

MX-E5xc SERVICE MANUAL



Tension Control	Programmable, 25 Levels
Resistance System	JID brushless generator
Flywheel	Integrated w/ Generator
Pedal	Self Balancing
Power	Self-Generating
Weight	128 kgs

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SECTION 1
MAINTENANCE PROCEDURE

PREVENTIVE MAINTENANCE SCHEDULE

VISION BIKE

<i>Item</i>	<i>Daily</i>	<i>Weekly</i>	<i>Monthly</i>	<i>Quarterly</i>	<i>Biannual</i>	<i>Annual</i>
<i>Console Mounting Bolts</i>					Inspect	
<i>Frame</i>	Clean				Inspect	
<i>Display Console</i>	Clean		Inspect			
<i>Handlebar</i>	Clean				Inspect	
<i>Handrail & Handlebar</i>				Inspect		
<i>Belt Grooves</i>			Inspect			
<i>V Belt</i>				Clean	Inspect	
<i>Air Shock</i>					Lubricate	

CLEANING THE GROOVES

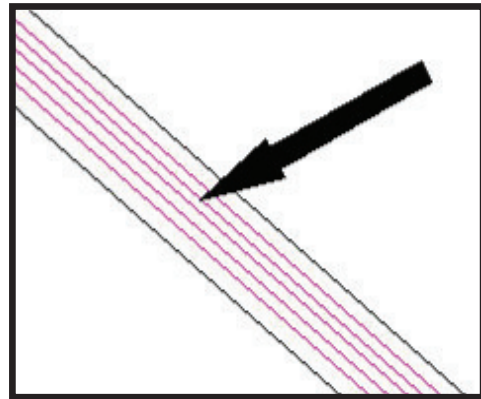
Caution:

If there is any dust in the grooves of the Poly-V belts and pulleys, noises will be generated during operation.

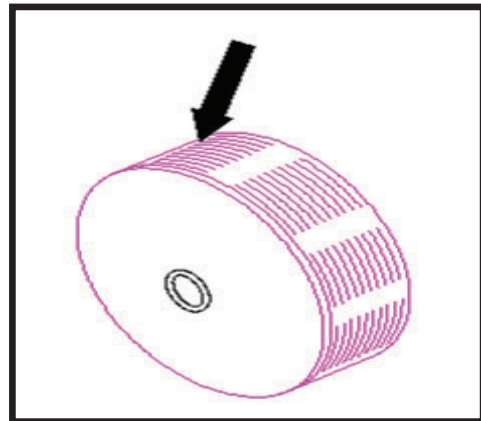
Frequency: Every 3 to 4 months.

Procedure:

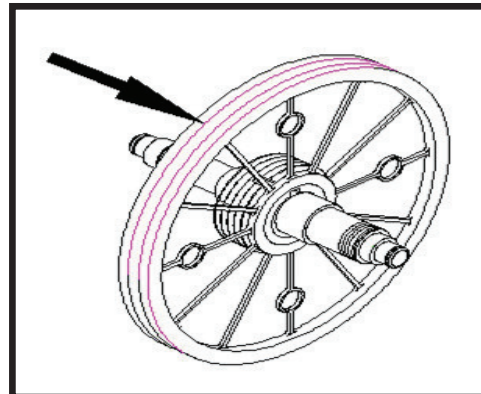
1. Remove the Poly-V belts and check the grooves of the belt for dirt or dust and clean it if any.



2. Check the grooves in the pulley for dirt or dust and clean it if any.

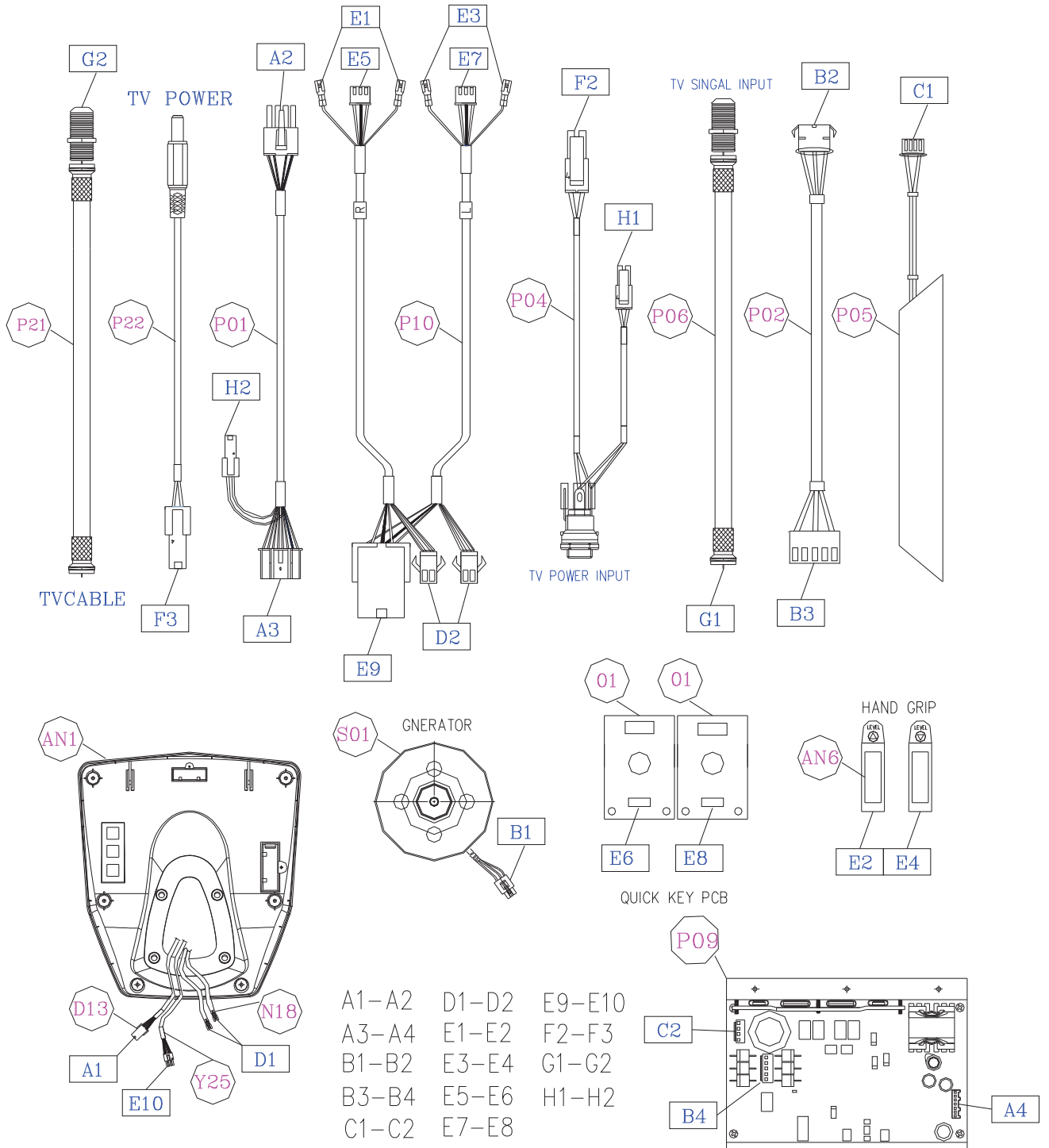


3. Check the grooves in the roller pulley for dirt or dust and clean it if any.

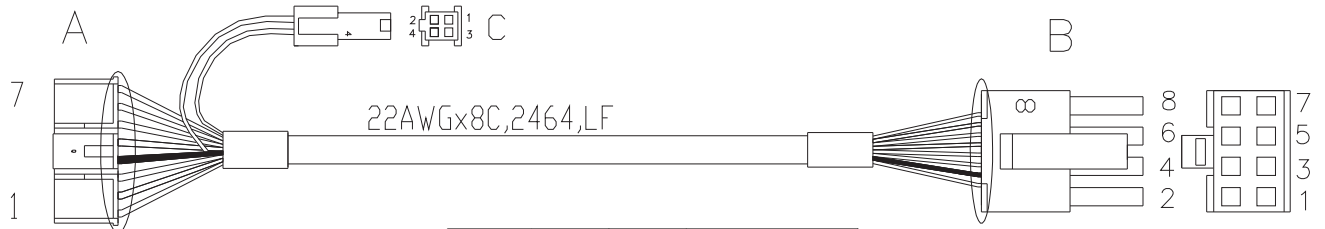


SECTION 2
WIRING DIAGRAM INSTRUCTION

MX-E5xc WIRING DIAGRAM INSTRUCTION

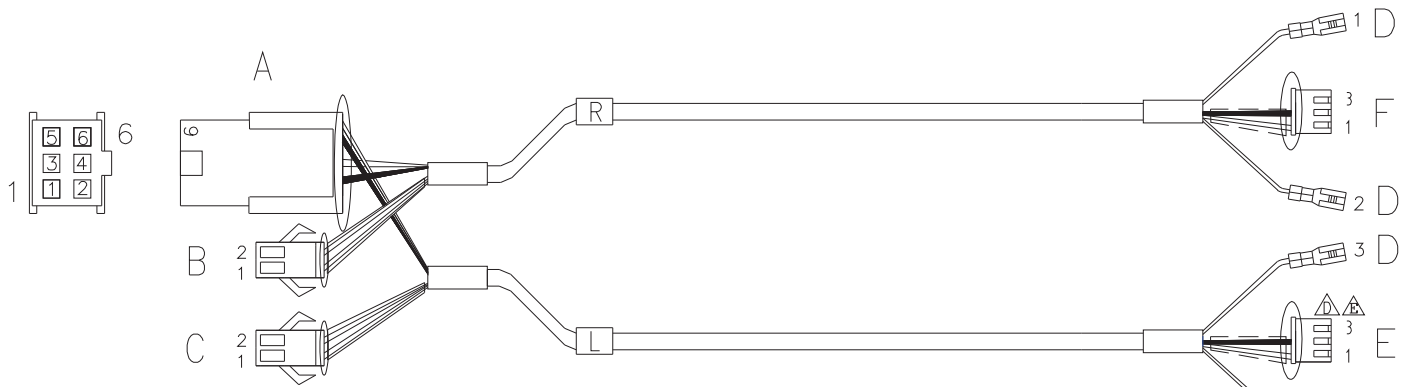


P01 : Console cable



A.HOLE	B.HOLE	C.HOLE	FUNCTION
1	1		T+
2	2		T-
3	3		14V
4	4	2	GND+(Shielding)
5	5		RPM
6	6		D/A
7	7		+5.5V
	8	3	+12V(TV)
		1,4	NC

P03 : Pulse sensor wire



A.HOLE	B.HOLE	C.HOLE	D.HOLE	E.HOLE	F.HOLE	COLOR	FUNCTION
1					3		NC
2					2		GND(Shielding)
3					1		UP
	1		1			黑色	Right Hand Pulse+
	2		2			紅色	Right Hand Pulse-
4				3			NC
5				2			GND(Shielding)
6				1			DOWN
		1	3			黑色	Left Hand Pulse+
		2	4			紅色	Left Hand Pulse-

SECTION 3
CONSOLE ENGINEERING MODE GUIDE

How to enter into the engineering mode?



1. Press & Hold both “DOWN” and “UP” at the same time for 3-5 sec. Then, the dot vision display will show “MANAGER”
2. Press the " UP or DOWN" to select you want and press the “SELECT” key enter.

key name	function
UP	Select address or add parameter
DOWN	Select address or decrease parameter
SELECT	Enter address
START	To Store up the parameter
Hold MANUAL & RANDOM for 3’S	Clean accumulate time and distance

Engineer mode interpret

Display show	Function interpret
MANAGER	Select address or add parameter
SERVICE 1	Display test
SERVICE 2	HW test mode show RPM
SERVICE 3	Show accumulate distance & time
SERVICE 4	HR test
ENG 1	Test for factory

ADDRESS	description	SOURCES	MIN	MAX
P0	MAX TIME	95	10	99
P1	USER TIME	20	10	MAX TIME
P2	DF LEVEL	L1	L1	L25
P3	DF WEIGHT	150LB /75kg	60LB /30kg	400LB /180kg
P4	SPEED IS MILE/KM	MILE		
P5	MACHI IS EL/BI/RE	BI		
P6	CARDIO IS ON/OFF	OFF		
P7	AC DIST			
P8	AC TIME			
P9	LANGUAGE	ENGLISH		
P10	VERSION			

Remarks:

1. If you want to clean the accumulated distance and time, Please enter engineer mode of "MANAGER" select to P7 or P8, Hold the "MANUAL and RANDOM" key for 5 sec.
2. About the Engineer mode "SERVICE 3" the display show AM is accumulated Distance AT is accumulated Time, If you want to clean the accumulated distance and time, Please enter engineer mode of "SERVICE 3", Hold the "CONSTANT WATTS and RANDOM" key for 5 sec.

SECTION 4
TROUBLESHOOTINGS

CONTENTS

- 1. No display on the console or the display is dim**
- 2. No RPM is displayed during the exercise**
- 3. All or some of the function keys do not respond**
- 4. No resistance change or too hard for pedaling**
- 5. Feel slipping while pedaling**
- 6. Knocking or creaking noises**
- 7. Heart-Rate-Control function does not work**

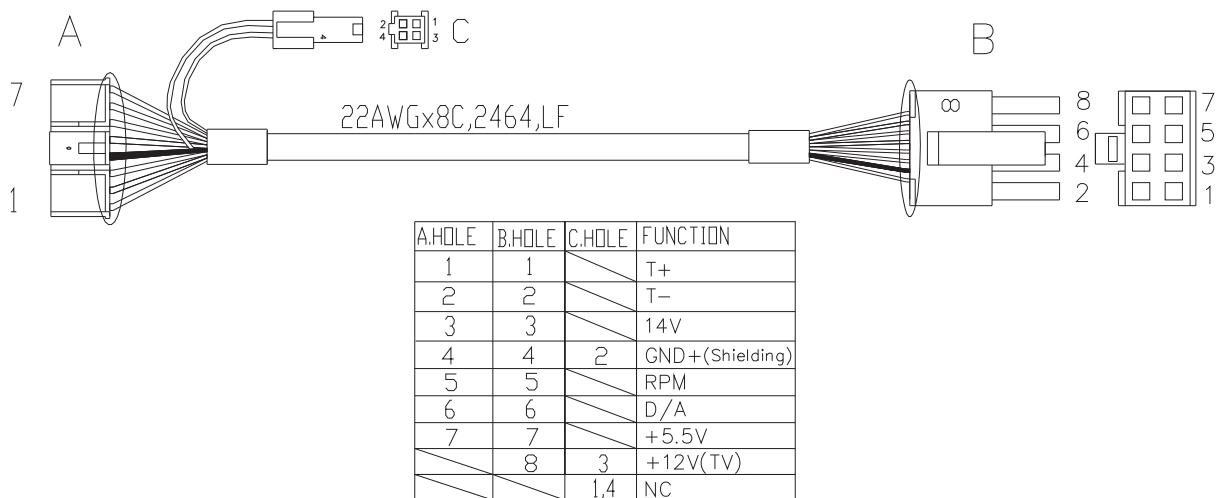
No display on the console or the display is dim

Possible causes:

1. Console is damaged or the console cable is not connected properly.
2. Poor connection to all the terminals on the control board.
3. Control board is damaged.
4. Generator is damaged.

Fix:

1. First, unplug the console cable and use a multi-meter to check if the voltage between the 7(Vcc) and 4(Ground) pin of the console cable is greater than 5.5VDC.
(If it is, replace the console and check again.)



2. Open the side covers then check if all the wire harnesses are connected properly to the terminals of the control board
3. Unplug the generator cable from the control board and pedal the machine to check if the voltage is variable.
If it is, replace the control board with a new one.
If it is not, replace the generator with a new one.

No RPM is displayed during the exercise

Possible causes:

1. Console cable is damaged or the console cable is not connected properly.
2. Console is damaged.
3. Control board is damaged.

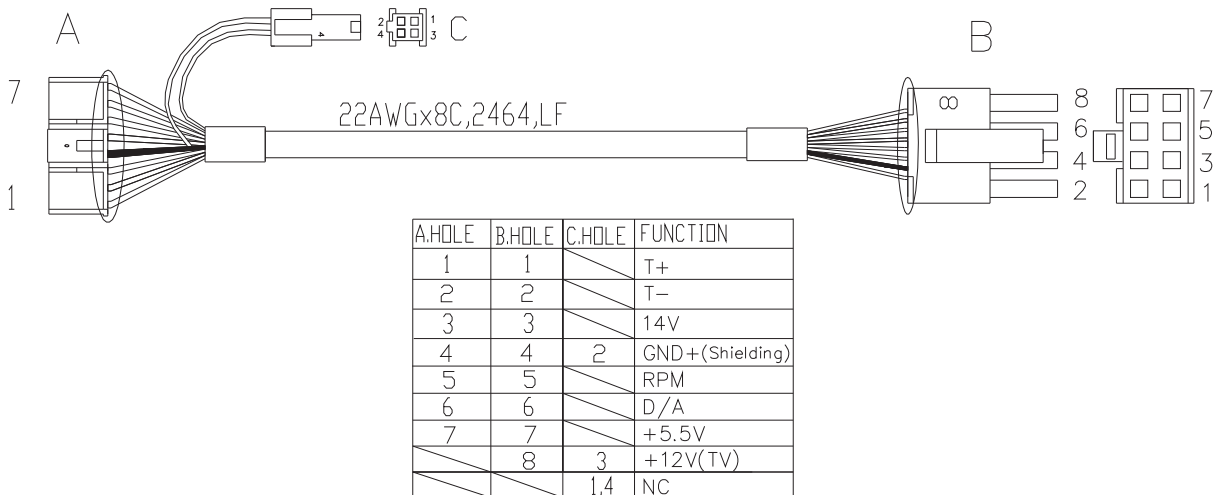
Fix:

1. Remove the console and check if the terminal of console cable is connected properly to the console.

If it is not connected well.

1-1 Connect the terminal properly.

1-2 If cable is damaged, replace it with a new one.



2. Console is damaged, replace it with a new one.
3. Open the side covers, then replace the control board with a new one.

All or some of the function keys do not respond

Possible causes:

1. Keypad connecting plug has been not fit-in properly.
2. Keypad is damaged.
3. Upper board is damaged.

Fix:

1. Remove the console cover, and then check if keypad cable is connected properly to the upper board.

If it has not been connected well, reconnect it to the terminal and check again.

2. Keypad or upper board is damaged.
Replace the console.

No resistance change or too hard for pedaling

Possible causes:

1. Console is damaged or the console cable is not connected properly.
2. Console cable is damaged.
3. Power resistance is damaged.
4. Control board is damaged.

Fix:

1. Remove the console and check if the console cable has been connected properly.
2. Remove the side covers and check if the console cable is connected well to the control board properly.
3. Please make use of tools to confirm “Power resistance” have conduct.



◆ If it is damage, Please replace “power resistance”

◆ If it is well, Please replace control board

Feel slipping while pedaling

Possible causes:

1. Belt tension is not enough.
2. One way bearing is damaged.

Fix:

1. Remove all of the cover.
2. Pedaling and check if the belt tension is correctly.
3. One way bearing is damaged. Replace it with a new one. (instruction see below).

Knocking or creaking noises

Possible causes:

1. Pedal is on crank arm too loose
2. Crank or axle is wear out
3. Belt tension is too loose or poly v belt is too dirty

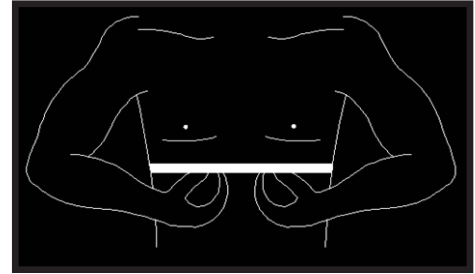
Fix:

1. Re-tighten it.
2. Replace it with a new one
3. Re-adjust the belt tension and clean the poly v belt

Heart-Rate-Control function does not work

Possible causes:

1. Bike does not contact with user's chest very well.
2. Bike (Polar-belt) is at low battery status.
3. Bike (Polar-belt) is damaged.
4. Heart-rate-control board is damaged.
5. PCB is damaged.



Fix:

1. Center the bike on your chest below the pectoral muscle(breast) as shown, then check again.
2. Remove the battery cover of the bike. Replace a new battery and check again.
Actually, as moisture may activate the transmitter, please dry transmitter after use.
3. Transmitter is damaged. Replace the Transmitter.
4. Heart-rate-control board is damaged. Replace the HR-control board.
5. PCB is damaged. Replace the PCB.

SECTION 5
SOFTWARE UPGRADE PROCEDURE

MX-E5xc BIKE SOFTWARE UPGRADE SOP

A. Service Tools & Accessories:

1. Computer (Notebook is preferred)
2. Connection cables (Parts NO: MQMXCV001 and MQMXCV002)
3. Software

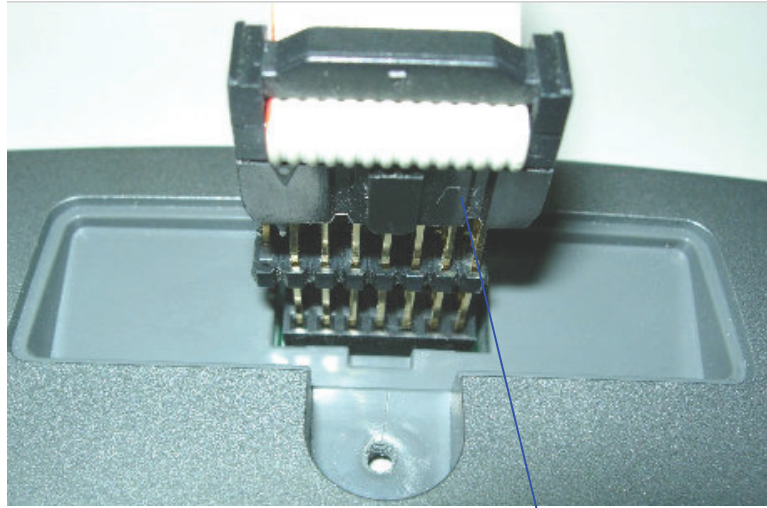


MQMXCV001

MQMXCV002

B. Steps:

1.



MQMXCV002

2. Turn ON the power switch.
3. Find out the software version file in the computer and then actuate/open the file by “click” the mouse twice.
4. The computer will be turned into DOS mode, and run the installation work. Automatically. (It takes around 2 minutes for installation.)
5. After completed installation, the computer will show passing on the computer screen.
6. Turn OFF the power switch.
7. Disconnect the cables.
8. Turn ON the power switch and then enter into the engineering mode to confirm if the software had been installed/upgraded.