

1 Introduction

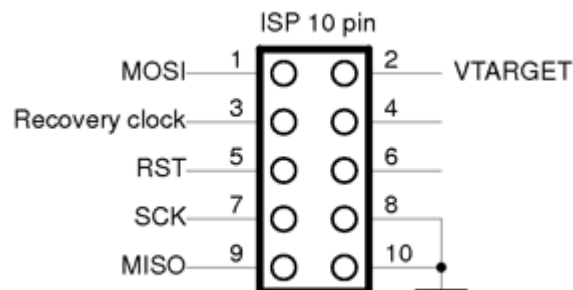
The SD 30/40xx analog door access control device's software can be updated by using the USB ISP ASP Programmer For 51 ATMEL AVR. (See image below)



Note: The additional information regarding purchasing the USB ISP ASP Programmer For 51 ATMEL AVR optionally can be found follow by link: <http://www.ebay.com/itm/USB-ISP-USBISP-USBASP-ASP-Programmer-for-51-ATMEL-AVR-WIN7-64-Random-Color-/181378179138?hash=item2a3afb6042:g:U94AAOSwQItT6Dx->

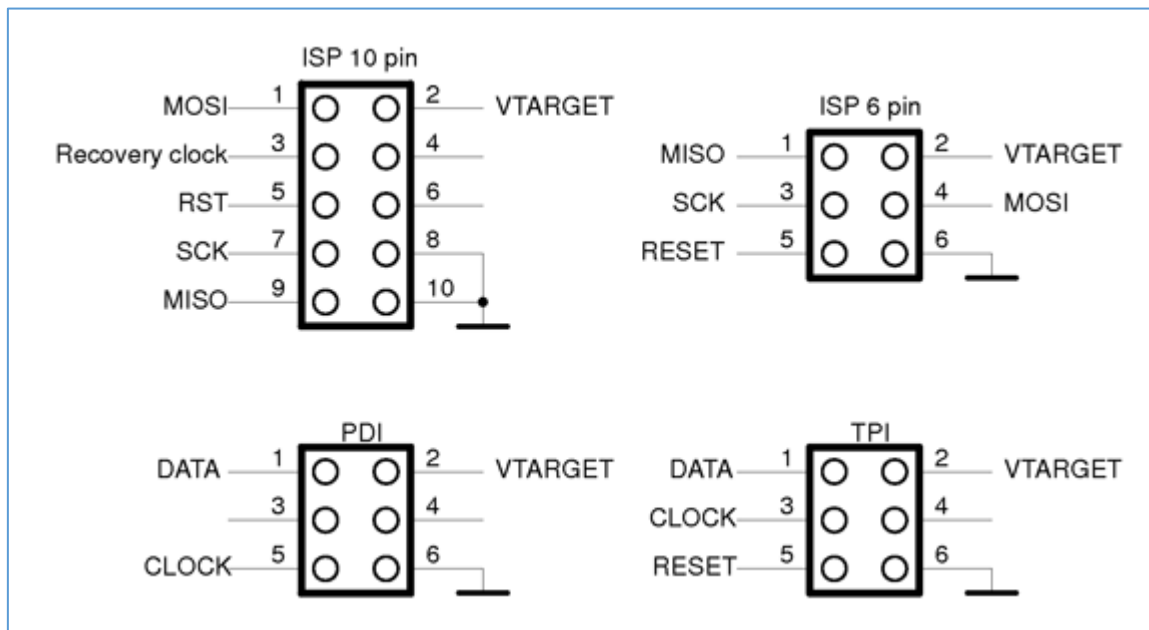
2 USB ISP ASP Programmer's Cable

1. USB ISP ASP Programmer For 51 ATMEL AVR usually supplied with the flat cable and ISP-10 pin connector





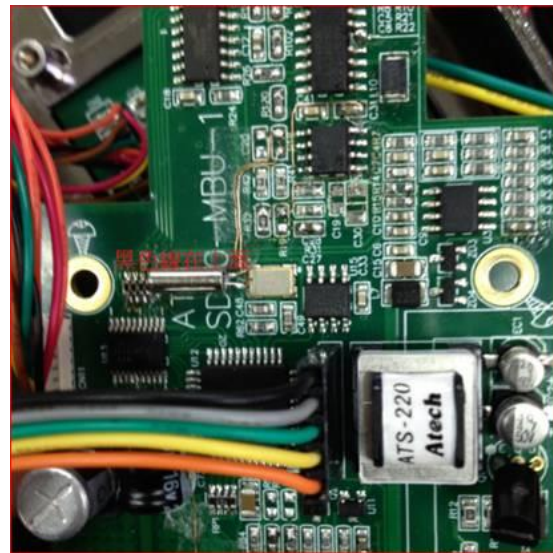
2. Note: Optionally the USB ISP ASP programmer can be supplied with the different flat cable connector:



3. The SD 30/40 xx PCB module includes the 6-pins software updating connector (See picture below)



SD-40 PCB



SD-30 PCB

4. The SD 30/40 PCB software updating connector pin-out is following:

Black= GND (**Draw attention that The Black pin mandatory shall be the first pin connected – see pictures above !**)

Gray= SCK

Green= MISO

Yellow= MOSI

Orange= RES-ISP

5. In case if programmer purchased without the PCB – USB-ISP connection cable, so cable can be made by customer follow by pin-outs diagrams shown below. Required to prepare the connection adapter to connect the USB ISP ASP Programmer cable and SD 30/40 PCB

The Connection adapter shall correspond to following cable ends pin-out


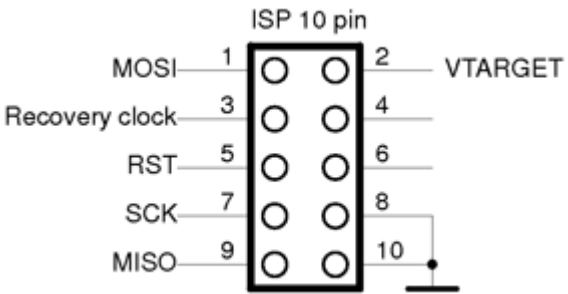
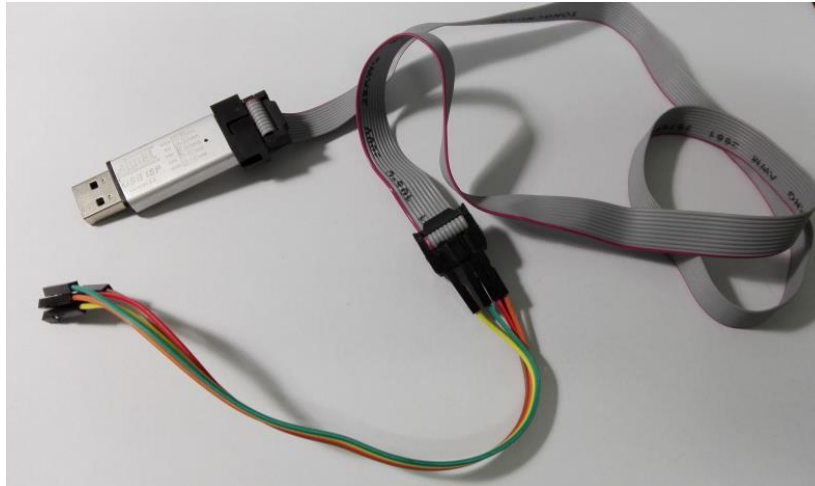
| <p>SD-30-40 PCB side:</p>  | <p>ISP-10 pin USB Flat Cable Side</p>  |
|--|---|
| <p>Black= GND</p> | <p>8 or 10; 10 -preferred - GND</p> |
| <p>Gray= SCK</p> | <p>7 - SCK</p> |
| <p>Green= MISO</p> | <p>9 - MISO</p> |
| <p>Yellow= MOSI</p> | <p>1 - MOSI</p> |
| <p>Orange= RES-ISP</p> | <p>5 - RST</p> |

Table 1 The USB ISP ASP Programmer cable adapter

6. Finally, as example, the programmer cable shall look as shown on the picture below



3 Programmer's connection to PCB

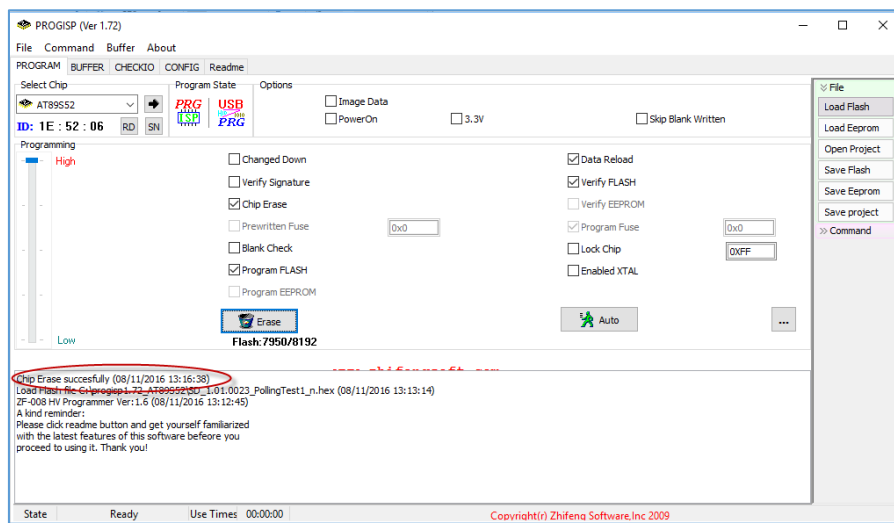
1. Take out the short pin jumper, when connect programming cable as shown on picture below:



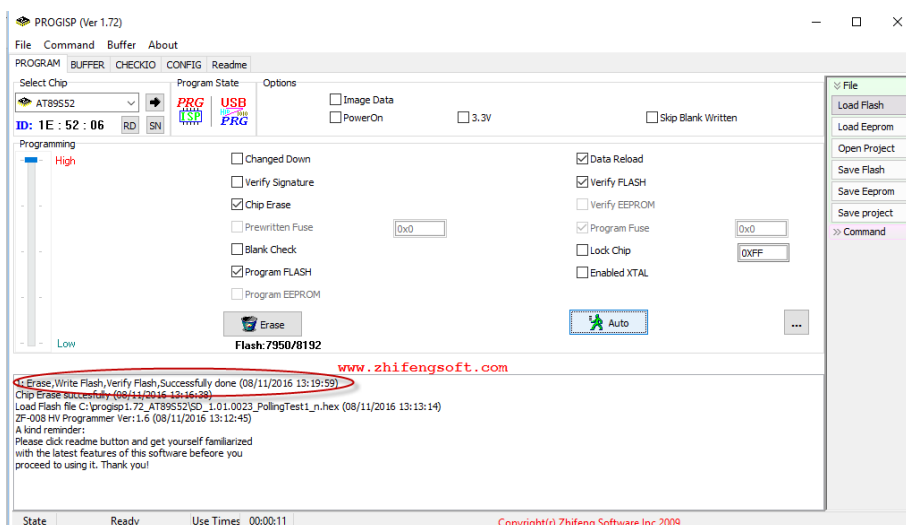
2. Connect the USB ISP ASP Programmer cable to SD-30/40xx PCB follow by pin-out's listed in Table 1
3. **Note: Don't forget to return the short pin jumper, when software update procedure will be done.**

4 SD-30/40 Software update procedure with PROGISP software

1. Download 'ProgISP 1.72' programming software follow by link:
https://www.dropbox.com/sh/avpfyonqd8qv1xz/AACI3H7y9oS_UiGgFjogGxvOa?dl=0
2. The programmer software doesn't require installation and can be launched just by double click on file 'progisp.exe'
3. The software updating procedure of PROGISP programmer for SD30/40 is follow:
 1. Un-power the unit
 2. Select Chip (CPU) for **AT89S52**
 3. Click 'Load Flash' button to load the SD 30/40 software file by select '**SD_1.xx.00xx_.hex**' file
 4. Power the unit with power adapter.
 5. **Click 'Erase'** button to erase the chip, the appropriate message shall be shown in status region



6. **Click 'Auto' button** - programming shall be started and finished with appropriate message



7. Return the short pin jumper when finished
 Note: Repeat the 'Auto' button programming procedure if failed.

