Linear SECURITY ®

DUAL 824 SUPERVISED HYBRID SECURITY CONTROL AND HARDWIRE KEYPAD

A built-in superhet receiver reduces installation time.

- 24 supervised zones and eight hardwire loops
- Up to 1,500 foot transmission range
- Installation and programming ease
- Reduced potential for false alarming
- Two valuable plug-in voice options
- Industry's most extensive line of transmitters

Across the security industry, the traditional definition of a hybrid system has been one mixing hardware and wireless components and requiring the addition and installation of a radio receiver. With the DUAL 824, Linear officially breaks with tradition by offering a hybrid control and keypad that includes its own receiver. Not just any radio, the DUAL 824's built-in model is a superheterodyne type with a measured range of 1,500 feet. Because the receiver is located inside the control panel cabinet, installers do not have to take the time to find a separate place to mount it.

User controls for the DUAL 824 are centralized on an easy-to-read, backlighted, full-function keypad with numeric indicators for each of 24 supervised wireless sensor zones and up to eight hardwire loops. The DUAL 824 supports the addition of a second hardwire keypad. A built-in piezo generates alert and alarm tones. The DUAL 824's control panel is housed in a high-impact plastic box, along with the receiver and a rechargeable back-up battery that features 40 hours of standby power. Inside, there is plenty of room for wire and the battery.

The DUAL 824 has six operating modes and can be configured for one-button operation, for eight user codes (including duress), and to the SIA false alarm standard. Installation and programming are made easy by Linear's RA-2400 remote access software, Linear's quick-learn transmitters, plus default settings that eliminate many steps. Two optional plug-in boards add valuable communications capabilities, including voice prompts, touch-tone telephone access, and a two-way voice link for central station monitoring*. Compatibility with industry's widest line of transmitters and sensors (Linear's supervised DXS series and non-supervised DX series) means that systems can be easily tailored by site and by need. Available models include door/windows, smokes, glass breaks, bill traps, keypads, and single and multi-channel personal transmitters in a variety of styles (handhelds, pendants, minis, and wristbands).

The DUAL 824, with its wealth of capabilities and its built-in 1,500 foot range receiver, is the new definition of hybrid security controls.

*Requires addition of RSM-2 speaker modules.

A hybrid redefined by the convenience of a built-in radio.

Features

- 24 supervised zones with up to eight hardwire loops.
- 12 VDC output to power most popular security devices.
- High impact plastic control panel cabinet — easy to mount, with plenty of room for wire and battery.
- Easy-to-read, backlighted control station.
- Supports two supervised hardwire control stations.
- Superheterodyne receiver is integral with panel.
- Rechargeable back-up battery, with 40 hours of standby power.
- UL listed.

Available Models

MODEL	PRODUCT NUMBER	DESCRIPTION
DUAL 824	SSC00056	DUAL 824 Control with Hardwire Keypad
DUAL 824KP	AAE00451	Additional Hardwire Keypad for Dual 824
VB-2	AAE00365	Voice Prompt/Telephone Access/2-Way Voice Board
VB-3	AAE00376	Voice Prompt/Telephone Access Board
RSM-2	CAE00191	Speaker/Mic Kit (required with VB-2 and VB-3)

Compatible Transmitters

MODEL	PRODUCT NUMBER	DESCRIPTION
DXT-61A	SNT00380A	1-Button, 1-Channel Pendant
DXT-41	SNT00381	1-Button, 1-Channel Mini
DXT-42	SNT00382	2-Button, 3-Channel Mini
DXT-21	SNT00376	2-Button, 1-Channel Handheld
DXT-23	SNT00377	3-Button, 4-Channel Handheld
DXS-21	SST00094	Supervised 2-Button, 1-Channel Handheld
DXS-23	SST00095	Supervised 3-Button, 4-Channel Handheld
DXS-31	SST00073	Supervised Door/Window
DXS-32	SST00100	Supervised Mini Door/Window
DXS-54	SST00074	Supervised Passive Infrared Motion Detector
DXS-62	SNT00090	Supervised Waterproof 1-Button Wristband/Pendant
DXS-63	SNT00091	Supervised Waterproof 2-Button Wristband/Pendant
DXS-72	SST00076	Supervised Photoelectric Smoke Detector
DXS-81	SST00078	Supervised Bill Trap
DXS-91	SSA00015	Supervised Glass Break
DXS-10	SST00079	Supervised Wireless Keypad

Specifications

ELECTRICAL

Primary Operating Voltage: 120 VAC, 60 Hz

Transformer: UL listed, Class II, plug-in, 16 VAC,1.25 A (supplied)

Back-Up Battery: 4.0 Amp-hour, 12 VDC

RADIO RECEIVER

Type: superheterodyne

Operating Frequency: 315 MHz ±125 KHz

Sensitivity: -100 dB minimum

Antenna Type: counterpoised bipolar design

Compatible RF Formats: Linear DX, DXS

CONTROL PANEL

Radio Zones: 24 supervised

Hardwire Loops: eight supervised

PAC Codes: eight total, including Duress, Installer, Paging, and five User

Operating Modes: Off, Chime, Home, Home Instant,Away, and Test

Sensor Types: 11 including Automation, Emergency, Panic, Fire, Perimeter, Exit/Entry,Interior, Chime Only,Arm/Disarm A, Arm/Disarm B, and Environmental

Auxiliary Outputs: Automation, External Console Speaker, and External Alarm Siren

Memory: EEPROM retains system programming during total power failure

Operating Temperature: 32 to 120°F (0 to 49°C)

COMMUNICATOR

Dialing: DTMF or pulse dialing

Reporting Formats: 4 x 2, 20 PPS, or Ademco Contact ID

Telephone Numbers: primary, secondary, and supervisory (paging); Reports: full zone reports, console reports, general system reports, forced arming, and duress PAC
Note: paging application uses the supervisory telephone number to access the pager

Auxiliary Power: 12 VDC@ 1 amp maximum for auxiliary devices

HARDWIRE KEYPAD

Indicators: 24 red zone condition indicators, plus power on, radio, battery, ready, armed, trouble, and five system operating mode indicators

Built-in Audible: Piezo device for alarm tone* keypad and status prompts

Keypad Wiring:

Standard Keypad Configuration: four wires standard for +, -, data in, data out

Optional Keypad Configuration:

When using optional VB-3 — six wires, including +, -, data in, data out, speaker +, speaker -

When using optional VB-2 — eight wires, including +, -, data in, data out, speaker +, speaker -, mic +, mic -

Note: microphone wire must be twisted shielded pair.

Operating Temperature: 32 to 120°F (0 to 49°C)

PHYSICAL

Control Panel

Dimensions: 11.5 in L x 4 in W x 12.5 in H (292 x 102 x 318 mm)

Weight: 4 lbs (1.81 kg)

Hardwire Keypad

Dimensions: 6.62 in W x 4.50 in H x 1.38 in D (168 x 114 x 35 mm)

Weight: 2 lbs (0.91 kg)

ACCESSORIES

VB-3: voice board with voice prompts and remote telephone access capabilities

Remote Telephone Access Modes: from remote touch-tone telephone and from local touch-tone telephone

Telephone Access Methods:

From A Remote Telephone—dial, redial, enter PAC code plus #; console will report system mode, alarms, and trouble; user may change system mode of operation

From A Local Phone—press # # #, enter PAC code plus #; console will report system mode, alarms, and trouble; user may change system mode of operation

Voice Prompt Vocabulary: 32 words, including key system words, modes, zone numbers, conditions (i.e.,"System Armed, Away Mode")

VB-2: voice board with voice prompts and remote telephone access capabilities same as VB-3, plus 2-way voice

Two-Way Voice Modes: a total of three — listen only, two-way manual, and full duplex

Two-Way Voice Switching Modes: listen only — none; two-way manual — press 1 to talk; press 3 to listen, press 9 to disconnect

RSM-2: speaker/microphone kit that mounts inside DUAL 824KP; required when using the VB-2 or VB-3 options; includes high quality speaker, condenser, microphone, all hardware, and hook-up wire

Specifications subject to change without notice.

*Not to be considered as a substitute for an alarm sounder.

Linear