AIPHONE

LEF Series
Communication, Paging, and Entry Security System

Commercial | Educational | Industrial | Residential

Features and Benefits

Mix and match a variety of stations
Up to 11 components can be intermixed to create the desired communication solution.

Complements CCTV system
Visitors can be seen with CCTV cameras while communicating via the intercom.

PTT and hands-free communication
Calls are made with push-to-talk operation and answered with hands-free communication.

LED and call-tone indicators
LED lights and call tones at the master station indicate which door/sub station is calling.

Selective door release
When visitors are confirmed, doors can be unlocked with the push of a button.

Selective Call and optional All Call
Provides the option to call one station at a time or to call all stations at once.

Indoor and outdoor speakers
Announcements can be heard throughout the facility where speakers are installed.

Reliable and designed to last
Customers can rely on this system for trouble-free use for years to come.

FLOOR 2

Easily add two-way communication where it is needed!

Applications

Offices

Schools

Factories

Homes

Components - Mix and match up to 11 door/master/sub stations *(requires 1 master station)*

Door Stations

LE-D
Audio Door Station
• Plastic chassis
• Surface mount
  4-3/4" H
  3-7/16" W
  1-1/8" D

LE-SS-1G
Audio Door Station
• Stainless steel panel
• Flush mount
  (fits 1-gang box)
  4-1/2" H
  2-3/4" W
  2-1/2" D (back box depth)

LE-DA
Audio Door Station
• Stainless steel cover
• Flush mount
  (fits 2-gang box)
  4-1/2" H
  4-9/16" W
  2-1/2" D (back box depth)

LE-SS/A
Audio Door Station
• Stainless steel panel
• Flush mount
  (fits 2-gang box)
  4-3/4" H
  4-3/4" W
  2-1/2" D (back box depth)

LE-SSR
Audio Door Station
• Red mushroom call button
• Stainless steel panel
• Flush mount
  (fits 2-gang box)
  4-3/4" H
  4-3/4" W
  2-1/2" D (back box depth)

LS-NVP/C
Audio Door Station
• Powder-coated steel panel
• Flush mount
  (fits 3-gang box)
  7-1/2" H
  5-1/2" W
  2-1/2" D (back box depth)

NOTE: *Aiphone recommends a 2-1/2" minimum back box depth for all flush mount door stations.*

Components - Mix and match up to 11 door/master/sub stations *(requires 1 master station)*

Master Stations

LEF-3
3-Call Audio Master Station
• Surface mount
  7-1/16" H
  5-5/8" W
  2-1/8" D

LEF-3L
3-Call Audio Master Station
• Selective door release
• Surface mount
  7-1/16" H
  5-5/8" W
  2-1/8" D

LEF-5
5-Call Audio Master Station
• Selective door release
• Surface mount
  8-1/8" H
  7-1/2" W
  2-3/16" D

LEF-10
10-Call Audio Master Station
• Selective door release
• Surface mount
  8-1/8" H
  7-1/2" W
  2-3/16" D

LEF-10S
10-Call Audio Master Station
• All Call button *(requires BG-10C)*
• Selective door release
• Surface mount
  8-1/8" H
  7-1/2" W
  2-3/16" D

LEF-3C
3-Call Audio Master Station
• All Call button *(requires BG-10C)*
• Semi-flush mount
  8-1/4" H
  6-1/8" W
  2" D (9/16" goes inside wall)

LEF-5C
5-Call Audio Master Station
• All Call button *(requires BG-10C)*
• Selective door release
• Semi-flush mount
  9-7/16" H
  7-7/8" W
  3" D (1-1/2" goes inside wall)

LEF-10C
10-Call Audio Master Station
• All Call button *(requires BG-10C)*
• Selective door release
• Semi-flush mount
  9-7/16" H
  7-7/8" W
  3" D (1-1/2" goes inside wall)

Sub Stations *(includes sub stations, speakers, and paging adaptors)*

LE-A
Audio Sub Station
• Surface mount
  6-1/4" H
  5-1/8" W
  2" D

LE-AN
Privacy Audio Sub Station
• Surface mount
• Privacy button
  6-1/4" H
  5-1/8" W
  2" D

LE-B
Audio Sub Station
• Semi-flush mount
  8-1/4" H
  6" W
  2" D (9/16" goes inside wall)

LE-BN
Privacy Audio Sub Station
• Semi-flush mount
• Privacy button
  8-1/4" H
  6" W
  2" D (9/16" goes inside wall)

LEF-1C
Audio Sub Master Station
(requires BG-10C)
• All Call button
• Semi-flush mount
  8-1/4" H
  6" W
  2" D (9/16" goes inside wall)

SP-20N/A
Ceiling Speaker
(requires NP-25V)
• 20Ω
• Indoor use
• Flush mount
  Diameter: 12-7/8"
  Baffle Diameter: 8"

BA-1
Paging Adaptor
(requires one amplifier per paging zone – use P30BGM, DMA2060, or DMA2120)
  4-1/8" H
  2-1/2" W
  1-1/2" D

Components

Power Supply *(required for system)*

PS-1225UL
12V DC, 2.5A
Power Supply
(required if using BG-10C, otherwise use PS-1208UL)

PS-1208UL
12V DC, 800mA
Power Supply

Accessories

KMB-45
45° Mullion
Mounting
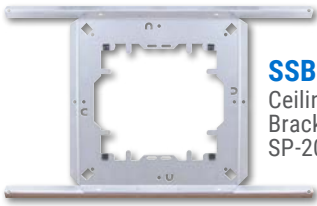Bracket for LE-D

SBX-1G
Surface
Mount Box
for LE-SS-1G

SBX-2G/A
Surface Mount
Box for LE-DA,
LE-SS/A, or LE-SSR

SBX-NVP/A
Surface Mount
Box for LS-NVP/C

SSB-2
Ceiling Support
Bracket for
SP-20N/A

EL-12S
Electric Door Strike
(requires PT-1210NA)

PT-1210NA
12V AC Transformer
(required for EL-12S)

RY-PA
Door Release
Relay

LT-1
20Ω-to-8Ω
Matching
Transformer

**LEW-5,
LEW-10,
LEW-10S**
Terminal Box

BG-10C
All Call, Chime, and Music Adaptor
*(required for LEF-10S, LEF-3C,
LEF-5C, LEF-10C, or LEF-1C)*

NP-25V
33µF, 25V
Non-Polarized
Capacitor

RY-AC/A
External
Signaling
Relay

Specifications

IMPORTANT VOLTAGE NOTICE: Use 12V DC voltage only! Connecting AC voltage to an LEF master station can damage the component.

Power Source	12V DC — use PS-1208UL (use PS-1225UL if installing BG-10C)
Communication	Push-to-talk (simplex)
Door Release	N/O dry contact, 24V DC, 1A or 240V AC, 300mA (one RY-PA required per door strike)
Wire Type	See wiring table below
Distance	Door Station or Sub Station to farthest Master Station: 650' (22 AWG) 1,600' (18 AWG)

LEF Standard Wiring	Wire #	Gauge	Conductor
LEF-3	822210	22 AWG	10-conductor, overall shield
LEF-5	822212	22 AWG	12-conductor, overall shield
LEF-10, LEF-10S	822220	22 AWG	20-conductor, overall shield
LEF-1C Wiring			
Homerun to BG-10C	822212	22 AWG	12-conductor, overall shield
Looped (max. 9 stations)	822220	22 AWG	20-conductor, overall shield
LEF-3C	822212	22 AWG	12-conductor, overall shield
LEF-5C	822215	22 AWG	15-conductor, overall shield
LEF-10C	822220	22 AWG	20-conductor, overall shield
BG-10C to Master Station	822220	22 AWG	20-conductor, overall shield

Sub/Door Station Wiring	Wire #	Gauge	Conductor
Homerun (22AWG)	822203	22 AWG	3-conductor, overall shield
Homerun (18AWG)	821803	18 AWG	3-conductor, overall shield
Looped (max. 4 stations)	822206	22 AWG	6-conductor, overall shield
Looped (max. 8 stations)	822210	22 AWG	10-conductor, overall shield
Door Release Wiring (K Terminals)			
LEF-3L	822212	22 AWG	12-conductor, overall shield
LEF-5, LEF-5C	822220	22 AWG	20-conductor, overall shield
LEF-10, LEF-10S, LEF-10C	822210 + 822210	22 AWG	20-conductor, overall shield + 10-conductor, overall shield