

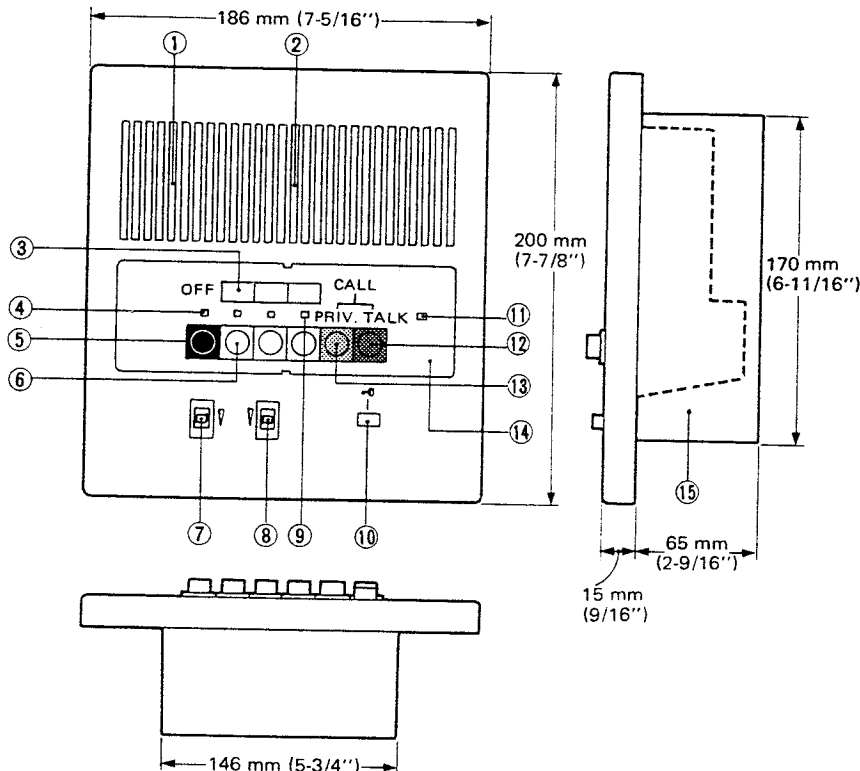
# HOME INTERCOM

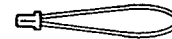
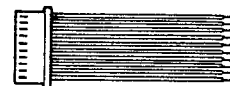
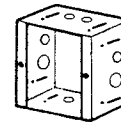
**MODEL:**

# LAF-3B

**Master station  
3-call  
semi-flush mount**

## INSTALLATION MANUAL


**Mounting accessories;**

**WOOD SCREW (x 2)  
(4.1 x 22 ±)**

**2-PIN CONNECTOR  
(Attach on LAF-3B  
when combined with  
existing LAF models)**

**10-PIN CONNECTOR  
WITH 10 WIRES  
(for station wiring)**
**Mounting back box (Model: BBX 2)**

**SCREW (x 2)  
(4 x 25 ±)**
**\*Must be ordered separately.**

## 1 NAMES AND FUNCTIONS

- |                                   |                                    |
|-----------------------------------|------------------------------------|
| ① Microphone                      | ⑨ Call annunciator LED             |
| ② Speaker                         | ⑩ Door release button              |
| ③ Directory card                  | ⑪ OCCUPIED LED                     |
| ④ Station selection indicator LED | ⑫ TALK button                      |
| ⑤ OFF button                      | ⑬ PRIVACY button                   |
| ⑥ Station selector button         | ⑭ Panel                            |
| ⑦ Communication volume control    | ⑮ Mounting back box (Model: BBX-2) |
| ⑧ Call tone volume control        |                                    |

## 2 SYSTEM FEATURES

- Versatile communication system. Either All-master, Single-master or Intermixed System can be created.
- Intermixable masters and subs, either semi-flush mount (LAF-B) or desk/wall mount type (LAF).
- Can receive All Call announcement and Background music.
- Sub call-in annunciator LED stays lit for approx. 20 seconds.
- During your communication, sub call-in can be signalled by soft tone.
- Options: \* Door station (any number). \* Door release, using RY-PA relay.  
\* Paging thru an 8-ohm horn with talkback.

# 3

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

### \*Operation;

1. On all LAF master stations, except station initiating a call, OFF button **MUST BE DEPRESSED** and **LOCKED DOWN**, or system will not work. The illuminated LED above OFF button indicates you forget to depress OFF button, if not in use.
2. The illuminated OCCUPIED LED indicates the other station is using the system. While this OCCUPIED LED is lit,
  - (1) Do not depress any selector button. The squeak sound will come out at initiating and receiving stations.  
So, when you receive calls from another master and a sub at the same time, **REPLAY FIRST TO THE MASTER** and, after the OCCUPIED LED goes out, depress a selector button of the calling sub and communicate.
  - (2) Do not make All Call nor any other operation, when LAF-B units are intermixed with existing models (LAF-3A/5/10/10S/10B/10BS).
3. When a sub station calls during Background music distribution, the call tone will come out through all LAF station speakers, and call-in annunciator LED stays lit for approximately 20 seconds on the called master station.

### \*Installation;

1. **DO NOT CONNECT ANY TERMINAL ON ANY UNIT TO AC POWER LINES.**
2. Be sure not to plug power supply into AC receptacle until you complete wiring connections and unplug before opening the unit.
3. Lay out your system in advance. Determine the exact location of each station. Assign station number and make a sketch showing the number of wires and color codes from one station to another. Begin your installation with master station No. 1. Upon installing second master station, we recommend a test be made for all functions, calling and talking between each station.  
After completing all the masters connection and testing, begin sub station installation.

4. Insulate by tape, etc. each unused connector wire end. If touches the other wires or back box it will cause damage to the units.

### Installation location;

5. Select the installation locations that would not be exposed to temperature/humidity extremes, water, oil, dust, iron dust, inflammable and chemical products, etc.
6. To avoid feedback, **DO NOT PLACE MASTER STATION AND ANOTHER MASTER OR SUB STATION BACK TO BACK, OR ON A COMMON WALL BETWEEN ROOMS.**

### Unit selection;

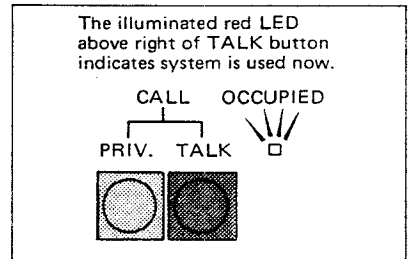
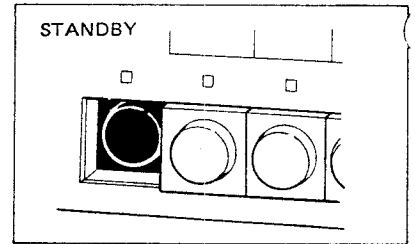
7. When making an intermixed system, note in advance that master stations: LAF-3A, LAF-5, LAF-10 console type have no button for All Call nor door release. LAF-1B and LAF-3B have only door release button. If such functions are required at console type station, please use LAF-10S.
8. If any LAF-B station: LAF-1B/3B/7B/10B (Type A) is intermixed with existing models: LAF-3A/5/10/10S/10B, install a 2-pin supplied connector on back of all the LAF-B units.

### Adaptor installation location;

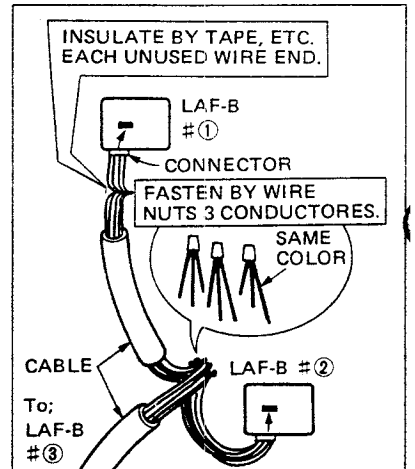
9. Locate PS-12A (or PS-12C) power supply near center of the system.
10. Locate BG-1A/1B adaptor near by the power supply.

### \*Maintenance;

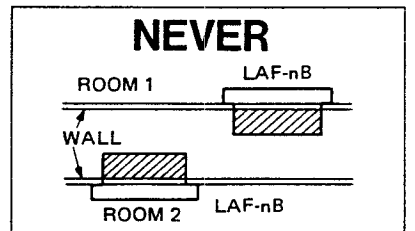
1. Clean your equipment with a soft cloth dampened with neutral household cleanser. Never use thinner nor benzene, etc.



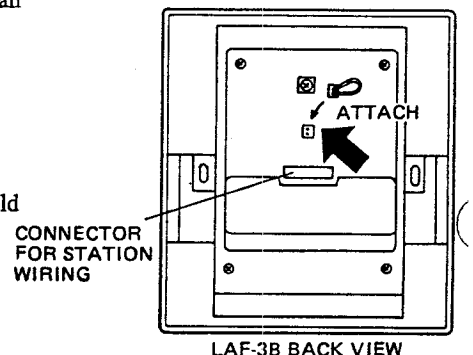
Installation: 4



Installation location: 6



Unit selection: 8

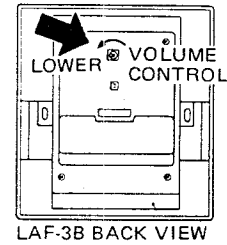


**\*Volume adjustment;**

LAF-B unit has pre-setting volume, allowing to lower the maximum level of communication. On back of LAF-3B unit, using a philip screwdriver, turn the volume counter-clockwise to achieve the desired level.

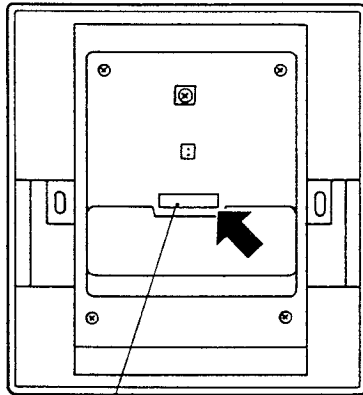
On front panel, LAF-B unit has two volume controls for communication and call tone, each adjustable to three levels as desired.

TO LOWER MAX. COMMUNICATION VOLUME



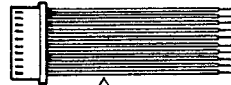
LAF-3B BACK VIEW

# 4 ACTUAL TERMINAL LOCATION



10-PIN CONNECTOR (male)  
LAF-3B BACK VIEW

10-PIN CONNECTOR WITH 10 WIRES OF APPROX. 22 CM (8-5/8")



PIN/WIRE COLOR CODE IDENTIFICATION

- + Red
- Black
- 1 Brown
- 2 Pink
- 3 Orange
- C Yellow
- E Green
- Y Blue
- R Purple
- L Gray

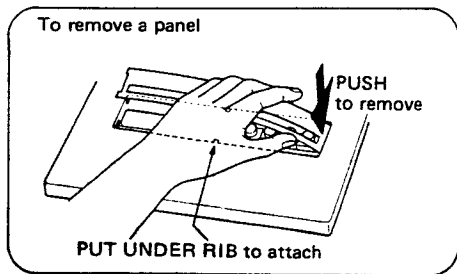
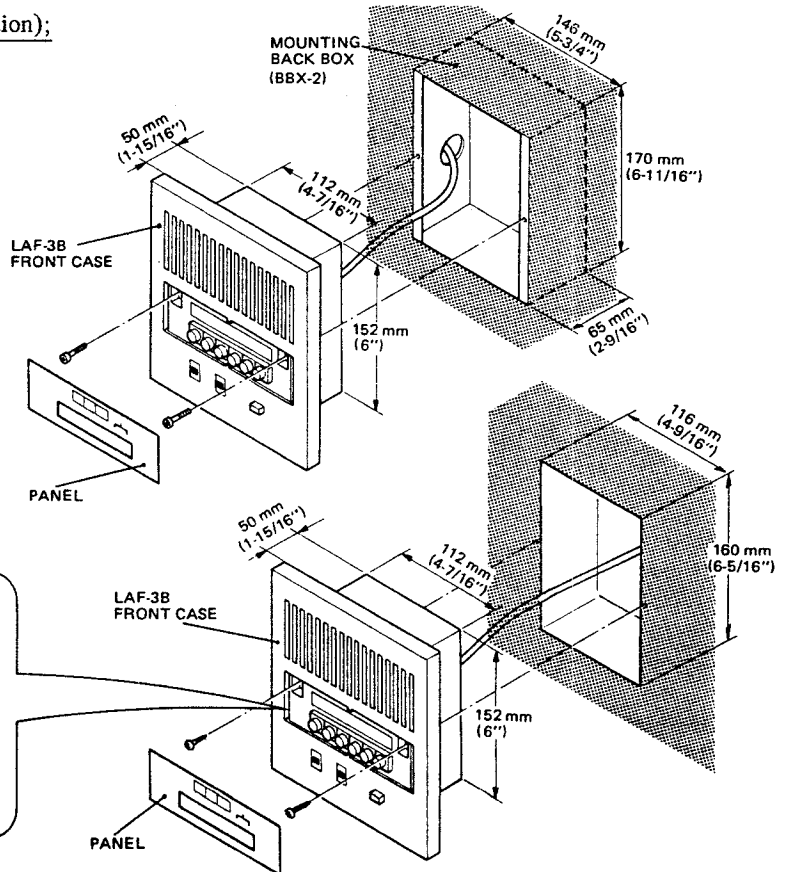
- + , - : for power supply
- 1 ~ 3 : for connecting station unit
- C : for receiving a call and BGM
- E : for common communication
- Y : for sub's call-in tone during communication
- R : for occupied LED
- L : for door release

# 5 INSTALLATION

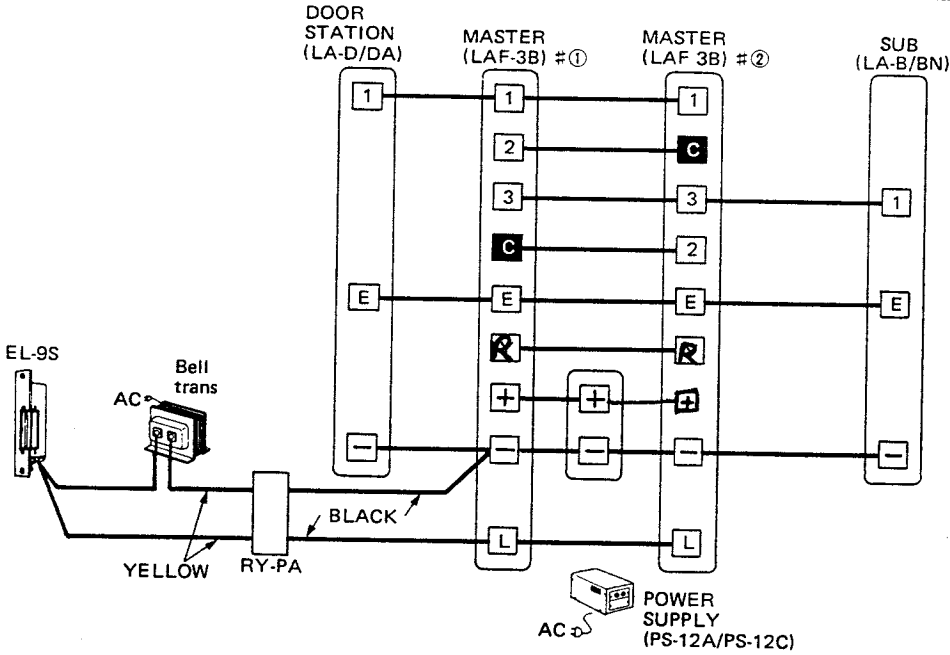
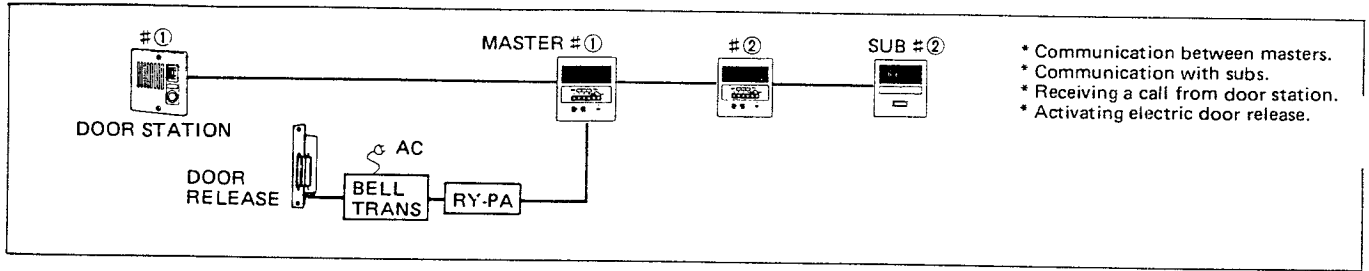
**(1) Semi-flush mounting to wall (in new construction);**

For new construction, use a mounting back box (Model BBX-2).

1. Install the back box in the wall.
2. Remove a panel on LAF-3B front case.
3. Mount LAF-3B unit to the back box with two screws (supplied).
4. Reattach the panel.



# #3 LAF-3B INTERMIXED SYSTEM



### NOTES;

- ① LAF-3B master station can call and communicate with each other, and also with door station & sub.
- ② Door release can be activated by either LAF-3B master, answering door-phone call.
- ③ Door station call-in tone sounds softly at a communicating master station.

### LAF-3B CONNECTOR WIRE COLOR CODES

10 P I N ( 10 W I R E S)	+	Red
	-	Black
	1	Brown
	2	Pink
	3	Orange
	C	Yellow
	E	Green
	Y	Blue
	R	Purple
	L	Gray

### LA-B/LA-BN CONNECTOR WIRE COLOR CODES

3 P I N ( 3 W I R E S)	-	Black
	E	Blue
	1	Brown

# 6

## SPECIFICATIONS

- \*Power source: DC 12V. Use PS-12A (or PS-12C in North America) power supply.
- \*Current consumption: 350 mA maximum.
- \*Communication: Press-to-talk, release-to-listen at calling master.
- \*Communication output: 800 mW maximum at 20 ohm.
- \*Communication network: Either of All-Master, Single-Master or Intermixed System can be created.
- \*Calling: Electronic tone and an illuminated LED (staying lit for approx. 20 seconds), when called by sub (at master)  
Electronic tone or Voice direct when called by master (at master)  
Electronic tone or Voice direct when called by master (at sub).
- \*Talk channel: 1 talk channel.
- \*Wiring: ① Between master stations;

	Between masters	Between masters & BG-1A/1B
For communication only	5 common + 1 individual	—
For communication and BGM reception	5 common + 1 individual	4 common + 1 individual
For door release	Plus 1 common (additional)	—
For all functions as above	6 common + 1 individual	4 common + 1 individual

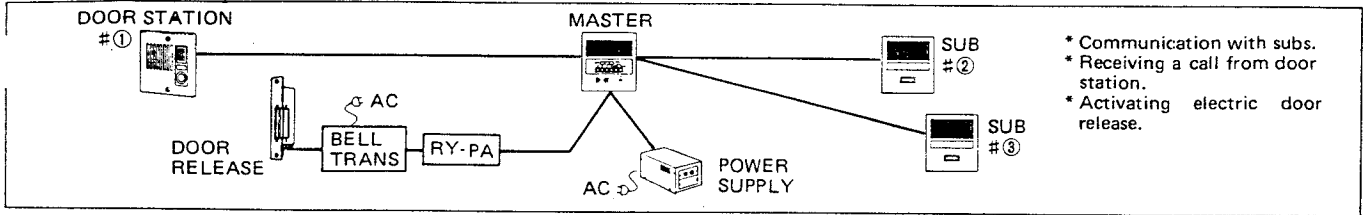
- \*Wiring distance: ② Between sub station; 3 wires for each sub station.  
Between two farthest master/sub stations;

AWG	24 AWG	22 AWG	20 AWG
Distance	400'	650'	1,000'
Diameter	0.5 mm	0.65 mm	0.8 mm
Distance	120 m	200 m	300 m

- \*Dimensions: H : 200 mm x W : 186 mm x D : 15 mm  
(H : 7-7/8" x W : 7-5/16" x D : 9/16")
- Recessed: H : 152 mm x W : 112 mm x D : 50 mm  
(H : 6" x W : 4-7/16" x D : 1-15/16")
- \*Weight: Approximately 480 g (1.06 lbs.).
- \*RY-PA relay contact capacity: AC 110V, 1A.  
DC 24V, 1A.

# WIRING DIAGRAM

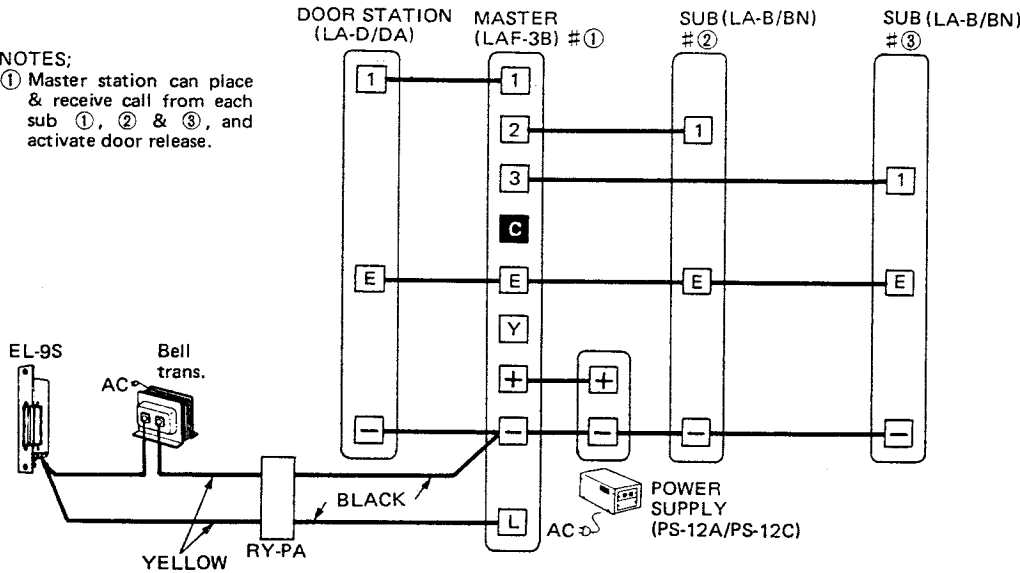
## # ① LAF-3B MASTER SELECTIVE SYSTEM WITH DOOR STATION



- \* Communication with subs.
- \* Receiving a call from door station.
- \* Activating electric door release.

### NOTES;

- ① Master station can place & receive call from each sub ①, ② & ③, and activate door release.



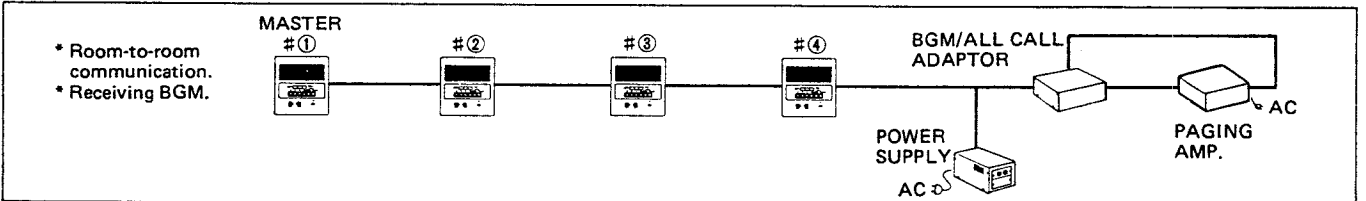
### LAF-3B CONNECTOR WIRE COLOR CODES

10	+	Red
P	-	Black
I	1	Brown
N	2	Pink
10	3	Orange
W	C	Yellow
I	E	Green
R	Y	Blue
E	R	Purple
S	L	Gray

### LA-B/LA-BN CONNECTOR WIRE COLOR CODES

3	-	Black
P	E	Blue
I		
N	1	Brown
3		

## # ② LAF-3B ALL-MASTER SYSTEM WITH BACKGROUND MUSIC



- \* Room-to-room communication.
- \* Receiving BGM.

### NOTES;

- ① Each master station can place and receive calls with any other master station.
- ② Background music can be received at each station (All call announcement is not available from LAF-3B).

### LAF-3B CONNECTOR WIRE COLOR CODES

10	+	Red
P	-	Black
I	1	Brown
N	2	Pink
10	3	Orange
W	C	Yellow
I	E	Green
R	Y	Blue
E	R	Purple
S	L	Gray

