APOLLO *Mini*

RADIO REMOTE CONTROL

HANDBOOK

DC version



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

May 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

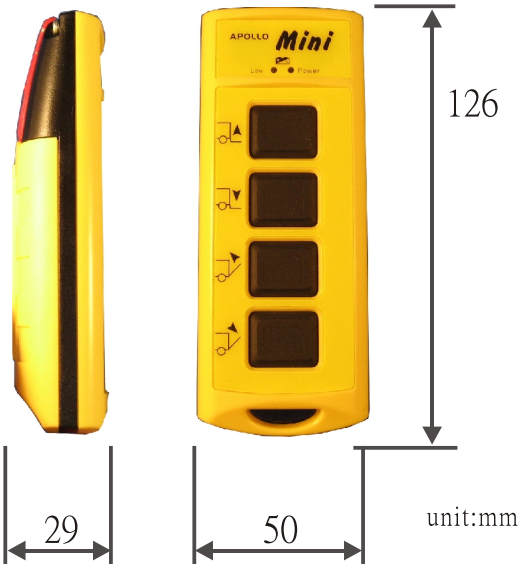
MINI 20	1 step, (2) buttons
MINI 30	1 step, (3) buttons
MINI 40	1 step, (4) buttons

※ 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
Temparature: 0°C~+70°C
Source supply:1.5V(AA)*2pcs or rechargable nickel battery
Enclosure: IP65
Material: Industrial ABS + PC
Address code : 256 sets
Weight : 95 g (excluding batteries)
Size: 124x48x25mm

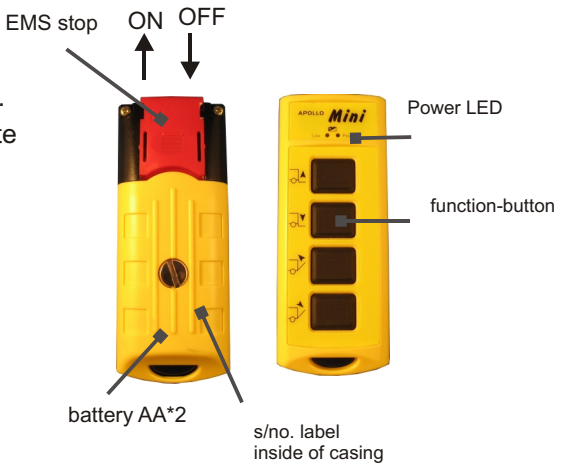


3.2 INDICATOR:

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)

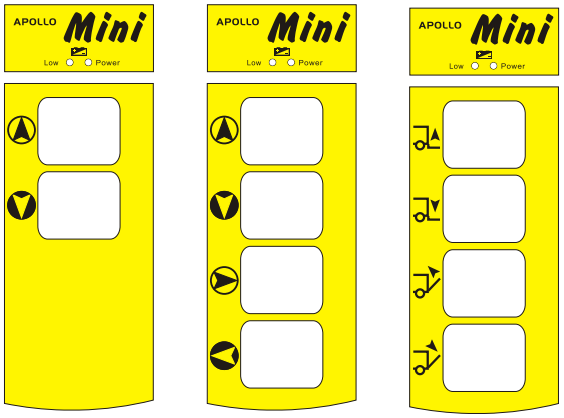


3.4 POWER-OFF STEPS :

(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:

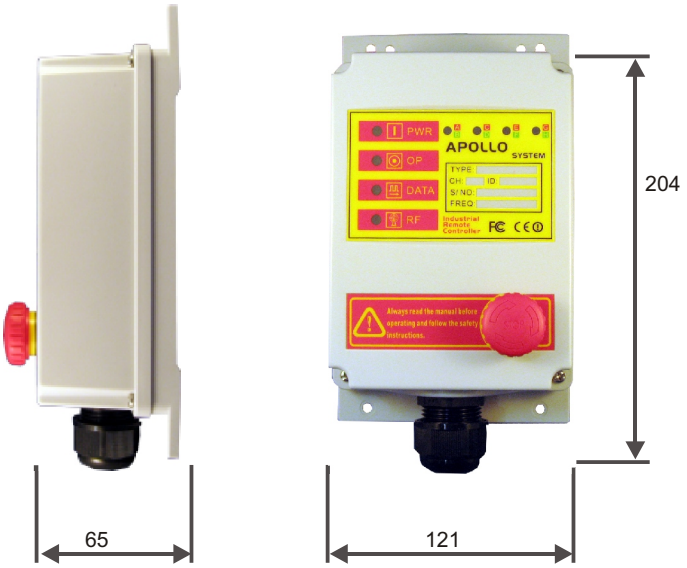


Mini 20 Mini 40 Mini 40 (tailift)

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 1.2

4.2 INDICATOR:

lillustration	description
PWR	Power LIGHT Green lights when power on
OP	Operation LIGHT GREEN lighting when power on Light OFF when EMS stop pressed or power off
DATA	Data LIGHT 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
RF	Frequency LIGHT 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.

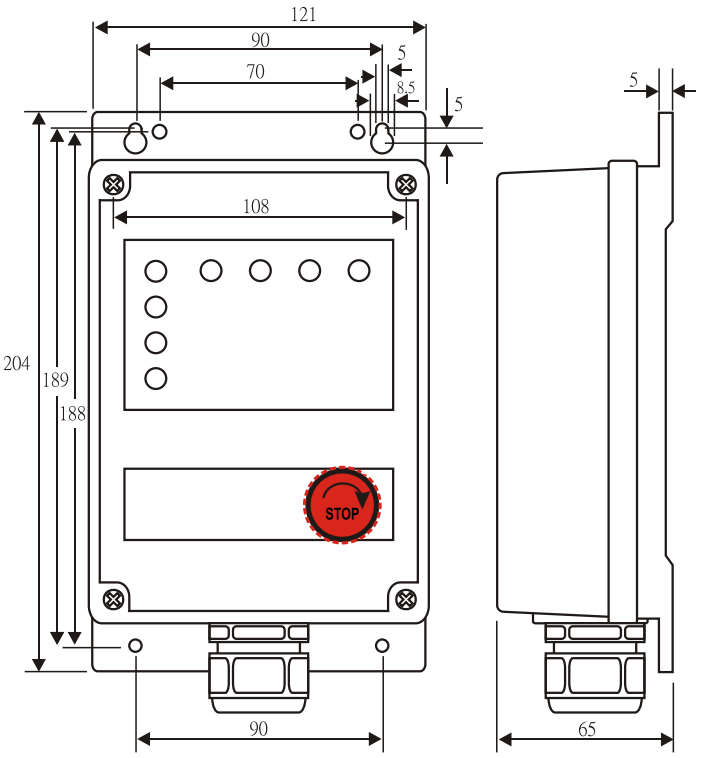
(4) Keep away the mounted site from motors relays, cables, high voltage wiring and devices, or the protrusion of building where crane moves.
Select a firmed site without metal shield.

(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

Dimension of receiver

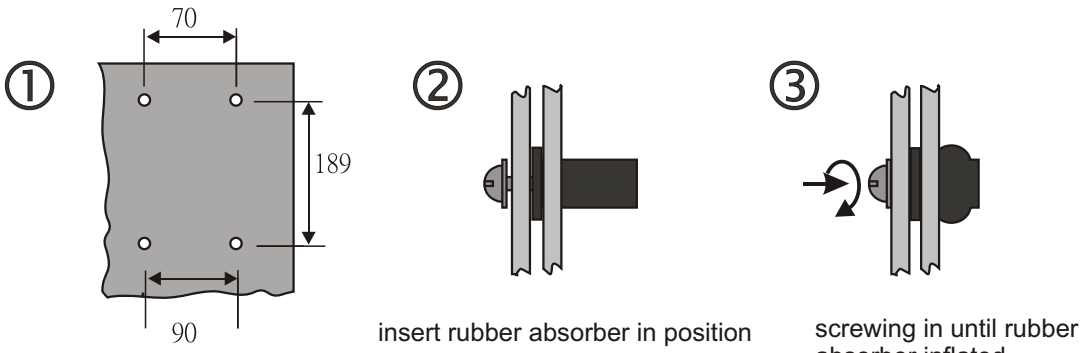


(Box 1.2)

CAUTION:

Please clean the EMS stop regularly at least every week to keep good condition

4.4 RECEIVER INSTALLATION ILLUSTRATION :



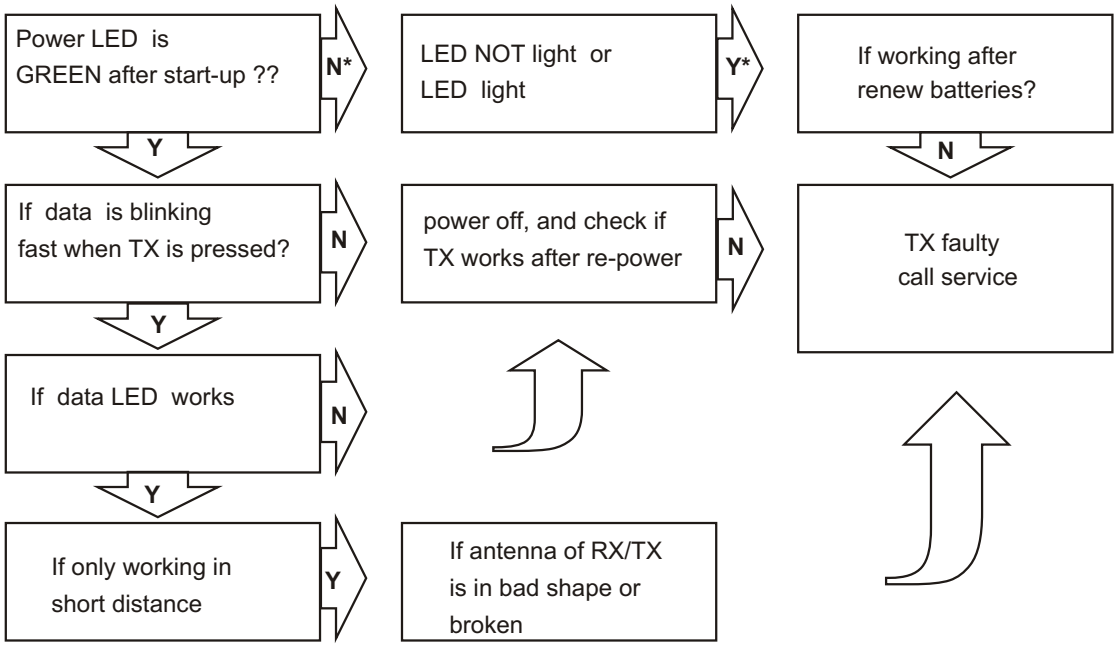
hole 8mm dia x 4

insert rubber absorber in position

screwing in until rubber absorber inflated

5. TROUBLE SHOOTING- TX

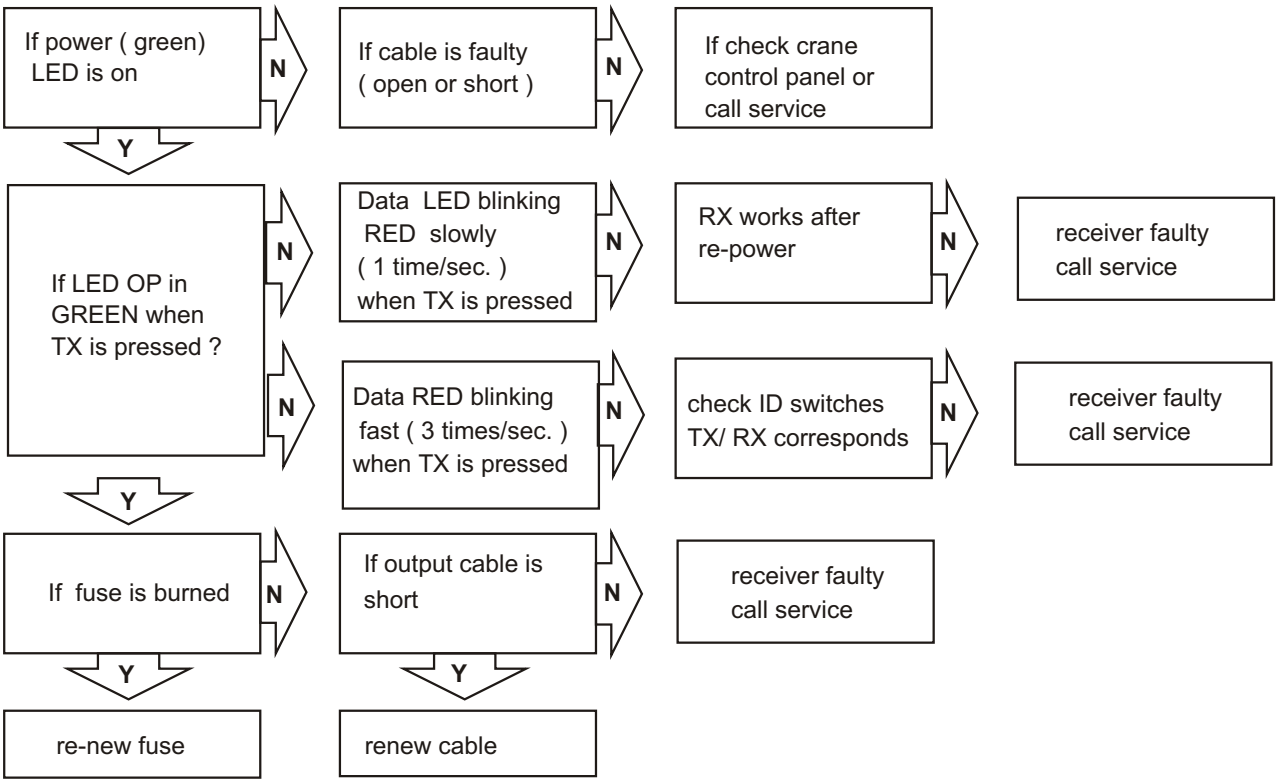
Please make sure the following status before trouble shooting.
(1) The hoist or device is subject to control works
(2) The TX outlook is in good condition without leakage
(3) Receiver works



TX*: transmitter

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



RX*: receiver

7. PARTS LIST

TRANSMITTER	
part number	**description**
MTC	trasmitter casing (incl. RED stop, rubber pushbuttons,battery case)
MED-20	encoder board(Mini 20)
MED- 30	encoder board(Mini 30)
MED-40	protection sleeve
MPS	protection sleeve
MWS	wrist strap

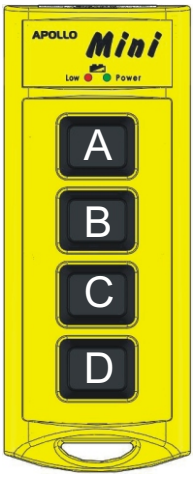
	RECEIVER
part number	**description**
BOX1.2	receiver housing incl. cable gland
MDD-20	decoder board (Mini 20)
MDD-30	decoder board(Mini 30)
MDD-40	decoder board(Mini 40)
RFP	receiver frequency part
CAP08	cable 8c X 0.75mm2 x 1.8 M

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



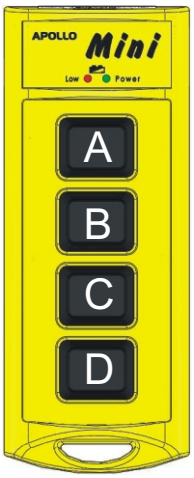
Push button B and pull out the EMS stop button. Then push button B-A-B in sequence. (Please finish this step within 5 seconds.) After done that, you can change the channel successfully.

*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.

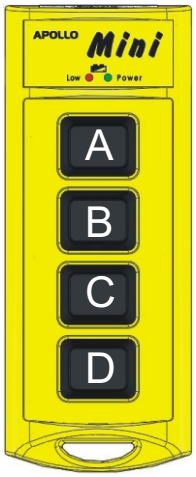
The red and green light flash slowly.

.

2.Host transmitter :

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

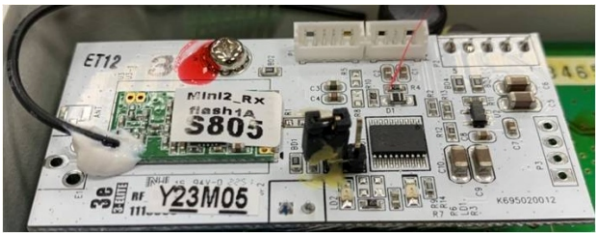
Deputy transmitter

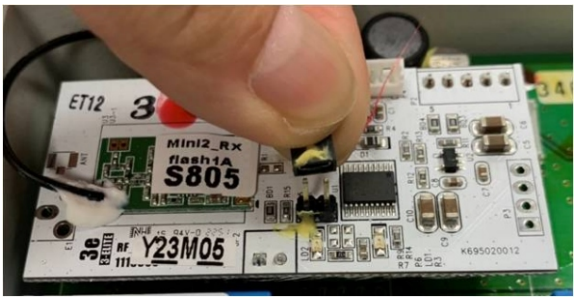


3. This process must complete within 5 seconds.

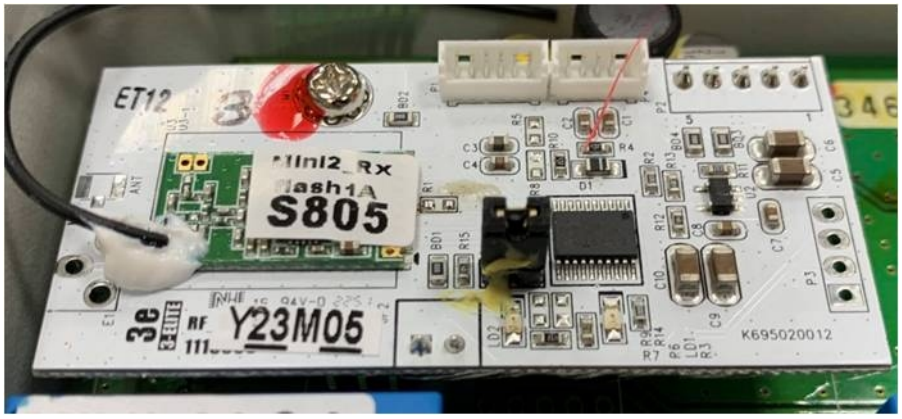
When the lights of deputy transmitter are off, the transmitter are copied.

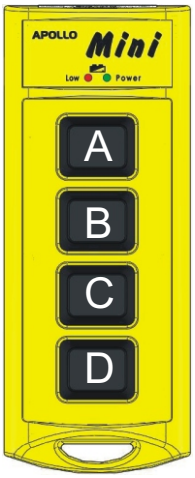
Matching transmitter and receiver





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

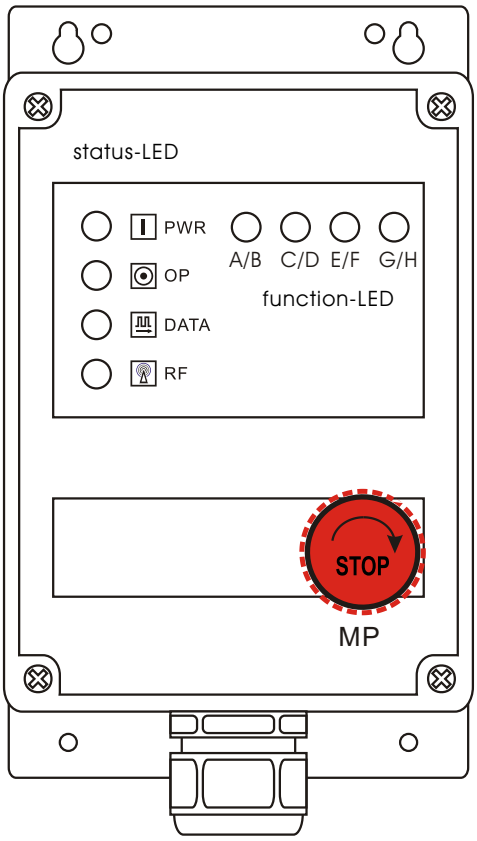
APOLLO Mini

Standard Wiring Diagram

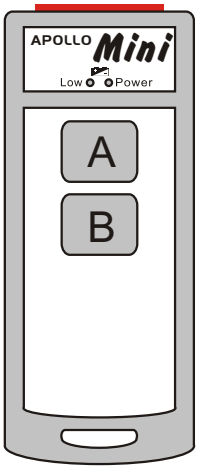
- ☐ APOLLO mini 20
- ☐ APOLLO mini 30
- ☐ APOLLO mini 40

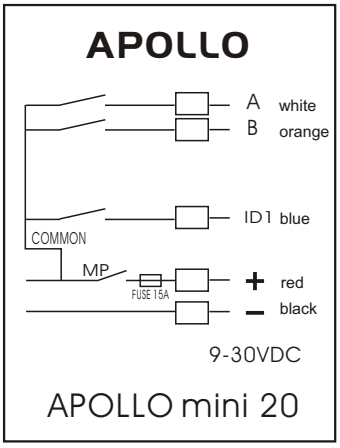
APOLLO mini 20 Installation Wiring Diagram

receiver

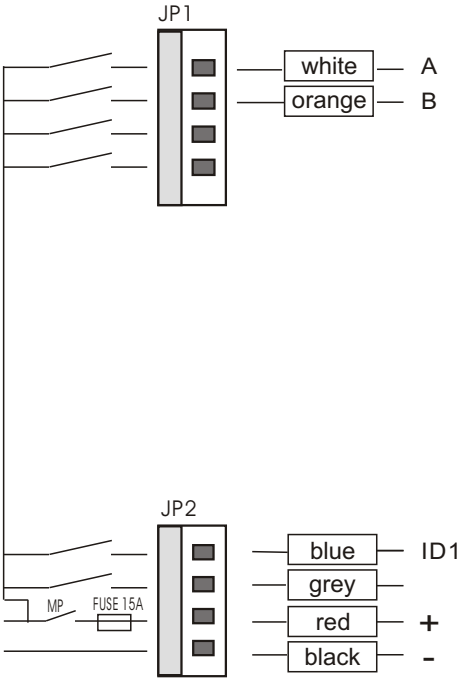


transmitter





Internal wiring



Features:

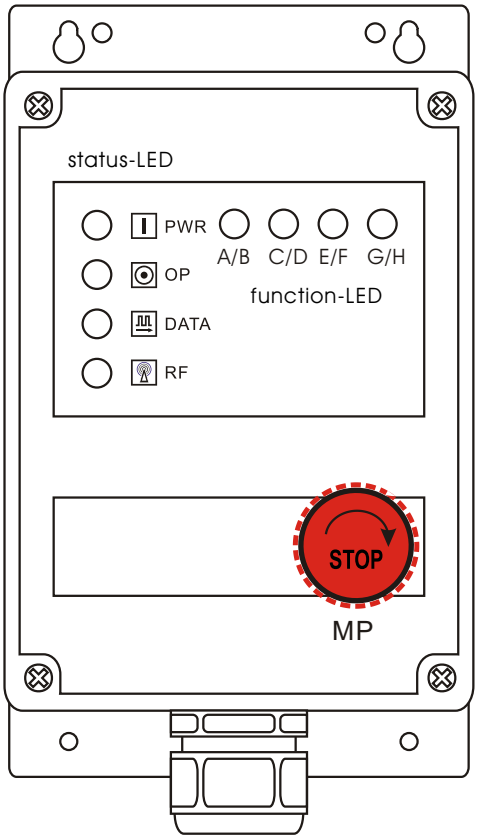
1. ID1 main relay is set for oil pump to be linked with each movement.

2. Furnished with control cable 2M long.

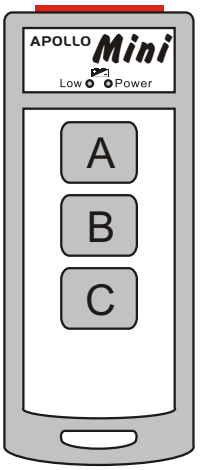
3. Each set of motion (ex.K1/K2) is set with interlock ex-work.

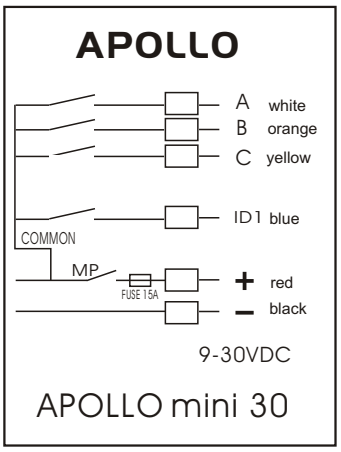
APOLLO mini 30 Installation Wiring Diagram

receiver

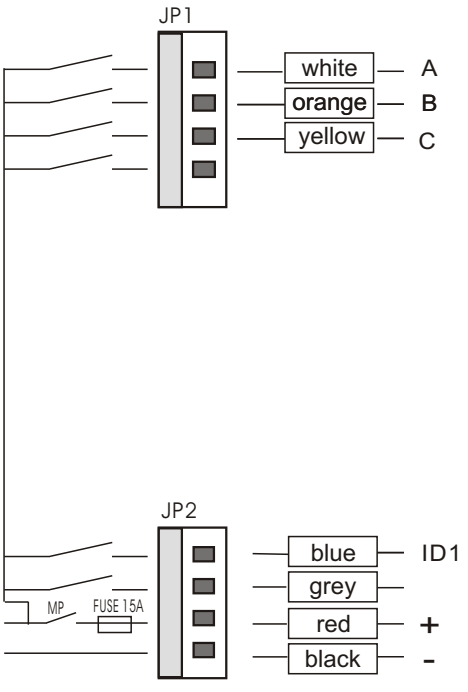


transmitter





Internal wiring

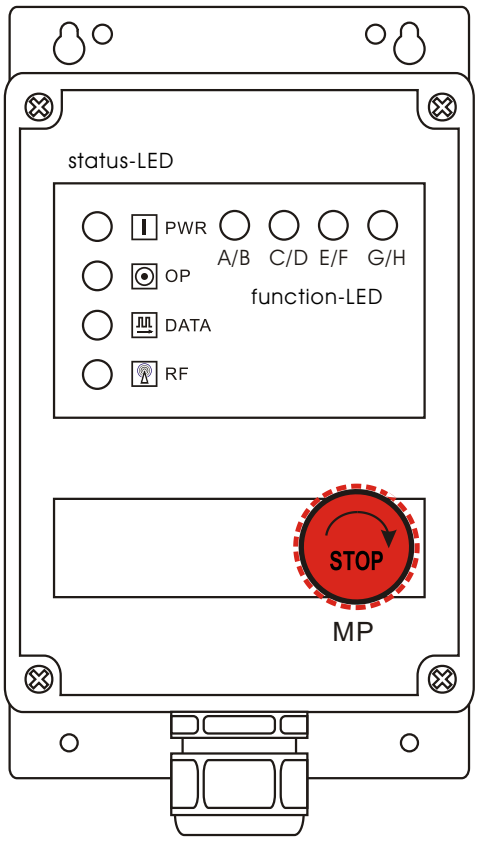


Features:

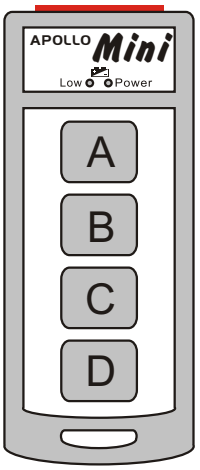
1. ID1 main relay is set for oil pump to be linked with each movement.
2. Furnished with control cable 2M long.
3. Wrecker button legend is available on demand.
4. Each set of motion (ex.K1/K2) is set with interlock ex-work.

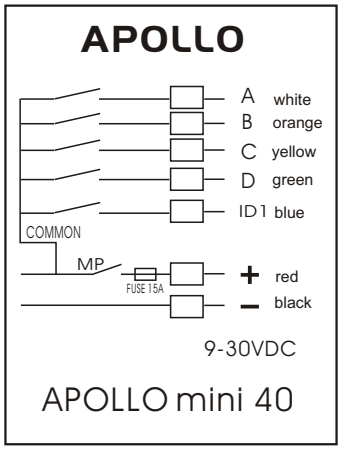
APOLLO mini 40 Installation Wiring Diagram

receiver

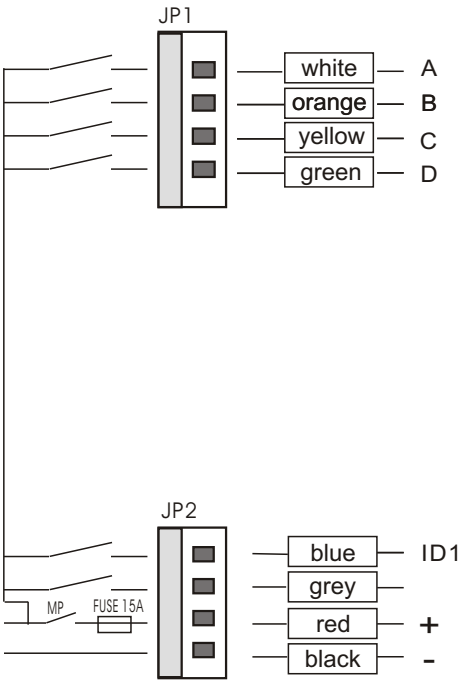


transmitter





Internal wiring



Features:

1. ID1 main relay is set for oil pump to be linked with each movement.
2. Furnished with control cable 2M long.
3. Wrecker button legend is available on demand.
4. Each set of motion (ex.K1/K2) is set with interlock ex-work.

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