



### HPR3V3



### HPR1V2



### HPRAVR

#### **Introduction:**

HPR3V3 is an optional accessory to the PRESTO programmer for programming of stand-alone 3.3 V devices (as for example DataFlash Memories). The PRESTO programmer can supply a programmed device with 5 V. However, some devices require 3.3 V supply voltage and 3.3 V logic levels on their pins. In such case, the HPR3V3 level shifter or an external 3.3 V power supply have to be used.

HPR1V2 is an optional accessory to the PRESTO programmer for programming of the devices with supply voltage and logical levels between 1.2 and 3.3 V (as for example Xilinx CoolRunner-II). The PRESTO programmer can program devices with signal levels between 3 and 5 V  $\pm 10\%$ , but sometimes it is necessary to program a device with lower voltage levels. In such case, the HPR1V2 level shifter must be used.

HPR1V2 must be used with external supply voltage from application, it cannot be supplied from the programmer.

HPRAVR is optional accessory to the PRESTO programmer for programming of the AVR microcontrollers in an application with standard ISP10PIN connector. This connector is usually used on the boards with the AVR processors like STK500.

#### **Item includes:**

1 Converter.

User manual in English.