

# 3-CAMERA ADAPTOR

MODEL: **MCW-P3** for up to 3 cameras

## INSTRUCTIONS

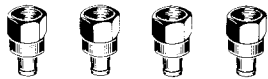
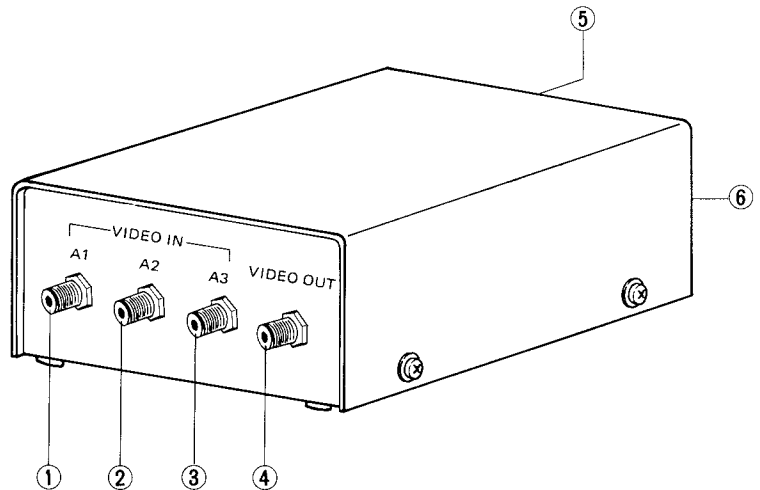
### Accessories included;



SCREW (x 2)




WOOD SCREW (x 2)

TYPE F CONNECTOR (x 4)  
for 5C-2V, RG-59/U (20GA)MOUNTING  
BRACKET

## 1 NAMES AND FUNCTIONS

- ① Video input terminal for Camera #1
- ② Video input terminal for Camera #2
- ③ Video input terminal for Camera #3
- ④ Video output terminal for MCH-U monitor
- ⑤ Audio & control terminals for room station/  
MCH-U video monitors
- ⑥ Lead wires for connecting door release (3 pairs)

## 2 FEATURES

- Provides video monitoring capability for up to 3 locations, combined with AIPHONE MCH-U and Chime Tone Intercom System; either IC-1GD(U) TYPE A or IC-2AD(U) TYPE A.
- Accepts max. 3 cameras. Camera unit can be either AIPHONE MC-D video door station or surveillance camera locally available.  
Max. one MC-D plus 2 monitor cameras for IC-1GD(U) TYPE A system  
Max. two MC-D plus one monitor camera for IC-2AD(U) TYPE A system
- Door release for each door station may be installed (max. 3). The  button on room station activates door release of the door seen on the MCH-U monitor.
- Monitoring not only by video but also by sound. Pick up handset after MCH-U MONITOR button pressed. If necessary, you can talk to the door station.

## 3 BEFORE YOU INSTALL AND OPERATE THE EQUIPMENT — Prohibitions and precautions —

### \*Operation;

- DO NOT HOLD HOOK SWITCH DOWN WHILE PICKING UP HANDSET. THE CHIME TONE SOUNDS THRU THE HANDSET RECEIVER ELEMENT AND COULD CAUSE HEARING DAMAGE.
- Priority on door station call-in. When called by door station #① while monitoring door station #②, the picture on the MCH-U monitor is automatically switched to a calling door station #①'s.
- During communication, pressing MONITOR button switches the picture to the next camera's. Remember the door release button always activates the lock connected to the door seen on the screen (not the door you are talking to).

**NEVER**



# BEFORE YOU INSTALL AND OPERATE THE EQUIPMENT (continued)

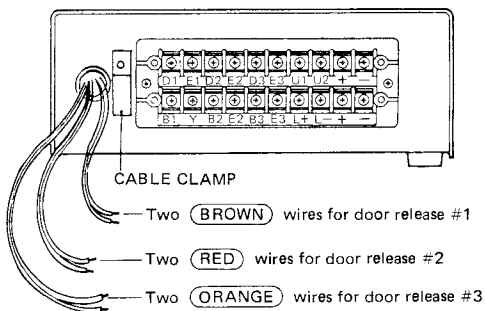
## — Prohibitions and precautions —

### \*Installation;

1. DO NOT CONNECT ANY TERMINAL ON ANY UNIT TO AC POWER LINES.
2. When a monitor camera unit locally available is used, observe that;
  - (1) its scanning line is identical with the connected MCH-U monitor's (525 or 625 lines).
  - (2) the camera unit must be powered by a separate power supply.
  - (3) Inside the MCW-P3 unit, two setting switches are provided. If these switches are set to wrong position, the picture will not appear but raster on the MCH-U monitor.
3. Connect MC-D and/or monitor camera(s) to video input terminals in the order of A1, A2 and A3. Do not skip any terminal.
4. Monitor camera must be connected to terminal A1 then A2, so that video monitoring is always started from camera #① and its picture appears first by a single push of MONITOR button.
5. Select an adequate Type F plug for the coaxial cable used. Order separately connecting cord complete with Type F connector for MCW-P3 input terminals.
6. Locate MCW-P3 adaptor within 3.5 m (12') from PS-24N power supply with 0.8 mm dia. (20AWG) wires.
7. As to camera unit installation location, follow instructions as stated in the MC-D Instructions.

# 4 INSTALLATION

## (1) ACTUAL TERMINAL LOCATION

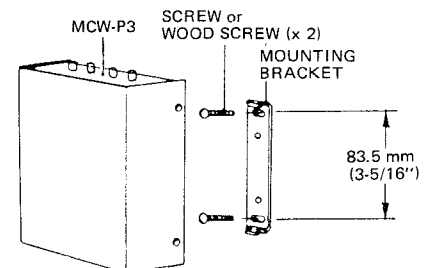


- D1** **E1** **B1** **Y** ; for connecting to **1** **2** on MC-D or ID-DA, etc. #① (non-polarized).
- D2** **E2** (upper) ; for connecting to **1** **2** on MC-D or ID-DA, etc. #② (non-polarized).
- B2** **E2** (lower) ; for connecting to (WHITE) (BLUE) wires on MAW-B.
- D3** **E3** (upper) ; for connecting to **1** **2** on MC-D or ID-DA, etc. #③ (non-polarized).
- B3** **E3** (lower) ; for connecting to (WHITE) (BLUE) wires on MAW-B.
- U1** **U2** **+** **-** (upper) ; for connecting to each terminal on MCH-U
- +** **-** (lower) ; for connecting power supply PS-24N.
- L+** **L-** ; for connecting to **L** **L** terminals on IC-IGD(U)/A, -2AD(U)/A

## (2) MOUNTING INSTALLATION

MCW-P3 is shipped with a mounting bracket. Attach the mounting bracket to single-gang box or to wall with the supplied screws or wood screws. Insert the prongs of the bracket into the holes of the MCW-P3 chassis and pull the body downward until properly locked. Select a location where the unit is not exposed in order to avoid injury or tampering.

The MCW-P3 unit may be mounted on the bracket fixed on shelf or rack, so that it would not move nor fall down.



## (3) CONNECTING COAXIAL CABLE

### \*COAXIAL CABLE REQUIREMENTS;

Use 5C-2V or RG-59/U which must meet the following specifications;

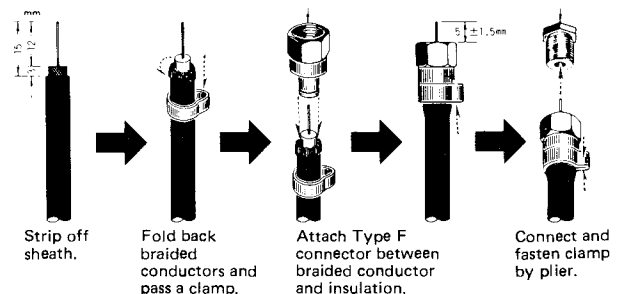
\*Both core and braided conductors must be of copper (not of copper-weld).

\*Impedance: 75 ohm.

\*Permitted closed loop DC resistance: 14 ohm.

\*Permitted attenuation: 6dB at 4MHz.

\*Cable sheath size should not exceed 7.4 mm (5/16").

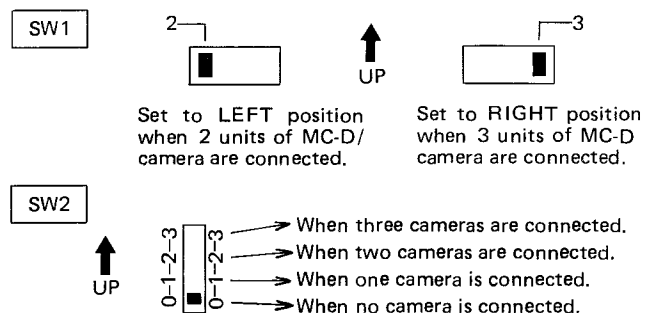
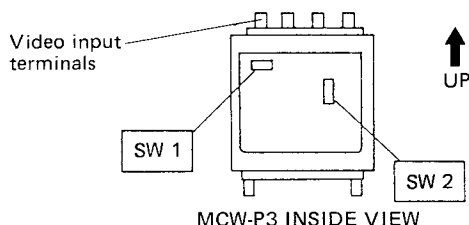


## (4) SETTING SWITCHES

Remove the cover, unscrewing at four points. Two switches are provided on the PC board;

SW 1 for setting total units (2 or 3) of installed MC-D video door station and/or camera

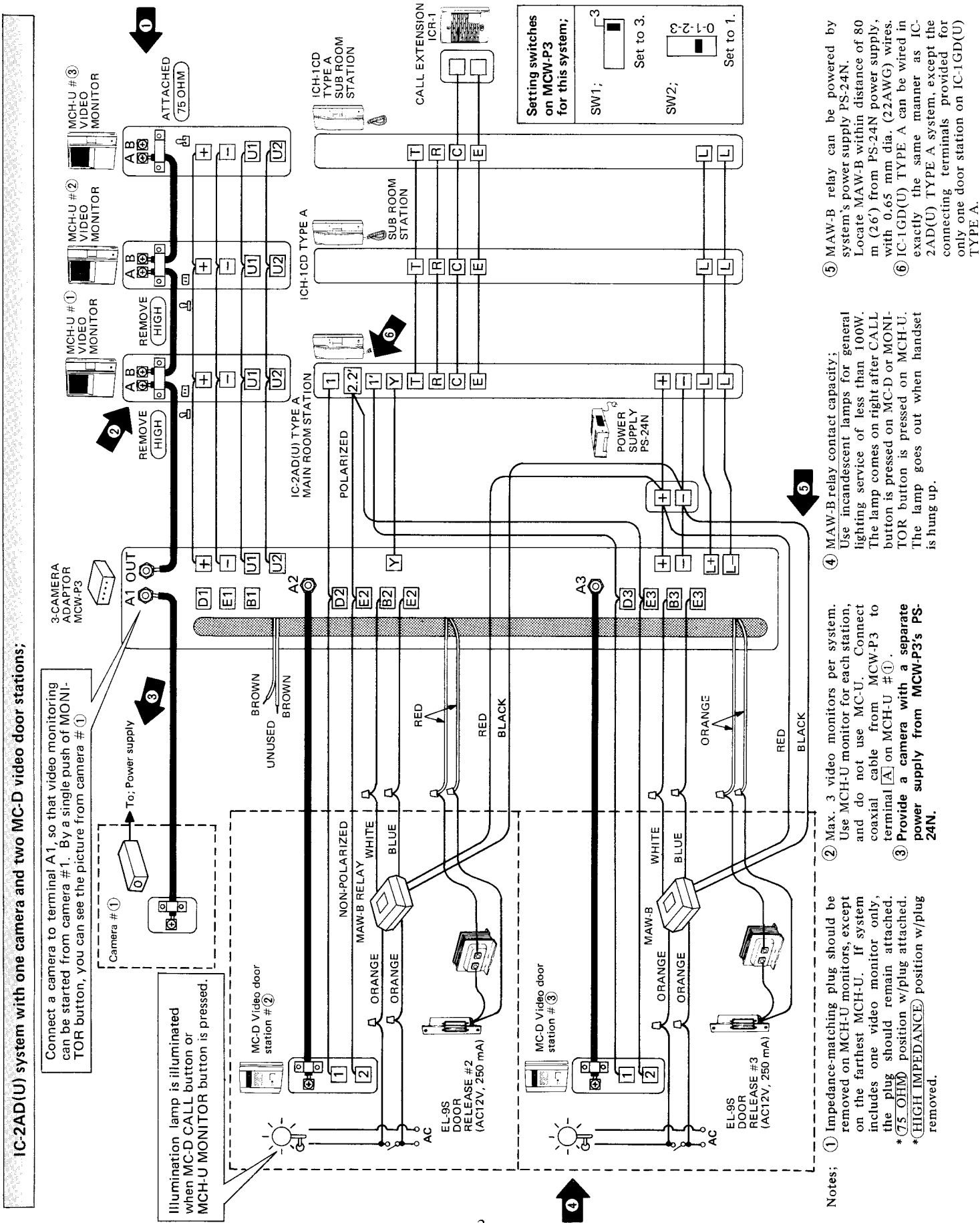
SW 2 for setting the total units (0-1-2-3) of camera installed.



# 5

## WIRING DIAGRAM

### (1) IC-2AD (U) system with one camera and two MC-D video door stations



IC-2AD(U) system with one camera and two MC-D video door stations;

Connect a camera to terminal A1, so that video monitoring can be started from camera #1. By a single push of MONITOR button, you can see the picture from camera #1

Illumination lamp is illuminated when MC-D CALL button or MCH-U MONITOR button is pressed.

5 MAW-B relay can be powered by system's power supply PS-24N. Locate MAW-B within distance of 80 m (26') from PS-24N power supply, with 0.65 mm dia. (22AWG) wires. 6 IC-1GD(U) TYPE A can be wired in exactly the same manner as IC-2AD(U) TYPE A system, except for connecting terminals provided for only one door station on IC-1GD(U) TYPE A.

4 MAW-B relay contact capacity; Use incandescent lamps for general lighting service of less than 100W. The lamp comes on right after CALL button is pressed on MC-D or MONITOR button is pressed on MCH-U. The lamp goes out when handset is hung up.

2 Max. 3 video monitors per system. Use MCH-U monitor for each station, and do not use MC-U. Connect coaxial cable from MCW-P3 to terminal [A] on MCH-U #1. 3 Provide a camera with a separate power supply from MCW-P3's PS-24N.

Notes; 1 Impedance-matching plug should be removed on MCH-U monitors, except on the farthest MCH-U. If system includes one video monitor only, the plug should remain attached. \* (75 OHM) position w/plug attached. \*(HIGH IMPEDANCE) position w/plug removed.

# 6

## OPERATIONS

### 1. Receiving a call from door station;

At door station; Momentarily depress CALL button.  
At room station; Incoming call from door station is announced by 4- or 2-stroke electronic chime, and picture appears at all MCH-U monitors. To reply, simply pick up handset at either station. After communication, hang up handset. The picture goes out at all MCH-U monitors.


#### Notes;

- (1) Reply within 45 seconds after call tone sounds.
- (2) Picture goes out approximately 2.5 minutes after CALL button is pressed on MC-D.  
If picture goes out during communication, depress MONITOR button, until the picture of calling door station appears.
- (3) The calling from door station placed last time has priority. So, if a new call comes in before a first call is answered, the picture on MCH-U monitors is switched to a second door station's scene.

### 2. Receiving another door station call during communication;

An incoming call tone is heard softly thru handset receiver. Hang up handset to end communication with the first door station. The picture is switched to the second door station's scene. Repick up handset to reply.

### 3. Activating door release;

While seeing the picture of the door station you are communicating with, depress and hold  (DOOR RELEASE) button.

#### Notes;

- (1) Door release activation is operative, only while video monitor is on.

- (2) During communication with a door station, pressing MONITOR button switches the picture to another station's scene. Door release strike always takes place at the entrance monitored on the MCH-U. So, do not depress MONITOR button before receiving a person inside.

### 4. Video monitoring;

Momentarily depress MONITOR button on MCH-U. The first push of MONITOR button catches the scene from monitor camera/MC-D # (1). The second push catches scene from # (2). Third push catches scene from # (3). By the fourth push, the picture goes out on the monitor. The video monitoring is restarted from # (1) by the fifth push.

#### Notes;

- (1) Video monitoring is valid for approximately one minute after MONITOR button is pressed.
- (2) Video monitoring is started from the entrance last monitored, unless the mode is reset by door station call-in or by audio monitoring.
- (3) Pressing MCH-U MONITOR button illuminates visitor call LED on the IC main or sub room stations for approx. 45 seconds, which may remain illuminated even after video monitoring is finished.

### 5. Audio monitoring;

If you pick up handset within approx. 45 seconds after depressing MONITOR button (i.e. while the picture is seen on the monitor), the communication circuits is established, and you can monitor sound or talk to the door station.

### 6. Receiving a door station call during monitoring;

If a door station calls in during monitoring, chime tone sounds and picture is switched to a calling door station's scene. Simply pick up handset to reply.

#### Note;

Door station call has priority to monitoring.

# 7

## SPECIFICATIONS

### MCW-P3

- \* Power source: DC 24V, supplied by PS-24N power supply.
- \* Current consumption: Max. 1.8A. 0.1A in standby mode (in a system with 3 pcs each MC-D and MCH-U installed).
- \* Capacity: Total three units of either MC-D video door station and/or monitor camera locally available. The monitor camera scanning line must be matched with MCH-U video monitor's (either 525 or 625 lines).
- \* Door release contact capacity: AC 30V, 2A. DC 30V, 2A.
- \* Components requirements:

DESCRIPTION	MODEL	IC-1GD(U)/A		IC-2AD(U)/A		
Door station capacity		1 pce		2 pcs		
●Video door station	MC-D	1 pce	—	2 pcs	1 pce	—
Audio door station	ID-DA, etc.	—	1 pce	—	1 pce	2 pcs
Monitor camera		2 pcs	3 pcs	1 pce	2 pcs	3 pcs
●Video monitor	MCH-U	Max. 3 pcs		Max. 3 pcs		
Main room station		IC-1GD(U)/A 1 pce		IC-2AD(U)/A 1 pce		
Sub room station	ICH-1CD/A	Max. 2 pcs		Max. 2 pcs		
Power supply	PS-24N	1 pce		1 pce		
Door release	EL-9S	1 pce		Max. 2 pcs		
Relay for illumination	MAW-B	Max. 3 pcs		Max. 3 pcs		
3-camera adaptor	MCW-P3	1 pce		1 pce		

\* Measurements: Height: 60 mm (2-3/8") x Width: 150 mm (5-7/8") x Depth: 160 mm (6-5/16").

\* Weight: Approximately 900 g (2 lbs.).

### \* Wiring distance:

MC-D - MCW-P3	5C-2V 0.65 mm	5C-2V 0.8 mm	5C-2V 1.2 mm	RG-59/ U(20GA) 22AWG	RG-59/ U(20GA) 20AWG	RG-59U/ U(20GA) 16AWG
	100m	180m	300m	330'	590'	990'
MCW-P3 - MCH-U	5C-2V 0.8 mm	5C-2V 1.2 mm	RG-59/U(20GA) 20AWG		RG-59/U(20GA) 16AWG	
	70m	100m	230'		330'	

MCW-P3 - PS-24N	0.8 mm	1.2 mm	20AWG	16AWG
	3.5 m	6.5 m	10'	20'
MCW-P3 - IC-1GD(U)/A IC-2AD(U)/A	0.65 mm		22AWG	
	30 m		100'	

Note: MCW-P3 adaptor has 3 pairs of lead wires for connecting door release. Audio door station is optional.

## WARRANTY

Aiphone warrants its products to be free from defects of material and workmanship under normal use and service for a period of one year after delivery to the ultimate user and will repair free of charge or replace at no charge, should it become defective upon which examination shall disclose to be defective and under warranty. Aiphone reserves unto itself the sole right to make the final decision whether there is a defect in materials and/or workmanship; and whether or not the product is within the warranty.

This warranty shall not apply to any Aiphone product which has been subject to misuse, neglect, accident, or to use in violation of instructions furnished, nor extended to units which have been repaired or altered outside of the factory.

This warranty does not cover batteries or damage caused by batteries used in connection with the product.

This warranty covers bench repairs only, and any repairs must be made at the shop or place designated in writing by Aiphone. Aiphone will not be responsible for any costs incurred involving on site service calls.

Aiphone Co., Ltd., Nagoya, Japan  
Aiphone Corporation, Bellevue, Washington

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