FIRE MONITOR MANUAL
ELECTRIC CONTROLLED

Instructions For Installation,
Operation and Maintenance

I . TECHNICAL SPECIFICATION

Weight in lbs incl. nozzle approx.	42lbs
Material	Body Stainless 304(standard) Gear bronze Nickel plated connectors Gold-plated pins OBO plastic control unit box Rubber cables
Flow range @ 145psi （Max recommended）	MAX. 160gpm
Max. reach @ 102psi	~115ft @ 80-300gpm (Depending on Pump size)
Range of motion	+/-90 °vert , 360°
Speed (of high speed version)	24 °/sec rotation , 10 °/ sec vertical
Power consumption Max.	12v @ 15A
Power supply	12VDC
Reaction force	Up to 1800N
Mechanical installation	Support must withstand 8000 N of force
Options	Network, aux control

II . SYSTEM COMPONETS DICRIPTION

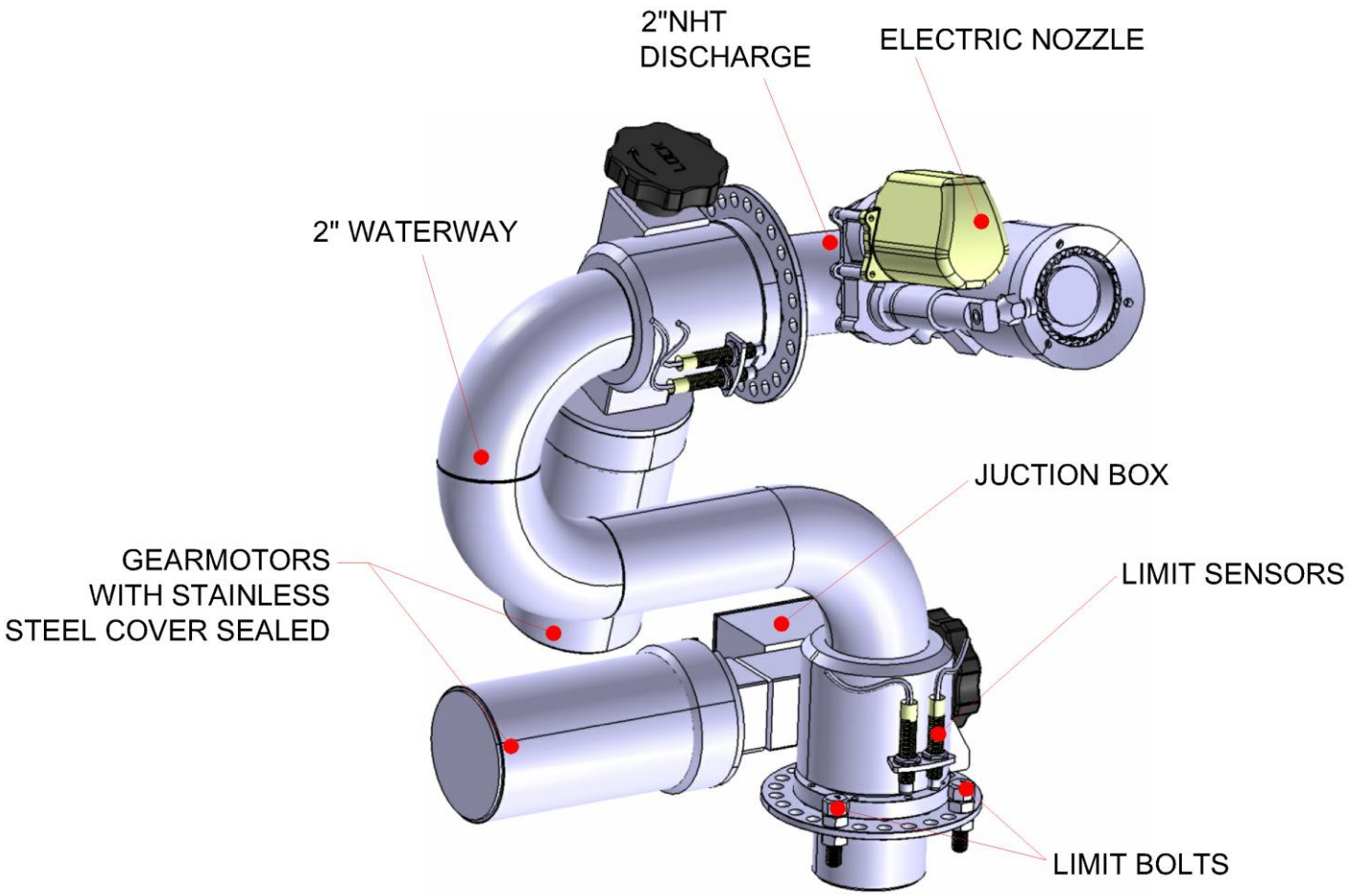
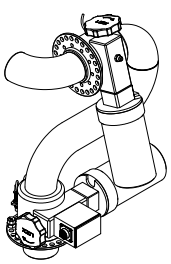
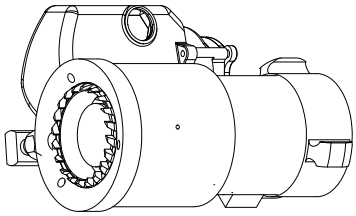
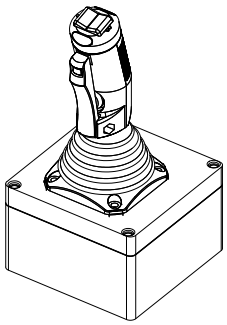
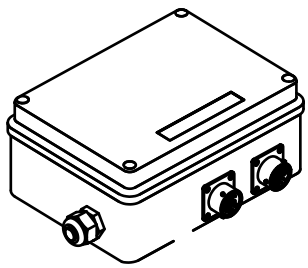
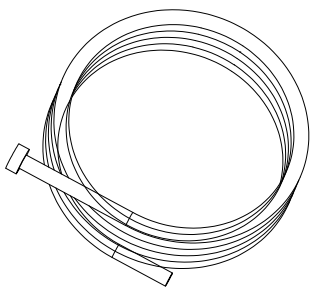


Figure 1

FDS-PSKD30 Fire Monitor

PART IMAGE	PART #	BRIEF DISCRIPTION
FDS-PSKD30S FIRE MONITOR BODY 	FDS-PSKD30S-1	FDS-PSKD30S FIRE MONITOR BODY

ELECTRIC MONITOR NOZZLE 	FDS-FNE30	80gpm Nozzle
JOYSTICK 	FDS-CTRL-J01	STANDARD CONFIGURATION
COMPACT FIRE MONITOR CONTROL UNIT 	FDS-MCU-N	12v Powered
CONTROL CABLE 	FDS-C001 FDS-C002 FDS-C003 FDS-C004 FDS-C005	VARIOUS LENGTH CABLE WITH MULTI-CONNECTORS

III．OUTLINE DIMENSIONS

Before mounting fire monitor, ensure that both the horizontal and vertical rotation envelopes are clear of all obstructions.　See Figure 2, 3 and Figure 4 for envelope dimensions.　The rotation limits are determined by the limit bolts locations on the monitor flange, and can be adjusted （how to adjust the end positions bolts see chapter IV）.

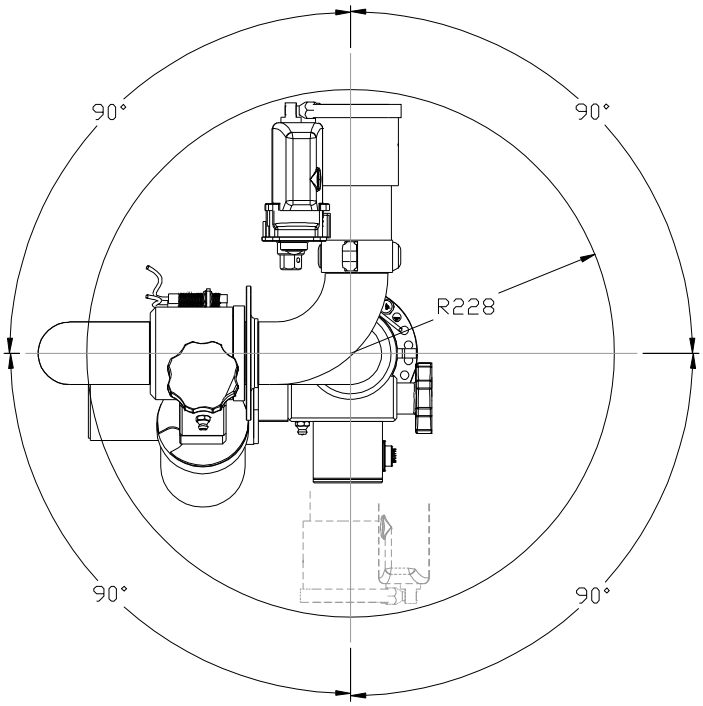


Figure 2

Horizontal Rotation Envelop

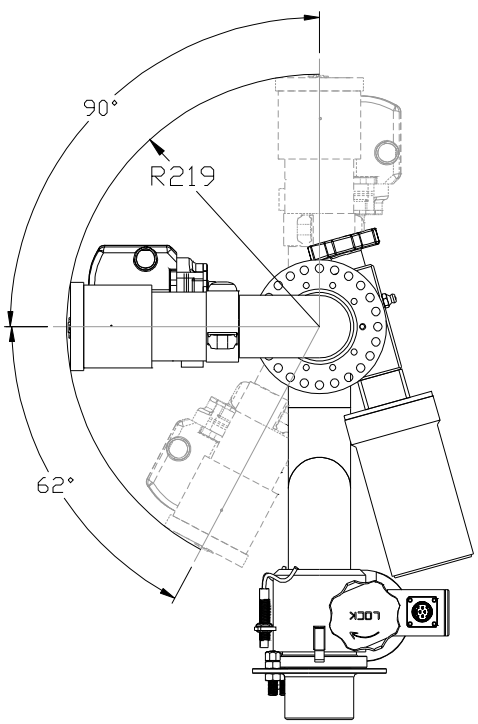
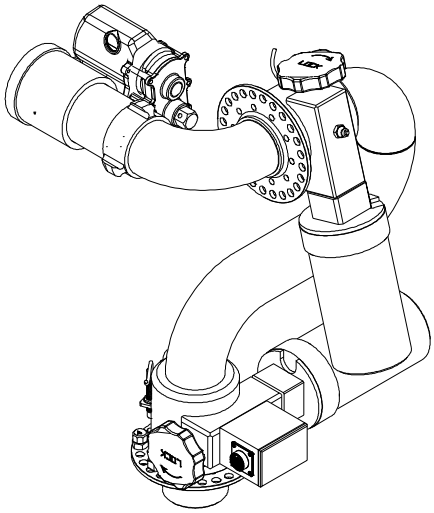
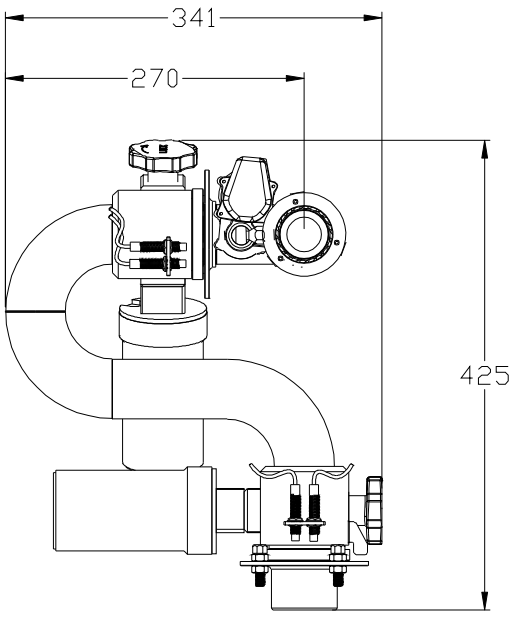


Figure 3

Vertical Rotation Envelop





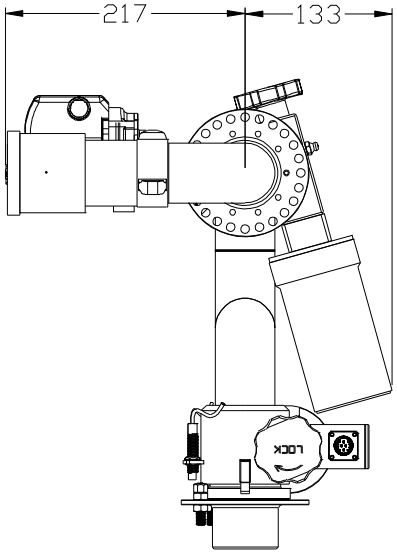
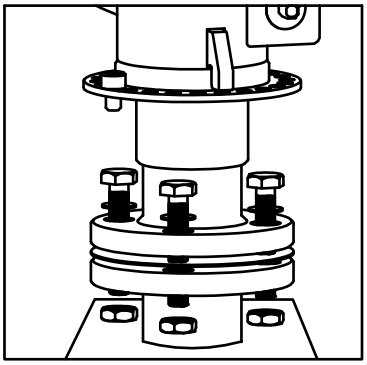


Figure 4

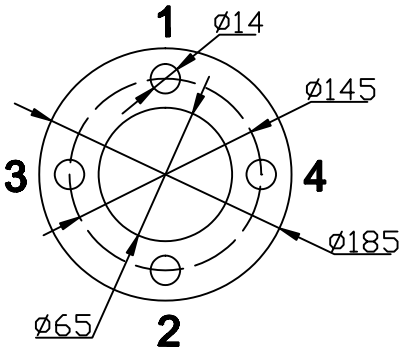
FDS-PSKD30S Fire Monitor Outline Dimensions

IV . INSTALLATION INSTRUCTIONS

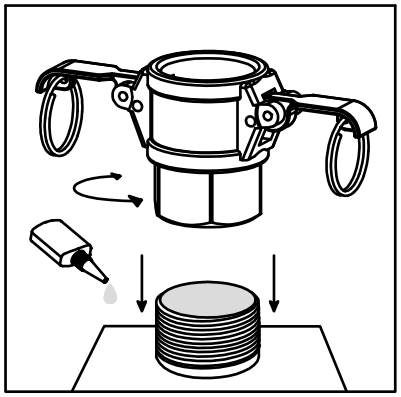
Step 1: Mount Monitor onto base



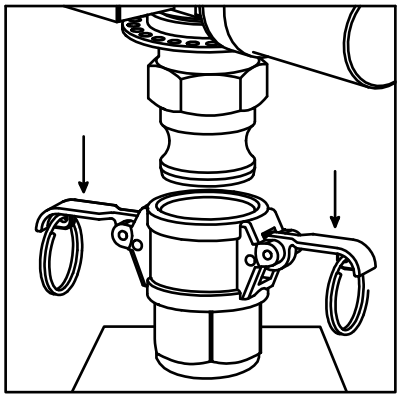
MOUNT MONITOR- FLANGE



Flange bolts tightening sequence



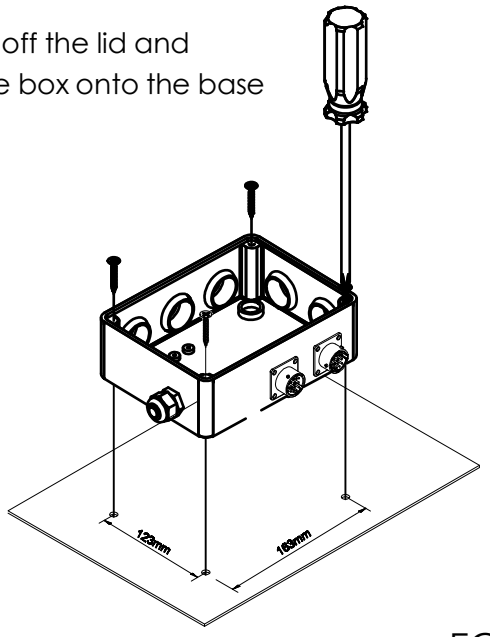
MOUNT MONITOR- QUICK COUPLING



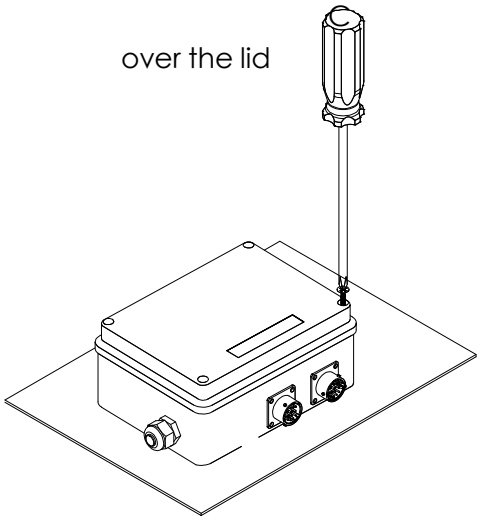
Thread monitor quick coupling onto base using Loctite 592 thread sealant or equivalent.

Step 2: Components Mounting

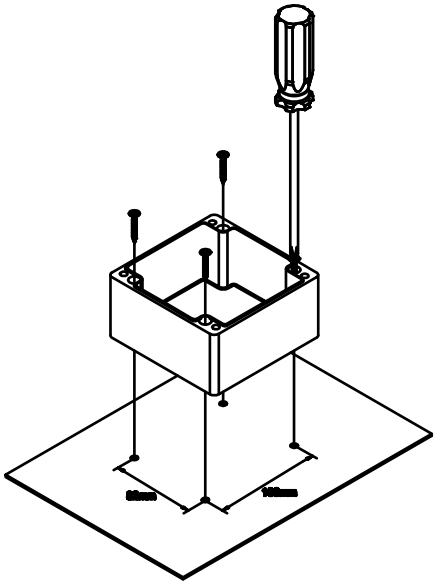
Take off the lid and
fix the box onto the base



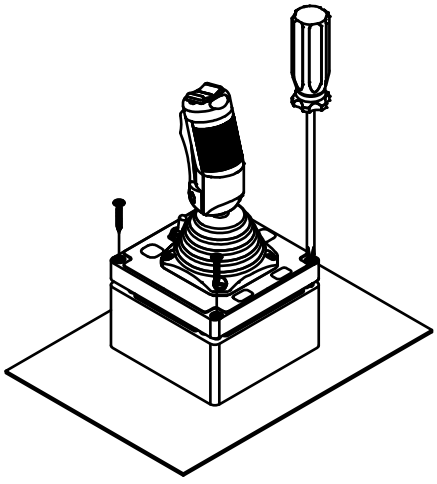
over the lid



ECU Box Mounting



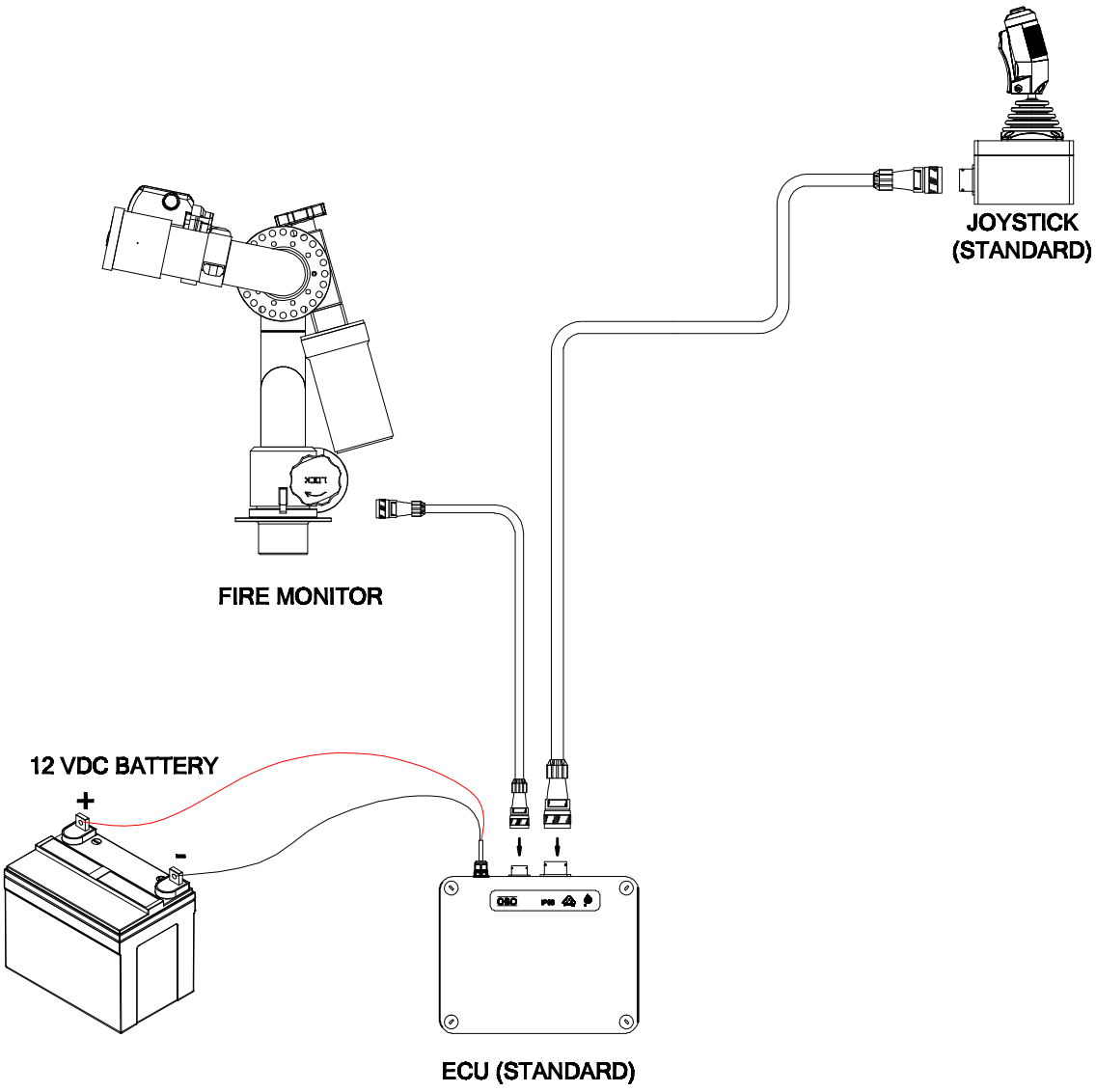
Take off the lid and
fix the box onto the base



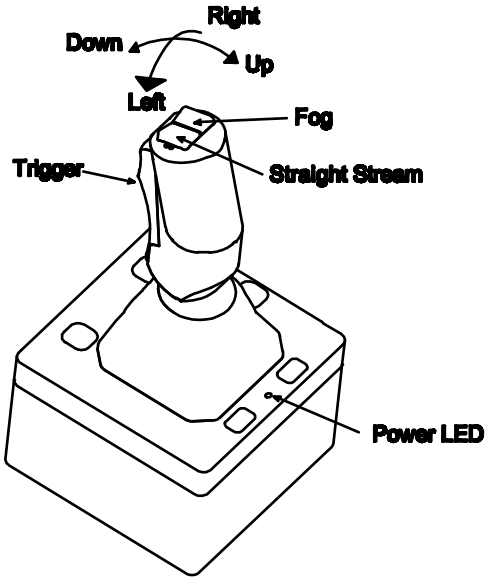
Cover the lid

Joystick Mounting

Step 3: Wiring



V . BUTTON PRESS INSTRUCTION



Joystick (standard)

TROUBLE SHOOTING

BEFORE CONTACT SXFIRE PLEASE GO THROUGH THE TROUBLE SHOOTING AS BELOW. IF PROBLEM REMAINS PLEASE CONTACT SXFIRE WITH AS MUCH DETAILED INFORMATION OF THE PROBLEMS AS POSSIBLE

PROBLEMS:
1. Cannon does not work at all
2. NO GREEN LED ON JOYSTICK
3. Cannon does not move up or down
4. Cannon does not move left or right
5. Cannon does not spray

1. Cannon does not work at all.
Check all power cable connections
Confirm fuse in the control box are O.K. (25A for 12V cannon).
Confirm the red led in the circuit of the control box is on.
Confirm cables are O.K., and not damaged.
Confirm the voltage is sufficient.
Confirm the power supply can deliver enough current, (up to 25A at 12V) without any drop in voltage.

2. NO GREEN LED ON JOYSTICK
Check the joystick cable is connected to the right socket in the control box.
Check all power cable connections
Confirm fuse in the control box are O.K. (25A for 12V cannon).
Confirm the red led in the circuit of the control box is on.
Confirm cables are O.K., and not damaged.
If power is confirmed and there is still no Green LED coming on, please try another joystick cable or joystick to check the problem is with the cable or the joystick..

If the problem remains, contact VBN:FDS. Joystick may be damaged.

3. Cannon does not move up or down
Confirm when the joystick moves up, the following 2 pins (up & com-0v) is connected (you can use a digital multimeter to check it)

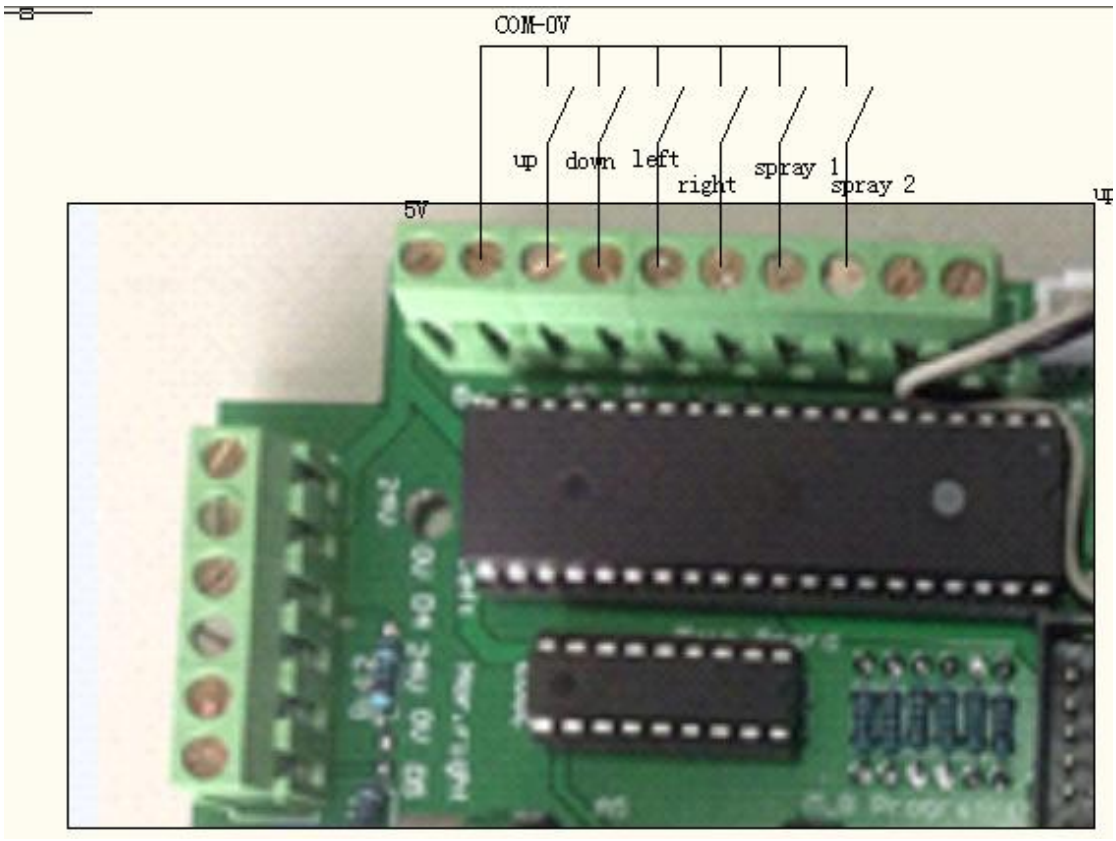


FIGURE 5

Check the relays for the vertical motor are ok.
Check the cable from the control box to the vertical motor is connected.

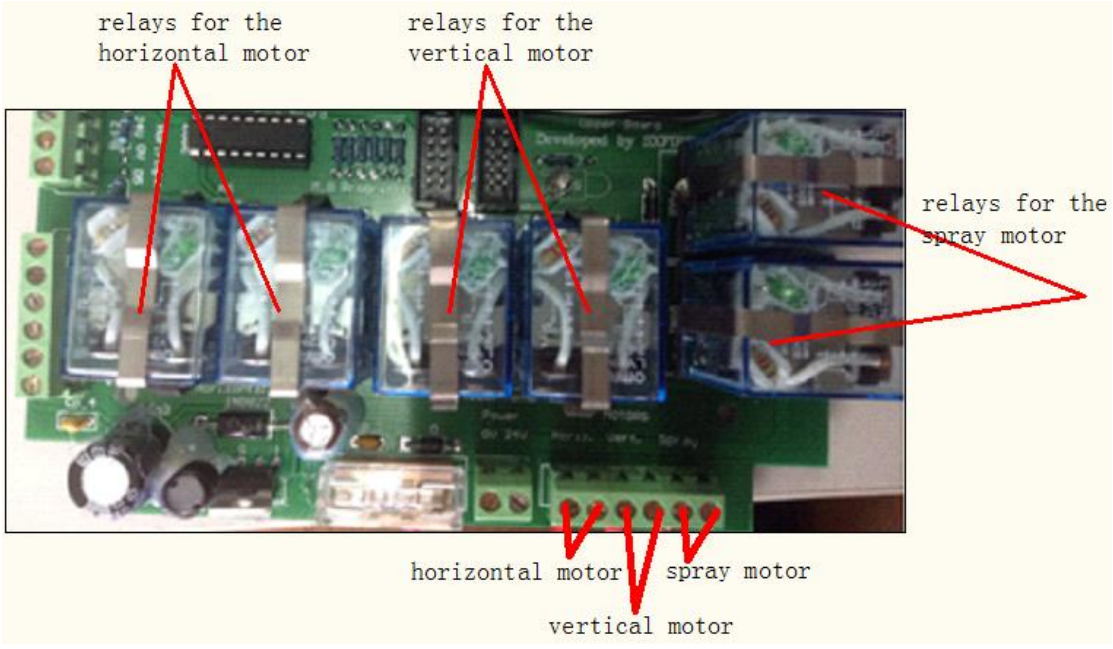


FIGURE 6

Check the vertical 2 vertical sensors are ok. (The led at the end of the sensor will be on when the sensor reaches its limit position, so if the cannon is not at its up limit or down limit, the led should not be on. Or the sensor will be broken. Besides, the proper distance between the sensing surface and the limit position should be 3mm. too close or too far may break or disable the sensor.)

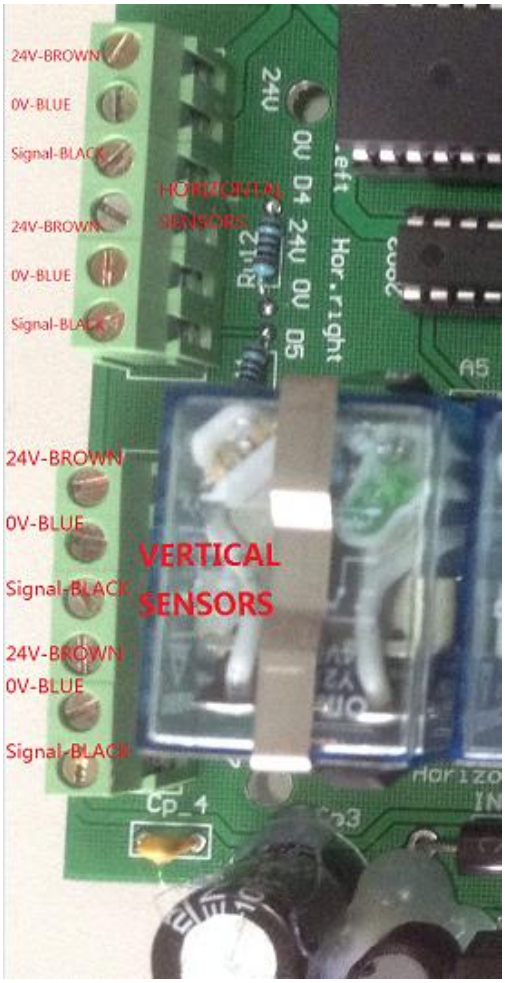


FIGURE 7

4. Cannon does not move left or right Steps are similar to the problems 3.
5. Cannon does not spray Steps are similar to the problems 3.