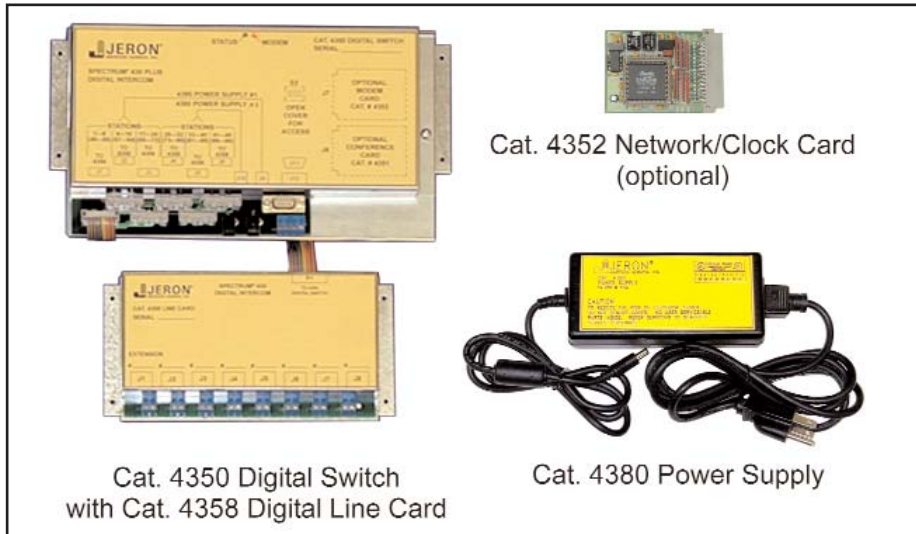


# Security Intercom System

## Central Exchange

Cat. 4350/4354/4356/4358/4352/4380



### DESCRIPTION

The Jeron 430 Central Exchange is a fully digital microprocessor based switching center employing PCM encoded voice and data for interference-free digital internal duplex communications for up to 48 intercom stations. Two Central exchanges may be networked for a capacity of 96 stations. Additional Central Exchanges may be networked for a total capacity of 1008 stations with additional equipment.

Using two, three or four digit push-button dialing sequences, high speed connections are instantaneous and delays such as dial tone are eliminated. Voice quality is natural, clear and crisp allowing the highest level of speech intelligibility for distances of up to 1.2 mi. (2 km) on a single, non-polar, twisted pair for each digital station and a single, shielded twisted pair for each analog station.

The 430 Central Exchange provides 30 private, simultaneous speech and data crosspoint paths for call connection. A pair of networked

Exchanges may be configured for 100% non-blocking of up to 60 stations.

Programming changes to system configuration may be performed on-line from any Master Station without interruption to calls in progress or control functions. Cat. 4690 Administrative Program Software allows centralized programming from a PC. Factory default settings for all programmable system functions simplify initial installation procedures.

All programmable system data including user changes are retained in solid state, non-volatile memory devices assuring preservation of data in the event of power failure.

Model 4350 Digital Switch is self-contained in a compact surface mount metal enclosure and has provision for connecting up to six plug-in Cat. 4358 Digital Line Cards/Cat. 4356 Analog Line Cards/Cat. 4354 Digital/Analog Line Cards (48 station lines), two Cat. 4380 Power supply units, one Conference Card and one Modem Card. An RS-232 serial data port

provides bidirectional interface for GUI, security integration or VDT. The optional Cat. 4351 Conference Card provides conference capability for up to five members in the hands-free loudspeaking mode. A maximum of ten simultaneous conferences are supported with a total maximum of 32 members.

Optional Cat. 4352 Network/Clock Cards are used to network two Cat. 4350 Digital Switches for a capacity up to 96 stations. The Cat. 4355 Network Hub can be used to link up to seven Cat. 4350 Digital Switches equipped with the optional Cat. 4352 Network/Clock Cards for a capacity up to 336 stations. Additional Network Hubs can be used to link additional Central Exchanges for a total of 1008 stations. Central Exchanges may be directly linked by two twisted pair cables up to 1000 ft. (308 m) or by fiber optic transceivers.

Each Cat. 4358/4356/4354 Line Card Module has a capacity of 8 station lines and is equipped with an 18 inch flat ribbon cable for attachment to the Digital Switch. Station lines are terminated on plug-in screw terminal blocks and protected for overcurrent and surge conditions. Cat. 4359 Digital Line Card extends distance to 2.4 mi. (4 km) when stations are equipped with -EXT option. Any station line may be replaced with a fiber optic line by employing Cat. 4375 Interfaces and fiber optic transceivers.

Cat. 4380 Power supply has a capacity of 24 stations, is plug-in and has internal overcurrent protection.

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# Central Exchange

## Cat. 4350/4354/4356/4358/4352/4380

### FEATURES & FUNCTIONS

- ☐ Two-way Handsfree Loudspeaking
- ☐ Private Full Duplex Handset Communication
- ☐ LCD Display of: Called and Caller ID and Name/Number Directory
- ☐ Door Control
- ☐ Manual Speech Control
- ☐ Mute
- ☐ Tone Signals
- ☐ Digital Volume Keys
- ☐ Privacy
- ☐ Speed Dial
- ☐ Redial
- ☐ Call Forward-No Answer
- ☐ Call Forward
- ☐ Call Transfer
- ☐ Hold & Consult
- ☐ Hold
- ☐ Group Call
- ☐ Reply
- ☐ All-call
- ☐ Emergency All-call
- ☐ Pre-empt and Restore
- ☐ Message Waiting
- ☐ Camp-on-Busy
- ☐ Partitioning
- ☐ 2, 3 or 4 Digit Dialing Sequences
- ☐ Standard and Admin Type Calls
- ☐ Interfaces: PBX, 2-way Radio, Radio Page, Overhead Page, Audio Program Distribution
- ☐ Fiber Optic
- ☐ RS-232 Port
- ☐ Exchange Networking

### TECHNICAL DATA

#### 4350 DIGITAL SWITCH

##### Enclosure:

- Plated steel

##### Mounting:

- Surface with supplied brackets

##### Dimensions (H x W x D):

- 1.6 x 11.5 x 6.3 in.  
(4.1 x 29.2 x 15.9 cm)

##### Capacity:

- Six 4358 line card modules
- 48 station lines
- 30 links  
(simultaneous speech paths)

##### Indicators:

- System status, red LED;  
modem, green LED

##### Operating Voltage:

- 24 VDC nominal

##### Power Requirements:

- 100 W 48 station capacity

##### Ambient Temperature:

- 32° to 104° F  
(0° to 40° C)

##### Termination:

- J1—J6: plug-in line card header (6)
- J9—J10: plug-in power supply jacks (2)
- J11: DB-9 F RS-232 serial data
- J12: Plug-in modem screw terminal block

#### 4358 DIGITAL LINE CARD MODULE

##### Dimensions (H x W x D):

- 2.0 x 8.5 x 4.3 in.  
(5 x 21.6 x 11 cm)

##### Capacity:

- 8 station lines

##### Ambient Temperature:

- 32° to 104° F  
(0° to 40° C)

##### Line Specifications:

- Attenuation:  
24 dB @ 160 kb/s maximum
- Loop Resistance:  
170 Ohm Maximum
- Distance:  
4358: 1.2 mi. (2 km)  
4359: 2.4 mi. (4 km)
- Cable: one twisted pair,  
non-shielded
- AC Output: 1.2 Vpp maximum
- Format: (2B+D) compatible to  
ISDN basic rate
- Line Code: biphasic with  
differential encoding

##### Termination:

- To 4350: 18" plug-in

cable (furnished)

- Field: plug-in screw terminal blocks (8)

##### Standards Compliance:

- Overvoltage and Current:  
CCITT K20 and  
BELLCORE TR-NWT-000974

#### 4356 ANALOG LINE CARD MODULE

##### Dimensions (H x W x D):

- 4.38 x 10.75 x 2.00 in.  
(11.11 x 27.31 x 5.08 cm.)

##### Field connections:

- Eight (8), three-circuit plug-in screw terminal blocks

##### Central Control connection:

- 16-pin polarized with ribbon cable

##### Operating voltage:

- 24VDC @ 75mA

##### Audio Power (45-Ohm Speaker):

- Eight (8), 1W channels;  
8W peak/4356 line card
- Frequency response: 150 Hz to  
12,000 Hz
- Total Harmonic Distortion (THD):  
Less than 5% at rated output
- S/N Ratio: Greater than 60dB at  
rated output

##### Temperature Range:

- 50-104° F (10-40° C)

##### Humidity:

- 88% @ 32° C

##### Certification:

- UL Listed 813
- C-UL Canadian Standard C22.2  
NO. 1-98

#### 4352 NETWORK/CLOCK CARD (optional)

##### Dimensions (L x W):

- 3.00 x 2.12 in.  
(7.6 x 5.4 cm)

#### 4380 POWER SUPPLY

##### Dimensions (H x W x D):

- 6.5 x 3.25 x 2.12 in.  
(16.5 x 8.3 x 5.4 cm)

##### Capacity:

- 24 stations

##### Input Rating:

- 120 - 240 VAC @ 1.5 A  
50-60 Hz

##### Output:

- 24 VDC @ 2.2 A

##### Termination:

- DC power plug to 4350  
IEC line cord receptacle

##### Certification:

- Listed UL 813
- C-UL C22.2 No. 1-98

PRODUCT SUBJECT TO CHANGE WITHOUT NOTIFICATION