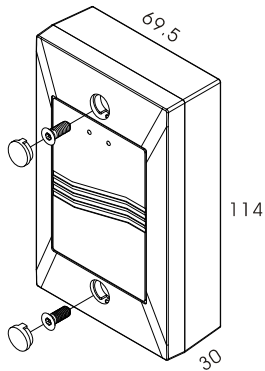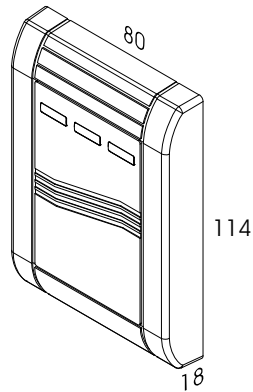# EASIPROX Stand Alone Reader
Operation Manual

EASIPROX-ANSI   **EASIPROX-980-40**

Unit: mm

I. Features
1. Memory volume up to 2000 proximity cards/tokens. Reading time approx. 0.5 seconds.
2. Programmable via Master Card.
3. Non-volatile memory protects programmed information in case of power loss.
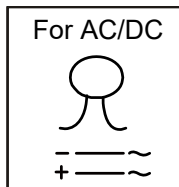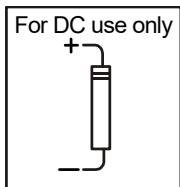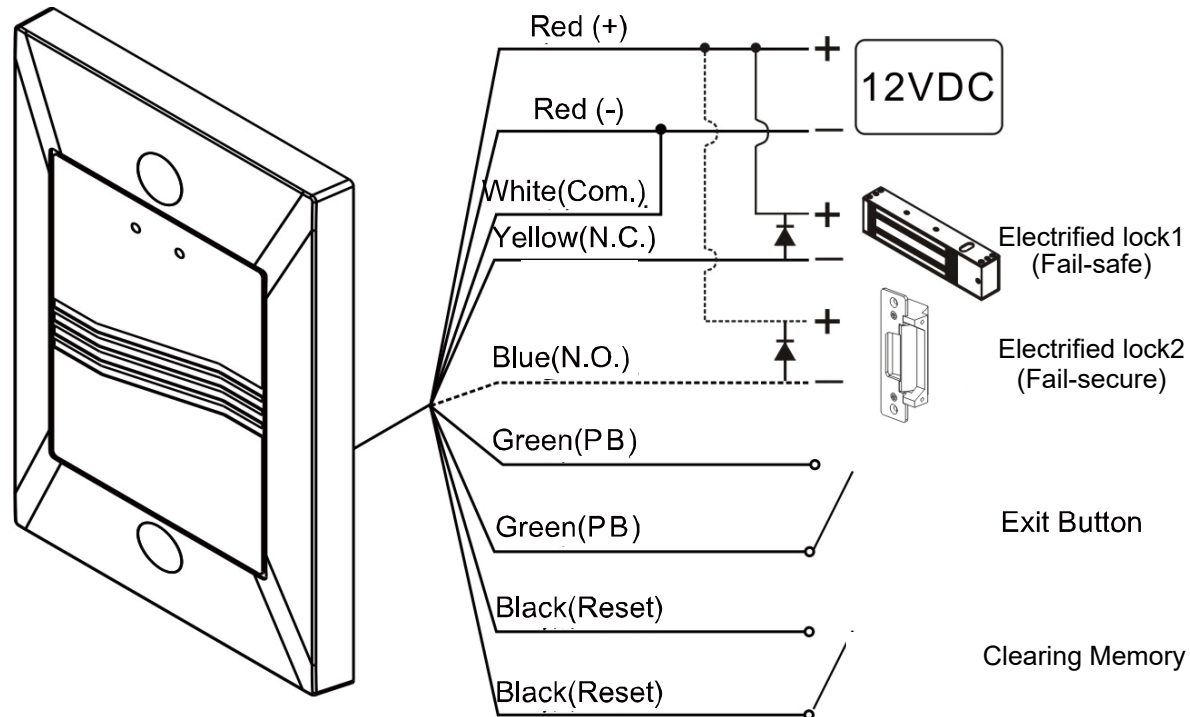4. Epoxy sealed. Standard size of single-gang box.

II. Specifications

Operating Voltage	12 VAC/VDC
Current Draw	Active: 70 mA/12 VDC, Standby: 45 mA/12 VDC
RF Frequency	125 KHz (ABA form code)
Read Range	10~15 cm
Input	1 contact for Request-To-Exit button
Output	1 relay (Dry contacts: N.O./N.C./Com.)
LED Status Indication	2-LED indicators (Yellow & Green / Red); 3-LED indicators (Yellow, Green, Red)
Memory Volume	2000 proximity cards/tokens
Format	EM-400x 64-bit Standard R/O or Compatible
Relay Rating	Max. 5A/250 VAC
Relock Time	1~60 seconds
Ambient Humidity	5%~95% (Non-condensing)
Operating Temperature	-20°C~70°C
EMC Specification	CE approval

III. LED Status Indication

Mode	Signal	Status / Function
Standby	Yellow & Green LED flash	No Master Card (empty memory)
	Yellow LED On	Standby
	Green LED On	Relay activated
	Red LED On	Invalid entry
Programming	Green LED flash	Enter ADD CARDS mode
	Red LED flash	Enter DELETE CARDS mode
	Yellow & Red LED flash	Enter CLEAR MEMORY mode
	Yellow LED flash	Adjust relock time (1~60 flashes, 1~60 seconds)
	Green LED quick flash	Clearing memory in progress

IV. Wiring Diagram

Red (+)

Red (-)

White(Com.)

Yellow(N.C.)

12VDC

Electrified lock1
(Fail-safe)

Blue(N.O.)

Electrified lock2
(Fail-secure)

Green(PB)

Green(PB)

Exit Button

Black(Reset)

Black(Reset)

Clearing Memory

For DC use only

For AC/DC

Red	12 VDC (Polarity Insensitive)	Green	Exit button input
Red	12 VDC (Polarity Insensitive)	Green	Exit button input
White	Com.	Black	All settings are cleared
Yellow	N.C.	Black	All settings are cleared
Blue	N.O.		

Note:
1. It is suggested to use #22~26 AWG insulation wire.
2. It is suggested to use a linear power supply unit to prevent the reduction of reading range.
3. The door strike or relay must have a varistor or a diode across the door strike terminals to suppress the back EMF of the strike. Failure to do so will damage the relay contacts and electronic components, or even burn the controller.
4. The exit button input can be wired to a normally open push button to activate the relay.

V. Operation Instructions

1. Programming Master Card
Yellow and Green LED flash indicate that the memory is empty. Present a new card to the reader to set as the "Master Card" (Yellow LED turns on and reader enters standby mode). The first card presented to the reader is Master Card.

Note: The same Master Card can be used on more than one reader.

2. Adding User Cards
1. Present Master Card to the reader (Green LED turns on for 3 seconds and flashes, and reader enters ADD CARDS mode)
2. Present a new user card to the reader (Relay is activated when a new card is added to memory).
3. Present Master Card to the reader again (Green LED turns off, Yellow LED turns on, and reader goes back to standby mode).

Note: It is suggested to use cards with ABA form codes and make a list of all added cards.

3. Deleting User Cards
1. Present Master Card twice with a time between reads of less than 2 seconds (Red LED turns on for 3 seconds and flashes, and reader enters DELETE CARDS mode).
2. Present the user card (Green LED turns on and then the user card is deleted).
3. Present Master Card again (Red LED turns off, Yellow LED turns on, and reader goes back to standby mode).

4. Clearing Memory
1. Present Master card 3 times with a time between reads of less than 2 seconds (Yellow and Red LED turn on 3 seconds and flash, and reader enters CLEAR MEMORY mode).
2. Present any card with EM-400x64-bit format except Master Card (Green LED quickly flashes indicating that clearing memory is in progress).
3. Wait until Yellow and Green LED flash, then all memories are cleared, and all settings are reset to factory values.
4. Program a new Master Card.

If the Master Card is lost, follow the steps bellow to clear memory:
1. Turn off the power.
2. Connect the two black cables and turn on the power (Green LED flashes indicating that clearing memory is in progress).
3. Disconnect the two black cables (Yellow and Green LED flash indicating that all memories are empty).
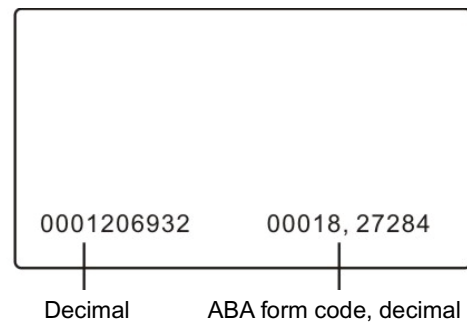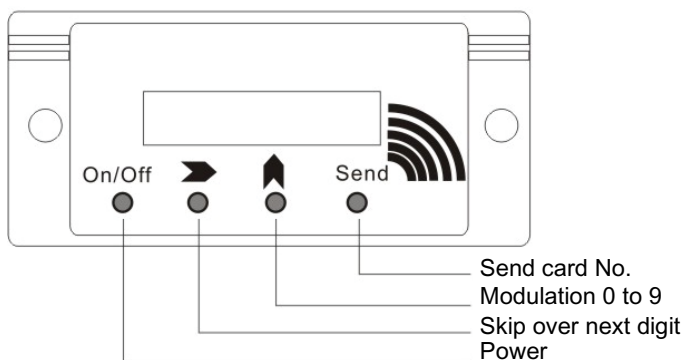
5. Setting Relock Time
1. Present Master Card 4 times with a time between reads of less than 2 seconds (All LEDs go off for 3 seconds, Yellow LED flashes and reader enters RELOCK TIME SETTING mode).
2. Each flash of the Yellow LED indicates 1 second.To set the relock time to 5 seconds, present Master Card after 5 flashes of the Yellow LED (Yellow LED stays on and reader goes back to standby mode).

Note: The relock time can be set up to 60 seconds so the Yellow LED flashes up to 60 times. After 60 flashes, the Yellow LED stays on and reader goes back to standby mode.

VI. TS-980 Tag Simulator(Optional)

The Tag Simulator is an extremely simple "Programming Device" that allows adding and deleting proximity card/tag numbers from reader memory when the tag is lost or not available.

For example: To delete a card printed with a decimal number "0001206932," press **On/Off** continuously. When the screen displays displays *0001262368*, press ▶ → *0001262368*, and press ▲ → *0001202368*. Repeat the preceding step. When the screen displays *0001206932*, press **Send** (The distance between the Tag Simulator and the reader must be within 3 cm). Card deletion is completed.

On/Off ▶ ▲ Send

Send card No.
Modulation 0 to 9
Skip over next digit
Power

0001206932   00018, 27284

Decimal   ABA form code, decimal

Warranty
The product is warranted against defects in material and workmanship while used in normal service for a period of 1 year from the date of sale to the original customer. The GEM policy is one of continual development and improvement; therefore GEM reserves the right to change specifications without notice.

Annex: User List

Slot Number	ABA Form Code	User Name	Note