dome cover: PC resin (Insoparent) Dimensions Camera section external diameter: ø230 × 330.5 (H)mm Dome external diameter: ø150mm Weight 3.9kg Accessory Top cover mounting screw (Hexagon socket screw M4 × 8) × 3, CD-R (Camera controller software, manual (PDF)) × 1	Application	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)
Sunshade: Aluminum, light gray, paint Dome cover: PC resin (transparent) Dimensions Camera section external diameter: ø230 x 330.5 (H)mm Dome external diameter: ø 150mm Weight 3.9kg Accessory Top cover mounting screw (Hexagon socket screw M4 x 8) x 3, CO-R (Camera controller software, manual (PDF)) x 1	Dust/Water Protection	IP66
Dome external diameter: ø 150mm	Finish	Sunshade: Aluminum, light gray, paint
Accessory Top cover mounting screw (Hexagon socket screw M4 × 8) × 3, CD-R (Camera controller software, manual (PDF)) × 1	Dimensions	Dome external diameter: ø 150mm
CD-R (Camera controller software, manual (PDF)) x 1	Weight	3.9kg
	Accessory	CD-R (Camera controller software, manual (PDF)) × 1
Option Wall mounting bracket: C-BC711W, Suspension bracket: C-BC711P, Pole mounting bracket: C-BC711PM, Smoked dome cover: C-A 711DM	Option	Wall mounting bracket: C-BC711W, Suspension bracket: C-BC711P, Pole mounting bracket: C-BC711PM, Smoked dome cover: C-A 711DM

■ C-CC714 SPECIFICATIONS

Power source	24V AC 50/60Hz (2P loose end)
Power consumption	10W (normal operation), 80W max.
Control	RS-485 communications system (new protocol compatible)
Video Output	VBS 1.0V(p-p), 75Ω, BNC-R jack
Camera Control Terminal	RS-485 camera control connector, multi-pair cable 8P, loose end (3P of 8P)
Alarm Input	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)
Auxiliary Contact Output	1 channel, open collector output, withstand voltage: 30V DC, permissible current: Under 100mA, multi-pair cable 8P, loose end (1P of 8P)
Synchronization	Internal synchronization/power synchronization (phase adjustable when in power synchronization mode)
ID	8 characters (alphanumeric and symbols) Camera, Position, Trace, Auto-pan, Tour, Home, Alarm, Sector, AUX
No. of Preset Positions	255 Positions
Automatic Operation	Auto-pan, Preset sequence, Auto-trace (2 preset patterns (60s)), Tour (16 preset patterns)
Timer	Refresh: Starts at the preset time every day or every week by timer settings Program: Settable 16 actions
Camera	
Image device	1/4 type CCD
Resolution	Horizontal: 480 lines (at center)
S/N ratio	50dB
Minimum Illumination	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)
Backlight Compensation	Pattern 1/Pattern 2/Pattern 3/OFF
High-Sensitivity Function	Slow shutter mode (32 times max.)
White Balance	ATW/AWB
Flicker Reduction	Automatic correction
Electronic Zooming	12x zooming
Auto-Focus	One push/stop AF/continuous
Lens	
Zooming	22x
Effective Focal Length	f = 4.0 – 88mm (22X)
Effective Angle of View	Horizontal: 47.3° (W) – 2.2° (T), Vertical: 36.5° (W) – 1.7° (T)
Maximum Aperture	F 1.6 (W) – F 3.8 (T)
Zoom Speed	WIDE end to TELE end Approx. 1.3s (preset operation), Approx. 2.4s (manual operation)
Pan/Tilt Head	I D
Rotating Range	Panning: Endless 360° rotation, Tilting: +5° to –90°
Rotating Speed	Panning/Tilting: 360°/s max. (preset operation), 360°/s max. (manual operation)
Other Function	Manual Limit
Operating Temperature	-40°C to +50°C
Operating Humidity	Under 90% RH (no due condensation produced)
Application	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)
Dust/Water Protection	IP66
Finish	Case, top cover and decorative frame: PC resin, light gray Sunshade: Aluminum, light gray, paint Dome cover: PC resin (transparent)
Dimensions	Camera section external diameter: ϱ 230 \times 330.5 (H)mm Dome external diameter: ϱ 150mm
Weight	3.9kg
Accessory	Top cover mounting screw (Hexagon socket screw M4 \times 8) \times 3, CD-R (Camera controller software, manual (PDF)) \times 1
Option	Wall mounting bracket: C-BC711W, Suspension bracket: C-BC711P, Pole mounting bracket: C-BC711PM, Smoked dome cover: C-A 711DM

C-CC564/C-CC514

COMBINATION DOME CAMERA (INDOOR USE)



C-CC564 FEATURES

- 255 preset positions
- 276X zoom (optical 23X, electronic 12X)
- Tilt rotation range +5° -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-CC514 FEATURES

- 255 preset positions
- 264X zoom (optical 22X, electronic 12X)
- Tilt rotation range +5° 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-CC564 SPECIFICATIONS

Power source	24V AC 50/60Hz
Power consumption	9W (normal operation), 19W max. (1.3A max.)
Control	RS-485 communications system (new protocol compatible)
Video Output	VBS 1.0V(p-p), 75Ω, BNC-R jack
Camera Control Terminal	RS-485 camera control connector
Alarm Input	8 channels, no-voltage make contact input, open voltage: 18V DC, short-circuit current; Under 2mA (settable alarm action)
Auxiliary Contact Output	2 channels, open collector output, withstand voltage: 30V DC, permissible current: Under 100mA, relay contact output, permissible voltage: 110V DC, 125V AC, permissible current: Under 1A
Synchronization	Internal synchronization/Power synchronization (phase adjustable when in power synchronization mode)
ID	8 characters (alphanumeric and symbols) Camera, Position, Trace, Auto-pan, Tour, Home, Alarm, Sector, AUX
No. of Preset Positions	255 Positions
Automatic Operation	Auto-pan, Preset sequence, Auto-trace (2 preset patterns (60s)), Tour (16 preset patterns)
Timer	Refresh: Starts at the preset time every day or every week by timer settings Program: Settable 16 actions
Camera	
Image device	1/4 type CCD
Resolution	Horizontal: 480 lines (at center)
S/N ratio	50dB
Minimum Illumination	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)
Backlight Compensation	WIDE DYNAMIC/Pattern 1/Pattern 2/Pattern 3/OFF
Dynamic Range	46dB (backlight compensation: WIDE DYNAMIC operation)
High-Sensitivity Function	B/W mode and slow shutter mode (32 times max.)
White Balance	ATW/AWB
Flicker Reduction	Automatic correction
Electronic Zooming	12x zooming
Auto-Focus	One push/stop AF/continuous
Lens	- Company of the Comp
Zooming	23x
Effective Focal Length	f = 3.6 – 82.8mm (23X)
Effective Angle of View	Horizontal: 54° (W) – 2.5° (T), Vertical: 41.6° (W) – 1.9° (T)
Maximum Aperture	F 1.6 (W) – F 3.7 (T)
Zoom Speed	WIDE end to TELE end Approx. 1.5s (preset operation), Approx. 2.9s (manual operation)
Pan/Tilt Head	7
Rotating Range	Panning: Endless 360° rotation, Tilting: +5° to -185°
Rotating Speed	Panning/Tilting: 360°/s max. (preset operation), 360°/s max. (manual operation)
Other Function	Auto-Pan, Freeze Preset, Manual Limit, Privacy Masking (up to 8), Motion Detect (each 8 presets at each 4 positions)
Operating Temperature	-10°C to +50°C (continuously active for operation at temperature below 0°C)
Operating Humidity	Under 90% RH (no due condensation produced)
Application	Indoor used
Finish	Base: PC/ABS resin, cool gray Camera: PC/ABS resin, black
Dimensions	ø168 × 234 (H)mm
Weight	1.7kg
Accessory	Camera mounting screw × 4, Safety wire × 1, CD-R (Camera controller software, manual (PDF)) × 1
Option	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 Anchor bracket: C-BC511A

■ C-CC514 SPECIFICATIONS

Power source	24V AC 50/60Hz	
Power consumption	9W (normal operation), 19W max. (1.3A max.).	
Control	RS-485 communications system (new protocol compatible)	
Video Output	VBS 1.0V(p-p), 75Ω, BNC-R jack	
Camera Control Terminal	RS-485 camera control connector	
Alarm Input	3 channels, no-voltage make contact input, open voltage: 18V DC,	
Alaini input	short-circuit current; Under 2mA (settable alarm action)	
Auxiliary Contact Output	1 channel, open collector output, withstand voltage: 30V DC, permissible current: Under 100mA	
Synchronization	Internal synchronization/power synchronization (phase adjustable when in power synchronization mode)	
ID	8 characters (alphanumeric and symbols) Camera, Position, Trace, Auto-pan, Tour, Home, Alarm, Sector, AUX	
No. of Preset Positions	255 Positions	
Automatic Operation	Auto-pan, Preset sequence, Auto-trace (2 preset patterns (60s)), Tour (16 preset patterns)	
Timer	Refresh: Starts at the preset time every day or every week by timer settings Program: Settable 16 actions	
Camera		
Image device	1/4 type CCD	
Resolution	Horizontal: 480 lines (at center)	
S/N ratio	50dB	
Minimum Illumination	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)	
Backlight Compensation	Pattern 1/Pattern 2/Pattern 3/OFF	
High-Sensitivity Function	Slow shutter mode (32 times max.)	
White Balance	ATW/AWB	
Flicker Reduction	Automatic correction	
Electronic Zooming	12x zooming	
Auto-Focus	One push/stop AF/continuous	
Lens		
Zooming	22x	
Effective Focal Length	f = 4.0 – 88mm (22X)	
Effective Angle of View	Horizontal: 47.3° (W) – 2.2° (T), Vertical: 36.5° (W) – 1.7° (T)	
Maximum Aperture	F 1.6 (W) – F 3.8 (T)	
Zoom Speed	WIDE end to TELE end Approx. 1.3s (preset operation), Approx. 2.4s (manual operation)	
Pan/Tilt Head		
Rotating Range	Panning: Endless 360° rotation, Tilting: +5° to -90°	
Rotating Speed	Panning/Tilting: 360°/s max. (preset operation), 360°/s max. (manual operation)	
Other Function	Manual Limit	
Operating Temperature	-10°C to +50°C (continuously active for operation at temperature below 0°C)	
Operating Humidity	Under 90% RH (no due condensation produced)	
Application	Indoor used	
Finish	Base: PC/ABS resin, cool gray Camera: PC/ABS resin, black	
Dimensions	ø168 × 234 (H)mm	
Weight	1.7kg	
Accessory	Camera mounting screw × 4, Safety wire × 1, CD-R (Camera controller software, manual (PDF)) × 1	
Option	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 Anchor bracket: C-BC511A	

Brackets and Dome Cover for C-CC764/C-CC-714 (Outdoor Use)



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.

Finish	Base: Aluminum, light gray, paint Pipe: Stainless steel (SUS304)
Dimensions	140 (W) × 164 (H) × 200 (D)mm
Weight	1kg
Accessory	Camera mounting screw (M5×12, with washer) × 3

Note: pay attention to the strength of the attaching portion



C-BC711W Wall Mounting Bracket

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

Finish	Base: Aluminum, light gray, paint Pipe: Stainless steel (SUS304)
Dimensions	140 (W) × 240 (H) × 188.1 (D)mm
Weight	1.3kg
Accessory	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.

Transmissivity	Approx. 30%*
Finish	Dome: PC resin, smoked Frame: PC resin, light gray
Dimensions	ø219.8 × 128 (H)mm (Dome external diameter: ø150mm)
Weight	400g

*As a general guideline, the minimum object illumination of the camera equipped with the Smoked Dome Cover is approximately 33 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-BC711PM Pole Mounting Bracket

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

Finish	Stainless steel (SUS304)
Dimensions	140 (W) × 200 (H) × 60 (D)mm
Weight	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.

Brackets and Dome Cover for C-CC564/C-CC-514 (Indoor Use)

C-BC511A Anchor Bracket

The C-BC511A is specially designed to mount TOA's Combination Cameras directly on the wall. 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.

Finish	Surface-treated steel plate, black, paint
Dimensions	132 (W) × 30 (H) × 70 (D)mm
Weight	1.1kg
Accessory	Camera mounting screw × 4, Safety wire × 1, Paper pattern × 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. The cover is used to make it difficult for individuals to see the camera's orientation.

Finish	Case: PC/ABS resin, cool gray Dome cover: Acrylic resin, transparent
Dimensions	ø168 × 182.2 (H)mm (Dome external diameter: ø125mm)
Weight	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 or suspending it from the ceiling. The cover is used

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.

Transmissivity	Approx. 20%*
Finish	Case: PC/ABS resin, cool gray Dome cover: Acrylic resin, smoked
Dimensions	ø168 × 182.2 (H)mm (Dome external diameter: ø125mm)
Weight	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-BC511P Ceiling Suspension Bracket

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

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

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

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 g screws cannot be securely installed, such as on

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.

Finish	Bezel: PC/ABS resin, cool gray Dome cover: Acrylic resin, transparent Bracket: Aluminum, black, paint Surface-treated steel plate, black, paint
Dimensions	ø250 × 282.7 (D)mm (Dome external diameter: ø125mm)
Weight	1.2kg
Accessory	Safety wire x 1, Paper pattern x 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 page of the dual-construction.

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.

Transmissivity	Approx. 20%*
Finish	Bezel: PC/ABS resin, cool gray Dome cover: Acrylic resin, smoked Bracket: Aluminum, black, paint Surface-treated steel plate, black, paint
Dimensions	ø250 × 282.7 (D)mm (Dome external diameter: ø125mm)
Weight	1.2kg
Accessory	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.

Combination Dome Camera **SETTING GUIDE**

SETTING GUIDE

The camera menu screens are comprised of the following

setting item screens. CAMERA MENU PRESET **ID SETTING** CAMERA **AUTO MODE Setting Item** Programs the camera position (camera orientation), displays setting status, and performs reset. **PRESET SETTING** PRESET MEMORY* Programs the camera position. GLOBAL PRESET MEMORY CORRECTION Corrects all preset camera positions PRESET MEMORY RESET Resets preset camera position PRESET MEMORY ALL RESET The camera returns to the preset position automatically when the preset period of time elapses by external control. **AUTOMATIC RETURN** Designates the program the camera automatically returns to. HOME Displays the still image during camera FREEZE PRESET movement between preset positions **ID (TITLE) SETTINGS** DISPLAY Sets to display or hides the title. ID SETTINGS*2 Sets ID. DISPLAY POSITION SETTINGS*2 Sets title display position and its length. FRAME ADJUSTMENT SETTINGS Sets the character display position. ANGLE ORIGIN POINT SETTING Sets the origin point of the angle display. **CAMERA SETTINGS** Sets camera properties. WHITE BALANCE*2 Sets the camera's white balance. BACKLIGHT COMPENSATION*2 Sets the backlight compensation. BRIGHTNESS* Adjusts the camera's brightness. Sets to give operation priority to black & white mode or slow shutter mode depending on the subject's brightness. DAY AND NIGHT*2 *3 **AUTO FOCUS** Sets Auto Focus mode AGC*2 Sets AGC. SLOW SHUTTER*2 Sets slow shutter. SHUTTER SPEED* Sets shutter speed. Sets a maximum enlargement of **ELECTRONIC ZOOM** ENHANCER*2 Sets contour enhancement. CHROMA* Adjusts the chroma. SYNC SYSTEM Switches sync. system and adjusts phase. Return each item on the camera setting screen to the factory default status. INITIALIZING Sets automatic operation of Auto-Pan, Preset **AUTOMATIC OPERATION** sequence, Trace and Tour Assigns automatic functions to the Auto key. **AUTO KEY AUTO PAN** Sets the Auto-Pan operations SEQUENCE Sets the preset sequence order TRACE Stores trace movements. TRACE 1 PAUSETIME Sets the stop duration of trace movements.

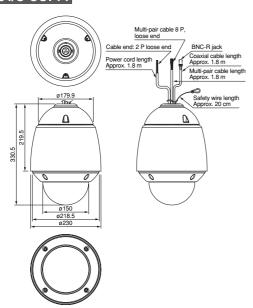
TRACE 2 PAUSE TIME	Sets the stop duration of trace movement
TOUR	Sets the operation to be programmed.
_ARM SETTINGS	ets alarm operations.
	_
LINPUT	Sets input number of alarm input.
REPORT	Sets the terminal that transmits the alarm information.
ACTIVE	Selects whether to activate the alarm inp with make or break contacts.
PRIORITY*4	Sets whether to forcibly execute action of set priority order to operation.
ACTION*4	Sets camera operation when alarm signal is received.
CLOCK	Sets the period of time that alarm conditi are maintained.
RESET ACTION*4	Sets camera operation when the alarm conditions are released.
ALARM LOGS	Verify alarm logs.
ONITA OT OLUTPUIT OFFTINOS	
ONTACT OUTPUT SETTINGS	ets contact output.
-AUX1	Sets contact output.
AUX2*5	Sets contact output.
MED OFFEINOS	
MER SETTINGS	ets the timer.
PROGRAM*4	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.
TIMER	Sets the time.
DATE	Sets the date.
	_
ANUAL OFTENOO	alterial control of the control of t
ANUAL SETTINGS	dividual settings.
ANUAL SETTINGS In	dividual settings. Resets zoom interlocking.
	_
ZOOM INTERLOCKING	Resets zoom interlocking.
- ZOOM INTERLOCKING - ROTATION LIMIT	Resets zoom interlocking. Designate the pan and tilt rotation limits.
- ZOOM INTERLOCKING - ROTATION LIMIT - ROTATION LIMIT SETTING	Resets zoom interlocking. Designate the pan and tilt rotation limits. Sets the pan and tilt rotation limits. Sets the maximum speed of pan and tilt operation.
- ZOOM INTERLOCKING - ROTATION LIMIT - ROTATION LIMIT SETTING - MANUAL SPEED	Resets zoom interlocking. Designate the pan and tilt rotation limits. Sets the pan and tilt rotation limits. Sets the maximum speed of pan and tilt operation. Sets whether to set the tilt rotation range
- ZOOM INTERLOCKING - ROTATION LIMIT - ROTATION LIMIT SETTING - MANUAL SPEED - FLIP*3 - TILT ANGLE LIMIT	Resets zoom interlocking. Designate the pan and tilt rotation limits. Sets the pan and tilt rotation limits. Sets the maximum speed of pan and tilt operation. Sets whether to set the tilt rotation range 90 or over. Sets the tilt angle limit.
- ZOOM INTERLOCKING - ROTATION LIMIT - ROTATION LIMIT SETTING - MANUAL SPEED - FLIP*3 - TILT ANGLE LIMIT	Resets zoom interlocking. Designate the pan and tilt rotation limits. Sets the pan and tilt rotation limits. Sets the maximum speed of pan and tilt operation. Sets whether to set the tilt rotation range 90 or over.
- ZOOM INTERLOCKING - ROTATION LIMIT - ROTATION LIMIT SETTING - MANUAL SPEED - FLIP*3 - TILT ANGLE LIMIT	Resets zoom interlocking. Designate the pan and tilt rotation limits. Sets the pan and tilt rotation limits. Sets the maximum speed of pan and tilt operation. Sets whether to set the tilt rotation range 90 or over. Sets the tilt angle limit.
- ZOOM INTERLOCKING - ROTATION LIMIT - ROTATION LIMIT SETTING - MANUAL SPEED - FLIP*3 - TILT ANGLE LIMIT	Resets zoom interlocking. Designate the pan and tilt rotation limits. Sets the pan and tilt rotation limits. Sets the maximum speed of pan and tilt operation. Sets whether to set the tilt rotation range 90 or over. Sets the tilt angle limit.
- ZOOM INTERLOCKING - ROTATION LIMIT - ROTATION LIMIT SETTING - MANUAL SPEED - FLIP*3 - TILT ANGLE LIMIT AINTENANCE SETTINGS - INITIALIZING	Resets zoom interlocking. Designate the pan and tilt rotation limits. Sets the pan and tilt rotation limits. Sets the maximum speed of pan and tilt operation. Sets whether to set the tilt rotation range 90 or over. Sets the tilt angle limit. ets functions during maintenance. Corrects deviation of stepping motor. Corrects deviation of position.
- ZOOM INTERLOCKING - ROTATION LIMIT - ROTATION LIMIT SETTING - MANUAL SPEED - FLIP*3 - TILT ANGLE LIMIT - INITIALIZING - REFLESH	Resets zoom interlocking. Designate the pan and tilt rotation limits. Sets the pan and tilt rotation limits. Sets the maximum speed of pan and tilt operation. Sets whether to set the tilt rotation range 90 or over. Sets the tilt angle limit. ets functions during maintenance. Corrects deviation of stepping motor. Corrects deviation of position. Sets the password required when activat
- ZOOM INTERLOCKING - ROTATION LIMIT - ROTATION LIMIT SETTING - MANUAL SPEED - FLIP*3 - TILT ANGLE LIMIT AINTENANCE SETTINGS - INITIALIZING - REFLESH - PASSWORD	Resets zoom interlocking. Designate the pan and tilt rotation limits. Sets the pan and tilt rotation limits. Sets the maximum speed of pan and tilt operation. Sets whether to set the tilt rotation range 90 or over. Sets the tilt angle limit. ets functions during maintenance. Corrects deviation of stepping motor. Corrects deviation of position. Sets the password required when activat maintenance menu screen.
- ZOOM INTERLOCKING - ROTATION LIMIT - ROTATION LIMIT SETTING - MANUAL SPEED - FLIP*3 - TILT ANGLE LIMIT AINTENANCE SETTINGS - INITIALIZING - REFLESH - PASSWORD - MOTOR POWER	Resets zoom interlocking. Designate the pan and tilt rotation limits. Sets the pan and tilt rotation limits. Sets the maximum speed of pan and tilt operation. Sets whether to set the tilt rotation range 90 or over. Sets the tilt angle limit. ets functions during maintenance. Corrects deviation of stepping motor. Corrects deviation of position. Sets the password required when activat maintenance menu screen. Improves deviation of preset position. Returns all setting to initial status set by the factory.
- ZOOM INTERLOCKING - ROTATION LIMIT - ROTATION LIMIT SETTING - MANUAL SPEED - FLIP*3 - TILT ANGLE LIMIT AINTENANCE SETTINGS - (INITIALIZING - REFLESH - PASSWORD - MOTOR POWER - INITIAL STATUS	Resets zoom interlocking. Designate the pan and tilt rotation limits. Sets the pan and tilt rotation limits. Sets the maximum speed of pan and tilt operation. Sets whether to set the tilt rotation range 90 or over. Sets the tilt angle limit. ets functions during maintenance. Corrects deviation of stepping motor. Corrects deviation of position. Sets the password required when activat maintenance menu screen. Improves deviation of preset position. Returns all setting to initial status set by the factory.
- ZOOM INTERLOCKING - ROTATION LIMIT - ROTATION LIMIT SETTING - MANUAL SPEED - FLIP*3 - TILT ANGLE LIMIT AINTENANCE SETTINGS - INITIALIZING - REFLESH - PASSWORD - MOTOR POWER - INITIAL STATUS - AUTOMATIC CORRECTION	Resets zoom interlocking. Designate the pan and tilt rotation limits. Sets the pan and tilt rotation limits. Sets the maximum speed of pan and tilt operation. Sets whether to set the tilt rotation range 90 or over. Sets the tilt angle limit. ets functions during maintenance. Corrects deviation of stepping motor. Corrects deviation of position. Sets the password required when activat maintenance menu screen. Improves deviation of preset position. Returns all setting to initial status set by the factory. Automatically corrects deviation of position

- *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 and C-CC764.
- *4 Can be only set when the C-RM500 is connected.
- *5 Can be only set for the C-CC564

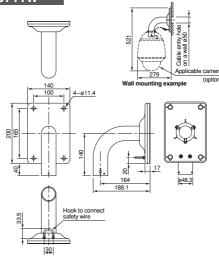
C-CC764/C-CC714

APPEARANCE AND DIMENSIONAL DIAGRAM

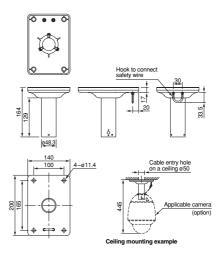
C-CC764/C-CC714



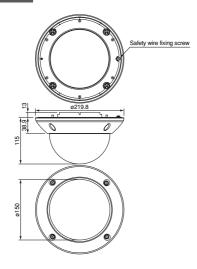
C-BC711W



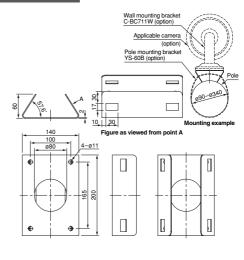
C-BC711P



C-A711DM



C-BC711PM



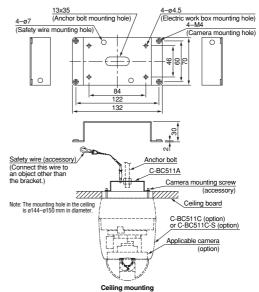
C-CC564/C-CC514

APPEARANCE AND DIMENSIONAL DIAGRAM

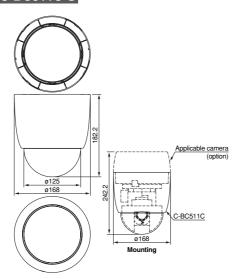
C-CC564/C-CC514 Connector 1 BNC Jack Power supply terminal block View of an optional camera installation cover attached) INSTALLATION EXAMPLE Mounting to a heavy-duty ceiling (such as a concrete ceiling) 1, When routing both the coaxial, power cables and signal cable from the speaker side. Power cables and signal cable from the speaker side.

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

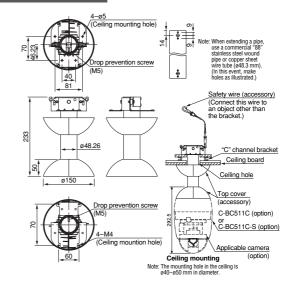
C-BC511A



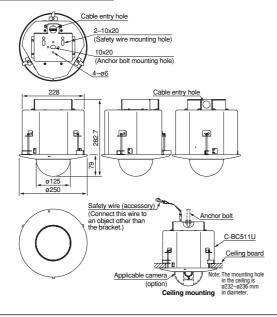
C-BC511C/C-BC511C-S



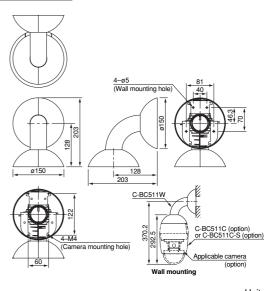
C-BC511P



C-BC511U/C-BC511U-S



C-BC511W



Unit: mm

C-RM500

REMOTE CONTROLLER



The C-RM500 Remote Controller is designed for use in camerabased 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.

Control up to 16 TOA's Combination Dome Cameras

Realtime control as well as preprogrammed position retrieval of up to 255 positions is provided. Each position allows providing a specific title as well remote image quality adjustment.

Instant position recall

The most used camera and position numbers can be assigned to function keys A through H for one-touch instant recall. Other camera numbers and position numbers can be assigned to ID numbers from 1 through 512 and easily retrieved using the tenkey pad.

Controls Multiplexer

The C-RM500 can also control the TOA multiplexers and allows switching video image display modes – single screen, single screen in sequence, 4-screens in sequence, as well as 4, 9, 10 and 16-segment split screens.

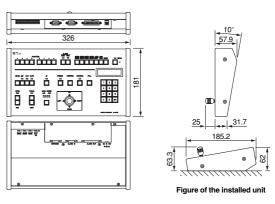
Alarm capability

Alarm signals received by the alarm input of combination dome cameras can be transmitted to the C-RM500 via a pair of RS-485 communication line where the C-RM500's alarm operations can be activated, based on the alarm signal type received. This has reduced the number of signal lines that were conventionally required in an expanded system. An Alarm Hold function allows temporarily suspending automatic switching of video images triggered by an alarm to enable the operator to prioritise the screen currently being viewed. In addition, the C-RM500 can receive alarm signals from an C-AL80 unit through the RS-232C port.

2 Location Control

The system can be independently controlled in two separate locations by installing 2 C-RM500 units.

APPEARANCE AND DIMENSIONAL DIAGRAM



Unit: mm

SPECIFICATIONS

Power Source	12 V DC
Current Consumption	150 mA
Slave Remote Controller	RS-485. screwless connector
Camera Control	RS-485, screwless connector (*1)
Switcher Control	RS-485, screwless connector RS-232C, D-sub connector (9 pins, male)
Alarm Input	RS-232C, D-sub connector (9 pins, male)
Alarm Output/ Control Input	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)
Display	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
Alarm Signal	Continuous alarm tone (can be turned on and off)
Number of Unit Connections	Up to 2 (one to be set for MASTER unit, another for SLAVE unit)
Maximum Cable Distance	1.2 km (*2) (between the Remote controller and the Combination cameras)
Operating Temperature	0°C to +50°C
Operating Humidity	Under 90% RH (no due condensation produced)
Finish	Panel: Surface-treated steel plate, sand gray, paint Sides: Rubber
Dimensions	326 (W) × 62 (H) × 185.2 (D) mm
Weight	1.8 kg
Accessory	D-sub connector (9 pins, male) × 1, D-sub connector(25 pins, male) × 1
Applicable Model (option)	Combination dome camera: C-CC504S, C-CC554S Switcher: C-MS161D, C-MS91D Slave remote controller: C-RM500 Interface unit: C-IF500 Alarm unit: C-AL80

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

C-IF500 INTERFACE UNIT



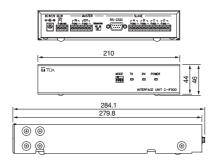


A useful option for configuring camera systems, the C-IF500 functions as a splitter. It provides control over expanding a camera system when the distance is over 1.2km (max. 3km) between the dedicated C-RM500 Remote Controller and system cameras linked to it. It will also allow configuring a star connection. 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 data transfer rate in four increments via DIP switch to suit network requirements.



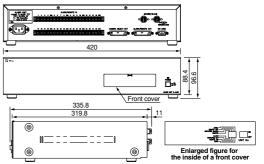
The C-AL80 Alarm Unit serves as the main controller for the alarm requirements of a system by converting alarm signals initiated by externally connected equipment into RS-232C-compatible signal data. In addition to its 32 alarm or remote inputs, the C-AL80 can also be linked to a maximum of 8 other C-AL80 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



Unit: mm

APPEARANCE AND DIMENSIONAL DIAGRAM



Unit: mm

SPECIFICATIONS

Power Source	12 V DC
Current Consumption	100 mA
External Control	Master: RS-485, screwless connector terminating resistance (100 Ω) switch ON/OFF Slave(*1): 4 channel, RS-485, screwless connector RS-232C, D-sub connector (9-pin, male)
Display	Power LED indicator, communication LED indicators (TX, RX)
Maximum Cable Distance	RS-485: 1.2 km (*²) RS-232C: 10 m
Communication Speed	4800 bps, 9600 bps, 19200 bps, 38400 bps
Operating Temperature	-10°C to +50°C
Operating Humidity	Under 90% RH (no due condensation produced)
Finish	Panel: Aluminum, black, 30% gloss, paint Case: Pre-coated steel plate, 30% gloss, black
Dimensions	210 (W) x 46 (H) x 284.1 (D) mm
Weight	1.4 kg
Option	Rack mounting bracket: M-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)

SPECIFICATIONS (H/L)

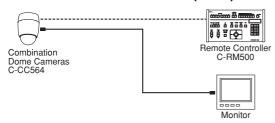
Power Source	H: 230 V AC, 50/60 Hz L: 120 V AC, 50/60
Power Consumption	under 3 W
Alarm/Remote Input	32 channels, no-voltage make contact input, open voltage: 5 V DC, short-circuit current: max. 5 mA, M3 screw terminal, distance between barriers: 7.62 mm
Control Input/Output	1 channel, RS-232C, D-sub connector (9 P, male) (only valid for master unit), fixed to 38,400 bps
Master/sub Connection Terminal	2 channels, RS-485, maximum cable length: 1200m, DIN connector (5 P)
Alarm Reset Input	1 channel, no-voltage make contact input, open voltage: 5 V DC, short-circuit current: max. 5 mA, D-sub connector (25 P)
Setting Switches	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)
Application	Indoor use
Operating Temperature	0°C to +50°C
Finish	Panel: Aluminum extrusion, black, 30% gloss Case: Pre-coated steel plate, black, 30% gloss
Dimensions	420 (W) × 96.6 (H) × 335.8 (D) mm
Weight	3.6 kg
Accessory	DIN plug \times 2, RS-232C cable (2 m) \times 1, D-sub connector (25 P) \times 2, Power cord (2 m) \times 1
Option	Rack mounting bracket: MB-23B
Application Model	Remote controller: C-RM500

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

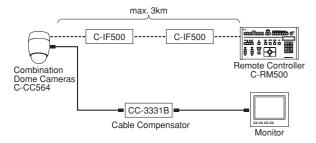
Represents the total of connected cable distances if multiple combination cameras or Interface units are connected in the system (when the CPEV-S cable thicker than 0.65 mm in diameter is used).

SYSTEM EXAMPLES

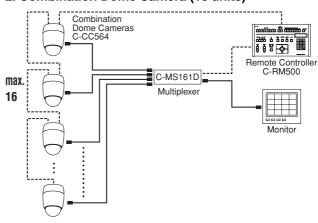
1. Combination Dome Camera (1 unit)



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



2. Combination Dome Camera (16 units)



4. Sensor-activated Dome Camera operation.

