

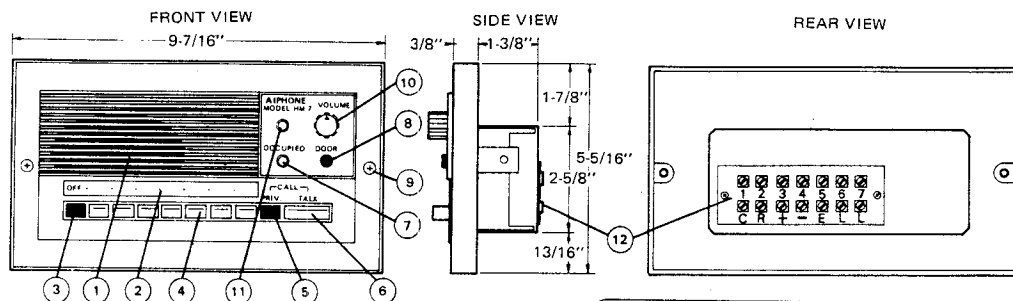
ALL MASTER HOME INTERCOM SYSTEM

MODELS: HM-7 (Master Station)

CH-B (Door Station)

— INSTRUCTIONS —

NAMES & FUNCTIONS



- | | |
|----------------------------|------------------------|
| ① Speaker/Microphone | ⑦ Occupied lamp |
| ② Directory card | ⑧ Door release button |
| ③ OFF button | ⑨ Mounting screws |
| ④ Station selector buttons | ⑩ Volume control |
| ⑤ Privacy button | ⑪ ON lamp |
| ⑥ Talk button | ⑫ Connecting terminals |

ACTUAL HM-7 TERMINAL LOCATION

- | | |
|-----------|-------------------------------------|
| ① - ⑦ | : for calling out and talking |
| ① C | : for receiving call and talking |
| ① + - ① - | : for power supply connection |
| ① R | : for on & occupied lights |
| ① E | : for connecting door station |
| ① L | : dry make contact for door release |

SPECIFICATIONS

- * Power source: DC 12 volt. Use PS-12S AC adaptor (PS-12C in North America).
- * Current consumption: 500 mA maximum.
- * Station selection: Push button station selection from each HM-7 master station.
- * Wiring: Up to 14 conductors may be required. Please refer to wiring diagram showing system that meets your requirements.

FEATURES

- * All master system — every HM-7 station can call every other station.
- * Open voice hands free communication at called station.
- * Up to 8 master stations or 7 master stations with up to 2 (paralleled) door stations can be connected.
- * Privacy switch on all master stations eliminates eavesdropping.
- * HM-7 masters fit standard 4-gang plaster ring or 4-gang concrete box for semi-flush wall mounting (Plaster rings and/or concrete boxes are available from almost all electrical supply outlets).
- * CH-B door station can be surface-mounted in standard 1-gang box and incorporates push button for operation of standard or existing door chime. Chime system not included or supplied by Aiphone.
- * Electric lock switch can be used for remote control of door release. Other remote functions such as switching of outside lights etc. is possible using relay (Relay not supplied nor manufactured by Aiphone)

COMPONENTS AVAILABLE



HM-7: 7 call master station.



CH-B: Weather resistant door station.



PG-3: 3-watt paging amplifier. Allows paging from HM-7 master through a 8 ohm horn speaker.



EL-9S: Electric door release. Requires separate transformer.



PS-12C: CSA & UL approved power supply (available only in North America).



PS-12S: Power supply for system. Standard everywhere except in North America.

INSTALLATION

Do not attempt to install your intercom system until you have read and thoroughly understood the installation procedure. Aiphone's warranty is void if system is installed in a manner other than described in this manual.

Lay out your system in advance. Determine the exact location of each station. We recommend that the maximum number of station locations be pre-wired, even though you may not initially be installing the maximum number of stations available to your system. This way, should you decide to add a station later, you can avoid running additional cables to existing stations.

WIRING REQUIRED

HM-7 master stations — a total of up to 14 conductors may be required.

CH-B door station — 4 conductors required. 2 conductors from each door station connect to HM-7 master station system and 2 conductors connect to existing doorbell (or doorbell supplied by others).

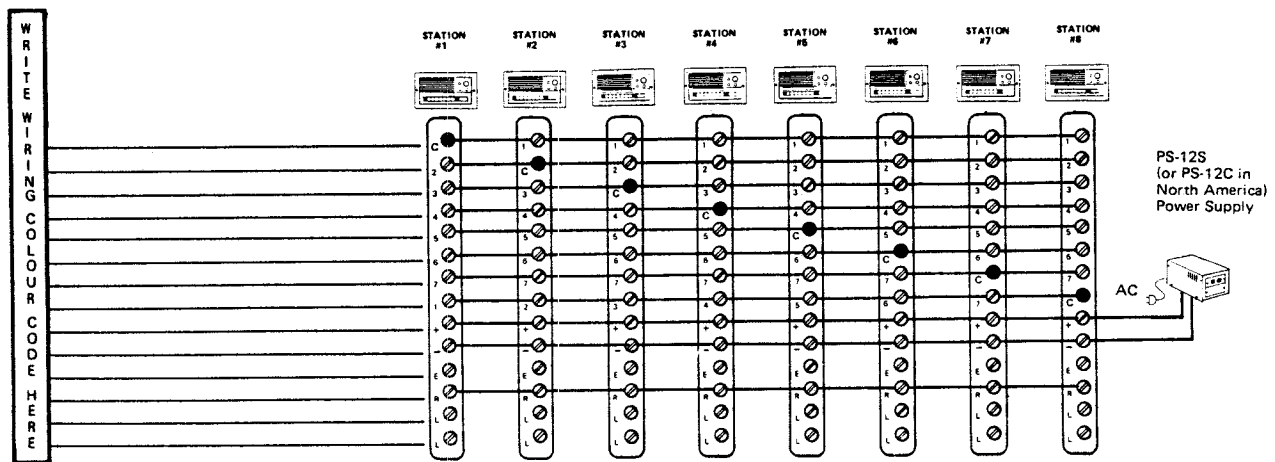
Refer to the chart below and select the proper wire gauge to meet your requirements.

AWG WIRE SIZE	24 AWG	22 AWG	20 AWG	18 AWG
DISTANCE	400'	650'	1000'	1650'

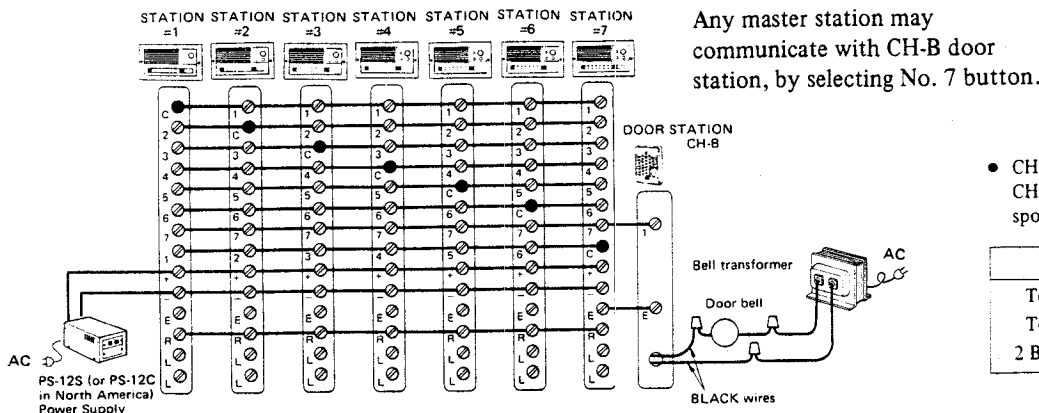
DIAMETER OF WIRE	0.5 mm	0.65 mm	0.8 mm	1.0 mm
DISTANCE	120 m	200 m	300 m	400 m

NOTE: Due to sensitivity of this system, avoid running cable or mounting units in proximity of electrical wiring, or dimmer controls.

HM-7 ALL MASTER SYSTEM



HM-7 ALL MASTER SYSTEM WITH ONE CH-B DOOR STATION:



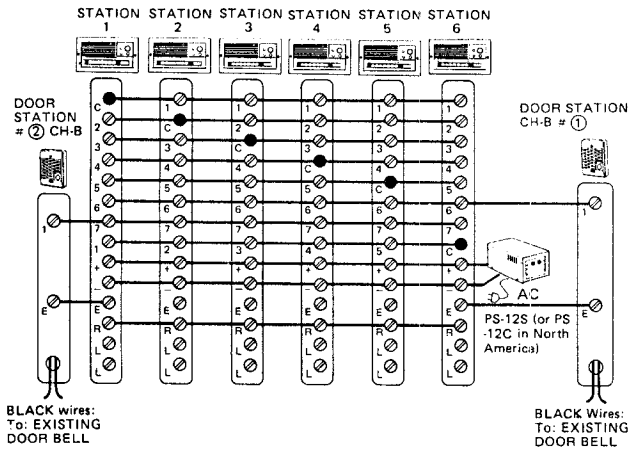
Any master station may communicate with CH-B door station, by selecting No. 7 button.

- CH-B may be used in place of the CH-BC, whose color codes correspond as follows:

CH-B	CH-BC
Terminal 1	= RED wire
Terminal E	= RED wire
2 BLACK wires	= 2 BLACK wires

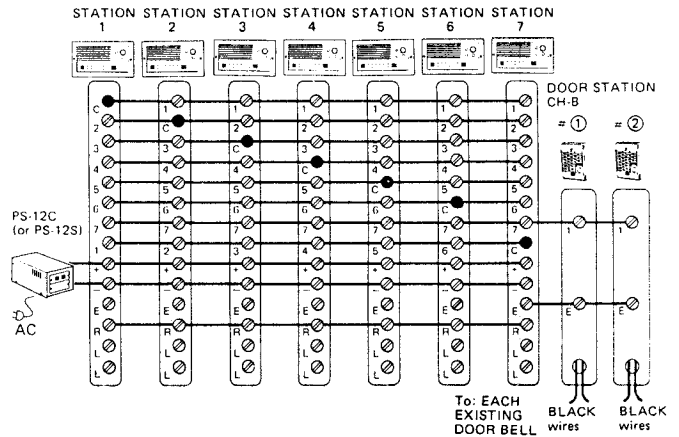
HM-7 ALL MASTER SYSTEM WITH 2 CH-B DOOR STATIONS:

Selector button # (6) on any master is to communicate with CH-B door station # (1) and selector button # (7) with CH-B door station # (2).



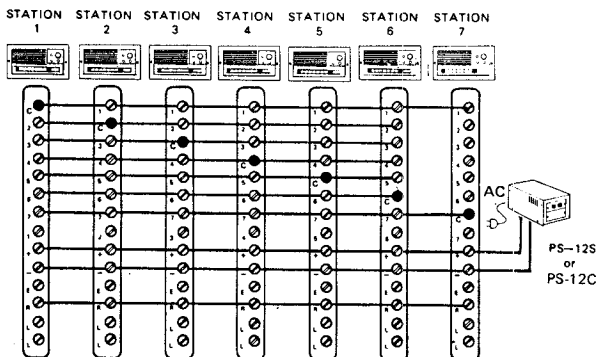
HM-7 ALL MASTER SYSTEM WITH TWO CH-B DOOR STATIONS IN PARALLEL:

Selector button # (7) on any master is to communicate with either CH-B door station. Communication between master and one door station can be heard at the other door station.



IF ALL MASTER CAPABILITY IS NOT REQUIRED

Master station HM-7 also serves as a substation. In this illustration station 7 is allowed to call only station one. However all other stations in the system may call station 7. Station selection wires may be omitted at any station to develop a communication system to meet your requirements.



MASTER STATION INSTALLATION

* New Construction:

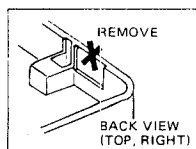
Provide 4-gang concrete box, 4-gang plaster ring, or 4-gang plaster ring with box for installation of HM-7 master and install as shown. (Boxes and plaster rings are standard items available from most electrical supply houses.)

* Existing Construction:

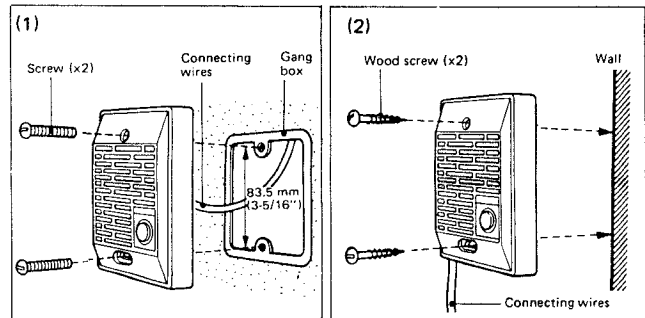
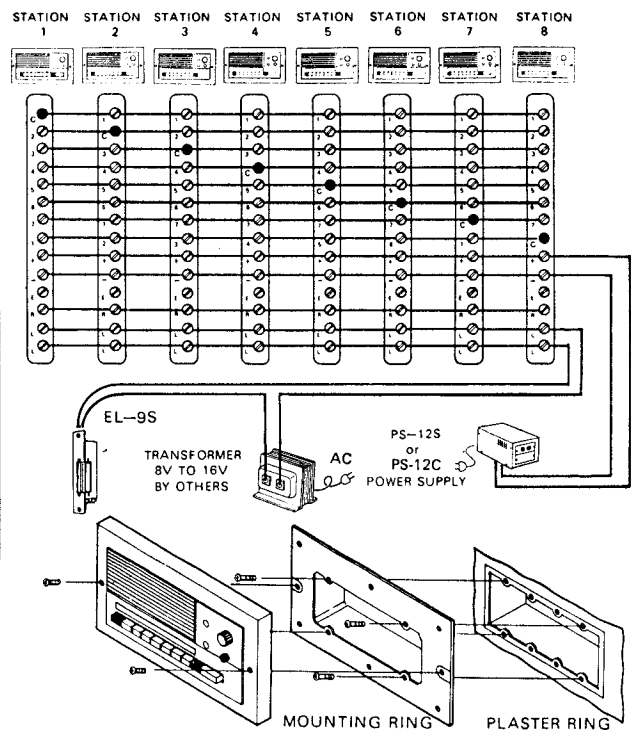
Cut 3" x 7-1/4" (80 mm x 190 mm) opening into wall at desired location and insert provided mounting ring as shown.

INSTALLATION OF DOOR STATION CH-B

- (1) Attach the unit to 1-gang box with the supplied 2 screws.
- (2) When mounting to wall, conductors may be pulled out either from top or bottom of the back case. As shown, remove the outlet part of the case when passing conductors through the top.



CONNECTING DOOR LOCK OR AUXILIARY EQUIPMENT

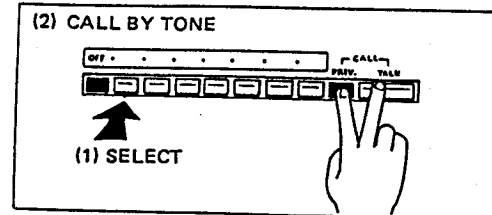


OPERATION OF MASTER STATION

* Calling:

- 1) Depress the selector button of the desired station.
- 2) To call by tone, momentarily depress both private and talk buttons.
- 3) To call by voice, depress talk button and speak.
- 4) To listen, release talk button.
- 5) Upon completing conversation, depress OFF button.

NOTE: HM-7 master station OFF button when depressed puts station in standby position as well as OFF position. OFF button MUST BE DEPRESSED on all master stations except station initiating a call or system will not work.



* Receiving:

- 1) Unless privacy switch is in depressed position, no action is required, and communication is hands free.
- 2) With privacy switch in depressed position, release same by momentarily depressing talk button, then resuming hands free operation as above.

* Monitoring:

- 1) Depress selector button of the station you wish to monitor.
- 2) Check room station to be monitored to insure privacy button is in off position.

* Receiving call from door station:

- 1) Door station signals call through home's chime (door bell) system.
- 2) Depress door selector button at any master station.
- 3) Operate talk button at master station for communication with door station. Door station operation is hands free.
- 4) For remote opening of door with optional EL-9S electric door lock, depress door release button on master station.

TO PREVENT ELECTRIC SHOCK

- * DO NOT CONNECT ANY TERMINAL ON ANY UNIT TO AC POWER LINES.
- * BE SURE TO REMOVE PLUG OF PS-12S (OR PS-12C) FROM POWER OUTLET BEFORE YOU MAKE WIRING CONNECTIONS.
- * Do not pinch connecting wires in windows, doors or desks.
- * Do not spray water on the CH-B unit.
- * HM-7 must be installed in as dry and dust-free environment as possible.

CLEANING YOUR INTERCOM STATIONS

- * Your Aiphone intercom stations may be cleaned with a soft cloth dampened with household cleanser, such as Mr. Clean or Fantastik.

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We at AIPHONE are proud of our products. Our designers and engineers strive to bring you the finest in communication equipment. Each item has been carefully tested and inspected before leaving our factory. Properly installed and used, your Aiphone intercom system should give years of trouble-free service.

We are pleased to offer the following warranty:

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.