

# Stop- Read First!

## iPort Firmware Programming Instructions

### Introduction:

This tech note outlines how to use a Windows based computer to update firmware on iPort products produced 2009 or later with RS-232.

### What's needed:

To update the firmware the computer being used will need a serial port connection or USB to serial adapter. The COM port assignment must be COM port: 1, 2, 3 or 4.

COM port 5 and higher is not supported by this software.

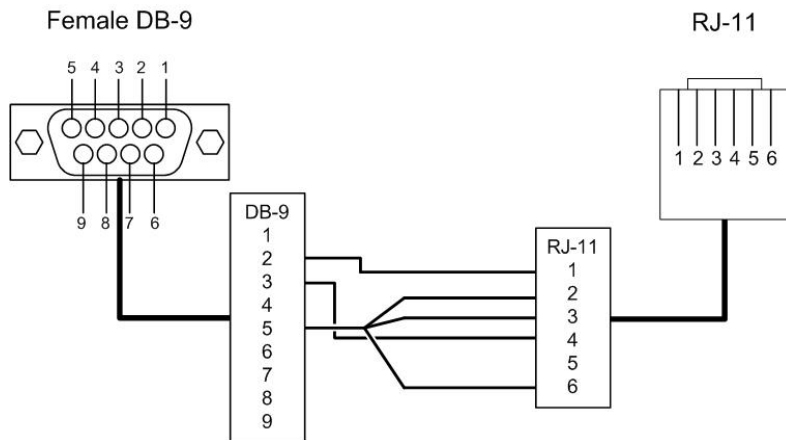
A special programming cable is needed before you can proceed. This cable can be custom made or purchased directly from iPort (PN# 70132). To purchase please have a credit card ready and call (888) 45-iPort / (888) 454-7678.

### Programming Cable:

In contrast to the RS-232 cable included with the iPort, the programming cable as shown below connects pin 6 of the RJ11 to pin 5 of the DB-9. This sets the microcontroller to program mode.

### Example

RJ-11	DB-9	Name
1	2	PC Rx
2	5	GND
3	5	GND
4	3	PC Tx
5	2	PC Rx
6	5	Mode



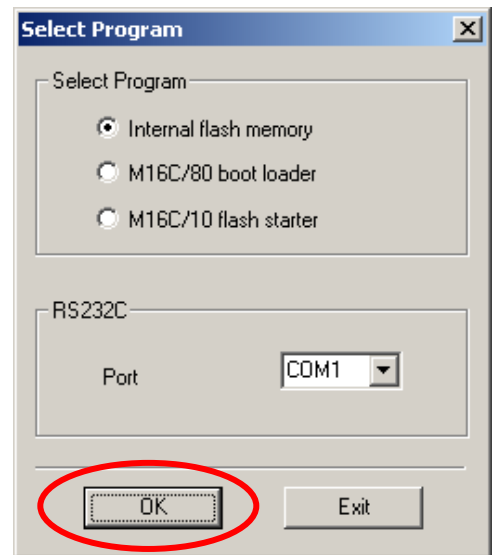
**Please Note:** The supplied RS-232 cable included with the iPort is **NOT** configured to perform firmware updates.

### Step 1

- Go to <http://www.iportmusic.com/support.html>
- Look for the “Firmware Upgrade” section under the iPort product you are updating.
- Download the appropriate files.
- Extract the files and save them in a folder that can be easily found.

### Step 2

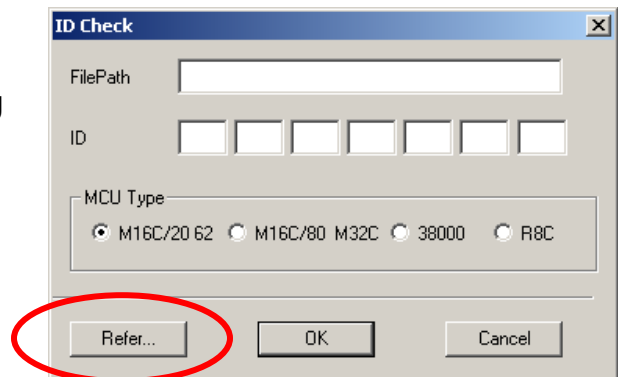
- Disconnect power from the iPort.
- Plug the firmware update cable (page 1) into the RJ-11 connector.
- Re-connect power to the iPort.
- Run “FlashSta.exe” on the computer.  
**Note:** Only have one instance of the program open at a time.
- The “Select Program” window will open. Select the appropriate COM port.
- Select “Internal flash memory”.
- Click “OK”.



### Step 3

- The “ID Check” window will open, verifying communication was successful.
- In the “ID Check” window, browse for the firmware programming file by using the “Refer” button.

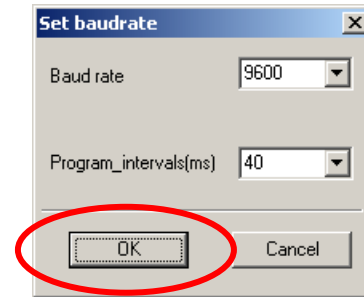
Example: browse for SxMainboard\_V103.mot



**Note:**

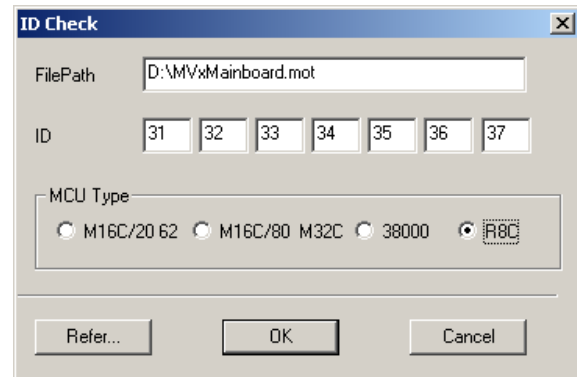
If one of following dialog boxes appears, communication was not established with the chip.

- Cycle the power to the dock and restart the software.
- Verify the cable being used is configured correctly for firmware updates (page 1).
- Verify the correct com port has been selected.
- If the following dialog appears ID files are not available.
- Enter the ID as shown below.



**Step 4**

- In the “ID Check” dialog box, verify that the ID is “31 32 33 34 35 36 37” and that “R8C” is selected.
  - If not, enter the above settings and click “OK”.

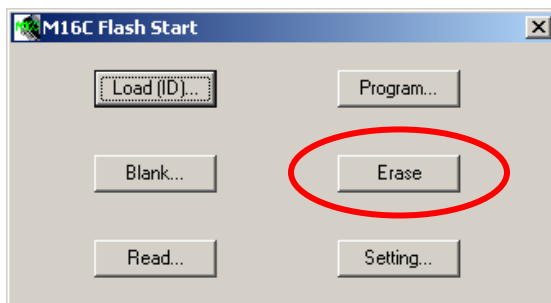


- **Note:**  
If an error occurs stating the ID doesn't match and everything is correct, cycle power to the dock and start over.

If the ID check doesn't work after resetting the power, verify the cable being used is configured correctly for firmware updates (page 1).

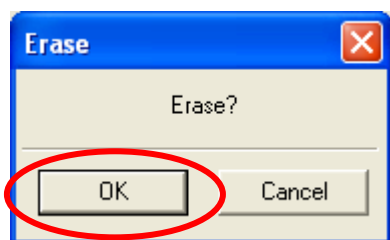
### Step 5

- The “M16C Flash Start” dialog box will open. Click the “Erase” button First.



### Step 6

Click “OK”



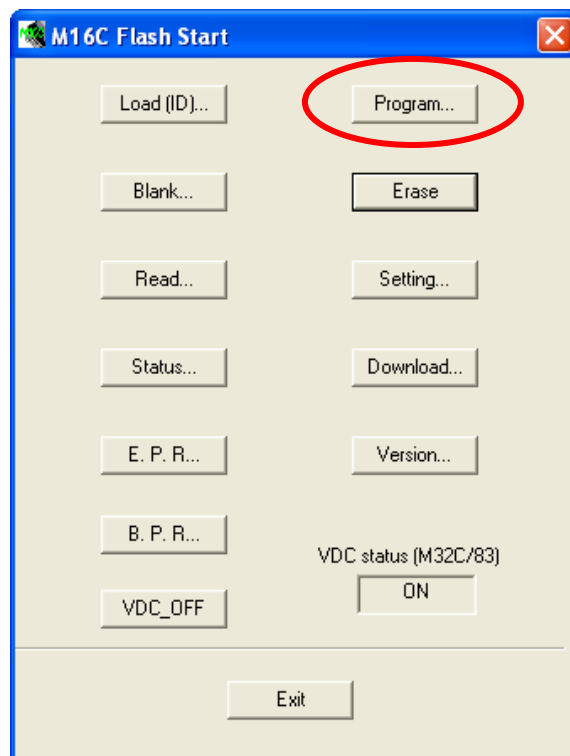
### Step 7

Click “OK”



### Step 8

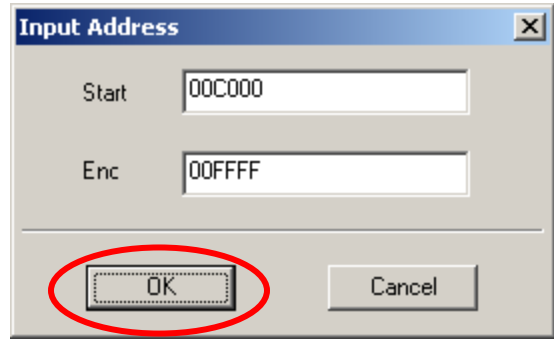
- Click on the “Program” button.



### Step 9

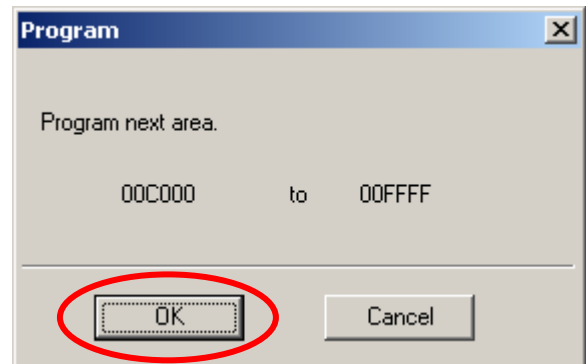
- The “Input Address” dialog will open.
- The Start address will be “00C000”.
- The End address will be “00FFFF”.

This is the default and should not be changed.



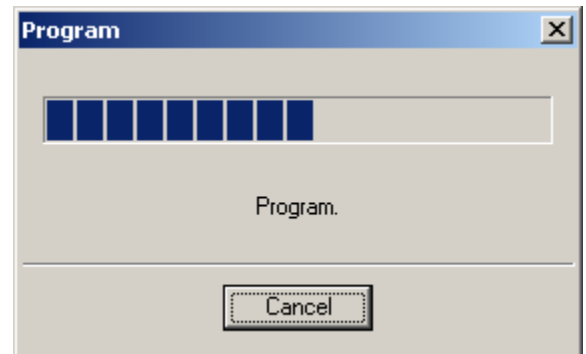
### Step 10

- When the “Program” dialog opens, click “OK”.



### Step 11

- Programming will begin.



### Step 12

- The “M16C Flash Start” dialog should state that programming is successful.
- If programming is successful, press “OK” then exit the FlashSta.exe application.
- Remove the programming cable, cycle power and verify that the board is operational.



**If you need technical assistance please call iPort tech support at  
(888) 45-iPort / (888) 454-7678.**

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