

ARCHITECTURAL IRON DESIGNS, INC.

— YOUR IMAGINATION, FORGED HERE —

GATE AUTOMATION



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(All a mind)

ATTAC MATTER

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TYPICAL COMPONENTS OF SWING GATE SYSTEM

Example of Swing Gate System

- Gate Operator
- ② Digital Keypad or Remote Control
- 3 Driveway Loops/Detectors
- 4 Photocells
- 6 Monitored Safety Edges

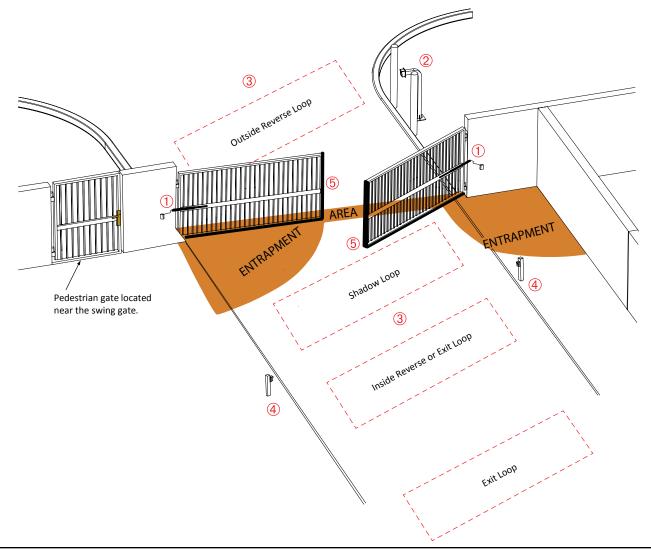








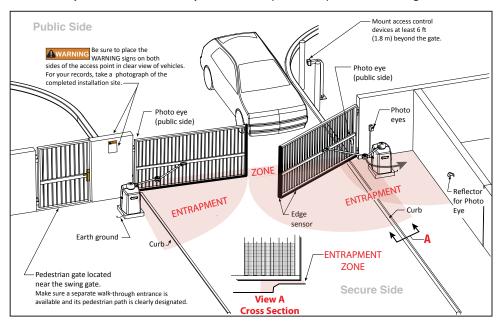




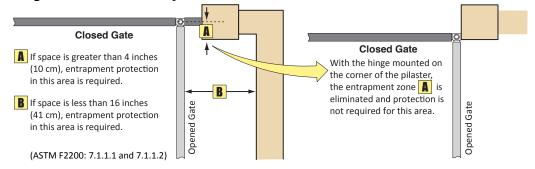
SWING GATE REQUIREMENTS

Only install the operator on gates used for vehicular traffic. Be sure to direct pedestrians to a separate entry and exit.

Refer to the illustrations. The gate site must be designed so persons do not come in contact with the vehicular gate while it is moving. Signs must be posted to warn pedestrians to stay clear of the gate's entire travel path. A separate pedestrian entry/exit must be clearly visible and promote pedestrian usage.

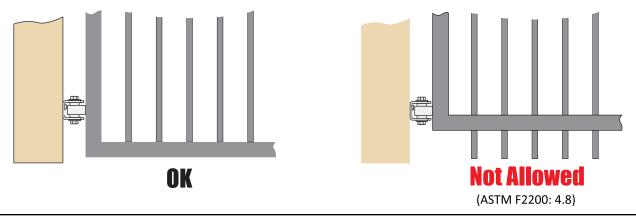


Hinge Mount Location: Entrapment Considerations



BASE OF SWING & SLIDE GATES

Gates must have smooth bottom edges, no protrusions should exist. If gate hardware or sensors protrude, they must have smooth surfaces free of any sharp cutting edges that do not exceed $\frac{1}{2}$ inch (13 mm) beyond the base of the gate.



TYPICAL COMPONENTS OF SLIDE GATE SYSTEM

Example of Slide Gate System

- Gate Operator
- ② Digital Keypad or Remote Control
- ③ Driveway Loops/Detectors
- 4 Photocells
- 6 Monitored Safety Edges

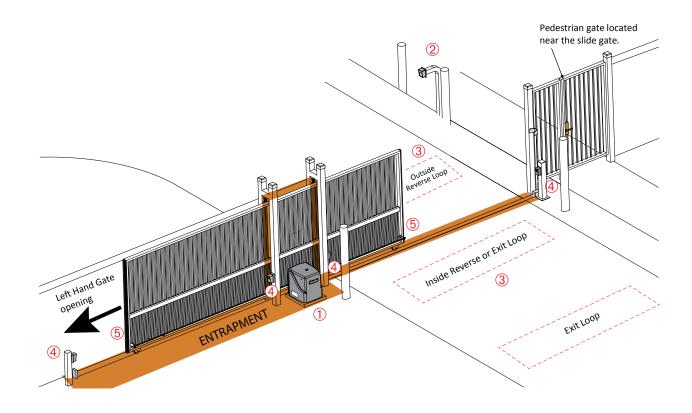










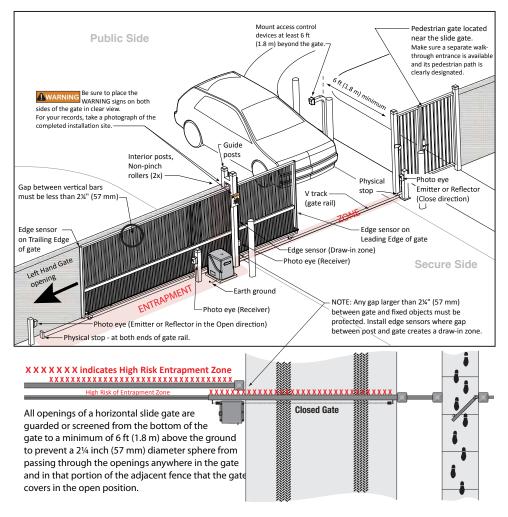


DASMA SLIDE GATE REQUIREMENTS

SLIDE GATE REQUIREMENTS

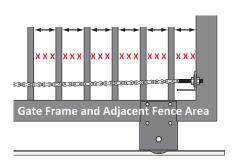
Only install the operator on gates used for vehicular traffic. Be sure to direct pedestrians to a separate entry and exit.

Refer to the illustrations. The gate site must be designed so that persons do not come in contact with the vehicular gate while it is moving. Signs must be posted to warn pedestrians to stay clear of the gate's entire travel path. A separate pedestrian entry/exit must be clearly visible and promote pedestrian usage.



COMPLIANT OPENINGS

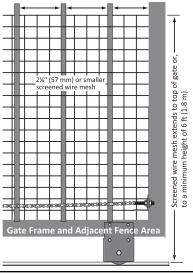
Gap (X X X) between vertical bars must be less than 2¼ inches (57 mm) up to a height of 6 ft (1.8 m) above grade.



SCREENED WIRE MESH

In the illustration to the right, the gap between vertical bars is non-compliant. It poses a safety hazard if it is wider than 2½ inches (57 mm).

A screened wire mesh has been added to comply with ASTM F2200 gate standards.



DASMA SAFETY GUIDE

GATE SYSTEM SAFETY – An Automatic Decision

NOTICE: Beginning January 2016, all external entrapment protection devices must be monitored for presence and correct operation. If a fault occurs, the gate operator will not function unless a continuous pressure activation device is being used.

This brochure, created and supplied by DASMA, will be included with your Automated Vehicular Gate System and provides an overview of safety and general design considerations that should be implemented at your site.

Its purpose is to provide guidance and help familiarize you with gate and gate operator safety standards and requirements. Review this brochure carefully and keep it for reference. If you have any questions, talk to your qualified installer.



BE SAFE

Automated vehicular gate systems provide user convenience and security.

However, because these machines can produce high levels of force, it is imperative that you understand how proper site design, installation and maintenance reduce potential hazards associated with gates and automatic gate operators. This brochure highlights industry safety standards and identifies entrapment protection devices that need to be in place to avoid serious injury or death. Before the installer leaves the site, take a few minutes to inspect and test your gate system.

- Make sure your gate operator is grounded.
- Ask the installer where the Emergency Stop Switch is located and cycle the gate once or twice to test it.
- Learn how to turn power ON and OFF and manually open and close the gate.
- Inspect the entrapment protection devices. Ask your installer to perform tests and show you that they are working properly.

A MOVING GATE CAN CAUSE SERIOUS INJURY OR DEATH!

It is the owner's and user's responsibility to be aware of potential hazards associated with an automated vehicular gate system and take appropriate steps to reduce the risk of injury.

Be sure to read the Important Safety Information found in your gate operator's manual as it provides more details and safety considerations than can be supplied in this brochure.

NOTE: The design and construction of automated gates for vehicular traffic must comply with certain safety standards and local codes. The illustrations and callouts in this brochure show the basics for gate system compliance. For reference, UL 325 and ASTM F2200 requirements are called out where applicable.

INSTALLATION & MAINTENANCE

Follow the manufacturer's recommended maintenance schedule and ask your qualified installer about a service agreement. On a regular basis:

- ☐ Check all entrapment protection devices in accordance with the manufacturer's recommended maintenance schedule.
- ☐ Check that the gate is level. Manually open and close the gate to make sure it travels smoothly. (Refer to the gate operator's manual to learn how to turn off power and move the gate by hand.)
- ☐ Check the gate hardware on a regular basis. Tighten any loose fasteners and replace any worn or damaged parts. A smooth running gate prolongs the life of your gate operator.
- ☐ Before the qualified installer leaves the site, test all features (entrapment protection devices, obstruction sensing features) to make sure the gate stops and reverses upon striking an object.
- ☐ Make sure you receive instructions on all operational functions of the gate operator. Learn how to reset the gate operator, turn off/on power, and manually operate the gate.

MORE INFORMATION

Websites:

DASMA: www.dasma.com

Underwriters Laboratories: www.ul.com

Automated Vehicular Gate Standards, ASTM

F2200: www.astm.org

Disclaimer: This brochure cannot cover all possible site situations or compliance issues. Be sure to read your gate operator's manual, follow manufacturer's requirements, and consult with your qualified installer for additional information.

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DASMA SAFETY GUIDE

BE AWARE

Make sure your gate system is installed and maintained according to the manufacturer's installation instructions. Make sure your installer adheres to UL 325 and ASTM F2200 standards discussed in this brochure and in the Important Safety Instructions found in the operator's manual.

DO

Review the illustrations found in this brochure for more information and safety requirements. Operate your gate system only when all necessary entrapment protection devices are connected and working properly. Examples of these devices include:

- Sensing edges
- Photoelectric sensors (e.g. photo eyes)

Follow ASTM F2200 standard for automated gates. Where applicable, these include the following:

Slide Gates:

- Covers for all exposed weight bearing rollers and pinch points that exist less than 8 feet (2.5 m) above grade.
- Fallover protection to prevent the gate from falling when gate is detached from supporting hardware.
- Physical gate stops to avoid over-travel in both directions.
- Proper adjustment of the inherent sensing system.
- No protrusions along the bottom of the gate.
- Protective screen mesh to guard openings from the gate's base support to a minimum height of 6 feet (1.8 m) above the ground. This must prevent a sphere of 2¼ inches (57 mm) from passing under or through any opening in the gate or adjacent fence (the portion covered in the gate's open position.) Refer to the illustrations.

Swing Gates:

- No protrusions along the bottom of the gate.
- Fallover protection to prevent the gate from falling when gate is detached from supporting hardware.

PRECAUTIONS FOR GATE SYSTEMS

ENTRAPMENT ZONE HAZARDS

Body parts may become entrapped between a gate and a stationary object when the gate begins to move, which can result in serious injury or death. Make sure pedestrians stay clear of the gate path and areas where gate motion is close to stationary objects.

PINCH POINT HAZARDS

- In open roller slide gates, severe injury can occur when hands and fingers get caught in the slide gate rollers. Feet can be injured between the bottom of the gate and bottom rollers. Make sure roller guards are installed to cover these pinch points.
- A swing gate's opening mechanism may have arms that can overlap with a scissoring effect, which can result in serious injury. Make sure pedestrians stay clear of the gate path and the opening mechanism, especially when the gate is in motion.

CRUSH HAZARDS

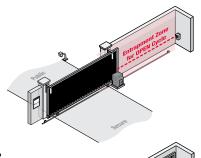
In picket gates, body parts positioned between the bars can become seriously mutilated when the gate begins to move, which can result in serious injury or death.

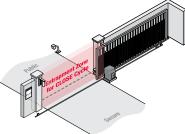
Make sure openings are covered or screened and gaps are filled to prevent persons from reaching through, and/or passing through, the gate.

SAFETY CHECKLIST

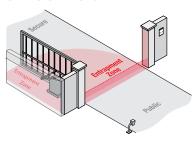
- Automated gates are for vehicular use only; provide and maintain walkways and signs to direct pedestrians to a separate walk-through entrance.
- Clearly display WARNING SIGNS on both sides of the gate in clear view of vehicles.
- Never let children operate or play with gate controls. Keep all remote controls, especially radio transmitters, away from children. DO NOT allow children to play on or around the gate or gate operator.
- Make sure all access control devices are mounted at least 6 feet (1.8 m) away from any moving parts. Create a safe design where a person need NOT reach over, under, through or around the gate to operate the access controls.

HORIZONTAL SLIDE GATE SYSTEM





SWING GATE SYSTEM



SLIDE GATE OPERATOR SELECTION

SLIDE GATE OPERATORS							
MFG.	MODEL	APPLICATION	WEIGHT CAPACITY	OPENING WIDTH	DRIVE TYPE	POWER	PAGE NO.
	DEIMOS ULTRA	Residential	800 lbs.	75 ft.	Rack/Pinion	24VDC, Battery Backup and Solar Options	458
	ARES 1500 FAST	Residential	1000 lbs.	75 ft.	Rack/Pinion	24VDC, Battery Backup and Solar Options	458
BFL	ARES 1500	Residential/Commercial	2000 lbs.	75 ft.	Rack/Pinion	24VDC, Battery Backup and Solar Options	458
Be ahead	ICARO FAST	Residential/Commercial	1300 lbs.	100 ft.	Rack/Pinion	110VAC	459
	ICARO Smart	Commercial	2600 lbs.	100 ft.	Rack/Pinion	110VAC	459
	SP3500	Industrial	4000 lbs.	100 ft.	Rack/Pinion	230VAC	459
FAAC	844ER	Industrial	4000 lbs.	131 ft.	Rack/Pinion	24VDC	468
0	SL-c	Residential/Commercial	1500 lbs.	35 ft.	Rack/Pinion	24VDC, Battery Backup and Solar Options	470
GATE SYSTEMS	SL-i	Commercial/Industrial	2500 lbs.	45 ft.	Rack/Pinion	24VDC, Battery Backup and Solar Options	470
	SL-90DC-C	Residential/Commercial	1600 lbs.	50 ft.	Chain	24VDC w/ Battery Backup, Battery Backup Solar Option	472
	SL-90DC-R	Residential/Commercial	1600 lbs.	50 ft.	Rack/Pinion	24VDC w/ Battery Backup, Battery Backup Solar Option	472
	SL-100DC-C	Residential/Commercial	2000 lbs.	50 ft.	Chain	24VDC w/ Battery Backup, Battery Backup Solar Option	473
	SL-100DC-R	Residential/Commercial	2000 lbs.	50 ft.	Rack/Pinion	24VDC w/ Battery Backup, Battery Backup Solar Option	473
AMBANIANE	SL-150DC-1/2-C	Commercial/Industrial	3000 lbs.	60 ft.	Chain	24VDC w/ Battery Backup, Battery Backup Solar Option	473
	SL-150DC-1/2-R	Commercial/Industrial	3000 lbs.	60 ft.	Rack/Pinion	24VDC w/ Battery Backup, Battery Backup Solar Option	473
	SL-150DC-1-C	Commercial/Industrial	4000 lbs.	60 ft.	Chain	24VDC w/ Battery Backup, Battery Backup Solar Option	474
	SL-150DC-1-R	Commercial/Industrial	4000 lbs.	60 ft.	Rack/Pinion	24VDC w/ Battery Backup, Battery Backup Solar Option	474
	SL-175DC-C	Commercial/Industrial	8000 lbs.	100 ft.	Chain	24VDC w/ Battery Backup,	474
	SL-175DC-R	Commercial/Industrial	8000 lbs.	100 ft.	Rack/Pinion	24VDC w/ Battery Backup	474

ACCESSORIES





SWING GATE OPERATOR SELECTION

SWING GATE OPERATORS							
MFG.	MODEL	APPLICATION	WEIGHT CAPACITY	OPENING WIDTH	DRIVE TYPE	POWER	PAGE NO.
	GIUNO	Residential/Commercial	1750 lbs.	17 ft.	Screw Arm	24VDC w/ Battery Backup, Battery Backup Solar Option	460
	KUSTOS	Residential	550 lbs.	16 ft.	Screw Arm	24VDC w/ Battery Backup, Battery Backup Solar Option	461
	LUX	Residential/Commercial	700 lbs.	15 ft.	Hydraulic	110VAC	461
BFL	IGEA	Residential	550 lbs.	10 ft.	Articulating Arm	24VDC w/ Battery Backup, Battery Backup Solar Option	462
Be ahead	E5 BT A12	Residential	175 lbs.	4 ft.	Articulating Arm	24VDC, Battery Backup Option	462
	E5 BT A18	Residential	220 lbs.	6 ft.	Articulating Arm	24VDC, Battery Backup Option	462
	SUB R	Residential/Commercial	1750 lbs.	12 ft.	Underground Hydraulic	110VAC	463
	SUB BT	Residential/Commercial	1750 lbs.	12 ft.	Underground Hydraulic	24VDC w/ Battery Backup, Battery Backup Solar Option	463
	S418	Residential	500 lbs.	12 ft.	Screw Arm	24VDC w/ Battery Backup	467
	400 CBAC	Residential/Commercial	1300 lbs.	16 ft.	Hydraulic	110VAC	467
FAAC	400 CBACR	Residential/Commercial	900 lbs.	12 ft.	Hydraulic	110VAC	467
	S800H	Residential/Commercial	1760 lbs.	13 ft.	Underground Hydraulic	24VDC w/ Battery Backup	468
ALA MINE	SW325	Residential/Commercial	2000 lbs.	22 ft.	Articulating Arm Bottom Drive	24VDC w/ Battery Backup, Solar Option	475
	TORO PRIME	Residential/Commercial	1600 lbs. 600 lbs	8 ft. 18 ft.	Screw Arm	24VDC w/ Battery Backup, Solar Option	475



455

GATE AUTOMATION QUOTE REQUEST FORM

Company:	Conta	ct:	Phone:
Email:		Job Name:	
1 GATE TYPE 2 • Swing Gate	GATE OPENING WIDTH	5 APPLICATION TYPE □ Residential	6 SWING GATE DRIVE TYPE ☐ Hydraulic Arm
☐ Single ☐ Double	FT	☐ Multi-Occupancy	☐ Electromechanical Arm
● Bi-Folding Gate ☐ Single ☐ Double 3	GATE LEAF WEIGHT	□ Commercial □ Industrial	☐ Articulating Arm ☐ Underground
● Slide Gate	LBS	☐ Vehicular Gate	☐ Electromechanical Pad Mount
	GATE LEAF HEIGHT	☐ Pedestrian Gate	☐ No Preference
☐ Ground Track☐ Telescoping	FTIN		SLIDE GATE DRIVE TYPE ☐ Rack/Pinion
7 INTENSITY OF USE	Q DOWER	REQUIREMENTS	☐ Chain
☐ Low up to 10 times ☐ Medium up to 100 times ☐ High 100+ times da ☐ Very High 1000+ times d	daily 220 V es daily 110 V ily Batter	AC	☐ No Preference
Note: Gate operator installation requi concrete finishing, welding, low knowledge. We recommend usin with UL325/ASTM-F2200 safety	and high voltage electrical ng a licensed professional fam standards.		
SAFETY ACCESSORIES	ACCESS CONTI	ROL	MISC. ACCESSORIES
(Recommended per UL325 Safety Standard	ls) ☐ Remote Trans	smitter (PG. 120)	☐ Post for Keypad (PG. 120)
☐ Photo Eyes (PG. 120) ☐ Edge Sensors (PG. 120)	□ Digital Keypa □ Landline Tele □ Cellular Cont	phone Control (PG. 120)	☐ Timer (PG. 120) ☐ Siren Operated Sensor(PG. 120) ☐ Lock Box (PG. 120)
DRIVEWAY LOOPS/DETECTOR		(PG. 120)	☐ Magnetic Lock (PG. 120) ☐ Sliding Gate Lock (PG. 120)
DRIVEWAY REVERSING LOOPS ☐ Direct Burial Loops (PG. 120) Pre-construction paved drivewa	□ Vehicle Integ	ration (PG. 120) Switch (PG. 120)	☐ Key operated ☐ Mechanical Code Operate
☐ Saw Cut Loops (PG. 120) Existing paved driveway ☐ Heavy Duty Burial Loops (Po	☐ Are vou inteara	ting this gate into an existing	
☐ Free-Exit Loops (PG. 120) ☐ Free-Exit Wand (PG. 120)			

MANUFACTURER OVERVIEW

AIDI offers multiple gate automation options to meet your varied requirements.



BFT Automation

Technology: 'BFT SMART TECHNOLOGY' includes Magnetic limit switches, End-cycle slowdown, Integrated radio receiver, Integrated D-Track selflearning and self-diagnostics, U-link WIFI platform.

Safety: 'BFT SAFE USE' includes In compliance with UL 325-2016 safety standards, Obstruction sensing, Rack drive increases operational safety and security on sliding gates, Keyed manual release.

Features / Overview information

- Small operator profiles and footprints
- Slide units are Rack Drive with ankle height drive output to allow installation on cantilever track
- Low cost to weight capacity ratio
- Made in Italy: Operational instructions written to European standards and norms



Technology: Full systems control board, Mechanical limit switches, 433 MHz rolling code technology, Soft stop opening and closing, 4 operating modes.

Safety: FAAC was among the first meet UL standards before the standards were implemented, ETL listed for UL 325 compliance, Anti-crushing safety with a twin-disk oil-bath clutch, Obstruction sensing, Rack drive increases operational safety and security on sliding gates, non-keyed manual release.

Features / Overview information

- Non-reversing operators means no electric locks needed
- Workhorse machines with years of solid performance
- Ankle height drive output allows installation on cantilever track
- Made in Italy: Operational instructions written to European standards and norms



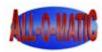
Rotary Gate Systems Automation

Technology: Full systems controller with integrated radio receiver, Mechanical limit switches, Programmable soft start/stop, Inherent reverse sensor, Multiple opening options on power outage.

Safety: UL Listed for Class I, II, III, IV; Obstruction sensing, Rack drive increases operational safety and security on sliding gates, High torque DC motor.

Features / Overview information

- Side mounted rack drive gear reduces accumulation of grit in the drive gear, and reduces ice buildup issues.
- Convenient 110 VAC outlet inside control box
- Made in the U.S.A. with excellent installation manuals & tech support



All-O-Matic Automation

Technology: Full systems controller, Internal limit switches unaffected by ice buildup, Integrated battery backup included, Inherent reverse sensor.

Safety: ETL Listed for UL 325-2018 and UL 991 Compliance, Pre-wired loop detector rack, Obstruction sensing, Rack drive increases operational safety and security on sliding gates, Maintenance free brushless DC motor.

Features / Overview information

- Rack or Chain Drive options available for sliding gates
- Available with either 110VAC or solar power option, or solar can be added to a 110VAC operator
- Rack drive implemented at knee height attaches to gate panel on sliding gates
- Heavy duty operators for large and heavy
- Made in the U.S.A. with excellent installation manuals & tech support





DEIMOS SLIDE GATE OPERATOR KIT

Slide Gate Operator for gates up to 800 Lbs and 75 Ft at 8 in/sec

KR925228 00003 DEIMOS ULTRA UL/CSA 120V 60HZ



Deimos Kit contains:

- 1 DEIMOS BT, operator with integrated 433 MHz rolling-code receiver on the control board
- 1 set of reflective photocells
- 1 MITTO 2 two channel remote transmitter









TECHNICAL FEATURES

- > Capacity: Recommended max 800 lbs and 75 Ft (Max rated 1300 lbs)
- > Gate Speed: 8 inches per second
- > Drive: Rack drive at 2" O.C. vertical
- > Motor: 24 VDC
- > Power Supply: 120 VAC, 60 Hz, Single Phase
- > Radio Controls: 433MHz Rolling Code (integrated)
- > Dimensions: 11-1/4"H x 10"W x 6-1/2"D
- > Weight: 18 lbs
- > MET Listed for UL, 325, Door, Drapery, Gate, Louver & Window Operator Systems

USAGE

- > Residential Focus
- > HomeLink compatible
- > Duty Cycle: 210 cycles/day
- > Rack drive applications
- > Small footprint
- > Battery backup available

- > Solar option available
- > Warranty 2 years from install date
 - DuraGates Hardware
 - Integrator Drive Hardware
 - Ranger Telescoping Systems
 - V-Groove Hardware



ARES FAST SLIDE GATE OPERATOR

Slide Gate Operator for gates up to 1,000 Lbs and 75 Ft at 8 in/sec

P926192 00001 ARES 1500 FAST ULTRA BT A 120V

ARES SLIDE GATE OPERATOR

Slide Gate Operator for gates up to 2,000 Lbs and 75 Ft at 6 in/sec

P926191 00001 ARES 1500 ULTRA BT A 120V



TECHNICAL FEATURES

- > Capacity: 75 Ft gate: FAST 1,000 lbs (Max rated 1,650 lbs); Std 2,000 lbs (Max rated 3300 lbs)
- > Gate Speed: FAST: 8 in/sec; Std 6 in/sec
- > Drive: Rack drive at 2-9/16" O.C. vertical
- > Motor: 24 VDC
- > Power Supply: 120 VAC, 60 Hz, Single Phase
- > Radio Controls: 433MHz Rolling Code (integrated)
- > Dimensions: 11-7/8"H x 10-5/8"W x 7-7/8"D
- > Weight: 20 lbs

USAGE

- > Residential/Commercial Focus
- > HomeLink compatible
- > Duty Cycle: 450 cycles/day
- > Rack drive applications
- > Small footprint
- > Battery backup available
- > Solar option available
- > Warranty 2 years from install date
 - DuraGates Hardware
 - Integrator Drive Hardware
 - Ranger Telescoping Systems
 - V-Groove Hardware



ICARO FAST SLIDE GATE OPERATOR

Slide Gate Operator for gates up to 1,300 Lbs and 75 Ft at 8 in/sec

P925237 00001 ICARO FAST ULTRA AC V 120V

ICARO SLIDE GATE OPERATOR

Slide Gate Operator for gates up to 2,600 lbs and 75 Ft at 6 in/sec

P925238 00001 ICARO ULTRA AC V 120V

TECHNICAL FEATURES

- > Capacity: 75 Ft gate: FAST 1,300 lbs (Max rated 2,200 lbs); Std 2,600 lbs (Max rated 4,400 lbs)
- > Gate Speed: FAST: 8 in/sec; Std 6 in/sec
- > Motor: 120 VAC
- > Drive: Rack drive at 2-9/16" O.C. vertical
- > Power Supply: 120 VAC, 60 Hz, Single Phase
- > Radio Controls: 433MHz Rolling Code (integrated)
- > Dimensions: 14-3/4"H x 10-1/4"W x 10-1/4"D
- > Weight: 60 lbs

USAGE

- > Residential/Commercial Focus
- > HomeLink compatible
- > Duty Cycle: 450 cycles/day
- > Rack drive applications
- > Small footprint w/steel case
- > Warranty 2 years from install date
 - DuraGates Hardware
 - Integrator Drive Hardware
 - Ranger Telescoping Systems
 - V-Groove Hardware







SP3500 SLIDE GATE OPERATOR

Industrial Slide Gate Operator for gates up to 4,000 Lbs and 100 Ft at 6-1/2 in/sec

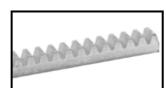
P925207 00002 SP3500

TECHNICAL FEATURES

- > Capacity: 4,000 Lbs and 100 Ft gate (Max rated 7,500 lbs)
- > Gate Speed: 6-1/2 in/sec
- > Motor: AC motor
- > Hydrodynamic gear for smooth gate starts & stops
- > Drive: Rack drive appx 6-13/16" from base of operator.
- > Power Supply: 230 VAC, 60 Hz, Three Phase
- > Radio Controls: Optional
- > Dimensions: 22-3/8"H x 18"W x 9-7/8"D
- > Weight: 130 lbs

USAGE

- > HD Industrial Focus
- > Duty Cycle: 500 cycles/day
- > Rack drive applications
- > Large footprint
- > Warranty 2 years from install date
 - DuraGates Hardware
 - Ranger Telescoping Systems



D571491 - CFZ6 30mm x 30mm, 6mm-pitch galvanized adjustable steel rack 6' 6" length.





P125015-basp Adjustable anchoring base



GIUNO SWING GATE OPERATOR

Hydraulic operator for swing gates up to 1,760 Lbs and 17 Ft

GIUNO ULTRA BT A50 UL



TECHNICAL FEATURES

> Capacity: 1760 lbs and 17 Ft > Cycle Time: 20 seconds

> Motor: 24 VDC > Drive: Hydraulic

> Power Supply: 120 VAC, 60 Hz, Single Phase

> Radio Controls: 433MHz Rolling Code (integrated)

> Weight: 35 lbs

> MET Listed for UL, 325, Door, Drapery, Gate, Louver & Window Operator Systems

> BFT Easy Set app to help with the installation geometry on new swing gates.

USAGE

- > Residential or Commercial Focus
- > Duty Cycle: 875 cycles/day
- > Small footprint
- > Battery backup available
- > Solar option available
- > Warranty 2 years from install date

GIUNO KITS - Standard Kits include Thalia control board w/integrated receiver, 10" x 12" fiberglass enclosure, 2 remotes

KGIUNOULA50S-SE

SINGLE GIUNO ULTRA BT A50 Operator, 10ft of wire, 1 polarized reflective photocell (KIRPOLAPHOT001)

KGIUNOULA50D-SE

DUAL GIUNO ULTRA BT A50 Operators, 35ft of wire, 1 polarized thru-beam Compacta photocell

GIUNO KITS - Battery Backup Kits includes Thalia control board w/integrated receiver, 12" x 14" fiberglass enclosure w/115V Outlet, 2-9AH batteries, 2 remotes

KGIUNOULA50S-LE

SINGLE GIUNO ULTRA BT A50 Operator, 10ft of wire, 1 polarized reflective photocell (KIRPOLAPHOT001)

KGIUNOULA50D-LE

DUAL GIUNO ULTRA BT A50 Operators, 35ft of wire, 1 polarized thru-beam Compacta photocell





BFL

KUSTOS SWING GATE OPERATOR

Electromechanical automation for swing gates up to 550 Lbs and 16 Ft

KUSTOS ULTRA BT UL A40



TECHNICAL FEATURES

> Capacity: 550 lbs and 16 Ft > Cycle Time: 17 seconds

> Motor: 24 VDC > Drive: Screw Drive

> Power Supply: 120 VAC, 60 Hz, Single Phase

> Radio Controls: 433MHz Rolling Code (integrated)

> Dimensions: 4-3/4"H x 4-3/8"W x 47-5/8"L > Weight: Arm: 33 lbs; Control box: 20 lbs

> MET Listed for UL, 325, Door, Drapery, Gate, Louver & Window Operator Systems

> BFT Easy Set app to help with the installation geometry on new swing gates.

KUSTOS UL KITS - Standard Kits include Thalia control board w/integrated receiver, 10" x 12" fiberglass enclosure, 2 Mittos remotes, 1 thru-beam COMPACTA photocell

KR935317 00004

SINGLE KUSTOS operator, Controller, 6 ft install cable

KR935317 00005

DUAL KUSTOS operators, One Controller, 35 ft install cable

KUSTOS UL KITS - Battery Backup Kits includes Thalia control board w/integrated receiver, 12" x 14" fiberglass enclosure w/115V Outlet, 2-9AH batteries, 2 Mittos remotes, 1 thru-beam COMPACTA photocell

KLEBR93531704

SINGLE KUSTOS operator, Controller, 6 ft of install cable

KLEBR93531705

DUAL KUSTOS operators, One Controller, 35 ft of install cable

USAGE

- > Residential Focus
- > Duty Cycle: 410 cycles/day
- > Small footprint

- > Battery backup available
- > Solar option available
- > Warranty 2 years from install

date



LUX SWING GATE OPERATOR

Hydraulic operator for swing gates up to 700 Lbs and 15 Ft

P935014 00010 LUX GV 2B UL

Lux operators are sold a la carte.

One or two actuators, a controller, and accessories as needed.

SMART TECHNOLOGY FEATURES

- > Integrated rolling code radio receiver
- > Control unit with D-Track self-learning and self-diagnostic functions
- > Control unit compatible with the U-link WIFI platform
- > Contains obstruction sensing device

TECHNICAL FEATURES

- > Capacity: 700 lbs and 15 Ft > Cycle Time: 17 seconds
- > Motor: 120 VAC > Drive: Hydraulic
- > Power Supply: 120 VAC, 60 Hz, Single Phase
- > Radio Controls: 433MHz Rolling Code (integrated)
- > Dimensions: 3-1/4"H x 3-1/4"W x 51"L
- > Weight: 19 lbs
- > MET Listed for UL, 325, Door, Drapery, Gate, Louver & Window Operator Systems
- > BFT Easy Set app to help with the installation geometry on new swing gates.
- > Mechanical Limit Switches
- > Requires Positive Stops



USAGE

- > Heavy Duty operator with Commercial & Industrial Focus
- > Duty Cycle: 500 cycles/day
- > Small footprint
- > Warranty 2 years from install date

The Rigel 6 controller boards include a built-in receiver, 24/7 timer, power outlet, and test button.



RIGEL6UL-SE Controller Standard 10" x 12" Fiberglass enclosure, pre-wired, 120V, w/Rigel 6 board



RIGEL6UL-LE Controller

Larger 16" x 18" Fiberglass enclosure, pre-wired, 120V, w/Rigel 6 board, pre-wired for loop detectors



IGEA SWING GATE OPERATOR

Electromechanical operator for column mounted swing gates up to 550 Lbs and 10 Ft

IGFA BT UI



> Capacity: 550 lbs and 10 Ft > Cycle Time: 15 seconds

> Motor: 24 VDC

> Drive: Column mounted articulated arm

> Power Supply: 120 VAC, 60 Hz, Single Phase

> Radio Controls: 433MHz Rolling Code (integrated)

> Weight: 35 lbs

> MET Listed for UL, 325, Door, Drapery, Gate, **Louver & Window Operator Systems**

> Mechanical Limit Switches

USAGE

- > Residential Focus
- > Column or Post Mounted
- > Designed for easy & simple installation
- > Duty Cycle: 100 cycles/day
- > Small footprint
- > Battery backup available
- > Solar option available
- > Warranty 2 years from install date

IGEA Standard Kits include Thalia control board w/ integrated receiver, 10" x 12" fiberglass enclosure, 2 Mittos remotes

U-LINK

KIGEAUL-S-SE

SINGLE IGEA BT Operator, Controller, 10ft of wire, 1 polarized reflective photocell (KIRPOLAPHOT001)

KIGEAUL-D-SE

DUAL IGEA BT Operators, One Controller, 35ft of wire, 1 polarized thru-beam Compacta photocell

IGEA Battery Backup Kits includes Thalia control board w/ integrated receiver, 12" x 14" fiberglass enclosure w/115V Outlet, 2-9AH batteries, 2 Mittos remotes

KIGEAUL-S-LE

SINGLE IGEA BT Operator, Controller, 10ft of wire, 1 polarized reflective photocell (KIRPOLAPHOT001)

KIGEAUL-D-LE

DUAL IGEA BT Operators, One Controller, 35ft of wire, 1 polarized thru-beam Compacta photocell

Electromechanical operator for column mounted



E5 Swing Gate Operator

P930027 00003 E5 BT A12 up to 175 Lbs and 4 Ft

P930027 00001 E5 BT A18

swing gates up to 220 Lbs and 6 Ft

up to 220 Lbs and 6 Ft

TECHNICAL FEATURES

- > Capacity: 175 lbs and 4 Ft / 220 lbs and 6 Ft
- > Cycle Time: 4.5 6.5 seconds / 14 seconds
- > Motor: 24 VDC
- > Drive: Column mounted articulated arm
- > Power Supply: 120 VAC, 60 Hz, Single Phase
- > Radio Controls: 433MHz Rolling Code (integrated)
- > Weight: 20 lbs
- > Mechanical Limit Switches

USAGE

462

- > Residential Focus
- > Pedestrian gates or doors
- > Unique Push & Go function allows the gate to be opened by a simple push of the hand
- > Non-Locking Mag lock recommended
- > Duty Cycle: 110 cycles/day
- > Small footprint
- > Battery backup available
- > Solar option available
- > Optional sliding arm available for constraints such as walls and obstacles
- > Warranty 2 years from install date

E5 operators are sold a la carte. One or two actuators, a controller, and accessories as needed.



KTHALIAUL-SE Controller

Thalia control board w/ integrated receiver, 10" x 12" fiberglass enclosure, pre-wired.



KTHALIAUL-LEB Controller

Thalia control board w/ integrated receiver, 12" x 14" fiberglass enclosure, pre-wired. Includes battery backup with (2) 12V, 9AH batteries, 110V outlet.



N735057 Sliding Arm for E5 BT A12

Used for restricted space applications.





SUB UNDERGROUND SWING GATE OPERATOR

Underground hydraulic operator for swing gates up to 1,750 Lbs and 12 Ft

SUB UL



> Capacity: 1750 lbs and 12 Ft > Cycle Time: 14 seconds

> Motor: 24 VDC & 110VAC options

> Drive: Hydraulic

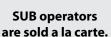
> Power Supply: 120 VAC, 60 Hz, Single Phase > Radio Controls: 433MHz Rolling Code (integrated)

> Weight: 58 lbs

USAGE

- > Residential Focus
- > Duty Cycle: 500 cycles/day
- > In ground installation eliminates footprint
- > Battery backup & Solar available on 24VDC model

> Warranty 2 years from install date





SUB R 120V UL In Ground Operator

- 120VAC Motor, w/slowdown
- No battery backup
- MET Listed for UL325

P930012 00007 SUB R UL/CSA DX

Motor on **right hand side** of driveway from inside the property.

P930012 00008 SUB R UL/CSA SX

Motor on **left hand side** of driveway from inside the property.

Controller Options

The Rigel 6 controller boards include a built-in receiver, 24/7 timer, power outlet, and test button.



RIGEL6UL-SE Controller

Standard 10" x 12" Fiberglass enclosure, pre-wired, 120V, w/Rigel 6 board



RIGEL6UL-LE Controller

Larger 16" x 18" Fiberglass enclosure, prewired, 120V, w/Rigel 6 board, pre-wired for loop detectors

Foundation Boxes

Bearing Foundation Cases allow maintenance to be carried out without disassembling the gate.



N733066 00001 - CPS DX (Right Hand) **N733066 00002 -** CPS SX (Left Hand)

SUB BT 24V In Ground Operator

- 24VDC Motor, no slowdown
- Battery backup option
- Not UL Compliant

P930123 00001 SUB BT 2B

Operator can be used for **both left and right hand installations**

Controller Options



KTHALIAUL-SE Controller

Thalia control board w/ integrated receiver, 10" x 12" fiberglass enclosure, pre-wired.



KTHALIAUL-LEB Controller

Thalia control board w/ integrated receiver, 12" x 14" fiberglass enclosure, pre-wired. Includes battery backup with (2) 12V, 9AH batteries, 110V outlet.

Foundation Box

Bearing Foundation Cases allow maintenance to be carried out without disassembling the gate.



N733480 00001 - FCS BOX Used for right or left hand installations



TRANSMITTERS & RECEIVERS



D111904 - MITTO 2 12V 12V Two channel 433Mhz rolling code remote control.



D113674 00001 - CLONIX 2E

This external two-channel receiver can be programmed to work with 128 remote controls.



P121024-Q-BOX

Digital Keypad

- 10 channels
- 100 combinations
- Backlit

A wireless digital keypad with 10 channels that can store 100 4-7 digit entry codes. A built in sensor detects low lighting conditions and activates the keypads built-in backlight.



KHLKIT - Homelink Kit

Use this Homelink Kit to eliminate the number of remote controls needed to open a gate and a garage door. This kit will allow for easy set up of one remote for both

your gate and garage door.

Kit contains one receiver and one transmitter.



P111494 - B EBA WIFI Gateway

The B-eba Wi-Fi expansion card connects to the web the device where it is installed, via wi-fi protocol. Through the U-control

management app, the B-eba card is registered on the home wi-fi network and thus allows the operator to be remotely managed. All U-Link protocol compatible BFT devices can be managed with U-control, whether they are operators, central units or receivers; therefore also automation devices by other brands can be remotely controlled. The U-control app is free and available for Android and IOS smartphones.

PHOTOCELLS

KIRREFLPHOT01UL

This polarized reflective photocell has a sensing range of 33 ft. This photocell has a wrap around mounting bracket. Hood included.



P111043 00002

A wired flat through-beam photocell receiver/transmitter set for external applications. This set has a range up to 100 ft (30m) and runs on a 24V power supply.



P111782 (COMPACTA A20-180)

This through-beam photocell is self-aligning and has a range of 65 ft.





BFL

GATE OPERATOR ACCESSORIES

GEAR RACK



D571053 - CVZ 30mm x 12mm, 4mm-pitch galvanized adjustable steel rack 3' 3" length.



D221073-CP 22mm x 22mm, 4mm-pitch plastic coated rack with adjustment slots. 3' 3" length.



Threaded gear rack connection. (3 connectors are needed per 3'3" gear rack.)

BATTERY BACKUPS



P125035- SL BAT2

24VDC battery backup system for the DEIMOS and ARES 1500 it includes a charger board that activates the batteries when the power is off and charges the batteries when the power is on.

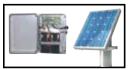


P125020

Battery backup system for Thalia control boards. This system plugs directly into the board.

SOLAR POWER

For more information on ECOSOL see page 466



KED113731H - ECOSOL KIT for DEIMOS and ARES

Interface control board, solar panel and 15' of panel cable for running BFT control panels off 24V solar power.



KETHALIA32U - ECOSOL KIT for KUSTOS and IGEA

KITS CONTAINS: 12" x 14" fiberglass enclosure w/pre-wired Thalia control board, 2-9AH batteries, 10W solar panel and 15' panel cable.

LOOP DETECTOR

DSP-7

- Designed to be cross talk free between other loops
- Automatically compensates for loop and lead-In sizes
- Switchless, self-adapting to most common installations
- Plug and play; Connect it up and watch it work
- Small profile, perfect for many installations
- Fail safe operation
- Wide low-voltage operation

MORE ACCESSORIES

Access Control	478-483
Mounting Posts	484
Driveway Loops	485-487
Vehicle Detectors	487
Safety Edges	487-488
Switches	490
Timers	490
Emergency Sensor	490
Knox Box	490







ECOSOL

SOLAR POWERED SYSTEM FOR USE WITH **DEIMOS & ARES SLIDE GATE OPERATORS** AND **KUSTOS & IGEA SWING GATE OPERATORS**





KED113731H - ECOSOL KIT for DEIMOS and ARES

Interface control board, solar panel and 15' of panel cable for running BFT control panels off 24V solar power.



KETHALIA32U - ECOSOL KIT for KUSTOS and IGEA

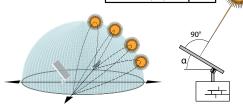
KITS CONTAINS: 12" x 14" fiberglass enclosure w/pre-wired Thalia control board, 2-9AH batteries, 10W solar panel and 15' panel cable.



α

47°

New York (NY) 41° San Francisco (CA) 38° Atlanta (GA) 34° 34° Los Angeles (CA) Phoenix (AZ) 33° Dallas (TX) 33° Houston (TX) 30° Miami (FL) 26° San Juan (PR) 18°







a >10°

 $\alpha = angle/latitude$

D113732 - ECOSOL DOUBLE

Battery capacity expansion for ECOSOL BOX. Includes two 12V 7.2Ah batteries.



N999475 - ECOSOL SECURITY

Anti-tamper stainless steel screws Kit for ECOSOL PANEL and ECOSOL POST BR.



N999473 - ECOSOL POST BR

Stainless steel bracket and screws Kit for mounting ECOSOL solar panel on round post 2" to 4" diameter or square post 3" side.



N999476 - ECOSOL CABLE

65' extension cable for ECOSOL CHARGER.



KBAT12V9AH - BATTERY

9 Amp/h 12 V battery replacement



N999477 - ECOSOL CHARGER

Battery charger 100/230V - 24V for rapid charging of ECOSOL Interface Box and ECOSOL Double from a standard electrical output.



KCAB2BR - CABLE

Solar panel 2 core red & black cable (per foot)



KRELAY24V - Relay

Relay board 24V for loop detector



1300185 10001

Thalia Lite 120V board only with cable for Libra board replacements



D113731 - ECOSOL BOX

Interface for running BFT control panels off 24V solar power. Includes two 12V 7.2Ah batteries and circuit board for management of commands to control panel and battery charge management, with built-in Rolling Code 433.92 MHz receiver with 63 stored positions. Features carry handle for possible quickcharging of batteries from electrical power outlet through ECOSOL CHARGER accessory.



N999471 - ECOSOL PANEL

10W, 24V solar panel for connection to ECOSOL BOX. Can be installed in parallel for improved recharge capacity. Complete with stainless steel screws and brackets for mounting on wall or horizontal surface. A maximum of 3 panels can be used per



Model S418 SWING GATE OPERATOR

Electromechanical operator for swing gates up to 720 Lbs and 16 Ft MODEL S418





Gate Length	Max Gate Weight		
12' (3.7m)	up to 500lbs (326kg)		
14' (4.3m)	up to 370lbs (168kg)		
16' (4.9m)	up to 280lbs (127kg)		

TECHNICAL FEATURES

- > Capacity: See chart above
- > Cycle Time: 19 seconds
- > Motor: 24 VDC, 35 W
- > Drive: Screw Drive
- > Power Supply: 120 VAC, 60 Hz, Single Phase
- > Radio Controls: 433MHz Rolling Code plug-in
- > Dimensions: 5"H x 4"W x 32'-6""L
- > Weight: 13.2 lbs
- > ETL Listed for UL 325 for Class I,II,III and IV applications

USAGE

- > Residential Focus
- > Duty Cycle: Continuous 100%
- > Small footprint
- > Battery backup included
- > Warranty 2 years from install date

104301.5 - BS418 Basic Single Kit

Kit contains:

- 1 Operator S418
- **E024U Enclosure Kit**
- 2 Batteries 12V 8Ah
- 1 Receiver 433 RC Plug In
- 2 4-channel transmitter XT4 433 RC
- 1 Pair XP 30 photobeam photocells
- 2 XP 30 adapters for conduit connection

10430115 - Single Operator only Contains:

- 1 Operator S418
- E024U Enclosure Kit type LE
- 2 Batteries 12V 8Ah

Model 400 SWING GATE OPERATOR

Hydraulic operator for swing gates up to 1300 Lbs and 16 Ft

MODEL 400

TECHNICAL FEATURES

- > Capacity: 1,300 lbs and 16 Ft
- > Cycle Time: 17 seconds
- > Motor: 115 VAC, 220 W
- > Drive: Hydraulic Drive
- > Power Supply: 120 VAC, 60 Hz, Single Phase
- > Radio Controls: 433MHz Rolling Code plug-in
- > Weight: 54 lbs
- > ETL Listed for UL 325 for Class I,II,III and IV applications

USAGE

- > If the operator will be installed in cold environments, the Arctic model must be used. (Arctic = any operator installed above the South of Kentucky.)
- > Residential to Industrial usage
- > Duty Cycle: 1200 cycles/day
- > Small footprint
- > Warranty 2 years from install date

400 CBAC - Single Kit 115V

10420112.5

1042011277.5* (Arctic model)

Leaf Weight: up to 1,300 lbs Leaf Length: up to 16 ft

90° opening time: approx 18 seconds

400 CBACR Rapid - Single Kit 115V

10420712.5

1042071277.5* (Arctic model)

Leaf Weight: up to 900 lbs Leaf Length: up to 12 ft

90° opening time: approx 12 seconds

Kits contain:

- 1 Operator 400 CBAC or CBACR
- 1 Prewired fiberglass enclosure 115V 14x16 in
- 1 455D control panel 115V
- 1 Receiver 433 RC Plua In
- 2 4-channel transmitter XT4 433 RC
- 1 Pair XP 30 photobeam photocells
- 2 XP 30 adapters for conduit connection

400 CBAC - Single Operator Only

104201125 - 400 CBAC standard operator only **1042011577*** - 400 CBAC *arctic* operator only

400 CBACR Rapid - Single Operator Only

10420712 - 400 CBACR standard operator only **1042071277*-** 400 CBACR *arctic* operator only



Model S800H UNDERGROUND SWING GATE OPERATOR

Hydraulic operator for swing gates up to 1,760 Lbs and 13 Ft

MODEL S800H

TECHNICAL FEATURES

- > Capacity: 1,760 lbs and 13 FT
- > Cycle Time: 13 seconds
- > Motor: 24VDC
- > Drive: Hydraulic Drive
- > Power Supply: 120 VAC, 60 Hz, Single Phase
- > Weight: 110 lbs
- > ETL Listed for UL 325 for Class I,II,III and IV applications
- > Integrated mechanical stops
- > 100° and 180° opening angle versions

USAGE

- > Residential focus
- > Duty Cycle: Continuous 100%
- > Small footprint
- > Built-in Battery backup
- > Solar option available
- > Warranty 2 years from install date



108710.5

Basic Single Kit contains:

- 1 Operator S800H CBAC with accessories
- Hydraulic manual release
- 1 Splined shaft collar with mounting bolts
- 1 Support Box (item 490112)
- 1 E024U Enclosure Kit
- 2 Batteries 12V 8 Ah
- 1 Receiver 433 RC Plug In
- 2 4-channel transmitter XT4 433 RC
- 1 Pair of XP30 Photobeams
- 2 XP30 adapters for conduit connection

10871015.5

Single operator only 100° opening angle



490113 Stainless steel support box



2148 **Extension Arm**



490112 Steel support box

MODEL 844ER Z16 PINION

Electromechanical operator for sliding gates up to 4,000 Lbs and 131 Ft - 7-1/2 in/sec

1098371

TECHNOLOGY

- > Maximum anti-crushing safety with a twin-disk oil-bath clutch and electronic board with encoder for reverse on obstacle
- > Simplified programming via display and pushbutton
- > Mechanical limit switches
- > Powerful electric break





490122

Galvanized rack plus fittings. 4 sections of 3.3 ft (1m) each.



737816

Foundation plate with side and height adjustments

TECHNICAL FEATURES

- > Capacity: 4,000 lbs
- > Gate Speed: 7-1/2 in/sec
- > Hydrodynamic gear for smooth gate starts & stops
- > Drive: Rack drive appx 6-13/16" from base of operator.
- > Power Supply: 115 VAC, 650W
- > Radio Controls: Optional
- > Dimensions: 15-1/4"H x 8-5/8"W x 7-1/2"D
- > Weight: 44 lbs
- > ETL Listed for UL 325 for Class I,II,III and IV applications

USAGE

- > Commercial & Industrial Focus
- > Duty Cycle: 70% Duty, appx 900 cycles/day
- > Rack drive applications
- > Large footprint
- > Warranty 2 years from install date

FAAC GATE OPERATOR ACCESSORIES

TRANSMITTER & RECEIVER



787453

Transmitter 4 channels Rolling code: the code varies whenever the transmitter is used. An algorithm recognizes and confirms the signal. Dimensions: $2 \times 2.5 \times 0.5$ in $(50 \times 64 \times 13 \text{ mm})$



787741

Plug in receiver can be plugged in directly to any FAAC electronic control board. Rolling code technology.

PHOTOCELL

785105 (XP-30)

FEATURES:

- Through-beam
- Wall Mounted or Post Mounted)
- Directional photocell with diagonal alignment
- Angle of detection +- 4 degrees
- Range: 100 ft
- Obstacle Detection Time: 10ms
- Housing Protection: IP 54
- Required power supply: 24-35 VDC available on FAAC control panels
- Output Relay Rating: 100MA/24VDC
- Output Relay: N.O. (Normally opened) & N.C. (Normally Closed)
- Dimensions: 2.2" x 3"

GEAR RACK



490122

Galvanized steel rack is sold in packages of 4. Each rack is 3' 3" in length. Mounting hardware included.

LOOP DETECTOR

2680 - Model VEK MNE1-R24-B

- Power supply 10-30 V AC/DC max 1 W
- Relay outputs max 2A 230 VAC
- 11 pins circular connector
- Automatic adjustment of the operating frequency for best performance
- Self setting at power-up
- Loop fault signal
- Operating ambient temperature
- -35°F to +158°F (-37°C to +70°C)

MORE ACCESSORIES

Access Control	478-483
Mounting Posts	484
Driveway Loops	485-487
Vehicle Detectors	487
Safety Edges	487-488
Switches	490
Timers	490
Emergency Sensor	490
Knox Box	490





POST MOUNTED SLIDE GATE OPERATOR





Rotary Gate Systems slide gate operators mount directly to a fall-over support post and allow for installation where pad mounted, chain drive operators are not desirable or practical. These rack drive operators are a natural fit for DuraGates cantilever hardware and provide much more security than chain or drive rail operators.

TECHNOLOGY

- > Full Systems Capable Controller
- > Inherent Reverse Sensor (UL 325 type A obstruction sensor)
- > Multiple Opening options on power outage
- > Mechanical limit switches
- > Key Secured Emergency Release

USAGE

- > Residential/Industrial Focus
- > Duty Cycle: Continuous
- > Rack drive applications
- > Small footprint
- > Warranty* 5 years for operator,
 - 2 years for controller
 - DuraGates Hardware
 - Integrator Drive Hardware
 - Ranger Telescoping Systems
 - V-Groove Hardware
- *This warranty only extends to the distributor and the installing dealer.

TECHNICAL FEATURES

- > Capacity: 1,500 or 2,500 lbs
- > Gate Speed: 1.1 ft/sec, not adjustable
- > Motor: 24VDC, high torque permanent magnet DC motor
- > Soft Start / Stop adjustable in programming
- > Drive: Rack direct drive 93:1 gear reduction
- > Power Supply: 115 VAC
- > Radio Controls: Optional Linear MegaCode
- > Dimensions: Operator- 26"H x 8"Dia, Control Box 18"x18"x6"
- > Weight: Operator 47 Lbs, Control box 45 Lbs
- > UL Listed for Class I,II,III and IV applications
- > UHMW Nylon Rack Gear Provides Years of Service



OPERATOR KITS INCLUDE:

- > Operator
- > Control Box w/ 110V outlet
- > 20ft UHMW Nylon Gear Rack



COMMERCIAL MODEL

Electromechanical operator for sliding gates up to 1,500 Lbs and 35 Ft

SL-c



37-001

UHMW Nylon Gear Rack, 5 Ft Mounting hardware included. Electromechanical operator for sliding

gates up to 2,500 Lbs and 45 Ft

SL-i

Recommended to mount rack rail on a 2x2 angle to cover the teeth.



TRANSMITTERS & RECEIVERS

MT-2B

2-CHANNEL BLOCK CODED VISOR TRANSMITTER



ACT-31B
1-CHANNEL BLOCK
CODED KEY RING
TRANSMITTER

MGR-2 2-CHANNEL GATE

RECEIVER

The MGR-2 can operate two gates, one gate and an obstacle sensor, or channel one can open the gate and channel two can close the gate.

AP-5

AP-5 RECEIVER / CONTROLLER - 2 DOOR/GATE

Designed for a broad range of applications and can control one or two door strikes, mag-locks, barrier gates, automatic gates, or door operators.

PHOTOCELLS

EMX IRB KIT

UNIVERSAL UL325 RETROREFLECTIVE PHOTOEYE KIT



Kit includes photoeye with hood, reflector with hood, and mounting bracket.

- Retroreflective configuration
- 60 ft. operating range

EMX IRB MON

UNIVERSAL UL325 THRU BEAM PHOTOEYE KIT

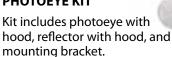


Kit includes transmitter, receiver, protective hoods and sunshield.

- Thru beam configuration
- 115 ft. operating range

EMX NIR-50-325

UL325 RETROREFLECTIVE PHOTOEYE KIT



- Retroreflective configuration
- 50 ft. operating range

E3K

LONG RANGE PHOTOELECTRIC SENSOR

Kit includes photoeye and reflector.

- Retroreflective configuration
- 30 ft. operating range







LOOP & VEHICLE DETECTORS

DSP-55

The DSP-55 is a compact loop and free exit probe vehicle detector that will operate on any voltage from 8 to 35 volts DC. The low voltage range is ideal for solar applications. detection needs.

OVS-01GT VEHICLE PRESENCE SENSOR

- Vehicle Virtual Loop detects vehicle presence while ignoring most human traffic
- Uses microwave (18 ft range) and ultrasonic sensors
- Replaces Ground loops & concrete cutting
- Can be mounted 2 to 3 feet off the ground
- Adjustable sensitivity

See page 485 for more information.

SOLAR UPGRADES

RGS-SOLAR CTL

SOLAR CONTROL UNIT

- Requires battery upgrade
- Requires solar panels
- Requires factory installation of solar controller
- Must be ordered as "Solar installation", cannot be setup on site
- Duty cycle of operators depends on solar panel output power and battery capacity
- NOT RECOMMENDED FOR INDUSTRIAL APPLICATIONS

MORE ACCESSORIES

Access Control	478-483
Mounting Posts	484
Driveway Loops	485-487
Vehicle Detectors	487
Safety Edges	487-488
Switches	490
Timers	490
Emergency Sensor	490
Knox Box	490



471



Model SL-90DC SLIDE GATE OPERATOR

Electromechanical operator for chain or rack driven sliding gates up to 1600 Lbs and 50 Ft at 12 in/sec

Solar Panel



TECHNICAL FEATURES

- > Capacity: 1600 lbs and 50 Ft gate
- > Gate Speed: 1 ft/sec
- > Drive: Chain or Rack drive (at 11-1/2" O.C. vertical)
- > Motor: 24 VDC, 1/2 HP
- > Power Supply: 115/230 VAC Single Phase or 24VDC Solar Panel
- > Radio Controls: Optional Linear MegaCode
- > Dimensions: 16"H x 15-1/2"W x 18-1/2"D
- > Weight: 95 lbs
- > ETL Listed for UL 325 2018 Compliant
- > Pre-wired loop rack is included
- > Mechanical Foot Pedal Release



AOM-PS-90/100 Pipe Stand Mount Kit



AOM-90-PDT
Pedestal Mount Kit

USAGE

- > Residential and Commercial Focus
- > Duty Cycle: Continuous
- > Battery backup integrated w/ (2) 7Ah 12VDC batteries
- > Solar option available
- > Warranty 7 years for residential, 5 years for commercial



SL90DC-C Chain drive operator

Includes 20' of #40NP chain, Bolt-on bracket, integrated battery backup.

sold separately.

SL90DC-C-S Chain drive operator Solar Powered Includes 20' of #40NP chain, Bolt-on bracket, integrated battery backup upgraded to (2) 14Ah batteries and SOLAR controller installed, NO 110VAC power supply input.

SL90DC-R Rack drive operator

Includes pinion gear upgrade, rodent plate, and integrated battery backup.

SL90DC-R-S Rack drive operator Solar Powered Includes pinion gear upgrade, rodent plate, and integrated battery backup upgraded to (2) 14Ah batteries and SOLAR controller installed, NO 110VAC power supply input.



Shown SL90DC-C. Chain drive operator for sliding gates.



Model SL-100DC SLIDE GATE OPERATOR

Electromechanical operator for chain or rack driven sliding gates up to 2000 Lbs and 50 Ft at 12 in/sec

gates up to

TECHNICAL FEATURES

- > Capacity: 2000 lbs and 50 Ft gate
- > Gate Speed: 1 ft/sec
- > Drive: Chain or Rack drive (at 13-1/2" O.C. vertical)
- > Motor: 24 VDC, 1/2 HP
- > Power Supply: 115/230 VAC Single Phase or 24VDC Solar Panel
- > Radio Controls: Optional Linear MegaCode
- > Dimensions: 23-1/2"H x 17-1/2"W x 12"D
- > Weight: 130 lbs
- > ETL Listed for UL 325 2018 Compliant
- > Pre-wired loop rack is included
- > Mechanical Foot Pedal Release



AOM-PS-90/100 Pipe Stand Mount Kit



AOM-100-PDTPedestal Mount Kit

USAGE

- > Residential and Commercial Focus
- > Duty Cycle: Continuous
- > Battery backup integrated w/ (2) 7Ah 12VDC batteries
- > Solar option available
- > Warranty 7 years for residential, 5 years for commercial

SL100DC-C Chain drive operator

Includes 20' of #40NP chain, Bolt-on bracket, integrated battery backup.

Solar Panel sold separately.

SL100DC-C-S Chain drive operator Solar Powered Includes 20' of #40NP chain, Bolt-on bracket, integrated battery backup upgraded to (2) 14Ah batteries and SOLAR controller installed, NO 110VAC power supply input.

SL100DC-R Rack drive operator

Includes pinion gear upgrade, rodent plate, and integrated battery backup.

SL100DC-R-S Rack drive operator Solar Powered Includes pinion gear upgrade, rodent plate, and integrated battery backup upgraded to (2) 14Ah batteries and SOLAR controller installed, NO 110VAC power supply input.

sold separately.



Model SL-150DC-1/2HP SLIDE GATE OPERATOR

Electromechanical operator for chain or rack driven sliding gates up to 3000 Lbs and 60 Ft at 12 in/sec

Solar Panel

TECHNICAL FEATURES

- > Capacity: 3000 lbs and 60 Ft gate
- > Gate Speed: 1 ft/sec
- > Drive: Chain or Rack drive (at 10" O.C. vertical)
- > Motor: 24 VDC, 1/2 HP
- > Power Supply: 115/230 VAC Single Phase or 24VDC Solar Panel
- > Radio Controls: Optional Linear MegaCode
- > Dimensions: 25"H x 19-1/2"W x 15"D
- > Weight: 150 lbs
- > ETL Listed for UL 325 2018 Compliant
- > Pre-wired loop rack is included
- > Mechanical Foot Pedal Release



AOM-PS-150 Pipe Stand Mount Kit



AOM-150-PDTPedestal Mount Kit

USAGE

- > Commercial and Industrial Focus
- > Duty Cycle: Continuous
- > Battery backup integrated w/ (2) 7Ah 12VDC batteries
- > Solar option available
- > Warranty 7 years for residential, 5 years for commercial

SL150DC-1/2-C Chain drive operator Includes 20' of #40NP chain, Bolt-on bracket, integrated battery backup.

SL150DC-1/2-C-S Chain drive operator Solar Powered Includes 20' of #40NP chain, Bolt-on bracket, integrated battery backup upgraded to (2) 14Ah batteries and SOLAR controller installed, NO 110VAC power supply input.

SL150DC-1/2-R Rack drive operator Includes pinion gear upgrade, rodent plate, and integrated battery backup.

SL150DC-1/2-R-S Rack drive operator Solar Powered Includes pinion gear upgrade, rodent plate, and integrated battery backup upgraded to (2) 14Ah batteries and SOLAR controller installed, NO 110VAC power supply input.

Visit locks4gates.com to view the latest models and download spec sheets and installation manuals.

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Model SL-150DC-1HP SLIDE GATE OPERATOR

Electromechanical operator for chain or rack driven sliding gates up to 4000 Lbs and 60 Ft at 12 in/sec



TECHNICAL FEATURES

- > Capacity: 4000 lbs and 60 Ft gate
- > Gate Speed: 1 ft/sec
- > Drive: Chain or Rack drive (at 10" O.C. vertical)
- > Motor: 24 VDC, 1 HP
- > Power Supply: 115/230 VAC Single Phase or 24VDC Solar Panel
- > Radio Controls: Optional Linear MegaCode
- > Dimensions: 25"H x 19-1/2"W x 15"D
- > Weight: 150 lbs
- > ETL Listed for UL 325 2018 Compliant
- > Pre-wired loop rack is included
- > Mechanical Foot Pedal Release



AOM-PS-150 Pipe Stand Mount Kit



AOM-150-PDTPedestal Mount Kit

USAGE

- > Commercial and Industrial Focus
- > Duty Cycle: Continuous
- > Battery backup integrated w/ (2) 7Ah 12VDC batteries
- > Solar option available
- > Warranty 7 years for residential, 5 years for commercial

SL150DC-1-C Chain drive operator

Includes 20' of #40NP chain, Bolt-on bracket, integrated battery backup, plastic cover.

Solar Panel sold separately.

SL150DC-1-C-S Chain drive operator Solar Powered Includes 20' of #40NP chain, Bolt-on bracket, integrated battery backup upgraded to (2) 14Ah batteries and SOLAR controller installed, NO 110VAC power supply input, plastic cover.

SL150DC-1-R Rack drive operator

Includes pinion gear upgrade, and integrated battery backup, metal cover.

SL150DC-1-R-S Rack drive operator Solar Powered Includes pinion gear upgrade, and integrated battery backup upgraded to (2) 14Ah batteries and SOLAR controller installed, NO 110VAC power supply input, metal cover.



Model SL-175DC SLIDE GATE OPERATOR

Electromechanical operator for chain or rack driven sliding gates up to 8000 Lbs and 100 Ft at 12 in/sec / 3000 Lbs and 100 Ft at 24 in/sec (special order)



TECHNICAL FEATURES

- > Capacity: 8000 lbs and 100 Ft at 1 ft/sec
- > High Speed Capacity: 3000lbs and 100 Ft at 1 ft/sec
- > Drive: Chain or Rack drive (at 21" O.C. vertical appx)
- > Motor: 36 VDC
- > Power Supply: 115/230 VAC Single Phase or 36VDC Solar Panel
- > Radio Controls: Optional Linear MegaCode
- > Dimensions: 27-1/5"H x 20"W x 19-1/2"D
- > Weight: 320 lbs
- > ETL Listed for UL 325 2018 Compliant
- > Pre-wired loop rack is included
- > Mechanical Foot Pedal Release



AOM-PS-90/100 Pipe Stand Mount Kit



AOM-175-PDT
Pedestal Mount Kit

USAGE

- > Heavy Duty Commercial and Industrial Focus
- > Duty Cycle: Continuous
- > Battery backup integrated w/ (3) 14Ah 12VDC batteries
- > Warranty 7 years for residential, 5 years for commercial



SL175DC-C Chain drive operator

Includes 20' of #50NP chain, Bolt-on bracket, integrated battery backup, metal cover.

SL175DC-R Rack drive operator

Includes pinion gear upgrade, rodent plate, and integrated battery backup, metal cover.





Model SW-325DC SWING GATE OPERATOR

Electromechanical operator for swing gates with bottom articulating arm up to 2000 Lbs and 22 Ft



TECHNICAL FEATURES

- > Capacity: 2000lbs and 22 Ft gate
- > Cycle time: 14 25 seconds, adjustable
- > Drive: Bottom mounted articulating arm
- > Motor: 24 VDC, 1/2 HP
- > Power Supply: 115/230 VAC Single Phase or 24VDC Solar Panel
- > Radio Controls: Optional Linear MegaCode
- > Dimensions: 21"H x 25-1/2"W x 19"D
- > Weight: 160 lbs. + 30 lb. Arm
- > ETL Listed for UL 325 2018 Compliant
- > Pre-wired loop detector rack is included
- > Easy Slide Quick Release Arm

USAGE

- > Residential and Commercial Focus
- > Duty Cycle: Continuous
- > Battery backup integrated w/ (2) 7Ah 12VDC batteries
- > Solar option available
- > Warranty 7 years for residential, 5 years for commercial



SW-325DC Swing gate operator Includes articulating arm, integrated battery backup.

SW-325DC-S Swing gate operator Solar Powered Includes articulating arm, integrated battery backup upgraded to (2) 14Ah batteries and SOLAR controller installed, NO 110VAC power supply input.



AOM-SPT-325Pipe Stand Mount Kit



AOM-SPD-325
Pedestal Mount Kit



Model TORO PRIME SWING GATE OPERATOR

Electromechanical screw type arm operator for swing gates up to 1,600 Lbs and 8 Ft OR 600 Lbs and 18 Ft

TECHNICAL FEATURES

- > Capacity at max weight: 1600 lbs/8 Ft; 1200 lbs/12 Ft
- > Capacity at max Length: 800 lbs/16 Ft; 600 lbs/18 Ft
- > Cycle time: 15 20 seconds, adjustable
- > Drive: Screw Drive
- > Motor: NA
- > Power Supply: 115/230 VAC Single Phase and 24VDC Solar Panel
- > Radio Controls: Optional Linear > Dimensions: Control box 15-3/4"H x 19-3/4"W x 8"D
- > Weight: Arm: 25 Lbs; Control box: 55 Lbs
- > ETL Listed for UL 325 2018 Compliant
- > Pre-wired loop detector rack is included
- > Keyed Manual Release

USAGE

- > Residential and Commercial Focus
- > Duty Cycle: Continuous
- > Battery backup integrated w/ (2) 7Ah 12VDC batteries
- > Solar option available
- > Warranty 4 years for residential, 3 years for commercial



Toro operators are sold a la carte.

One or two actuators, a controller, and accessories as needed.

T24-PRIME Operator actuator arm

T24-CB TORO control box, 110VAC input power, with integrated battery backup

T24-CB-S TORO control box, Solar Power Input, with upgraded battery backup (2) 14Ah 12VDC batteries, NO 110VAC power supply input.

T24S-CABLE 40' of cable for Primary/Secondary double gate applications

Visit locks4gates.com to view the latest models and download spec sheets and installation manuals.

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TRANSMITTERS & RECEIVERS

MT-2B

2-CHANNEL BLOCK CODED VISOR TRANSMITTER



ACT-31B
1-CHANNEL BLOCK
CODED KEY RING
TRANSMITTER



MGR-2

2-CHANNEL GATE RECEIVER

The MGR-2 can operate two gates, one gate and an obstacle sensor, or channel one can open the gate and channel two can close the gate.



AP-5

AP-5 RECEIVER / CONTROLLER - 2 DOOR/GATE

Designed for a broad range of applications and can control one or two door strikes, mag-locks, barrier gates, automatic gates, or door operators.



PHOTOCELLS

EMX IRB KIT

UNIVERSAL UL325
RETROREFLECTIVE
PHOTOEYE KIT



Kit includes photoeye with hood, reflector with hood, and mounting bracket.

- Retroreflective configuration
- 60 ft. operating range

EMX IRB MON

UNIVERSAL UL325 THRU BEAM PHOTOEYE KIT

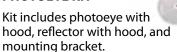


Kit includes transmitter, receiver, protective hoods and sunshield.

- Thru beam configuration
- 115 ft. operating range

EMX NIR-50-325

UL325 RETROREFLECTIVE PHOTOEYE KIT



- Retroreflective configuration
- 50 ft. operating range

E3K

LONG RANGE PHOTOELECTRIC SENSOR

Kit includes photoeye and reflector.

- Retroreflective configuration
- 30 ft. operating range



HOOD-E3K
PLASTIC HOOD FOR E3K



COV-E3K
COVER FOR E3K



LOOP DETECTOR

PRIME-VD-1

Designed for use with All-O-Matic LDR loop rack. (Included in All-O-Matic Operators)

1 detector per loop required.





OVS-01GT VEHICLE PRESENCE SENSOR

- Vehicle Virtual Loop detects vehicle presence while ignoring most human traffic
- Uses microwave (18 ft range) and ultrasonic sensors
- Replaces Ground loops & concrete cutting
- Can be mounted 2 to 3 feet off the ground
- Adjustable sensitivity

See page 485 for more information.

CHAIN ACCESS

AOM-40CH-10FT

#40 Chain extension Kit, 10 ft long, for SL45, 90, 100, 150.



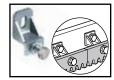
PINION-RACK

Galvanized 3'3" gear rack sections with mounting hardware.



AOM-40ML

Master Link for #40 Chain Need 1 master link per chain extension.



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GEAR ACCESS

Threaded gear rack connection. (3 connectors are needed per 3'3" gear rack.)

AOM-CHAIN KIT-40

Chain Kit to convert a rack drive AOM SL90DC, SL100DC, Sprocket, #40NP x 20 Ft, Weld-on Brackets.



SOLAR UPGRADES

When ordered as a solar operator, the 110VAC input and transformer is removed and replaced by the solar controller, no there is NO 110VAC input.

- Includes battery upgrade to 14Ah batteries
- Requires solar panels
- Duty cycle of operators depends on solar panel output power and battery capacity
- NOT RÉCOMMENDED FOR INDUSTRIAL APPLICATIONS

N999471 10W, 24V SOLAR PANEL

Solar panel for connection to ECOSOL BOX. Complete with stainless steel screws and brackets for mounting on wall or horizontal surface.

CESP20-24GOK 20W, 24V SOLAR PANEL

Solar Panel Kit with Steel Bracket and 10Ft lead

CESP40-24GOK 40W, 24V SOLAR PANEL

Solar Panel Kit with HD Bracket and 15Ft lead

MORE ACCESSORIES

Access Control Mounting Posts	478-483 484
Driveway Loops	485-487
Vehicle Detectors	487
Safety Edges	487-488
Switches	490
Timers	490
Emergency Sensor	490
Knox Box	490



Simple setup by mobile phone with the Praetorian Guard APP. Connect to the system video directly through your phone's or tablet's WiFi.

Using the app, you can see and hear your visitors in real time, speak with them or unlock the gate or door.

PRAE-IP-PED-KP-US

Pedestal IP Intercom + Keypad





PRAE-IP-ABK-US

Wall Mount IP Intercom + Keypad



Praetorian Guard App Features:

- Live HD video (120 camera lens & night vision)
- · 2-way audio communication
- Worldwide mobile access to Praetorian Guard IP Video Intercoms
- Push notifications on your smartphone or tablet when the call button is pushed, motion sensor is triggered or keypad/prox code is used.
- Program 24-7 / Timed and Temporary Keypad codes or PROX ID's
- Past 100 event history
- App is optimized for portrait and landscape format
- Up to 8 separate users
- SD card storage for all video & picture files. (Can accommodate up to 32GB)
- · Long Range Antenna* (2.4GHz) (up to 65 yards working range depending on router type and location)
- Voicemail Visitors can leave a video messages when unanswered
- * 2.4GHz antenna Included.

MON-11-US

Wall Mount Touch Screen Monitor

 Wall mount touch screen monitor (1280x800 Resolution), compatible with the Praetorian system.



- 10.1 inch screen IPS LCD android screen.
- · Wifi, Ethernet & Bluetooth connections.
- POE supplied (12V DC can be purchased separately)
- · Complete with both wall mount bracket.
- Android OS (8.1) with Praetorian app pre-loaded.
- RK3288, Quad-core cortex A17, 1.6G.

SURGE3

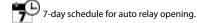
 Ethernet network surge and static protector.

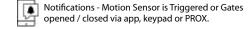




App images for illustrative purposes only.









Prox & Keypad codes added via App.





Praetorian Guard IP Intercom complete with 4G access point. The access point will provide an internet connection via a compatible SIM card*

- Speak to your visitors from anywhere in the world.
- Grant access remotely Send a command to the gate motor via the app to open your gates etc.
- Keypad Codes 24-7 / Timed / Temporary (Optional)
- No Touch Access PROX Cards/ Tags 24-7 / Timed / Temporary (Optional)
- Voicemail Visitors can leave a video messages when unanswered.
- Multi-User Add up to 8 maximum devices per Intercom ID. (incl ADMIN user. 4 maximum for optimal performance.)
- Wifi/LAN cable (Dualband WIFI. 2.4 & 5.8G wifi (802.11 b/g/n/a/c) can also be connected to a local Network
- Coin Cell Battery to retain important system settings while a device is off. E.g. date-stamp
- Volume of external speaker adjustable at the call-point.
- *MIN 1.5MB UPLOAD.
- *MIN 1GB P/MIN DATA (Depending on usage).



Pedestal mountable & modern blue illuminated buttons. Marine grade, brushed stainless steel construction with gloss acrylic trim and powder coated aluminium hood. Built in 4G router. (Kit includes speech panel, power supply and install manual)

MON-11-US

Wall Mount Touch Screen Monitor

 Wall mount touch screen monitor (1280x800 Resolution), compatible with the Praetorian system.



- 10.1 inch screen IPS LCD android screen.
- Wifi, Ethernet & Bluetooth connections.
- POE supplied (12V DC can be purchased separately)
- · Complete with both wall mount bracket.
- Android OS (8.1) with Praetorian app pre-loaded.
- RK3288, Quad-core cortex A17, 1.6G.



PRIME7-PED-KP-US

Pedestal Mount Cellular Intercom + Keypad



Pedestal panel with keypad, constructed from marine grade stainless steel, powder coated aluminium hood and gloss black toughened acrylic faceplate.

Features:

- Store up to 4 notification phone numbers to receive an SMS (customizable) when relay is triggered etc.
- Bigger 2 amp power supply
- Add up to 20 time restricted caller ID numbers
- Ability to view APN on signal level reply
- Ability to check Do Not Disturb Times
- 3rd Gen surge protection
- Auto clock sync
- Add up to 8 slave keypads or prox (RFID) readers
- Add APN via the keypad (APN list is pre-loaded)
- PROX (RFID) option







- Calls up to 500 families from a single SIM card.
- Visitors can scroll for residents, or enter apartment number to call.
- Dials up to 3 phone numbers per family on roll over.
- 4G Enabled.
- HD voice with VoLTE*.
- Programmable locally by USB PC link with free software, or remotely with free Android and iphone apps.
- Proximity card version available.
- Built in time clock for auto opening and closing of gates, barriers or doors in busy periods or for day operation.
- 2 relays.

*Requires correct APN to be set and will only be experienced on a VoLTE enabled device.



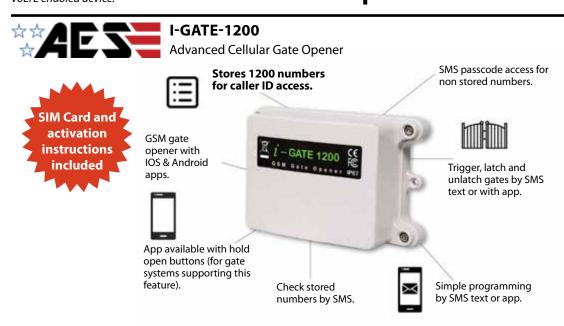
P121024-Q-BOX

Digital Keypad



- 10 channels
- 100 combinations
- Backlit

A wireless digital keypad with 10 channels that can store 100 4-7 digit entry codes. A built in sensor detects low lighting conditions and activates the keypads built-in backlight.



- GSM gate opener with IOS & Android apps.
- Large memory which can stores 1200 numbers for caller ID access.
- SMS passcode access for non stored numbers.
- Trigger, latch and unlatch gates by SMS text or with app.
- Simple programming by SMS text or app.
- Check stored numbers by SMS.
- Apps available with hold open buttons (for gate systems supporting this feature).











P111494 - B EBA WIFI Gateway



The B-eba Wi-Fi expansion card connects to the web the device where it is installed, via wi-fi protocol. Through the U-control management app, the B-eba card is registered on the home wi-fi network and thus allows the operator to be remotely managed. All U-Link protocol compatible BFT devices can be managed with U-control, whether they are operators, central units or receivers; therefore also automation devices by other brands can be remotely controlled. The U-control app is free and available for Android and IOS smartphones.

This gateway will only work with BFT gate operators.



1812-Access Plus Surface Mount Stainless (1812-090)

Telephone Entry System



The 1812 Access Plus is a control and communication system for residential applications. The 1812 Access Plus is PC Programmable and IP Addressible. Each Access Plus Series unit allows Voice and Data connection over either Cellular, VoIP, Wireless, or POTS. DKS offers easy ways to connect fast using the DKS IM Server and DKS Cellular services. With the easy to use Access Plus Account Manager programming software, you can customize the system immediately. The 1812 Access Plus controls a main door or gate and can easily be expanded to control up to six additional access points. The 1812 Access Plus features an upgraded processor, a new high fidelity digital voice circuit, better volume control, a lighted push-button and

additional call out telephone numbers (up to 27). Discerning homeowners will appreciate the additional programming, reporting and advanced features found in the 1812 Access Plus system.

DoorKing's Access Plus Account Manager Software is a powerful, flexible and easy to use computer program that allows you to manage access control in a variety of controlled access applications.

Features:

- IP addressable program from your PC via LAN/WAN or an Do-not-disturb feature internet connection or via built-in modem
- Access Plus Account Manager programming software included
- · Add up to six (6) card readers, keypads or RF receivers (RS-485)
- 100 card / transmitter / keypad codes (50 with phone numbers; 50 access codes only)
- Up to 30 holidays can be added to access and hold open time zones
- Control access points from your PC. Schedule lock and unlock times, lock or unlock an access point with the click of your mouse
- 10 temporary access codes with start and end dates
- 500 event transaction buffer
- Email notification of events of your choice. Internet connection required
- Call waiting
- Call forwarding with time zone restrictions
- Unique double ring
- Built-in clock / calendar

Features continued:

- Four "hold open" time zones
- Answer machine bypass feature
- 50 5-digit entry codes with time zone restrictions on some
- 10 Temporary entry codes with start and end dates
- Intercom mode for use with PBX and KSU phone systems
- Camera ready

Specifications:

- Hands free, full duplex digital audio circuit.
- Interfaces with a single phone line
- 27 dial-out phone numbers
- Two relays for door or gate control
- Ability to control an additional six (6) access points with card readers, keypads or RF controls
- Programming Method: System keypad, touch-tone telephone, or from PC
- 16 VAC, 20 VA (250 ma) power transformer provided
- FCC (US): DUF6VT-12874-OT-0
- DOC (CAN): 1736 4507 A
- Complies with UL 294; ETL Listed
- Surface mount dimensions: 6.13"H x 10"W x 5.25"D





1812-Classic Surface Mount Stainless (1812-081)

Telephone Entry System



The model 1812 is a unique telephone intercom system that allows homeowners to use their telephone as an intercom to speak to a guest at a front door or gate without the necessity to pay for an additional telephone line at their home. With its "intercom mode" programming feature, the 1812 can also be connected to a PBX or KSU type system, making it ideal for small businesses to control access through a single door or gate. Visitors are easily identified by voice communication and can be granted or denied access directly from a touch-tone telephone.

Features:

- Distinctive double ring identifies visitor calls from regular calls
- Call waiting
- Call forwarding
- 3 preprogrammed call out telephone numbers
- "Do Not Disturb" time zone
- · Hold open time zones
- Built-in time clock
- Entry code time zone
- "Flash" entry code
- LED lighted faceplate
- 2 relays for door/gate control

Specifications:

- · Hands free, full duplex digital audio circuit
- Connects in series with the residential phone line. By-pass switch provided.
- EEPROM Memory Chip
- Stores up to 3 call forwarding numbers
- Full duplex communication
- 50, 4-digit entry codes
- 24 VAC, 20 VA (250 ma) power transformer provided
- FCC (US): DUF6VT-12874-OT-0
- DOC (CAN): 1736 4507 A
- Complies with UL 294; ETL Listed
- Surface mount dimensions: 6.13"H x 10"W x 5.25"D



1802-EPD Surface Mount (1802-090)

Telephone Entry System



The 1802-EPD (Electronic Programmable Directory) model are ideal telephone entry systems that are loaded with features and are suited for applications that have limited space and can be used in residential as well as commercial applications. The 1802-EPD includes a built-in electronic directory. Visitors are easily identified by voice communication and can be granted or denied access directly from a touch-tone telephone.

Features:

- Programmable directory codes (1-4 digits) Stores up to 100 telephone numbers
- 16-digit dialing
- Two relays to control two entry points
- 5-digit entry codes for special needs
- · LED lighting illuminates keypad
- Built-in time clock
- Hold open time zones
- Entry code time zones
- "Flash" entry codes
- Built-in postal lock provision
- 1802-EPD includes directory display.

Specifications:

- Stores up to 100 telephone numbers and names
- EEPROM Memory Chip
- Full duplex communication
- 4-digit entry codes max. of 100
- Six, 5-digit entry codes
- 16 VAC, 20 VA (250 ma) power transformer provided
- Ringer equivalence: 0.0 A
- Jack type: RJ11C or W
- FCC (US): DUF6VT-12874-OT-0
- DOC (CAN): 1736 4507 A
- Complies with UL 294; ETL Listed
- Surface mount dimensions:
 12"H x 6.5"W x 5"D





1810 Surface Mount (1810-080)

Telephone Entry System



With its built-in lighted directory, Model 1810 is a completely self-contained telephone entry system that is ideal for small to medium sized apartment buildings, gated communities, condominiums, office buildings, factories and industrial sites. Managers can easily create and change the directory as needed with a word processing program (templates are available from DoorKing). Visitors are identified by voice communication via the telephone. Access is granted by pressing "9" on your touch tone telephone, or access can be denied by simply hanging up.

Features:

- Programmable directory codes (1-4 digits)
- 16-digit dialing
- Two special inputs can be programmed for relay activation or to dial out a preprogrammed phone number
- 5-digit entry codes for special needs
- Built-in LED lighted directory
- LED lighting illuminates directory
- Built-in time clock
- Hold open time zones
- Entry code time zones
- "Flash" entry codes
- Built-in postal lock provision
- Programming display

Specifications:

- Stores up to 600 telephone numbers
- EEPROM Memory Chip
- Full duplex communication
- 4-digit entry codes; 1000
- Six, 5-digit entry codes
- 16 VAC, 20 VA (250 ma) power transformer provided
- Ringer equivalence: 0.0 A
- Jack type: RJ11C or W
- FCC (US): DUF6VT-12874-OT-0
- DOC (CAN): 1736 4507 A
- · Complies with UL 294; ETL Listed
- Surface mount dimensions: 13"H x 11.25"W x 4.75"D



1520 Stand Alone Card Reader (1520-080)



Model 1520 provides users with a full feature single door stand-alone access control system. The 1520 is available with a built-in proximity card reader (DK Prox, AWID or HID) or can be ordered as a single door controller allowing the user to add their own 26-bit access control device.

Features:

- Built-in proximity card reader (available with DK Prox, AWID or HID reader)
- Available as a controller only (add your own 26-bit wiegand device)
- Built-in programming keypad
- Indoor or outdoor use

Specifications:

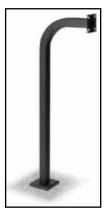
- Stores up to 1000 card codes
- Transaction buffer stores last 3600 events
- Timed anti-pass back (1-59 minutes)
- Four time zones
- Clock and transaction buffer maintain data for up to 3 days in the event of a power outage
- Print Menu
- Real time print mode
- Form "C" dry contact relay
- 16 VAC, 20 VA power transformer supplied

1508-020 - AWID Prox Cards

These cards are randomly pre-coded. Card numbers may, or may not be, in numerical sequence.

MOUNTING POSTS FOR ACCESS CONTROL

GOOSENECK POSTS FOR CELLBOX/KEYPAD



PED-2/42BK2
Pad mount for gooseneck post
This pad mount pedestal
is 48" high with and
12" reach.



PED-3/IN Inground gooseneck post This direct burial pedestal is 72" high with and 11½" reach.

Top cover

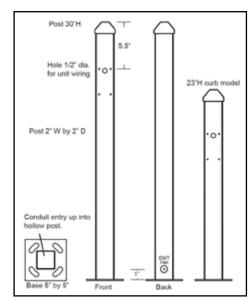
included



Minipost for mounting the OVS-01GT sensors.



The OVS-MP is a sturdy Mini Post specially designed for the OPTEX OVS-01GT Vehicle Presence Sensors. Installation is easy with the OVS-MP. The Vehicle Pres-ence Sensor mounts at the proper height. The 30" model is for road surfaces, and the 23" model is for island or curb mounting. No more ground loops, no more concrete cutting. The Mini Post is Powder Coated, tougher than paint.





30" Model Black

OVS-MPBcurb 23" Model

Black

30" Model Yellow

OVS-MPYcurb

23" Model Yellow

DRIVEWAY LOOPS AND VEHICLE DETECTORS



OVS-01GT VEHICLE VIRTUAL LOOP FROM OPTEX

This virtual loop vehicle sensor is designed to reliably detect the presence of a stationary or moving vehicle while also having the ability to ignore most human traffic. This virtual loop also eliminates the hassles associated with the installation of a ground loop. No more concrete cutting required. The OVS-01GT can be mounted 2 to 3 feet off the ground and can detect both small and large vehicles.



Presence Capability

For gate and barrier arm applications, the vehicle virtual loop is installed above ground and near the gate operator. It can be mounted on a pole or post. Its detection area can be customized with 8 range settings, 5 sensitivity settings and one-touch calibration.



Ignores Human Movement

It is important that the sensor only detect vehicles and ignore human movement. This virtual loop sensor has 5 selectable menu setting options to ignore human movement.

Easy Installation

- No need to stop traffic through the driveway during installation.
- Mounts quickly, easily and wires directly to the gate operator.
- No additional loop detector is required.
- No need for special programmers.
- Simple to use menu with visual indicators provides a simple and quick installation.

See page 484 for post options.

The OVS-01GT features 8 range settings for the microwave (above in blue) from 6'6" to 18', and 3 settings for ultrasonic (above in violet). The simple-to-use menu also has 5 settings for human cancellation adjustment, 5 sensitivity settings, and one-touch calibration.

DRIVEWAY LOOPS AND VEHICLE DETECTORS



PREFORMED DIRECT **BURIAL LOOPS**

BD Loops direct burial loops are designed for quick and easy installation and can be installed in concrete or under asphalt, pavers or gravel roads.

- 16 AWG loop wire designed for superior performance.
- Installation kit includes: cable ties, ground stakes, and loop lead-in labels.
- Easy to follow installation instructions.
- Loop wire is durable and rated for direct burial.
- Pre-phased (phasing direction marked) at the factory, allowing installers to easily take advantage of loop phasing.

Reverse/Shadow Loops

EL24-60 – 24 foot Loop 4' x 8' loop, 60ft lead wire

RL36-40 – 36 foot Loop 6' x 12' loop, 40ft lead wire

EL44-60 – 44 foot Loop 6' x 16' loop, 60ft lead wire

Free Exit Loops

EL36-100 – 36 foot Loop 6' x 12' loop, 100ft lead wire

EL44-100 – 44 foot Loop 6' x 16' loop, 100ft lead wire

SC24-50 – 24 foot Loop

6' x 12' loop, 50ft lead wire

SC44-50 – 44 foot Loop 6' x 16' loop, 50ft lead wire

PREFORMED SAW-CUT LOOPS

Used for saw-cut installations where a 3/16" groove is cut into the concrete or asphalt and the wire is stuffed and sealed (using loop sealant) into the groove. Custom polyethylene outer jacket protects a micro-dusted nylon coated inner jacketed 16AWG stranded wire. The sawcut loop has a built in backer-rod securely fitting a 3/16" saw-cut groove eliminating the need to apply backer-rod to hold the loop to the bottom of the saw-cut groove and requires 30-40% less loop sealant to seal the groove. Both the loop and the lead-in fit within a 3/16" saw-cut groove preventing wasted time spent double saw-cutting or doubling blades to cut the home run lead-in.

Reverse/Shadow Loops Free Exit Loops

4' x 8' loop, 50ft lead wire

SC36-50 – 36 foot Loop

SC44-100 – 44 foot Loop 6' x 16' loop, 100ft lead wire

SC36-100 – 36 foot Loop

6' x 12' loop, 100ft lead wire

LOOP SEALANT

Polyurethane sealant has many advantages when compared to other commonly used sealants.

- Does not shrink or crack—it does not have an evaporation cure like most other sealants.
- Does not conduct electricity water based sealants can facilitate shorts to ground.
- Has a low viscosity (flows easily) is easier on your hand, and is self leveling.
- Can be cleaned up with rubbing alcohol.



BDLS-BLACK BDLS-GRAY 30 fl. oz. tube

BDLS-BLACK-CASE BDLS-GRAY-CASE

Case of 12-30fl. oz. tubes

CARTELL - FREE EXIT SYSTEM

CP-4-100 - 100' of wire **CP-4-200 -** 200' of wire

The Cartell free exit system is a self-contained unit. All the electronics are contained in the sensor

probe housing. There is no external output board to install.

Bury the conduit & "puck" 3-5 inches underground, 100 feet from the automatic gate operator (toward the house), beside and parallel to the driveway. It should be hooked up directly to the free exit terminals on the gate operator. Universal voltage (AC and DC) makes it compatible with any gate operator, solar or powered.

LOOPS

Ideal for direct burial on gravel or dirt driveways. Also use under concrete or asphalt.

TOR 2050.048

4' x 8' loop | 3' x 9', 50ft lead wire

TOR 2100.410

4' x 10' loop | 6' x 8', 100ft lead wire

TORXUN PREFORMED HIGH TEMPERATURE

Self-contained system

- · Conduit-ready housing
- Sensitivity adjustment
- · Lowest standby current (30-70µA)
- Better heat resistance
- More lightning protection

FEATURES:

 New proven digital circuit

- · Weather-resistant cable
- · One model, less confusion
- Industry-standard wire
- · Universal voltage AC & DC
- · Works with all gate operators
- 5 year warranty

DRIVEWAY LOOPS AND VEHICLE DETECTORS



LOOP AND FREE EXIT PROBE VEHICLE DETECTOR

DSP-55 - 100' of wire

The DSP-55 is a compact vehicle detector that will

operate on any voltage from 8 to 35 volts DC. The low voltage range is ideal for solar applications.



The detector uses a 10-pin Molex connector for its connections and has three solid-state (open-collector) outputs. The solid-state outputs allow for a smaller total package size, lower power consumption, and elimination of contact bounce.

FEATURES:

- Can be connected to a standard inductive loop as well as Diablo Controls Free Exit Probes.
- Small profile, perfect for many installations.
- Three Solid State outputs.
- Fail-safe or Fail-secure operation.
- Wide low-voltage operation

- Separate Power/Fail and Detect LEDs.
- B Outputs can be presence, pulse on entry, pulse on exit, or loop fail.
- Flicker display shows occupancy of the detection zone when operating in a pulse mode.
- Delay or extension time is possible.

VEHICLE DETECTOR KIT

DML-9LP KIT75

The Diablo "Mini-Loop" is intended to be buried beneath the roadway surface and connected, via lead-in cable, to the Diablo DML-9LP Detector. Installation

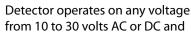


costs may be significantly less than those for conventional loops, because only single, straight 1/4" saw cuts need to be made and a 1" diameter hole drilled about 20" deep. Also resulting is the opportunity for greatly increased service life due to the reduced exposure to hazards such as road traffic, pavement movement, pavement deterioration, and roadwork.

LOOP DETECTOR

DSP-7

DSP-7LP (use with solar)





draws about 1 milliamp of current with no vehicle on the loop. This micro-sized detector will automatically adjust its sensitivity level when used on different sized loops. The detector loop inductance should be between 20 and 2000 microhenries.

- Designed for solar powered applications
- Designed to be cross talk free between other loops
- Automatically compensates for loop and lead-In sizes
- Switchless, self-adapting to most common installations
- Plug and play; Connect it up and watch it work
- Small profile, perfect for many installations
- Fail safe operation
- Wide low-voltage operation

SAFETY EDGES

HOW SENSING EDGES WORK

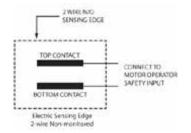
Miller Edge sensors are available in a variety of models to easily adapt to any motorized door or gate. All electrically activated edges operate on the same basic principle referred to as a Normally Open (N.O.) electrical configuration.

- The outer covering houses 2 electrically conductive flexible contact elements
- The contact elements are separated by a soft perforated foam cushion.
- When touched, the edge compresses causing the contacts to touch.
- An immediate electrical signal is sent to the motor control unit to stop and/or reverse motion.

Sensing Edges for Automated Gates:

Electrical Configuration / Wiring Diagram

A 2-conductor electrical configuration complies with UL-325 and the 2009 International Building Code for gates.



SAFETY EDGES

RBAND MONITORED WIRELESS GATE KIT

RB-G-K10

Gate edges are a common method of guarding entrapment and hazard zones. Now, with the RBand Monitored Wireless Gate Kit transmitter/receiver, there's no need to hard-wire, which saves valuable installation time and creates a clean appearance.

The Miller Edge RBand is a wireless monitored transmitter/receiver kit for automated gate systems. It monitors the presence and function of T2 (10k) sensing edges and transmits a wireless monitored signal to the operator controls. The RBand Receiver can be paired with up to 6 Transmitters on 2 channels. The Transmitter is built to endure rugged, outdoor environments.



The Miller Edge RBand eliminates the need to hard wire sensing edges and meets 2016 UL 325 standards for commercial gate operators.

FEATURES:

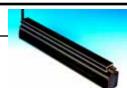
- Two-channel receiver compatible with up to 6 total wireless transmitters
- On-board diagnostics for easy setup/troubleshooting
- Bi-directional link improves immunity to RF interference
- Transmitter built to endure rugged outdoor environments
- 2016 UL 325 Recognized Component
- 2 year warranty

RR-TX10 RBand Transmitter

Wireless transmitter compatible with monitored gate receiver.

SAFETY SENSING EDGE

ME120-2E-04-T2 (4ft length) **ME120-2E-05-T2** (5ft length) ME120-2E-06-T2 (6ft length)



The small profile of these edge sensors allows for versatility to suit a wide variety of applications from motorized doors and gates to industrial safeguarding on plant equipment.

FEATURES:

- Touch Sensitive signalling
- Small profile
- Easy to Install
- Optional Safety Yellow color provides visual recognition of hazardous area
- Mounts vertically or horizontally
- ANSI/UL325 Recognized Component



FEATURES:

Small profile

Easy to install

1-year warranty



SAFETY SENSING EDGE KIT

The MG110 kit includes: (1) MG110 sensing edge, (1) ME110-C mounting channel, (2) molded nylon end caps,

and (2) stainless steel self-drilling mounting screws.

Molded end caps provide a clean, finished look

Sealed assembly impervious to dust and debris

Mounts vertically or horizontally

UL 325 Recognized Component

MG110K-2E-04-T2 (4ft length)

MG110K-2E-04-T2 (5ft length)



ALUMINUM CHANNEL

Mounting channel for monitored safety edge.

ME120-C-4FT

ME120-C-5FT

ME120-C-6FT

EMX-WEL-200K

WIRELESS EDGE LINK

- Compatible with NC, 10K and pulse monitored outputs
- Connect up to 4 safety edge transmitters
- No wiring reduces installation cost
- Operates two years on two AA lithium batteries





GATE OPERATOR ACCESSORIES

ONE-BUTTON SWITCH

ROS-EX-H22N

- Proximity or touch
- Red/Green switching LED
- Exterior rated
- Capable of momentary output or constant output
- Works with all types of devices: gate operators, Mag locks, electric strikes, control systems
- Mounts into a std double gang box



TWO-BUTTON SWITCH

For indoor use only

2512

- Actuate button is N.O.
- Stop Button is N.C.

EXIT BUTTON

electric strike

1211-080

- Switch rating 10 A / 250 VAC
- Dimensions: 4 in. wide x 2.87 in. high x 2.25 in. deep (102 x 73 x 57 mm)

Provides a release device for doors

1211-081 designed for mullion mounting

4-1/2" H x 2-13/16"W (114.3mm H x 71.4mm W)

secured with a magnetic lock or

Lighted Exit push buttons

12-volt DC power (for light)

THREE-BUTTON SWITCH

2510

- Open button is N.O
- Close button is N.O
- Stop Button is N.C.
- Switch rating 10 A / 250 VAC
- Dimensions:
 - 4 in. wide x 2.87 in. high x 2.25 in. deep (102 x 73 x 57 mm)

SEVEN DAY TIMER

PTM-24V

The PTM-24V Seven Day Timer allows for timed access for secure entry/exit on a wide range of control applications. Use on overhead doors, gates and parking barriers. The timer can also be used with magnetic door locks and electric strikes, indoor/outdoor lighting and security alarm systems.



FEATURES:

- Flexible programming with 16 ON/OFF events
- Large display and push-buttons for easy operation
- Battery backup for power outages
- DIN rail mount installation
- Three power supply options

SIREN OPERATED SENSOR

SAGM

New and improved siren operated sensor. Allows entry of emergency vehicles through gates, the siren activates gate opener while all other sounds are rejected.



FEATURES:

- New and improved siren operated sensor
- Easy and effective emergency access
- Makes all gates 911 accessible
- No codes or keys required
- Compatible with all gate/door operators
- Comes with a 4x5 inch reflective sign
- 12-24VAC/DC; 2-wire
- 6.5" (h) X 4.125" (w) X 2.25" (d)

LOCK BOX

1401-080 Knox Type **1401-081** Padlock Style

Fire Department lock boxes provide a convenient method to allow Fire Department personnel access into a property through an automated gate system.



- Designed to accept the Knox 3501 key switch used by Fire Departments throughout the country
- Ample room inside for additional access control devices or keys
- 14-gauge steel
- Faceplate is painted bright red, enclosure is painted black
- 5.375" (h) x 4.5" (w) x 5.375" (d)



GATE OPERATOR ACCESSORIES

ELECTRO MAGNETIC LOCK WITH OR WITHOUT HANDLE

Magnetic lock with or without handle.
Available in 2 versions.

MAGMAG-2500 with 600 lb. and MAGMAG-5000 with 1200 lb. of pulling force. The aluminum powdercoated housing equipped with the unique Quick-Fix fixings ensures a fast and nicely finished mounting. Eliminate time-consuming welding; drilling 5 holes is enough to fix the lock. A two layer, protective coating guarantees that our electromagnetic locks are ready for years of worry free use outside.



MAGMAG3000SL - Silver without Handle MAGMAG3000BL - Black without Handle For mounting on square posts and gate profiles of 1-1/2" to 3-1/8", 660 lbs. pulling force

MAGMAG5000SL - Silver without Handle MAGMAG5000BL - Black without Handle For mounting on square posts and gate profiles of 1-1/2" to 3-1/8", 1200 lbs. pulling force MAG3000SL - Silver with Handle MAG3000BL - Black with Handle For mounting on square posts and gate profiles of 1-1/2" to 3-1/8", 660 lbs. pulling force

MAG5000SL - Silver with Handle MAG5000BL - Black with Handle For mounting on square posts and gate profiles of 1-1/2" to 3-1/8", 1200 lbs. pulling force







S-MAG-2500-ZILV - Silver **S-MAG-2500-9005** - Black For mounting on square posts and gate profiles of 1-1/2" to 3-1/8", 600 lbs. pulling force

INTEGRATED MAGNET LOCK FOR SLIDING GATES

S-MAG is the perfect product to lock any type of sliding gate. It has a guaranteed 600 lbs of pulling force and resists extreme weather conditions. The armature plate offers flexible assembly which guarantees a normal closing even if the gate is not perfectly aligned. The rubber bumpers help protect and prevent damage to the gate and accessories in case of harsh handling and shaking of the gate.

- Guaranteed holding force tested on every magnetic lock
- 500h salt spray resistant! SGS Certified (ISO 9227)
- Special two-layer protective coating developed for outdoor use
- · Anti-residual magnetism kick-off system
- Minimal pulling force: 2500N (600 lbs)
- Current: 460mA / 12V or 230mA / 24V



