The LDF Loudspeaker Intercom and External Control System is designed for communication between a central master station and remote intercom stations. The LDF is an expanded feature version of the LAF-C/CA system. All information regarding installation other than the external control functions is included in the LAF-C/CA instructions. In addition to communication to remote locations, external devices can be activated, such as activating a CCTV camera when the associated sub station is selected, selectively controlling the corresponding door strike or maglock, or both.

**WIRING DIAGRAM: SYSTEM USED FOR CCTV CAMERA CALL-UP**

**Individual Components for System:**
- **LDF-nC**: Master station with selective contact output capability (20, 40)
- **LDF-nCA**: Master station with handset and selective contact output capability (20, 40)
- **LD-20AS**: 20-call Add-on Selector with selective output capability
- **LD-40AS**: 40-call Add-on Selector with selective output capability
- **RY-PA**: Relay for selective output (1 per station requiring external contact)
- **PS-1225UL**: 12V DC, 2.5A Power Supply
- **LE-series**: Any model sub station with LE-prefix
- **LS-NVP**: Vandal proof sub station (add SBX-NVP for surface mount)

**IMPORTANT:**
1. RY-PA must be used for each additional contact to isolate AC voltage from the intercom circuit.
2. Extra contact connections and L are on separate terminal block. LDF-40C/CA has two terminal blocks.

**LDF TERMINAL DEFINITIONS:**
- **R** Positive 12V DC input, and constant closure output
- **E** Negative
- **1~40** Station number
- **E** Common communication
- **R** Occupied LED control
- **L** Positive output for selective closure (Located on terminal block)

**NOTE:**
Leave jumper between E & - on master and subs when using 2 conductor homerun wiring IN SINGLE MASTER SYSTEM ONLY. Jumper BLK/GRN wires at LS-NVP in 2-wire system.

**CONSTANT CLOSURE:**
Normally Open contacts remain closed as long as master has sub station selected.

**DUAL FUNCTIONS FROM EACH CHANNEL:**
- Momentary closure #1
- Constant closure #1
- Momentary closure #2
- Constant closure #2
OPERATION:

* POWER SWITCH MUST BE ON FOR SYSTEM TO BE OPERABLE.

1. When a station calls in, press the selector button corresponding to the lit LED.
2. To speak to the person at the remote station, press the TALK button (or pick up the handset). Release TALK button to hear reply. Communication via the handset is VOX (voice actuated).
3. If the extra contacts are used as shown in the "camera call-up" diagram, activating a device that is to remain on for the duration of the call, the station's relay will stay activated as long as the selector button is depressed.
4. If the extra contacts are used as shown in the "selective door release" diagram, press the "door release" button while the selector button is depressed. This will activate the corresponding relay as long as the button is being held, which will activate the door release mechanism.
5. If both functions are used on a channel, the device connected to the "constant closure" relay will be on for the duration of the call. The "momentary closure" will only be active when the door release button is pressed.
6. When the conversation is completed, press the OFF button to the left of the station selector button. Hang up handset.

SPECIFICATIONS

- **Power Source:** 12V DC at master. Use PS-1225UL.
- **Commun. Output:** 800mW at 20 ohms
- **Communication:** Push-to-talk, release-to-listen (TALK button) or VOX handset at master. Hands free at sub station.
- **Calling:** Master to sub: By voice only
  Sub to master: Call button on sub activates tone and LED at master.
  LED remains lit for 20 seconds, and tone is momentary.
- **Wiring:** 2 conductors homerun to sub station (single-master system only), or loop multi-conductor with 2 common + 1 individual wire per sub station on wire run. Separate 2 conductor from RY-PA to external device.
  Shielded cable is recommended.
  Use Aiphone #822202 (2 cond., 22AWG) or #822203 (3 cond., 22AWG) wire.
- **Wiring Distance:** 650' with 22AWG; 1,600' with 18AWG.