



ELK
PRODUCTS

M1 Gold & M1EZ8 Controls

SECURITY • ENERGY & TASK MANAGEMENT • LIGHTING
AUDIO & VIDEO • HOME & BUSINESS CONTROL





M1 GOLD

Security & Automation Control

M1 Gold is commonly referred to as a Cross Platform® control due to the fact that it can be networked with other industry standard systems. A 500+ word vocabulary pleasantly announces system status, configurable in any sequence, to alleviate user intimidation. The built-in voice dialer can call up to 8 phone numbers and alert owners of status changes; such as, critical temperature levels, water leaks, children arriving home from school, etc. Built-in telephone remote control allows you to control temperature settings, water heater, garage door, lighting, and sprinklers plus arming/disarming system and more; by simply picking up the phone – any phone. Optional Ethernet port allows for programming, monitoring, and control over LAN or Internet without the need for a dedicated “24/7” server. Integrators and Installers will value the flash memory firmware, RS-232 serial port, Ethernet connectivity option, and PC programming in English text. The LCD keypads have programmable task keys, a navigation key to access system status and automation tasks, plus large character display.



SECURITY • ENERGY & TASK MANAGEMENT • LIGHTING AUDIO & VIDEO • HOME & BUSINESS CONTROL

M1 GOLD FEATURES:

- Flash Memory - Allows field updates to firmware
- 16 On-board Input Zones, expandable to 208, analog supported
- Wireless Capability, up to 144 zones with ELK Wireless Receiver
- 13 On-Board Outputs: 1 voice driver/siren, 1 siren driver/voltage, 1 form C relay, and 10 low current (50 mA)
- Two Way Listen-in capability:
 - For Central Station alarm verification
 - For User, activated through telephone remote control
- Voice announcement of alarms, zone descriptions, status, etc.
 - 500+Word / Phrase Vocabulary
 - Link up to 6 Words / Phrases per announcement
 - 10 custom recordable Words / Phrases
- Built-in Telephone Remote makes any phone a keypad
- Integrated Voice Dialer uses vocabulary or custom word / phrases
- Phone Number Capacity: 8
- On-Board Serial Port, expandable to 8 Serial Ports
- Plug-in Terminals make service and pre-wires a snap!
- Installer Telephone (buttset) Test feature
- Master Power Switch and Low Battery Disconnect
- Multiple Auxiliary Power Terminals
- Built-in Volt and Current Meter
- Time/Date stamped 512 Event History Log
- Menu driven keypad programming - No Manual Required!
- Supports 4 wire (any zone) and 2 wire (zone 16) smoke detectors
- Includes Fire Alarm Verification Routine
- Can be partitioned into 8 separate areas and accounts
- 199 User Codes (4 or 6 digit) with assignable authorities
- Arm levels: Away, Stay, Stay Instant, Nite, Nite Instant, Vacation
- Hardware “Watchdog” and Nonvolatile EEPROM Memory
- Telephone Line Fault with alarm output
- True Modem for fast reliable upload/download
- Digital Dialer: SIA, Contact ID, 4 + 2, and Pager (8 phone numbers)
- ElkRP PC Programming Software includes conflict resolution
- Powerful “Whenever/And/Then” RULES Programming
- Rules utilize easy to understand text based references
- Control Lighting using on-board 2-way Power Line Carrier (PLC) or RS-232 Serial Port for On,Off, Pre-set Dim, All On, All Off, and Scenes/Commands
- Astronomical Clock for Sunset/Sunrise calculation and activation
- Transmit and Receive Custom Serial ASCII strings
- Issue Commands to Distributed Audio Systems (Russound, Nuvo, Proficient)
- Read Temperature Sensors and communicate with up to 16 Thermostats
- Turn on Tasks, Lights, and Outputs via Keypad, Touchscreen, and PC browser
- Interfaces with a broad range of other systems
- Heavy duty - 2.5 Amp power supply with 1 Amp continuous
- Dynamic Battery Test, Zone Voltage Display, and Voltmeter
- PTC (fuseless) resettable overload protection
- UL Listed for Residential Burg & Fire, Commercial Burg, and Home Health Care



M1EZ8

Economical Security & Automation Control

M1EZ8 offers an economical solution for installations not requiring the voice and telephone remote control capability of the M1 Gold. Built on the same software architecture as M1 Gold, the possibilities for expansion, networking with other systems, and option for programming and control over the internet make M1EZ8 an exceptional value. The chart below outlines the key differences between the M1 Gold and M1EZ8.



Key Differences Between M1 Gold and M1EZ8

M1 Gold	M1EZ8
Voice Capability <ul style="list-style-type: none"> • Voice Announcements • Built-in Telephone Remote Control • Integrated Voice Dialer 	No Voice Capability
16 On-board Input Zones, expandable to 208	8 On-board Input Zones, expandable to 200
13 On-board Outputs, expandable to 205 <ul style="list-style-type: none"> • 1 voice driver/siren • 1 siren driver/voltage • 1 form "C" relay • 10 low current voltage (50 mA) 	12 On-board Outputs, expandable to 204 <ul style="list-style-type: none"> • 1 siren driver/voltage • 1 form C relay • 10 low current voltage (10 mA)
On-Board Serial Port	Serial Port available with addition of ELK-M1EZ8MSI Main Serial Port Interface
Plug-In Terminals	Non-removable screw terminals
4 Power Terminals - 3 Auxiliary, 1 Switched Smoke	2 Power Terminals, 1 Auxiliary, 1 Switched Smoke
Master Power Switch and Low Battery Disconnect	Master Power Switch and Low Battery Disconnect switch available with addition of ELK-965
Zone Voltage Display and Volt/Current Meter	Zone Voltage Display and Voltmeter
Two Way Listen-In Capability: <ul style="list-style-type: none"> • For Central Station Alarm Verification • User activated through telephone remote control 	Two Way Listen-In Capability: <ul style="list-style-type: none"> • For Central Station Alarm Verification Only

Available Options for M1 Gold & M1EZ8 Controls:

- Ethernet Port
- Temperature Sensors
- Door Entry Control
- Serial Port Expanders
- Input/Output Expanders
- Two-Way Listen-In Kit
- Wireless Interface
- Audio/Video Interface

M1 Gold System Packages



ELK-M1GSYS4

M1 Gold Control Kit with Enclosure

This "Ready to Install" value package includes:

- M1 Gold Control Board
- **ELK-M1KP LCD Keypad**
- ELK-SWB14 Enclosure
- ELK-1280 8Ah Battery
- ELK-TRG1640 AC Transformer
- ELK-73 Echo Paintable Interior Speaker
- ELK-952 Surge Protector
- ELK-RJSET Telco Jack & Cord



ELK-M1GSYS4S

M1 Gold Control Kit with Enclosure

This "Ready to Install" value package includes:

- M1 Gold Control Board
- **ELK-M1KP2 LCD Keypad**
- ELK-SWB14 Enclosure
- ELK-1280 8Ah Battery
- ELK-TRG1640 AC Transformer
- ELK-73 Echo Paintable Interior Speaker
- ELK-952 Surge Protector
- ELK-RJSET Telco Jack & Cord



ELK-M1GK

M1 Gold Control Kit without Enclosure

This "Ready to Install" value package includes:

- M1 Gold Control Board
- **ELK-M1KP LCD Keypad**
- ELK-1280 8Ah Battery
- ELK-TRG1640 AC Transformer
- ELK-73 Echo Paintable Interior Speaker
- ELK-952 Surge Protector
- ELK-RJSET Telco Jack & Cord



ELK-M1GKS

M1 Gold Control Kit without Enclosure

This "Ready to Install" value package includes:

- M1 Gold Control Board
- **ELK-M1KP2 LCD Keypad**
- ELK-1280 8Ah Battery
- ELK-TRG1640 AC Transformer
- ELK-73 Echo Paintable Interior Speaker
- ELK-952 Surge Protector
- ELK-RJSET Telco Jack & Cord



ELK-M1GSYS3

M1 Gold Control Kit with Enclosure (No Keypad)

This "Ready to Install" value package includes:

- M1 Gold Control Board
- ELK-SWB14 Enclosure
- ELK-1280 8Ah Battery
- ELK-TRG1640 AC Transformer
- ELK-73 Echo Paintable Interior Speaker
- ELK-952 Surge Protector
- ELK-RJSET Telco Jack & Cord

M1EZ8 System Packages

M1EZ8 Control Kits With Enclosure



ELK-M1EZ8KB Pictured

ELK-M1EZ8KB

This "ready to install" value package includes: M1EZ8 Control, UB12 metal enclosure, M1KP LCD Keypad, ELK-1250 5Ah battery, ELK-RJSET, SP35 speaker, plus Lifetime warranted ELK-TRG1640 transformer.

ELK-M1EZ8KBS

This "ready to install" value package includes: M1EZ8 Control, UB12 metal enclosure, M1KP2 LCD Keypad, ELK-1250 5Ah battery, ELK-RJSET, SP35 speaker, plus Lifetime warranted ELK-TRG1640 transformer.

M1EZ8 Control Kits Without Enclosure



ELK-M1EZ8KS Pictured

ELK-M1EZ8K

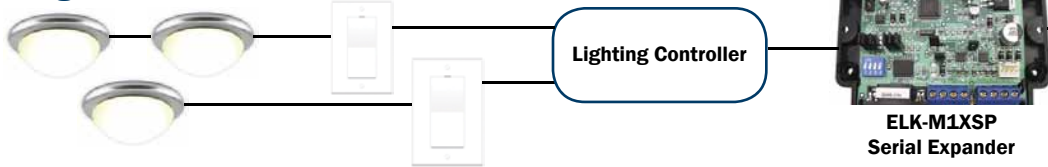
This "ready to install" value package includes: M1EZ8 Control, M1KP LCD Keypad, ELK-1250 5Ah battery, ELK-RJSET, SP35 speaker, plus Lifetime warranted ELK-TRG1640 transformer.

ELK-M1EZ8KS

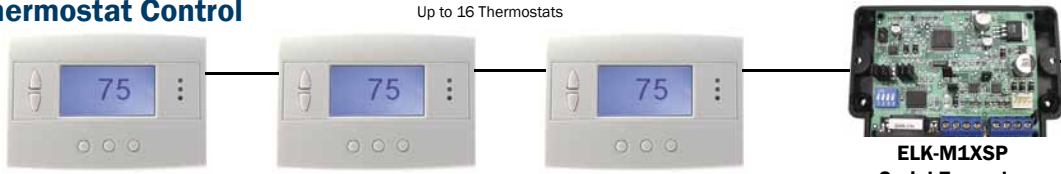
This "ready to install" value package includes: M1EZ8 Control, M1KP2 LCD Keypad, ELK-1250 5Ah battery, ELK-RJSET, SP35 speaker, plus Lifetime warranted ELK-TRG1640 transformer.

Integration & Expansion at a Glance

Lighting Control



Thermostat Control



Wireless Expansion

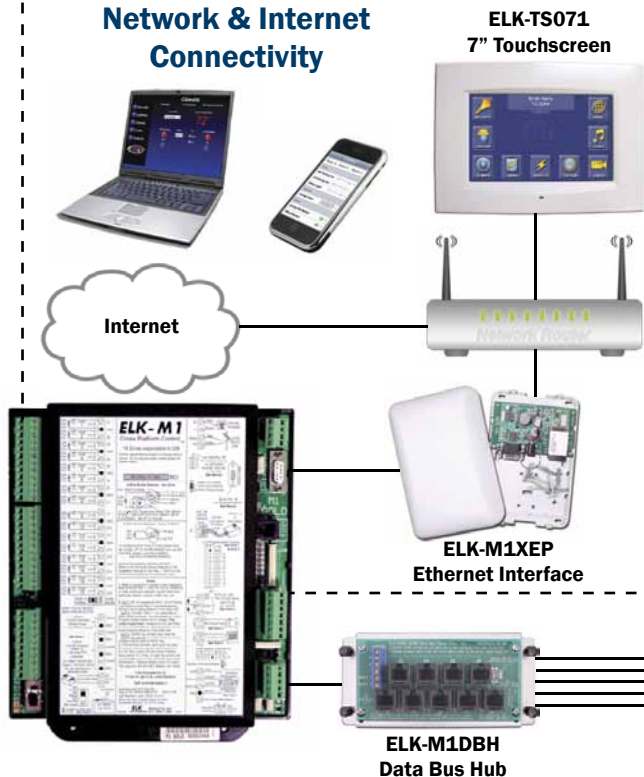
Compatible transmitters can be purchased through your local distributor. See wireless receiver specifications for information on compatible transmitters



Output Expansion



Network & Internet Connectivity



For more details on integration and expansion, including manuals and hookup diagrams, please visit www.elkproducts.com

User Interfaces



ELK-M1KP
Green LCD Display



ELK-M1KPB
Blue LCD Display

LCD Keypad

The ELK-M1KP is an addressable LCD Keypad for M1 Controls. It features a 32 character, backlit display with adjustable intensity and extra large character fonts, improving readability. Six (6) function ("F") keys can be programmed to contact emergency services or perform tasks; such as, controlling lights, watering the lawn, closing or opening the garage door, etc. The ELK navigation keys easily guide you through the full list of automation tasks, programming, systems diagnostics, and more. An optional plug-in proximity reader is available allowing prox card or fob arming, disarming, door strike control, etc. The fold down door features magnetic closure and can be completely removed, if desired.

- Backlit, Large Character LCD Display, 16 x 2 lines
- Six (6) programmable function keys
- Unique Menu Navigation/Direction keys
- Adjustable volume for tones/chime
- Accepts Plug-in Proximity Reader (ELK-M1PR) or "External" 26 bit Wiegand Prox Reader
- Built-in Temperature Sensor
- Input for 1 Supervised Zone
- One Programmable "Switched Positive" Voltage Output
- Exit, Stay, Chime, and Bypass Keys
- Programmable display of time, date, & temperature
- Displays system diagnostics and settings
- Input Connection: 6 Pin Plug-In "Flying Lead" Connector (Included)
- Operating Voltage: 13.8 Volts DC
- Current Draw: 40-50mA Idle (low backlight, sound silent) 160mA fully active
- Color: Glacier White
- Size: 6.875" x 5.25" x 1.375"

Connect any 26-bit Wiegand External Proximity Reader to the ELK-M1KP or ELK-M1KPB using the **ELK-W035A** wiring harness (not included).

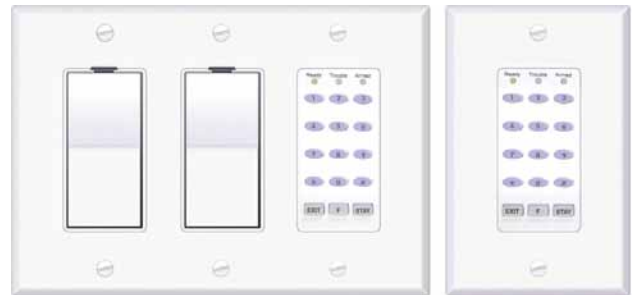


ELK-M1KPAS

Arming Station

Small, economical, arm/disarm station for M1 Controls fits into single gang box and utilizes a standard decorator style faceplate (not included). Displays basic system status with 3 LEDs: Green "Ready", Yellow "Trouble", and Red "Armed". The 12 button keypad is backlit with blue LEDs and has quick arm keys for "Exit" and "Stay". The M1KPAS also provides access to six (6) programmable function operations by pressing the "F" (Function) key followed by one of the keys (1 thru 6).

- Blue Backlit Keys
- Instant Activation of 6 Tasks
- Built-in Piezo Sounder
- Quick Arm Exit & Stay Keys
- LED Status Indication
- Connection: 4 Pin Plug-in "Flying Lead" Connector (Included)
- Color: White
- Operating Voltage: 13.8VDC
- Size: 1.81" x 2.75" x 1.13"



Keypad Feature Comparison

	ELK-M1KP	ELK-M1KPB	ELK-M1KPAS
Physical Dimensions	6.87"W x 5.25"H x 1.32"D	6.87"W x 5.25"H x 1.32"D	1.81"W x 2.75"H x 1"D
Door Cover	Yes	Yes	No
Zone Input	Yes (1)	Yes (1)	No
Programmable Output	Yes (1)	Yes (1)	No
Optional 26-Bit Wiegand Proximity Reader	Yes- Internal & External	Yes- Internal & External	No
Internal Temp Sensor	Yes	Yes	No
Function "F" Keys	6	6	6- Press "F" Key, then 1-6
LCD Backlighting	Green	Blue	N/A
Key Backlighting	Amber	Amber	Blue
Mounting Options	Surface Mount Only	Surface Mount Only	Mounts in Std. Electrical Box



ELK-M1KP2

Low Profile LCD Keypad

The ELK-M1KP2 is a low profile, addressable LCD Keypad for M1 Controls. It features a 32 character blue/white backlighted display, blue lighted keys, 4 programmable function keys, along with the ELK menu navigation keys. It may also be recessed, “flush” mounted, using a separately purchased back box kit (ELK-M1BBK2). The M1KP2 is compatible with “external” 26 bit Wiegand proximity readers, allowing cards or fobs to be used for arming, disarming, or limited door strike control, etc.

- Blue/white Backlighted Hi-Contrast LCD Display
- Four (4) Programmable Function Keys
- Unique Menu Navigation/Direction Keys
- Tones/Chime
- Accepts “External” 26 bit Wiegand Prox Reader
- Input for 1 Supervised Zone
- One Programmable “Switched Positive” Voltage Output
- Exit, Stay, Chime, and Bypass Keys
- Programmable display of time & date
- Displays system diagnostics and settings
- Surface mounts to a standard 1 or 2 gang electrical box
- Optional recessed, “flush” mount, kit available (ELK-M1BBK2)
- Connection: 6 Pin Plug-in "Flying Lead" Connector (Included)
- Color: White
- Operating Voltage: 13.8VDC
- Current Draw: 40-50 mA Idle (low back light level, sounder silent) 160 mA Fully Active (max. back light & sounder active)
- Size: 4.658" x 5.5" x .95" (.375" D with recess mount)
- Optional ELK-M1BBK2 Recess Back Box Size: 4.312" x 5.375" x 1"

Connect any 26-bit Wiegand External Proximity Reader to the ELK-M1KP2 using the **ELK-W039A** wiring harness (not included).



ELK-M1KP3

LCD Keypad

The ELK-M1KP3 is an addressable, surface mount LCD Keypad for M1 Controls. It features a 32 character blue/white backlighted display, blue lighted keys, 4 programmable function keys, along with the ELK menu navigation keys. The M1KP3 is compatible with “external” 26 bit Wiegand proximity readers, allowing cards or fobs to be used for arming, disarming, or limited door strike control, etc. It features a hinged door over the keys.

- Blue/white Backlighted Hi-Contrast LCD Display
- Four (4) Programmable Function Keys
- Unique Menu Navigation/Direction Keys
- Tones/Chime
- Accepts “External” 26 bit Wiegand Prox Reader
- Input for 1 Supervised Zone
- One Programmable “Switched Positive” Voltage Output
- Exit, Stay, Chime, and Bypass Keys
- Programmable display of time & date
- Displays system diagnostics and settings
- Surface mount only without electrical box
- Connection: 6 Pin Plug-in "Flying Lead" Connector (Included)
- Color: White
- Operating Voltage: 13.8VDC
- Current Draw: 40-50 mA Idle (low back light level, sounder silent) 160 mA Fully Active (max. back light & sounder active)
- Size: 3.97" x 5.425" x 1.19"

Connect any 26-bit Wiegand External Proximity Reader to the ELK-M1KP3 using the **ELK-W039A** wiring harness (not included).

Keypad Feature Comparison

	M1KP2	M1KP3
Physical Dimensions	4.65"W x 5.5"H x 1.32"D	3.97"W x 5.43"H x 1.19"D
Door Cover	No	Yes
Zone Input	Yes (1)	Yes (1)
Programmable Output	Yes (1)	Yes (1)
Optional 26-Bit Wiegand Proximity Reader	Yes- External Only	Yes- External Only
Internal Temp Sensor	No	No
Function “F” Keys	4	4
LCD Backlighting	Blue	Blue
Key Backlighting	Blue	Blue
Mounting Options	Surface or Flush Mount*	Surface Mount Only

*requires M1BBK2

ELK-RM

Remote Management Software (RMS)

Consumer Software Designed for PCs and Elk Touchscreens*



RMS provides a powerful graphic interface to the M1Gold and M1EZ8 controls. This redesigned software allows control of many aspects of the system including security, lighting, climate, tasks, outputs, audio** and more. RMS also provides access to video imagery from certain brands of IP accessible cameras and DVRs, weather information, and links to frequently visited websites.

The software connects to an M1Gold or M1EZ8 control through the main serial port or over a local network (network connectivity requires the ELK-M1XEP Ethernet Interface). Software setup is a snap with the convenient synchronize feature, which automatically populates each page based on system programming. RMS can be customized to the installation by hiding unused categories.

System Requirements:

- Supported Operating Systems (PC): Windows 98SE, ME, 2000 (Service Pack 3) , XP Home & Pro (Service Pack 2), or Server 2003
- Computing Device running Microsoft .NET 2.0 Framework
- Total Disk Space Requirements: 285 MB (280 MB for .NET 2.0 and 5 MB for ElkRM)
- Memory Requirements: Minimum 64 MB RAM
- Screen Resolution: 800 x 480

- * RMS included on ELK Touchscreens
- ** Distributed Audio partners currently include: Russound, Nuvo, and Proficient. Additional hardware and firmware revisions may be required. For complete details including a listing of compatible partner product model numbers, including IP cameras, DVRs, etc. please visit www.elkproducts.com



When Ordering ELK-RM Please Note:

RMS PC Edition requires a product key license to obtain full functionality with a control. A product key license may be purchased through your Authorized Elk Reseller. The serial number from the control must be provided to the reseller when ordering. Until a product key has been purchased and entered into RMS, it will run in DEMO mode, allowing only limited functionality. If you wish to receive the license key via email without having a CD shipped to you, please order Part# ELK-RMNCN



ELK-RMDESIGNER

Due to the licensing requirements, ELK has chosen to sell this product directly to the professional installers and not through distribution. Visit www.elkproducts.com for more details.

Graphic Designer Software for ElkRMS

RM Designer Software allows complete customization of the ElkRM Graphic User Interface Software for ELK-M1 Security & Automation Controls. Create totally unique custom pages, including backgrounds, colors, buttons, text, information boxes, etc.

- Provides simple to complex graphic user interface customization
- Create graphic interfaces of any size or resolution
- Easy to use background and button creation tools
- Synchronization feature allows RMDesigner to display item descriptions programmed into the M1 Control
- Save setup & graphic changes to individual project folders for future use
- Build designs directly to USB Flash drives or other removable storage for easy transfer to ELK touchscreens
- Built-in setup utility for audio, video, and links
- Easily share designs with Import feature
- Supported Operating Systems: Win 2000, XP, Vista, Server 2003
- Requires .NET 2.0 Framework
- Requires 20MB or more hard drive space
- Requires minimum 1 GHz Processor
- Requires minimum 1GB RAM

Not a Graphic Designer? Elk can provide a main (home) screen with your logo for a nominal fee. Ask about- ELK-CFD256.

M1Gold & M1EZ8 Accessories



ELK-M1XEP

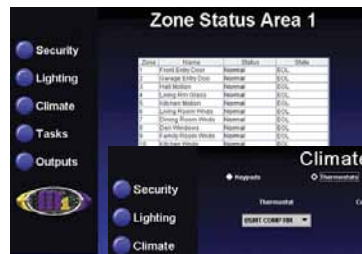
M1 Ethernet Port Interface

Allows M1 Controls to be connected to the Internet or LAN (network) for programming, monitoring, remote control, email notifications, etc. Requires permanent broadband connection; Cable Modem, DSL, T1, etc.

- Includes Web Server with embedded Java Applet "M1 Virtual Keypad"
- Secure connection with password protection and HTTPS encryption
- Event notification via Email (SMTP)
- Supports automatic Dynamic DNS Updates with providers using the DynDNS protocol
- Supports Network Time Protocol for synchronizing the M1Gold/M1EZ8 clock with an Internet time server
- LED indicators for Power, Link, and Data
- Flash Memory for firmware updating
- Operating Voltage: 12VDC Regulated
- Current Draw: Approximately 300mA
- Housing Size: 4.25" x 6.375" x 2.125"
- Board Size: 2.25" x 3.95"
- Includes ELK-P1216 Switching Power Supply and Serial Cable



Virtual Keypad Screens



ELK-M1EZ8MSI

Main Serial Port for EZ8

The main serial interface for ELK-M1EZ8, required for interfacing M1EZ8 with a PC for upload/download. Also required when adding the M1XEP Ethernet port. Baud rate programmable up to 115,200 baud.

- Powerline lighting pass-through connector for PSC05 (or equivalent) interface
- Housing Size: 4.375" x 3" x 1.25"
- Board Size: 3.375" x 2.25"



ELK-M1DBH

M1 Data Bus Hub

For easy connection of expanders & keypads. The M1DBH accepts up to 9, RJ45 equipped CAT5 or CAT6 cables, and series connects the data A & B lines so the data bus may be terminated properly.

- Designed for multiple home run cables
- Internally connect Data A & B lines from previous device into next device out
- Multiple Hubs may be connected for expansion
- EOL Bus Termination done on-board with included RJ-45 Terminator Plug
- Input Connectors: Elevator Screw Terminals
- Output Connections: RJ-45, 8-Pin Jacks
- Mounting Plate Size: 6.5" x 3" x .5"
- Circuit Board Size: 5" x 2.5" x .75"
- Easily snaps into Elk enclosure



ELK-M1DBHR

M1 Data Bus Hub for Retrofit

Active RS-485 data bus hub for retrofitting older panels with multiple home run, 4 conductor keypad/data wires with M1 Controls. The end of each cable is EOL terminated to insure proper operation and supervision.

- Splits main data bus into 4 managed RS-485 branches.
- Each branch can have 2 parallel home run cables for total of 8 home runs
- Works with standard 4 conductor home run wiring
- Inputs: Elevator Screw Terminals (4 position)
- Output: Elevator Screw Terminals (4 position)
- Includes ELK-SWG for easy mounting in ELK enclosure
- Circuit Board Size: 4.9" x 2.75" x .5"



ELK-M1XSP

M1 Serial Port (RS-232) Expander, Thermostat/Lighting Interface

Additional serial port(s) for M1 Controls to interface other manufacturer's equipment utilizing RS-232 ASCII commands.

- Adapts HVAC Communicating Thermostats to M1 Controls
- Allows M1 Controls to interface with a variety of lighting products
- Adjustable baud rate 300 to 38,400
- Up to 7 M1XSP Expanders may be added to M1 controls
- Operating Voltage: 12 Volts DC
- Current Draw: 31mA
- Housing Size: 4.375" x 3" x 1.125"
- Circuit Board Size: 3.5" x 2.75"

Some Partner Manufacturers; such as AMX, Control 4, and Crestron, interface through the main serial port. Visit www.elkproducts.com for more details and a complete list of partner manufacturers.



ELK-M1XRF2G

M1 Wireless Receiver for GE Crystal Transmitters

Wireless (RF) Receiver and Input Expander for use with M1 Controls.

- Adds up to 144 individual wireless zones (sensors/points)
- **Compatible with GE Crystal Transmitters**
- Operates from 4 wire data bus
- Multiple receivers (up to 11) may be connected to a single M1 or M1EZ8 Control for redundancy or greater coverage
- Flash Memory for firmware updating
- Sensitivity: >105 dbm
- Operating Temperature: 0 to +120 degrees F
- Operating Voltage: 12 Volts D.C.
- Current Draw: 70mA
- Indoor Range: 300 to 500 ft. line of sight
- Housing Dimensions: 6.5" x 4.5" x 1"
- Antenna Length: 9.25"



ELK-M1XRF2H

M1 Wireless Receiver for Honeywell 5800 Series Transmitters

Wireless (RF) Receiver and Input Expander for use with M1 Controls.

- Adds up to 144 individual wireless zones (sensors/points)
- **Compatible with Honeywell 5800 Series one way transmitters**
- Operates from the 4 wire Data Bus
- Multiple receivers (up to 11) may be connected to a single M1 or M1EZ8 Control for redundancy or greater coverage
- Flash Memory for firmware updating
- Sensitivity: >105 dbm
- Operating Temperature: 0 to +120 degrees F
- Operating Voltage: 12 Volts D.C.
- Current Draw: 70mA
- Indoor Range: 300 to 500 ft. line of sight
- Housing Dimensions: 6.5" x 4.5" x 1"
- Antenna Length: 8.6"



ELK-M1XIN

M1 16 Zone Input Expander

Adds 16 hardwired zones (with or without EOL resistor supervised) to the M1 Controls. Up to 12 may be added, increasing the M1Gold to 208 and the M1EZ8 to 200 total zones (inputs)

- Operates from 4-wire data bus.
- Dip Switch address settings
- Flash Memory for firmware updating
- Plug-in terminal strips
- Status and diagnostic LED
- Operating Power Range: 9 to 14VDC
- Current Draw: 65mA
- Size: 6" x 3.25" x .75"
- Includes ELK-SWG for easy mounting in ELK enclosure



ELK-M1XOVR

M1 16 Output Expander, 8 Voltage & 8 Relays

Adds 16 outputs (8 voltage, 8 relays) to M1 Controls. Voltages can be used to trigger low current devices (50 mA max. each). Operates from 4-wire data bus. Up to 12 output expanders may be used for a total of 205 outputs. Option: convert 8 voltage outputs to relays using M1RB Relay Board.

- Operates on the 4 wire Data Bus
- Up to 12 Output Expanders may be added
- DIP Switch address settings
- Flash Memory for Firmware Updating
- Includes 12 conductor "Flying Lead" Wire Harness
- Status LED with Diagnostic Display
- Relays: SPDT rated for 7A @ 28VDC, 10A @ 125 VAC.
- Voltage Outputs: 12VDC @ 50mA each
- Operating Power Range: 9 to 14VDC
- Current Draw 65mA Nom., 330 mA Max
- Size: 6" x 3.25" x .75"
- Includes ELK-SWG for easy mounting in ELK enclosure



ELK-M1RB

M1 Relay Board, Plug-in

Used to convert the M1 Controls voltage outputs into SPDT relays.

- Provides 8 Relay Outputs
- Plugs directly into M1 Controls or ELK-M1XOVR
- Includes ELK-SWG for easy mounting in ELK enclosure
- Relay Contact Ratings: 7A @ 28VDC, 10A @ 125VAC
- Wire harness length: 24"
- Current draw: 0mA idle, 250mA max
- Size: 6" x 3.25" x .75"



ELK-M1KAM

M1 Door Access Module

A single door access interface module for use with M1 Controls. It installs in place of an M1 Keypad and operates from the RS-485 4-Wire Keypad Data Bus.

- Input for a standard 26 bit Wiegand Reader
- Input for a Dallas iButton Reader
- (3)12VDC Outputs for Door Held Open Alarm(50mA), Ready To Arm, and System Armed indications (10mA)
- (2)Supervised Inputs for RTE (Request To Exit) Button/Device and Door Status Sensor
- Four selectable Time settings for "Request to Exit" and "Door Held Open"
- Heavy Duty Form "C" Relay Contacts for Switching Door Strike Power
- Connections: Plug-In Screw Terminals, 16 Position
- Operating Voltage: 13.8VDC
- Current Draw: Less than 30 mA with minimum activity, 44 mA fully active
- Housing Dimensions: 4.25" x 6.375" x 2.125"
- Circuit Board Dimensions: 3.95" x 2.875" x .95"
- Hardware Watchdog Circuit



ELK-M1PR

Keypad Plug-in Proximity Reader

Plugs into the connector inside the ELK-M1KP keypad.* Allows a proximity card or fob to be used to quickly arm, disarm, operate a door strike, etc.

- Reader format: 26 bit Wiegand
- Read Distance: ~3/8"
- 5 pin plug-in connector
- Operating voltage: 5VDC from keypad
- Current Draw: ~20mA

*Will not fit other keypads- see ELK-106055

Requires M1PRC cards or M1PRF fobs



ELK-106055

Exterior Proximity Reader

Allows a proximity card or fob to be used with M1 Controls to quickly arm, disarm, operate a door strike, etc.

- Connects to M1KP Keypad with ELK-WO35A
- Connects to M1KP2 & M1KP3 Keypads with ELK-WO39A
- Can be used on any system that is 26 bit Wiegand compatible
- Weatherproof - suitable for outdoor installation
- Size: 3 1/8" H x 1 7/8"Wx 1"D
- Color: Black
- Operating Voltage: 12VDC
- Current draw: 50mA

Requires M1PRC cards or M1PRF fobs



ELK-M1PRC

M1 Proximity "Clam Shell" Cards

For use with the add-on proximity readers: ELK-M1PR for the ELK-M1KP keypad or ELK-106055 exterior reader.

- Comes in packs of (10) ten
- Credit Card Size
- Color: Off white
- Size: 3.375" x 2.125" x .0625"



ELK-M1PRF

M1 Proximity Key Fobs

For use with the add-on proximity readers: ELK-M1PR for the ELK-M1KP keypad or ELK-106055 exterior reader.

- Comes in packs of (10) ten
- Attaches to key chain
- Color: Black
- Size: 2.125" x 1.3125" x .25"



ELK-P212S

Supervised Remote Power Supply

The ELK-P212S is a Supervised Remote Power Supply / Battery Charger, providing 12 VDC output with up to 2 Amps of total current. It supervises the AC Power Input as well as the rechargeable Battery, and can report abnormal conditions back to an ELKM1 Control over the RS485 four (4) wire data bus. It also features relay outputs for AC and Low Battery to allow "stand-alone" operation with other controls.

- M1 Control allows:
 - Remote power reset of powered peripherals
 - Data-bus supervision of AC and Battery status
- Stand-alone flexibility
 - Two (2) sets of DC outputs
 - On-board relay to supervise battery status
 - On-board relay to supervise AC status
- Master AC and Battery ON / OFF Power Switch
- Visual AC Power Indicator
- AC Input: 16.5VAC, 45VA (TRG1640 or equiv.)
- DC Output Voltage: 13.8 Volts D.C. +/- 5%
- Current Rating: 2.0 Amps
- Wattage: 30 Watts
- DC Output Protection: Auto Resetting PTC
- Rechargeable Battery Size: Max. 12 Ah
- Low Battery Cutoff Threshold: ~10 Volts.
- Load Regulation: + / - 2%



ELK-M1TWA

Audio Amplifier Module with Two Way Listen-In Capability

Provides 3 zones of amplified speaker outputs with adjustable volume, along with 3 zones of microphone inputs. The M1TWA can be used to add two way listen-in to M1 Controls or to just add amplified speakers at keypads and other locations in a building.

- 3 Amplified Speaker Zones
- Adjustable Speaker Volume Control by Zone
- Selectable Mute by Zone
- 3 Microphone Input Zones (up to 4 mics per zone)
- Selectable Mic Listen by Zone or Select ALL
- Interfaces to ELK-M1 or ELK-M1EZ8 Controls
- Compatible with: ELK-M1TWM, ELK-M1TWS, ELK-M1TWSF
- Output Impedance Range: ~4 to 32 Ohms per speaker output
- Amplifier Rating: 1/2 Watt per Speaker Output
- Operating Voltage: 9 to 14 Volts D.C.
- Current Draw: 15mA nominal, 1000mA max
- Microphone Current Draw: 5mA each
- Housing Dimensions: 4.25" x 6.375" x 2.125"
- Circuit Board Dimensions: 2.25" x 3.95"



ELK-M1TWSF

M1 Two Way Flush Mount Speaker/Microphone

Flush Mount 12 Watt Speaker and Microphone combination for use with the M1 Controls two way listen-in interfaces

- Fits single gang electrical boxes
- Requires 4 conductor cable.
- Up to 12 may be connected.
- Color: White
- Size: 4.81" x 3.13" x 1.69"



ELK-M1TWK

M1Gold Two Way Listen-in Kit

Complete kit for two way communication with **M1Gold** control

- Includes two-way interface, ELK-M1TWI, plus a two way speaker/microphone, ELK-M1TWS.
- Color: Interface-Black, Speaker- White
- Speaker Size: 4.25" X 4.25" X 2.13"
- Interface Size: 4.5" x 3" x 1.2"



ELK-M1EZ8TWK

M1EZ8 Two Way Listen-In Kit

Complete kit for two way communication with **M1EZ8** control

- Includes two-way interface, ELK-M1EZ8TWI, plus a two way speaker/microphone, ELK-M1TWS
- Color: Interface-Black, Speaker- White
- Speaker Size: 4.25" X 4.25" X 2.13"
- Interface Size: 4.5" x 3" x 1.2"



ELK-M1TWS

M1 Two Way Speaker/Microphone

Microphone and 20 Watt Speaker combination for use with the M1 Controls two way listen-in interfaces

- Requires 4 conductor cable.
- Up to 12 may be connected.
- Color: White
- Size: 4.25" x 4.25" x 2.13"



ELK-M1TWM

M1 Two Way Microphone

Microphone only for use with the M1 Controls two way listen-in interfaces.

- Simple two wire connection
- High Sensitivity
- Up to 12 may be connected
- Operating Voltage: Powered from M1TWI or M1EZ8TWI
- Current Draw: 5mA each
- Circuit Board Dimensions: 1.5" x 1"



ELK-M1TWI

M1 Gold Two Way Listen-In Interface

This can be used by Central Station to verify an alarm, or by a user from the M1Gold telephone remote control to check on elderly parents, children, etc.

- Adds up to three (3) zones of two way listen-in to M1G Control.
- Up to 12 microphones may be connected
- May be removed from included housing and mounted on optional glides in Elk structured wiring enclosures
- Module powered by M1 Gold
- Compatible with: ELK-M1TWM, ELK-M1TWS, ELK-M1TWSF
- Includes 8 conductor interface cable
- Housing: 6.5"W x 4.3"H x 2.0"D
- Board Size: 4.5"W x 3.0"H x 1.2"D



ELK-M1EZ8TWI

M1EZ8 Two Way Listen-in Interface

This can be used by Central Station to verify alarm from the M1EZ8. Some jurisdictions now require verification before dispatch.

- Adds up to three (3) zones of two way listen-in to E28 Control
- Up to 12 microphones may be connected
- May be removed from included housing and mounted on optional glides in Elk structured wiring enclosures
- Module powered by M1 EZ8
- Compatible with: ELK-M1TWM, ELK-M1TWS, ELK-M1TWSF
- Includes 8 conductor interface cable
- Housing Size: 6.5"W x 4.3" H x 2" D
- Board size: 3.375" x 2.25" H x .8"D



M1 Zone Temperature Sensors

Brings temperature information to M1 Controls for processing. Monitor high or low temperatures with this add-on remote sensor. Applications: wine cellars, server rooms, commercial coolers/freezers, second homes, agricultural uses, etc.

- Connects to any on-board zone on the M1 controls.
- Temperature may be accessed from keypad, touchscreen, telephone remote control, PC, or rules.
- Interface may be placed up to 1000' from M1 Control
- Temperature Range: -50 to +140F
- Operating Voltage: 12 Volts DC
- Current Draw: 10mA
- Housing Dimensions: 2.375" x 1.25" x 1"



ELK-M1ZTS

- Interface with Short Probe
- Suitable for Indoor/Outdoor use in a covered environment

ELK-M1ZTSR

- Interface with Stainless Remote Probe
- Suitable for Indoor/Outdoor use
- Probe Length: 7'



ELK-M1PCSPIM

UPB Interface for M1G & M1EZ8 Controls

The ELK-M1PCSPIM is a special Powerline Interface Module containing a built-in M1XSP Serial Port chip. This all-in-one device makes it easy to permanently connect the ELK M1 Control to a UPB network.

- Compact, space saving interface
- Easy hookup -- 4-wire data bus connection
- NO 9-Pin Serial Cable Required
- UPB Status light (multicolored)
- M1 Data Bus Status Light (Green)
- Lower cost than purchasing separate and M1XSP and PCSPIM products.
- Removable 4-pin terminal block connection
- Power:
 - UPB Network circuitry -- powered from the AC "Primary" Line.
 - M1 Data Bus Device circuitry -- powered (12VDC) from the M1 Data Bus
- Current Draw from M1: ~30mA @ 12 VDC
- M1 Bus Device Address: Preset at Address #7
- Firmware required: Standard Version (1.0.42 or later)



ELK-IP232

Ethernet to RS-232 Serial Bridge

The ELK-IP232 may be used to connect any standard serial communications device to an Ethernet network. It is able to both initiate and accept network connections. Once a network connection is made, the remote networked device is virtually connected to the serial device on the other side of the Bridge. Both the network device and the serial device can send and receive messages to and from each other.

- Supports both UDP and TCP protocols
- Up to 12 simultaneous TCP-IP connections
- Up to twelve (12) "Rules" may be programmed to make outgoing connections.
- Selectable baud rate from 300 to 115200 baud
- 802.3 compliant 10/100 Mbit interface
- Software and Hardware Handshaking
- Operating Voltage: 12 Volts D.C.
- Current Draw: Approx. 135 mA
- Dimensions: 3.85" L x 1.7"W x 0.93" D
- RS232, DB9M 9-pin serial port connection
- RJ45 8-pin Network Jack
- LED Indicators for Power, Link, and Data
- Includes: Serial Cable and 12V Supply



ELK-M1KCWB

Keypad Conduit Wall Box

The M1KCWB is a two-piece, surface mount metal wall box. Applications include: commercial installations, schools, businesses, factories, etc., or virtually any situation where a Keypad needs to be surface mounted with no ability to run or conceal the wiring within the structure's walls.

- Permits mounting of the ELK-M1KP or ELK-M1KP2 Keypad backplate
- 1/2" and 3/4" electrical conduit knockouts on 3 sides and back



ELK-UB12

Utility Box for Power Supplies, etc

Multi-purpose box works well for power supplies and other peripherals.

- Can be used to house "special projects"
- Hinged cover with camlock
- Color: White
- Size: 12" x 12" x 3.5"
- Included in some M1E28 Control kits



ELK-W018B

4-Pin Ribbon Cable

Used for connecting expanders and other peripherals to the M1 Control.

- 4 pin keyed connector
- Approx. 18" long



ELK-W035A

M1 Accessory Wiring Harness

This 5-pin cable is required for connecting GE Wireless Receivers (GE model NX548E) to the M1 Controls. It can also be used to connect ELK-106055 proximity reader or any manufacturer's 26 bit Wiegand reader to an M1KP keypad.

- Color Coded
- Pre-stripped wire ends
- Keyed connector
- 18 Gauge Wire
- Wire length: 18"



ELK-W039A

M1KP2 & M1KP3 Proximity Reader Wiring Harness

This two pin cable is used to connect a 26 bit Wiegand reader (such as the ELK-106055) to the ELK-M1KP2 or M1KP3 Keypad

- Color Coded
- Pre-stripped wire ends
- Keyed connector
- 22 Gauge Wire
- Wire Length: 12"



ELK-W040A

Serial Ribbon Cable

This serial ribbon cable is used to connect the M1 Controls main serial port to the M1XEP.

- Compact design means cable will not interfere with the enclosure door
- DB9F to DB9M
- Approx. 17" long



ELK-W046A

Uplink Serial Cable

This cable is used to connect the Uplink 2500 Cellular Transceiver to the ELK-M1XSP Serial Port Expander for integration to M1 controls

- Female DB9 Connector
- 6 pin flat keyed connector
- Approx. 4' long



ELK-USB232

Serial Cable to convert USB to RS-232

This special cable is required for the ELK-RP software to connect with the M1 Controls when the computer does not provide a conventional RS-232 9 pin port.

- Male USB to Male DB9
- Speed: USB 2.0
- Cable Length: 6'
- Includes CD with Device Drivers