

e-ASK Systems

(electronic Access & Security Keyless-entry)



Entrance doors, compartment doors or baggage doors, RF transmitter FOB, keypad or both...now you can have it all. Keyless convenience and security from a simple push of a button. You can count on Tri*Mark* to be your partner in keyless-entry integration.

High Value....





Increased Functionality....





500-1200 e-PAD System





Premium Features....





500-1000 e-ASK System

Tri*Mark* has expanded its door systems expertise by adding electrical/electronic controls to its product offering. The addition of keyless electrical products adds a further dimension of functionality, convenience and security to our systems. This selection of compatible components allows for complete keyless entry for on or off-highway vehicle applications.

Electronic Access & Security Keyless-Entry provides either an e-FOB RF transmitter/receiver or a 5-button e-PAD for true keyless operation.

The system can be adapted to provide basic locking; on locking function to entry door(s) but also can be customized for controlling compartment doors, windows, ignition, lighting, horns, sirens, other security system features, etc.

Tri*Mark* ADVANTAGE:

- Advanced technology expertise
- · Patented products
- Rugged and reliable systems for on and off -road applications
- Full service supplier
- Excellent design and applications support
- Integrated systems approach
- Global presence
- Ability to integrate with security systems
- Compatible with CAN SAE J1939, RV-C, and other multiplexing protocols



e-ASK PRODUCTS:

If security and convenience are two major attributes your customers demand, then Tri*Mark* is the answer. Full functionality and state-of-the-art design and manufacturing means you can depend on Tri*Mark* electronics to be working many years down the road.

- 500-1000 e-ASK System
- 500-1100 e-FOB System
- 500-1200 e-PAD System
- 540-0100 e-PAD Keypad
- 540-0200 Lighted Grab Handle With Keypad (e-GRAB)
- 550-0100 Power Lock Actuators

540-0200 Lighted Grab Handle With Keypad (e-*GRAB*)

This new product incorporates Tri*Mark*'s e-*ASK* keypad into a stylish entry assist handle for RV coaches, motor homes and travel trailers. Offering increased end user convenience with high end look and feel, the grab handle provides keyless entry, security, and convenience through a keypad electronic interface. Integration of an optional doorbell is available.

DESIGNED FOR:

- Entry assist handle incorporates TriMark's e-ASK keypad into a stylish combo for RV coaches, motor homes and travel trailers
- Incorporation with TriMark mechanical latches, handles and systems by providing keyless entry, security, and convenience for access door systems through a keypad electronics interface

FEATURES/BENEFITS:

- Increased end user convenience
- Offers modern styling with high end look and feel
- Rugged and durable construction is environmentally sealed for long life
- Lighted keypad and handle rod for more effective night time usage
- Tactile, visual and audio feedback
- Can control numerous entry/compartment doors with independent control of multiple door zones

AVAILABLE:

- Muti-plex or discrete e-PAD Keypad (Reference platforms 540-0100 and 500-1000 for additional information)
- With or without door bell feature
- Handle rod can be personalized with manufacturer name, model, logo etched
- Complete kit with wire harnesses and other accessories
- With e-FOB remote transmitter integration
- With security system integration

FINISH:

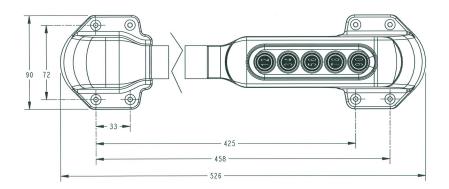
 High quality polished copper-nickel-nickel chrome is durable and stylish

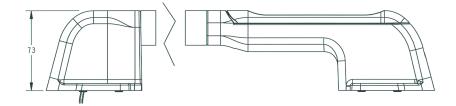
MATERIAL:

- Sturdy zinc die cast alloy housing, cover and end cap
- · Cast acrylic rod in clear or frosted finish

U.S. Patent No. 7,400,232 Design Patent No. D559,653







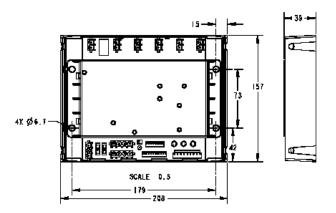
500-1000

e-ASK System

Tri*Mark*'s top level e-*ASK* system consists of a selection of compatible components that allow for complete keyless entry for on or off-highway vehicle applications. The incorporation of keyless-entry into Tri*Mark* mechanical latches, handles and systems provides additional security and convenience for access door systems. This system includes both a touch pad and remote fob transmitter for the ultimate in end user convenience and functionality.

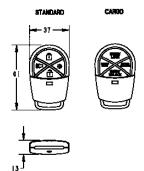
FEATURES/BENEFITS:

- · Easy and intuitive to operate
- Rugged and durable construction is compliant to onroad, off-road, and industrial environmental requirements
- I/O module with on-board locking and unlocking relays
- Can control up to 20+ entry/compartment doors (expandable) and utilizes staggered door control for minimized current draw
- Multiplexing communications (CAN, SAE J1939, RV-C, etc.
- Increased self-diagnosing and serviceability with common tools
- Provides interface with other compatible vehicle modules
- Locking/unlocking confirmation
- Ability to provide 5 OEM definable functions from keypad, including ability to unlock one side of motor home baggage doors at a time
- 3 security system inputs (ability to sense entry door(s) and baggage door(s), and other security system devices such as glass break and motion detectors)



e-FOB

- Reliable radio frequency (RF) transmission offers high security with code hopping technology and is FCC-Part 15 compliant
- 4-button standard fob (other configurations available)
- Customized graphics possible (buttons and logos)
- Can add up to 4 fob transmitters to vehicle





AVAILABLE:

- Standard kit make up includes: keypad, 2 pre-trained RF remote fob transmitters, RF receiver, I/O module, harness connecting receiver and I/O module, gasket, push button switch, LED assembly, key rings and manual
- · Customized wire harnesses
- · Additional fob transmitters
- 2 different programming functions; standard mode, and cargo mode. Standard mode allows for the lock/ unlocking of doors plus panic mode and one auxiliary output (controls lighting, opens compartment etc.).
 Cargo mode allows for the lock/unlocking of main personnel doors plus independent control of many cargo/compartment doors.

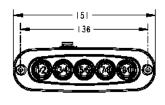
This product is covered by one or more of the following:

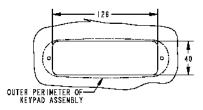
U.S. Patent No. 6,789,003

U.S. Patent No. 7,034,655

U.S. Patent No. 7,119,709

Design Patent No. D486,376





RECOMMENDED KEYPAD CLEARANCE CUTOUT

e-PAD

- · Tactile, visual, and audio feedback
- Over 3000 code combinations with tamper lock-out feature
- Lighted keypad for more effective night time usage
- Vertical and horizontal orientations
- 5 user codes can be assigned
- Multiple layer code control
- Multiple keypads integration

500-1100 e-*FOB* System

This cost-effective, simple, and integrated system offers increased security, convenience and functionality with reduced system installation and lower installation costs for demanding users of RV's, heavy trucks, emergency vehicles, agricultural and construction equipment.

Base system provides added convenience and security via a standard remote radio frequency (RF) transmitter providing automotive convenience to your vehicle.

FEATURES/BENEFITS:

- Increased end user convenience, operation is easy and intuitive
- Rugged and durable construction, is compliant to onroad, off-road, and industrial environmental requirements
- Increased vehicle security with multiple triggers and outputs
- Includes on-board locking and unlocking relays for up to 4 actuators
- Locking/unlocking confirmation
- Ignition controlled auto-locking

Patents Pending

- Starter deactivation available for increased security
- High security with code hopping technology offers reliable radio frequency (RF) transmission and is FCC-Part 15 compliant

TriMark 221041 vs (10) 0 00 135 96

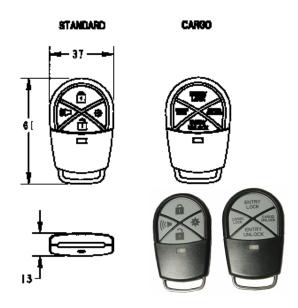
INSTALLATION:

- · Standard 12 VDC power
- e-FOB receiver is easily installed with (2) #6 or M3 screws (not included) and can be mounted in a concealed location

AVAILABLE:

- Standard kit make up includes: 2 pre-trained RF remote fob transmitters, RF receiver, 14 wire harness, 10 wire harness, 2 wire harness, push button switch, and LED assembly key rings and manual
- · Customized wire harnesses
- Customized graphics possible (buttons and logos please inquire)
- Can add up to 4 fob transmitters to vehicle
- 3 different programming functions; standard mode, cargo mode and sustained mode. Standard mode allows for the lock/unlocking of doors plus panic mode and one auxiliary output (controls lighting, opens compartment etc). Cargo mode allows for the lock/unlocking of main personnel doors plus independent control of many cargo/compartment doors. Sustained mode allows for the lock/unlocking of doors plus continuous output control with lower buttons pressing.

Please refer to individual product codes and part drawings for complete dimensions, specifications, and installation procedures. Engineering assistance and application drawings are available.



500-1200

e-PAD System

This integrated system offers increased security, convenience and functionality with reduced system installation complexity and lower installation costs for demanding users of RV's, heavy trucks, emergency vehicles, agricultural and construction equipment.

User friendly keypad system provides visual, audible and touch feedback. Keypad can be mounted horizontally, vertically, and with means to protect against vandalism and other tampering.

FEATURES/BENEFITS:

- · Easy and intuitive to operate
- Rugged and durable construction, is compliant to onroad, off-road, and industrial environmental requirements
- I/O module with on-board locking and unlocking relays
- Can control up to 20 entry/compartment doors (expandable), uses staggered door control for minimized current draw
- Locking/unlocking confirmation
- · Ignition controlled auto-locking
- Starter deactivation available for increased security
- Ability to provide 5 OEM definable functions from keypad, including ability to unlock one side of motor home baggage doors at a time
- 3 security system inputs (ability to sense entry door(s) and baggage door(s), and other security system devices such as glass break and motion detectors)
- 3 variable timed light activation output (porch, compartment or interior lighting)

This product is covered by one or more of the following:

U.S. PATENT NO. 6,789,003 U.S. PATENT NO. 7,034,655 U.S. PATENT NO. 7,119,709

DESIGN PATENT D486,376

AVAILABLE:

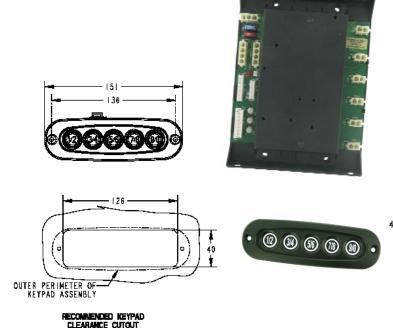
- Standard kit includes: Keypad, I/O module, gasket, push button switch, and LED assembly key rings and manual
- With e-FOB remote transmitter integration
- With security system integration
- · Customized wire harnesses
- Multiplexed or discrete communications
- 2 different functions; standard and cargo modes. Standard mode allows for the lock/unlocking of doors plus panic mode and one auxiliary output (controls lighting, opens compartment etc.). Cargo mode allows for the lock/unlocking of main personnel doors plus independent control of many cargo/compartment doors.

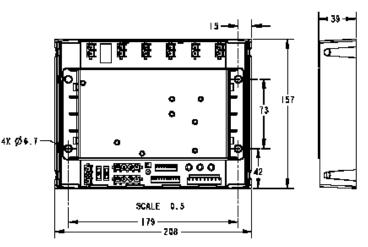
INSTALLATION:

- Standard 12 VDC power
- Keypad is easy to install with (2) #8 or M4 flat head screws (not included)
- Keypad can be installed in a wide range of locations in door - either horizontal or vertical orientation
- I/O module is easily installed with (4) 1/4" or M6 screws (not included) and can be mounted in a concealed location

Please refer to individual product codes and part drawings for complete dimensions, specifications, and installation procedures. Engineering assistance and application drawings are available.

For more information visit www.trimarkcorp.com





540-0100 e-PAD Keypad

This cost-effective, simple, and stand-alone system offers increased security, convenience and functionality with reduced system installation complexity and lower installation costs for demanding users of RVs, heavy trucks, emergency vehicles, agricultural and construction equipment.

User-friendly keypad system provides visual, audible and touch feedback. Keypad can be mounted horizontally, vertically, and with means to protect against vandalism and other tampering.

FEATURES/BENEFITS:

- Increased end user convenience, operation is easy and intuitive
- Rugged and durable construction, is compliant to onroad, off-road, and industrial environmental requirements
- Can control numerous entry/compartment doors
- Independent control of multiple door zones
- Tactile, visual, and audio feedback
- Over 3000 code combinations with tamper lock-out feature
- Lighted keypad for more effective night time usage
- · Vertical and horizontal orientations
- 5 user codes can be assigned
- Multiple layer code control
- Discrete communications protocol
- Keypad controlled timed lighting output

AVAILABLE:

- With e-FOB remote transmitter integration
- Vertical and horizontal keypad
- Complete kit with wire harnesses and other accessories
- · Customized wire harnesses

INSTALLATION:

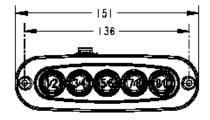
- Keypad is easy to install with (2) #8 or M4 flat head screws (not included)
- Can be installed in a wide range of locations in door either horizontal or vertical orientation
- Standard 12 VDC power

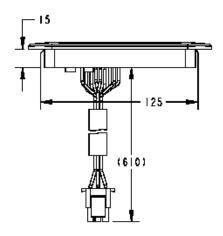
U.S. PATENT NO. 7,034,655 DESIGN PATENT D486.376

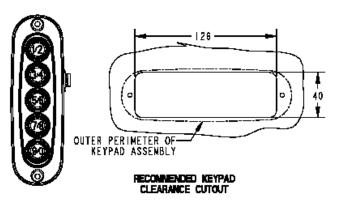
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550-0100

Power Lock Actuators

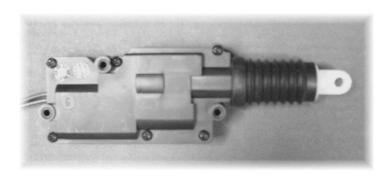
Tri*Mark* has several high quality power door lock actuators available with a variety of features and configurations. The actuators have been tested and validated to meet stringent requirements thus ensuring a long life of trouble free operation.

FEATURES/BENEFITS:

- · High impact sealed case design
- Long travel distance .83 to .86 inches (21-21.8mm)
- High output force for reliable locking, unlocking and power release functions
- Reliable and durable to high cycle counts in various environmental extremes
- Compact design allows for application in restricted space
- Compatible for use with TriMark power adaptable products
- Product selection options to ensure optimal fit for various applications
- Internal spring provides for extended or retracted rest position



- TriMark power actuators are easy to install either by integrating mounting directly into available TriMark latches or paddle or with universal hardware parts that include fasteners, a zinc clamp, a mounting strap and a rod
- 12 volt supply





AVAILABLE:

- In a "gun style" with or without an overload protected motor
- In a compact, rectangular design with an overload protected motor, clutching mechanism for smooth operation and a rotatable/detachable tip
- With individual bullet style connectors or spade connector for ease of installation
- With 2 wires for power or 5 wires for power and actuator sensing
- Possible customization available to include special connectors, custom wire length and kitting options.
 Please contact TriMark for more information.
- In a power release design with high force output and optional internal return spring

Please refer to individual product codes and part drawings for complete dimensions, specifications, and installation procedures. Engineering assistance and application drawings are available.

For more information visit www.trimarkcorp.com



OPTIONS:

There are numerous options available to allow the e-ASK systems to provide extra value and functionality. Here is a partial listing of what's available:

- Optional kits can include: any wiring harnesses for all connection points of system, extra relays, switches, door contacts, actuators, mounting hardware, mounting brackets, door latches, and door paddle handles
- Customized wiring harnesses
- Additional fob transmitters and custom graphics
- Different programming functions allows for customized functionality with e-FOB or e-PAD outputs including standard mode, cargo mode or sustained mode
- Security system integration
- Multiplexed or discrete communications

ELECTRONIC ACCESSORIES:

The following are Tri*Mark* accessories that are available to assist you in completing your total system requirements. All of the accessories have been approved and are compatible with our e-ASK products, so you can be assured that they will perform and be trouble free for many years.

550-0200 Solenoid 590-0100 Wire Harnesses 590-0200 Door Contacts

590-0300 Relays

590-0400 Sirens

590-0500 Rocker Switches

590-0600 Plunger Switches

590-0800 Lighting

590-0900 Security Accessories

Tri*Mark* supplied or existing OEM security system components (e.g. motion detectors, door ajar detectors, glass break sensors, etc.)



For additional information and new product introductions relating to Tri*Mark*'s Mechanical/Electrical/Electronic solutions, please refer to the website --

The following Tri*Mark* products are power lockable and are compatible with the e-*ASK* Systems. Please inquire about Tri*Mark*'s ability to assist in the system design and product selection that is right for your requirements and needs.

Entrance Door Applications Compartment and Baggage Door Applications

System kits are available and include handles, latches, remote transmitter FOB's and power lock actuators to provide a comprehensive access solution.

For additional information and new product introductions relating to Tri*Mark*'s Mechanical/Electrical/Electronic solutions, please refer to the website -- **www.trimarkcorp.com**



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