## Programming a TinyFSK with the Arduino IDE

Getting K0SM's software copied over to an Arduino Nano is fairly straight forward, but there are a few important steps to follow. Note that a "genuine" Nano is no longer sold, so you must use a clone; the original chip set used an FT232 FTDI chip, and many clones are sold with that chip. Some, however, have a CH340 chip, and that requires downloading and installing drivers to the Arduino Drivers folder. It is easier just to check the specs and go with an FT232 chip. Nano clones are also sold with and without header pins. I prefer those with the header pins in the package but not soldered to the board. That way you can mount the Nano any way you want.

First, download the Arduino IDE:

## Previous IDE Releases

ARDUINO 1.8.4

Arduino IDE that can be used with any Arduino board, including the Arduino Yún and Arduino DUE. Refer to the Getting Started page for Installation instructions. See the release notes.

Windows Installer Windows ZIP file for non admin install

Mac OS X 10.7 Lion or newer

Linux 32 bits Linux 64 bits Linux ARM

Source

## ARDUINO 1.0.6

Classic Arduino IDE, to be used with any Arduino board, but Arduino Yún and Arduino DUE. Refer to the Getting Started page for Installation instructions. See the release notes.

Windows Installer Windows ZIP file for non admin install

Mac OS X

Linux 32 bits Linux 64 bits

Source

## Arduino 1.6.x, 1.5.x BETA

These packages are no longer supported by the development team.

You have a choice: I suggest using the old version 1.0.6. The newest version does not recognize some Nano clones. So far 1.0.6 has worked with several for me. A blank sketch looks like this:



<u>http://www.frontiernet.net/~aflowers/tinyfsk/</u>. Near the bottom of his posting is the link to the source code: copy the entire code, and paste it into a blank Arduino sketch.

Go to your Control Panel---Device Manager---Ports (COM and LPT)---and watch what port comes up when you plug your Nano USB cable into the computer. Back in the Arduino IDE, under the Tools tab, be sure that port is entered in Ports and Nano is entered in the Board menu.

Now under the Sketch tab click Verify/Compile, and if all is well, the sketch will fly through and verify. A Timer1 error code may indicate that an updated Timer1 needs to be copied and pasted into the Arduino folder:

ganize 🔻 Include	in library   Share with  Burn	New folder			• ==	(
Favorites	Name	Date modified	Туре	Size		
📃 Desktop	drivers	3/22/2018 5:57 AM	File folder			
\rm Downloads	k examples	3/21/2018 8:51 PM	File folder			
📃 Recent Places	🔒 hardware	3/21/2018 8:51 PM	File folder			
	〕 java	3/21/2018 8:48 PM	File folder			
Libraries	퉬 lib	3/21/2018 8:51 PM	File folder			
Documents	퉬 libraries	3/21/2018 8:51 PM	File folder			
J Music	퉲 reference	3/21/2018 8:48 PM	File folder			
🔄 Pictures	📕 tools	3/21/2018 8:48 PM	File folder			
Videos	💿 arduino.exe	9/16/2014 9:46 AM	Application	844 KB		
	🧿 arduino_debug.exe	9/16/2014 9:46 AM	Application	383 KB		
Computer	🚳 cygiconv-2.dll	9/16/2014 9:46 AM	Application extens	947 KB		
🏭 Windows (C:)	Sygwin1.dll	9/16/2014 9:46 AM	Application extens	1,829 KB		
	📋 keywords.txt	3/21/2018 8:50 PM	Text Document	1 KB		
Network	🚳 iibesb0.dll	9/16/2014 9:46 AM	Application extens	43 KB		
	revisions.txt	9/16/2014 9:46 AM	Text Document	39 KB		
	🚳 rxtxSerial.dll	9/16/2014 9:46 AM	Application extens	76 KB		
	TimerOne.cpp	3/21/2018 8:50 PM	CPP File	8 KB		
	TimerOne.h	3/21/2018 8:50 PM	H File	3 KB		
	🗑 uninstall.exe	3/21/2018 8:48 PM	Application	402 KB		

Finally, Click File-----upload-----and the Nano will be a TinyFSK!!

