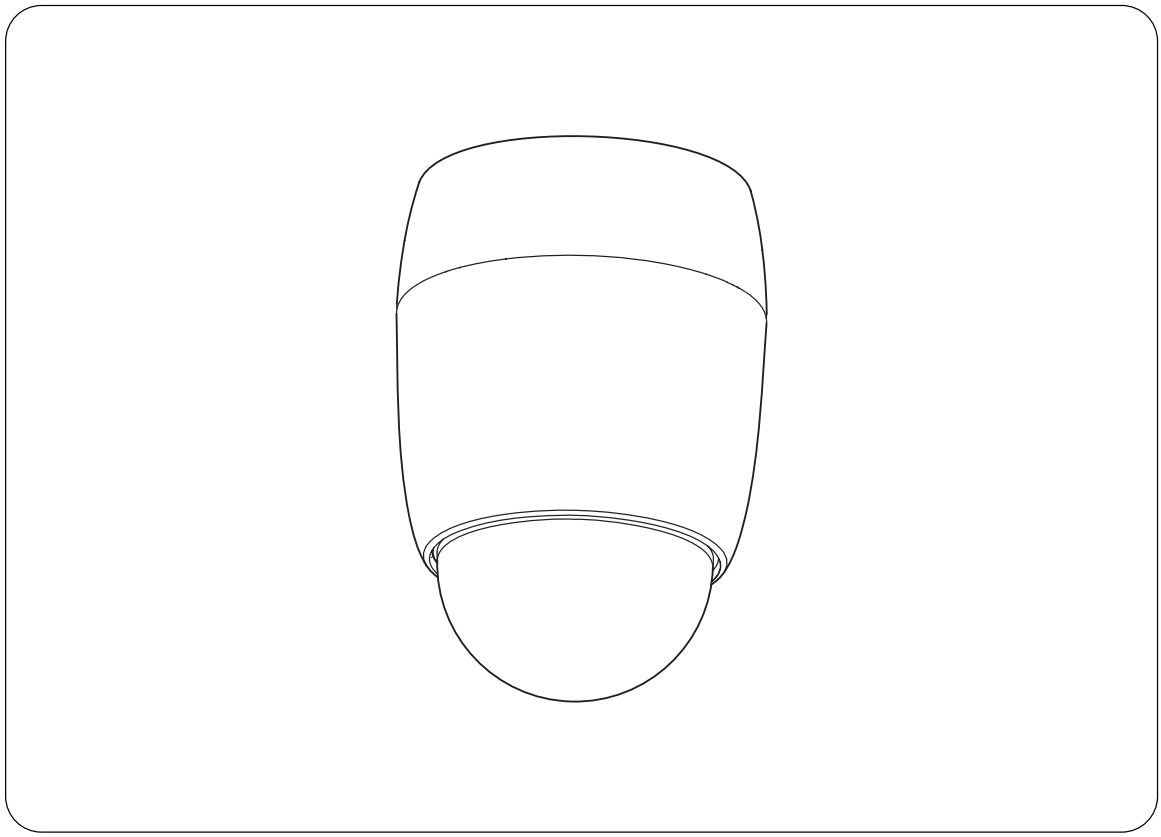
INSTALLATION MANUAL

COMBINATION CAMERA

C-CC514 NT
C-CC514 PL
C-CC564 NT
C-CC564 PL
C-CC574 NT
C-CC574 PL



Thank you for purchasing TOA's combination camera. Please carefully follow the instructions in this manual to ensure long, trouble-free use of your equipment.

TOA Corporation

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1. SAFETY PRECAUTIONS

- Be sure to read the instructions in this section carefully before use.
- Make sure to observe the instructions in this manual as the conventions of safety symbols and messages regarded as very important precautions are included.
- We also recommend you keep this instruction manual handy for future reference.

Safety Symbol and Message Conventions

Safety symbols and messages described below are used in this manual to prevent bodily injury and property damage which could result from mishandling. Before operating your product, read this manual first and understand the safety symbols and messages so you are thoroughly aware of the potential safety hazards.

⚠ **WARNING**	Do not expose the unit to rain or an environment where it may be splashed by water or other liquids, as doing so may result in fire or electric shock.

⚠ **WARNING**	Indicates a potentially hazardous situation which, if mishandled, could result in death or serious personal injury.

When Installing the Unit

- Use the unit only with the voltage specified on the unit. Using a voltage higher than that which is specified may result in fire or electric shock.
- Avoid installing the unit in unstable locations, such as on a rickety or slanted surface. Failure to do so may result in the unit falling and possibly causing personal injury.
- Install the unit only in a location that can structurally support the weight of the unit and the mounting bracket. Doing otherwise may result in the unit falling down and causing personal injury and/or property damage.
- Only use the unit's dedicated mounting hardware. The use of mounting hardware not designated could result in the unit falling and possibly causing personal injury.
- Do not use other methods than specified to install the unit. Extreme force is applied to the unit and the unit could fall off, possibly resulting in personal injuries.
- Attach the safety wire to the unit. If not attached, the unit could fall off, resulting in personal injury.
- Use nuts and bolts that are appropriate for the ceiling's or wall's structure and composition. Failure to do so may cause the unit to fall, resulting in material damage and possible personal injury.
- Tighten each nut and bolt securely. Ensure that the bracket has no loose joints after installation to prevent accidents that could result in personal injury.
- Avoid installing the unit in locations exposed to sea breeze or corrosive gas. Mounts may become corroded, eventually causing the unit to fall off, which could result in personal injury.
- Do not mount the unit in locations exposed to constant vibration. The mounting screws and/or bolts may be loosened by excessive vibration, potentially causing the unit to fall, which could result in personal injury.

When the Unit is in Use

- If any of the following irregularities occurs, immediately unplug the power plug from the AC outlet and inform the shop from where the unit was purchased. Further using the unit may result in fire or electric shock.
  - · If you detect smoke or a strange smell coming from the unit.
  - · If water or any metallic object gets into the unit
  - · If the unit falls, or the unit case breaks
  - · If the power supply cord is damaged (exposure of the core, disconnection, etc.)
  - · If no camera images are displayed on the monitor TV when the temperature of the camera unit is 0°C or more.
- To prevent a fire or electric shock, never open nor remove the unit case as there are high voltage components inside the unit. Refer all servicing to your nearest TOA dealer.
- Do not insert, or drop metallic objects or flammable materials in the ventilation slots of the unit’s cover, as this may result in fire or electric shock.
- Do not touch the unit during thunder and lightning, as this may result in electric shock.

⚠ CAUTION Indicates a potentially hazardous situation which, if mishandled, could result in moderate or minor personal injury, and/or property damage.

When Installing the Unit

- To avoid electric shocks, be sure to switch off the power before power supply wiring work. Failure to do so may result in electrical shock.
- Leave the installation of the unit to your TOA dealer because the installation requires expert experience and skills. If the unit falls, this could cause personal injures.

When the Unit is in Use

- Do not stand or sit on, nor hang down from the unit as this may cause it to fall down or drop, resulting in personal injury and/or property damage.
- Switch off the power, and unplug the power supply plug form the AC outlet for safety purposes when cleaning or leaving the unit unused for a long period of time. Doing otherwise may cause a fire, burn injury or electric shock.
- Have the unit checked periodically by the shop from where it was purchased. Failure to do so may result in corrosion or damage to the unit or its mounting brackets that could cause the unit to fall, possibly causing personal injury.
- Contact your TOA dealer as to the cleaning. If dust is allowed to accumulate in the unit over a long period of time, a fire or damage to the unit may result.

NTSC version complies with Part 15 of the FCC Rules.

Note
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

Modifications
Any modifications made to this device that are not approved by TOA Corporation may void the authority granted to the user by the FCC to operate this equipment.

Underwriters Laboratories Inc. (UL) has not tested the performance or reliability of the security aspects of this product. UL has only tested for fire, shock or casualties as outlined in UL's Standard(s) for Safety. UL Certification does not cover the performance or reliability of the security hardware and security operating software. UL MAKES NO REPRESENTATIONS, WARRANTIES OR CERTIFICATIONS WHATSOEVER REGARDING THE PERFORMANCE OR RELIABILITY OF ANY SECURITY RELATED FUNCTIONS OF THIS PRODUCT.

2. GENERAL DESCRIPTION

TOA's dome-type color cameras combine with a high-speed camera drive that permits one 360-degree horizontal rotation per second and a 35x (C-CC574) a 23x (C-CC564) or a 22x (C-CC514) optical zoom lens. Up to 255 arbitrary positions can be preset and such preset positions can be instantaneously repeated. The systems also feature a 12x electronic zoom, timer, and tracing, while the C-CC564 and C-CC574 offer additional functions that include a motion detector, auto flip, black & white mode, privacy masking, and motion compensation (C-CC574 only).

3. FEATURES

- Digital signal processing realizes high resolution and high picture quality. The unit also features the video memory that increases the electronic sensitivity up to 32 times and enables electronic zooming.
- Permits manual operations of the zoom lens, pan/tilt head, and preset camera positions, and the setting of the camera functions. Also it can correspond to the control using a communications line of RS-485.
- Up to 255 camera positions can be preset.

4. HANDLING PRECAUTIONS

- Noise may appear on the monitor or preset camera positions may deviate with prolonged camera use. In such cases, use the camera's refresh function to automatically refresh settings and reestablish the home position once a day or week, thus allowing any position deviation to be corrected. When correcting manually, initialize the camera from the remote controller.
- It is recommended that the unit be installed in locations where the temperature is under +40°C, as the longevity of the unit may reduce with prolonged unit use under high temperature and high humidity.
- Do not direct the camera lens to the sun or strong lighting or light reflection. Exposure to direct sunlight could cause the CCD's color filter to deteriorate, leading to image discoloration.
- Do not install the unit in locations exposed to constant vibration. The unit is not intended for vehicle use. Do not install the unit in a vehicle or ship.
- Do not give vibration or shock to the unit, as doing so may cause unit breakdown, or damage.
- Avoid installing the unit on sea or shore, or in locations exposed to dust or corrosive gas, or extraordinary combustible conditions, or in swimming pools where disinfectants are used.
- When the C-CC574 is recommended that presets be entered into the memory 10 minutes or more after the power has been switched on. The subject may go out of focus when presets have been entered into the memory on the telescope side.
- When the C-CC574 is directed toward horizontal direction on the telescope side, the subject may not be brought into focus.
- To prevent the unit falls off, be sure to hang the supplied safety wire first when installing the unit.
- The dome camera is designed solely for suspended installations. The camera or dome must be suspended vertically with its dome facing downward. Use special care not to suspend it at a tilted angle.
- The unit is not equipped with a power switch. Perform power construction work so that the camera power can be turned on and off remotely.
- The dome camera features built-in heat generating circuitry. Take care not to touch the internal parts marked "Caution High Temperature" when working inside the camera during dome cleaning or maintenance.
- Avoid directly touching the dome surface, since camera picture quality could deteriorate if the dome cover becomes smudged and dirty.

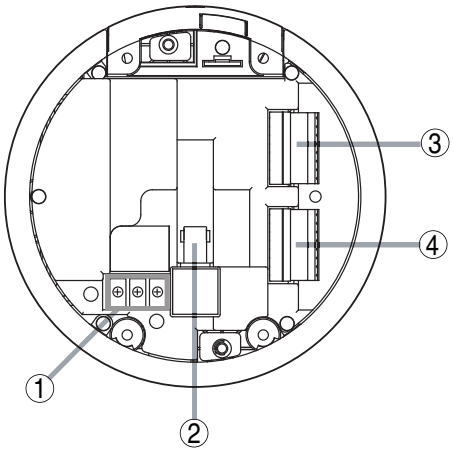
- To clean, be sure to first unplug the power plug from the AC outlet, then wipe with a dry cloth. When the unit gets very dirty, use a cloth dampened in a neutral detergent. Never use benzene, thinner or chemically processed towel as the unit's plastic or other parts may be deformed or discolored.

- When cleaning the dome cover, wipe lightly with a soft cloth. In this event, the cover could be scratched and damaged if the dome is covered in dust or sand. When the cover is extremely dirty, it is highly recommended that the cover be removed and that its outside surface be washed lightly with water. Since alcohol-based detergents can turn the dome cover whitish, avoid using them, as camera picture quality could be severely affected.

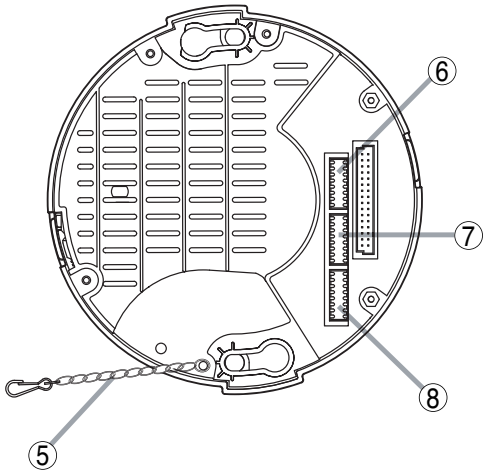
- When dust has settled on the unit's lens, lightly clean using a commercial camera blower or cleaning paper.

5. NOMENCLATURE

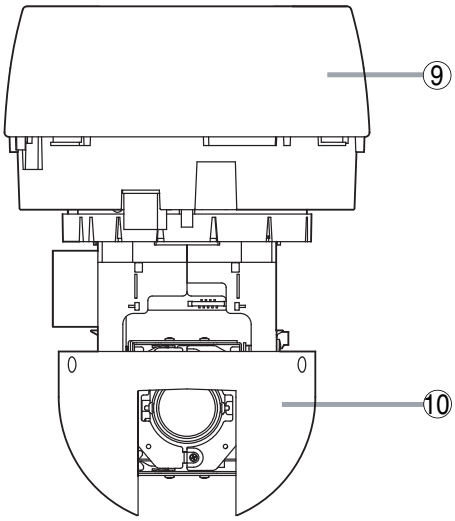
[Top view]



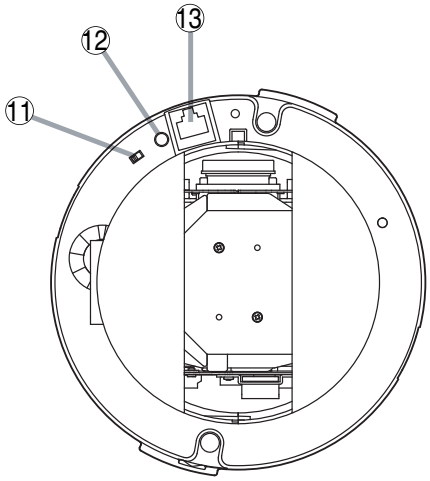
[Camera Unit Section, Top view]



[Front view]



[Camera Unit Section, Bottom view]



(1) Power supply terminal

(2) Video output terminal (VIDEO OUT)

(3) Connector (CN1)

(4) Connector (CN2) *1

(5) Safety wire

(6) DIP switch (SW1)

(7) DIP switch (SW2)

(8) DIP switch (SW3)

(9) Base unit

(10) Camera unit

(11) COM SW *2

(12) COM LED *2

(13) COM PORT *2

*1 C-CC564 C-CC574 only

*2 For use of (11), (12) and (13), refer to the "Camera Controller Software Operation Manual" on the enclosed CD-R.

6. PRECAUTIONS WHEN INSTALLING THE UNIT

⚠ WARNING

The combination camera weight 1.7kg. Select the heavy-duty mounting surface that can structurally support the weight of the camera. Doing otherwise may result in the unit falling and possibly causing personal injury.

Notes

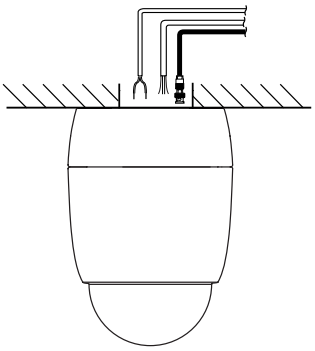
- Mount the camera to a heavy-duty ceiling surface (such as concrete ceiling).
- When mounting directly to the ceiling (such as a double ceiling) not strong enough to support the weight of the mounted camera, use the optional C-BC511A Ceiling Mounting Bracket.
- When installing the camera in the ceiling to hide it as much as possible, use the optional C-BC511U or C-BC511U-S Flush Ceiling Mounting Bracket.
- When hanging the camera from the ceiling, use the optional C-BC511P Ceiling Suspension Bracket.
- When mounting the camera to a wall, use the optional C-BC511W Wall Mounting Bracket.

7. DIRECT CEILING MOUNTING

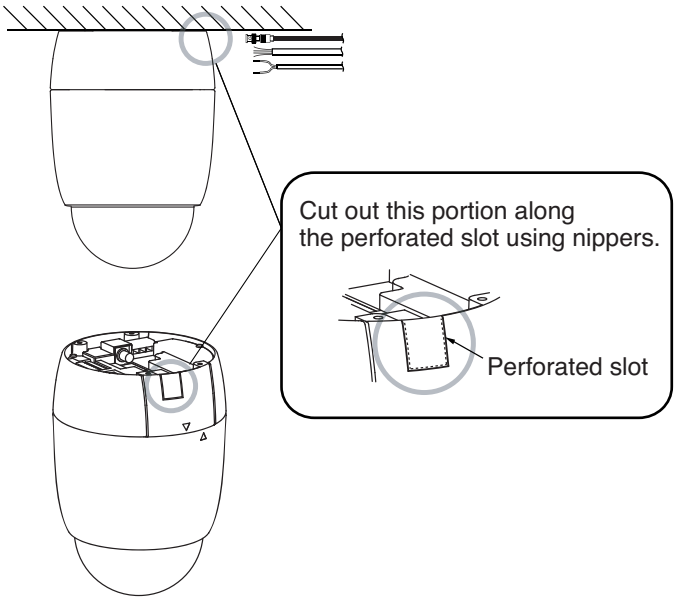
Use the C-BC511C or C-BC511C-S Ceiling Mounting Cover.

7.1. Mounting Example

[Cable routing to the attic]

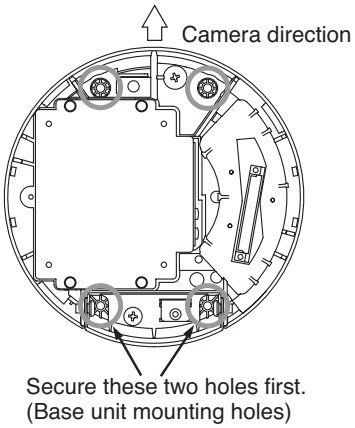


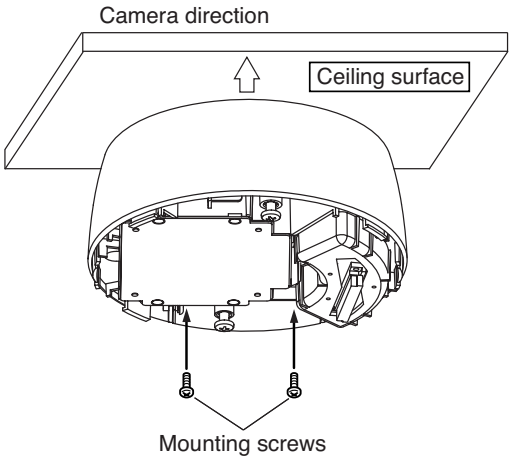
[Cable routing over the ceiling surface]



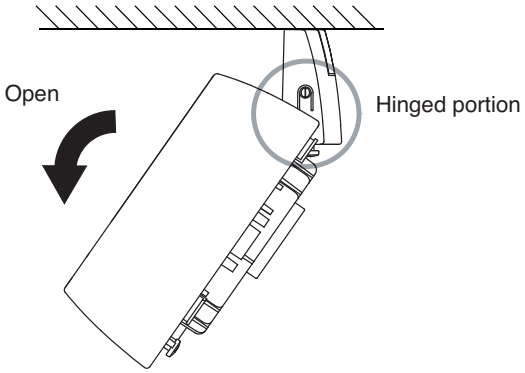
7.2. Mounting Procedures

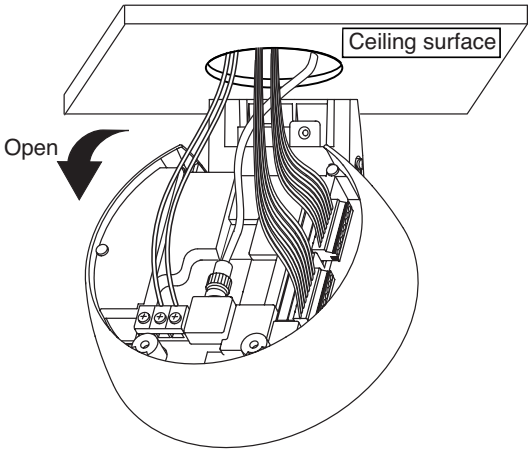
1. Mount the base unit to the ceiling.
   First fix two of the base unit mounting holes as shown below.
   Since no mounting screws are supplied with the camera, prepare them separately.
   Use screws with a nominal diameter of 4 mm and a length of over 25 mm.



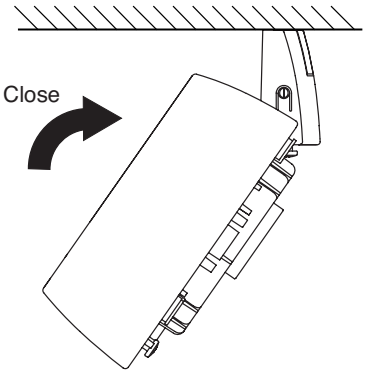


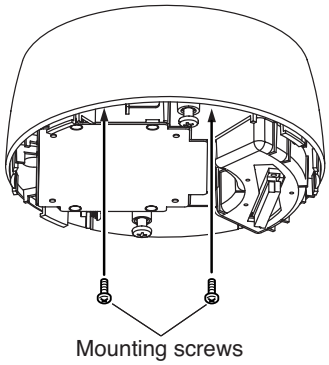
2. Release the lock on the hinged portion of the base unit and connect the power, video, and signal cables to the base unit.
   (For details, please refer to p. 29; "Connections.")





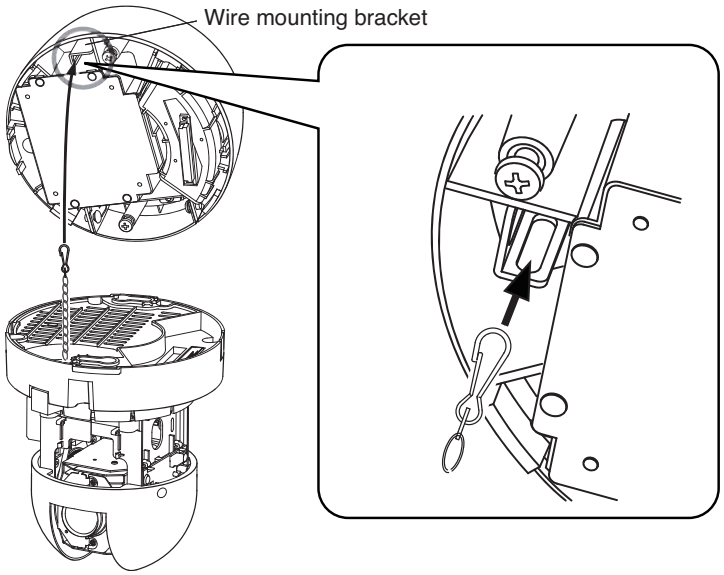
3. Push up and lock the hinged portion of the base unit and secure the remaining two mounting holes.



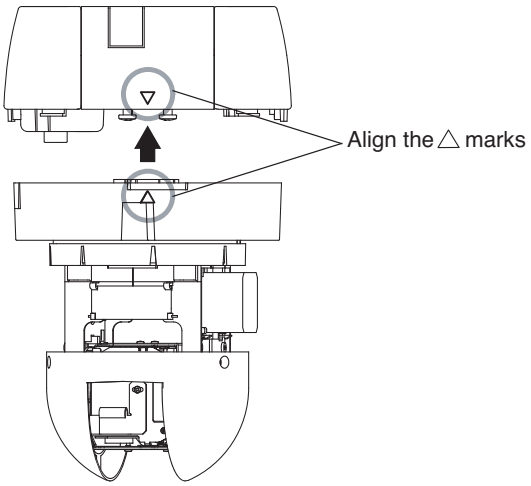


4. Perform DIP SW settings on the camera unit.
   (For details, please refer to p. 31; "DIP Switch Settings.")

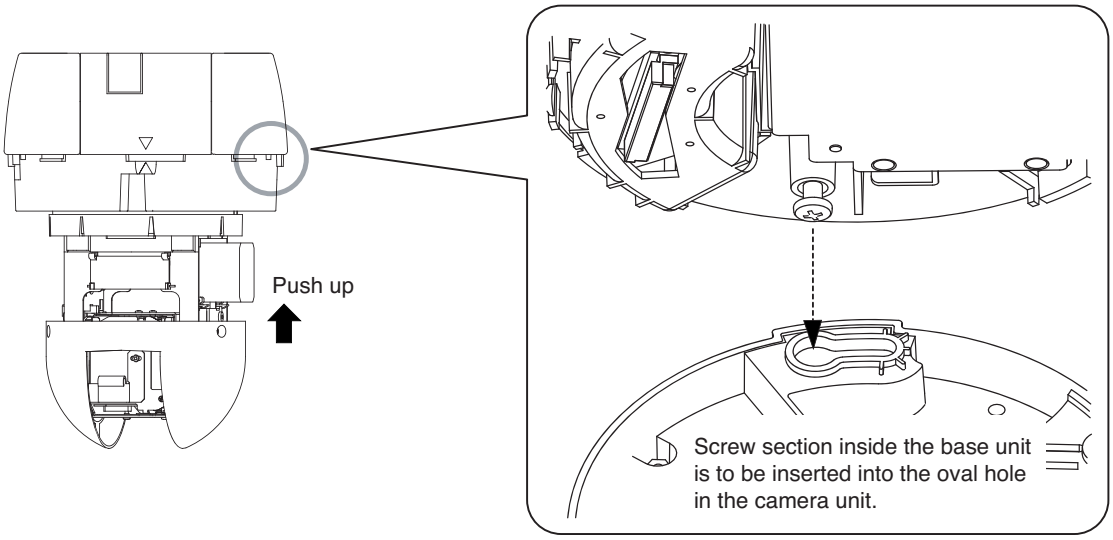
5. Attach the safety wire from the camera unit to the wire mounting hole of the base unit.



6. Align the positioning mark on the base unit with that on the camera unit.

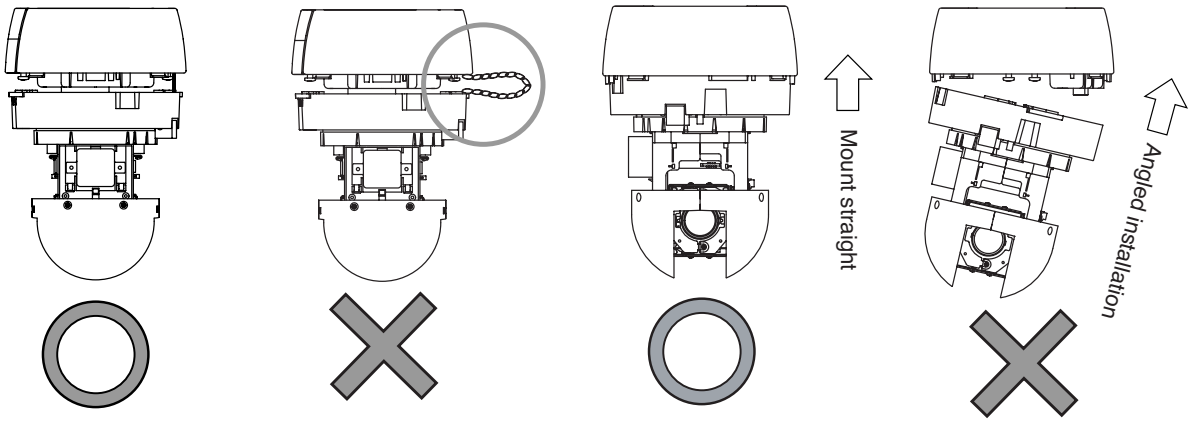


7. Align the positioning marks, then push the camera unit up into the base unit.

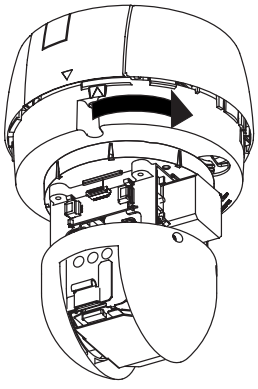


Note
Take care not to pinch the safety wire between the camera unit and base unit to avoid damage to the camera.

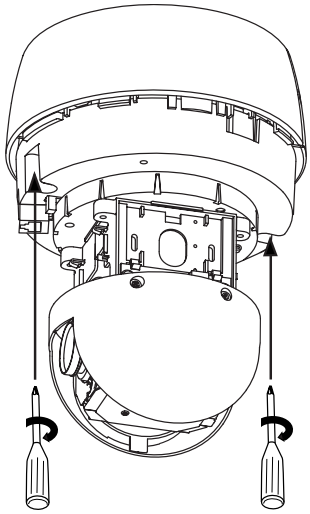
Note
When mounting the camera unit to the base unit, mount it straight till it is attached to the base unit correctly. Mounting it at an angle may cause damage to the camera unit.

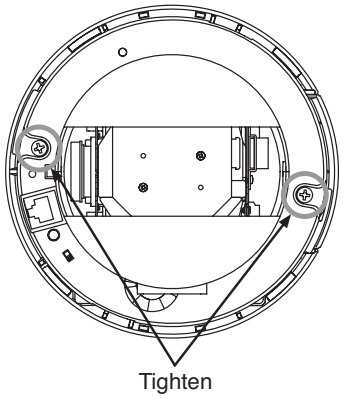


8. Turn the camera unit clockwise pushing it up to the base unit until it locks into place.

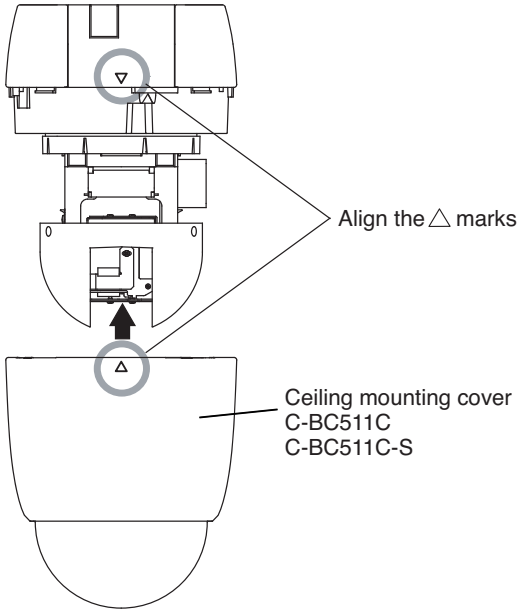


9. Tighten 2 camera unit mounting screws.

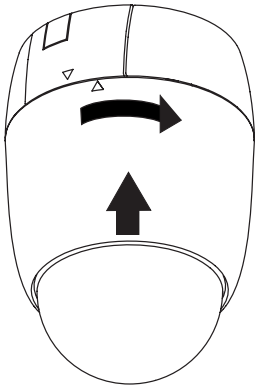




10. Align the positioning mark on the ceiling mounting cover with that on the base unit.



11. Turn the ceiling mounting cover clockwise pushing it up to the base unit until it locks into place.

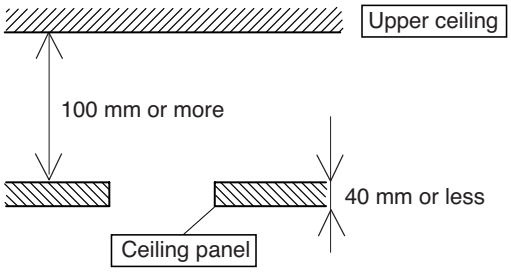


8. MOUNTING THE CAMERA TO A WEAK CEILING PANEL

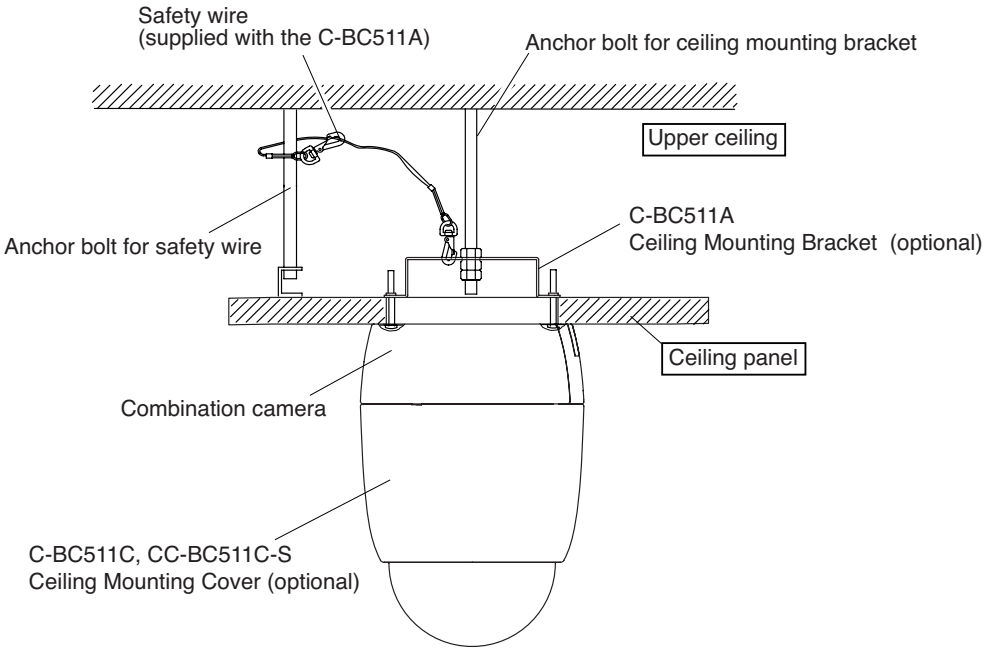
Use the optional C-BC511C or C-BC511C-S Ceiling Mounting Cover and the optional C-BC511A Ceiling Mounting Bracket.

Notes

- Use the cover and the anchor whenever the space between suspended ceiling panel and upper ceiling exceeds a height of 100 mm.
- The ceiling panel to which the camera will be mounted must be no more than 40 mm in thickness.
- Be sure to use the supplied safety wire.
- Be sure to use the specified screws to mount the combination camera and direct mounting anchor, and ensure that they are securely mounted without any play.



8.1. Mounting Example

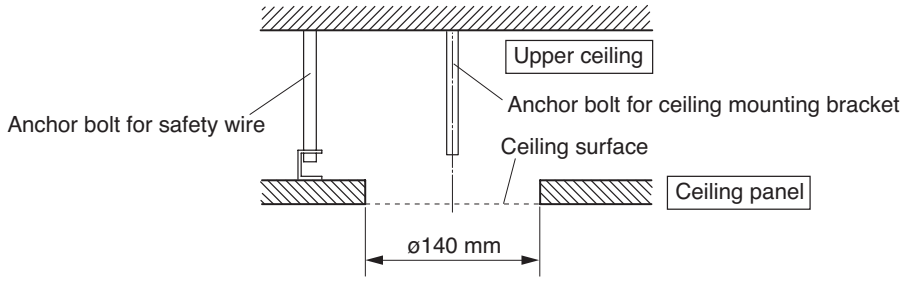


8.2. Mounting Procedures

1. Make a mounting hole of ø140 mm in the ceiling panel.

2. Install the anchor bolt for ceiling mounting bracket and anchor bolt for safety wire into the upper ceiling.

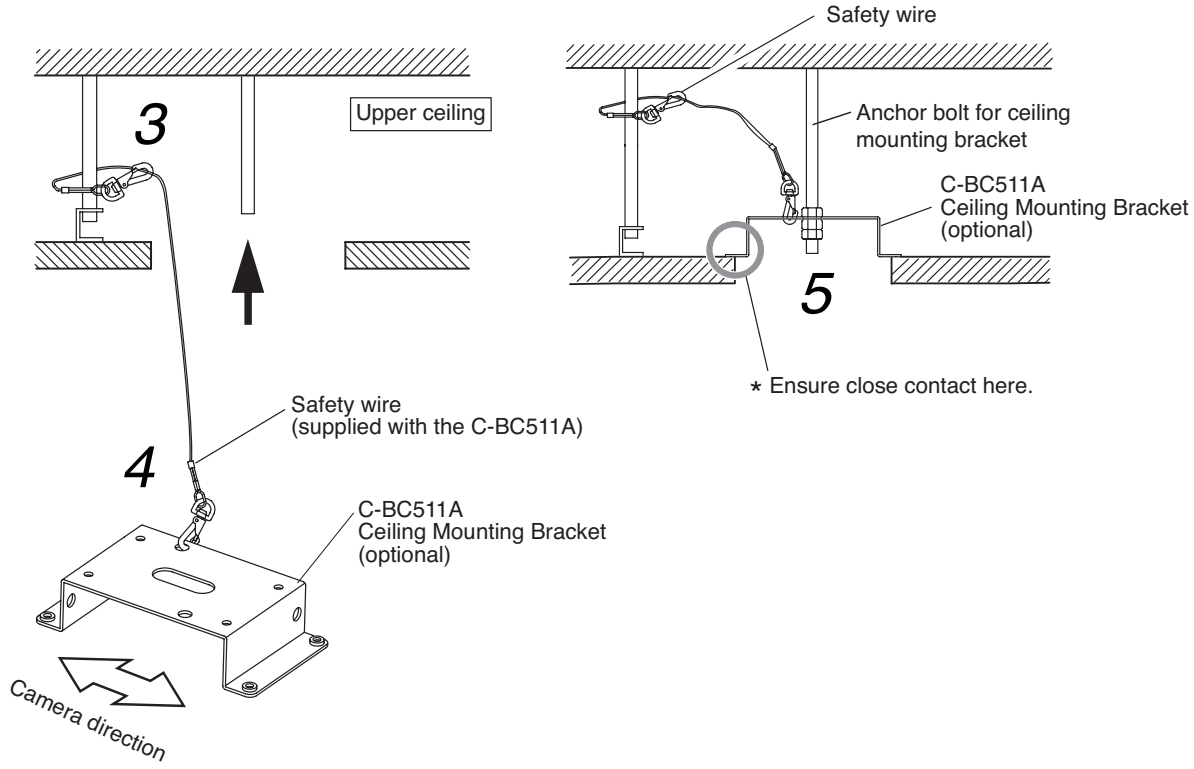
Notes
- The anchor bolt for ceiling mounting bracket must be aligned with the center of the mounting hole of ø140 mm in the ceiling panel, and must not project from the ceiling surface.
- If an existing anchor bolt is available nearby, it can be substituted for the anchor bolt for safety wire.



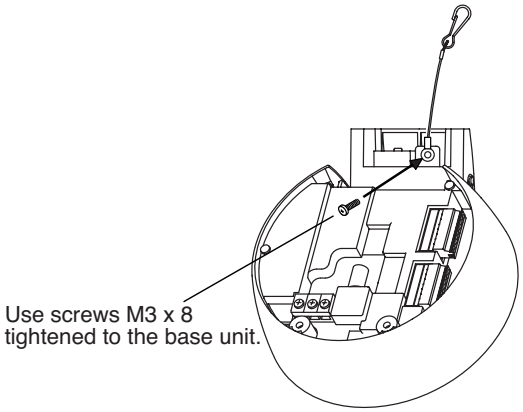
3. Attach the supplied safety wire to the anchor bolt for safety wire.

4. Attach the ceiling mounting bracket to the end of the safety wire.

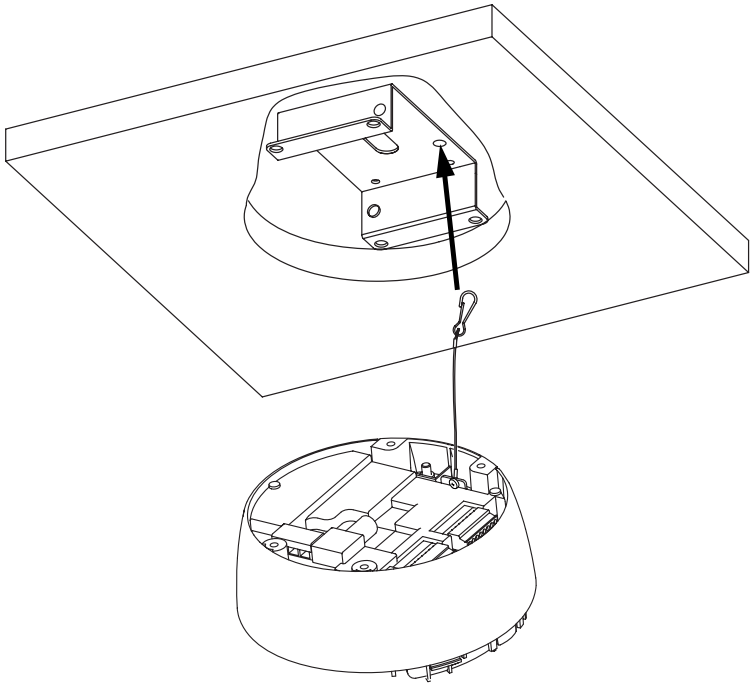
5. Attach the ceiling mounting bracket to the anchor bolt for ceiling mounting bracket.



6. Attach the supplied safety wire to the base unit.



7. Attach the safety wire connected to the base unit to the ceiling mounting bracket.



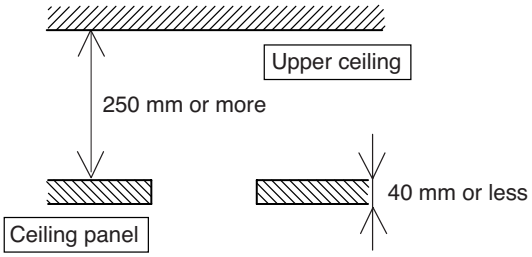
8. For subsequent procedures, follow the steps 1 – 11 on p. 9 – 12.

9. FLUSH CEILING MOUNTING

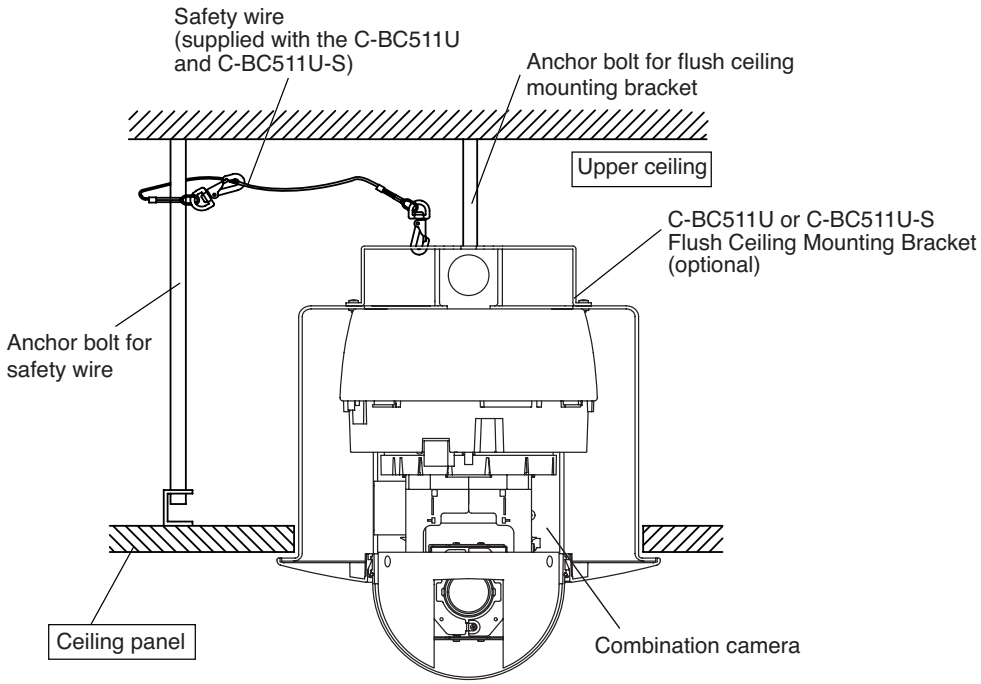
- Use the optional C-BC511U or C-BC511U-S Flush Ceiling Mounting Bracket.
- Flush mounting can be used to reduce the camera's exposed area. Use the optional C-BC511U or C-BC511U-S Flush Ceiling Mounting Bracket when mounting cameras to gypsum board ceilings or other weak ceiling panel materials in which mounting screws cannot be securely inserted.

Notes

- Use the bracket whenever the space between suspended ceiling panel and upper ceiling exceeds a height of 250 mm.
- The ceiling panel to which the camera will be mounted must be no more than 40 mm in thickness.
- Be sure to use the supplied safety wire.
- Be sure to use the specified screws to mount the combination camera and flush ceiling mounting bracket, and ensure that they are securely mounted without any play.



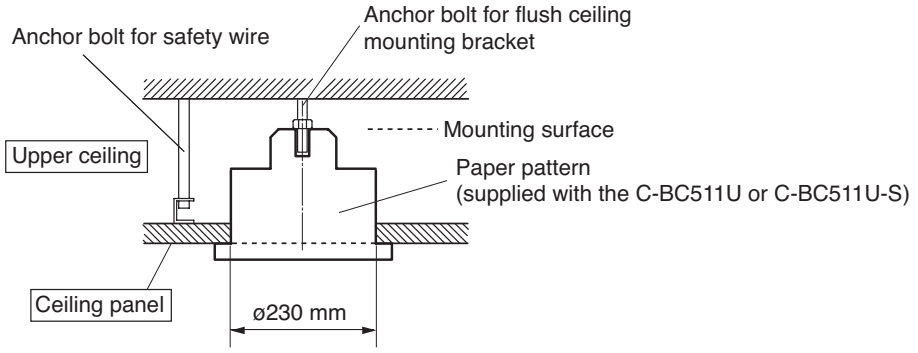
9.1. Mounting Example



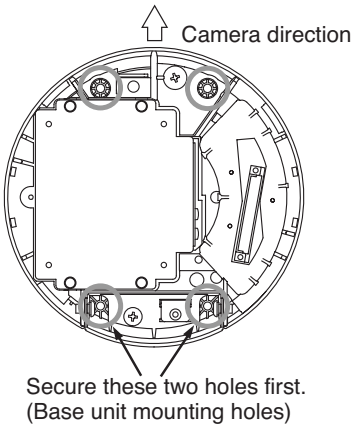
9.2. Mounting Procedures

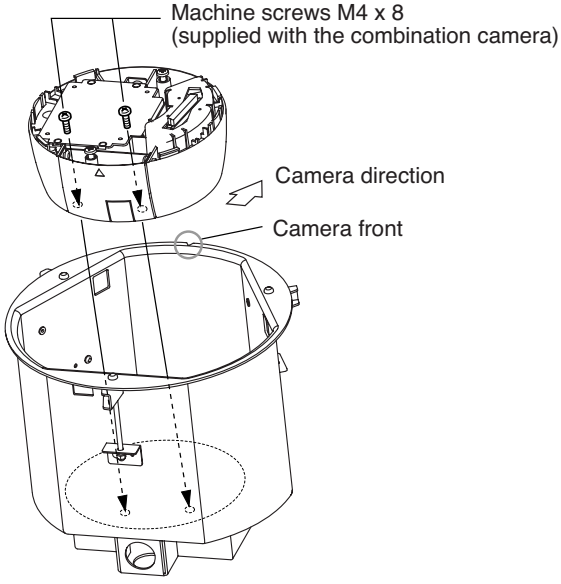
1. Make a mounting hole of ø230 mm in the ceiling panel.

2. Install the anchor bolt for flush ceiling mounting bracket and anchor bolt for safety wire into the upper ceiling.
   - The anchor bolt for flush ceiling mounting bracket must be aligned with the center of mounting hole of ø230 mm in the ceiling panel.
   - Use the pattern paper supplied with the C-BC511U or C-BC511U-S bracket to determine the anchor bolt length and mounting surface height.
   - If an existing anchor bolt is available nearby, it can be substituted for the anchor bolt for safety wire.



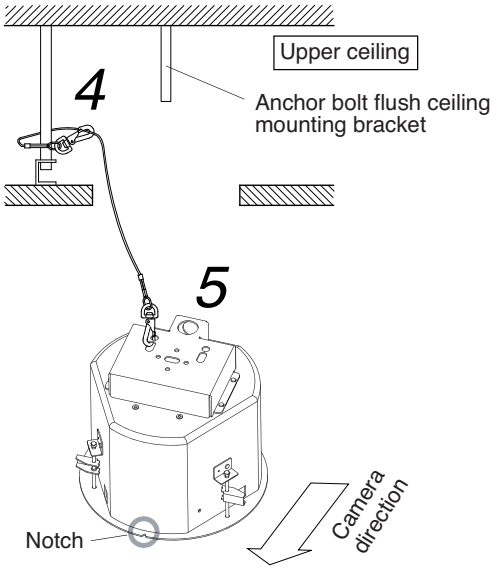
3. Attach the base unit to the flush ceiling mounting bracket.
   First fix two of the base unit mounting holes as shown below.
   (Use the machine screws supplied with the combination camera.)



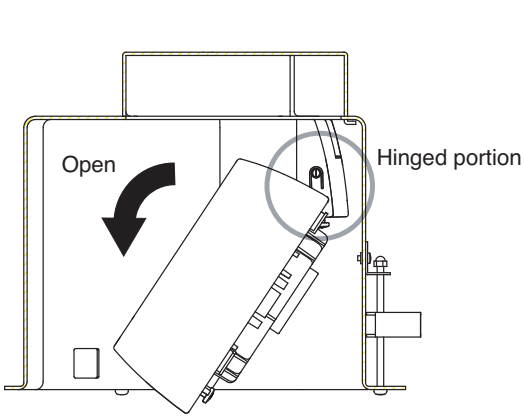


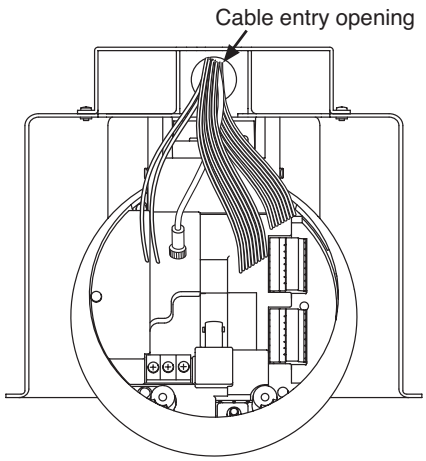
4. Attach the supplied safety wire to the anchor bolt for safety wire.

5. Attach the flush ceiling mounting bracket to the end of safety wire.

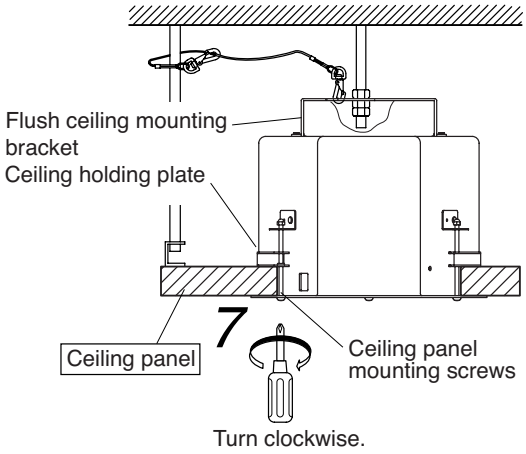


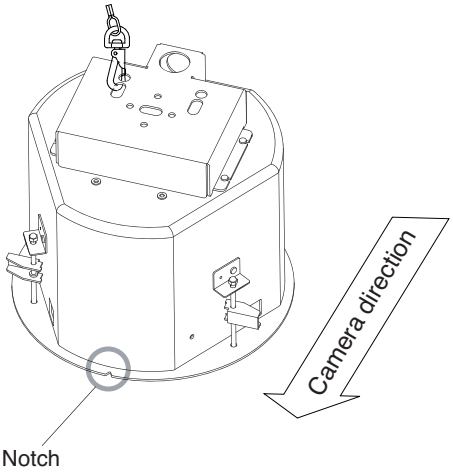
6. Release the lock on the hinged portion of the base unit and run the video, transmission and power cables extending from the ceiling through the flush ceiling mounting bracket's cable entry opening.



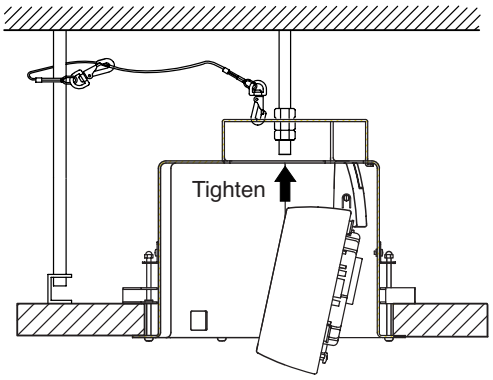


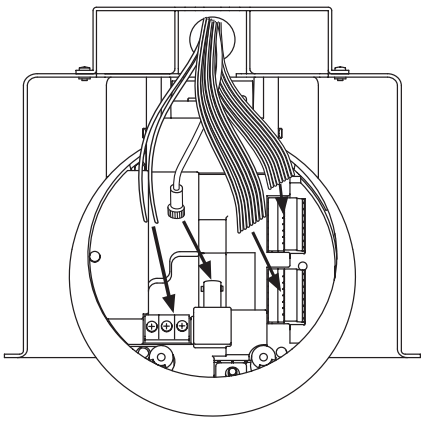
7. Place the flush ceiling mounting bracket in the ceiling behind the ceiling panel by inserting it through the mounting hole in the ceiling panel, then secure the bracket using the three supplied ceiling mounting screws.
   Turning the mounting screws clockwise clamps the ceiling holding plate to the ceiling panel. Ensure that the notch in the bracket is pointing in the camera's intended direction.





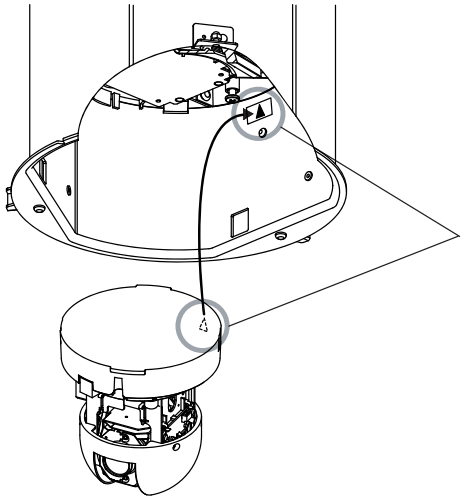
8. Fix the flush ceiling mounting bracket to the anchor bolt for flush ceiling mounting and connect the video, communications, and power cables to the base unit.
   (For details, please refer to p. 29; "Connections.")





9. Perform steps 3 – 5 on p. 9 – 10.

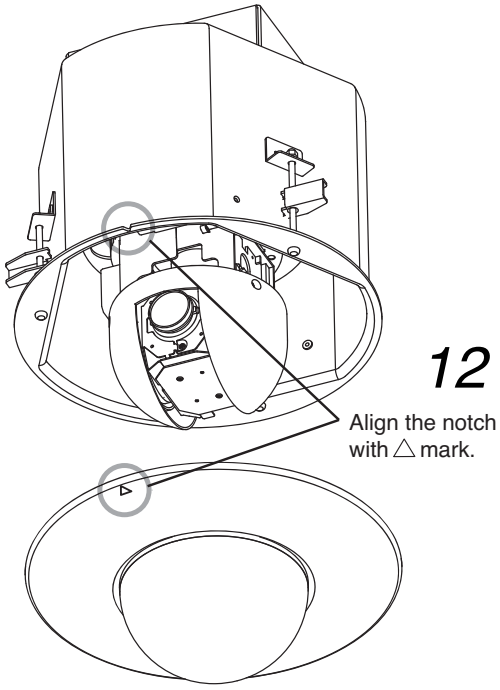
10. Attach the camera unit to the base unit.
    Align the positioning mark on the camera unit with that on the flush ceiling mounting bracket.

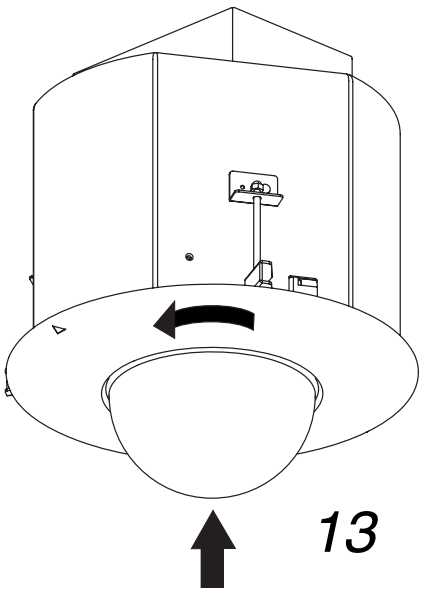


11. Perform steps 7 – 9 on p. 11 – 12.

12. Align the positioning mark on the supplied dome cover with the notch in flush ceiling mounting bracket.

13. Turn the dome cover counterclockwise pushing it up to the flush ceiling mounting bracket until it locks into place.





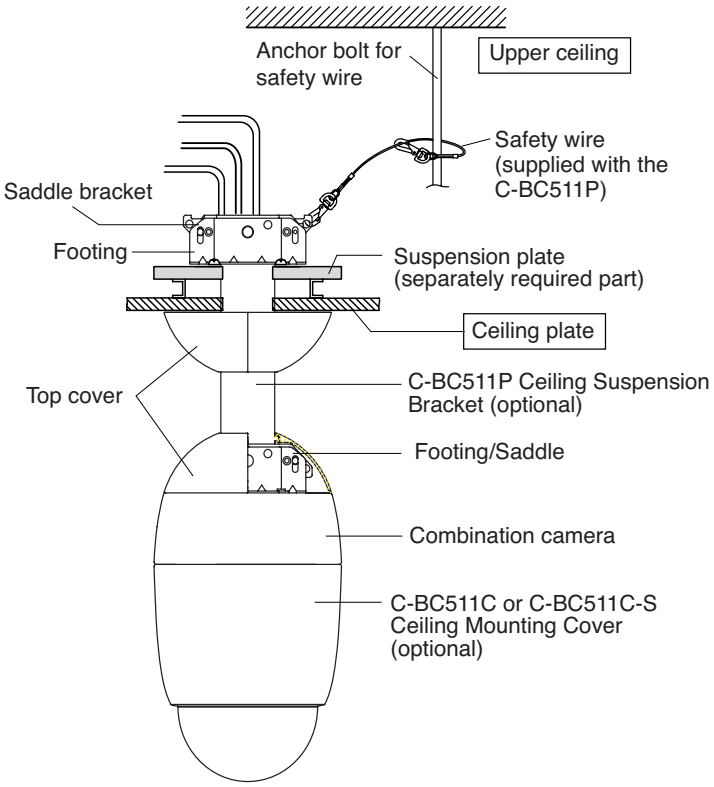
10. CEILING SUSPENSION

Use the optional C-BC511P Ceiling Suspension Bracket in combination with the optional C-BC511C or C-BC511C-S Ceiling Mounting Cover when suspending the camera from a ceiling.

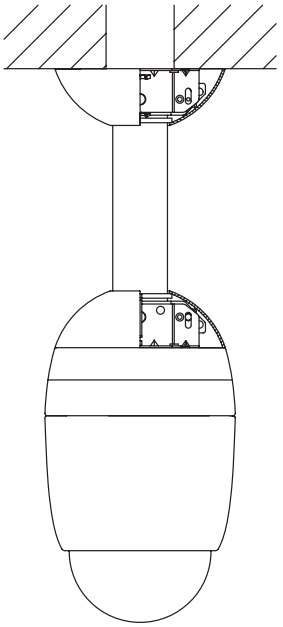
Notes
- Be sure to mount the ceiling suspension bracket using the supplied safety wire.
- Be sure to use the specified screws to mount the combination camera and ceiling suspension bracket, and ensure that they are securely mounted without any play.

10.1. Mounting Example

- When suspending the camera from a double-constructed ceiling



- When suspending the camera from the strong ceiling materials

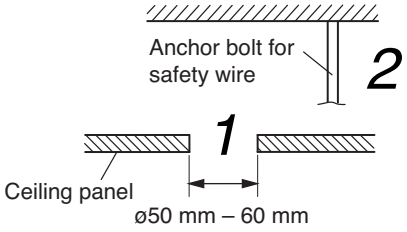


10.2. Mounting Procedures

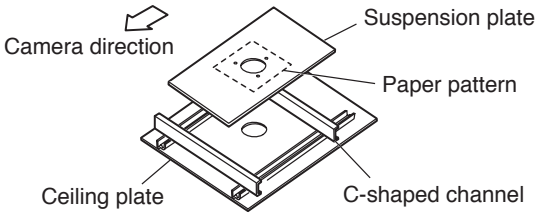
1. Determine the suspending position, then make a mounting hole of ø50 – 60 mm in the ceiling plate.

2. Install the anchor bolt for safety wire into the upper ceiling.
   • If an existing anchor bolt is available nearby, it can be substituted for the anchor bolt for safety wire.

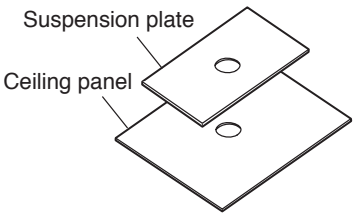
3. Separately prepare a suspension plate, and cut out the necessary hole in a way best suited to the plate material.



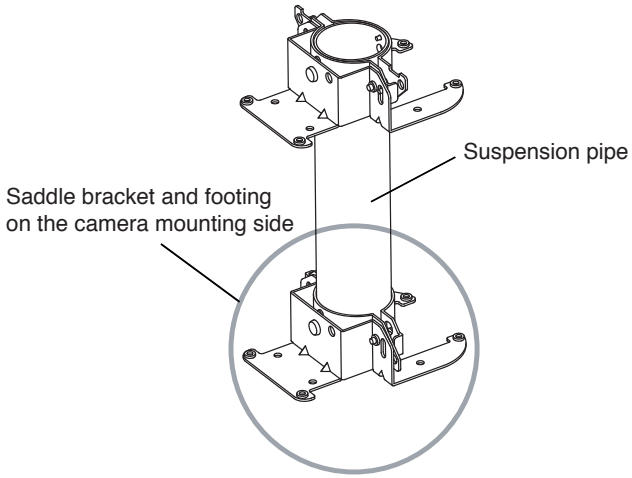
• For double-constructed ceilings



• For strong ceiling materials

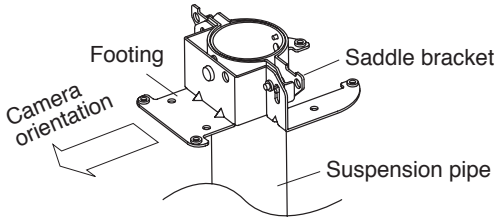


4. Detach footings and saddle bracket on the camera mounting side from the suspension pipe.
   • Removed saddle brackets and screws are attached to the suspension pipe in step 10.
   • Removed footings and screws are attached to the base unit in step 12.

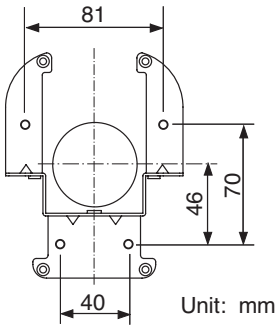


5. Attach the suspension pipe (saddle bracket and footing) to the suspension plate.

Note: Ensure that the installed suspension pipe faces in the intended camera orientation.



[Mounting hole dimensional diagram]

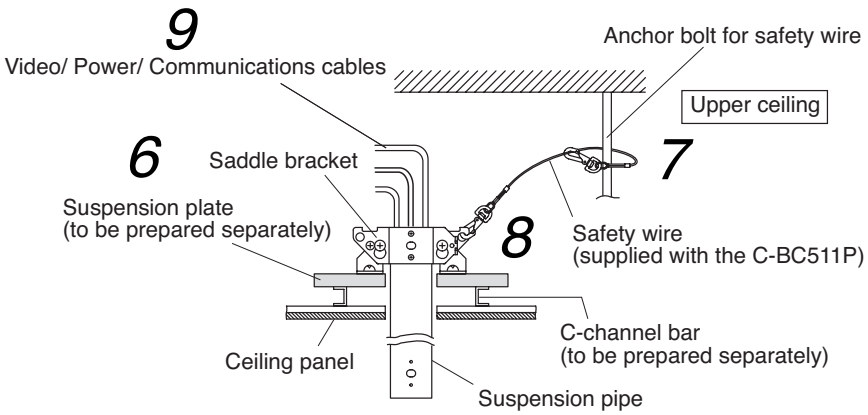


6. Install the suspension plate behind the ceiling panel.
   - When installing in double-constructed ceilings:
     Place the suspension plate across two C-channel bars with its hole aligned with the corresponding hole in the ceiling panel.
   - When installing in strong ceiling materials:
     Install the suspension plate with its hole aligned with the corresponding hole in the ceiling panel.

7. Attach the supplied safety wire to the anchor bolt for safety wire.

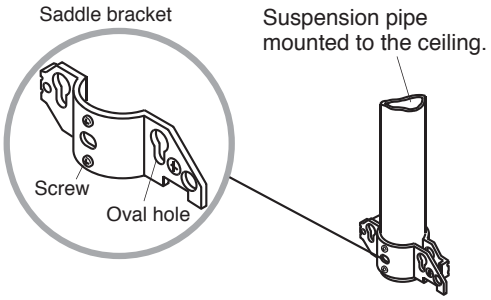
8. Attach the end of the safety wire to the saddle bracket of the suspension pipe.

9. Run the video, power cable and communications cables extending from the ceiling through the pipe.

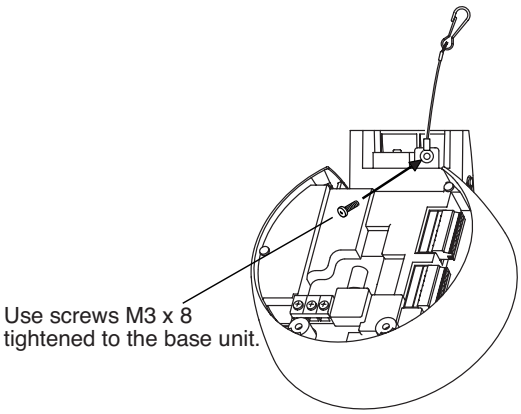


10. Attach two saddle brackets to the suspension pipe.
    - Align the screw installed in the saddle bracket with the hole in the pipe.
    - Attach the saddle bracket so that the orientation of its oval holes is as shown in the figure.

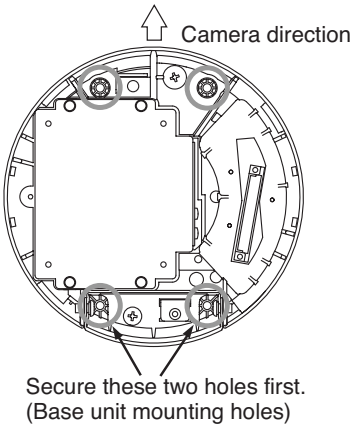
    Note: Ensure that the saddle brackets are securely fixed without any play.

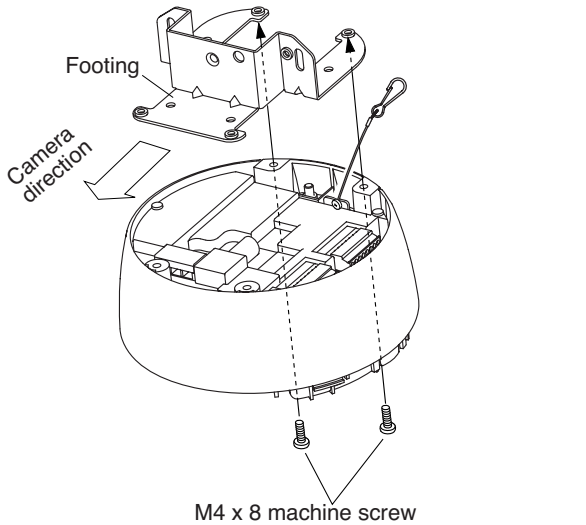


11. Attach the supplied safety wire to the base unit.

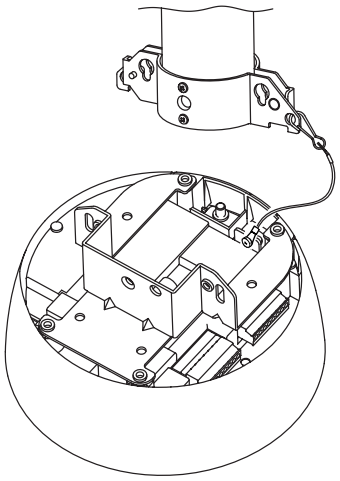


12. Attach removed footings to the base unit.
    - First fix two of the base unit mounting holes as shown below.
    - Use the screws supplied with the combination camera.

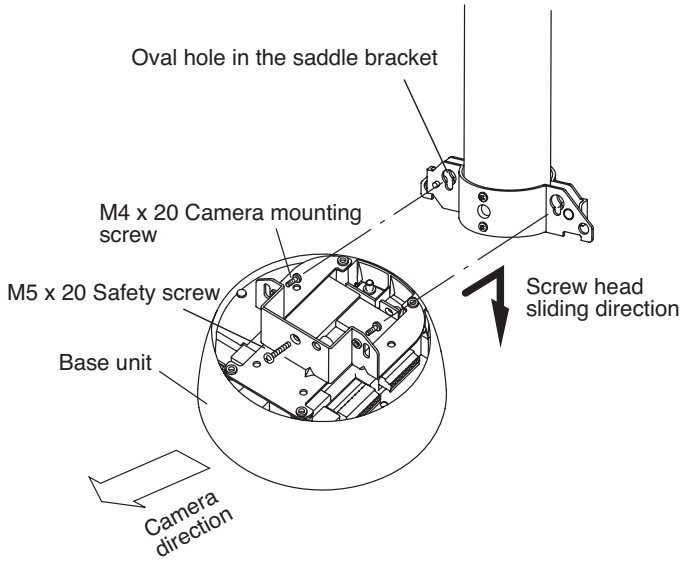




13. Attach the safety wire attached to the base unit to the saddle bracket of the suspension pipe.



14. Attach the base unit (with footing) to the suspension pipe.

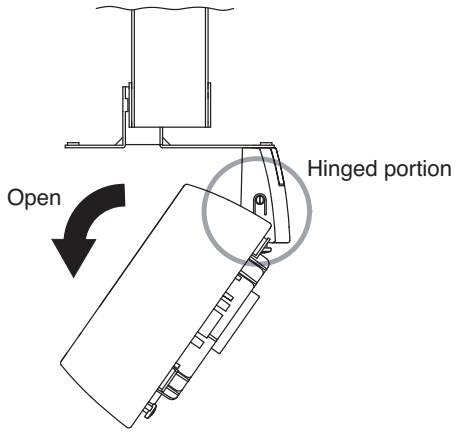


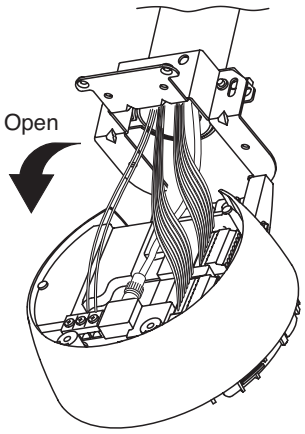
- Run the camera mounting screw head (2 screws) through the oval hole in the saddle bracket, and slide it in the direction indicated by the arrow, then tighten the camera mounting screws.
- Tighten the safety screw and run its screw tip through the round hole in the saddle bracket.

Note: Ensure that camera mounting screws and safety screw are securely tightened.

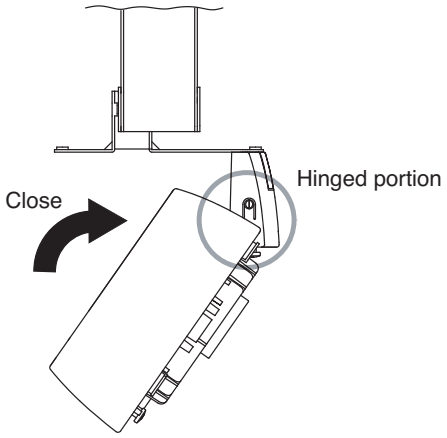
15. Release the lock on the hinged portion of the base unit and connect the power, video, and signal cables to the base unit.

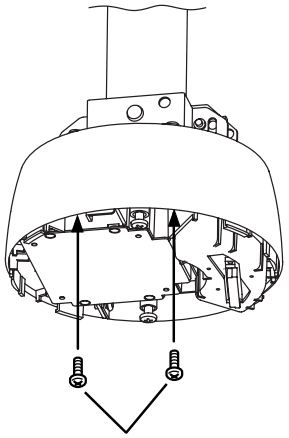
    (For details, please refer to p. 29; "Connections.")



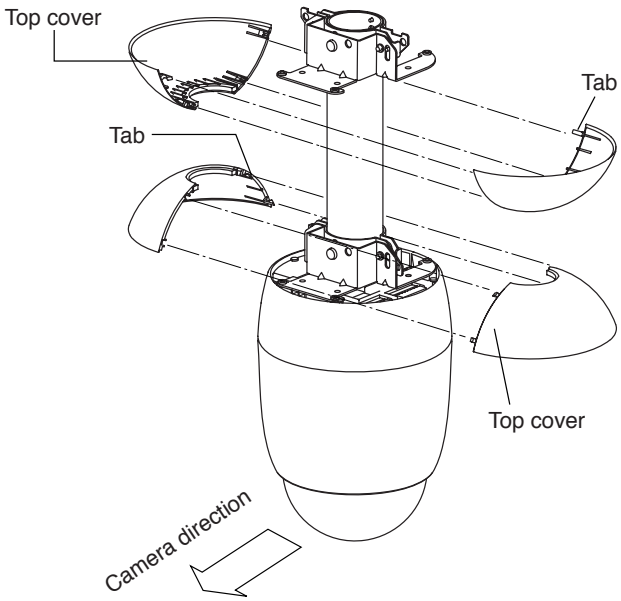


16. Lock the hinged portion of the base unit and secure the remaining two mounting holes.





17. Perform steps 4 – 11 on p. 10 – 12.
18. Mount the top cover by inserting the tabs of one half of the cover into the slots of the other half.

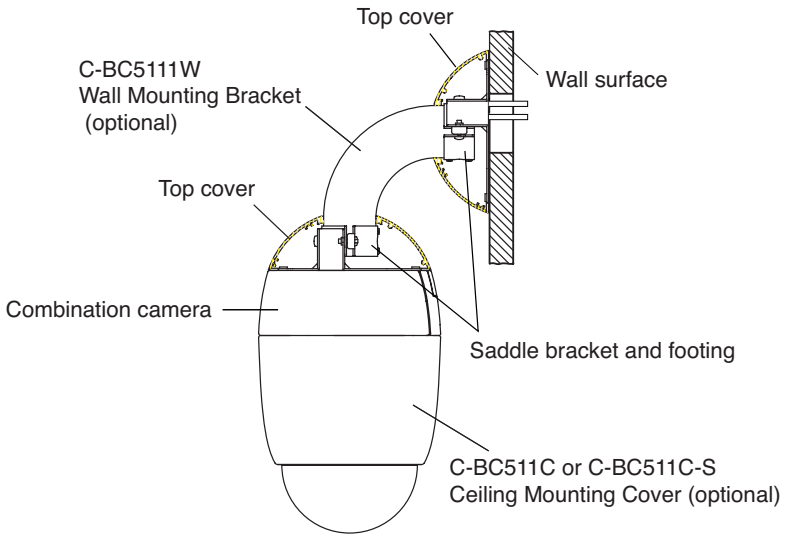


11. WALL MOUNTING

Use the optional C-BC511W Wall Mounting Bracket and optional C-BC511C or C-BC511C-S, Ceiling Mounting Cover.

Note
Be sure to use the specified screws to mount the combination camera and wall mounting bracket, and ensure that they are securely mounted without any play.

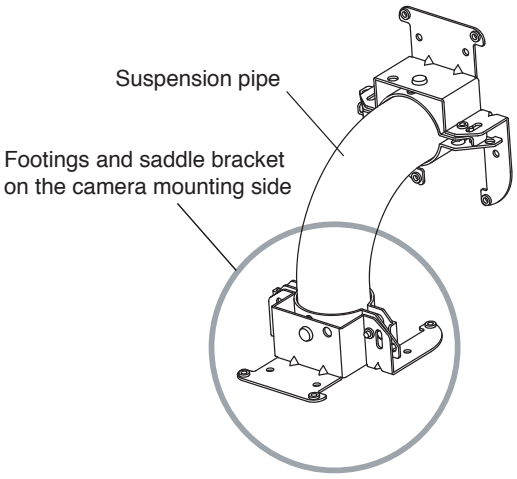
11.1. Mounting Example



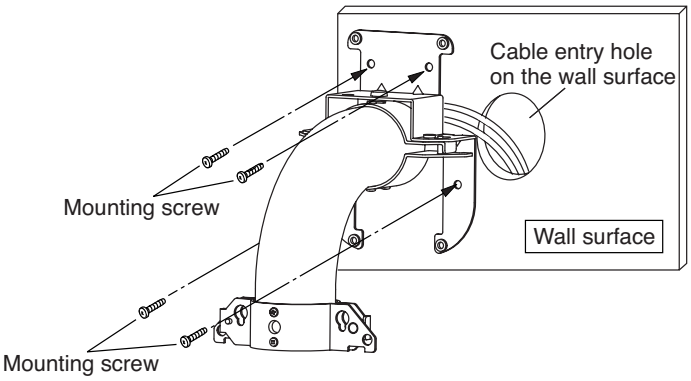
11.2. Mounting Procedures

1. Determine the mounting position, then make a mounting hole of ø50 – 60 mm on a wall.

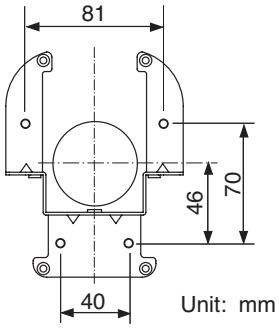
2. Detach footings on the camera mounting side from the suspension pipe.
   Removed footings and screws are attached to the base unit later. (refer to p. 24)



3. Mount the suspension pipe (with saddle bracket and footings) on a wall.



[Mounting hole dimensional diagram]

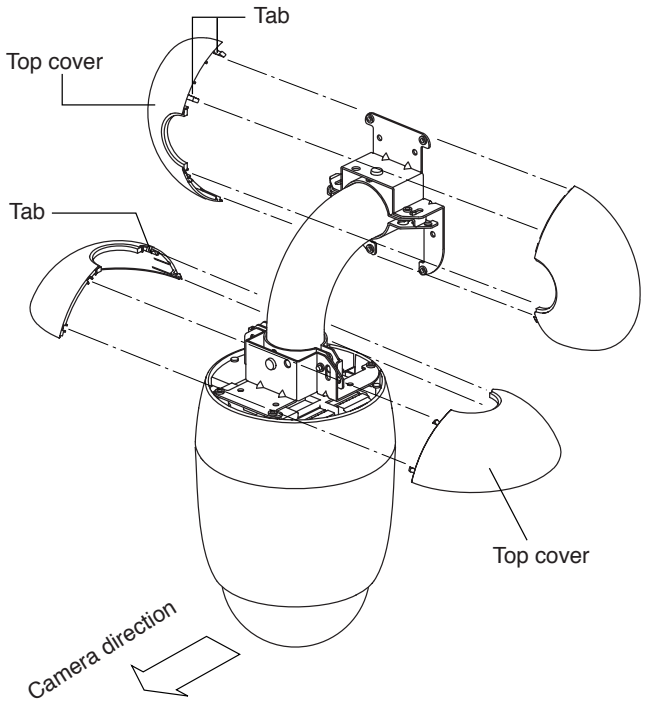


Notes

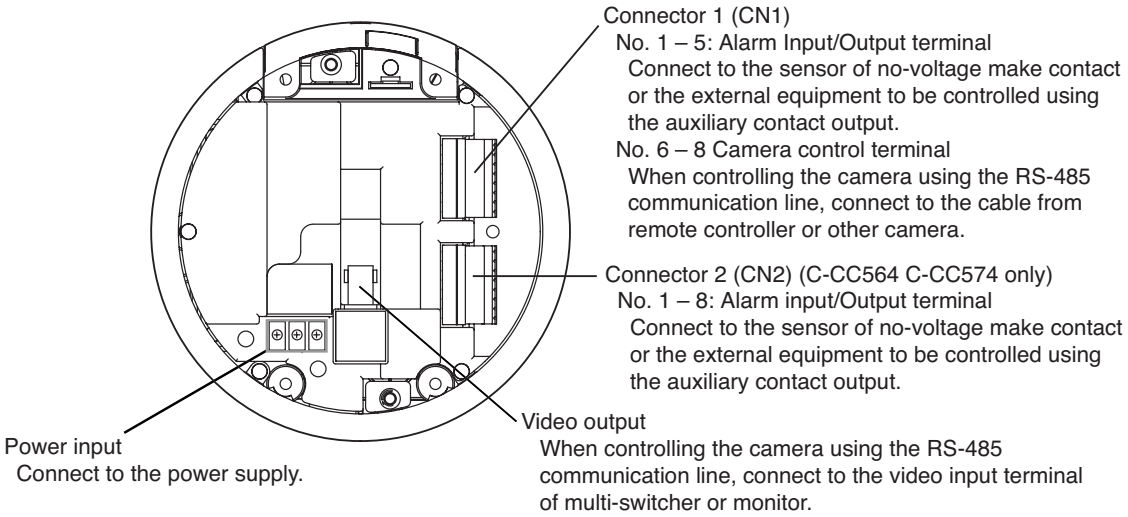
- Since no mounting screws are supplied with the camera, prepare them separately.
- Use screws with a nominal diameter of 4 mm.

4. Perform steps 11 – 16 on p. 24 – 26.

5. Attach the top cover. Insert one top cover's clicks into the other top cover's slots.
   Mount the top cover by inserting the tabs of one half of the cover into the slots of the other half.



12. CONNECTIONS



Terminal No.	Connector 1 (CN1)	Connector 2 (CN2)
(1)	GND	NC (Normally Close)
(2)	Alarm 3	COM
(3)	Alarm 2	NO (Normally Open)
(4)	Alarm 1	Alarm 8
(5)	AUX (Open Collector)	Alarm 7
(6)	GND	Alarm 6
(7)	B (RS-485) (–)	Alarm 5
(8)	A (RS-485) (+)	Alarm 4

12.1. Precautions When Installing the Camera

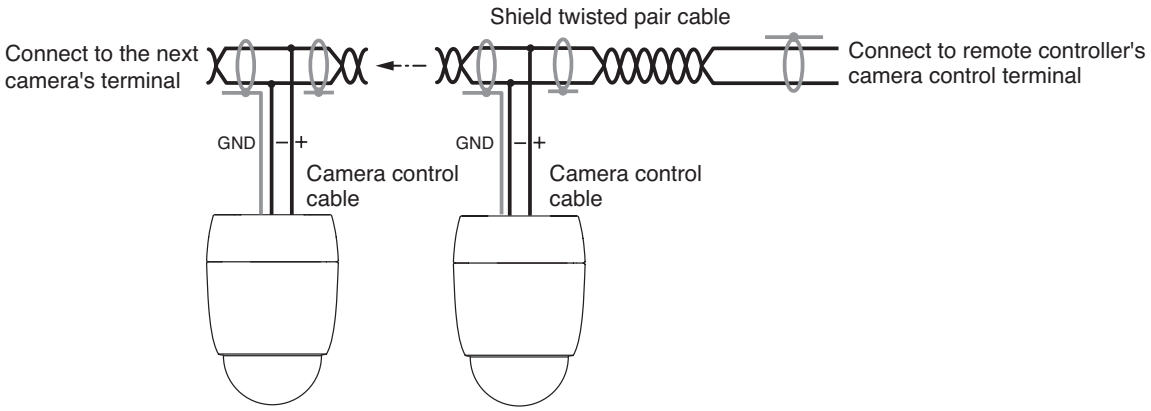
- Avoid install the camera cable in close proximity to other cables of electric products, such as fluorescent lamps. Failure to do this could downgrade the picture quality.
- Installing the camera near the strong electric or magnetic field produced by television transmitting antennas, motors or transformers could distort or shake the monitor screen. In such cases, install the cables in the sheet steel cable piping.
- Before applying the power to the camera, be sure to complete all connections between the camera and related equipment.

12.2. Camera Control Connector Connection (RS-485)

- Connect terminals (+) and (–) of the C-RM500 Remote Controller or the C-IF500 Interface Unit to the camera's terminals (+) (terminal No. 8) and (–) (terminal No. 7), respectively.
- Connect the camera's terminals (+) and (–) to the next camera's terminals (+) and (–) in order.

Notes

- The maximum number of units connectable to a pair of RS-485 lines (from termination to termination) is 32 units including the Remote Controller. The maximum cable length connecting each terminal is 1.2 km in total.
- The camera may not operate correctly if 32 or more units are connected or the total cable distance exceeds 1.2 km. In such cases, split or extend wiring using the C-IF500 Interface Unit.
- Indoor-use and outdoor-use combination cameras can be wired in free combinations.



13. CAMERA SETTINGS

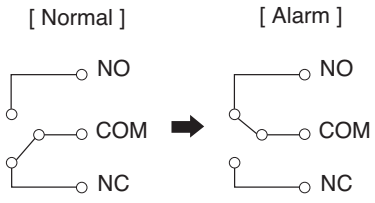
13.1. About AUX Output 1

Open collector output
Rated: withstand voltage: 20 V DC, permissible current: under 100 mA

13.2. About AUX Output 2 (C-CC564, C-CC574 only)

	Normal	Alarm
NO – COM	Open	Short
NC – COM	Short	Open

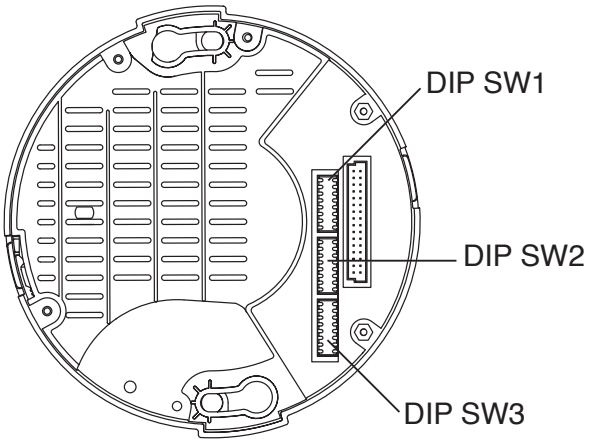
Rated, Maximum permissible voltage: 20 V DC
Permissible current limit: 1 A
Contact useful life: 100,000 times



13.3. About Alarm Input

No-voltage make contact input
Rated: open voltage: 18 V DC, short-circuit current: under 2 mA

13.4. DIP Switch Settings



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

Notes

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

13.4.1. Camera Address Setting Switch (DIP Switch 1: No. 1 – 8)

Used to set camera address when using the camera in connection with the C-RM500 Remote Controller. Set the DIP switch so that the address is equal to the connected switcher's channel number. The relationship between switch settings and camera addresses are shown in the attached table (p. 33).
(Factory setting: Only No.1 is "ON".)

Note
If the address switch number does not match with the connected switcher's channel number or if set to the same number as that of other camera connected to the same system, the system does not operate correctly.

13.4.2. Communication Speed Setting Switch (DIP switch 2: No. 1 – 2)

Check to be sure that the communication speed set here is the same as that of the Remote Controller. When changing the speed, change settings of all cameras and Remote Controller within the system.
(Factory setting: 38,400 bps.)

No.1	No.2	bps
OFF	OFF	38,400
O N	OFF	19,200
OFF	O N	9,600
O N	O N	4,800

13.4.3. OSD Switch (DIP switch 2: No. 3)

When this switch is set to the OFF position, the initial screen does not disappear until communications with other equipment are established following initial operation after the power has been switched ON.
(Factory setting: OFF)

13.4.4. Communication Method Selector Switch (DIP switch 2: No. 6)

Chooses the RS-485 communication method from Type A (used with the C-RM500 Remote Controller) and Type B. Set the switch to the OFF position to choose Type A, and to the ON position to choose Type B.
(Factory setting: ON)

13.4.5. Termination Switch (DIP switch 2: No. 8)

Set the switch of the camera last connected to the RS-485 communications line to ON. (Factory setting: OFF)

13.4.6. Firmware Update Switch (DIP switch 3: No. 1 – 3)

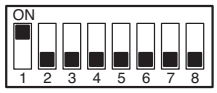
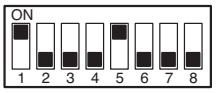
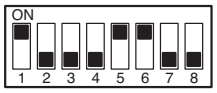
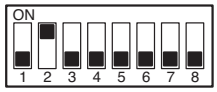
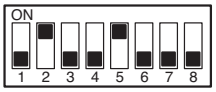
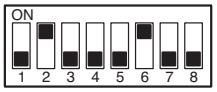
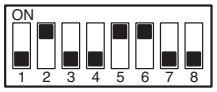
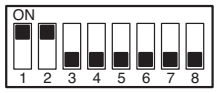
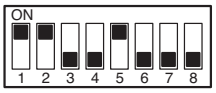
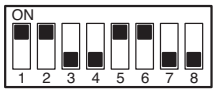
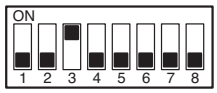
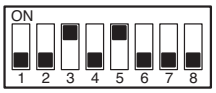
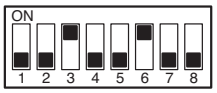
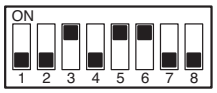
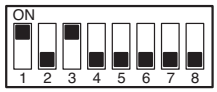
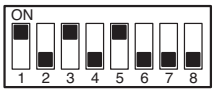
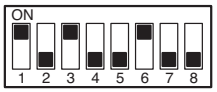
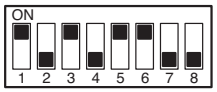
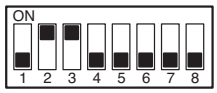
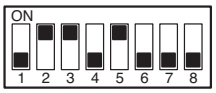
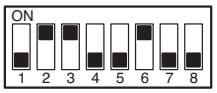
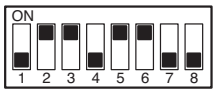
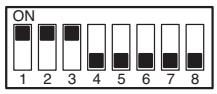
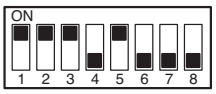
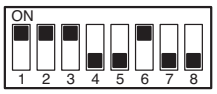
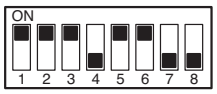
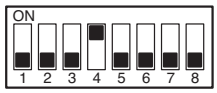
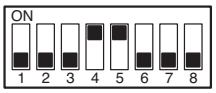
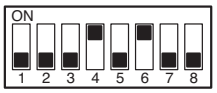
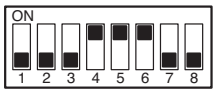
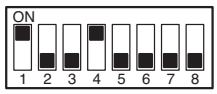
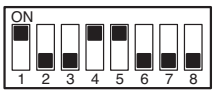
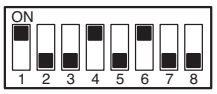
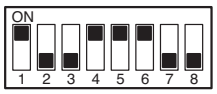
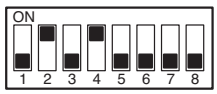
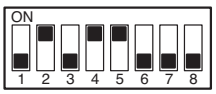
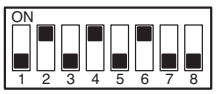
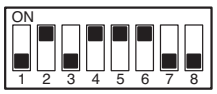
No.1: Used to update Master CPU firmware.
No.2: used to update Slave CPU firmware.
No.3: Temporarily pauses the initial operation.
For details, please refer to the "Camera Controller Software Operation Manual" on the enclosed CD-R.

13.4.7. Memory Clear Switch (DIP switch 3: No. 7)

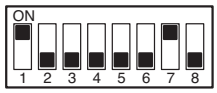
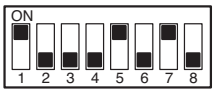
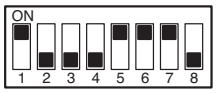
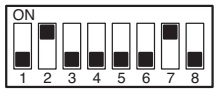
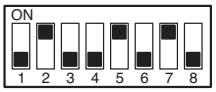
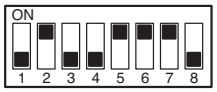
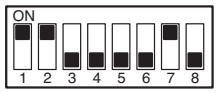
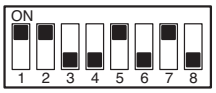
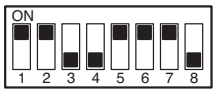
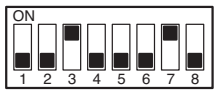
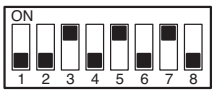
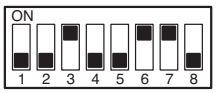
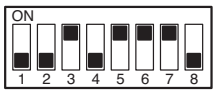
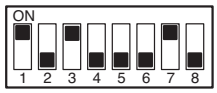
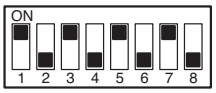
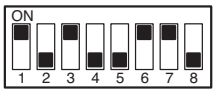
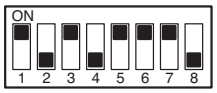
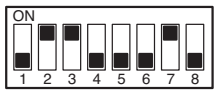
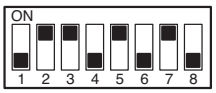
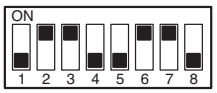
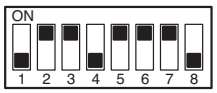
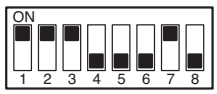
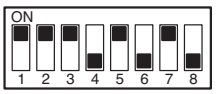
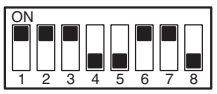
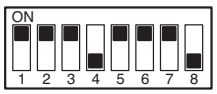
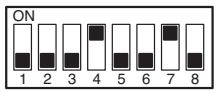
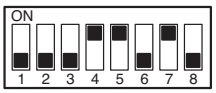
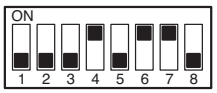
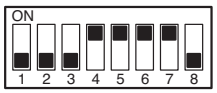
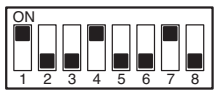
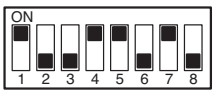
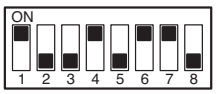
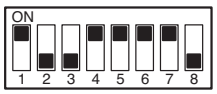
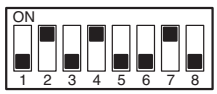
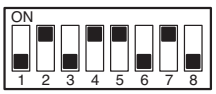
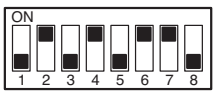
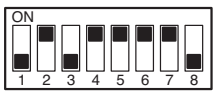
Switching on the power with this switch set to the ON position returns all camera settings to the initial setting. The indication "Memory Clear" is displayed on the screen while clearing memory. After the indication has disappeared, turn off the power and set the switch to the OFF position.

Note: Clock information and backup data are not erased.

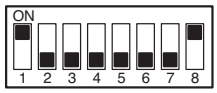
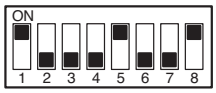
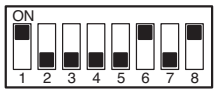
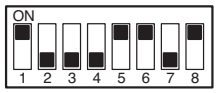
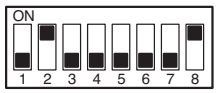
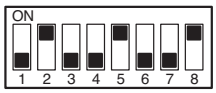
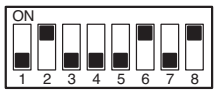
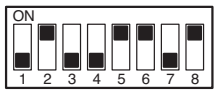
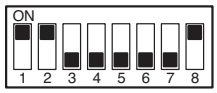
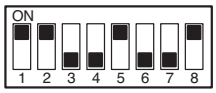
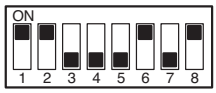
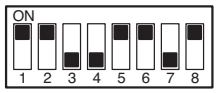
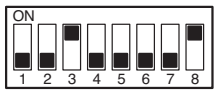
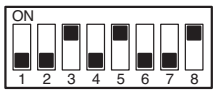
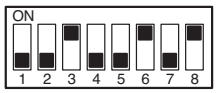
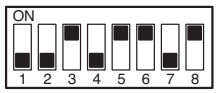
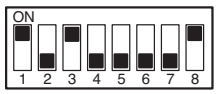
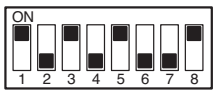
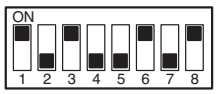
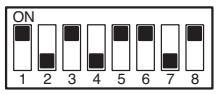
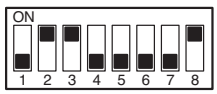
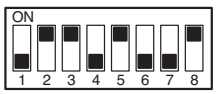
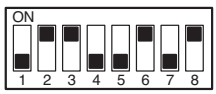
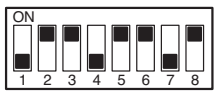
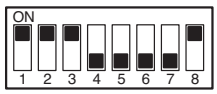
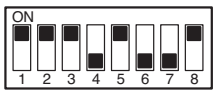
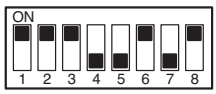
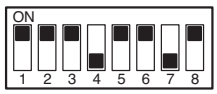
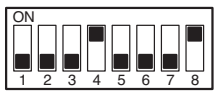
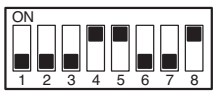
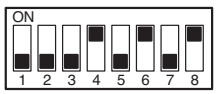
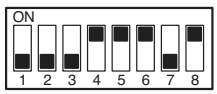
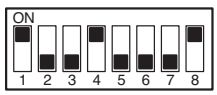
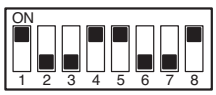
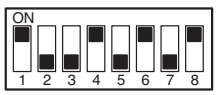
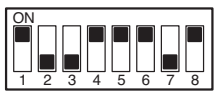
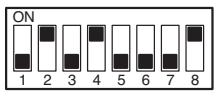
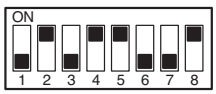
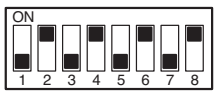
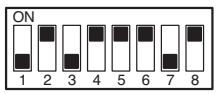
[Camera address setting switch 1 – 64]

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2		18		34		50	
3		19		35		51	
4		20		36		52	
5		21		37		53	
6		22		38		54	
7		23		39		55	
8		24		40		56	
9		25		41		57	
10		26		42		58	
11		27		43		59	
12		28		44		60	
13		29		45		61	
14		30		46		62	
15		31		47		63	
16		32		48		64	

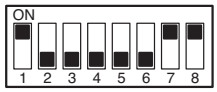
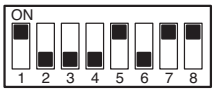
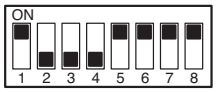
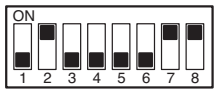
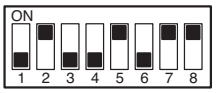
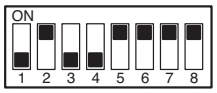
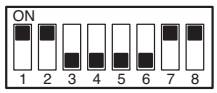
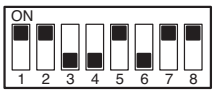
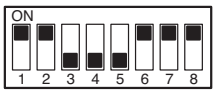
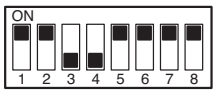
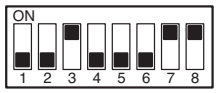
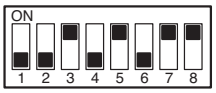
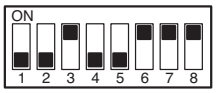
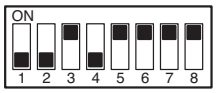
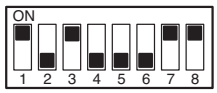
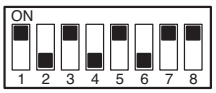
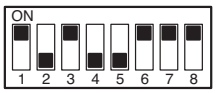
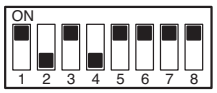
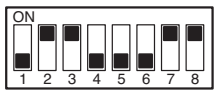
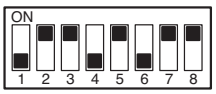
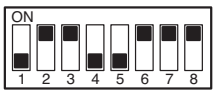
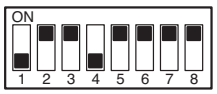
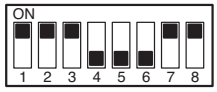
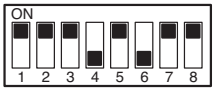
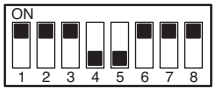
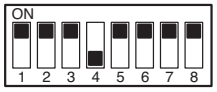
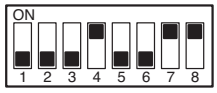
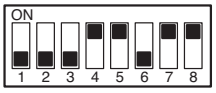
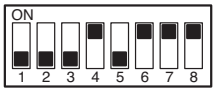
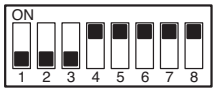
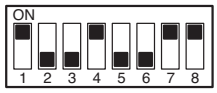
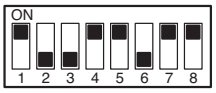
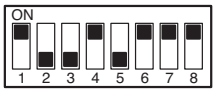
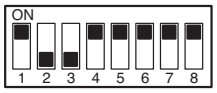
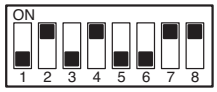
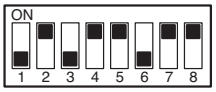
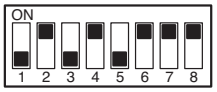
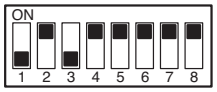
[Camera address setting switch 65 – 128]

No.	DIP switch 1	No.	DIP switch 1	No.	DIP switch 1	No.	DIP switch 1
65		81		97		113	
66		82		98		114	
67		83		99		115	
68		84		100		116	
69		85		101		117	
70		86		102		118	
71		87		103		119	
72		88		104		120	
73		89		105		121	
74		90		106		122	
75		91		107		123	
76		92		108		124	
77		93		109		125	
78		94		110		126	
79		95		111		127	
80		96		112		128	

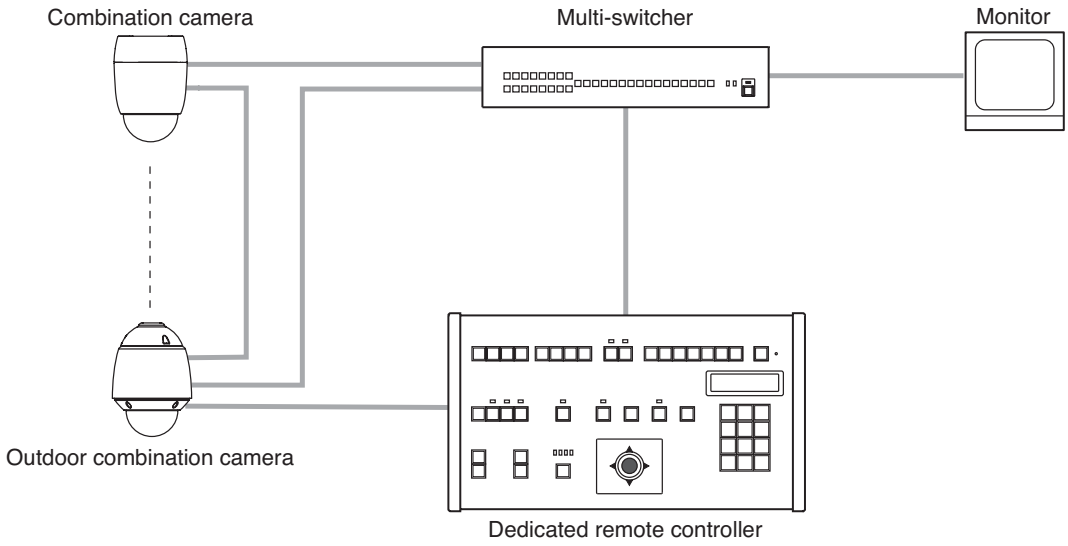
[Camera address setting switch 129 – 192]

No.	DIP switch 1	No.	DIP switch 1	No.	DIP switch 1	No.	DIP switch 1
129		145		161		177	
130		146		162		178	
131		147		163		179	
132		148		164		180	
133		149		165		181	
134		150		166		182	
135		151		167		183	
136		152		168		184	
137		153		169		185	
138		154		170		186	
139		155		171		187	
140		156		172		188	
141		157		173		189	
142		158		174		190	
143		159		175		191	
144		160		176		192	

[Camera address setting switch 193 – 255]

No.	DIP switch 1	No.	DIP switch 1	No.	DIP switch 1	No.	DIP switch 1
193		209		225		241	
194		210		226		242	
195		211		227		243	
196		212		228		244	
197		213		229		245	
198		214		230		246	
199		215		231		247	
200		216		232		248	
201		217		233		249	
202		218		234		250	
203		219		235		251	
204		220		236		252	
205		221		237		253	
206		222		238		254	
207		223		239		255	
208		224		240			

14. SYSTEM EXAMPLES



15. SPECIFICATIONS

Model	C-CC514 NT	C-CC514 PL
Power Source	24 V AC, 50/ 60 Hz	
Power Consumption	9 W (normal operation), 19 W max. (1.3 A max.)	
Control	RS-485 communications system (applicable protocol: Type A, Type B)	
Video Output	VBS 1.0 V(p-p), 75 Ω, BNC-R jack	
Camera Control Terminal	RS-485 camera control connector	
Alarm Input	3 channels, no-voltage make contact input, open voltage: 18 V DC, short-circuit current: under 2 mA (settable alarm action)	
Auxiliary Contact Output	1 channel, open collector output, withstand voltage: 20 V DC, permissible current: under 100 mA	
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, Sector, AUX	
No. of Preset Positions	255 + Home	
Automatic Operation	Auto-pan, Preset sequence, Auto-trace (2 preset patterns (60 s)), Tour (16 preset patterns)	
Timer	Refresh: Start at the preset time every day or every week by timer settings Program: Settable 16 actions	
Language	Menu: English, German, French, Italian ID: English, German, French, Italian, Russian, Polish, Spanish, Portuguese	
Camera		
Image Device	1/4 type CCD	
Resolution	Horizontal: 480 lines (at center)	
S/N Ratio	50 dB	
Minimum Illumination	High-sensitivity function OFF: 1 lx (50 IRE), 0.3 lx (20 IRE) ON: 0.03 lx (50 IRE), 0.01 lx (20 IRE)	High-sensitivity function OFF: 1 lx (350 mV), 0.3 lx (140 mV) ON: 0.03 lx (350 mV), 0.01 lx (140 mV)
Backlight Compensation	pattern 1/ pattern 2/ pattern 3/ OFF	
High-Sensitivity Function	Slow shutter mode (32 times max.)	
White Balance	ATW/ AWB	
Iris	Automatic	
Flicker Reduction	Automatic correction	
Electronic Zooming	12x zooming	
Auto-Focus	One push/ stop AF/ continuous	
Lens		
Zooming	22x	
Effective Focal Length	f = 4.0 – 88 mm (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) – 3.8 (T)	
Zooming Speed	WIDE end to TELE end Approx. 1.3 s (preset operation), Approx. 2.4 s (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 Functions	Manual limit	
Operating Temperature	–10°C to +50°C (14°F to 122°F) (continuously active for operation at temperature below 0°C (32°F))	
Operating Humidity	Under 90% RH (no condensation)	
Application	Indoor used	
Finish	Base: PC/ ABS resin, cool gray Camera: PC/ ABS resin, black	
Dimensions	ø168 x 234 (H) mm (ø6.6 x 9.2 (H) inch)	
Weight	1.7 kg (3.7 lb)	

Note: The design and specifications are subject to change without notice for improvement.

Model	C-CC564 NT	C-CC564 PL
Power Source	24 V AC, 50/ 60 Hz	
Power Consumption	9 W (normal operation), 19 W max. (1.3 A max.)	
Control	RS-485 communications system (applicable protocol: Type A, Type B)	
Video Output	VBS 1.0 V(p-p), 75 Ω, BNC-R jack	
Camera Control Terminal	RS-485 camera control connector	
Alarm Input	8 channels, no-voltage make contact input, open voltage: 18 V DC, short-circuit current: under 2 mA (settable alarm action)	
Auxiliary Contact Output	2 channel, open collector output, withstand voltage: 20 V DC, permissible current: under 100 mA, relay contact output, permissible voltage: 20 V DC, permissible current: under 1 A	
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, Sector, AUX	
No. of Preset Positions	255 + Home	
Automatic Operation	Auto-pan, Preset sequence, Auto-trace (2 preset patterns (60 s)), Tour (16 preset patterns)	
Timer	Refresh: Start at the preset time every day or every week by timer settings Program: Settable 16 actions	
Language	Menu: English, German, French, Italian ID: English, German, French, Italian, Russian, Polish, Spanish, Portuguese	
Camera		
Image Device	1/4 type CCD	
Resolution	Horizontal: 480 lines (at center)	
S/N Ratio	50 dB	
Minimum Illumination	High-sensitivity function OFF: 3 lx (50 IRE), 1 lx (20 IRE) ON: 0.03 lx (50 IRE), 0.01 lx (20 IRE)	High-sensitivity function OFF: 3 lx (350 mV), 1 lx (140 mV) ON: 0.03 lx (350 mV), 0.01 lx (140 mV)
Backlight Compensation	WIDE DYNAMIC/ pattern 1/ pattern 2/ pattern 3/ OFF	
Dynamic Range	46 dB (backlight compensation: WIDE DYNAMIC operation)	
High-Sensitivity Function	B/ W mode and slow shutter mode (32 times max.)	
White Balance	ATW/ AWB	
Iris	Automatic	
Flicker Reduction	Automatic correction	
Electronic Zooming	12x zooming	
Auto-Focus	One push/ stop AF/ continuous	
Lens		
Zooming	23x	
Effective Focal Length	f = 3.6 – 82.8 mm (23x)	
Effective Angle of View	Horizontal: 54° (W) – 2.5° (T), Vertical: 41.6° (W) – 1.9° (T)	
Maximum Aperture	F 1.6 (W) – 3.7 (T)	
Zooming Speed	WIDE end to TELE end Approx. 1.5 s (preset operation), Approx. 2.9 s (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 Functions	Auto-pan, Freeze Preset, Manual limit, Privacy masking (up to 8), Motion Detect (each 8 presets at each 4 position)	
Operating Temperature	–10°C to +50°C (14°F to 122°F) (continuously active for operation at temperature below 0°C (32°F))	
Operating Humidity	Under 90% RH (no condensation)	
Application	Indoor used	
Finish	Base: PC/ ABS resin, cool gray Camera: PC/ ABS resin, black	
Dimensions	ø168 x 234 (H) mm (ø6.6 x 9.2 (H) inch)	
Weight	1.7 kg (3.7 lb)	

Note: The design and specifications are subject to change without notice for improvement.

Model	C-CC574 NT
Power Source	24 V AC, 50/ 60 Hz
Power Consumption	9 W (normal operation), 19 W max. (1.3 A max)
Control	RS-485 communications system (applicable protocol: Type A, Type B)
Video Output	VBS 1.0 V(p-p), 75 Ω, BNC-R jack
Camera Control Terminal	RS-485 camera control connector
Alarm Input	8 channels, no-voltage make contact input, open voltage: 18 V DC, short-circuit current: under 2 mA (settable alarm action)
Auxiliary Contact Output	2 channel, open collector output, withstand voltage: 20 V DC, permissible current: under 100 mA, relay contact output, permissible voltage: 20 V DC, permissible current: under 1 A
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, Sector, AUX
No. of Preset Positions	255 + Home
Automatic operation	Auto-pan, Preset sequence, Auto-trace (2 preset patterns (60 s)), Tour (16 preset patterns)
Timer	Refresh: Starts at the preset time every day or every week by timer settings Program: Settable 16 actions
Language	Menu: English, German, French, Italian ID: English, German, French, Italian, Russian, Polish, Spanish, Portuguese
Camera	
Image Device	1/4 type CCD
Resolution	Horizontal: 540 lines typ. (at center),520 lines min.
S/N Ratio	50 dB
Minimum Illumination (High-sensitivity function)	OFF: 1 lx (50 IRE), 0.3 lx (20 IRE), ON: 0.005 lx (50 IRE), 0.0015 lx (20 IRE) (Sensitivity ON) OFF: 0.5 lx (50 IRE), 0.15 lx (20 IRE), ON: 0.0025 lx (50 IRE), 0.00075 lx (20 IRE)
Backlight Compensation	WIDE DYNAMIC/WIDE DYNAMIC 2/ pattern 1/ pattern 2/ pattern 3/ OFF
Dynamic Range	52 dB (backlight compensation: WIDE DYNAMIC operation)
High-Sensitivity Function	B/W mode and slow shutter mode (32 times max.)
White Balance	ATW/ AWB
Iris	Automatic
Flicker Reduction	Automatic correction
Electronic Zooming	12 x zooming
Auto-Focus	One push/ stop AF/ continuous
Lens	
Zooming	35 x
Effective Focal Length	f = 3.4 – 119mm (35x)
Effective Angle of View	Horizontal: 55.8° (W) – 1.7° (T), Vertical: 43.3° (W) – 1.3° (T)
Maximum Aperture	F 1.4 (W) – 4.2 (T)
Zooming Speed	WIDE end to TELE end Approx. 2 s (preset operation), Approx. 3.2 s (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 Functions	Auto-pan, Freeze preset, Manual limit, Privacy masking (up to 8), Motion detect (each 8 presets at each 4 positions),EIS
Operating Temperature	–10°C to +50°C (14°F to 122°F) (continuously active for operation at temperature below 0°C (32°F))
Operating Humidity	Under 90% (no condensation)
Application	Indoor used
Finish	Base: PC/ ABS resin, cool gray Camera: PC/ ABS resin, black
Dimensions	ø168 x 234 (H) mm (ø6.6 x 9.2 (H) inch)
Weight	1.7 kg (3.7 lb)

Note: The design and specifications are subject to change without notice for improvement.

Model	C-CC574 PL
Power Source	24 V AC, 50/ 60 Hz
Power Consumption	9 W (normal operation), 19 W max. (1.3 A max)
Control	RS-485 communications system (applicable protocol: Type A, Type B)
Video Output	VBS 1.0 V(p-p), 75 Ω, BNC-R jack
Camera Control Terminal	RS-485 camera control connector
Alarm Input	8 channels, no-voltage make contact input, open voltage: 18 V DC, short-circuit current: under 2 mA (settable alarm action)
Auxiliary Contact Output	2 channel, open collector output, withstand voltage: 20 V DC, permissible current: under 100 mA, relay contact output, permissible voltage: 20 V DC, permissible current: under 1 A
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, Sector, AUX
No. of Preset Positions	255 + Home
Automatic operation	Auto-pan, Preset sequence, Auto-trace (2 preset patterns (60 s)), Tour (16 preset patterns)
Timer	Refresh: Starts at the preset time every day or every week by timer settings Program: Settable 16 actions
Language	Menu: English, German, French, Italian ID: English, German, French, Italian, Russian, Polish, Spanish, Portuguese
Camera	
Image Device	1/4 type CCD
Resolution	Horizontal: 540 lines typ. (at center),520 lines min.
S/N Ratio	50 dB
Minimum Illumination (High-sensitivity function)	OFF: 1 lx (350 mV), 0.3 lx (140 mV), ON: 0.005 lx (350 mV), 0.0015 lx (140 mV) (Sensitivity ON) OFF: 0.5 lx (350 mV), 0.15 lx (140 mV), ON: 0.0025 lx (350 mV), 0.00075 lx (140 mV)
Backlight Compensation	WIDE DYNAMIC/WIDE DYNAMIC 2/ pattern 1/ pattern 2/ pattern 3/ OFF
Dynamic Range	52 dB (backlight compensation: WIDE DYNAMIC operation)
High-Sensitivity Function	B/W mode and slow shutter mode (32 times max.)
White Balance	ATW/ AWB
Iris	Automatic
Flicker Reduction	Automatic correction
Electronic Zooming	12 x zooming
Auto-Focus	One push/ stop AF/ continuous
Lens	
Zooming	35 x
Effective Focal Length	f = 3.4 – 119mm (35x)
Effective Angle of View	Horizontal: 55.8° (W) – 1.7° (T), Vertical: 43.3° (W) – 1.3° (T)
Maximum Aperture	F 1.4 (W) – 4.2 (T)
Zooming Speed	WIDE end to TELE end Approx. 2 s (preset operation), Approx. 3.2 s (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 Functions	Auto-pan, Freeze preset, Manual limit, Privacy masking (up to 8), Motion detect (each 8 presets at each 4 positions),EIS
Operating Temperature	–10°C to +50°C (14°F to 122°F) (continuously active for operation at temperature below 0°C (32°F))
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Application	Indoor used
Finish	Base: PC/ ABS resin, cool gray Camera: PC/ ABS resin, black
Dimensions	ø168 x 234 (H) mm (ø6.6 x 9.2 (H) inch)
Weight	1.7 kg (3.7 lb)

Note: The design and specifications are subject to change without notice for improvement.

• **Accessories**

Safety wire 1
Camera mounting screw (machine screw M4 x 8) 4
CD-R (CAMERA CONTROLLER Software, installation manual) 1

• **Optional Products**

Ceiling Mounting 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

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