

Dear Customer

Thank you for purchasing an 'ISPjuno MK2 AVR –  
Portable Production ISP Programming System supporting  
Microchip (Atmel) AVR microcontrollers'.

There are 2x different variants of this programmer kit – see table  
below ...

Ordering information...

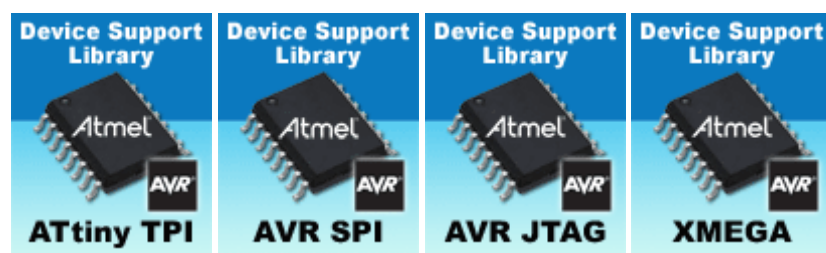
#	Programmer Order code	Device Libraries included	TIM* Modules included
1	ISPjunoMK2- AVRLIB1-SYS	<u>All AVR Device Libraries</u> are pre- enabled as standard	AVR-TIM-01 AVR-TIM-04 AVR-TIM-05
2	ISPjunoMK2- AVRLIB1-SYS	<u>Only 1x AVR Device Library</u> is included as standard. Customer must email Equinox to request which Device Library to enable.	AVR-TIM-04 AVR-TIM-05

\*TIM = Target Interface Module

## Device Support Libraries – included with this programming system

The ISPjuno MK2 programmer is capable of programming the following Microchip (Atmel) AVR  
microcontroller families / programming interfaces....

AVR SPI, AVR JTAG, AVR XMEGA PDI, AVR ATtiny TPI, AVR UPDI (not released yet)



The 'Device Support Libraries' which are pre-enabled in your programmer depends on which 'Programmer  
variant' you have ordered – see 'Ordering information' above.

## How to request your 1x Device Support Library

If you have purchased the '1x AVR Device Library' variant of the programmer, please select which 'Device  
Library' you would like to enable – see list above – and then email your 'Selected Device Library' and  
'Programmer Serial Number' to [support@equinox-tech.com](mailto:support@equinox-tech.com).






## Programmer – System / kit contents

The **ISPjuno MK2** programmer comes complete with an USB power cable, external mains power supply, EQTools PC Driver Software and ISP ribbon cables. This version also comes complete with an **“AVR Universal – Target Interface Module”**.

Please see the full contents list detailed below.

	Hardware
	<ul style="list-style-type: none"> <li>• ISPjuno MK2 -AVR Programmer</li> <li>• 9V Power Supply- Universal adaptor Input: 230V AC, Output: 9V DC reg. @1.33A Fitted with 2.1mm centre +ve jack connector</li> <li>• 1 x Set of mains plug adaptors - UK, USA, European, Asia</li> <li>• Various Target Interface Modules (TIMs)</li> </ul>
	Cables
	<ul style="list-style-type: none"> <li>• USB connection cable (mini-USB to USB-A)</li> <li>• USB DC Power Cable (2.1mm jack plug to USB-A connector)</li> <li>• 10-way IDC ISP cable</li> <li>• 6-way IDC ISP cable</li> </ul>
	Miscellaneous
	<ul style="list-style-type: none"> <li>• 4 x Rubber feet</li> </ul>
	Software
	<ul style="list-style-type: none"> <li>• <b>EQTools Version 5</b> (Project Management Utility for Equinox Production ISP Programmers)*</li> <li>• <b>Equinox USB Driver for Equinox programmers</b></li> </ul>
	Documentation
	<ul style="list-style-type: none"> <li>• Programmer - User Guide*</li> <li>• AVR – Universal Target Interface Module – User Guide*</li> </ul>

\* All manuals and application notes are downloadable in pdf format from the Equinox website.



## Target Interface Modules (TIM) – included with this programmer

The ISPjuno MK2 programmer kit includes various TIM Modules depending on the kit order code.

The table below gives an overview of the 'ISP Connectors' on each TIM Module...

TIM Module	Illustration	AVR SPI 6-way IDC 0.1"	AVR SPI 10-way IDC 0.1"	AVR JTAG 10-way IDC 0.1"	AVR PDI 6-way IDC 0.1"	AVR UPDI 6-way IDC 0.1"	AVR TPI 6-way IDC 0.1"
AVR-TIM-01		YES	YES	YES	YES	YES	YES
AVR-TIM-04-EO		YES	-	YES	-	-	-
AVR-TIM-05-EO		YES	YES	-	-	-	-

## USB Power cable

The programmer is supplied with 'USB +9V DC Power Cable' which is capable of generating a +9V supply for the programmer from either a PC or an 'External USB Power Pack'. Part code: CAB-USB-9V-2-1

<p>2.0m</p> <p>2.1mm Jack Socket</p> <p>USB Type A Connector</p>	<p><b>USB Programmer Power Cable</b></p> <p>This cable enables the ISPjuno programmer to be powered from either a PC USB Port or a 'USB Battery Pack'.</p>
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## Software / Drivers / Documentation download

The **ISPjuno MK2** programmer – software, USB drivers and documentation can be downloaded from the dedicated “**ISPjuno MK2 programmer - Download Page**” on the Equinox website:

### Software / Documentation – Download page

<http://www.equinox-tech.com/products/details.asp?ID=2101&displ=tl>

The list of downloads for this programmer are shown below...

#### 1. Programmer Configuration Software - installer

Software name	Further information
EQTools version 5	Programmer Configuration Software Includes EQTools Version 5, EDS – Development Mode, Project Builder, Project Manager and Project Upload Wizard software components.

#### 2. Programmer – USB Driver installer

Software name	Further information
Equinox USB Driver	USB Driver installer for Equinox programmers

#### 3. Main Documentation

Type	Further information
Manual	ISPJuno MK2 programmer - User Manual
AN126	USB Driver – Installation instructions – Application Note
Manual	Target Interface Modules (TIM) - User Manual
AN173	Buffered ISP Cable Adaptor Modules for Equinox programmers

#### 4. Device algorithm – application notes

Application Note	Device Family	Programming Interface
AN101	Atmel - AVR FLASH microcontrollers via the SPI Interface	SPI
AN105	Atmel - AVR FLASH microcontrollers via the JTAG Interface	JTAG
AN127	Atmel – XMEGA AVR – FLASH microcontrollers via the PDI interface	PDI
AN132	Atmel – ATtiny AVR microcontrollers via the TPI Interface	ATtiny TPI

## Technical Support

Please do not hesitate to contact our Support Department with any questions about this product by emailing [support@equinox-tech.com](mailto:support@equinox-tech.com) or phoning +44 (0)1942 841975.