KB Series
AUDIO-ONLY SUB-MASTER STATION
Model: KB-3SD

INSTALLATION & OPERATION MANUAL

⚠️ PRECAUTIONS ON OPERATIONS

This Manual and the Markings on the product contain various symbols in order that the product can be used safely and properly, and that the installer and user are protected from injury and property damage. The following precautions must be thoroughly read and understood before proceeding.

⚠️ WARNING  Negligence could result in death or serious injury.

⚠️ CAUTION  Negligence could result in injury or damage to property.

⚠️ WARNING
1. Do not change or alter KB-3SD. It can cause fire or electric shock.
2. Keep KB-3SD away from water or any other liquid. Fire or electric shock could result.
3. Keep AC cord of power supply from being marred or crushed. If damaged, fire or electric shock could result.
4. Do not plug or unplug with wet hands. Electric shock could result.
5. Keep AC plug away from moisture or dust. Fire could result.
6. Do not use any power source other than specified. Fire or electric shock could result.

4. Do not install KB-3SD in any of the following locations, as it can cause fire, electric shock or unit damage:
   - High or extreme cold temperature area, 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 (bathroom, cellar, greenhouse, etc.)
   - Places subject to environmental conditions, such as oil, dust, chemicals, salt, etc.
   - Places subject to constant vibration or impact.
   - Where noise generating devices such as TV or radio are close by.
   - Places subject to steam or smoke (near heating equipment or cooking surfaces)
5. Do not install or make wire terminations while power supply is plugged in. It can cause electrical shock or damage to the unit.

⚠️ CAUTION
1. Mount KB-3SD on wall in a convenient location, but not where it could be bumped or jarred.
2. Verify chime volume while handset is on the hook. Chime sound from KB-3SD speaker is very loud, and can cause hearing damage.
3. Before plugging in power supply, make sure wires are not crossed or shorted. Fire or electric shock could result.

⚠️ GENERAL PRECAUTIONS
1. KB-3MRD system is not operational during a power failure.
2. Keep all DC wiring at least 30cm, 1\’ away from AC 100-240V wiring, fluorescent lighting, or dimmer switches. Otherwise, cross AC wiring at a 90°.
3. KB-3MRD system must be more than 1m, 3’3” away from TV or radio.

Explanations of Symbols:

⚠️ GENERAL PRECAUTIONS
The mark indicates caution statement (incl. danger and warning), which is specifically shown inside.

⚠️ GENERAL INSTRUCTIONS
The mark indicates contents which demand a specific action shown inside or attached.

⚠️ GENERAL PROHIBITIONS
The mark indicates contents which prohibit a specific action shown inside or attached.

⚠️ DISMANTLE PROHIBITIONS

⚠️ MOISTURE PROHIBITIONS

- 1 -
1 SYSTEM OUTLINE & COMPONENTS

The KB-3SD is an audio-only sub master station for use in KB-3MRD system. One or two KB-3SD's can be used in place of KB-3HRD sub master station with monitor.

SYSTEM LAYOUT

PACKAGE CONTENTS
- Audio only sub master station (KB-3SD)
- Packet of screws
- Installation & Operation Manual

COMPONENTS AVAILABLE

- At doors
  - KB-DAR

- Inside the rooms
  - KB-3MRD
  - KB-3HRD
  - KB-3SD

- Power supply
  - PS-2420, PS-2420D, PS-2420S, PS-2420UL

KB-DAR: Video door station.
KB-3MRD: Master station.
KB-3HRD: Sub station (2 ~ 4 pcs).
KB-3SD: Audio sub master station (max. 2 pcs).
FEATURES
1. Audio only sub station, capable of answering door, activating door strike, in place of master station with monitor.
2. ALL CALL button calls all inside stations with pre-tone and voice.
3. Handsfree, simultaneous reply for internal call.
4. Privacy setting.
5. Front volume control for two purposes: incoming chime and audio volume.
6. Self lit ALL CALL button, when the function is operated.
7. Single-gang wall mounting (bracket supplied).
1. Unlock and separate the mounting bracket. Attach the mounting bracket to single-gang box with 2 supplied screws.

2. Terminate wires on back terminals. Set for room # and impedance matching switches.

3. Aligning with the unit, insert the prongs of the bracket into the back chassis. Pull the unit downward until the unit locks.

**Single-gang surface mounting**

- Mounting bracket
- Single-gang box
- 2 screws (supplied)
- 83.5mm (3-5/16")

**Surface wall mounting**

- Mounting bracket
- Cable
- 2 screws (supplied)
- 83.5mm (3-5/16")

KB-3SD Back view

Short link for room # setting

Video impedance-matching switch
Wiring Precautions

1. Employ cable with polyethylene (PE) insulation and vinyl sheath. Coax-cable cannot be used.
   For other types, normal operation or max. communication distance cannot be guaranteed.
2. When using an existing cable other than 2-conductor parallel cable, terminate any unused pairs with a 120Ω resistor.

3. Do not include in & out wires in the same jacketed cable.
4. When system does not operate properly with existing cable, replace wires.
   Sub station with monitor or audio only CANNOT be connected in series.

- Room # setting

<table>
<thead>
<tr>
<th># 1</th>
<th># 2</th>
<th># 3</th>
<th># 4</th>
<th># 5</th>
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<tbody>
<tr>
<td></td>
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<td></td>
<td>ID2</td>
<td>ID2</td>
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<td>ID2</td>
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</tbody>
</table>

- Video impedance matching

SW1: Shipped in A position.

When system has more than 2 sub-master stations, put all the SW1 to B position except on farthest sub station.

Do not use any vacant terminal for junction purpose.
5 OPERATIONS

Receiving

• Door call

1. Momentarily depress CALL button.
2. Chime tone sounds, and call-in LED flashes.

<table>
<thead>
<tr>
<th>DOOR STATION</th>
<th>CHIME</th>
<th>LIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Door 1</td>
<td>4-tone</td>
<td>red LED</td>
</tr>
<tr>
<td>Door 2</td>
<td>2-tone</td>
<td>green LED</td>
</tr>
<tr>
<td>Door 3</td>
<td>8-tone</td>
<td>orange LED</td>
</tr>
</tbody>
</table>

Note: Call-in times out in approx. 30 sec. after called.

3. Lift handset to communicate.
4. When finished, hang up handset.

• Room call (by all call)

1. Pre-tone sounds, and button is flashing inside.
2. Lift handset to communicate.
3. When finished, hang up handset.
   ALL CALL light goes off.

• Room call (by selective call)

1. Pre-tone sounds. ALL CALL light flashes inside the button.
2. Voice is heard from speaker. Replay hands free.
   Or lift handset.
3. When the calling station replaces handset, the channel is
   automatically shut off. (no further operation is necessary)
   Or Replace handset.

• Privacy (Open voice mic. is cut on your station)

When your station is set for privacy, pick up handset to reply
to any call.

Setting for privacy

1. With handset on the hook, depress ALL CALL button
   for more than 2 sec.
2. Privacy mode is set. Green light is on inside ALL CALL
   button.
3. To release the privacy mode, depress ALL CALL button
   for more than 2 sec. with handset on the hook.
   The inside green light is off.

• Placing internal call (⚠ Selective call is not available.)

1. Lifting handset, momentarily depress ALL CALL button.
   (ALL CALL light flashes red inside)
2. Call by voice to the other inside stations.
   The light is steadily lit.
3. When finished, hang up handset.

Notes:
① When a red light is steadily lit in ALL CALL button or door call-in
   LED is lit, the other stations are using the system.
   Wait until the light goes off.
② Call ring tone may be fed back from speaker (Varies by system).
5 OPERATIONS (continued)

- Receiving a door call during internal call
  1. Chime tone is heard from handset.
     Door call-in LED flashes.
  2. Hang up both handsets to end internal call.
  3. Pick up handset at station to answer.
     Door call-in LED is lit.
  4. When finished, hang up handset.
     The LED goes off.

- Transferring a door call
  1. While communicating with door station, momentarily
don press ALL CALL button.
     Call other stations by voice.
  2. When call is acknowledged by the other station, replace
     handset.

- Receiving a transferred door call
  1. When called, pick up handset.
  2. Hang up at both stations, and pick up at the transferred
     station.
  3. When finished, hang up handset.

- Activating door strike
  1. While communicating with a door station, depress and
     hold down Door Release button.
  2. Door strike is activated at the communicating door.
     Hang up handset.

Adjust chime tone/receive volumes
- Chime tone
  With handset on the hook, press Vol. switch.
  Pressing repeatedly, chime volume changes from:
  STANDARD → HIGH → OFF

- Receive volume
  While communicating with door station or other room station,
  press Vol. switch.
  Pressing repeatedly, receive volume changes from:
  STANDARD → HIGH → VERY HIGH

Notes: Adjusting volume is done at individual station.
After power failure, etc., the volume is reset to initial STANDARD position.
6 TECHNICAL PRECAUTIONS

⚠️ Precautions on Operations
• KB-3SD wall-mounted may collect dust. Clean unit as needed.
• Replace KB-3SD handset on cradle securely. If called when handset is off-hook, inside audio can be heard at the door for approx. 2-1/2 minutes.

Cleaning
Clean the KB-3SD unit with a soft cloth dampened with neutral household cleanser. Never use any abrasive cleaner or cloth.

7 SPECIFICATIONS

<table>
<thead>
<tr>
<th>KB-3SD</th>
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<tbody>
<tr>
<td>• Power source:</td>
<td>22V DC (approx.), supplied by master station.</td>
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<tr>
<td>• Current consumption:</td>
<td>Max. 85mA. (approx.), 50mA (approx. in Standby).</td>
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<tr>
<td>• Communication:</td>
<td>Simultaneous with handset.</td>
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<tr>
<td>• Ambient temperature:</td>
<td>0°C ~ 40 °C (14°F ~ +104 °F)</td>
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<tr>
<td>• Housing:</td>
<td>Fire retardant ABS plastic.</td>
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<tr>
<td>• Dimensions:</td>
<td>100 (W) x 210 (H) x 73.5 (D) (mm).</td>
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<td>3-15/16&quot;(W) x 8-1/4&quot;(H) x 2-7/8&quot;(D).</td>
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<tr>
<td>• Weight:</td>
<td>Approx. 460g (1.01 lbs.).</td>
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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 two years after delivery to the ultimate user and will repair free of charge or replace at no charge, should it become defective up on 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, power surge, 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 unit. 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 will not provide compensation for any loss of or damage incurred by the breakdown or malfunction of its products during use, or for any consequent inconvenience or losses that may result.

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