

## 6-CALL CHIME-TONE INTERCOM

## Model: IE-8MD

### **INSTALLATION & OPERATION MANUAL**

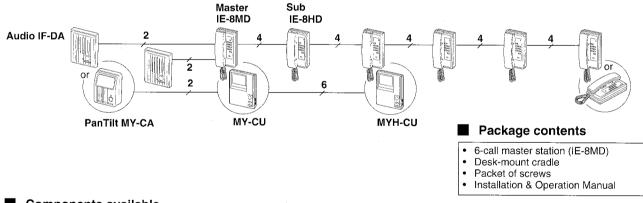
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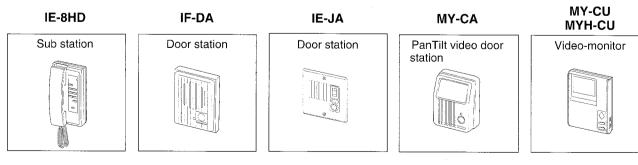
## SYSTEM OUTLINE & COMPONENTS

#### System Outline

IE-8MD is a master station for 6-call chime tone intercom system, featuring selective calling among 6 room stations, and max. 2 audio IE/IF series door stations.



#### Components available



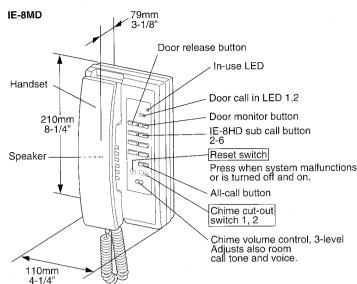
\* Door station (max. 2)

- IE-JA, flush or any IE/IF series IE-8HD, 6-call
- \* Sub room station (max. 5)
- \* One Pan Tilt door (any) **MY-CA**, etc. instead of an audio door, installs with **MY-CU** video-monitor & **MYH-CU** sub (1 or 2).

\* Audio or visual call device mounts for IE-8MD or IE-8HD.

Use either **RY-AC** or **TAR-3** relay to connect an AC-operated buzzer, etc.

# **2** NAMES AND FEATURES



Press the bottom edge of directory cover, and it moves up with directory. Dip switches 1, 2, which are door station numbers, are initially set to off position. Reset switch is to reinitialize IE-8MD system.

Desk or wall-mountable design

For wall-mounting



For desk-top use

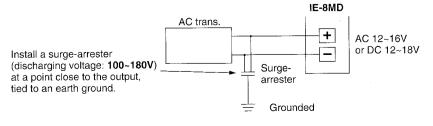
Supplied

#### FEATURES

- ☆ IE-8MD with up to 5 sub room stations (IE-8HD) on 4-conductor cable run.
- $\Rightarrow$  PanTilt video door answering can be added.
- $\frac{1}{\sqrt{2}}$  All-call or selective voice calling with pre-tone.
- 😾 Door-monitor button selectively connects IE-8MD master with a door station LED-lit.
- Button for door release.

### 3 PRECAUTIONS ON INSTALLATION & WIRING -

- ★ Do not attempt to install or connect wires on IE-8MD master station while system's power supply is plugged in.
- ★ IE-8MD master station, IE-8HD subs, and related equipment, except door station, are designed for indoor use only, and are not to be installed outdoors.
- ★ Do not connect any other power source than specified on terminals +, -. Doing so can damage the IE-8MD equipment.
- ★ For system installation, there is no need to disassemble the equipment. Do not open any IE-8MD system components unless properly qualified.
- ★ Any other manufacturer's products installed with this system (power supply, external signalling device, etc.) are not covered under Aiphone's warranty.
- ★ Do not mount IE-8MD equipment in the following places, as it may cause the system to malfunction;
  - High or extreme cold temperature areas: under direct sunlight, near equipment that varies in temperature, in front of air-conditioner, inside a refrigerated area, etc.
    - Places subject to moisture or humidity extremes.
    - Places subject to environmental conditions: dust, oil, chemicals, etc.
- ★ IE-8MD is an electrical device, which must not be subjected to water, or any other liquid.
- ★ Weather conditions, such as electrical storms could cause damage to IE-8MD equipment. We recommend that power surge protection be installed as follows: (However, this does not guarantee that no damage will occur.)
  - When an AC transformer is used



– 2 –

• When a DC power supply is used

If the power supply has a GROUND terminal, take it to an earth ground. In this case, a separate surge arrester is not necessary.

When an using power supply does not have a GROUND terminal, install a surge-arrester near the output as shown. Surge-arresters are not supplied from Aiphone.

#### Before installing the IE-8MD system, the instructions on pages 3 ~ 6 must be carefully read and understood.

#### **WIRING** ■ IE-8HD terminals block layout IE-8MD terminals block layout CN6 (5 pin) plugs yellow at top D1 1 +To door station 1 (\*) (f)E1 $\oplus$ 2 Æ \_ To next IE-8HD (f)Œ ΕL 3 D2 Æ To EL-9S 1 To door station 2 4 Œ EL E2 $\oplus$ B+ SL To RY-AC or To EL-9S 2 SL TAR-3 relay B $\oplus$ 1 $\underbrace{\oplus}{\oplus}$ 2 To IE-8HD subs 3 CN7 (4 pin) pluas $\oplus$ 4 yellow at left end (+)B+ To RY-AC or TAR-3 relay $(\mathbf{f})$ B-(\*) Do not connect any other power source on +, - terminals than what is specified: CN5 (6 pin) plugs AC12 ~ 16V or DC12 ~ 18V. vellow at left end

#### Cable requirements

Use a 4 conductor (twisted or non-twisted) cable 0.65 ~ 1.0mm diam., 22 ~ 18AWG.

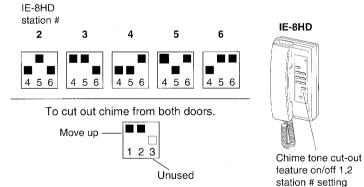
#### IE-8HD station # setting

Using a ball-point pen or small screwdriver, set switches as shown: Change initial off to on position individually.

After completing wiring connections, set each station number by positioning the dip switches under the front cover (IE-8HD only). See Diagram. IE-8MD is pre-set to #1.

#### Chime tone cut-out feature

Setting switches 1, 2 mute chime tone from each door station(3: unused), selectable on each IE-8HD station. Disabling tone by moving switch to ON position does not prevent the station from being able to communicate with the door.



4,5,6

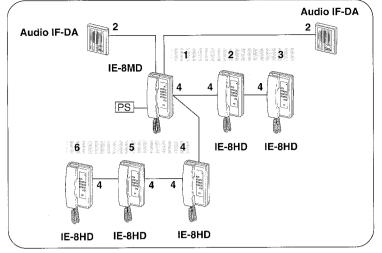
1,2 are door stations number.



Reset switch IE-8MD only Chime tone cut-out feature on/off 1,2

After completing all installation and wiring, plug in system's power supply. The system auto-initializes itself. When any function does not operate properly, press the Reset switch.

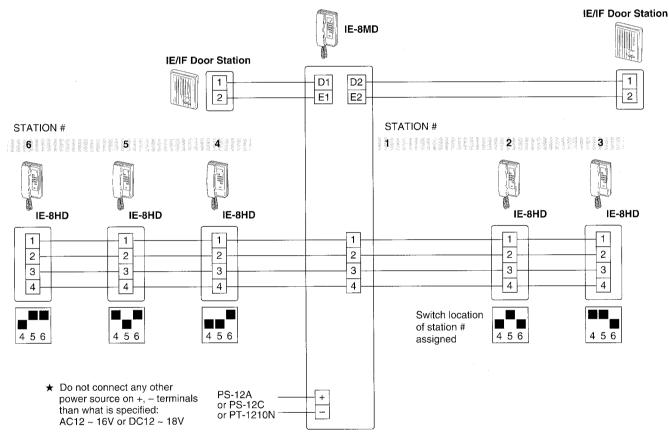
Also press the Reset switch when the system is powered down and back up for any reason.



# AC/DC power supply system allows use of either standard PS-12A (PS-12C) or AC transformer PT-1210N.

IE-8MD intercom can be wired with one or two cable runs, with 1–5 IE-8HD's on a 4-conductor cable run. Station # setting on each IE-8HD sub is programmable with switches 4, 5, 6 under directory. IE-8MD is preset to #1.

One or two IE/IF audio door stations can be used.



#### Wiring distance

#### IE-8MD to audio door station

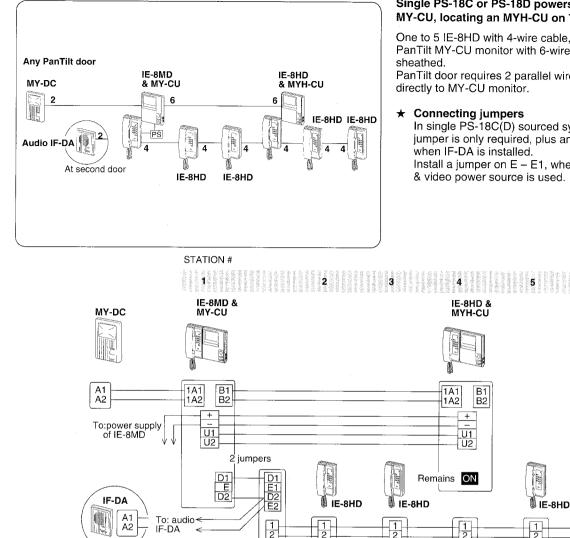
Diameter	0.65mm	0.8mm	1.0mm
Distance	150m	230m	360m
AWG	22AWG	20AWG	18AWG
Distance	500'	770'	1,180'

#### Two farthest stations (any pair)

Diameter	0.65mm	0.8mm	1.0mm
Distance	75m	120m	190m
AWG	22AWG	20AWG	18AWG
Distance	245'	380'	580'

#### IE-8MD to power supply PS-12A(C), etc.

Diameter	0.65mm
Distance	10m
AWG	22AWG
Distance	33'



+

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3 4

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Switch location of station # assigned

#### Single PS-18C or PS-18D powers both IE-8MD and MY-CU, locating an MYH-CU on 75m, 245'.

One to 5 IE-8HD with 4-wire cable, station-to-station. PanTilt MY-CU monitor with 6-wire cable separately

PanTilt door requires 2 parallel wires, connected

In single PS-18C(D) sourced system, a D1 - D1 jumper is only required, plus another D2 - D2 Install a jumper on E - E1, when a separate audio

& video power source is used.

★ Do not connect any other power source on +, - terminals than what is specified: DC18V only on +, - of MY-CU.

#### Wiring distance

#### **MY-CU to PanTilt door**

IF-DA

<

**PS-18C** 

PS-18D

Diameter	0.65mm	0.8mm	1.0mm
Distance	50m	65m	100m
AWG	22AWG	20AWG	18AWG
Distance	165'	215'	330'

G

#### MY-CU to next MYH-CU (2 monitors)

Diameter	0.65mm	0.8mm	1.0mm
Distance	35m	48m	75m
AWG	22AWG	20AWG	18AWG
Distance	115'	160'	245'

#### MY-CU to power supply PS-18D(C)

Diameter	1.0mm	AWG	18AWG
Distance	5m	Distance	16'

#### IE-8MD to audio door station

1

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2 3

4

456

Diameter	0.65mm	0.8mm	1.0mm
Distance	150m	230m	360m
AWG	22AWG	20AWG	18AWG
Distance	500'	770'	1,180

1

2 3

4

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 IE-8HD

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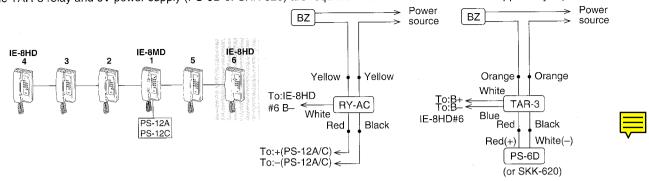
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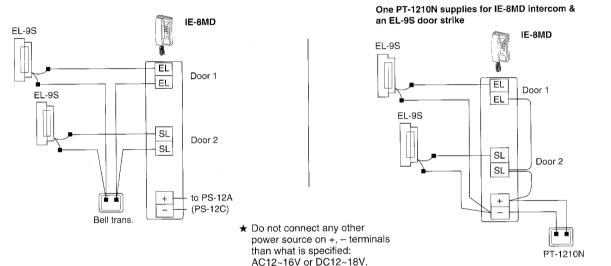
#### Connection of audio or visual call device

An external signalling device can be used with any handset, and will activate when that station is called. The TAR-3 relay and 6V power supply (PS-6D or SKK-620) are required. The external device is not supplied by Aiphone.

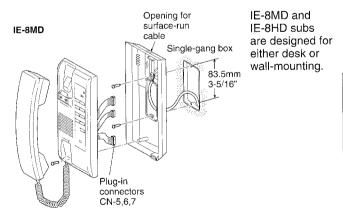


#### Connection of door release EL-9S

Door strikes for each door are wired to the IE-8MD, and are selectively controlled corresponding to the door where communication is established. All inside stations can release the door they are communicating with. Door release button contact capacity 24V AC/DC, 0.35A.

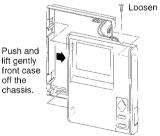


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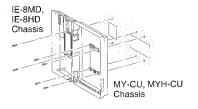
Loosen a front bottom screw, and lift front case off the chassis. Disconnect the intercom by unplugging connectors. The chassis mounts on a single-gang box with 83.5mm, 3-5/16" guide.

Make wire terminations on 4 screw terminals (intercom feature only), labelled 1–4. IE-8MD master has terminals that connect either DC 12~18V wires of PS-12A (PS-12C) or, in USA only, AC 12~16V wires of PT-1210N. After wiring, reconnect and mount intercom to the chassis.

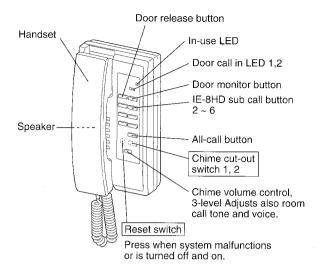


IE-8MD mounts with main MY-CU, and IE-8HD with MYH-CU sub-monitor. In either mounting, use a template to decide height and break out cable openings. Refer to the Manual packed with MY-CU/MYH-CU.

Mount the chassis of intercom first, then monitor chassis which self-adjusts with fastening screws. Two or three jumper wires between the main handset and monitor are necessary.

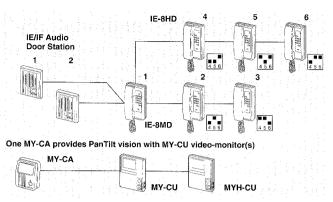


# OPERATIONS on IE-8MD



#### Single talk path system

The in-use LED indicates the system is occupied. Wait until the system is available. If any handset is accidentally left off-hook, all IN-USE LEDs will be lit.



#### Door answering

When door station calls in with 4 or 2-tone chime, simply pick up and reply at any handset. LED 1 or 2 will light on main IE-8MD. On IE-8HD subs, chime tone will be heard. It may pick up to reply.

A door station can be transferred to another inside station. Call station and hang up, and second party can pick up and speak with visitor.

**Door monitor button (IE-8MD only)** connects with an audio IF-DA 1 & 2, identified by a red-lit LED. It also activates the PanTilt door camera(s), turning on the monitor. Pan-and-tilting the camera is then operable.

#### Room calling with selective call button or all-call

Lifting handset, press a call button 2-6, sounding a short audio tone. Speak into the mouthpiece, and you will be heard at the called station. To reply, pick up the IE-8HD handset.

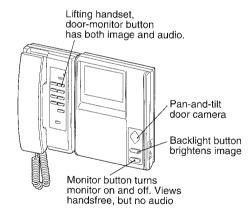
To call all stations, press the ALL-CALL button and speak after the pretone. All stations will hear the announcement.

#### Door station call-in overrides

When a door station calls, while two stations are talking, the chime will be heard in each handset. To answer the door, hang up and pick up again and communication will be established to the door.

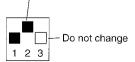






#### Other operations

Switch 2 in ON position mutes chime from Door 2



On setting IE-8HD & IE-8MD

- 1. Call-in from a door station is held for approx. 45 seconds after chime sounding.
- 2. The **door release button** activates the door strike at the door where communication is established. Strike remains activated while the button is held down.
- Chime cut-out feature Chime tone(s) mutes on IE-8MD or IE-8HD sub selectable. To mute chime, set SW 1 and/or 2 (under directory cover) to upper ON position. Even with chime tone muted, the IE-8HD may pick up to reply.
- 4. Own # button remains inoperative on each station (1 on IE-8MD).

## CLEANING THE EQUIPMENT

- 1. Clean intercom unit surface with a soft and dry cloth.
- 2. When the soil is not easily cleaned, the cloth may be dampened with neutral household cleanser. Never use any abrasive cleaner or cloth.

## **BEFORE ASKING FOR REPAIR**

- ★ In case some station does not operate properly, press Reset switch on the IE-8MD master. Entire IE-8MD system auto-initializes when the system is powered on. If IE-8MD does not function properly, press Reset switch.
  ★ Do not adjust any switch settings while the system is powered on.
- ★ Keep direct forceful rain or water from the front of the door station. The units are designed to be weather-

## 9 SPECIFICATIONS

Power source

resistent.

DC12~18V, 500mA AC12 ~ 16V, 900mA

IE-8MD intercom In USA; PS-12C or PT-1210N In other areas; PS-12A or Bell trans.: AC12V, 10VA or AC16V, 14VA both w/no-load voltage rating: 20V or less

IE-8MD intercom plus EL-9S door strikeIn USA;PT-1210N onlyIn other areas;Bell trans.: AC12V, 10VA only

IE-8MD & MY-CU, with one MYH-CU sub (plus EL-9S door strike) In USA; PS-18C only (plus PT-1210N) In other areas; PS-18D only (plus bell trans.: AC12V, 10VA)

#### Calling

Two door stations connected to D1 - E1, D2 - E2, each sounds chime in 4 and 2-tone.

Room # button 1 - 6 places an individual call with a short audio tone and voice. To call all other stations simultaneously, momentarily press All-call button, which activates all station speakers with pre-tone and voice. All call tones and voices are 3-level adjustable with the same volume control.

#### Communication

When called by chime or audio tone and voice, pick up (any) handset.

#### Dimensions

210mm high x 110mm wide x 79mm deep 8-1/4" H x 4-5/16" W x 3-1/8" D

#### Weight

IE-8MD: 600g (1.32 lbs.) approx. IE-8HD: 520g (1.15 lbs.) approx.

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· * * * * * * * * * * * * * * * * * * *	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.	* * * * * * * * * * * * * * * * * * * *
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