Adding AVRISP-U to AVRStudio

AVRStudio 4

The installer for AVRISP-U will automatically add a plugin to AVRStudio 4, and the programmer will appear in **AVRStudio Tools Menu** under **Kanda Tools**. Select **AVRISP-U** and the programmer will launch, and load the files and device type.

Please make sure you have **Built** the AVRStudio project successfully before launching programmer.



Atmel Studio 7

AVRISP-U is not automatically added to Atmel Studio 7 but it is quite simple to add it to the Tools menu.

Important:

External Tools.. may be missing from Tools menu in later versions of Atmel Studio 7 (7.0.1645 on). If it is missing, choose **Tools -> Select Profile** and change profile from Standard to Advanced. The External Tools.. choice will now be visible.

- 1) Open Atmel Studio 7 and select Tools Menu > External Tools...
- 2) The External Tools Dialog Box will open, see picture below.

External Tools	? ×
Menu contents:	
AVRISP-U	<u>A</u> dd
	Delete
	Move Up
	Move Do <u>w</u> n
<u>T</u> itle:	AVRISP-U
<u>C</u> ommand:	C:\Program Files\embres\AVRISP-U\AVRISP-
Arguments:	\$(ProjectDir)\$(ProjectFileName)
Initial directory:	\$(ProjectDir)
🔲 Use <u>O</u> utput window	Prompt for arguments
Treat output as Unic	tode 🛛 🗖 Close on <u>e</u> xit
	OK Cancel Apply

3) Click on Add Button

4) Give the programmer a New Title, either AVRISP-U or your own name

5) In the Command section, use the browse button (...) to add the path to AVRISP-U

The default path is different for STK200 kits and AVRISP-U software

- STK200 Kits : c:\Program Files\Kanda AVR\avrisp-u\avrisp-u.exe
- AVRISP-U Software : c:program Files\embres\AVRISP-U\avrisp-u.exe

If you have changed from default install folder, please select your install path here

- 5) In Arguments section use Arrow Button to select Project Directory, followed by Project File Name. They should appear as \$(ProjectDir)\$(ProjectFileName) – note that there are no spaces in this argument.
- 6) Initial Directory can be set to Project Directory \$(ProjectDir), but this is not important.
- 7) Click **OK button**

AVRISP-U is now installed, and will appear in Tools menu, immediately above External Tools.

Running AVRISP-U

Build your project first and click on AVRISP-U to launch it. It will open with the device set to your Project's device and load the Hex file.

Unless you have an external power supply you will get a No Voltage Detected message, the first time you run it.

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Click on the **Setup** button at top right of screen to open Setup screen.



Change **Power Target - 5V** from Disabled to Enabled and click OK. The programmer should now detect your target AVR.

Next we need to setup the auto Program Options. Go to **Device menu > Auto-Program Options** and check the operations to be carried out, like this.



- Change Programmer ISP Speed if your AVR has 1MHz Internal Clock (Default). Medium is a safe choice
- Reload files will make sure the output Hex file is reloaded if you change the code in Studio
- Erase will erase the AVR, which must be done before it can be re-programmed
- Program and Verify Flash will load your code and check it has programmed ok

• Run will release the AVR from ISP mode

Now press **F5 Key** or go to **Device menu > Auto-Program** to program the target. The LEDs should start flashing.

All these settings will be remembered, so the next time you call the programmer from Studio, you should just need to press F5.

Important

If you change project, close down AVRISP-U software and re-open it when new project is loaded as it will not update to new project if it is already open.