

FG70 Installation Guide

Version 1.5
(English Edition)



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FG70 Technical Documentation



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Regulatory Standards Compliance

A. EMI Warning

FCC Class A Certification

This device complies with Part 15 of the FCC Rules. Operation is subject to the following conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Warning! This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

FCC Class A Certification

この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラス A 情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を構ずるよう要求されることがあります。

B. CE Mark Declaration of Conformance

This product complies with the requirements of the Low Voltage Directive 73/23/EEC (UL 60950) and the EMC Directive 89/336/EEC (ETS 300 329).

CE mark	
EMC directive	89/336/EEC (ETS 300 329)
Safety (low voltage directive)	73/23/EEC (UL 60950)

Records of Revision

Version	Released Date	Remarks
1.0	November 12, '02	1 st release
1.1	November 21, '02	Added 3.4 and 3.5
1.2	November 25, '02	Change wiring with Control Panel
1.3	December 02, '02	Change regulatory standards
1.4	April 22, '03	Added interfacing with ML200SLD
1.5	July 21, '03	Chinese localization Change wiring with BAN

Table of Contents

1 Packing List	6
2 Preparation	7
3 Installation	8
3.1 Hanger mounting	8
3.2 Harnessing with FG70	10
3.3 FG70 door lock installation illustration	14
3.3.1 Illustration for each point :	14
3.3.2 Set up door lock output signal type :	15
3.4 Install FG70 on the hanger	16
3.5 Door lock settings and test	17
3.6 Put on the plastic covers	17
4. Configure the settings	17

1 Packing List

Before you begin installing your FG70, please make sure that the following materials have been shipped:

- ◆ 1 FG70 User Guide
- ◆ 1 certificate of warranty
- ◆ 1 FG70
- ◆ 1 hanger
- ◆ 2 Plastic covers
- ◆ 4 screws
- ◆ 1 AC to DC adaptor (optional)

If any of these items are missing or damaged, contact your distributor or sales representative immediately.

2 Preparation

You'll need some tools and parts to for the installation. The required tools / parts are listed in the following Table.

Item	Function	Quantity	Description
Cross-head screwdriver	Tool	1	
Flower-head screwdriver	Tool	1	
Plastic screw receiver	Part	N	Insert into the wall for screw receiving
Screw	Part	N (4-10)	M4; Fasten the hanger against the wall

3 Installation

3.1 Hanger mounting

Before mounting the hanger against the wall, the pinning positions have to be decided and marked on the wall. On those marked positions, a plastic screw receiver has to be inserted into each and every marked position, as described as follow.

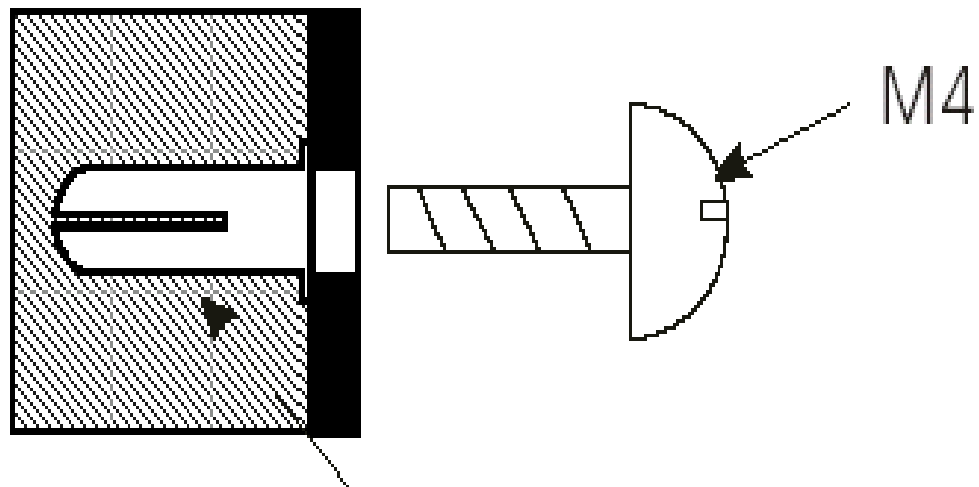


Figure 3.1

There are totally 12 available pinning positions on hanger. User has to use their own discretion to decide what combination of pinning positions is best for the application. However, usually at least six of them are required in general cases.

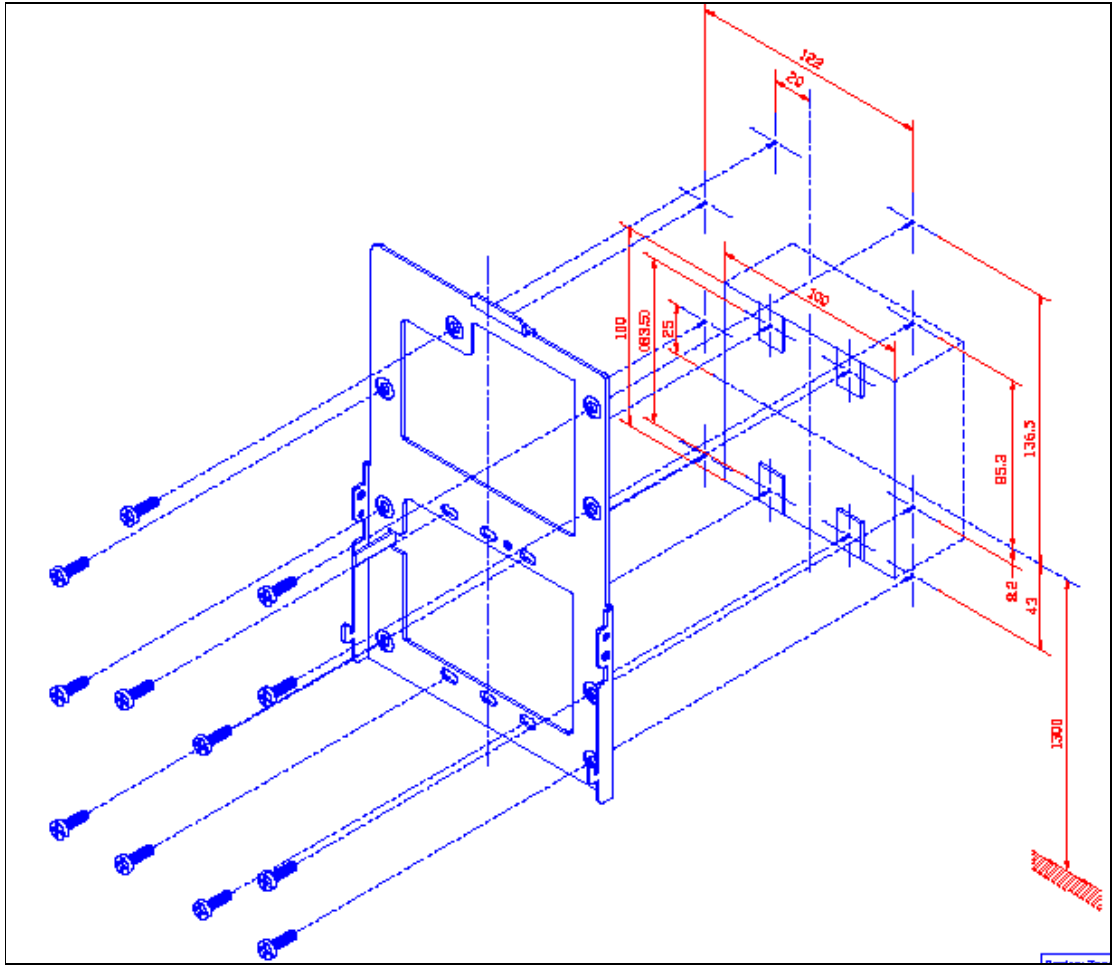


Figure 3.2 12 available pinning positions of hanger against wall

3.2 Harnessing with FG70

FG70 renders the interfaces to interact with other devices. They're itemized as follow.

- RJ45 (Ethernet connection)
- 4 signal input nodes (normal open)
- 2 signal output nodes
- 2 power output nodes
- RS232
- RS485
- DC 24V input power jack
- DC 24V input power node

The interfacing with FG70 is recommended to the following order.

- a. Connect with the Electric Lock / Control Panel
- b. Connect with Ethernet Network (optional)
- c. Connect with Power Supply

Once the power is supplied to FG70, the system will go to the booting process.

When booting is done, enter "Maintenance Mode" and proceed with the mounting with the hanger. For details about how to harness with BAN-F01A, AMTA and ML200SLD, please refer to Figure 3.3, 3.4 and 3.5, respectively. The other harnessing method(s) with any other type of lock should consult with your sales representative.

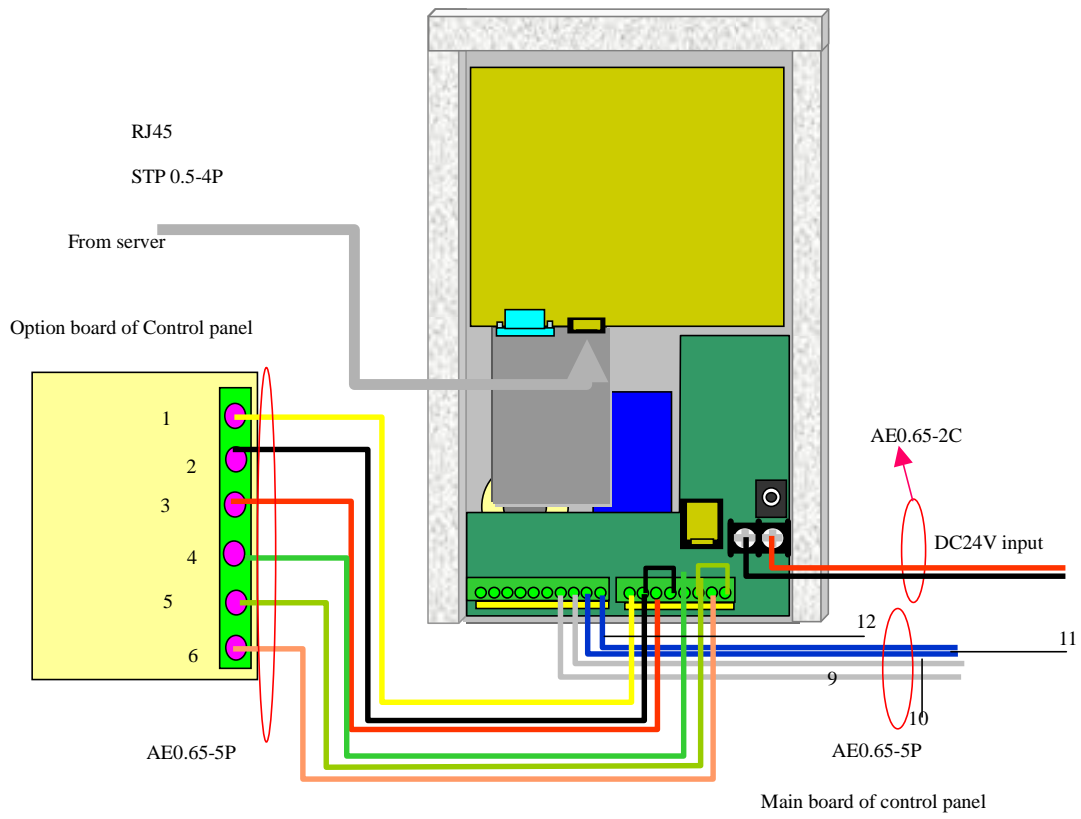


Figure 3.3 Harnessing between FG70 and Control Panel (BAN-F01A / MIWA)

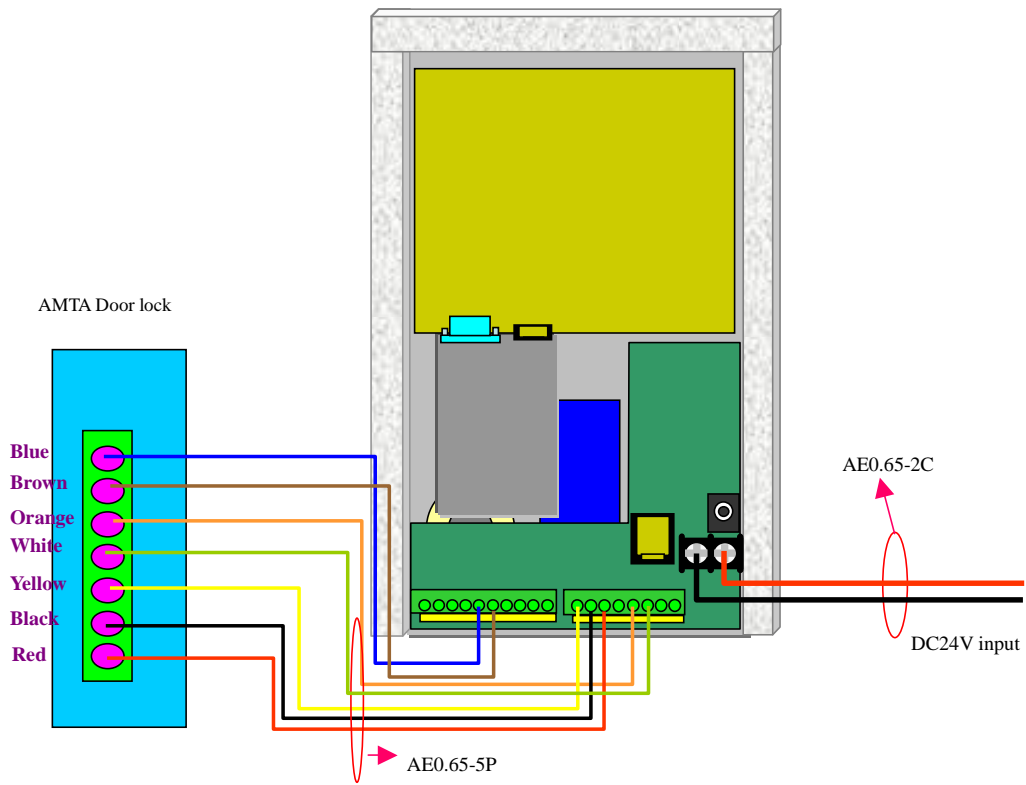


Figure 3.4 illustrates the harnessing with the other electric lock (AMTA / MIWA).

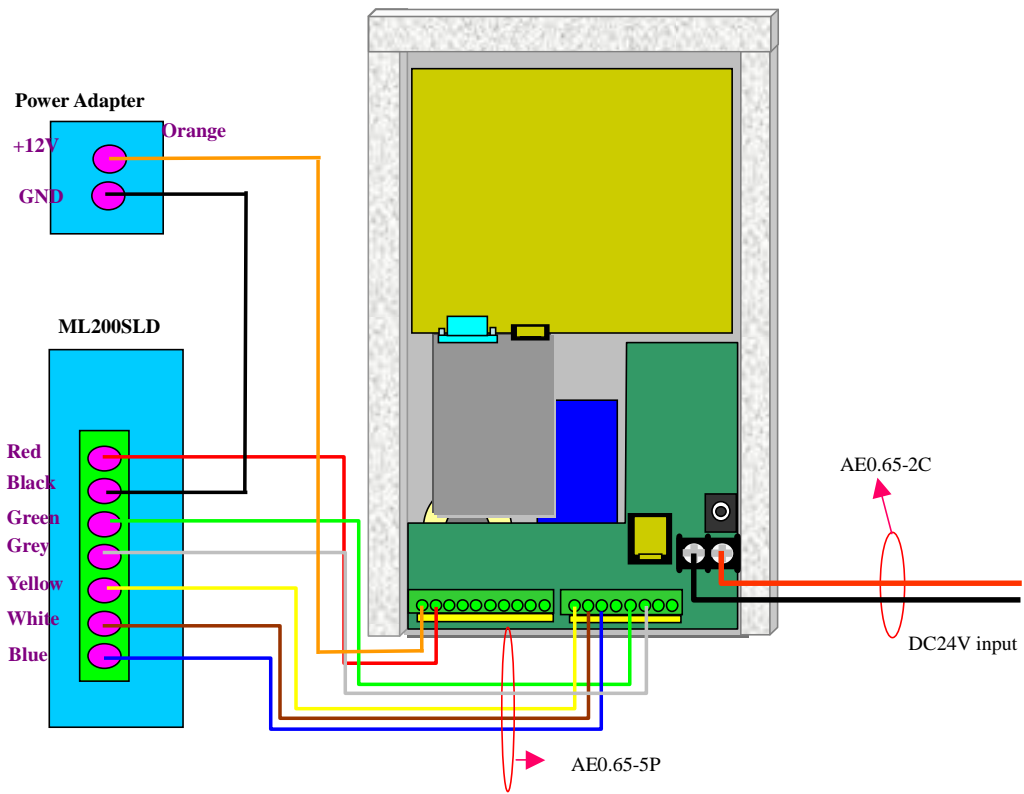
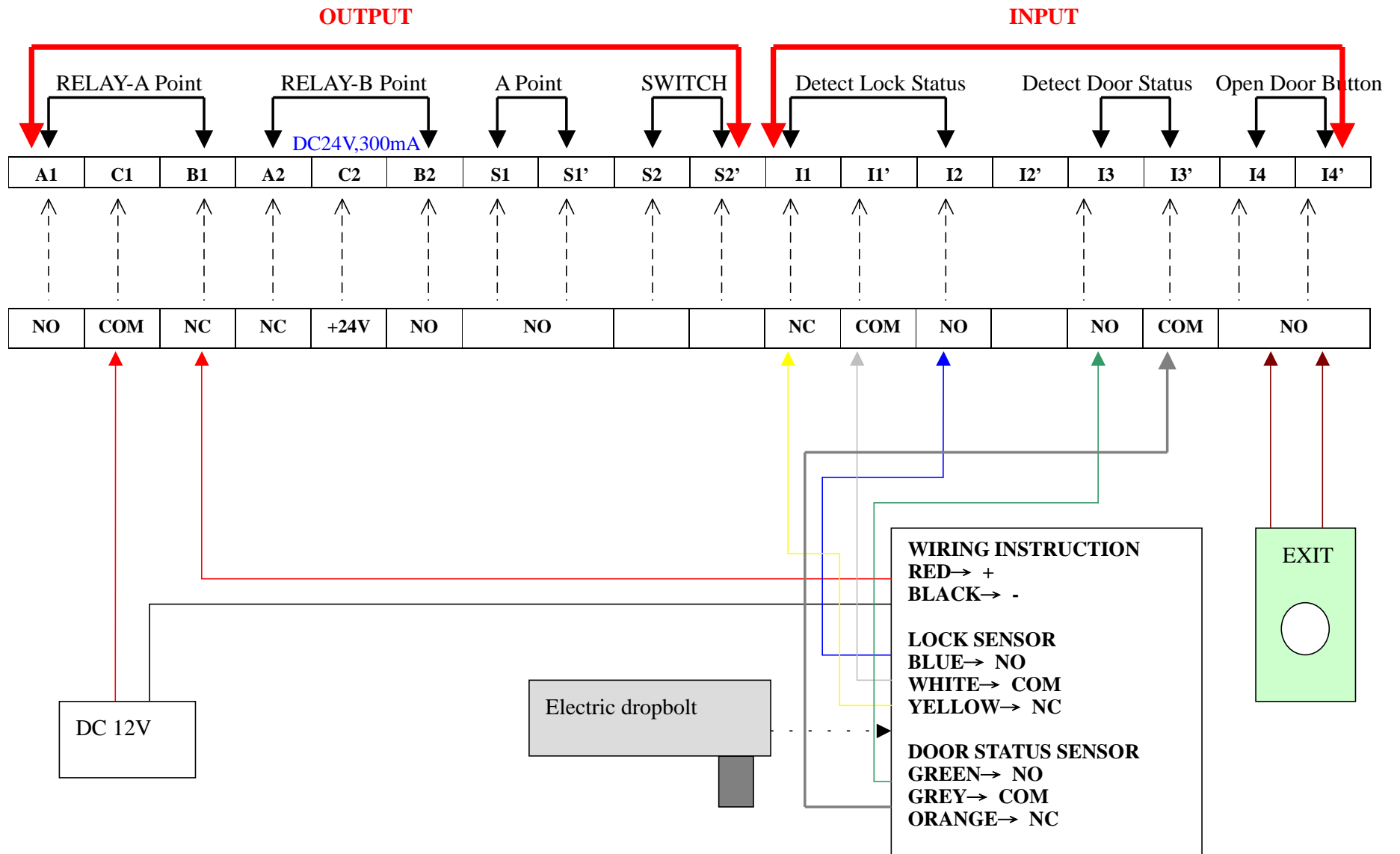


Figure 3.5 Harnessing between FG70 and electric lock (ML200SLD).

3.3 FG70 door lock installation illustration

3.3.1 Illustration for each point :



3.3.2 Set up door lock output signal type :

0. No output : When identification successful, every control point returns no output signal.
1. S1&S2 (software output) : When identification successful, S1、 S1'(often on NO) will output 1 second (NC) pulse, S2、 S2' is the output function that signals a door open for a certain time.
2. S1-CONTI (software output) : When identification successful, S1、 S1'(often on NO) will output the setting of the second count for unlock interval, NO→NC.
3. S1-PULSE (software output) : When identification successful, S1、 S1'(often on NO) will output a 1-second (NC) pulse.
4. ACB1-CONTI (RELAY output) : When identify successful, A1(NO)、 C1(COM)、 B1(NC) will output (NC or NO) the setting of the second count for unlock interval.
5. ACB1-PULSE (RELAY output) : When identify successful, A1(NO)、 C1(COM)、 B1(NC) will output (NC or NO) the setting of the second count for unlock interval.
6. ACB2-CONTI (RELAY DC 24V output) : When identify successful, A2(NC)、 C2(COM DC +24V)、 B2(NO) will output (NO or NC) DC 24V and the setting of the second count for unlock interval.
7. ACB2-PULSE I (RELAY DC 24V output) : When identify successful, A2(NC)、 C2(COM DC +24V)、 B2(NO) will output a 1-second (NO or NC) DC 24V pulse.

P.S. :

- 1. PULSE : the duration of the output signal is 1 second.**
- 2. Set unlock interval : unlock interval can be set to 5、 10、 20 or 60 seconds.**
- 3. Set open interval (detect door state) : counting the seconds from when the door opens. When it exceeds the setting (3~99 seconds), the system will launch the alarm.**
- 4. Detect lock status: if the lock breakdown fails to lock normally, or if unlock occurs while the system did not receive an unlock signal, the system will launch the alarm**

3.4 Install FG70 on the hanger

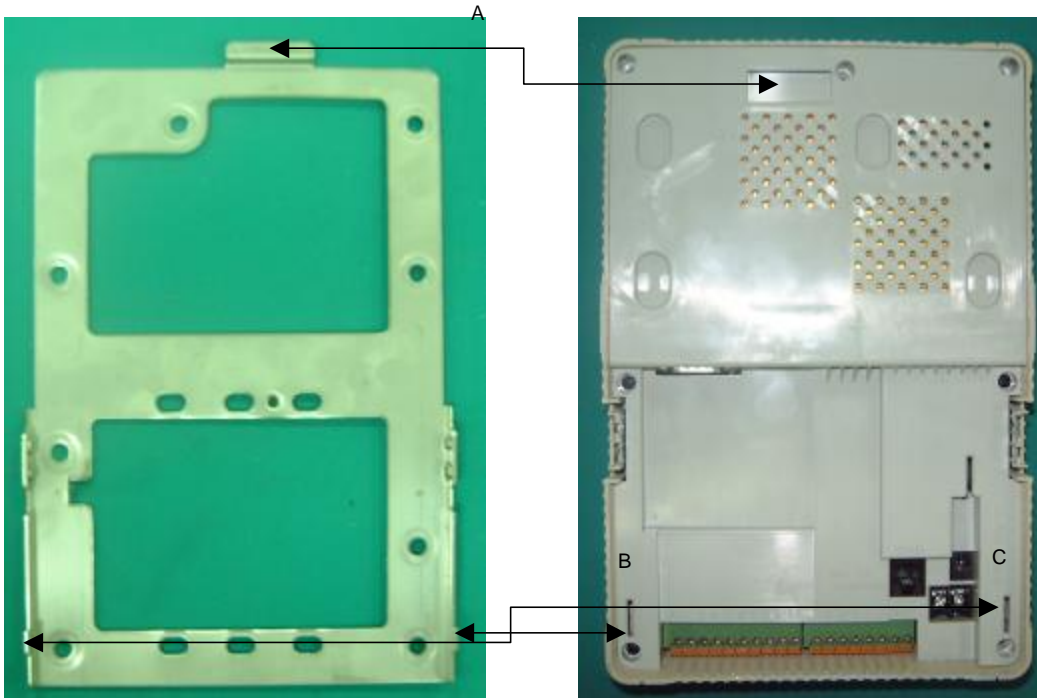


Figure 3.6 Mounting position of FG70 against the hanger

Figure 3.6 illustrates the mounting positions A, B, and C between the hanger and FG70. The following are the steps for installing FG70 on its hanger.

- a. Tilt FG70 a few angles with its bottom ling against the wall.
- b. Look down from the top to make sure pins B and C are inserted into their designated slots.

- c. Push the top of FG70 against the wall and make sure pin A is in its designated slot.
- d. After FG70 is clipped onto the hanger, slide FG70 downward a little then the mounting process is completed.

3.5 Door lock settings and test

After hang FG70 on the hanger indeed. Before installing the screws and covers on FG 70, please user must enter administrator mode to process the door lock settings and test.

3.6 Put on the plastic covers

After FG70 is correctly mounted on the hanger, apply two screws on both sides, respectively, to fasten the mounting position. After that, clip the plastic cover into the slot on both sides.

4. Configure the settings

Once FG70 is installed, you have to manually configure the initialization settings for FG70 before using it. For details about how to configure the required settings, please refer to “**FG70 Product Manual**”.

