

## SA4550 Primary Attitude Display Instructions for update to software version 1.07

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Date: March 14, 2011

Regarding: Software update to version 1.07

### Introduction

This section describes the procedure to update an SA4550 to software version 1.07.

### Hardware Requirements

PC with Windows Vista, XP or 2000 with available USB port

USB to mini-USB interface cable, Sandel part number 88114 or equivalent

### Upload Instructions

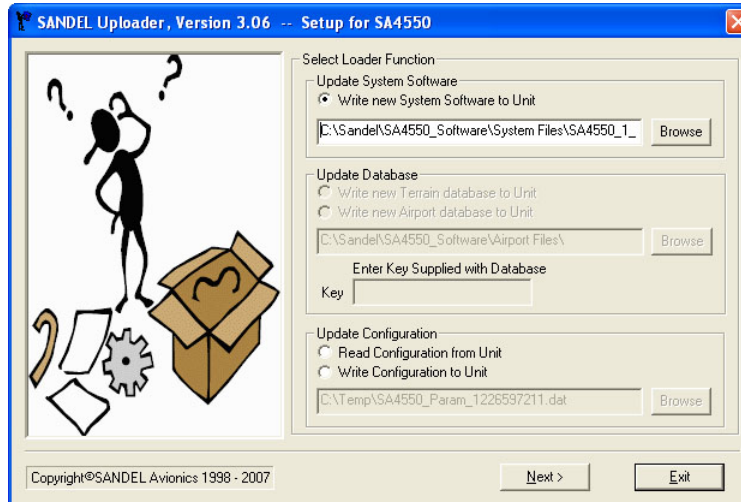
1. With power removed from the SA4550, connect the SA4550 to the PC via the USB cable.
2. Power up the SA4550 in maintenance mode. This is done by holding down the M and ATT TEST keys on the SA4550 while applying power. Continue to hold down the two keys until the display is visible.
3. If a message 'Found New Hardware' appears, follow the instructions for loading the Sandel USB driver in Appendix A of these instructions.
4. Record the following settings for reference purposes:

Maintenance Page 2: PTCH CAL \_\_\_\_\_  
BALL CAL \_\_\_\_\_  
FD STYLE \_\_\_\_\_

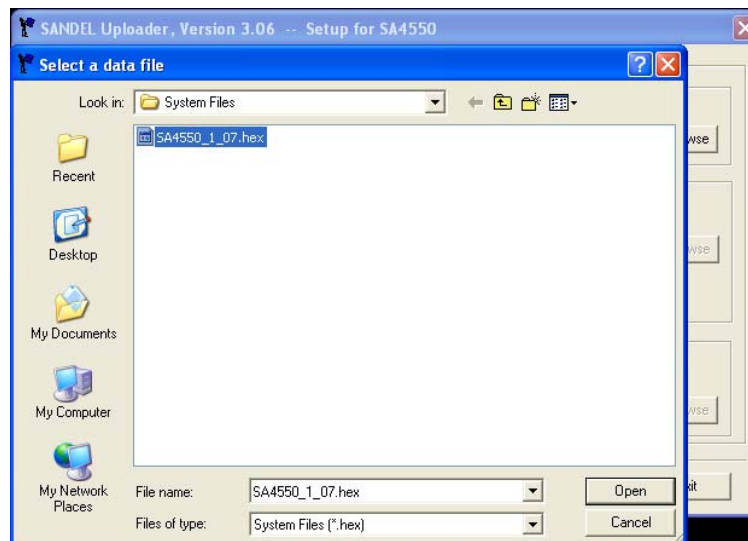
Maintenance Page 7: CAL \_\_\_\_\_  
RA TST \_\_\_\_\_  
BUTTON \_\_\_\_\_

5. Open Windows Explorer and locate the **Sandel\_Uploader\_3.06.exe** file. The default location will be in 'C:\Sandel\SA4550\_Software. Double click on the Sandel\_Uploader\_3.06.exe file to start.

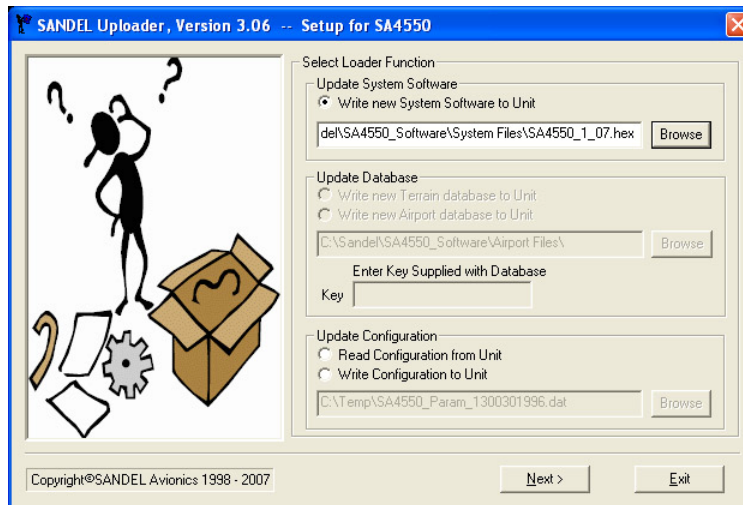
- The Sandel Uploader Setup screen will appear. (Example below.) Select the option for **'Write new System Software to Unit'**.



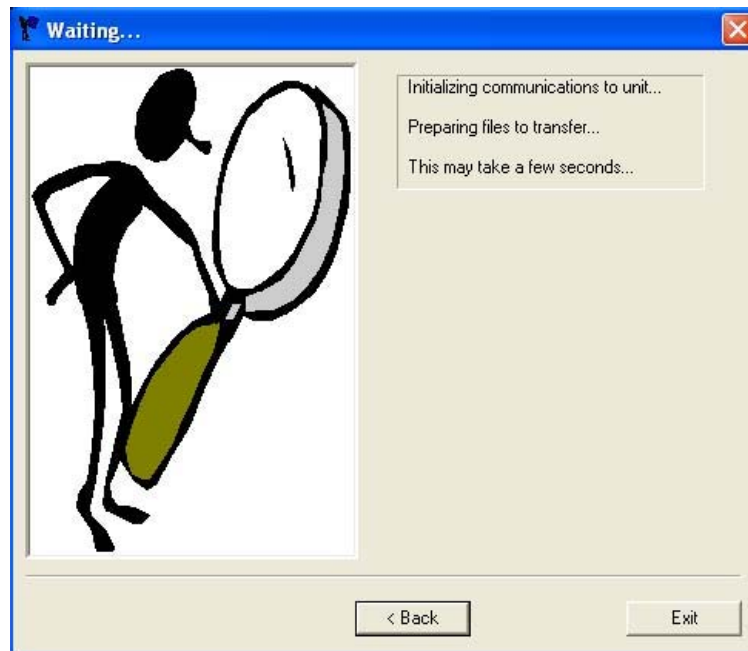
- Click on 'Browse' and locate the file 'SA4550\_1\_07.hex'. Highlight the file and click on 'Open'. The default location for this file is 'C:\Sandel\SA4550\_Software\System Files'.



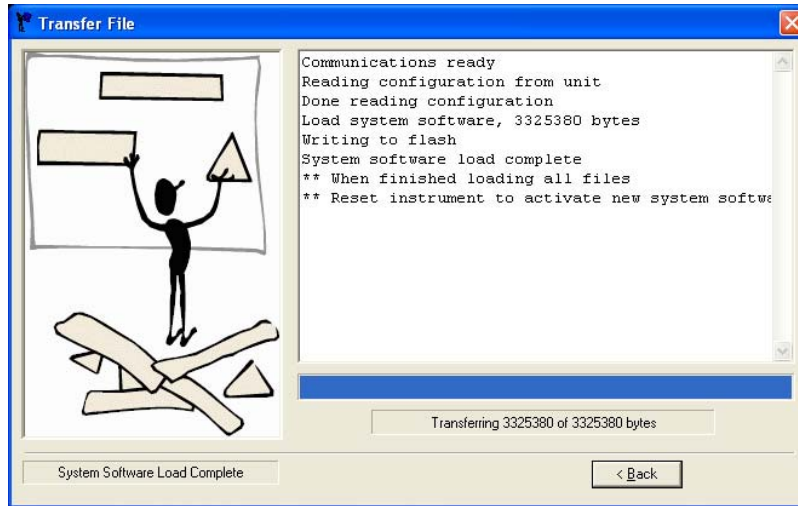
- Verify that the file 'SA4550\_1\_07.hex' is shown in the selection window and then click on 'Next'.



- A message that the program is initializing communications with the unit will appear for several seconds.



10. Once communication is established, the software file will be transferred to the SA4550. Do not remove power or disconnect the cable until 'Software System Load Complete' is shown.



11. Close the program by clicking on the red 'X' at the top right of the program window. The USB cable can now be removed and the SA4550 powered down.
12. Power up the SA4550 in maintenance mode.
13. On Page 4, verify that the Software Rev is 1.07. On Page 11, SFTWR CRC, press the knob on the SA4550 to update the CRC codes. Verify that all fields show Pass.
14. Verify that the configuration and calibration settings on Page 2 and Page 7 are unchanged from the previous settings. Power down the unit when done.
15. Print out the SA4550 Pilot's Guide Effectivity and Errata Revision D2 PDF file, '82010-PG-ERR-D2\_SA4550\_PG-ERR\_W\_Instructions.pdf'. The default location for this file is in 'C:\Sandel'. Place this version in the SA4550 Pilot's Guide binder adjacent to page x and line out the existing Revision D1 page x.

## Troubleshooting

Please contact Sandel Product Support if there are any questions with this procedure:

Phone: 877-726-3357 or 760-727-4900 ext. 2

Email: [support@sandel.com](mailto:support@sandel.com)

**END**

## Appendix A Sandel USB Driver Installation Instructions

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### Introduction

This document includes instructions for installing the USB driver for Sandel products which utilize a USB interface. This enables the updating of software and databases through the USB port located on the front bezel of the units.

Note: This procedure does not apply to the SN3308 EHSI as that product requires a serial interface.

### Hardware Requirements

- PC with Microsoft Windows Vista (32 bit version only), XP or 2000 with available USB port
- USB to mini-USB interface cable, Sandel part number 88114 or equivalent

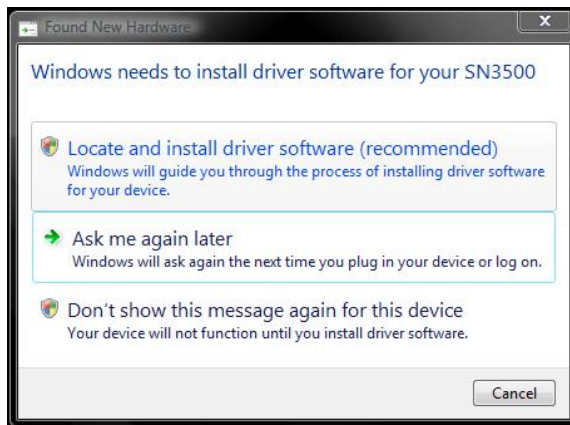
### USB Driver Installation Instructions

It is necessary to install a USB driver the first time a Sandel unit is connected to a PC via the USB interface. The procedures are slightly different for each version of Windows and are described separately on the following pages.

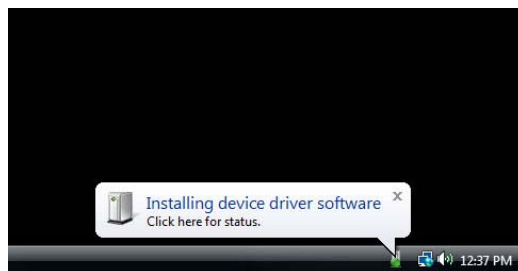
## Windows Vista USB Driver Installation

(Note: Only the 32 bit version of Windows Vista is compatible with the Sandel USB driver. The 64 bit version of Windows Vista is not supported.)

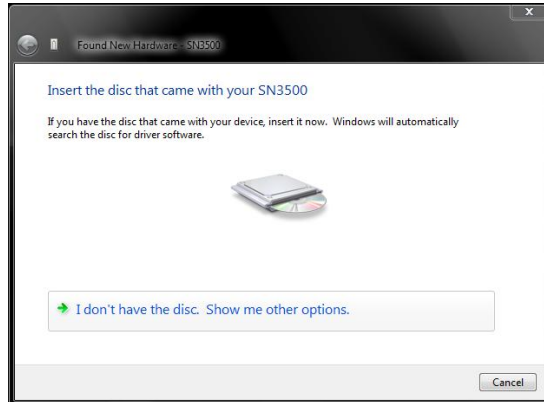
1. With power removed from the Sandel unit, connect the unit to the PC via the USB cable.
2. Power up the Sandel unit in maintenance mode. This is done by holding down the appropriate keys on the unit while applying power. Continue to hold down the keys until the display is visible.
3. A message 'Windows needs to install driver software' will appear. (Example using the SN3500 is shown below.) Click on 'Locate and install driver software'.



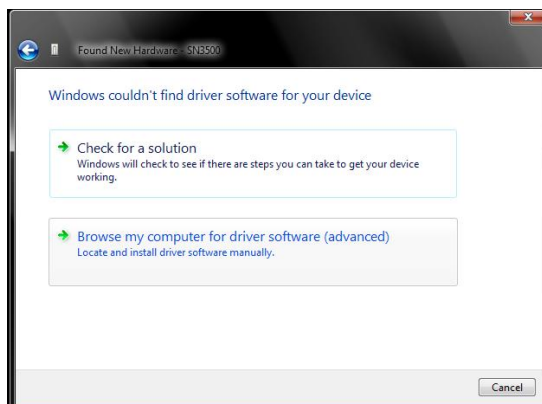
4. A message 'Windows needs your permission to continue' will appear. Click on 'Continue'.
5. A message 'Installing device driver software' will appear at the lower right. No action is necessary.



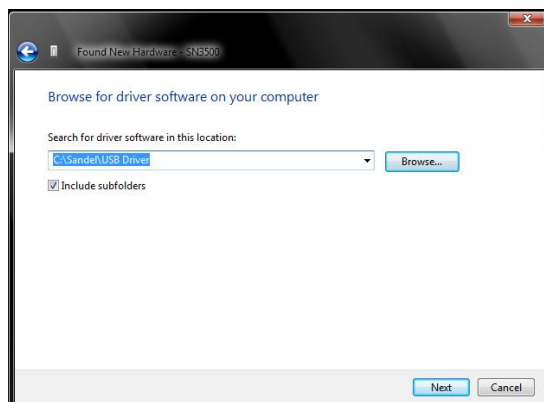
6. After several seconds, Windows will prompt to 'Insert the disc'. If the software or database was distributed on a CD-ROM, insert the CD and go to Step 9. Otherwise click on 'I don't have the disc. Show me other options.'



7. A message 'Windows couldn't find driver software for your device' will appear. Click on 'Browse my computer for driver software'.



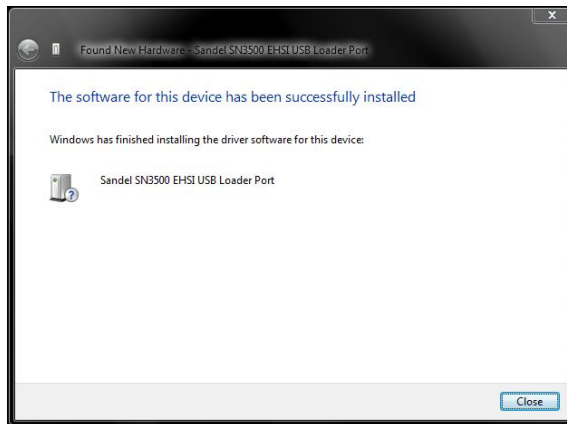
8. Windows will ask for the location of the driver. Click on 'Browse' to select the folder which contains the file 'ST3400.inf'. The default location is C:\Sandel\USB Driver'. Click on 'Next'. (Note: ST3400.inf is used for all Sandel models.)



9. A warning message 'Windows can't verify the publisher of this driver software' will appear. Click on 'Install this driver software anyway'.



10. Windows will install the driver. This will take several seconds. After successful installation of the driver click on 'Close' to complete the process.



## **Windows XP USB Driver Installation**

1. With power removed from the Sandel unit, connect the unit to the PC via the USB cable.
2. Power up the Sandel unit in maintenance mode. This is done by holding down the appropriate keys on the unit while applying power. Continue to hold down the keys until the display is visible.
3. A message 'Found New Hardware' will appear. (Example below.)



4. The Found New Hardware Wizard will start. Select the option 'No, not this time' and click on 'Next'.



5. Windows will ask if it should install the software automatically or install from a list or specific location. Select the option 'Install from a list or specific location (Advanced)' and click on 'Next'.



- Windows will ask for the location of the driver. Select the option ' Search for the best driver in these locations' and check the box 'Include this location in search:'. Click on 'Browse' and select the folder that contains the file 'ST3400.inf'. The default location is 'C:\Sandel\USB Driver'. If installing from a CD-ROM, the file will be located in the 'Sandel\USB Driver' folder. Click on 'Next'. (Note: ST3400.inf is used for all Sandel models.)



- Windows will locate and install the necessary driver.



- The driver has been installed. Click on 'Finish' when complete.



## Windows 2000 USB Driver Installation

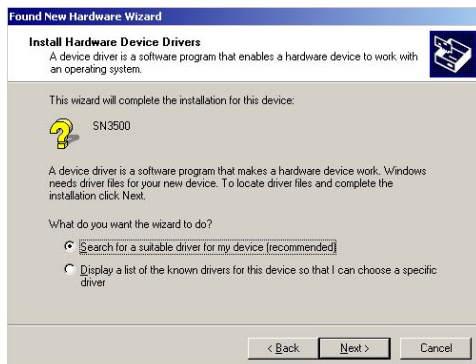
1. With power removed from the Sandel unit, connect the unit to the PC via the USB cable.
2. Power up the Sandel unit in maintenance mode. This is done by holding down the appropriate keys on the unit while applying power. Continue to hold down the keys until the display is visible.
3. A message 'Found New Hardware' will appear. (Example below.)



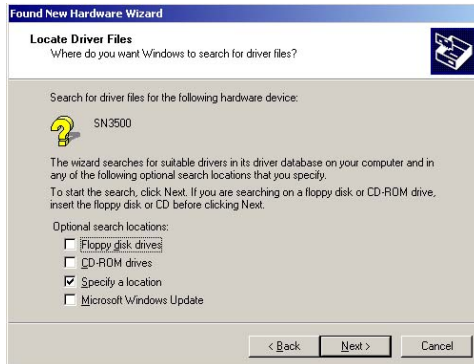
4. The Found New Hardware Wizard will start. Click on 'Next'.



5. Windows will ask if it should search for the driver. Select the option 'Search for a suitable device driver for my device (recommended)' and click on 'Next'.



6. Windows will ask where to search for the driver. Select the option 'Specify a location' and click on 'Next'.



7. Windows will ask for the location of the driver. Click on 'Browse' to select the folder which contains the file 'ST3400.inf'. The default location is 'C:\Sandel\USB Driver'. If installing from a CD-ROM, the file will be located in the 'Sandel\USB Driver' folder. Click on 'OK'. (Note: ST3400.inf is used for all Sandel models.)



8. Windows will verify that a device driver has been found. Click on 'Next'.



9. Windows will install the driver. Click on 'Finish' when complete.



**END OF USB DRIVER INSTALLATION INSTRUCTIONS**