



Components shipped with Firmware Upgrade Kit (Not all components included are used during firmware upgrade)



Components used for Firmware Upgrade



Components used for firmware upgrade (OLIMEX, Programmer & cable assembled)

POWER MUST BE APPLIED TO UNIT BEFORE REPROGRAMMING

The first time you use your programmer

Before use always confirm you are using the most current firmware. Log on to the Partner Login section at www.seametrics.com and navigate to Partner Documents then to Software and download the iMAG/AG3000 Series Firmware Upgrade.

Double-click on the "ST-Link Programmer v4.5.0" folder, then double-click the 'STM32 ST-LINK Utility v4.5.0.exe' setup application and follow the prompts to install the ST app to your computer.

Double click on the "USB Serial Cable - FTDI v2.12.6" folder, then double-click the 'CDM21226_Setup.exe' application setup and follow the prompts to install the USB cable drivers to your computer.

Double-click on the "Seametrics Upgrade Firmware - upgrades vX.X" folder and double-click on the 'upgradesm-setup.XXXX.msi' setup and follow the prompts to install the UpgradeSM app to your computer.

EXE (executable) or MSI (Microsoft installer) files may need administrative approval before installing. Additionally, USB cable driver or Microsoft .Net Framework downloads may take time to download.

In your kit (part #104002-02) you will find an ST-Link/v2 programmer along with an OLIMEX ARM BOARD. See photo below for correct configuration of the board, USB cable and programmer.

1) Install OLIMEX board as shown and 10 pin ribbon cable provided in the ST LINK programmer kit. Connect **grey cable** from ST LINK kit to available USB port on your computer. Red LED should light.



.....Connect grey USB cable to computer

Connect OLIMEX board as shown.....

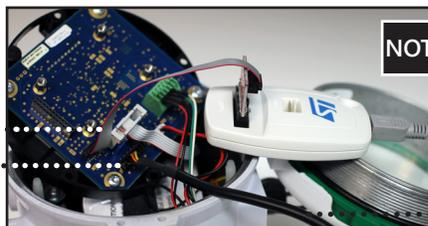
Program Board

You should see a new application on your computer called Seametrics Firmware Upgrade. This is the program needed for upgrading the iMAG4700 or AG3000 firmware.



2) Connect the ST-Link programmer grey cable to any USB port on your computer and to J4 of the transmitter board being reprogrammed.

3) Connect the iMAG4700/AG3000 programming cable (PN:104001-02 **black cable** with black 6-pin connector) to another USB port on the computer and to J6, the **black** connector shown below.



NOTE: Lower board must be installed.

ST-Link Ribbon Cable connected to J4.....

.....To Computer USB

Black Programming Cable connected to J6.....

.....To Computer USB

4) Connect power to the transmitter board. Totals will be retained while updating firmware.

5) Wake meter by pressing the right arrow button.

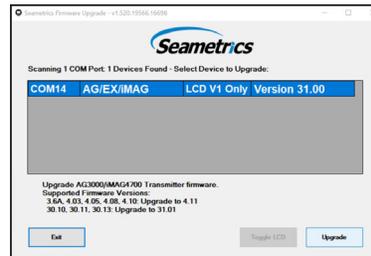
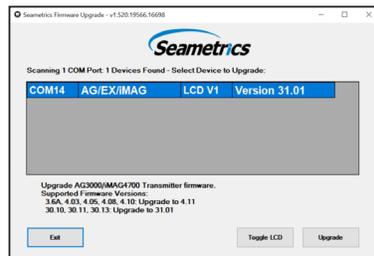
6) The Main Screen operates as follows:

EXIT: exit

TOGGLE LCD: Firmware-dependent, = change LCD setting from old to new or new to old.

New boards required new LCDs, there is a setting in newer firmware to control which LCD is used, if it is incorrect the screen will be blank or black. This functionality is designed to allow the end user (or Seametrics Technical Support) to set the LCD setting correctly if/when there is a problem with the upgrade and the display setting is incorrect. If the button is disabled the device firmware does not support the LCD commands.

UPGRADE: Select to Begin Firmware Upgrade Process



7) **Click Update.** The Update Screen will be displayed and the Firmware Update will start automatically for the selected device on the selected COM Port. The Update Screen Buttons operate as follows:

UPDATE: Can be used to restart a paused update, or to retry a failed update after the error condition has been remedied

LOG FILE: Open log file in a text editor

MAIN MENU: Show Main Screen

EXIT: Exit Program

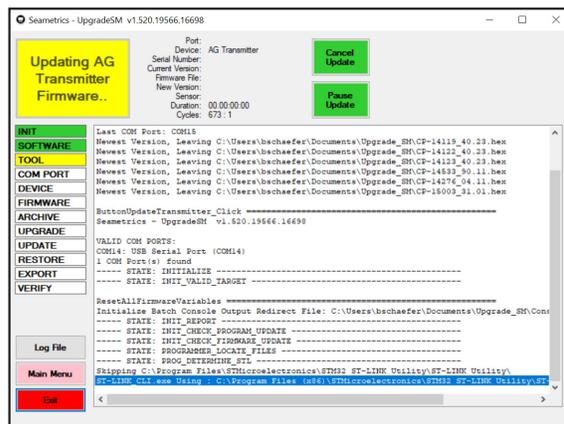
8) The program will take approximately 3.5 minutes to complete. A Success or Failure Message will display in the upper-right corner of the screen. The Update Screen Buttons operate as follows:

BEGIN...: Retry/Update Again

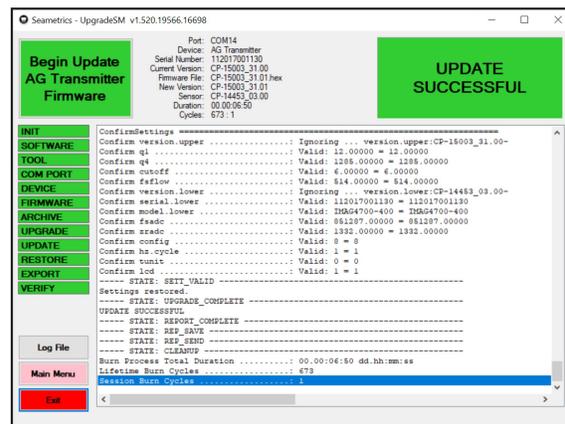
LOG FILE: Show Log

MAIN MENU: Show all COM Ports, Detected Devices, and Device Status

EXIT PROGRAM: Exit Program



Step 7



Step 8

10) If the update failed, check cables and try again.

11) When finished programming, click the red 'Exit' button to close the update program.