

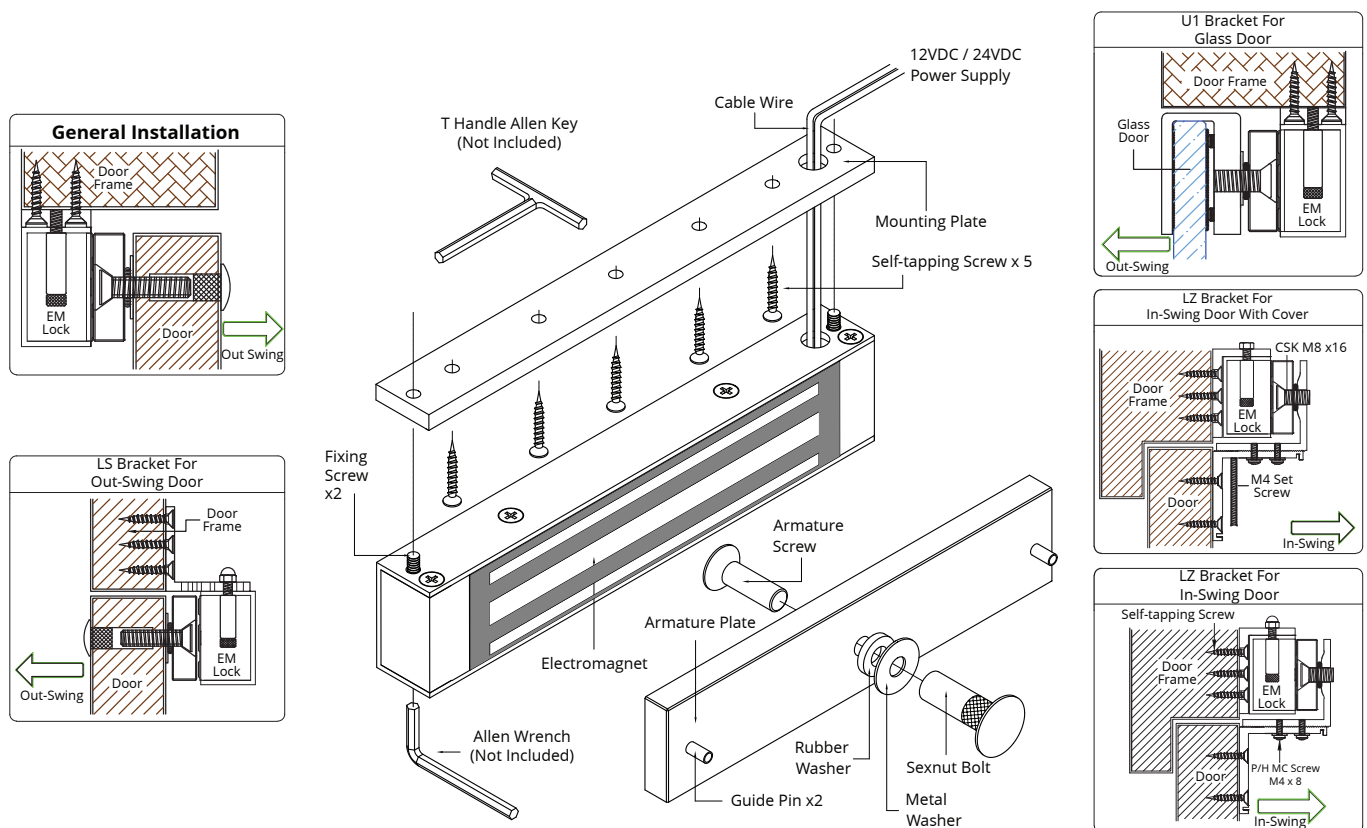
1. Specifications

	CX-90S-03
Holding Force	Up to 300 Lbs. (136 kg)
Voltage Input	12VDC / 24VDC **
Current Draw	300mA / 150mA
Dimensions (Body)	6 11/16"W x 1 3/8"H x 13/16"D (165 x 35 x 22 mm)

** 12VDC / 24VDC is pre-set on manufacturer; once it set, it cannot be changed.



2. Basic Installation Concept & Accessories (Figure 1)



3. General Installation Steps & Maintenance

1. Drill the armature plate holes in the door using the template provided.
2. Attach the armature plate to the door with the hardware provided as per Figure 2.3
3. With the door closed, mark the door frame at the edge of the armature in order to properly align the electromagnet to the armature.
4. Attach the mounting plate to the door frame using the self-tapping screws provided.
Align the mounting plate with the mark from Step 3.
5. Insert the wires through the hole in the mounting plate and into the electromagnet unit. Attach the electromagnet unit to the mounting plate with the Allen head fixing screw.
6. Screw in the anti-tamper nuts to prevent unauthorized access and make sure to fully tighten the fixing screw with proper tool. A "T" Handle Allen Key.
7. Connect the power wires in accordance with NFPA 101. All wiring to be completed inside protected area.

Notes

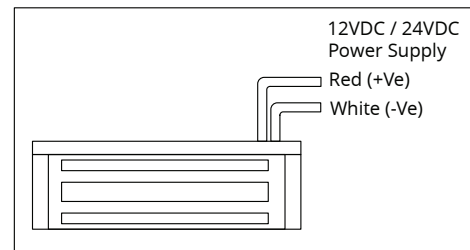
It is recommended to apply a light coat of silicon lubricant to the mating surface on a monthly basis to prevent rust.

4. Trouble Shooting

1. Sensor not functioning:
 - Improper attachment of electromagnet and armature plate
 - Modification of the PCB
2. Door not locked:
 - Incorrect wiring or no power from power supply
3. Reduced holding force:
 - Poor contact of electromagnet and armature.
 - Be sure armature is loose enough that it can fully contact electromagnet along the entire length
 - Mating surface is dusty or damaged.
 - Improper input voltage or wire size.

Performance Level

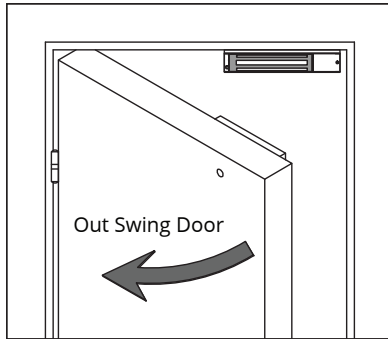
- Destructive Attack: Level I
- Line Security: Level I
- Standby Power: Level I
- Endurance: Level IV



Wiring Instruction

** Note: 12VDC / 24VDC is pre-set on manufacturer; once it set, it cannot be changed.

6. Regular Installation Guide (Figure 2)



1 Installation Template

Fold the CX-90S Template along the dotted line upto 90°.

Note: Installation Template Only for In-door E.M. Lock Model 300, 600, 1200

2 Door Frame
Door Template

Close the door, position the EM lock mounting location as close to the door upper corner with gap 10mm.

3 Door Frame
Door

Place the template against the door & frame and drill holes according to template indications.

4 Door Frame
Door

Drill 2 holes on Frame and 3 holes on door as indicated on the template.

5 Armature Screw
Armature Plate
Rubber Washer
Metal Washer
Sexnut Bolt

Install the Armature Plate to the door.

Note: Actual installation may varies according to door figures.

Wooden Door

6 Door
Rubber Washer

This allow the armature plate to pivot around the armature screw to compensate for door misalignment.

7

Mount the FB600 on the door frame by screw in the self tapping screw on the holes as indicated on template.

8

Once position is correct, screw in others screws to permanently mount the plate; and drill the wire cable access hole.

9 Cable Wire
Cover Screw
Fixing Screw x2
PCB Cover
Anti Tamper Nut x2
Allen Wrench

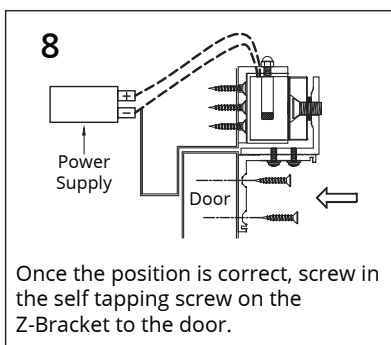
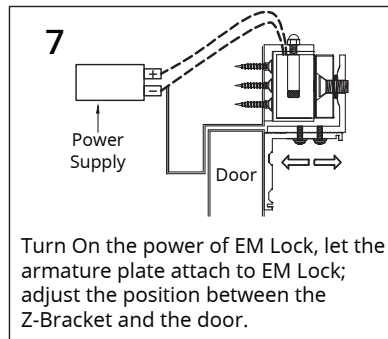
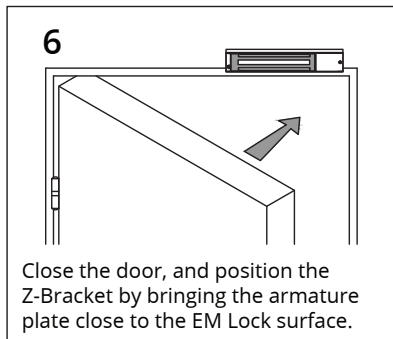
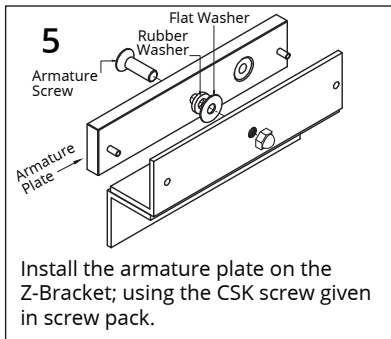
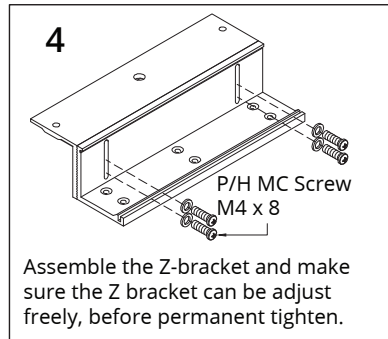
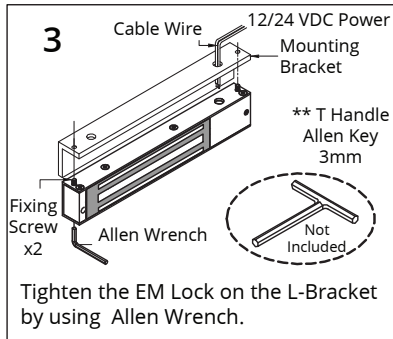
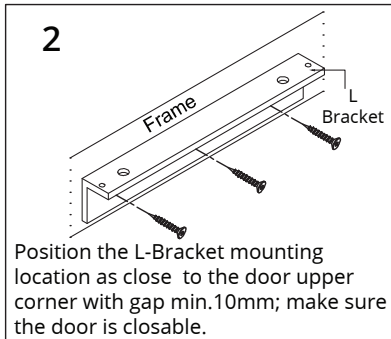
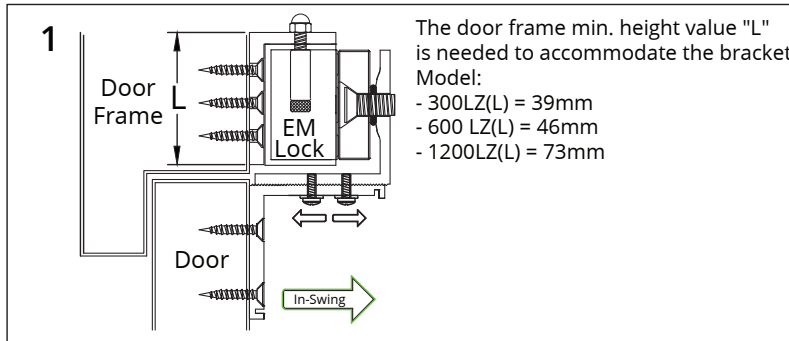
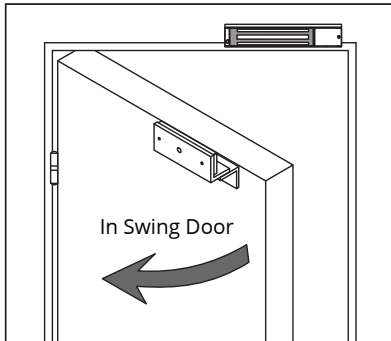
** T Handle Allen Key 3mm Not Included

Use an Allen key wrench to unscrew the anti tamper nut and tighten the fixing screws on the mounting plate.

10 Door Frame
Door EM Lock

Connect to power supply and test the unit.

7. LZ Bracket for In-Swing Door Installation Guide (Figure 3)



Distance in feet from power supply to the furthest lock unit

	Amps	25f	50f	75f	100f	150f	200f	250f	300f	400f	500f	1000f
Minimum Wire Gauge (AWG) for 12VDC	0.25	18	18	18	18	18	16	16	14	14	12	
	0.50	18	18	18	16	16	14	12				
	0.75	18	18	16	14	12	12					
	1.00	18	16	14	14	12						
	1.50	18	14	12	12							
	2.00	16	14	12								
Minimum Wire Gauge (AWG) for 24VDC	0.25	18	18	18	18	18	18	18	18	16	16	16
	0.50	18	18	18	18	18	16	16	14	14	12	
	0.75	18	18	18	18	16	14	14	12	12		
	1.00	18	18	16	16	14	14	12	12			
	1.50	18	18	16	14	14	12					
	2.00	16	16	14	14	12						

