Wall Mount Instrument

Firmware Upgrading Procedure

Operating Manual – English 1.00



Introduction

This document will describe the steps involved to successfully upgrade the Wall Mount range of instruments with the latest firmware. All Wall Mount instruments have a RS232 communications port as standard which will allow the connection of the instrument to a computer. If your computer does not have a RS232 communication port then an external RS232 to USB converter cable will have to be used.

Please follow the steps below in order to successfully upgrade your instrument.

1) Connect the RS232 port on the Wall Mount instrument to the PC RS232 port as described in the table below. If the computer does not have a RS232 port then an external RS232 to USB converter will have to be used.

PC D9 Female Pin	Instrument
Pin 2	RS232 TXD
Pin 3	RS232 RXD
Pin 5	RS232 GND

2) Download the Wall Instrument firmware package. Unzip the package to a known location on your hard drive. The Wall Mount Instrument firmware files have the model number with the extension .fw. The programming application is called IFUU (Instrument Firmware Upgrade Utility) and is located in the same directory as the firmware files.

3) Run the IFUU application, select the PC COM port that the instrument is connected to and click "Connect".



4) Apply power while linking jumper J1 on the display PCB (Shown below). Both the instruments LCD and LED display will be turned off when in the bootloader mode (Instrument firmware ready to upgrade).



5) Click the ""Load Firmware File" button, navigate to the directory where the instrument firmware files reside and select the correct firmware file. The selected file name is shown in the status bar.



6) Click the "Upgrade Instrument" button.

Instrument Firmware Upgrade Utility V1.01	– 🗆 🗙
File Help	
Ø LT1300V402.fw	COM Port Open: 🔘 🛛 RX: 🔘 TX: 🔘
Communication Window	PC Communication Settings
Connection established! Getting processor bootloader version Bootloader Version: 1.0 Getting processor ID Processor ID: 414 Erasing the device Removing Read Protection Read Protection removed - Please restart the firmware upgrade procedure	COM Port: COM4
	Load Firmware File Instrument" butto
0%	Upgrade Instrument

7) The read protection has to be removed from the instrument before programming can take place. If you see the below screen then the read protection has been removed and the instrument is ready for programming.

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	File Help	
	LT1300V402.fw	COM Port Open: 🍥 🛛 RX: 🌒 TX: 🌒
	Communication Window	PC Communication Settings
	Attempting to connect to the instrument Connection established! Getting processor bootloader version Bootloader Version: 1.0 Getting processor ID Processor ID: 414 Erasing the device Removing Read Protection Read Protection removed - Please restart the firmware upgrade procedure	COM Port: COM4
The instrument read		Load Firmware File
removed.	0%	Upgrade Instrument

- 8) Power off the instrument.
- 9) Follow the same procedure as step number 4. Apply power while linking jumper J1 on the display PCB. Both the instruments LCD and LED display will be turned off when in the bootloader mode (Instrument firmware ready to upgrade).
- 10) Click the "Upgrade Instrument" button. The instrument will begin to load the new firmware.

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File Help	
LT1300V402.fw	COM Port Open: 🔘 🛛 RX: 🅥 TX:
Communication Window Attempting to connect to the instrument Connection established! Getting processor bootloader version Bootloader Version: 1.0 Getting processor ID Processor ID: 414 Erasing the device Device erased Programming device	PC Communication Settings COM Port: COM4 Signature Disconnect
	Load Firmware File Click the "Upgrade Instrument" button
5%	Upgrade Instrument

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- 11) Once the code has been loaded and verified then the below screen will be shown. Make sure that the progress bar is green and that it has successfully completed the operation. Click the exit button to exit the IFUU application.

Instrument Firmware Upgrade Utility V1.01	- 🗆 🗙
File Help	
LT1300V402.fw	COM Port Open: 🔘 🛛 RX: 🅥 TX: 🌑
Communication Window	PC Communication Settings
Connection established! Getting processor bootloader version Bootloader Version: 1.0	COM Port: COM4
Getting processor ID Processor ID: 414 Erasing the device	💕 Disconnect
Device erased Programming device Device has been programmed!	
Program verified! Firmware upgrade successful! Booting the instrument	Load Firmware File
100%	Upgrade Instrument

12) Power the instrument off and back on again. Verify that the correct version of code has been loaded into the instrument by checking the version number on the start up screen. It may be necessary to load factory default settings on the instrument by holding in the Clear / Back button when power is been applied.