How to Download Firmware from #3 808 Key Camera

This guide will show you how to retrieve the firmware off a #3 variant 808 Keychain camera.

Items you will need

SPCA1528 Webcam driver (XP)
USB cable
ISP program
#3 808 Keychain camera

Software Setup

1) Webcam driver

Install the SPCA1528 webcam driver. This is so you know if your computer detects the camera when you put it in set-up mode. Once the webcam driver is installed, connect one end of the USB cable to a spare USB socket on your computer. Press and hold the mode button on your camera (see the camera user manual for the mode button), with one hand then with the other, connect the the other end of the USB cable to the camera (the camera's LED will now come on), making sure you are still pressing the mode button. If everything has gone correctly, you will notice your computer detect new hardware and begin to install the device drivers for the camera. At this point you can stop pressing the mode button.

2) In System Programming Tool (ISP)

Unzip the Sunplus Tools package to a suitable location on your hard-drive. The program is a standalone file so there nothing to actually install.

Now you are ready to being the process of downloading the firmware files off your camera.

First, double click the ISP program icon, this will now start the program as shown in Fig.1

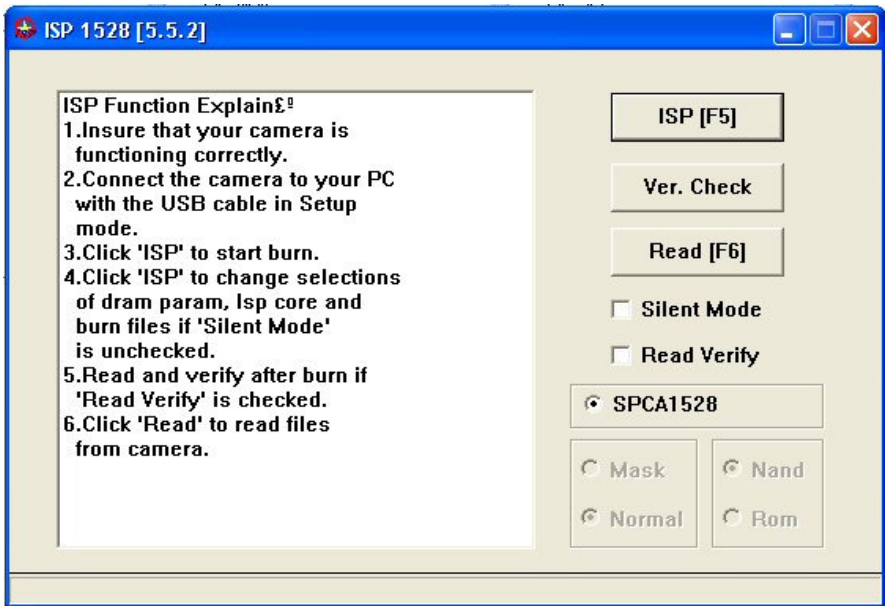

Fig.1

Next you need to make sure the ISP program can see the camera. To do this you must put the camera in to set-up mode. Plug your micro SD-card into your camera, press and hold the mode button, keeping the mode button firmly pressed down, plug the other end of the USB cable in to camera. After approx. 20 seconds you can release the mode button. On the ISP software, click on the 'Ver. Check' button. If the ISP software can see the camera, the results can be seen in Fig.2

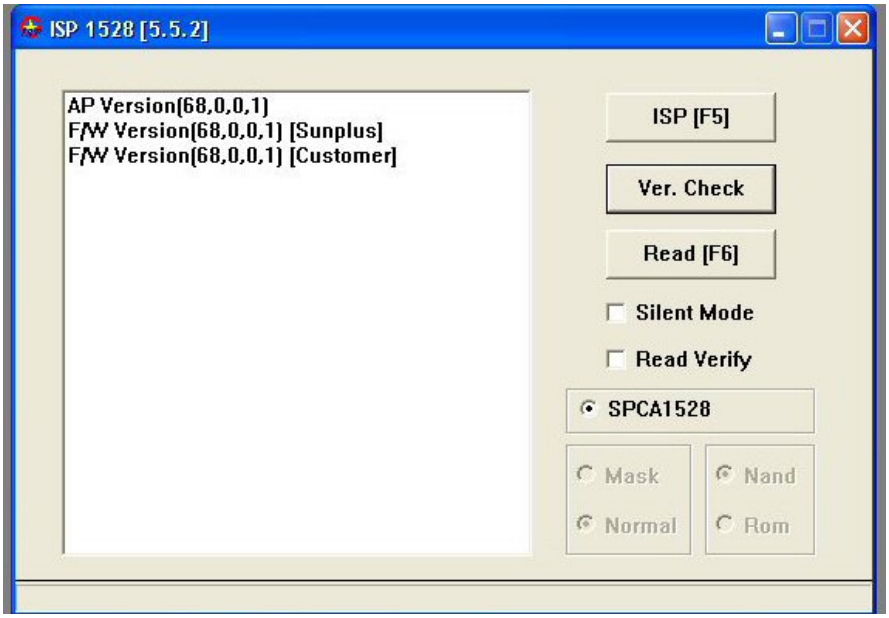

Fig.2

If the program fails to see the camera, it will display the following (Fig.3)

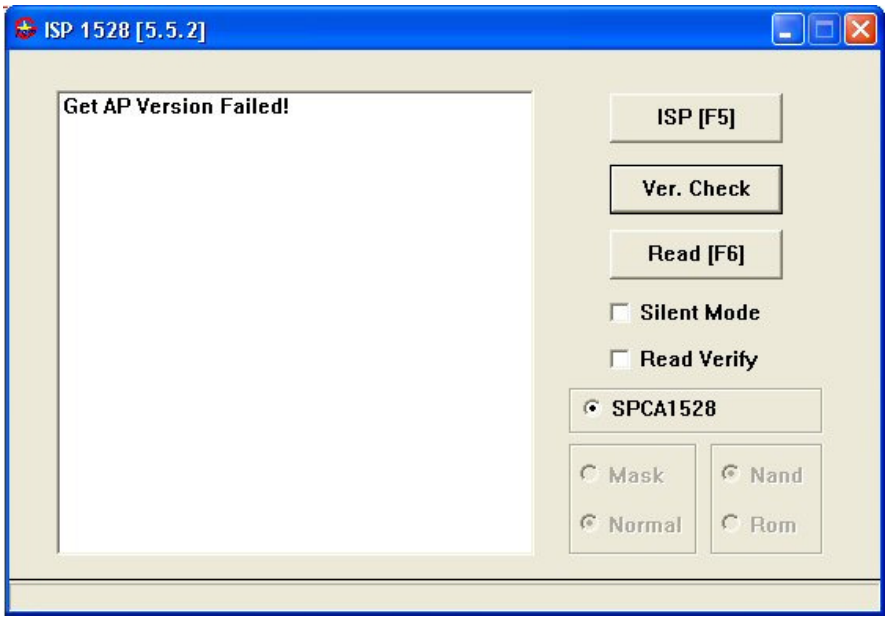

Fig.3

When this happens, you will have to repeat the set-up mode procedure again. If your camera can be seen by the ISP program, you are now ready to download the firmware files off the camera. To do this, press the 'Read' button. The program will now start to download the firmware off the camera. During the download, it will ask you where you would like the firmware files to be saved to, the default location is the same directory as where you unzipped the Sunplus Tools package. Fig.4 displays this process in action.

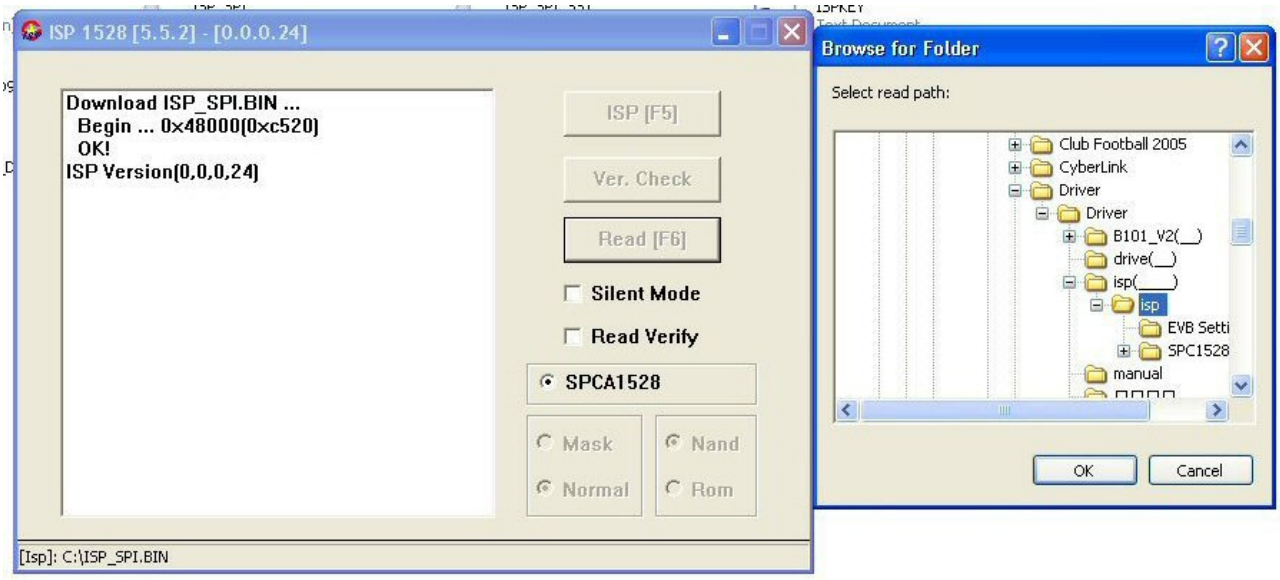

Fig.4

Once you have selected the location where you wish the firmware files to be saved to, the download will continue. Once it has finished, the program will display the following as shown in Fig.5

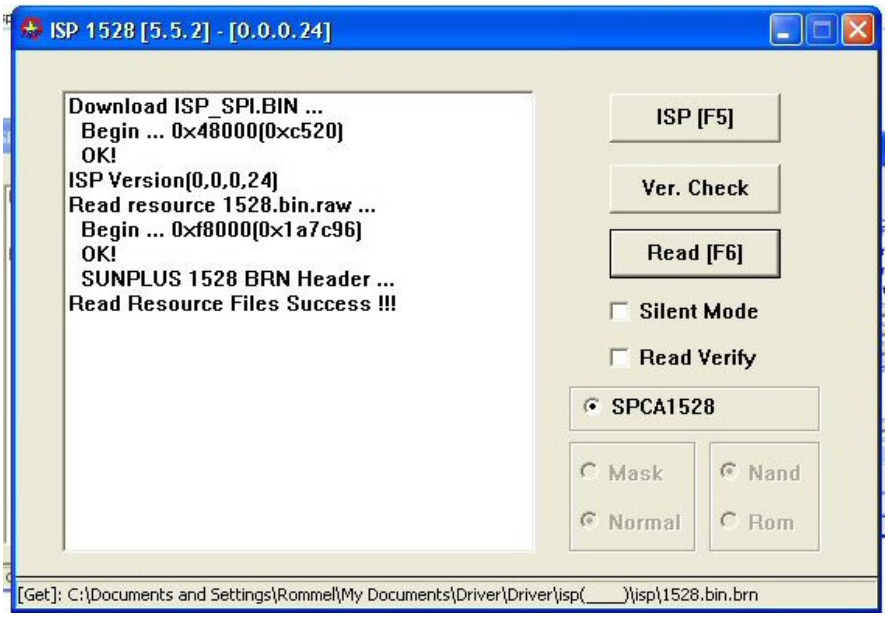

Fig.5

The firmware files have now been successfully downloaded off the camera. At this point you can remove the USB cable from the camera. If you are unable to power off the camera in the usual manner, just reset it by pressing the reset button. Now go-to the location where you saved the camera's firmware files. You will notice a few files, these are listed below:-

1528.bin.raw
1528.bin.brn
Res_0x100
A (directory containing numerous Res_0x files)
B (directory containing 2 Res_0x files)

The names of these Res_0x files are described in the table below

List of files in Folder A

Res_0x0.res = Adf.bin
Res_0x1.res = AVIHeader.bin
Res_0x2.res = Exposure.bin
Res_0x3.res = AVIHeader_PCM.bin
Res_0x4.res = AwbCtt.bin
Res_0x5.res = BadPixView.bin
Res_0x6.res = BadPixCap.bin
Res_0x7.res = LensLut.bin
Res_0x8.res = Gamma.bin
Res_0x9.res = CdspPara.bin
Res_0xa.res = english.sfn
Res_0xb.res = VideoHeader.bin
Res_0xc.res = UsbStr.txt
Res_0xd.res = Open.jpg
Res_0xe.res = Open_1.wav
Res_0xf.res = Menu.jpg
Res_0x10.res = Shutter.wav
Res_0x11.res = Open_2.wav
Res_0x12.res = Open_3.wav
Res_0x13.res = Beep.wav
Res_0x14.res = Pwrctrl.bin
Res_0x15.res = AUDIOBG1.jpg
Res_0x16.res = Usb.jpg
Res_0x17.res = BG.jpg
Res_0x18.res = Close_1.wav
Res_0x19.res = stamp.yuv
Res_0x1a.res = icon.sfn
Res_0x1b.res = chinese_s.sfn
Res_0x1c.res = chinese_s_1.sfn
Res_0x1d.res = chinese_t.sfn
Res_0x1e.res = chinese_t_1.sfn
Res_0x1f.res = Frame_A.jpg
Res_0x20.res = Frame_B.jpg
Res_0x21.res = Frame_C.jpg
Res_0x22.res = Frame_D.jpg
Res_0x23.res = ds_6432.yuv
Res_0x24.res = ds_4824.yuv
Res_0x25.res = ds_3216.yuv
Res_0x26.res = ds_2412.yuv
Res_0x27.res = ds_2010.yuv
Res_0x28.res = ds_168.yuv
Res_0x29.res = ds_106.yuv
Res_0x2a.res = pblock.yuv
Res_0x2b.res = pbmemo.yuv
Res_0x2c.res = pbvideo.yuv
Res_0x2d.res = photoframe.yuv
Res_0x2e.res = cdsphc.bin
Res_0x2f.res = fileerr.yuv
Res_0x30.res = criteria.dat

Res_0x31.res = ob.dat
Res_0x32.res = awb.dat
Res_0x33.res = iq.dat
Res_0x34.res = speTableHour.dat
Res_0x35.res = speTableWavy.dat
Res_0x36.res = speTableBubble.dat
Res_0x37.res = ob_cal.dat
Res_0x38.res = string_en.res
Res_0x39.res = string_cs.res
Res_0x3a.res = string_ct.res
Res_0x3b.res = LensLut1.bin
Res_0x3c.res = LensLut2.bin
Res_0x3d.res = stamp320x24.yuv
Res_0x3e.res = stamp640x32.yuv
Res_0x3f.res = sun192x24.yuv
Res_0x40.res = moon192x24.yuv
Res_0x41.res = sun288x32.yuv
Res_0x42.res = moon288x32.yuv
Res_0x43.res = cwb.bin
Res_0x44.res = 0320Q850.hdr
Res_0x45.res = BadPixCap1.bin

List of files in Folder B
Res_0x80.res = Udf.bin
Res_0x81.res = Open.jpg

File in root directory of the ISP program
Res_0x100.res = Fw.bin

Hereby ends the tutorial on how to download the firmware of a #3 variant 808 keychain camera.

Written by
Roger M.