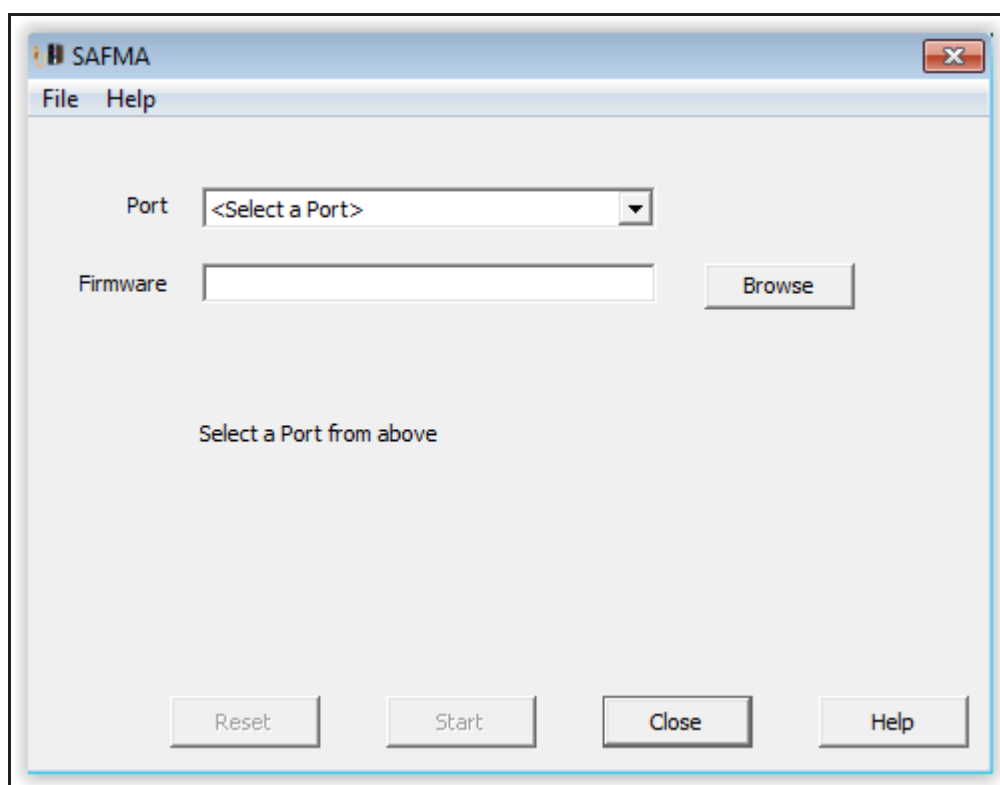# TalkMaster™ FOCUS

StandAlone Firmware Management

Reference Manual

Table of Contents

Getting Started

Welcome

Welcome to the TalkMaster Focus StandAlone Firmware Management Application (SAFMA). SAFMA is designed to update Firmware in an IP7 IP Endpoint via the USB Port. It should only be used when the Firmware Management Console is unable to flash update IP7's over the network.

Release Notes

June 2017

- Modified Phase 1 Serial communications to work with Windows 10 latest updates

February 2012

- Initial Release

Overview

Stand Alone Firmware Management App is a utility used to update Firmware in the IP7 via the USB Port. It should be used in instances where the Firmware Management Console is unable to flash update IP7's over the network (usually due to a failed firmware upgrade).

A PC with a USB A-B cable is required for this procedure.

USB-A Cable End	USB-B Cable End
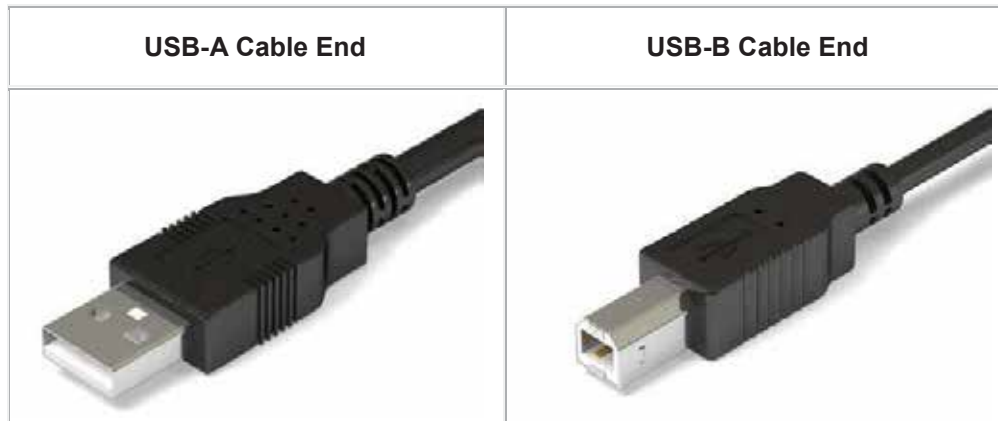
Running SAFMA consists of two phases:

- **Phase 1** - The existing firmware must be erased. Erasing the Firmware *does not* alter the IP7's configuration information

- **Phase 2** - The new firmware is flashed into the IP7 via the USB Cable

The entire process should take less than 1 minute for each IP7

TalkMasterFOCUSStandAloneFirmwareManagementApp

SAFMA ✕

File   Help

Port   <Select a Port> ▼   ☐ Verify FLASH

Firmware   T:\Firmware\intercom.7.1.3.12.samba.bin   Browse

Select a Port, or specify a firmware filename, to continue
Select a Port from above
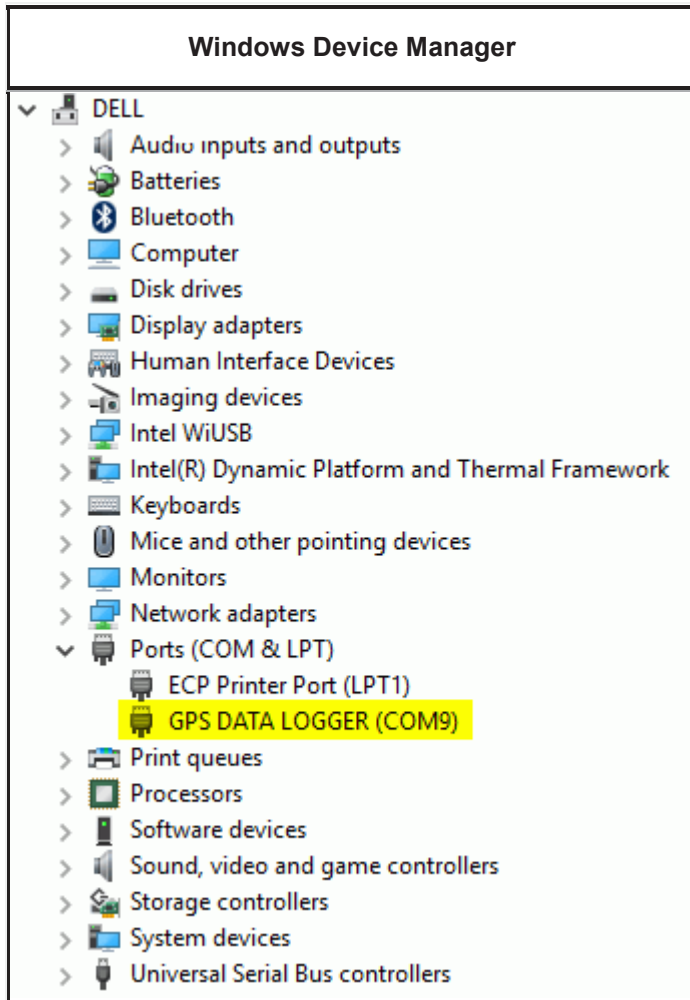
| Reset | Start | Close | Help |
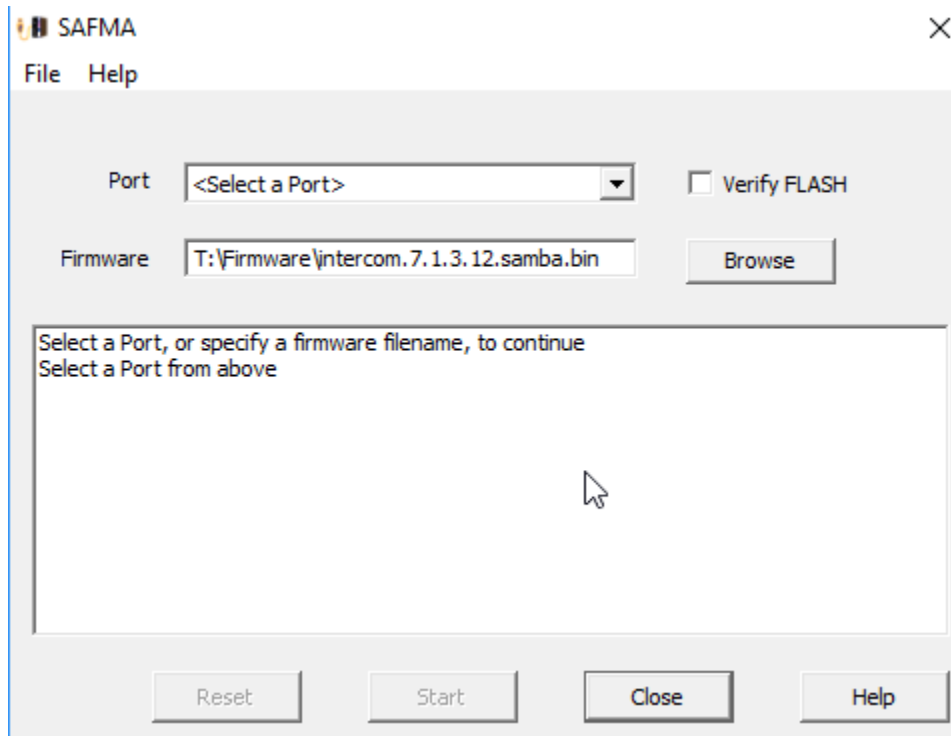
Flash Upgrading

Device Driver Installation

When a USB Device is plugged into a the computer, Windows should automatically load a driver that will work with SAFMA.

- Plug the IP7 into the computer using a USB cable. On Windows 7 and Windows 10, the IP7 will enumerate as a GPS DATA LOGGER during Phase 1

- Once the driver has been installed, open the Windows Device Manager to confirm settings for using Windows Update can be changed to their previous settings

Windows Device Manager

> DELL
> > Audio inputs and outputs
> > Batteries
> > Bluetooth
> > Computer
> > Disk drives
> > Display adapters
> > Human Interface Devices
> > Imaging devices
> > Intel WiUSB
> > Intel(R) Dynamic Platform and Thermal Framework
> > Keyboards
> > Mice and other pointing devices
> > Monitors
> > Network adapters
> ∨ Ports (COM & LPT)
> > ECP Printer Port (LPT1)
> > GPS DATA LOGGER (COM9)
> > Print queues
> > Processors
> > Software devices
> > Sound, video and game controllers
> > Storage controllers
> > System devices
> > Universal Serial Bus controllers

💡 *The **COMx** number that is created will vary based on the devices that are already installed on the computer. The USB Driver needs to be installed each time a different USB-A port on the PC is used, so always try to use the same USB-A port on the PC*
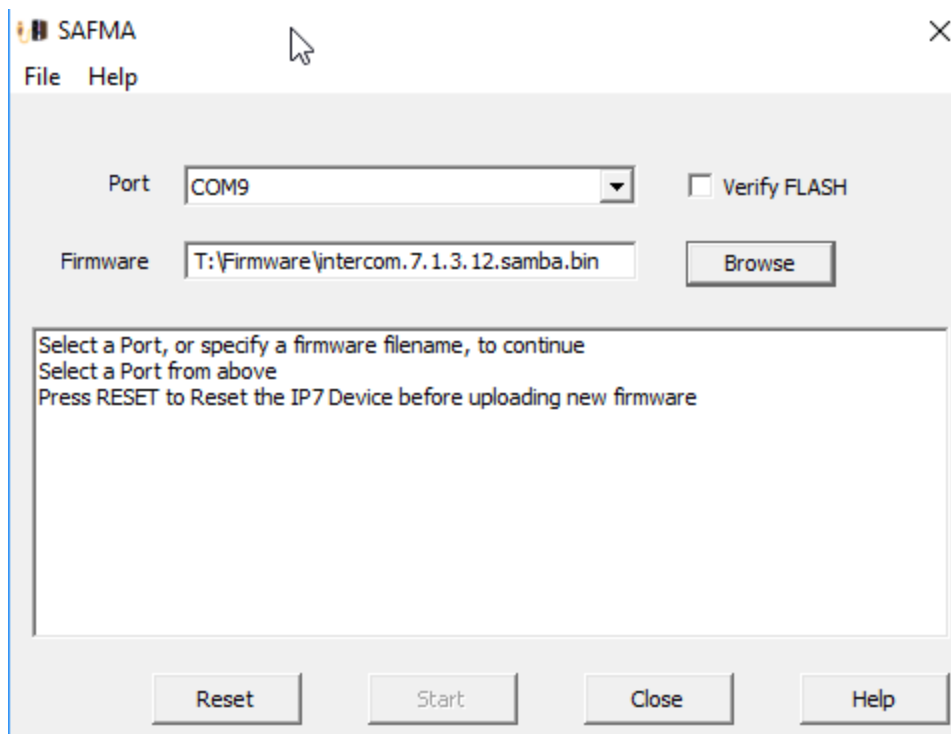
Phase 1 - Reset

In Phase 1, the current firmware is wiped and the IP7 is prepared for Phase 2. This process does not affect the IP7's configuration information.

To begin, download the IP7 firmware from the Digital Acoustics Website under the Support >> Software/Firmware Downloads page. Unzip the contents to a folder on your desktop so it can be easily found.

From the Windows Start menu, open Stand-alone Firmware Management application:

- Unplug the IP7 from its external power or PoE network cable

- Plug a USB cable into one of the USB-A ports on the PC

- Plug the other end of the USB cable into the USB-B port on the IP7. This will power up the IP7 (the IP7-MZC-FD will need to be powered via a external 12VDC power supply). Wait at least 15 seconds before proceeding

- After the PC has recognized the USB device, the **COMx** port should be shown in the **Port** field. If is not, then select it from the drop down dialog

- Press the **Reset** button. The **Reset Complete** message box will be displayed
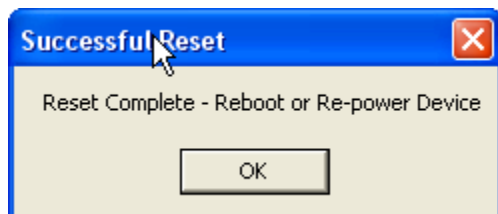
- Remove the USB cable from the USB-B Port (or external power supply) on the IP7 to power down the IP7 and complete the Phase 1 process

- If the Reset does not complete successfully, then refer to the Hardware Rest Pins topic

Phase 2 - Start

In Phase 2, the new Firmware is loaded into the IP7

- Download the latest IP7 Firmware from the Digital Acoustics Website. SAFMA Firmware files are included in the Firmware download and have a **.bin** extension. A firmware file with an extension of .**IP7** cannot be used

- Plug the USB cable into the USB-B port on the IP7. This will power up the IP7 (the IP7-MZC-FD will need to be powered via a external 12VDC power supply)

- The Blue LED on the IP7 should light up. All Red LEDs must be off to continue the process. If any Red LEDs are on, Phase 1 did not complete successfully

- Select the **\USBSerial\COMx** port listed in the **Port** drop down dialog

- Use the **Browse** button to select the previously downloaded **Firmware** file. The firmware name must have an extension of **bin**.
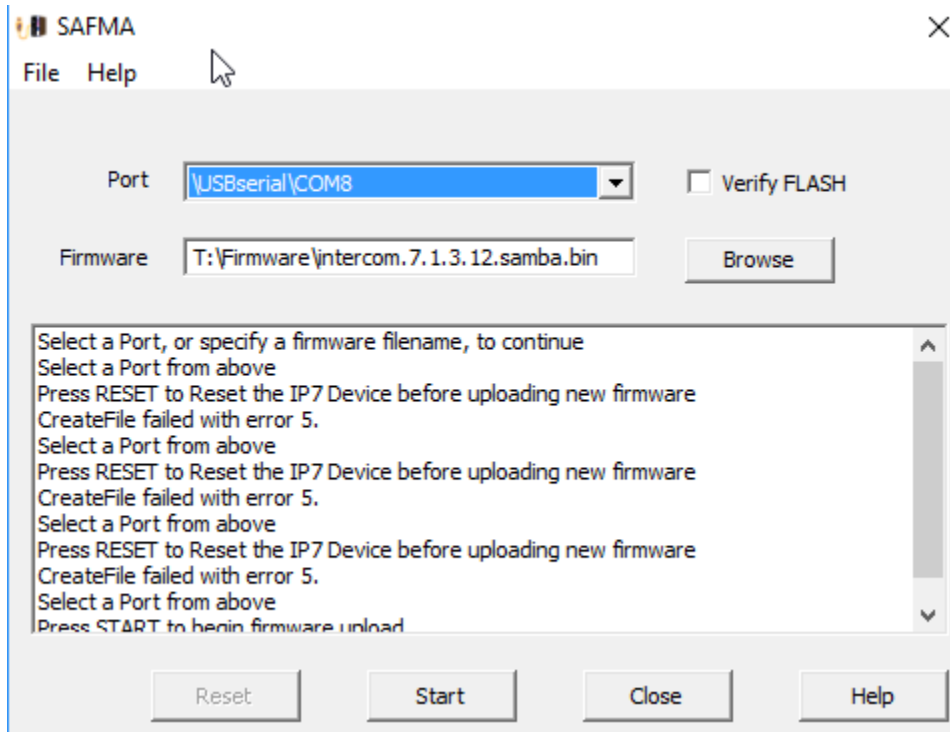
- Press the **Start** button. As the firmware is loaded, the screen will display the progress. The load will complete is less than one minute. Do not repower the IP7 during this time
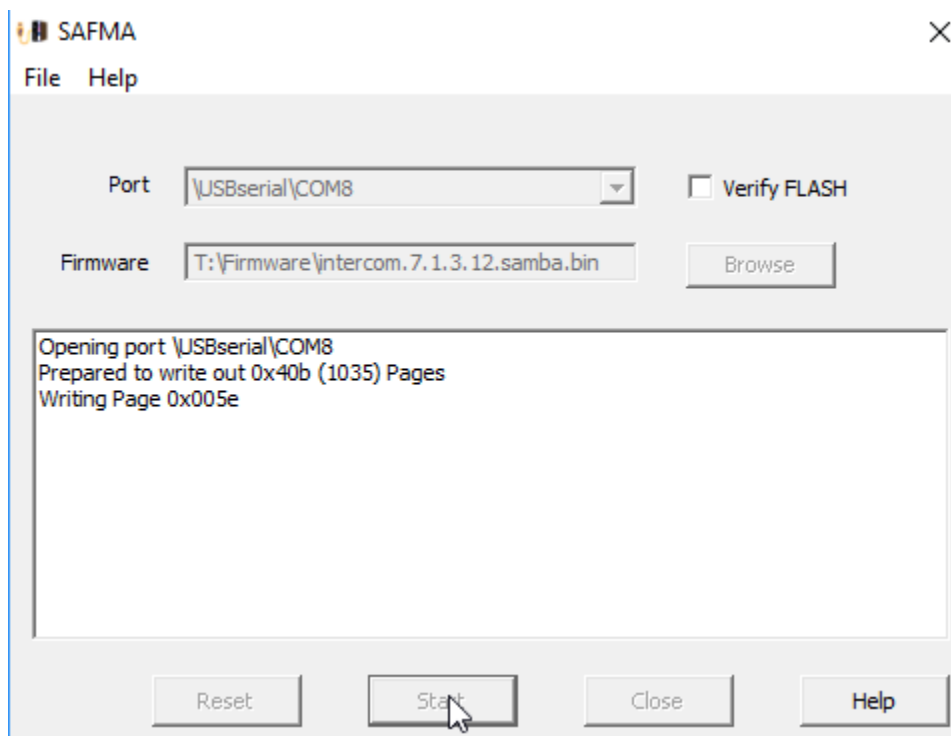
- When the Firmware Update is completed, click the OK button to proceed

- Remove the USB cable from the USB-B Port on the IP7 (or the external power supply) to power down the IP7 and complete Phase 2

- Connect the IP7 back to its normal power supply and network connection. The IP7 is now ready for use

Troubleshooting

Symptom	Resolution
In Phase 1, the Reset button is grayed out	• The wrong COM port has been selected. Use the Windows Device Manager to verify the correct COM port is being selected • Phase 1 has already completed. Proceed

	to Phase 2
Phase 1 Reset fails	• Retry the Phase 1 Reset again • With the USB connected to the IP7 and computer, power the device with external power or PoE power. Pull the USB connector out and insert it back in • If Phase 1 continues to fail, follow the procedure for resetting the Firmware via the Hardware Reset Pins topic

Hardware Reset Pins

In certain circumstances, the Phase 1 Reset may fail and the IP7 may have to be reset via the Hardware Reset Pins:

- An IP7 was powered off while the Firmware was being updated over the network

- Early versions of IP7 Firmware did not support the software reset feature

To reset the IP7 via the Hardware Reset Pins, the cover on the IP7-STx, IP7-SE8, IP7-FD, IP7-FX, IP7-SS20 or IP7-SS40 must be removed

- Remove the four screws (two on the front and two on the back)

- Carefully open the case by pulling up slowly on the side **opposite** the Volume buttons till the top pops off. Take care to prevent damage to the Vol+ and Vol- buttons

- The Hardware Reset pins are located to the right of the Vol+ and Vol- buttons as shown below

- On the IP7-MZC-FD, the reset pins are located behind the Primary Ethernet 10/100 connector
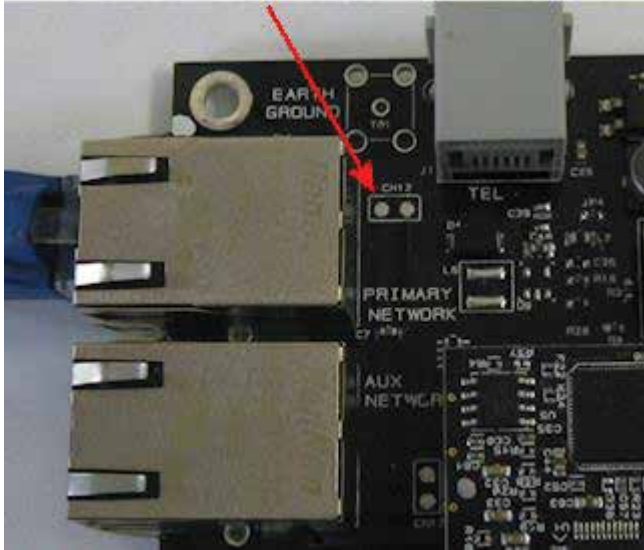
- Power up the IP7 by plugging in a USB cable, external power supply or a PoE network cable

- Bend a piece of wire or a paper clip and jumper the two holes indicated above

- Remove the wire and power cycle the IP7. The only LED that should come on is the blue power LED

- Return to the SAFMA software and run Phase 2

- When re-installing the IP7 cover, align the holes with the blue Vol+ and Vol- buttons and carefully press down on the **opposite** side of the cover to snap it over the back of the case . Take care to prevent damage to the Vol+ and Vol- buttons

Menu Options

File Menu Options

The File menu has the following option:

- **Exit** - exits the SAFMA session

Help Menu Options

The Help Menu has the following options:

- **About** - displays the current software version

Support Information

Contacting Technical Support

For Information on contacting Technical Support, please visit our web site at:

www.digitalacoustics.com

About Us

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