

CUPID RADIO REMOTE CONTROL

HANDBOOK

FCC ID:PCSCUPID06062006



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



Dec. 2012

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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 that are 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 not be co-located or operating in conjunction with any other antenna or transmitter.

CUPID

.....

Makes control easier !!

1. INTRODUCTION

1.1 FEATURES:

1. Advance program design, quick & good performance on movements.
2. PA transmitter housing, water/shock/dust proof.
3. Single-low button transmitter, compact and lighter design, ensure safe & convenient operation.
4. Random security code up to 4.2 billions sets, each transmitter has own unique ID code.
5. Receiver with 4-LED indicators, quick, simple judgement for operation status & after services.

2. MODELS

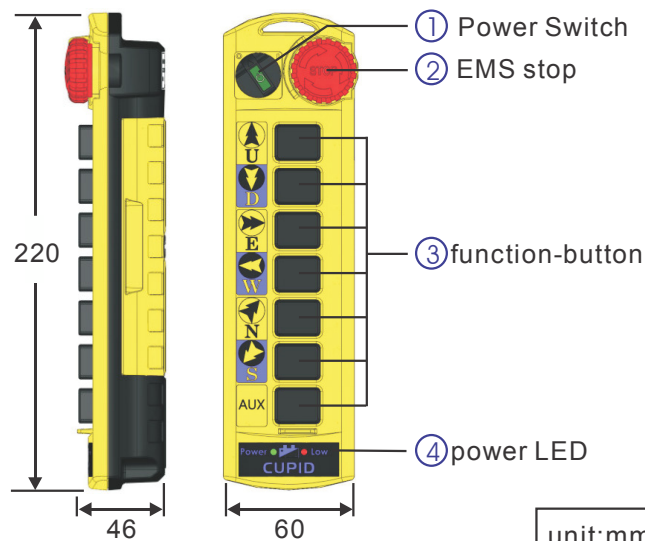
CUPID Q100	1 step, (6) buttons + (1) AUX button (momentary)
CUPID Q100S	1 step, (6) buttons + (1) light button (toggle/latch)
CUPID Q100AB	1 step, (6) buttons + (1) button for A, B , A+B hoist
CUPID Q211	(2) 2 step-button + (4) 1 step- button + (1) AUX button (momentary)
CUPID Q112	(4) 1 step- button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

3. TRANSMITTER

3.1 TECHNICAL DATA:

Operation distance: 100M
 Frequency : FM 418Mhz (20CH)
 FM 433Mhz (20CH)
 FM 868Mhz (40CH)
 Output power : < 10mW
 Antenna : internal type
 Temperature : -10°C~+75°C
 Power supply : 1.5V(AA)*4pcs
 Enclosure : IP65
 Housing : ABS+PC
 Consumption : <27mA
 Address code :4.2 billions sets
 Weight : 235 g (excluding batteries)



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
power off	Indicator lights off (EMS OFF)
AUX button- A, B, A+B (only for Q100AB & Q200AB)	press AUX button once, LED A remains -hoist A available press again, LED B remains - hoist B available press again, LED A/B both remains - A/B hoist both available press again, LED A/B off NOTE: when AUX button pressed , if no operation for about 5 sec., then LED will be off automatically, once any button is pressed, the AUX LED will be lighted again automatically

3.3 POWER-ON STEPS:

- (1)Power on receiver.
- (2)Switch the ' power switch ' to ON, and turn on the mushroom.
- (3)Press any button and release, now CUPID is ready to operate (now receiver power LED lights GREEN)

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 turn on mushroom (EMS-stop), the power LED RED is in RED blinking fastly, the situation won't be cleared until the button malfunction is released or mushroom is pushed down.

4. RECEIVER

4.1 TECHNICAL DATA:

HF sensitivity : -116dBm

Frequency :FM 418Mhz (20CH)

FM 433Mhz (20CH)

FM 868Mhz (40CH)

Antenna : internal type

Operation Temperature : -10°C~+75°C

Source Voltage : AC48V / AC110V / AC220V

AC380V / 415V, 50/60Hz

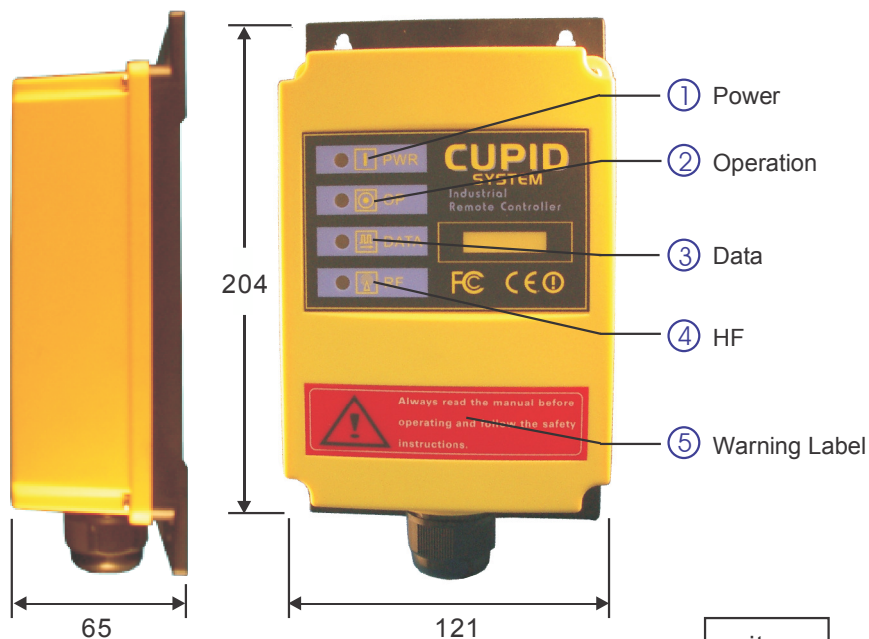
Enclosure:IP67

Housing : ABS+PC

Consumption:<12W

Security Code:4.2 billions sets

Weight:700 g (excluding cable)



unit:mm



Custom-made voltage is available on demand

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> OFF lighting when TX* is pressed (in operation) RED when button release RED light blinks fastly when ID codes incorrect.
	<u>Frequency LIGHT</u> RED lights when TX is pressed (in operation) Light blinks slightly when buttons are released (Without operation)

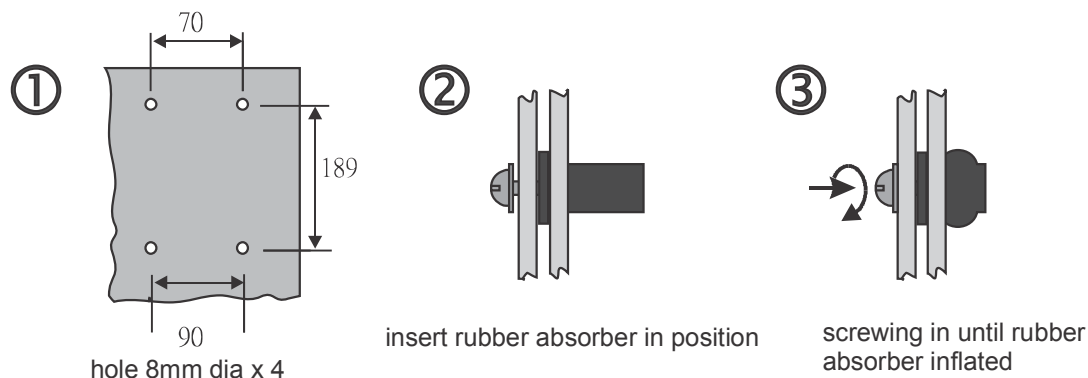
TX*: transmitter

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.

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. DO NOT CHANGE or EXCHANGE THE SPARE PARTS WITHOUT AUTHORIZATION AS THIS VOID THE WARRANTY. Please call your distributor or authorized engineer if a repair service is requested
6. **Under multi transmitters but ONE receiver application , such as 2T1R i.e. 2 more transmitters (handsets) are matched to the ONE receiver , the CUPID system is only allowed ONE transmitter to be operated , the other spare transmitter's MUSHROOM must be OFF (pushed down). If the handset can NOT be off due to damage or out of power, please power off the receiver and re-power again.**

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

6. ID CODE- MATCH & BURN

1. The CUPID is designed to feature each TRANSMITTER has its OWN, UNIQUE ID once is produced ex works, the new encoding technology can provide up to 32 bits, i.e. the CUPID is able to provide up to 4.2 billions different ID(addresses), so each transmitter's ID won't be repeated .

Further, there is NO ID switch in the CUPID transmitter & receiver, and initially the RECEIVER is produced without any ID , until before shipping the RECEIVER will then be recorded an ID from the matched TX ex works

2. ONE CUPID RECEIVER can be matched & recorded maximum up to 15 transmitter SIMULTANEOUSLY. In general each unit ex works is ONE-TO-ONE (1TX + 1RX/unit) or TWO-TO-ONE i.e. two transmitters (one spare transmitter , 2TX + 1RX/unit) and the ID code-match & record all have been done ready ex-works.

2. ONE CUPID receiver can be recorded MAXIMUM up to 15 transmitters simultaneously . In general, each unit is matched one by one i.e. 1 transmitter + 1 receiver (1T1R /unit) or 2 transmitters with 1 receiver (2T1R/unit , extra TX as spare), the ID code- matching (record) all will be done ex-works.

3. Two options available for purchasing SPARE transmitters when original TX missing or damaged or require a spare TX .

(Opt ion 1). May require **indicated channel & ID code** :

Please purchase it from the authorized agent/dealer, the channel/ ID information, please refer the receiver ID label.

(Opt ion 2). May require only the **indicated channel**:

It is also available to purchase indicated channels only, and follow exactly the match & record steps/ demonstration instruction guide to have the spare transmitter ' matched & recorded ' to the indicated receiver. Please contact your authroized agent or manufacturer for the ' match& record demonstration steps if necessary.



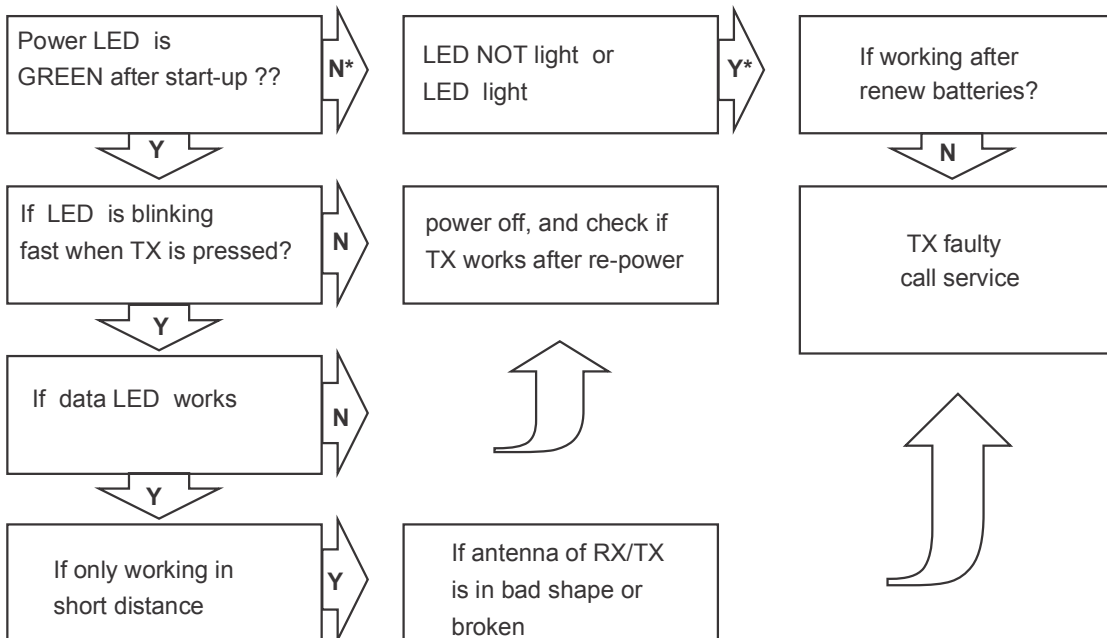
CAUTION:

Under multi transmitters but ONE receiver application , such as 2T1R i.e. 2 more transmitters (handsets) are matched to the ONE receiver , the CUPID system is only allowed ONE transmitter to be operated , the other spare transmitter's MUSHROOM must be OFF (pushed down) . If the handset can NOT be off due to damage or out of power, please power off the receiver and re-power again.

7. TROUBLE SHOOTING- TX

Please make sure the following status before trouble shooting.

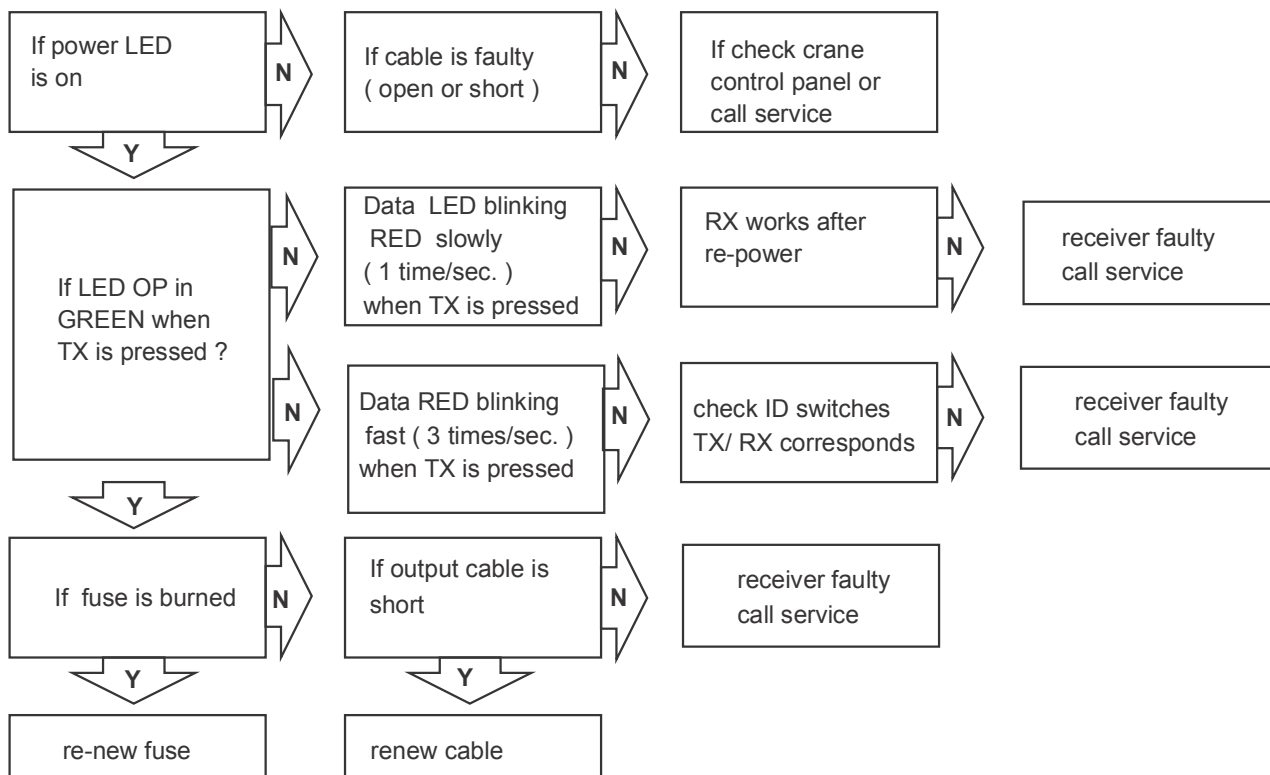
- (1) The hoist or device is subject to control works
- (2) The TX outlook is in good condition without leakage
- (3) Receiver works



8. 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



9. PARTS LIST

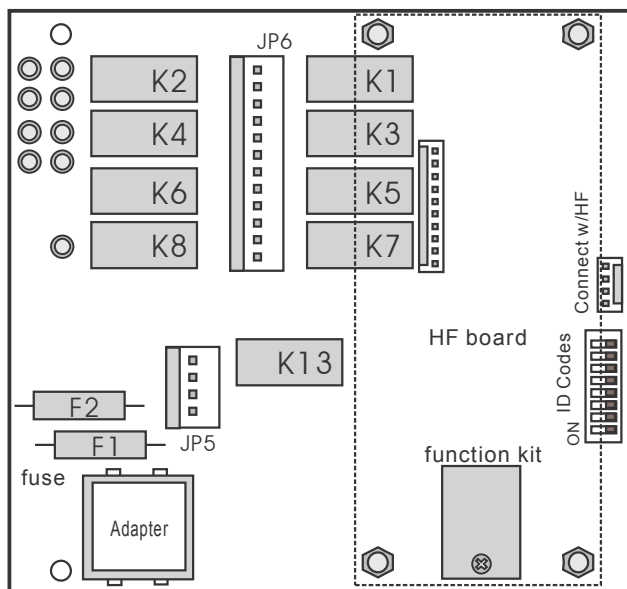
TRANSMITTER	
part number	description
QTC	transmitter casing (incl.power switch board,rubber pushbuttons, battery case)
QSB	wrist strap
QEDR-100	encoder board(Q100)
QEDR-100S	encoder board(Q100S)
QEDR-100AB	encoder board(Q100AB)
QEDR-211	encoder board(Q211)
QEDR-112	encoder board(Q112)
QEDR-200	encoder board(Q200)
QEDR-200S	encoder board(Q200S)
QEDR-200AB	encoder board(Q200AB)
TFP-433	433MHz HF board
TFP-868	868MHz HF board
	OPTIONAL
BP2	40mm rubber absorber
P01	Transmitter protection sleeve x 10
P02	Ip65 waterproof protective cover of the transmitter

RECEIVER	
part number	description
BOX1.1-C	receiver housing incl. cable gland
DD8-Q100	decoder board(Q100)
DD8-Q100S	decoder board(Q100S)
DD8-Q100AB	decoder board(Q100AB)
DD8-Q211	decoder board(Q211)
DD8-Q112	decoder board(Q112)
DD8-Q200	decoder board(Q200)
DD8-Q200S	decoder board(Q200S)
DD8-Q200AB	decoder board(Q200AB)
RFP-418	418MHz HF board
RFP-433	433MHz HF board
RFP-868	868MHz HF board
ADP-(110/220/380/415)	transformer AC110/220/380/415V
CAP16	cable 16c x 1.8 M x 0.75mm ²
CAP20	cable 20c x 1.8 M x 0.75mm ²

10. WIRING DIAGRAM

CUPID Q100

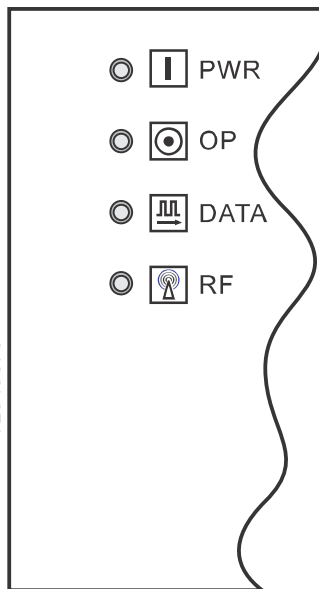
decoder & relay board (front side)



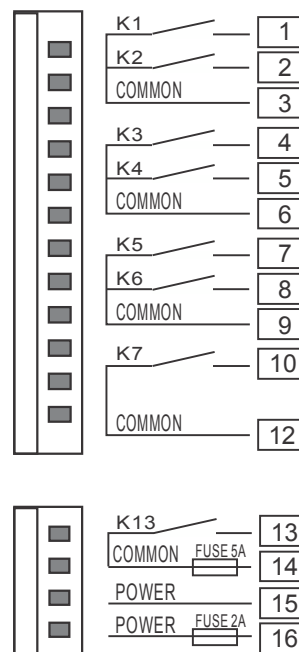
K13	Main
K1	A
K2	B
K3	C
K4	D
K5	E
K6	F
K7	G

F1	2A Power fuse
F2	5A Main fuse

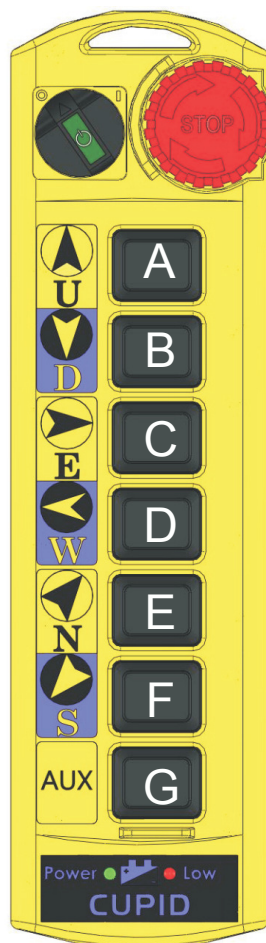
indicator panel



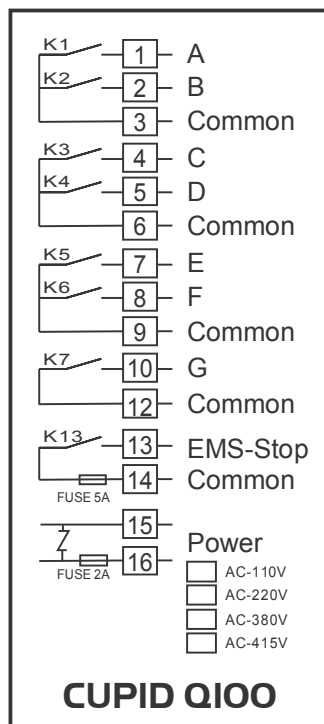
wires location



Transmitter



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

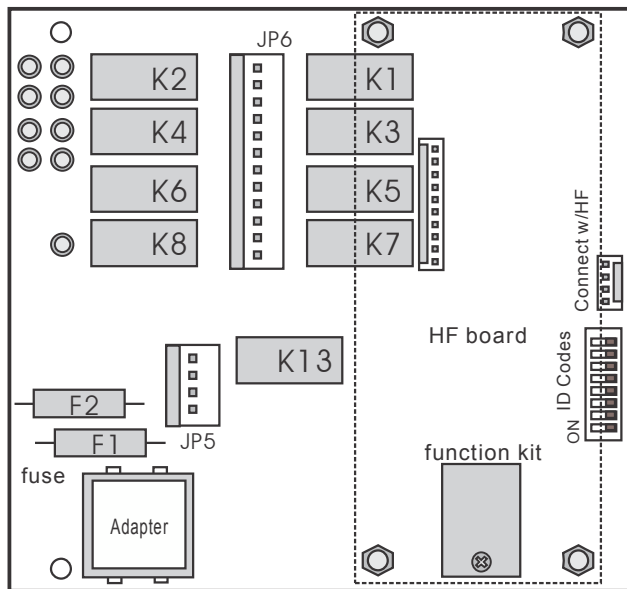


CUPID Q100



CUPID Q100S

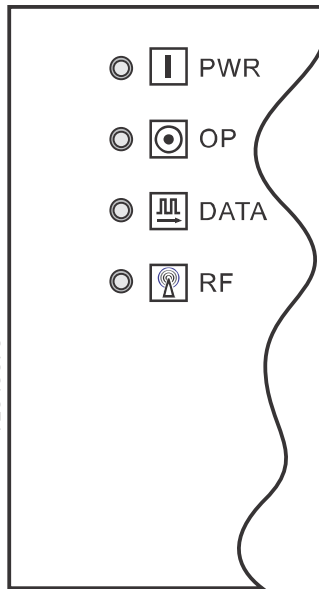
decoder & relay board (front side)



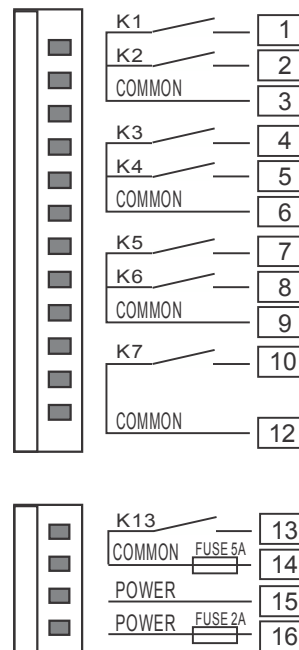
K13	Main
K1	A
K2	B
K3	C
K4	D
K5	E
K6	F
K7	G

F1	2A Power fuse
F2	5A Main fuse

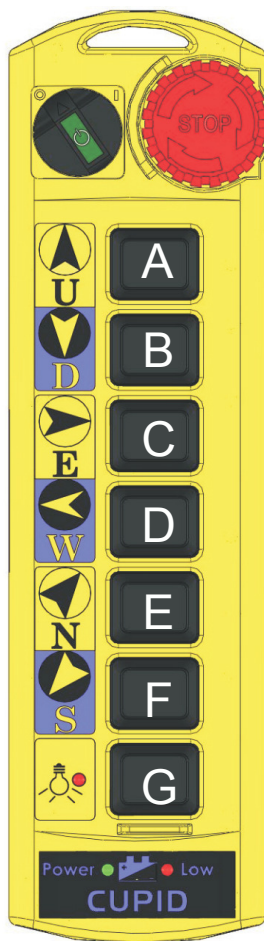
indicator panel



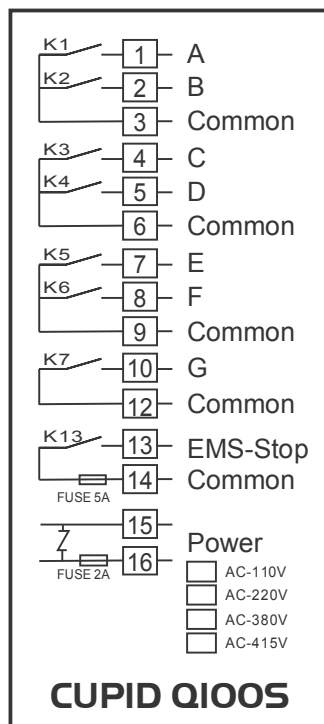
wires location



Transmitter



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

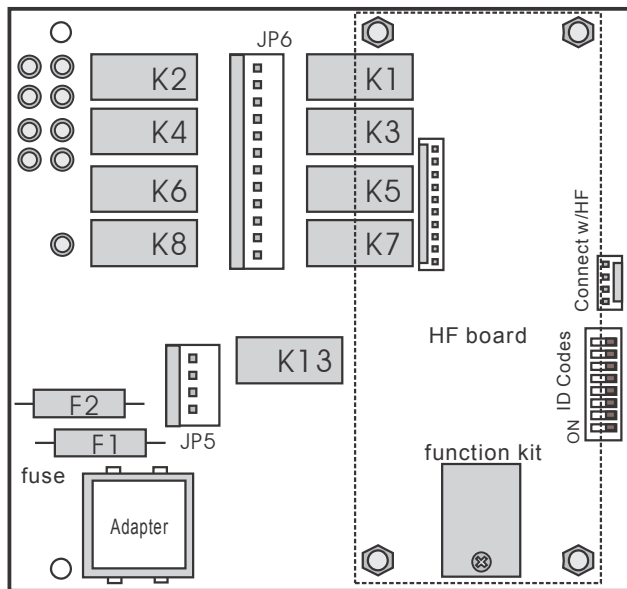


CUPID Q100S



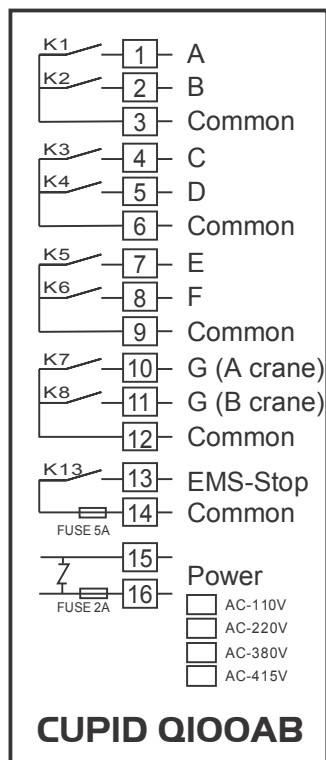
CUPID Q100AB

decoder & relay board (front side)

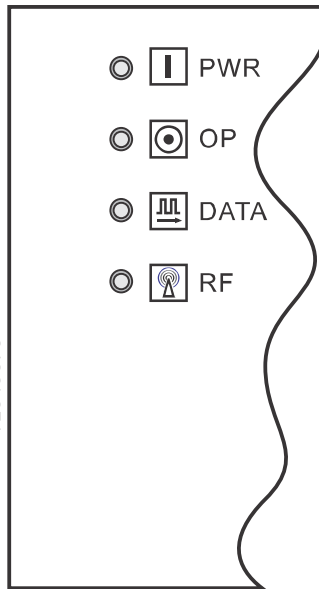


K13	Main
K1	A
K2	B
K3	C
K4	D
K5	E
K6	F
K7	G(A crane)
K8	G(B crane)

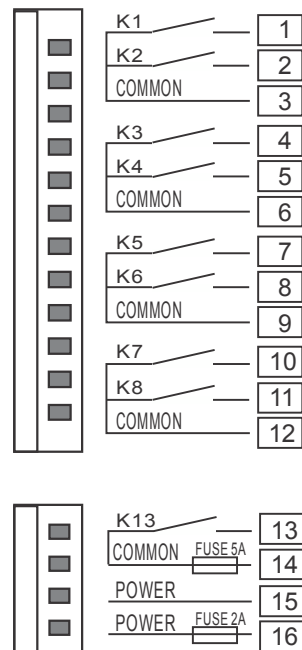
F1	2A Power fuse
F2	5A Main fuse



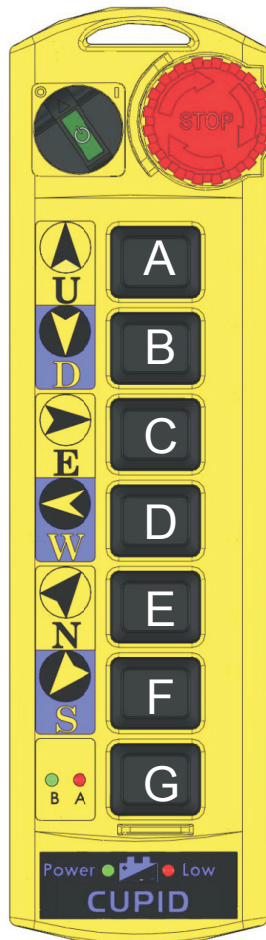
indicator panel



wires location



Transmitter

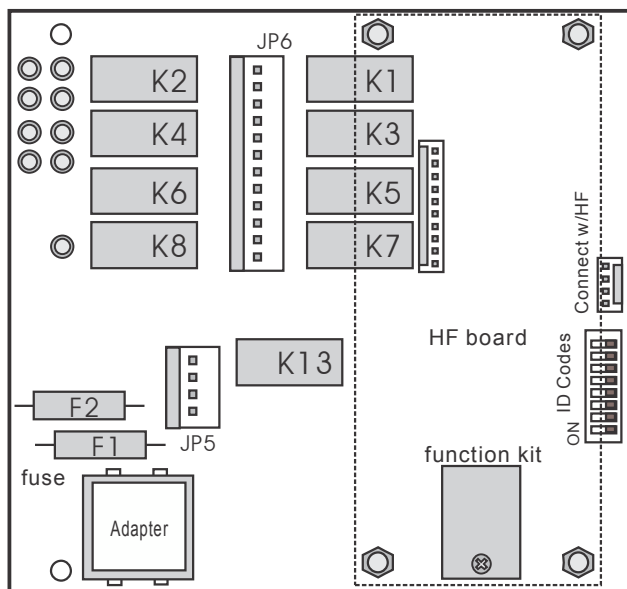


☐	AC-110V
☐	AC-220V
☐	AC-380V
☐	AC-415V



CUPID Q112

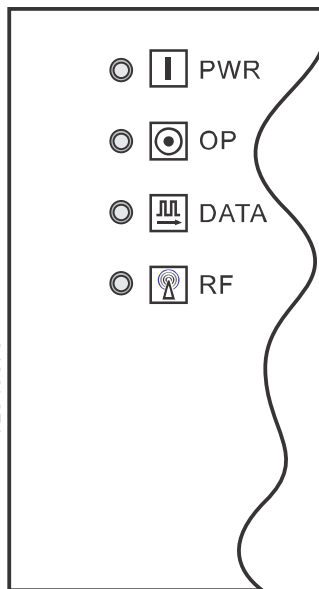
decoder & relay board (front side)



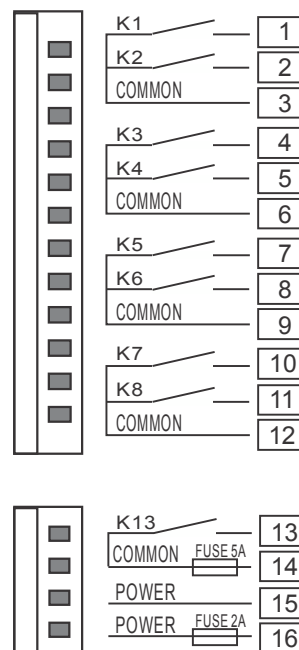
K13	Main
K1	A
K2	B
K3	C
K4	D
K5	E
K6	F
K7	G
K8	E/F step2

F1	2A Power fuse
F2	5A Main fuse

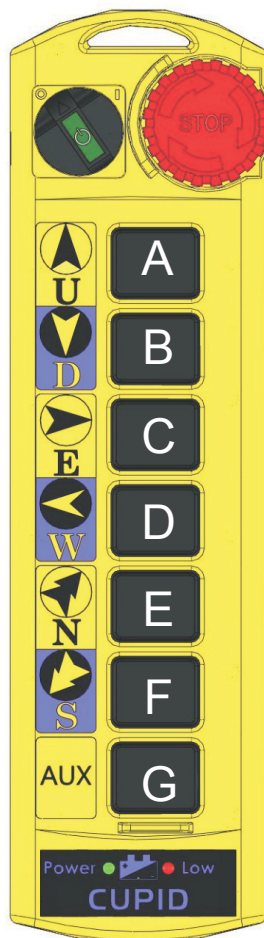
indicator panel



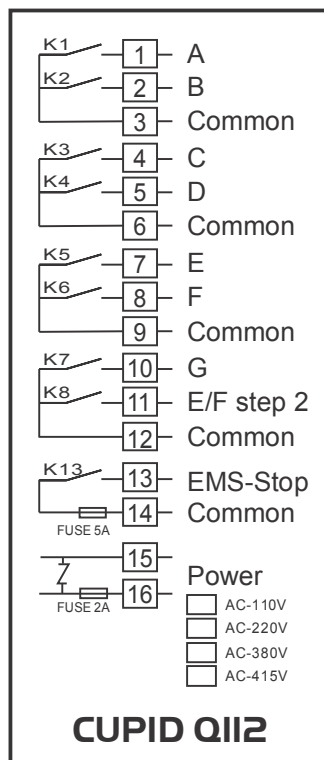
wires location



Transmitter

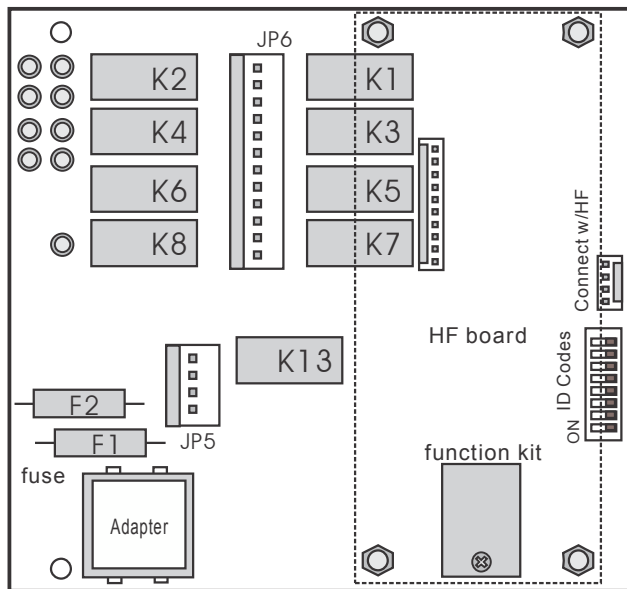


- ☐ AC-110V
- ☐ AC-220V
- ☐ AC-380V
- ☐ AC-415V



CUPID Q211

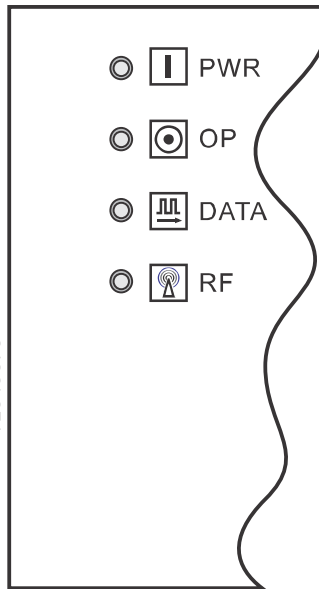
decoder & relay board (front side)



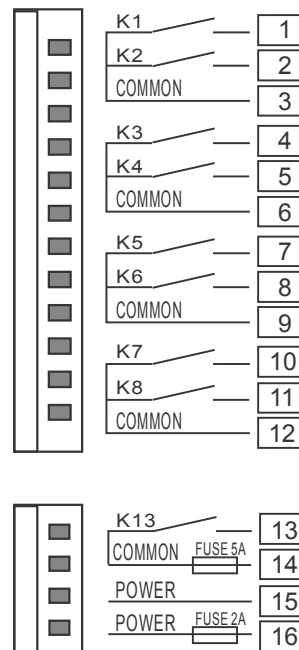
K13	Main
K1	A
K2	B
K3	C
K4	D
K5	E
K6	F
K7	G
K8	A/B step2

F1	2A Power fuse
F2	5A Main fuse

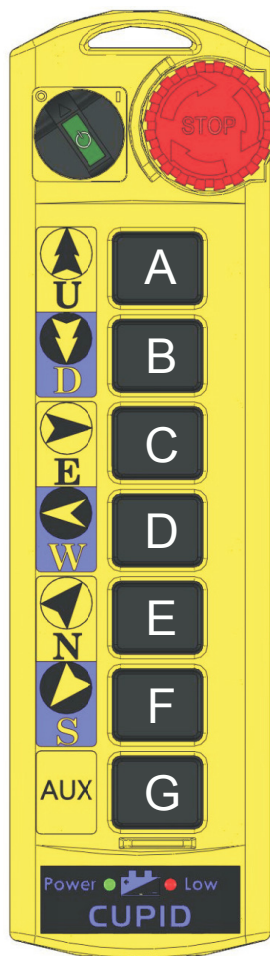
indicator panel



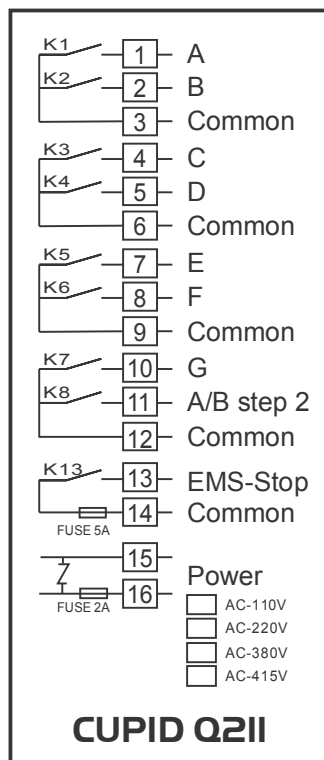
wires location



Transmitter

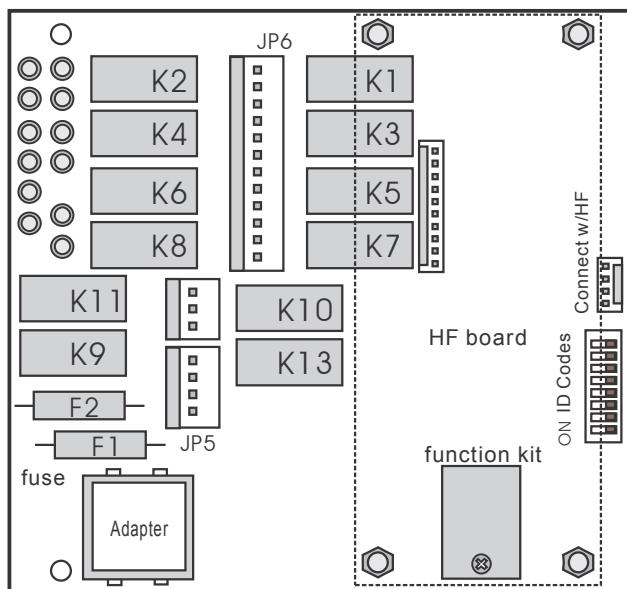


- ☐ AC-110V
- ☐ AC-220V
- ☐ AC-380V
- ☐ AC-415V

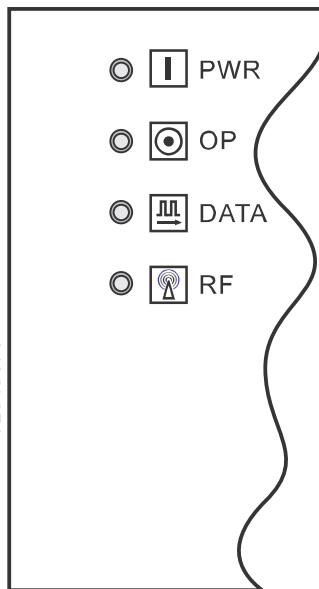


CUPID Q200

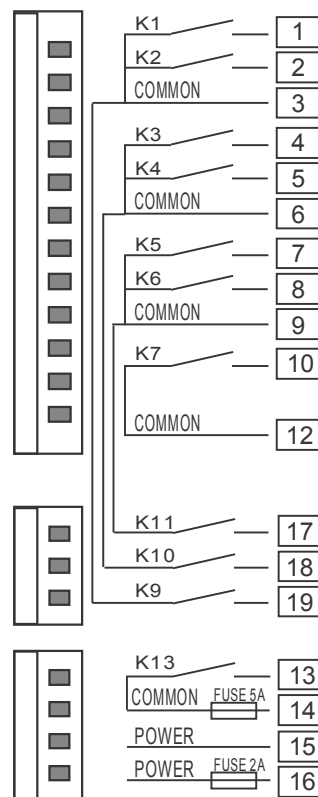
decoder & relay board (front side)



indicator panel



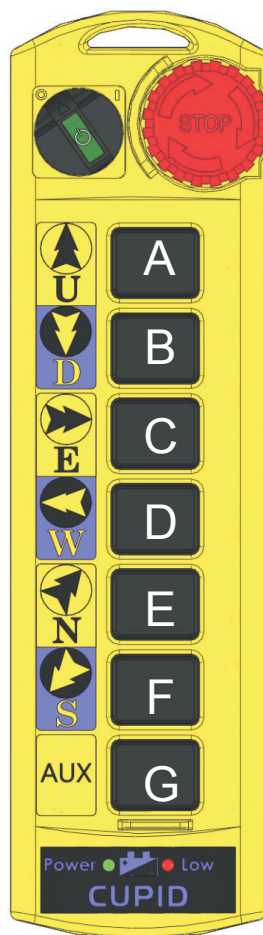
wires location



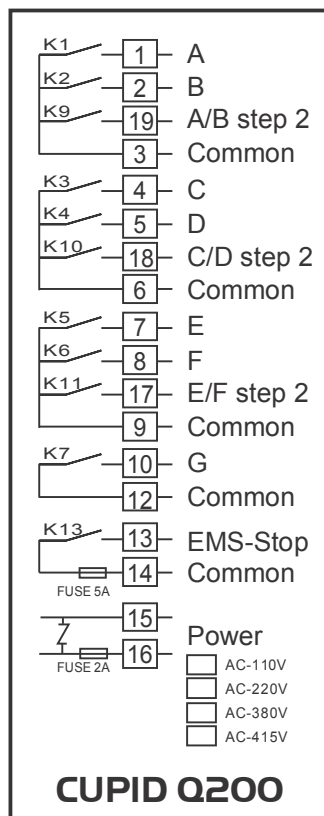
K13	Main
K1	A
K2	B
K3	C
K4	D
K5	E
K6	F
K7	G
K9	A/B step 2
K10	C/D step 2
K11	E/F step 2

F1	2A Power fuse
F2	5A Main fuse

Transmitter

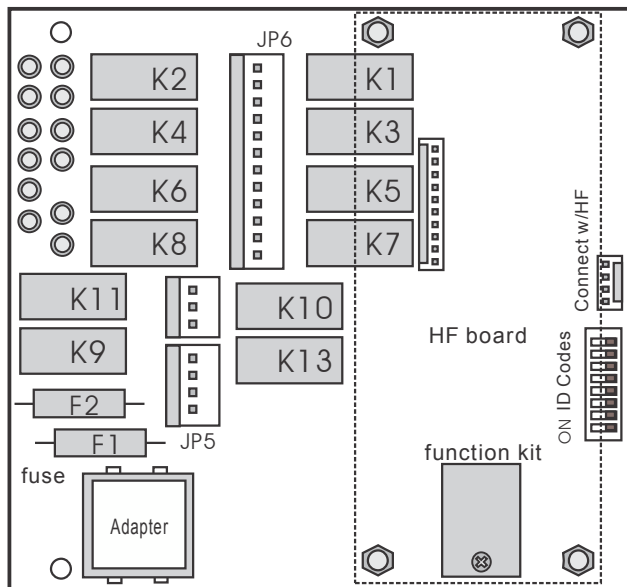


- ☐ AC-110V
- ☐ AC-220V
- ☐ AC-380V
- ☐ AC-415V

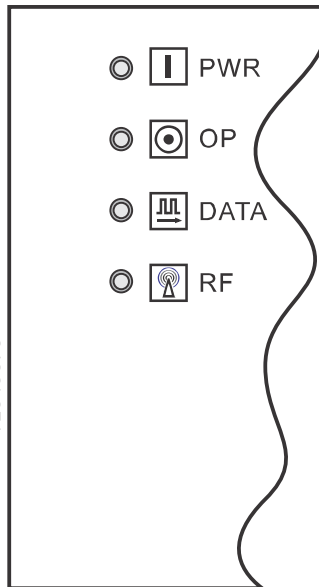


CUPID Q200S

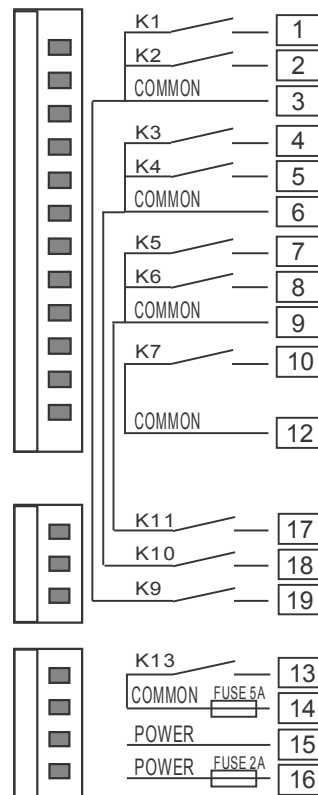
decoder & relay board (front side)



indicator panel

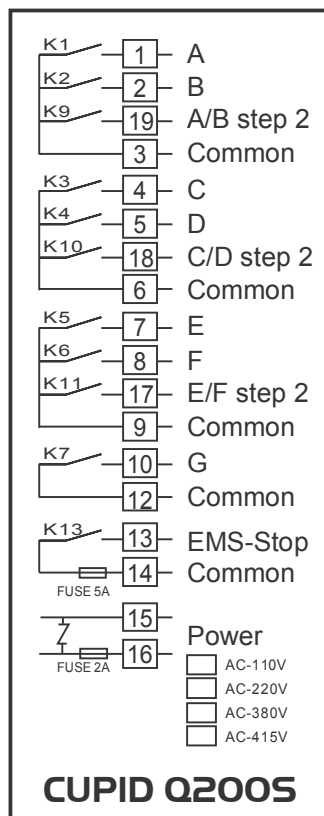


wires location

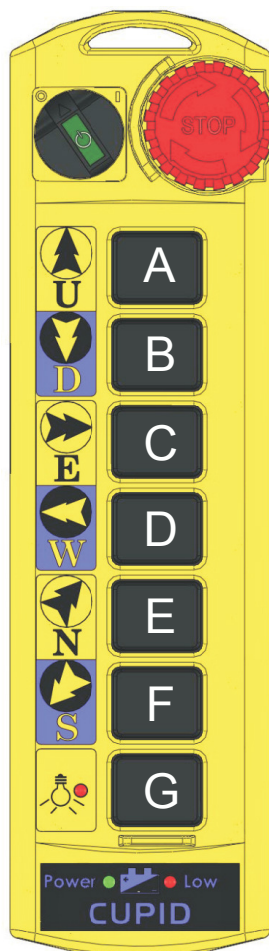


K13	Main
K1	A
K2	B
K3	C
K4	D
K5	E
K6	F
K7	G
K9	A/B step 2
K10	C/D step 2
K11	E/F step 2

F1	2A Power fuse
F2	5A Main fuse



Transmitter

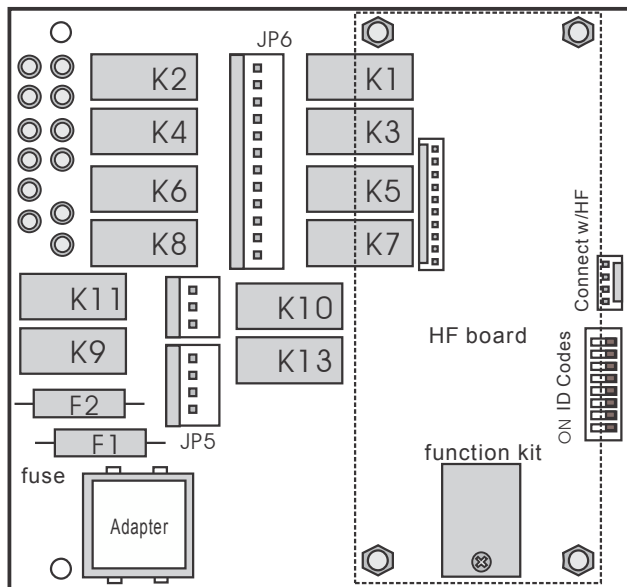


- ☐ AC-110V
- ☐ AC-220V
- ☐ AC-380V
- ☐ AC-415V

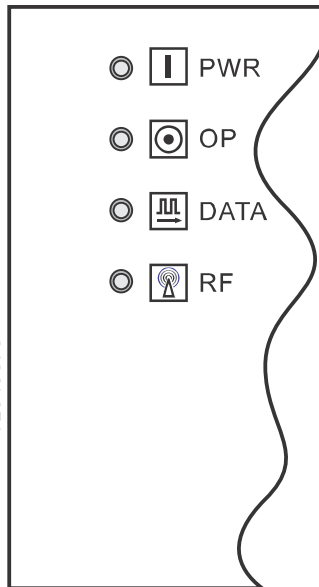


CUPID Q200AB

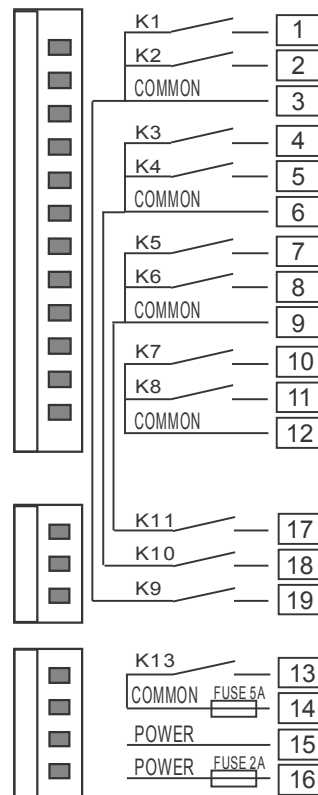
decoder & relay board (front side)



indicator panel

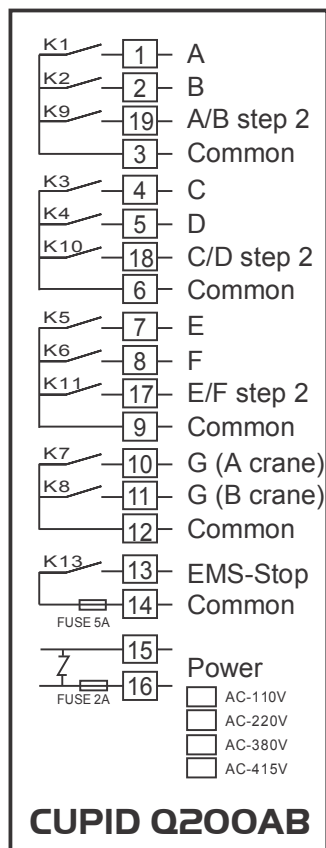


wires location

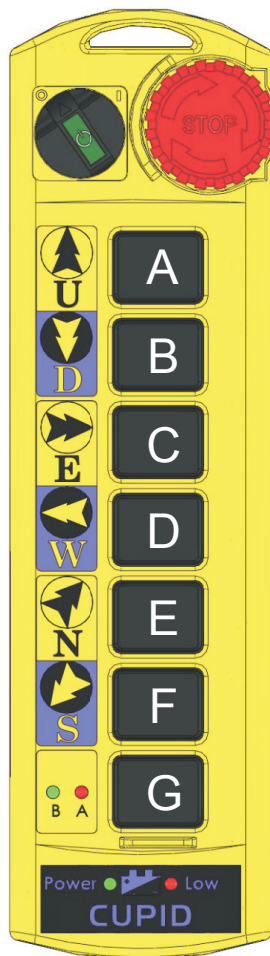


K13	Main
K1	A
K2	B
K3	C
K4	D
K5	E
K6	F
K7	G(A crane)
K8	G(B crane)
K9	A/B step 2
K10	C/D step 2
K11	E/F step 2

F1	2A Power fuse
F2	5A Main fuse



Transmitter



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



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 1 | ☐ transmitter zip sleeve x 1 |
| ☐ wrist strap x 1 | ☐ transmitter jelly sleeve x 1 | |



Note : Please contact with your local distributor in case of any shortage.

