

HM-7 Master Station (Stock Product)

Basic System

HM-7 All Master Home Intercom System

Description

Door Chime and Background Music through all stations, and Paging Capability.

Models

DD-1 Chime tone and Background Music Adaptor.

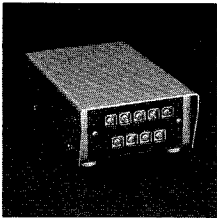
BA-1 Paging adaptor.

HM-5A 5-call desk style master.

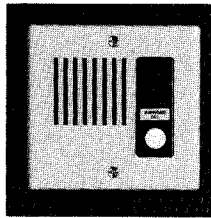
HM10A 10-call desk style master.

BG-2A BGM only Adaptor.

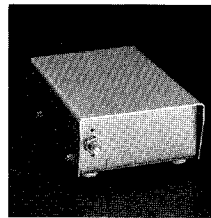
CH-BA Flush type door station.



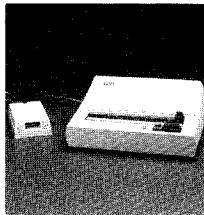
DD-1



CH-BA



BA-1



HM-10A

Features/Functions

Chime tone from substation to master units using DD-1 and PG-3 amplifier.
 BGM through master stations.
 Door release button on master.
 Station-to-station call by voice or electronic tone.
 Hands-free operation from station receiving a call.
 Privacy button at every station to lock out monitoring.
 5- and 10-call desk/wall mount master.
 Flush type door station. (CH-BA)
 BGM Adaptor. (BG-2A)

System Components
(Stock Products)

HM-7 7-call master station
PS-12C Power supply
CH-B Door station
EL-9S Electric door release
PG-3 3 watt amplifier
 Paging amplifiers and speakers

Dimensions (in inches)	H	W	D
DD-1	2 ¹ / ₃₂	3 ⁷ / ₁₆	5 ⁵ / ₈
BA-1, BG-2A	2 ¹ / ₃₂	3 ⁷ / ₁₆	5 ⁵ / ₈
HM-5A, HM-10A	3 ³ / ₈	9 ⁵ / ₁₆	8 ⁷ / ₈
CH-BA	4 ¹ / ₂	4 ¹ / ₂	1 ¹ / ₈

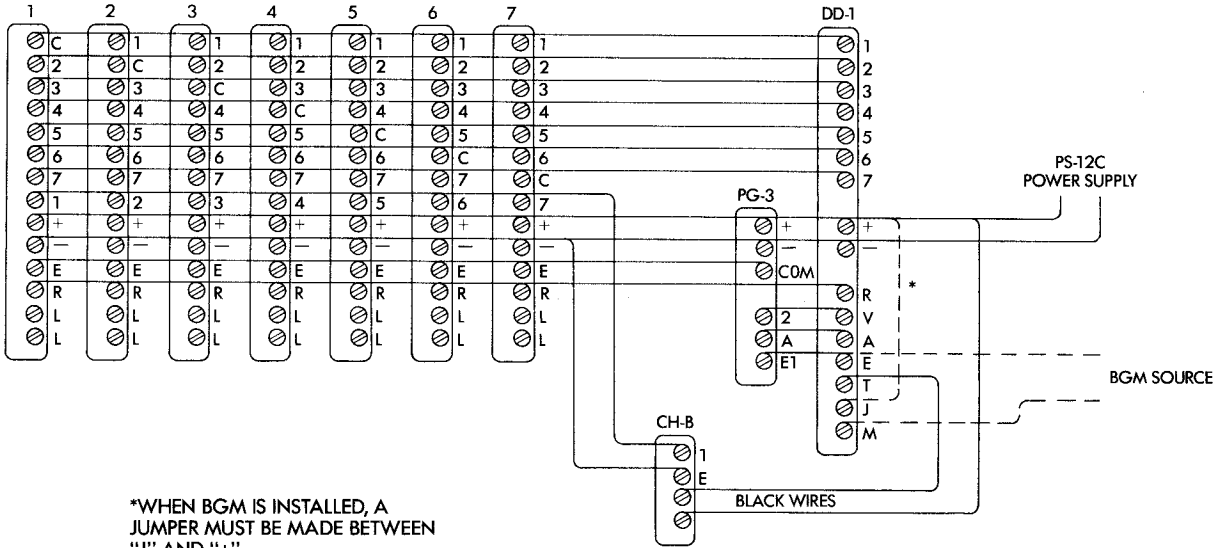
Wiring Requirements

3 common, 1 individual between masters, plus 2 common for door release
 Between DD-1 and HM-7:
 8 conductors
 Between DD-1 and PG-3:
 5 conductors
 Between PG-3 and HM-7:
 3 conductors

Maximum Communication Distance

400'/24 AWG, 650'/22 AWG, 1,000'/20 AWG

HM-7 W/CHIME DOOR CALL TONE AND/OR BGM



*WHEN BGM IS INSTALLED, A JUMPER MUST BE MADE BETWEEN "J" AND "+"

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Contact technical sales if additional configurations are required.



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.

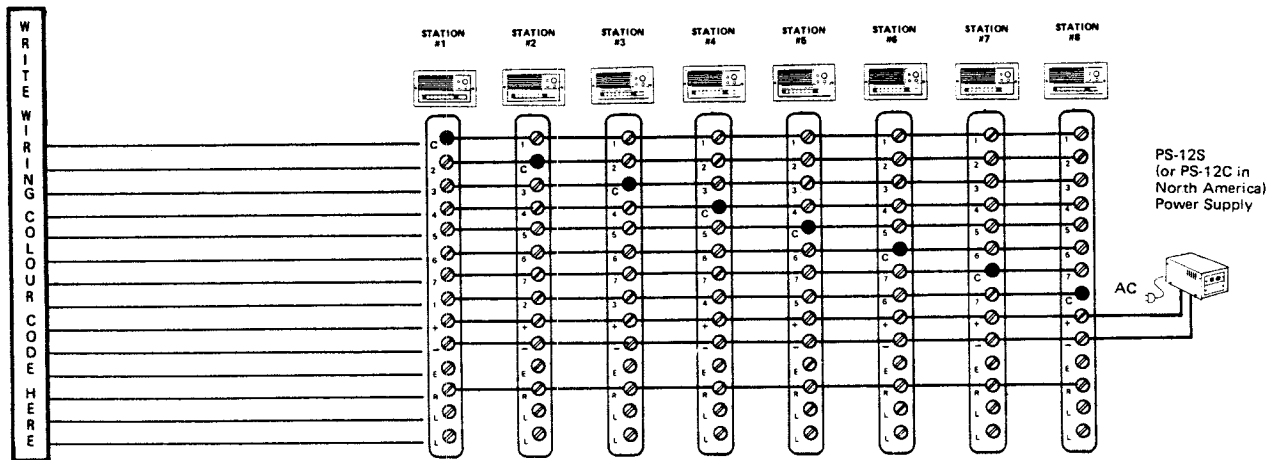
CH-B door station – 4 conductors required. 2 conductors from each door station connect to HM-7 master station system and 2 conductors connect to existing doorbell (or doorbell supplied by others).

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

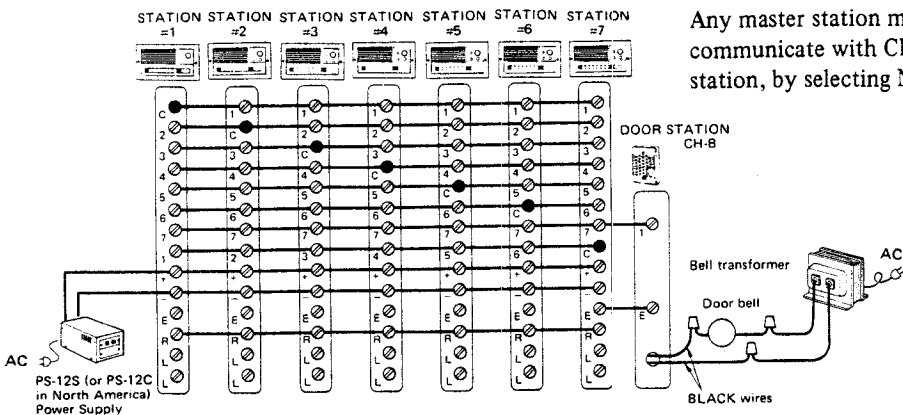
AWG WIRE SIZE	24 AWG	22 AWG	20 AWG	18 AWG
DISTANCE	400'	650'	1000'	1650'
DIAMETER OF WIRE	0.5 mm	0.65 mm	0.8 mm	1.0 mm
DISTANCE	120 m	200 m	300 m	400 m

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:



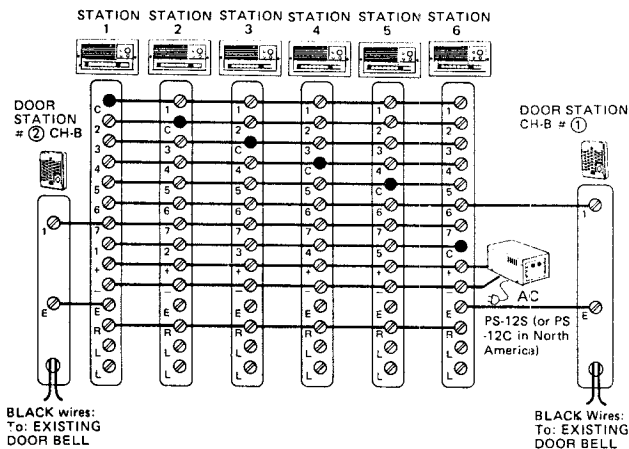
Any master station may communicate with CH-B door station, by selecting No. 7 button.

- 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

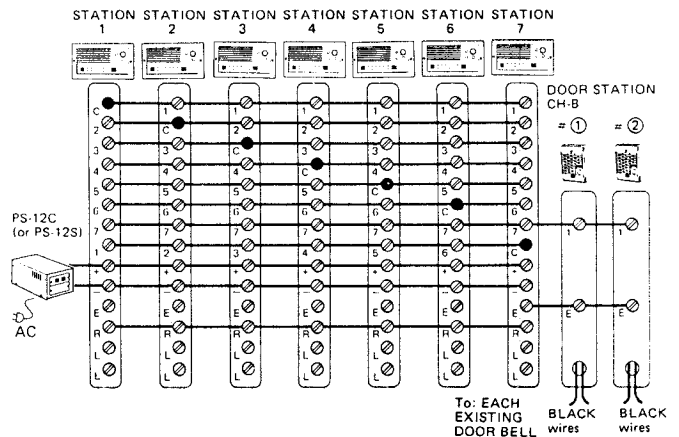
HM-7 ALL MASTER SYSTEM WITH 2 CH-B DOOR STATIONS:

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).



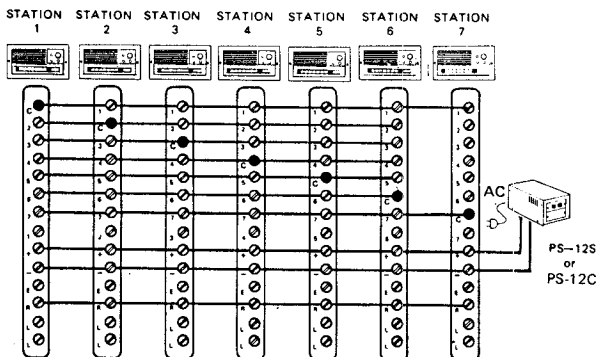
HM-7 ALL MASTER SYSTEM WITH TWO CH-B DOOR STATIONS IN PARALLEL:

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.

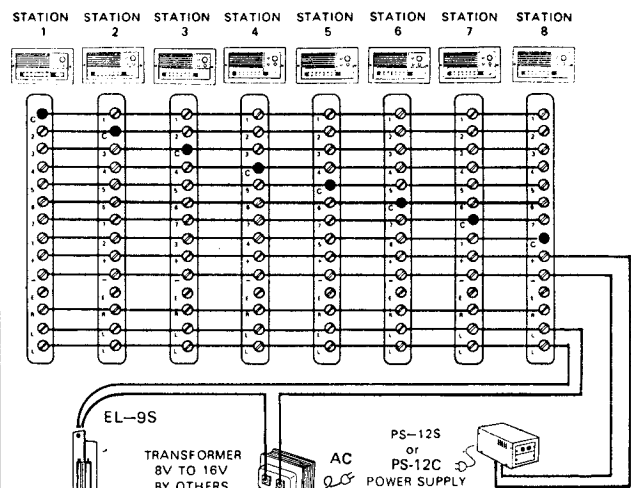


IF ALL MASTER CAPABILITY IS NOT REQUIRED

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.



CONNECTING DOOR LOCK OR AUXILIARY EQUIPMENT



MASTER STATION INSTALLATION

* New Construction:

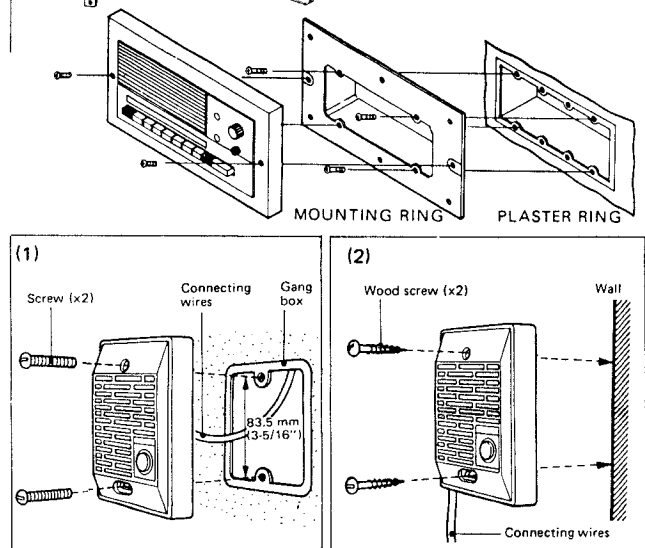
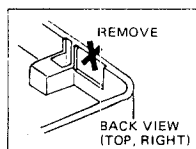
Provide 4-gang concrete box, 4-gang plaster ring, or 4-gang plaster ring with box for installation of HM-7 master and install as shown. (Boxes and plaster rings are standard items available from most electrical supply houses.)

* 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.

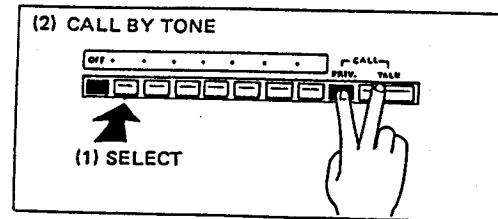


OPERATION OF MASTER STATION

* 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.

* * *

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.