

1. INTRODUCTION

MUON counting system is a device that counts MUONs through dual channel and also the co-incidence signal (CIS) rate. Product is mainly based upon two major sections, in which one is the electronic section that counts the MUONs and transmits the data and the other section is GUI to analyze the data.

2. OPERATING PROCEDURES

- GUI Operating Procedure
- Install 'MUON Data Receiver' software on PC
- Install software on a PC by using "setup.exe" File
- Run "setup.exe" File
- "Application Install" window will open, click on "Install" tab
- Connect MUON Receiver unit to the PC through 'micro-USB' cable
- Open Software application
- After GUI is opened Set the detected COM PORT to which USB cable is connected
- Select the baud rate to 115200, DATA BITS – 8, STOP BITS – One, PARITY BITS – None
- Press 'OPEN' tab
- Software setting is complete

2.1 Hardware Operating Procedure

To switch ON the device do the following steps

- Connect Wi-Fi Antennas to the device
- Set the Push button the released position (Push button should not be pressed)
- Shift the slide switch to the ON position
- Now device will send data to the receiver after every 60 seconds
- Press 'GRAPH' button to Plot the DATA graph

To switch OFF the device do the following steps

- Shift the slide switch to the OFF position
- Press the push switch

2.2 DATA Storage Procedure

- Press 'SAVE DATA' button'

- User can select any '.xls' file in the desired Path
- After Pressing 'Yes' Data would be saved in the selected excel file

2.3 Battery Charing Procedure

- Check slide switch is in the OFF position
- Push switch should be pressed
- Now connect the micro-USB cable to 'micro-USB Charge' connection of the device
- Red LED will be ON
- Device fully charged blue LED will be ON, Disconnect the USB cable

3. DATA COLLECTION & Erase FROM DEVICE

Transmitter also internally stores the transmitted data and this data could be collected by directly connecting transmitter device to the PC.

3.1 DATA Collection Procedure

- Connect transmitter unit to the PC through 'micro-USB Tx' connection using USB cable
- Now open the software application
- Select the baud rate to 4800, DATA BITS – 8, STOP BITS – One, PARITY BITS – None
- Press 'CLEAR' tab to remove any data on the GUI
- Press the Top switch using screw driver or a pin, Tx will start sending data

3.2 DATA Erase from Transmitter

- Connect transmitter unit to the PC through 'micro-USB Tx' connection using USB cable
- Now run the software application
- Select the baud rate to 115200, DATA BITS – 8, STOP BITS – One, PARITY BITS – None
- Open the Port
- Press 'CLEAR Tx DATA'
- Close the Port