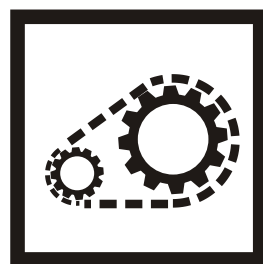


APOLLO *Mini*
RADIO REMOTE CONTROL

HANDBOOK

AC version



Please read the handbook carefully before operation to avoid any dangerous or damage may be incurred

Jun. 2023

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1. INTRODUCTION

1.1 FEATURES:

1. Pocket-size transmitter, light ,more handy for operation.
2. ABS +PC transmitter housing, water/shock/dust proof.
3. Transmitter 2-4 functions equipped with a push type emergency STOP button .
4. Receiver with 4-LED, quick, simple judgement for operation status & after services.

2. MODELS

MINI20C	1 step, (2) buttons
MINI30C	1 step, (3) buttons
MINI40C	1 step, (4) buttons
MINI60C	1 step, (6) buttons

※ All models are equipped with RED EMS stop (push type)

3. TRANSMITTER

3.1 TECHNICAL DATA:

Operation distance: 30M (open space)
 Frequency : FM 418/433/868Mhz
 Output power : < 10mW
 Response time: 100mS
 Antenna: internal type
 Temperature: 0°C~+70°C
 Source supply:1.5V(AA)*2pcs or rechargeable nickel battery
 Enclosure: IP65
 Material: Industrial ABS + PC
 Address code : 256 sets
 Weight : 95 g (excluding batteries)
 Size: 124x48x25mm



3.2 INDICATOR:

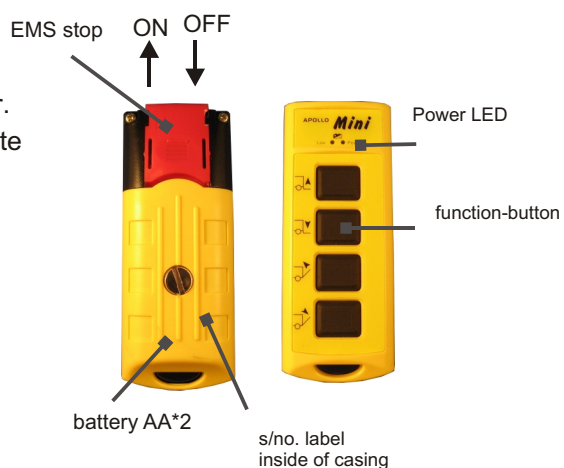
stand-by (power on)	RED/GREEN both indicators are NOT lighting (EMS ON)
operation	GREEN indicator light blinking
power low	RED indicator light blinking (when button pressed)
power off	Indicator lights off (EMS OFF)

3.3 POWER-ON STEPS:

- (1) Power on receiver.
- (2) PUSH up the RED stop button to power on the transmitter.
- (3) Press any button and release, now MINI is ready to operate
(now receiver power LED lights GREEN)

3.4 POWER-OFF STEPS :

- (1) Push down the RED stop button .

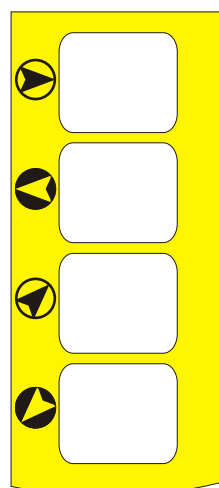
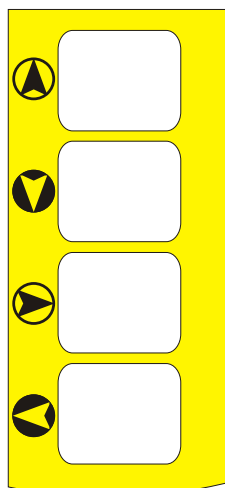
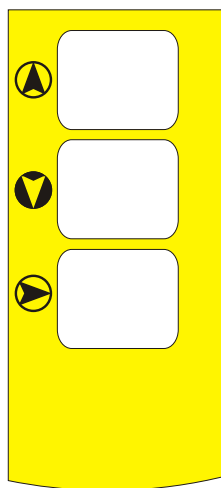
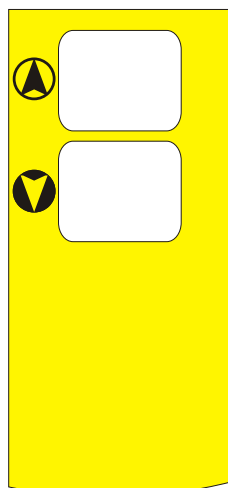


CAUTION:

Please take out the batteries if long term period NOT operation.

3.5 STANDARD MINI BUTTON LAYOUT:

● Transmitter Label :

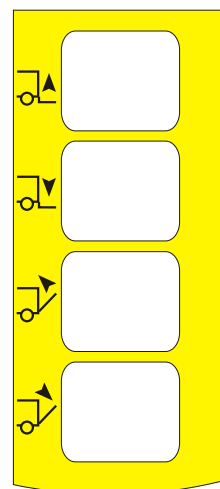
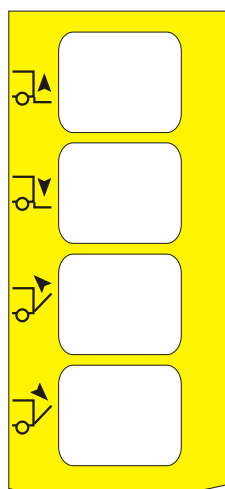
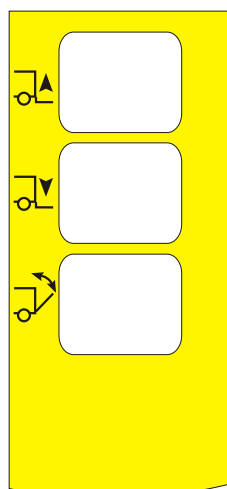
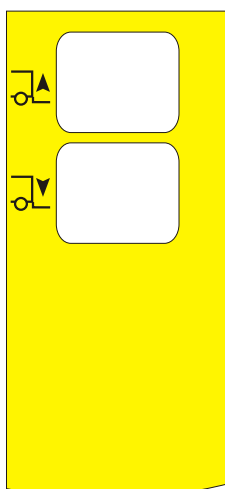


Mini20C

Mini30C

Mini40C

Mini60C



Mini20

Mini30

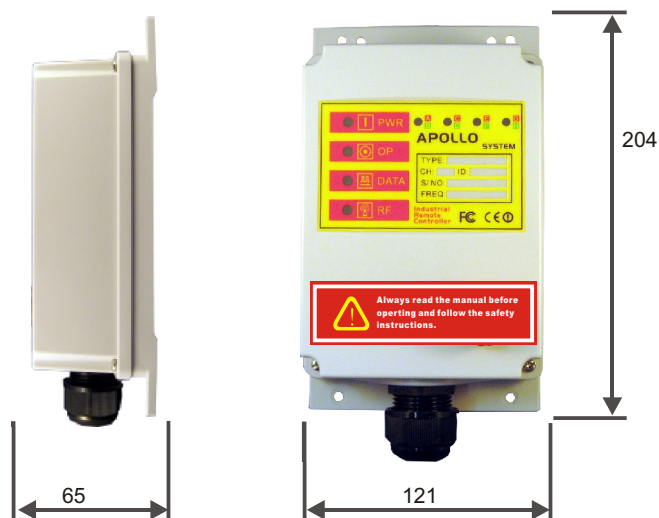
Mini40

Mini60

4. RECEIVER

4.1 TECHNICAL DATA:

Frequency : FM 418/433/868Mhz
 Sensitivity of RF:-110dBm
 Antenna : internal type
 Operation Temperature : -10°C~+75°C
 Source Voltage: 9-30V DC
 Enclosure: IP67
 Consumption: <12W
 Security Code: 256sets
 Weight: 270g (excluding cable)
 protection: short protection
 Color: Grey



BOX 1.1

4.2 INDICATOR:

illustration	description
	<u>Power LIGHT</u> Green lights when power on
	<u>Operation LIGHT</u> GREEN lighting when power on Light OFF when EMS stop pressed or power off
	<u>Data LIGHT</u> RED when buttons are pressed (in operation) OFF when buttons are released (without operation) RED light blinks slowly when data is incorrect RED light blinks fast when ID codes are incorrect
	<u>Frequency LIGHT</u> RED lights when TX is pressed (in operation) Light blinks slightly when buttons are released (without operation)

TX*: transmitter

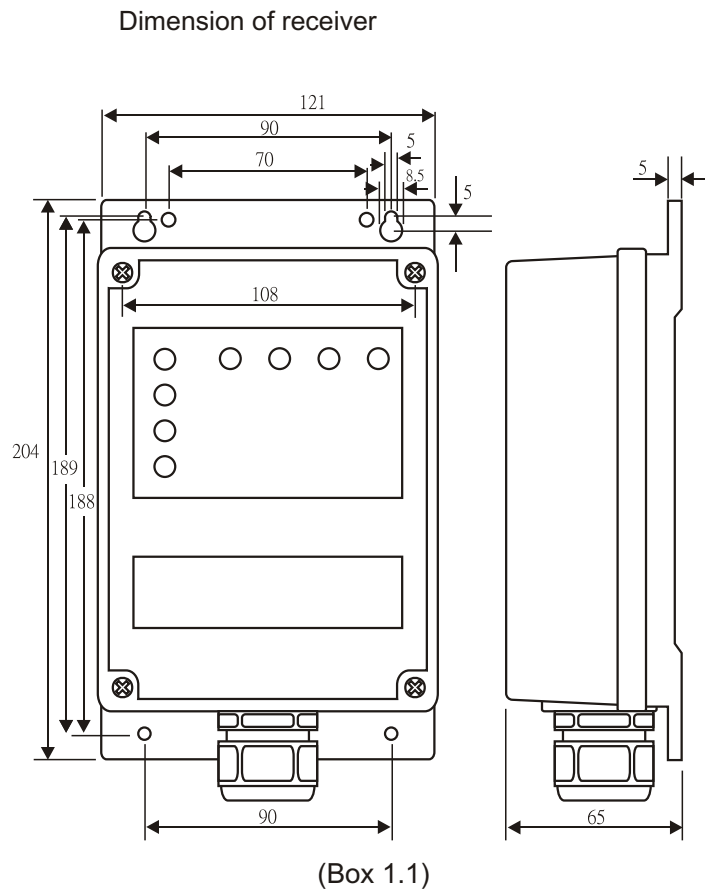


S/No. ID LABEL:

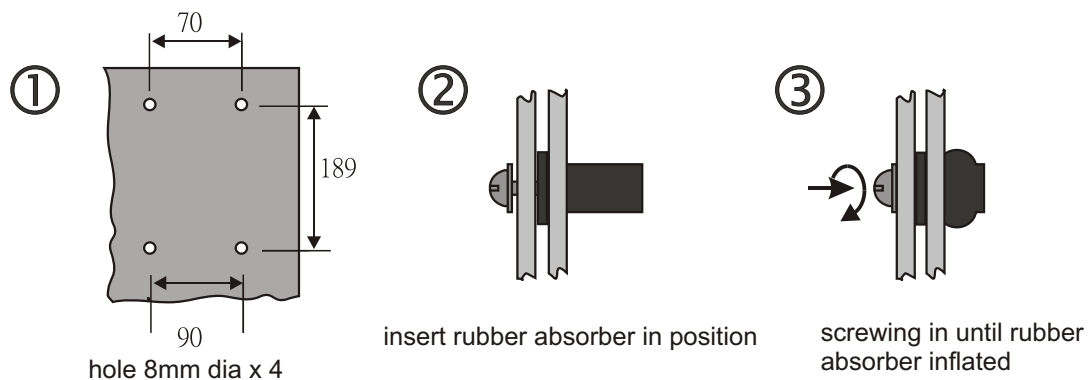
Each MINI unit has its own s/no. ID label which defines the device's type, ID, service number (S/No.), and channel. For any inquiry please advise your supplier the S/NO. for a faster service.

4.3 INSTALLATION NOTES:

- (1) Ensure the original wired control of equipment works.
- (2) Shut down equipment main power source before installation.
- (3) Mount in a firmed site where the receiver can be seen easily by operator.
- (4) Keep away the mounted site from motors relays, cables, high voltage wiring and devices, or the protrusion of building where crane moves.
Select a firmed site without metal shield.
- (5) Ensure the wiring layout correctly and safely
- (6) Test each function to be sure each output has the same function as wired control
- (7) Put the wired pendant if has in safe position



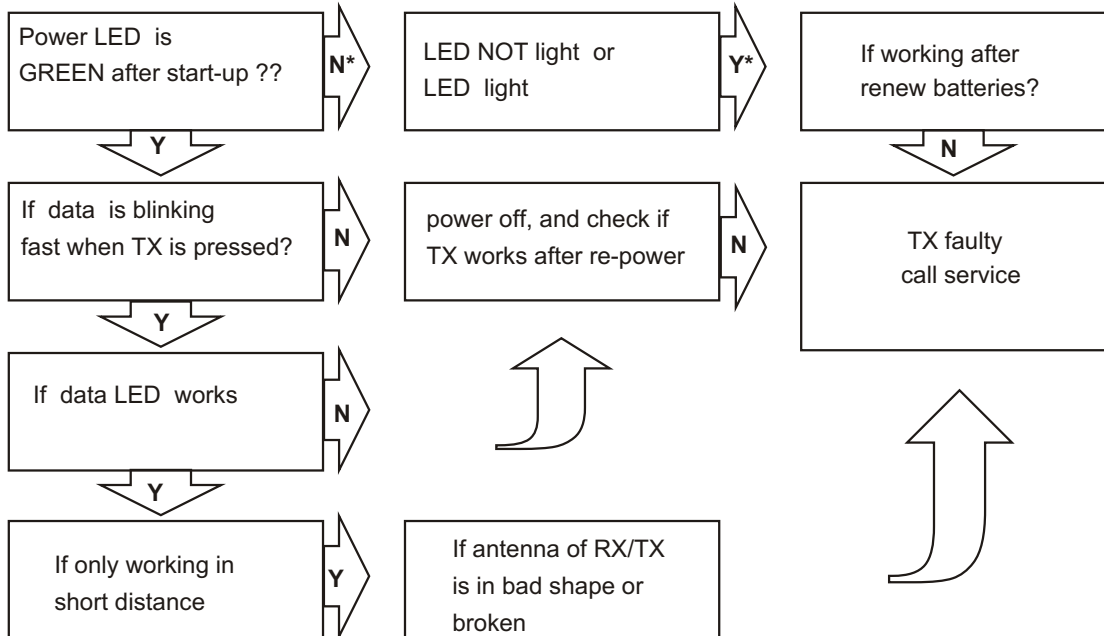
4.4 RECEIVER INSTALLATION ILLUSTRATION :



5. TROUBLE SHOOTING- TX

Please make sure the following status before trouble shooting.

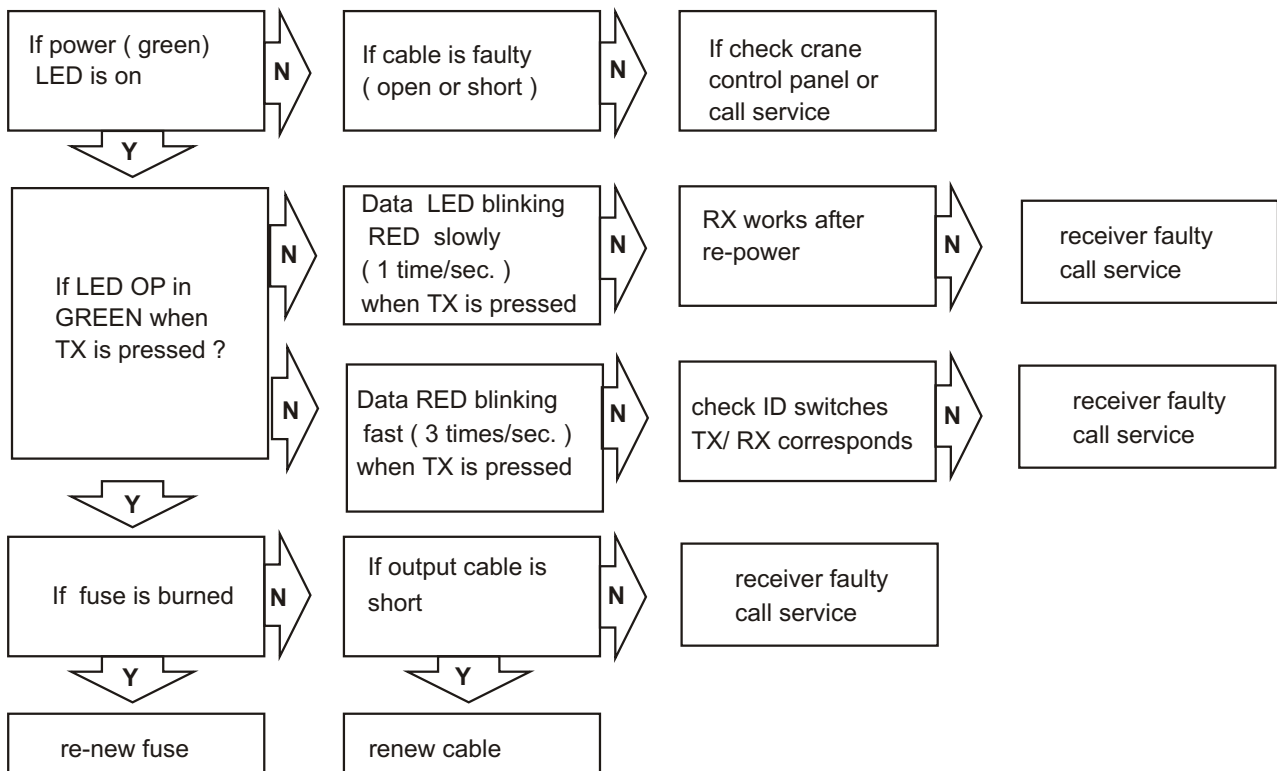
- (1) The hoist or device is subject to control works
- (2) The TX outlook is in good condition without leakage
- (3) Receiver works



6. TROUBLE SHOOTING- RX

Please make sure the following status before trouble shooting.

- (1) The hoist or device is subject to control works
- (2) The RX outlook is in good condition without leakage
- (3) Transmitter works



7. PARTS LIST

TRANSMITTER	
part number	description
MTC	transmitter casing (incl. RED stop, rubber pushbuttons, battery case)
MED-20	encoder board(Mini 20C)
MED- 40	encoder board(Mini 40C)
MPS	protection sleeve
MWS	wrist strap

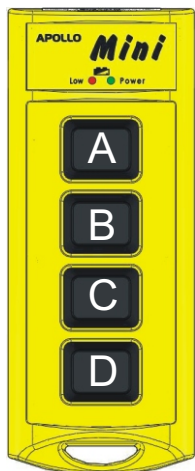
RECEIVER	
part number	description
BOX1.1	receiver housing incl. cable gland
MDD-20	decoder board (Mini 20C)
MDD-40	decoder board(Mini 40C)
RFP	receiver frequency part
CAP08	cable 8c X 0.75mm ² x 1.8 M

APOLLO *Mini*

Code Matching Operation Instruction

- ☐ Changing the channel of Transmitter
- ☐ New transmitter copy to another transmitter
- ☐ Matching transmitter and receiver

● Changing the channel of transmitter



Push button B and pull out the EMS stop button. Then push button B-A-B in sequence. (Please finish this step within 5 seconds.) After done that, you can change the channel successfully.

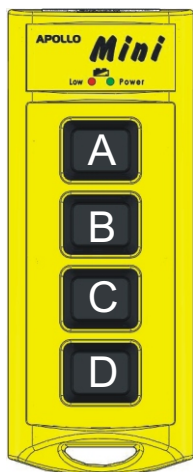
*You may refer to the attached linkage film.



發射器更換頻道

● New transmitter copy to another transmitter

Host transmitter



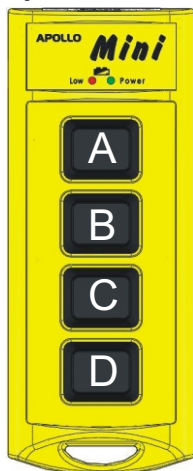
1. Deputy transmitter :

Push button A, then pull out the EMS stop button.
The red and green light flash slowly.

2. Host transmitter :

Push button A & B at the same time, then pull out the EMS stop button.

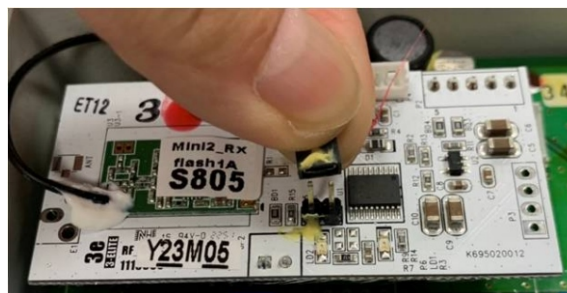
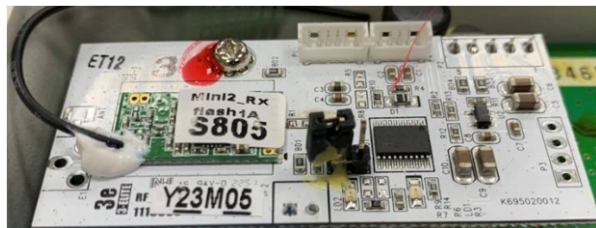
Deputy transmitter



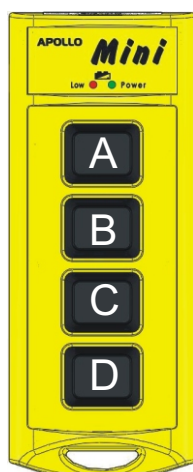
3. This process must complete within 5 seconds.
When the lights of deputy transmitter are off, the transmitter are copied.



● Matching transmitter and receiver



Please insert the short circuit pin on the receiver frequency board



Notice: Please ensure the receiver is power on.

1. Please insert the short circuit pin on the receiver frequency board.
2. The red and green LED will flash alternately after you pushing button A & B at the same time and pulling out the EMS stop button. Then push button A, green LED lights; push button B, red LED lights. Remove short circuit pin after done that.

Matching process is finished successfully.

*You may refer to the attached linkage film.



發射器燒錄接收器

8. Code Matching Operation Instruction

APOLLO **Mini**

Standard circuit illustration.

☐ APOLLO mini 20C

☐ APOLLO mini 30C

☐ APOLLO mini 40C

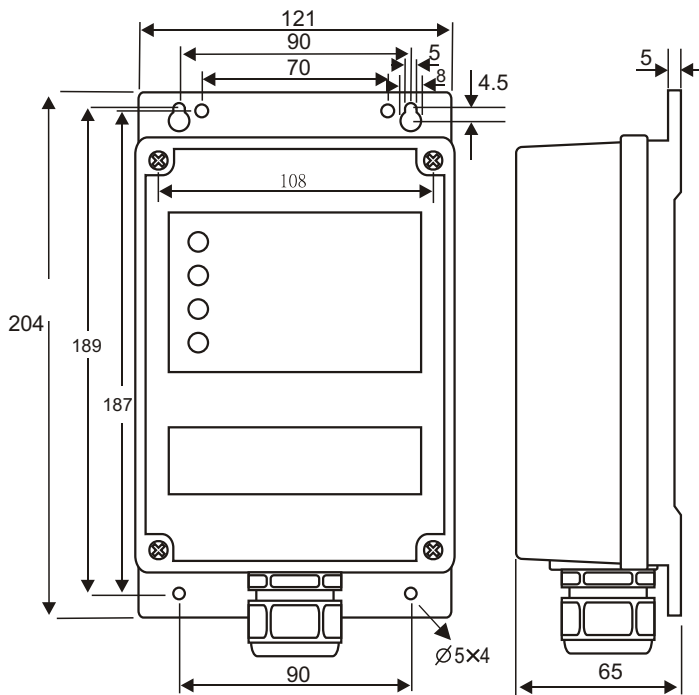
☐ APOLLO mini 60C

☐ _____

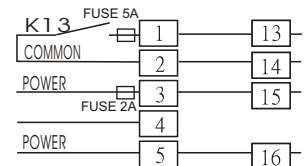
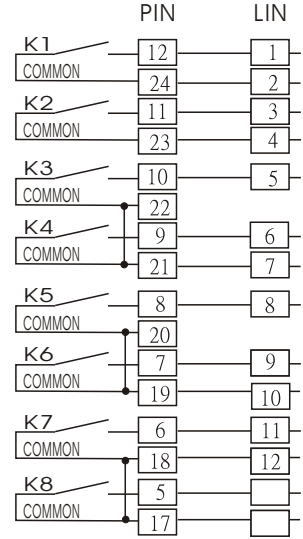
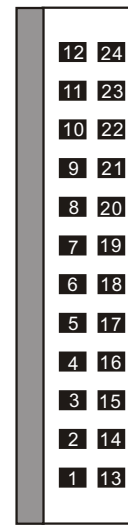
(Special case we will attach circuit illustration.)

APOLLO mini 20C Installation Wiring Diagram

receiver



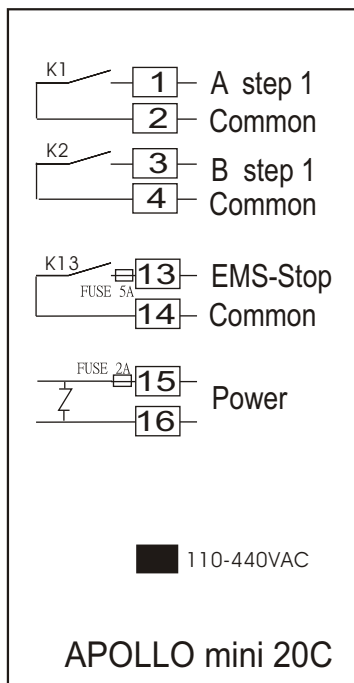
Wires Location in Decoder & Relay Board



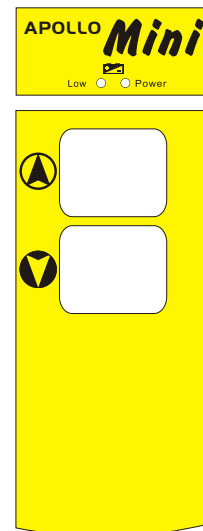
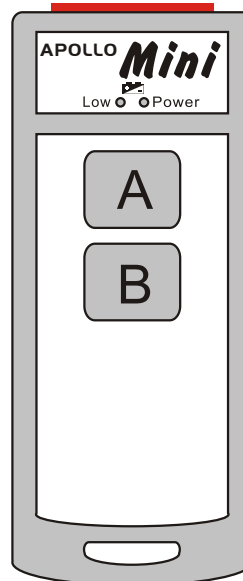
F1 2A Power Fuse
F2 5A Main Fuse

K13 Main(stop)
K14 CPU
K1 1ST step in A
K2 1ST step in B

110-440VAC

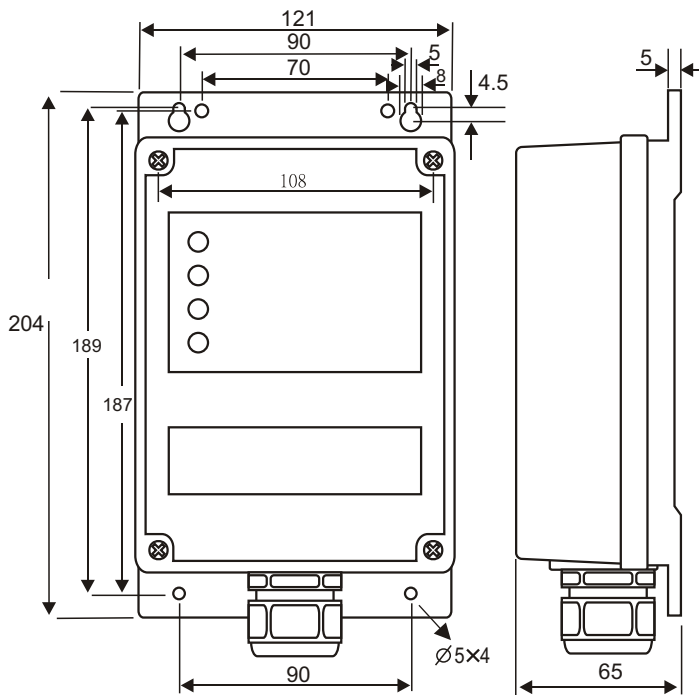


transmitter

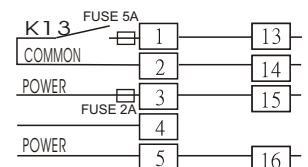
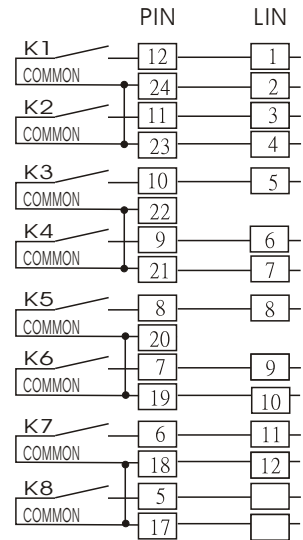
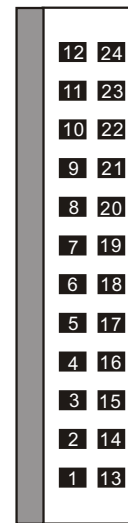


APOLLO mini 30C Installation Wiring Diagram

receiver



Wires Location in Decoder & Relay Board



F1 2A Power Fuse

F2 5A Main Fuse

K13 Main(stop)

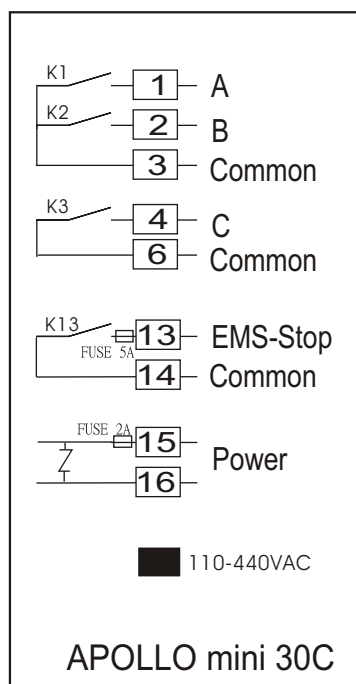
K14 CPU

K1 1ST step in A

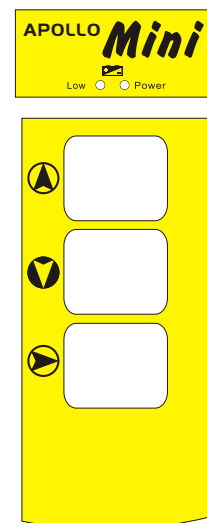
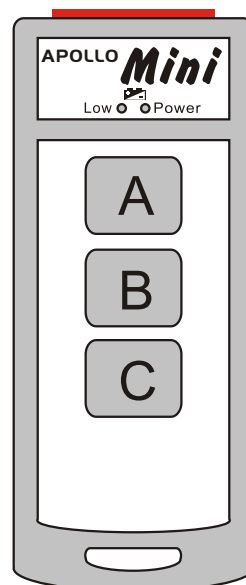
K2 1ST step in B

K3 1ST step in C

110-440VAC

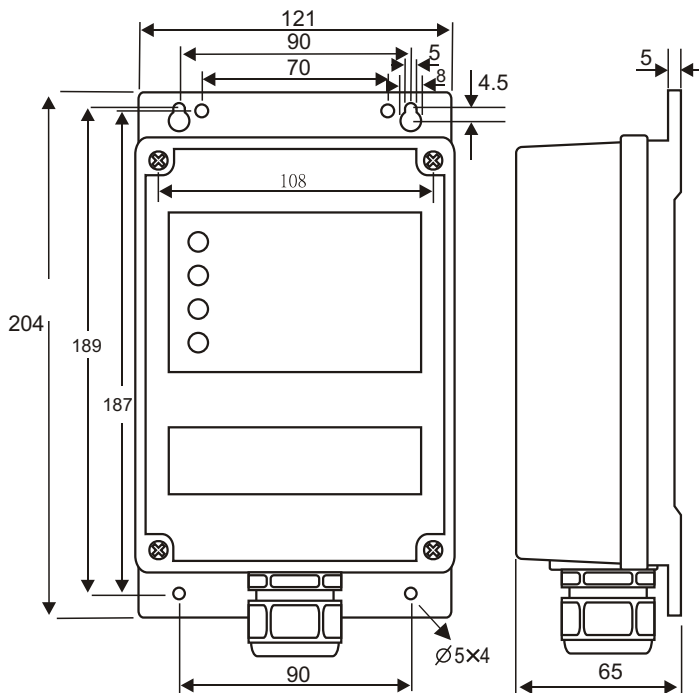


transmitter

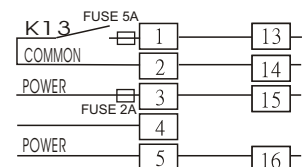
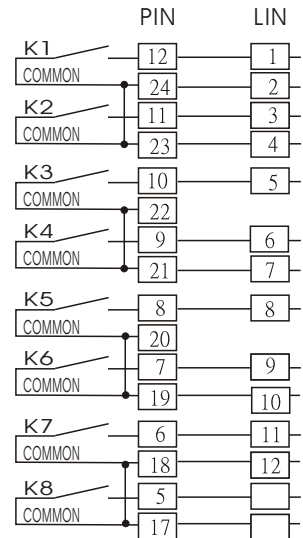
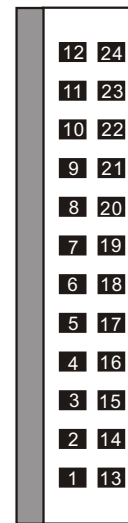


APOLLO mini 40C Installation Wiring Diagram

receiver



Wires Location in Decoder & Relay Board



F1 2A Power Fuse

F2 5A Main Fuse

K13 Main(stop)

K14 CPU

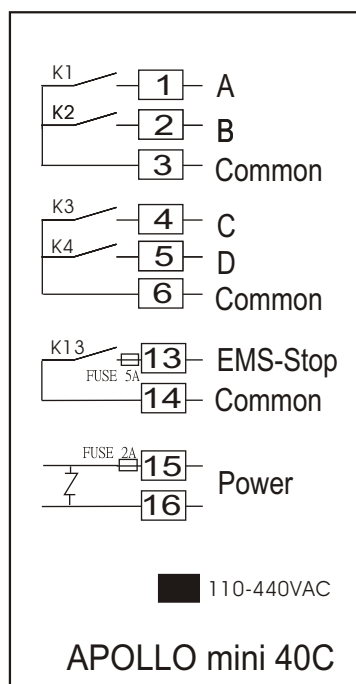
K1 1ST step in A

K2 1ST step in B

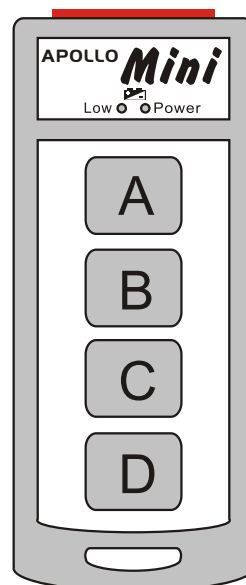
K3 1ST step in C

K4 1ST step in D

110-440VAC

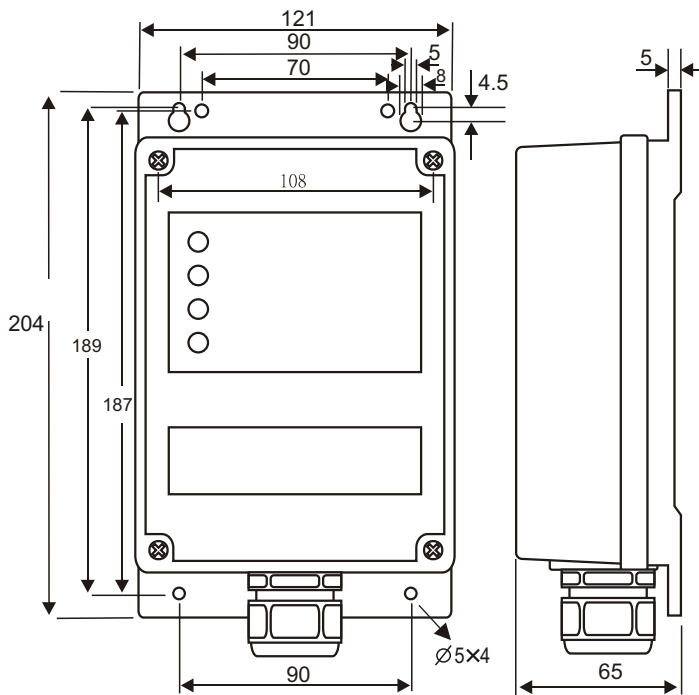


transmitter



APOLLO mini 60C Installation Wiring Diagram

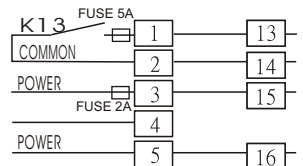
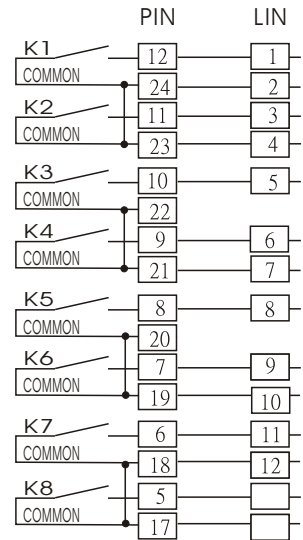
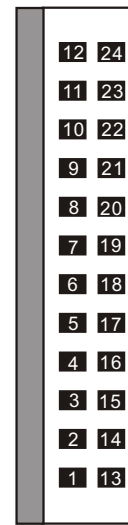
receiver



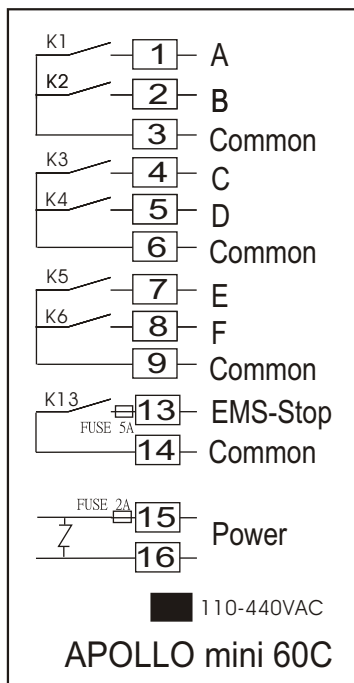
F1 2A Power Fuse
F2 5A Main Fuse

K13 Main(stop)
K14 CPU
K1 1ST step in A
K2 1ST step in B
K3 1ST step in C
K4 1ST step in D
K5 1ST step in E
K6 1ST step in F

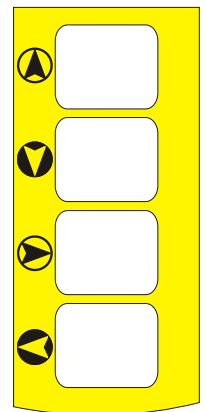
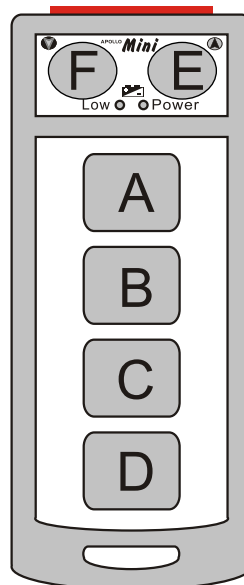
Wires Location in Decoder & Relay Board



110-440VAC



transmitter



WARRANTY

The equipment is warranted for one year from date of purchase against defects in materials or workmanship provided it was purchased from 3-Elite or authorized dealer.

This warranty does not cover equipment which has been abused or damaged by careless handling or shipping, OR damaged by nature disaster such as earthquake, typhoon etc.

The careless handling including self-change components, antenna, voltage; or circuits, and switches increased would be deemed as end of warranty, user should cover the repairing fee.

Should any defect develop, we will, at our option, repair or replace any defective parts without charge for either parts or labour. If we cannot correct the defect in your equipment, we will replace it at no charge with a new one. We will pay for the cost of returning your merchandise to you.

This warranty applies only to items returned to us, shipping costs prepaid, within one year from the date of purchase.

distributor

STANDARD ACCESSORY

- | | | |
|--|---|---------------------------------------|
| ☐ transmitter x 1 | ☐ receiver x 1 | ☐ handbook x 1 |
| ☐ screw x 4 | ☐ transmitter sleeve x 2 | |



