

CUPID RADIO REMOTE CONTROL

HANDBOOK



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

April 2006

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Note: The device complies with part 15 of FCC Rules. Operation is subject to the following two conditions:
 (1)This device may not cause harmful interference , and
 (2)This device must not accept any interference received, including interference that may cause undesired operation.
 The FCC require the user to be notified that any changes or modifications made to this device thatare not expressly approved by 3e may avoid the user's authority to operate the equipment.

To comply with FCC RF exposure requirement, this device and its antenna must no be co-located or operating in conjunction with any other antenna or transmitter.

1. INTRODUCTION

1.1 FEATURES:

1. Advance CPU with quick response, good performance on movements.
2. Transmitter in PA housing material with water/shock/dust-proof.
3. Single-row transmitter hand set ,ergonomics design, easy use without fatigue after long operation.
4. Simple and convenient installation on receiver.
5. Receiver with 4-LED, quick, simple judgement for operation status & after services.

2. MODELS

CUPID Q100	1 step, (6) buttons + (1) AUX button (normal)
CUPID Q100S	1 step, (6) buttons + (1) AUX button (toggle/latch)
CUPID Q100AB	1 step, (6) buttons + (1) button for A, B , A+B hoist
CUPID Q211	(2) 2 step-button + (4) 1 step- button + (1) AUX button (normal)
CUPID Q112	(4) 1 step- button + (2) 2 step-button + (1) AUX button (normal)
CUPID Q200	2 steps, (6) 2 step-button + (1) AUX button (normal)
CUPID Q200S	2 steps, (6) 2 step-button + (1) AUX button (toggle/latch)
CUPID Q200AB	2 steps, (6) 2 step-button + (1) button for A, B , A+B hoist

※ All models are equipped with EMS stop and power on key

3. TRANSMITTER

3.1 TECHNICAL DATA:

Operation distance: 100M

Frequency **433MHz (16CH)**

Output power :< 10mW

Antenna: interference 50Ω

Temperature:-20°C~+75°C

(no battery inside)

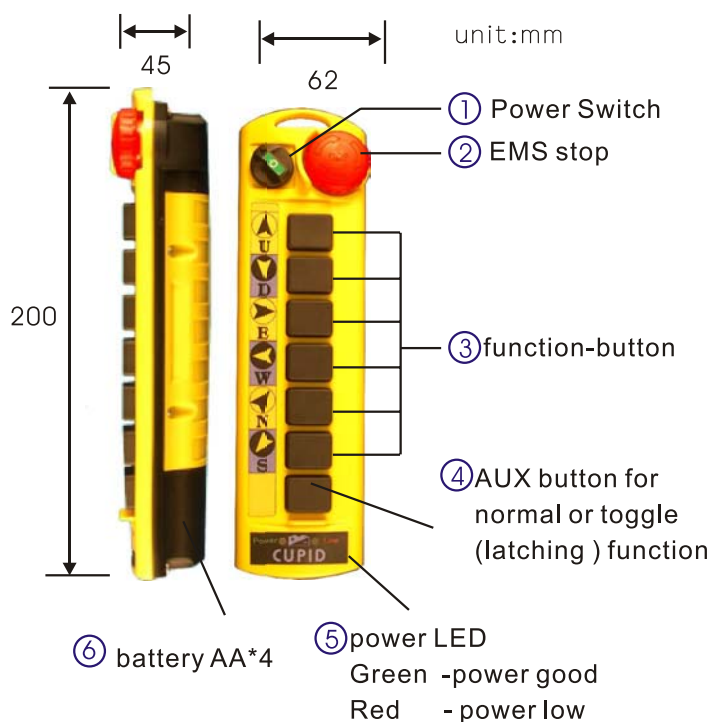
Power supply:1.5V(AA)*4pcs

Enclosure:IP64

Consumption: <17mA (stand-by : <20mA)

Address code :4.2 billion

Weight : 235 g (excluding batteries)



3.2 INDICATOR:

stand-by (power on)	no light (EMS on)
operation	GREEN light blinking
power low	RED light blinking
power off	no light (EMS off)

3.3 POWER-ON STEPS:

- (1) Power on receiver.
- (2) Switch on transmitter power, and turn on mushroom.
- (3) Press any button and release , now CUPID is ready to operate (receiver power LED green lighting)

3.4 POWER-OFF STEPS :

- (1) Push down the mushroom .
- (2) Switch off transmitter power to cut off the power.



CAUTION:

The CUPID transmitter has automatic checking function, if pushbutton stuck incurred when turning EMS stop, the power LED is in RED blinking fastly, the situation won't be eased until the button malfunction is released or EMS stop is pushed down.

4. RECEIVER

4.1 TECHNICAL DATA:

Sensitivity of RF:-110dBm

Frequency : **433MHz (16CH)**

Antenna : internal type,
impedance as 50Ω

Operation Temperature :
-10°C~+75°C

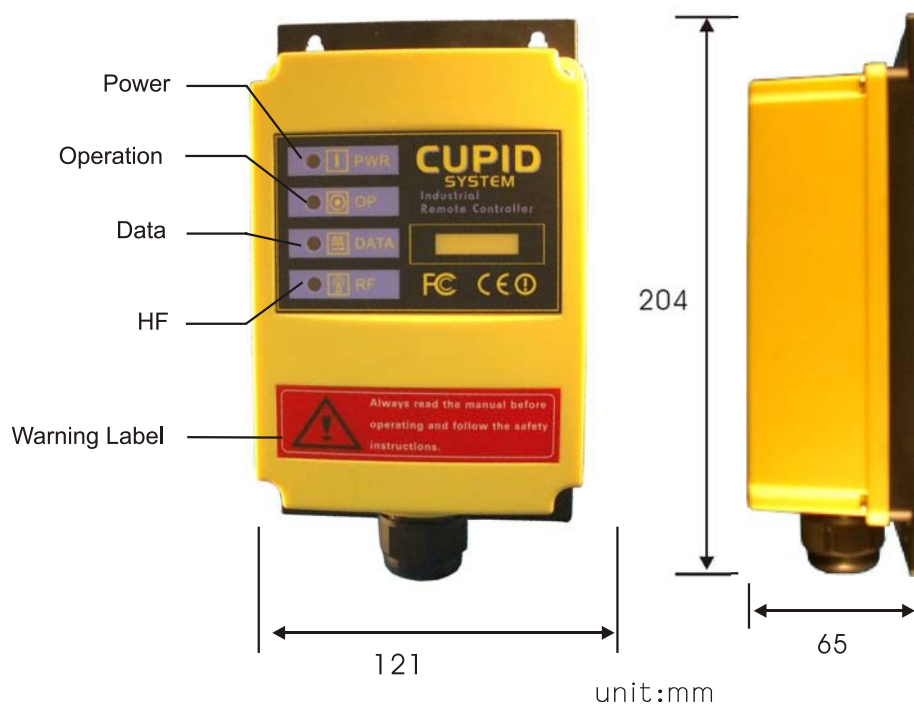
Source Voltage:
48V/110V/220V
380V AC, 50/60Hz

Enclosure:IP65

Consumption:<12W

Security Code:4.2 billion

Weight:700 g (excluding cable)



4.2 INDICATOR:

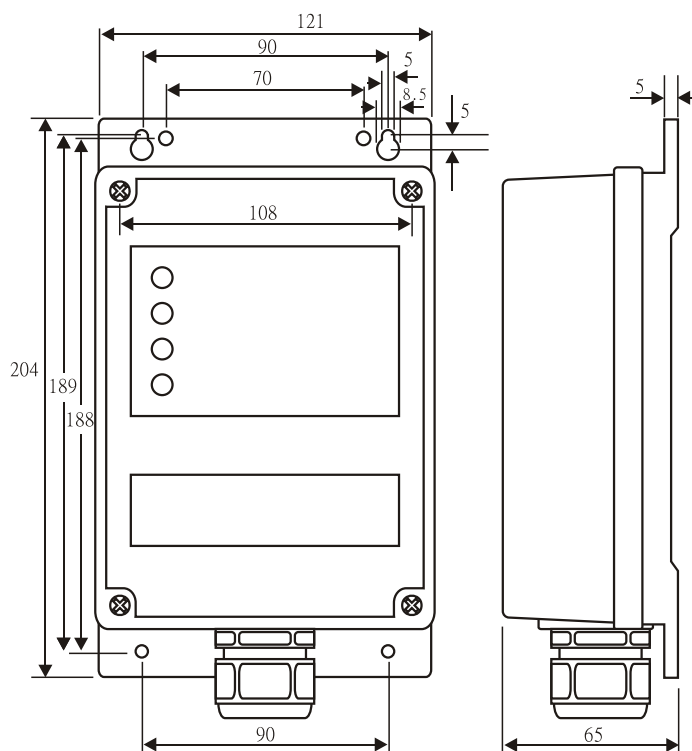
Illustration	description
	Power LED Green when power on
	Operation LED GREEN when start-up. Light OFF when EMS stop pressed or power off
	Data LED RED when TX is pressed (in operation). OFF when button released RED LED blinking slowly when data not corresponded on TX & RX RED LED blinking fast when ID codes incorrect.
	Frequency LED RED when TX pressed (in operation) Light OFF when button released. RED LED blinking irregularly when interference incurred

4.3 INSTALLATION NOTES:

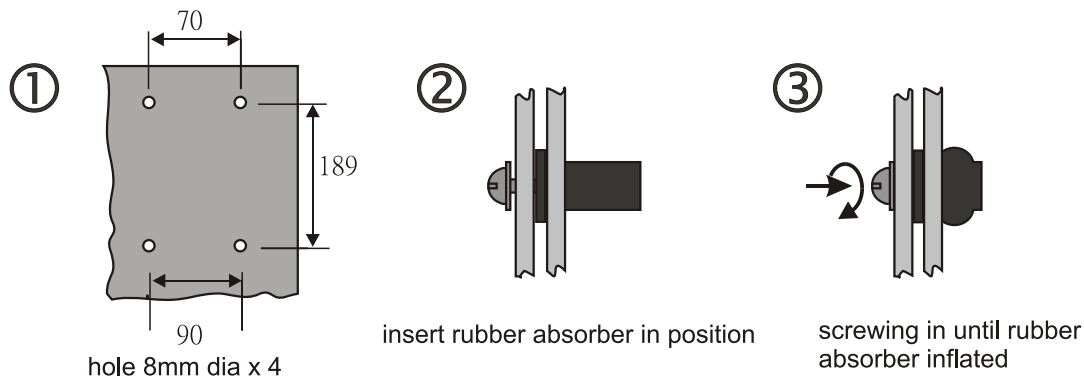


- (1) Ensure the original wired control of crane works.
- (2) Shut down crane main power source before installation.
- (3) Mount in a firmed site where the receiver can be seen easily by operator.
- (4) Keep away the mounted site from motors relays, cables, high voltage wiring and devices, or the protrusion of building where crane moves.
Select a firmed site without metal shield.
- (5) Do not install the other same channel remote controller within 50M
- (6) Ensure the wiring layout correctly and safely
- (7) Test each function to be sure each output has the same function as wired control
- (8) Put the wired pendant in safe position

Dimension of receiver (Box 1.1)



4.4 RECEIVER INSTALLATION ILLUSTRATION :



5. USER REMINDER

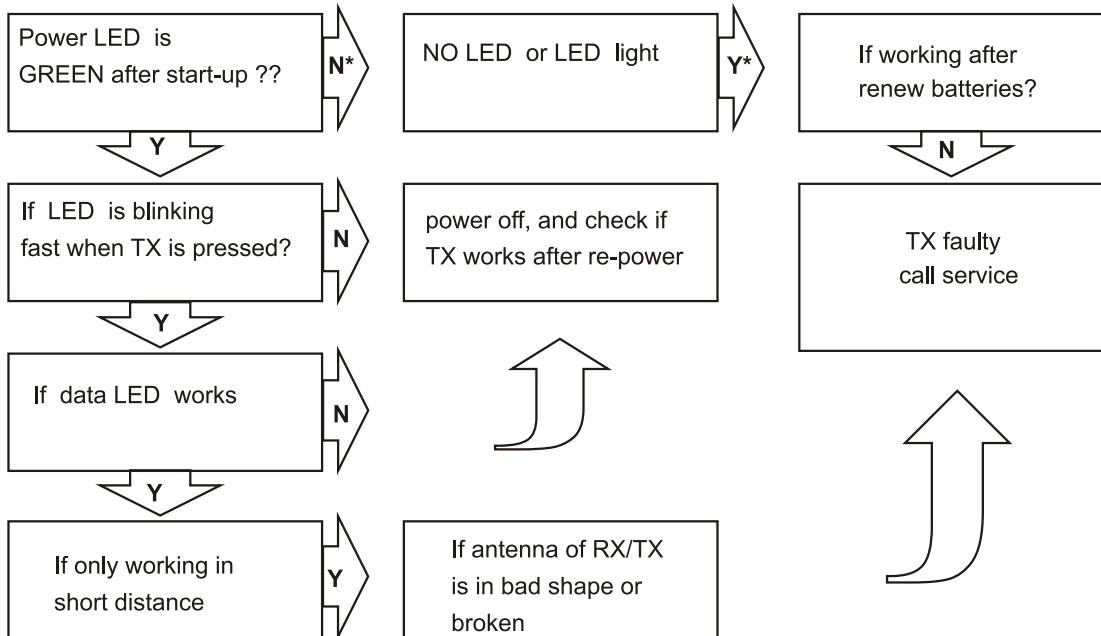
1. Please be aware that only operator with well trained in order to use the unit to avoid any damage or dangerous incurred by un-proper operation.
2. Even you have known well the radio remote control, we may insist you to read the manual carefully before operation.
3. Please do regular check for remote control with long life.
4. Please ensure that battery is sufficient before use, or please renew . Please take the batteries out if no operation for long time.
5. Please don't try to change or exchange the spares without authorization, please call your distributor or authorized engineer if a repair service is requested

If an interference or sunder incurred, please stop operation and contact with your distributor IMMD.

7. TROUBLE SHOOTING- TX

Please make sure the following status before trouble shooting.

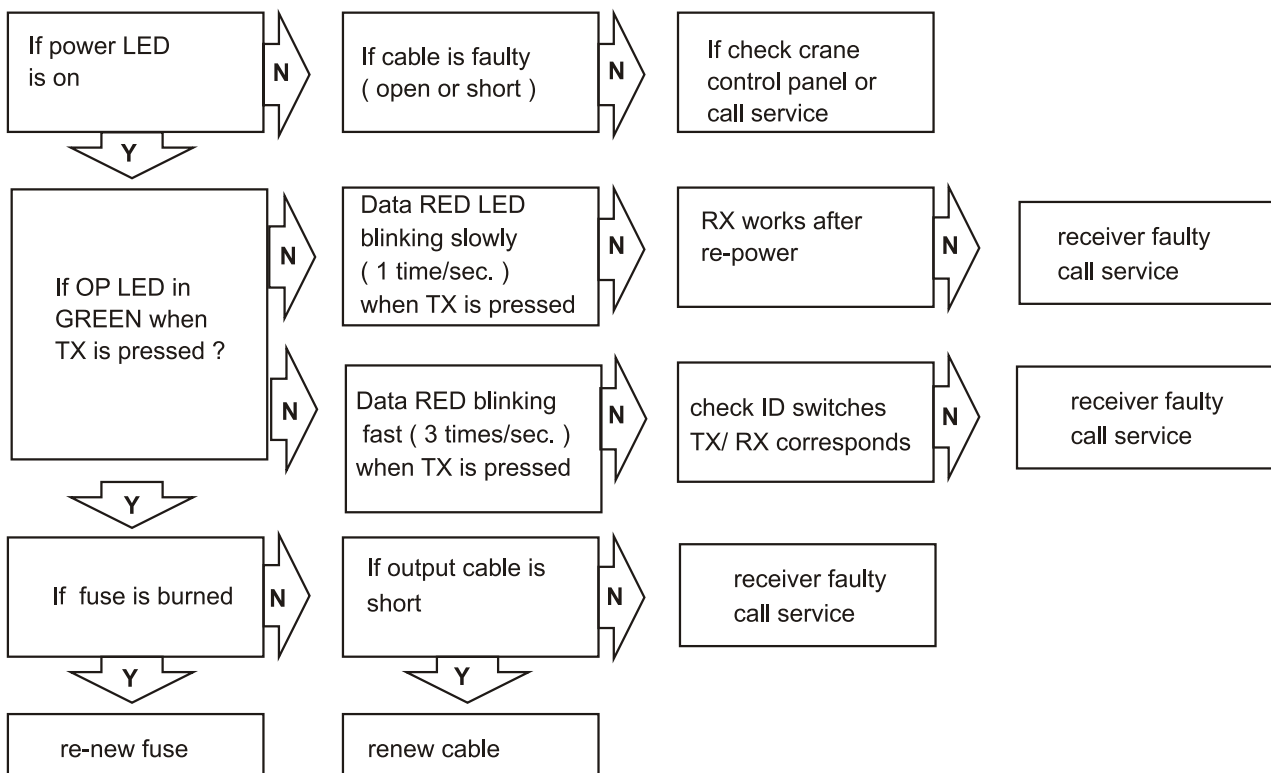
- (1) The hoist or device is subject to control works
- (2) The TX outlook is in good condition without leakage
- (3) Receiver works



7. 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



8. PARTS LIST

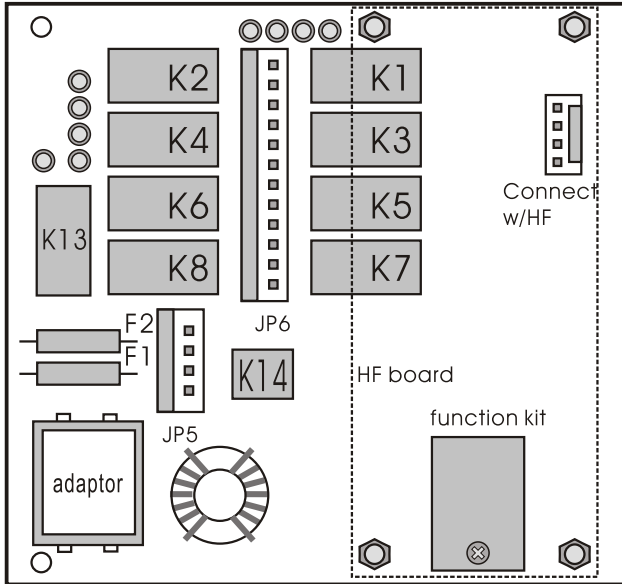
TRANSMITTER	
part number	description
QTC	transmitter casing (incl. power board, battery case, protection sleeve)
QSB	wrist strap
QED-100	encoder board(Q100)
QED-100S	encoder board(Q100S)
QED-100AB	encoder board(Q100AB)
QED-211	encoder board(Q211)
QED-112	encoder board(Q112)
QED-200	encoder board(Q200)
QED-200S	encoder board(Q200S)
QED-200AB	encoder board(Q200AB)
TFP-433	433MHz HF board
TFP-868	868MHz HF board
QPC	protection sleeve
	OPTIONAL
QBC	charger 110(220)V
QBC-1	rechargeable battery AA*4
CAP**-**	cable**meter
QPC-1	PVC protection sleeve IP67

RECEIVER	
part number	description
QBOX1.1	receiver housing incl. cable gland
QDD-700	decoder board (Q700)
QDD-100	decoder board(Q100)
QDD-100S	decoder board(Q100S)
QDD-100AB	decoder board(Q100AB)
QDD-211	decoder board(Q211)
QDD-112	decoder board(Q112)
QDD-200	decoder board(Q200)
QDD-200S	decoder board(Q200S)
QDD-200AB	decoder board(Q200AB)
RFP-433	433MHz HF board
RFP-868	868MHz HF board
ADP220(380)	transformer AC220(380)V-12V
CAP16	cable 16c x 1.8 M
CAP20	cable 20c x 1.8 M

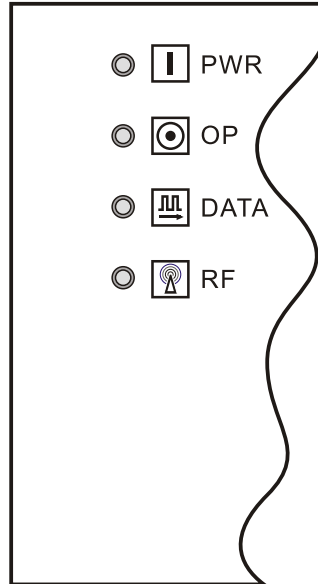
9. WIRING DIAGRAM

CUPID Q100

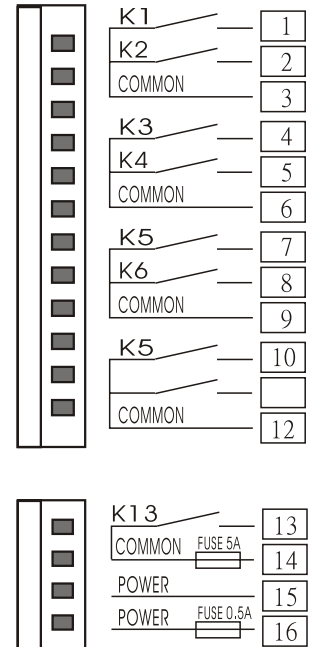
decoder & relay board (front side)



indicator panel



wires location

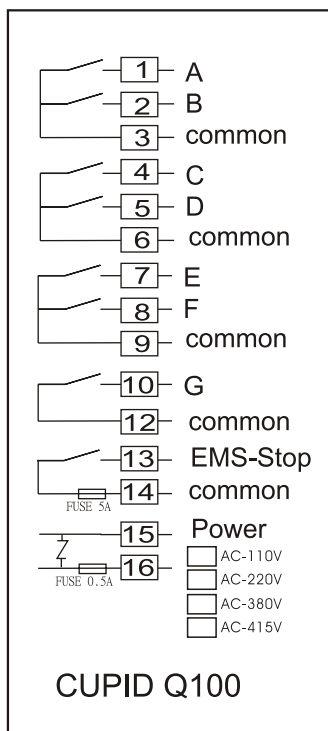


K14	CPU
K13	Main
K1	A
K2	B
K3	C
K4	D
K5	E
K6	F
K7	G

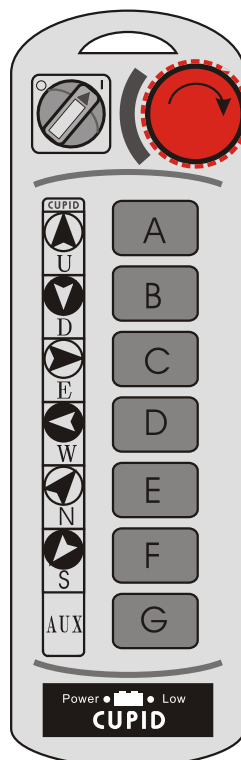
F1	0.5A power fuse
F2	5A main fuse

- ☐ AC-110V
- ☐ AC-220V
- ☐ AC-380V
- ☐ AC-415V

transmitter

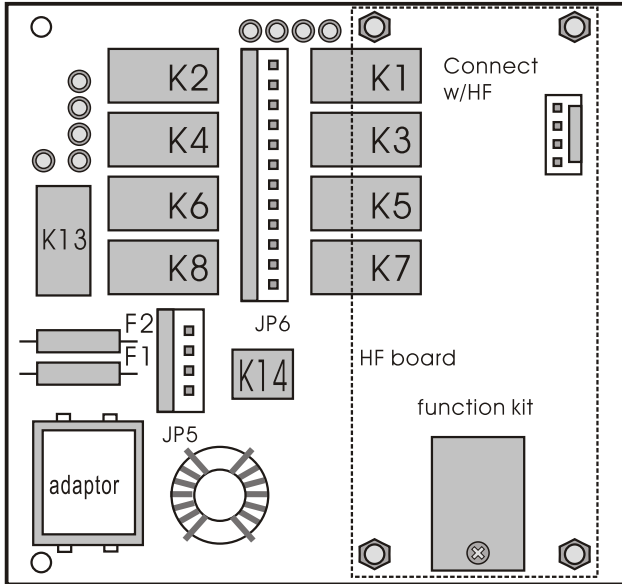


CUPID Q100

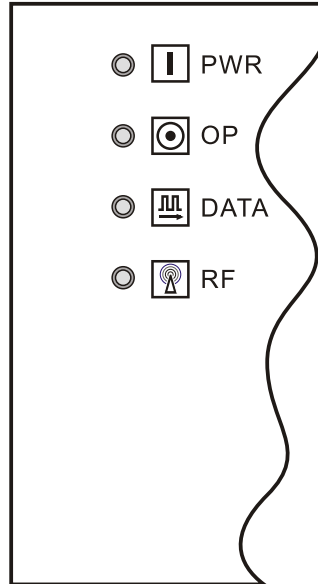


CUPID Q100S

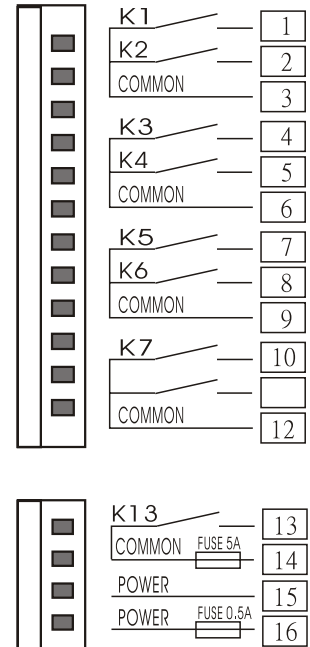
decoder & relay board (front side)



indicator panel



wires location

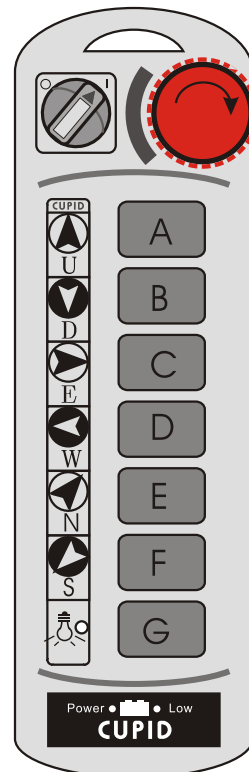
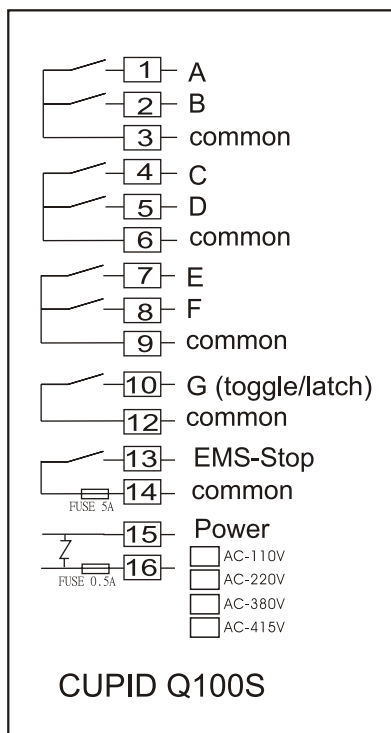


K14	CPU
K13	Main
K1	A
K2	B
K3	C
K4	D
K5	E
K6	F
K7	G

F1	0.5A power fuse
F2	5A main fuse

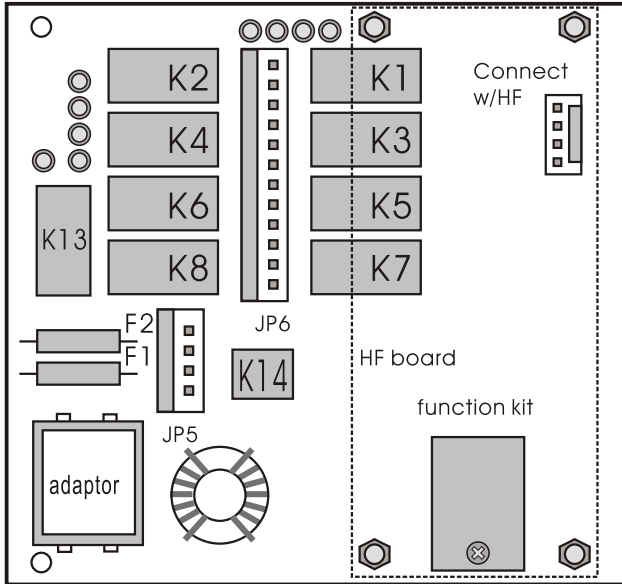
☐	AC-110V
☐	AC-220V
☐	AC-380V
☐	AC-415V

transmitter

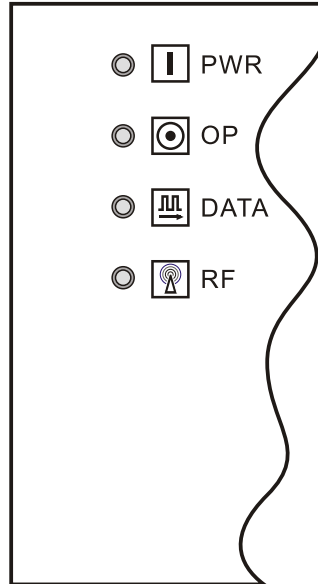


CUPID Q211

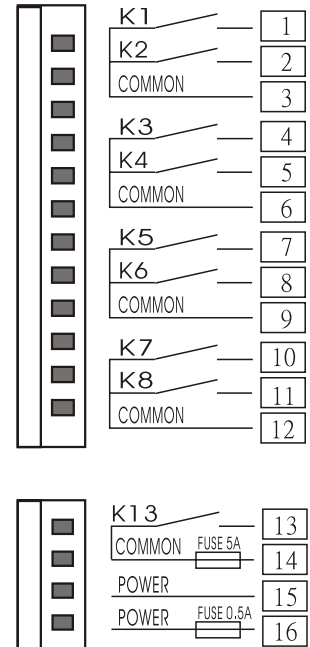
decoder & relay board (front side)



indicator panel



wires location

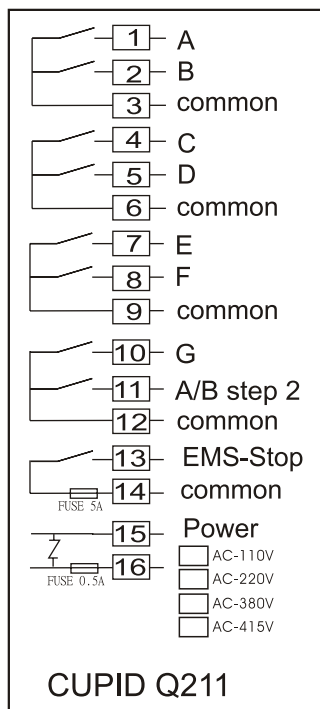


K14	CPU
K13	Main
K1	A
K2	B
K3	C
K4	D
K5	E
K6	F
K7	G
K8	A/B step 2

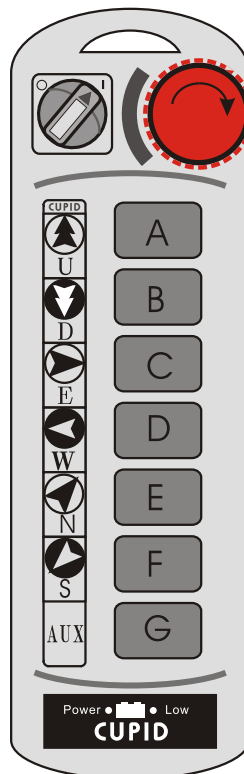
F1	0.5A power fuse
F2	5A main fuse

☐	AC-110V
☐	AC-220V
☐	AC-380V
☐	AC-415V

transmitter

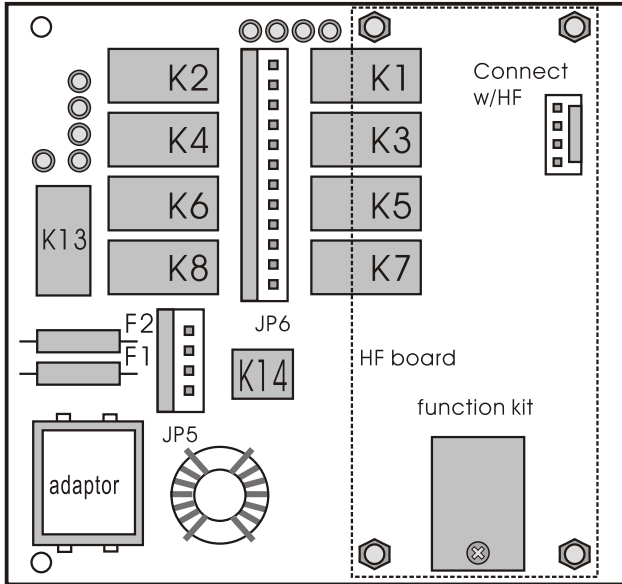


CUPID Q211

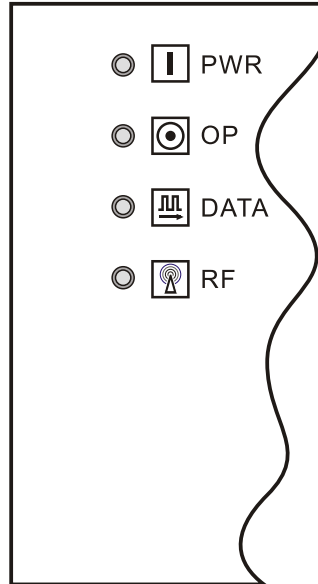


CUPID Q100AB

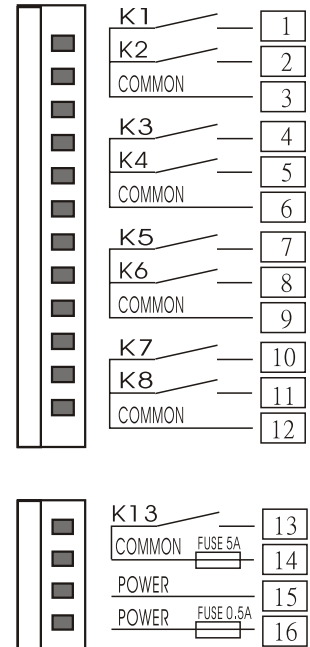
decoder & relay board (front side)



indicator panel



wires location

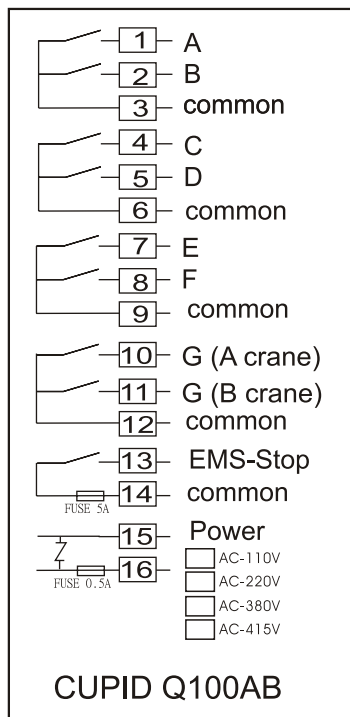
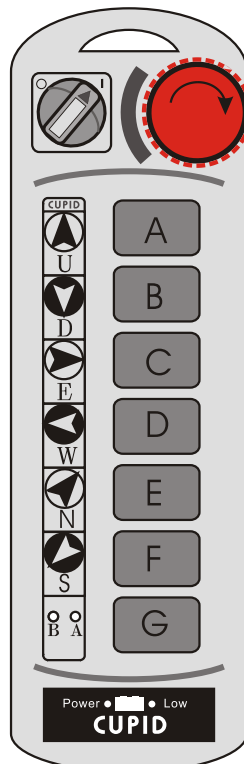


K14	CPU
K13	Main
K1	A
K2	B
K3	C
K4	D
K5	E
K6	F
K7	G
K8	H

F1	0.5A power fuse
F2	5A main fuse

☐	AC-110V
☐	AC-220V
☐	AC-380V
☐	AC-415V

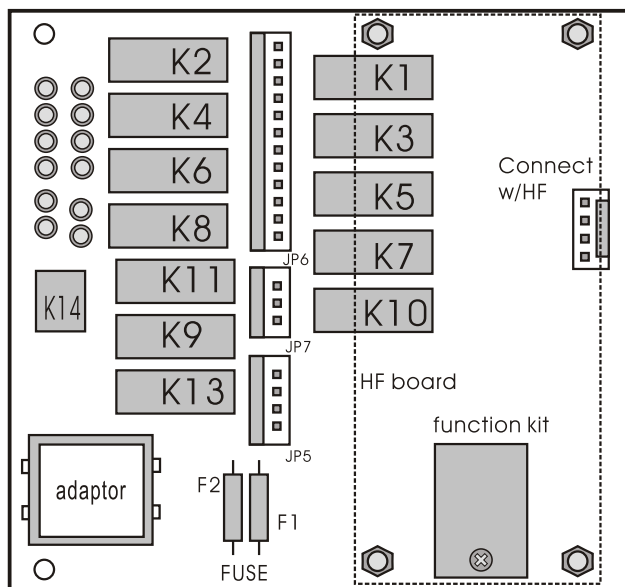
transmitter



CUPID Q100AB

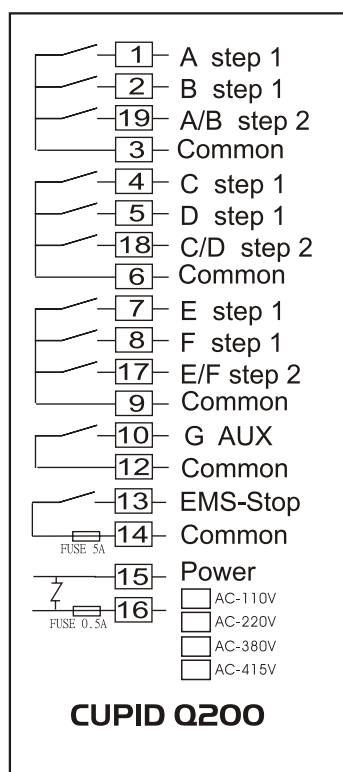
CUPID Q200

decoder & relay board (front side)

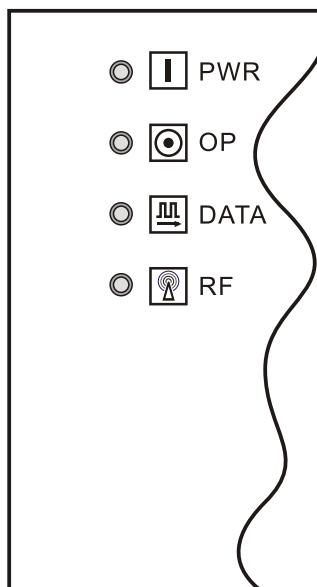


K14	CPU
K13	Main
K1	A
K2	B
K3	C
K4	D
K5	E
K6	F
K7	G
K8	
K9	A/B step 2
K10	C/D step 2
K11	E/F step 2

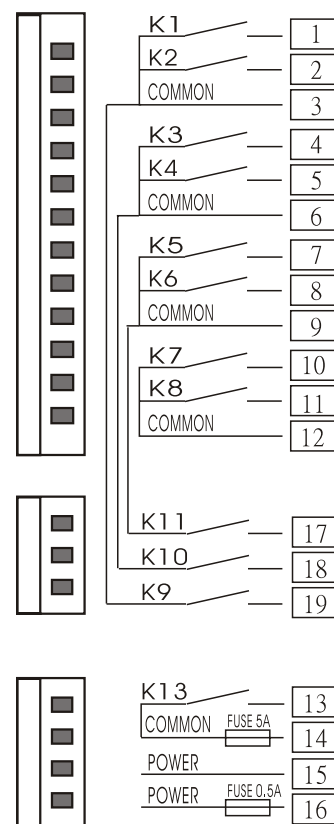
F1	0.5A power fuse
F2	5A main fuse



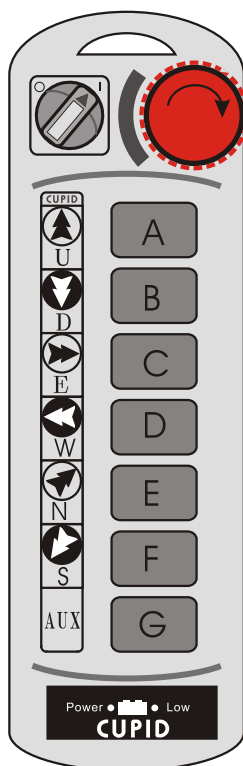
indicator panel



wires location



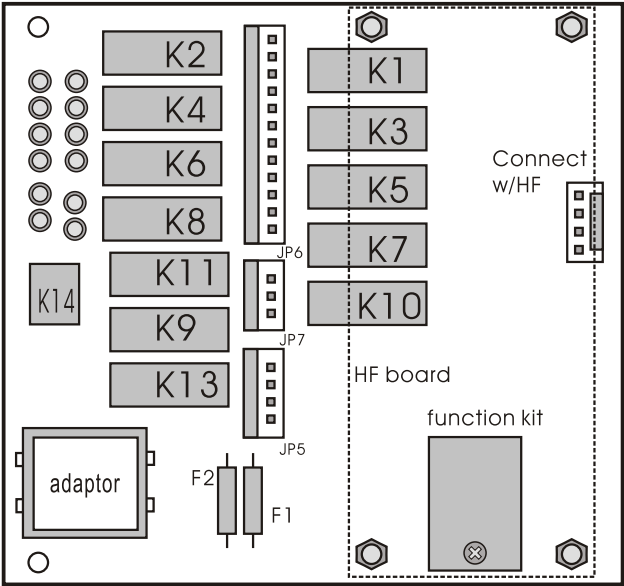
transmitter



- ☐ AC-110V
 - ☐ AC-220V
 - ☐ AC-380V
 - ☐ AC-415V

CUPID Q200S

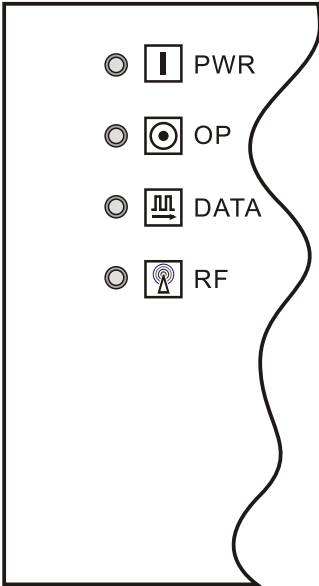
decoder & relay board (front side)



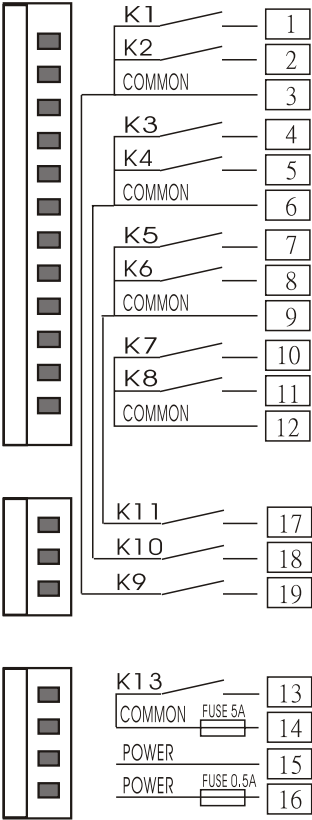
K14	CPU
K13	Main
K1	A
K2	B
K3	C
K4	D
K5	E
K6	F
K7	G
K8	
K9	A/B step 2
K10	C/D step 2
K11	E/F step 2

F1	0.5A power fuse
F2	5A main fuse

indicator panel

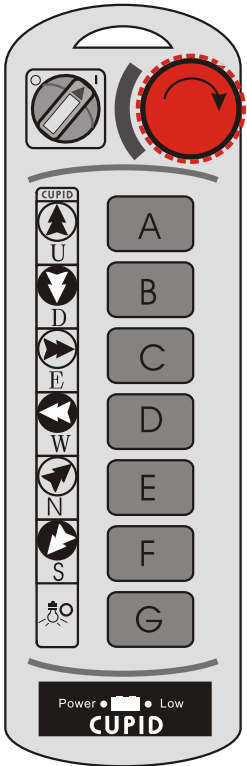
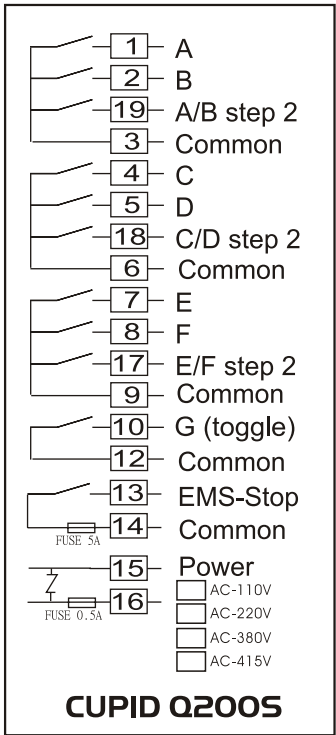


wires location



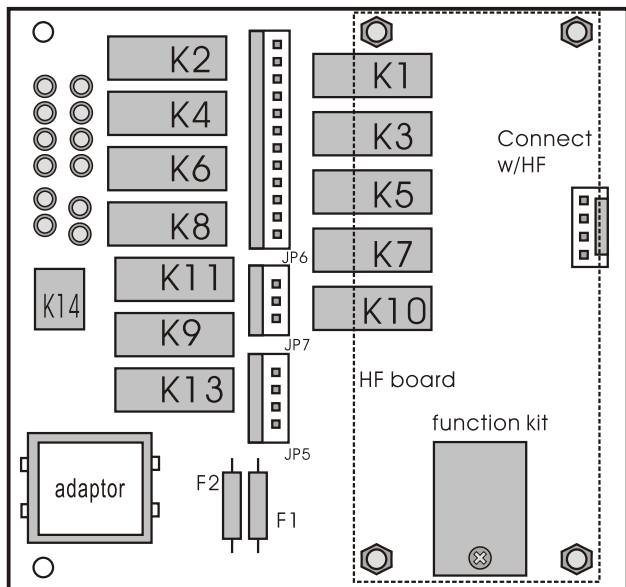
- ☐ AC-110V
- ☐ AC-220V
- ☐ AC-380V
- ☐ AC-415V

transmitter



CUPID Q200AB

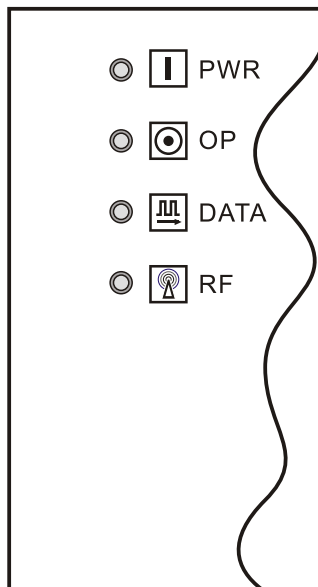
decoder & relay board (front side)



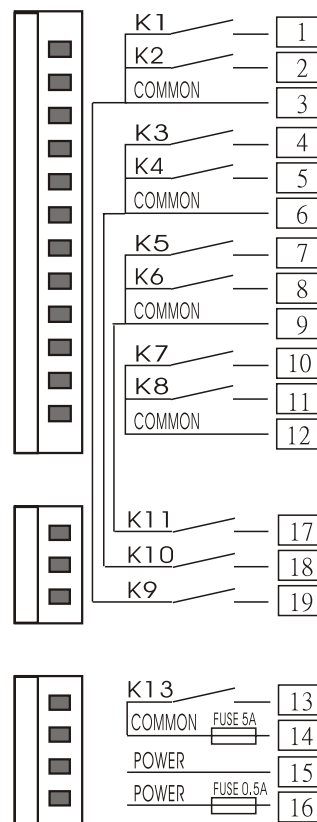
K14	CPU
K13	Main
K1	A
K2	B
K3	C
K4	D
K5	E
K6	F
K7	G
K8	
K9	A/B step 2
K10	C/D step 2
K11	E/F step 2

F1	0.5A power fuse
F2	5A main fuse

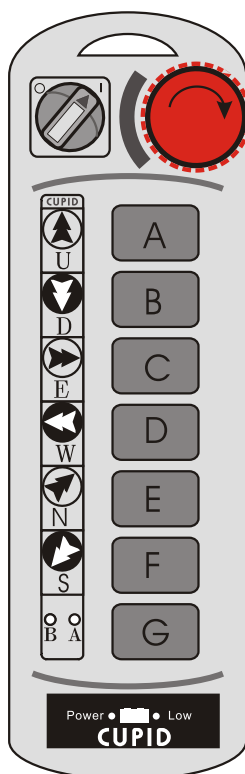
indicator panel



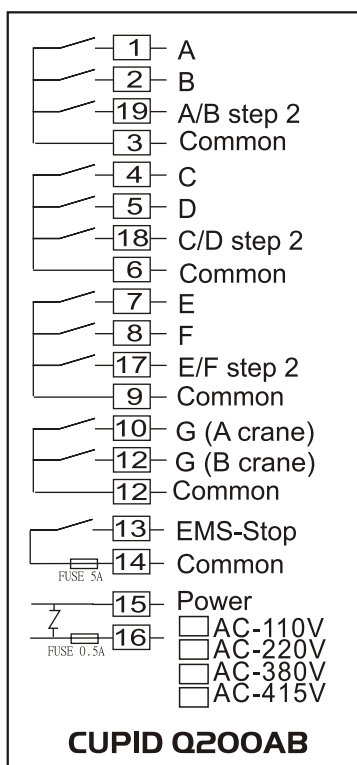
wires location



transmitter



- ☐ AC-110V
- ☐ AC-220V
- ☐ AC-380V
- ☐ AC-415V



CUPID Q200AB

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.



STANDARD ACCESSORY

☐ transmitter x 1 ☐ receiver x 1 ☐ handbook x 1

☐ screw x 4 ☐ transmitter sleeve x 2