Instructions for Installing FlashUpdate and Downloading Updates for Al Turbo S2 Satellite Meter

Updates to the Field Guide and to the instrument firmware are available from the Applied Instruments website.

Requirements

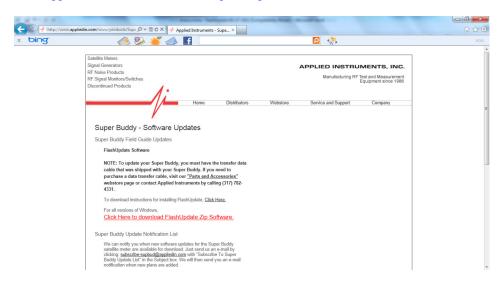
- 1) A PC running Microsoft Windows 95, 98, 2000, NT, XP, Vista, 7, 8, or Windows 10
- 2) An open USB connection port on your PC
- 3) An internet connection
- 4) The USB data transfer cable provided with the instrument

Installation

Before you can update your instrument, you must obtain and install the FlashUpdate software application onto your PC:

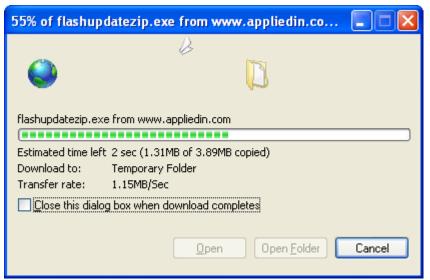
- 1) Ensure that you are signed on as Administrator or have Administrator rights for Microsoft Windows.
- 2) Temporarily disable your computer's anti-virus software and firewall so it doesn't interfere with the installation of the FlashUpdate and SatTransfer programs and the related USB drivers. If you have a hardware firewall, either stand-alone, or in a router, you must either modify the settings of the device to permit access to our program or you will have to entirely by-pass the router or other inhibiting hardware device.
- 3) Go to the Applied Instruments website, www.appliedin.com. With your mouse, move your cursor over 'Service and Support' and click on it, then click 'Software Updates', then click on 'AI Turbo S2 satellite meter'. Then click on 'Click Here to Download FlashUpdate Zip Software' (highlighted in red) or use the following link directly:

www.appliedin.com/downloads/flashupdatezip.exe



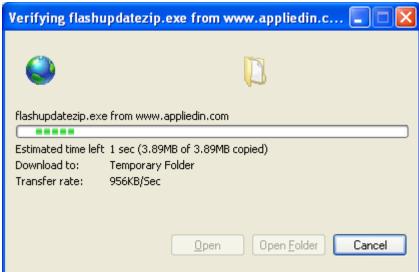
4) This is a self-extracting archive file. You may choose to open or run the file directly from the website or may save it to your disk and then open or run it. It is recommended that you run the file. The instructions below assume that you have chosen to run the file.



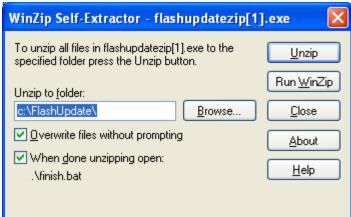


You may receive a warning message. Press Run to continue to open the file.





5) When you open this self-extracting archive file, the WinZip Self-Extractor program will appear. It is recommended that you press the Unzip button to unzip the files to the default location (c:\FlashUpdate\). If you wish to unzip the files to another location, type that desired destination folder into the field titled 'Unzip to folder' or press the Browse button and then navigate the network to select the desired destination folder.



6) It will unzip several files onto your PC to the location you indicated. Press OK.



7) A Command Prompt screen will appear. Using your computer's keyboard, type the number next to the question mark at the flashing cursor that corresponds to your computer's operating system. If you aren't sure of which Operating System you are running, please proceed to Step 8. If you already know your Operating System, please proceed to Step 9.



```
Select your operating system
(press corresponding number)

Windows 95/98

Windows Millenium

Windows 2000

Windows XP

Windows VI

Windows VI

Windows VI

Windows V

Which version of Windows 7?
(press corresponding number)

Windows 7 32Bit

Windows 7 64Bit (most newer machines)

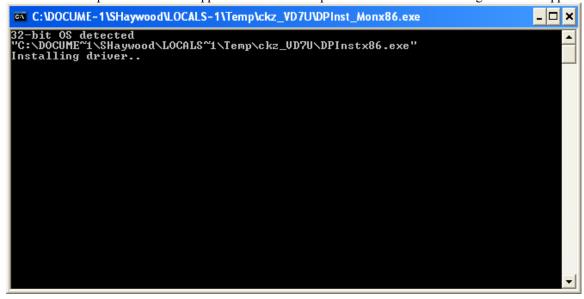
Windows 7 Intel Itanium Only

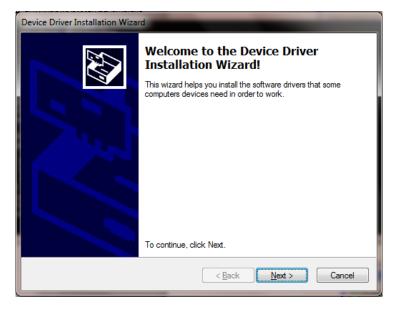
Windows 7 Intel Itanium Only
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```
Select your operating system
(press corresponding number)

Windows 95/98
Windows Millenium
Windows 2000
Windows NP
Windows VP
Windows VI
Windows 7 32Bit
Windows 7 32Bit
Windows 7 64Bit (most newer machines)
Windows 7 Intel Itanium Only
Siarvircomport.inf
I file(s) copied.
Copying shortcut to desktop.
FlashUpdate.lnk
SatTransfer.lnk
2 file(s) copied.
Starting USB driver installation.
```

- 8) To find out which Operating System you're running on this PC, using your mouse, right click on the My Computer icon. Scroll to Properties and left click on it. On the General tab, underneath System, it will tell you which Operating System is installed on your PC (i.e. Microsoft Windows XP). Another method to find out which Operating System you're running is by using Windows Explorer. Path: Windows Explorer → Help → About.
- 9) Another Command Prompt screen will appear to let you know that USB drivers are being installed. After the USB driver installation is complete, you will receive a message advising you to press Enter. Pressing Enter will complete the software application installation process and the "DOS looking" screen disappears.







- 10) Close your internet browser window if you still have it open and view your desktop screen.
- 11) You will notice that two new shortcut icons have been installed on your desktop. If the icons do not appear on your desktop, you can use "My Computer" or Windows Explorer to navigate to the C:\FlashUpdate\ folder and open FlashUpdate.exe from there and you can also copy and paste shortcut icons from the folder to your Desktop. If you're running Windows Vista or Windows 7 and the shortcut icons do not appear on the desktop after downloading, please right click with your mouse on the Desktop and select Refresh and then the shortcuts should appear.

FlashUpdate is the program used to download the latest satellite transponder and firmware updates to the AI Turbo S2 meter.

Application filename: FlashUpdate.exe

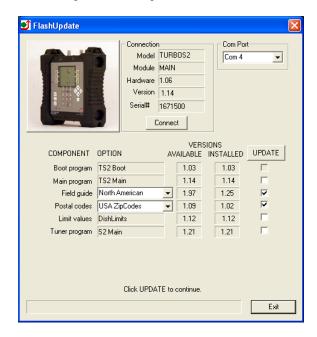


SatTransfer is the program used to upload stored Proof of Performance Scan information, stored Limit Scans, and stored Spectrum Scans from your AI Turbo S2 meter to the PC. Application filename: SatTransfer.exe



Updating

- 1) Ensure you have an active internet connection.
- 2) Plug your AI Turbo S2 into the AC outlet to prevent any problems due to a low battery.
- 3) Connect the AI Turbo S2 to your PC using the supplied data transfer cable and turn the meter on.
- 4) Double click the Flash Update shortcut icon or start the application from wherever you saved it (i.e. your C drive).
- 5) If connection is established, a picture of the AI Turbo S2 meter will appear in the top left corner of the FlashUpdate program and the top center portion of the program will be filled in with data obtained from the instrument (i.e. serial number, loaded software version, etc). If the connection is working, proceed to Step 7. If connection is not established, proceed to Step 6.

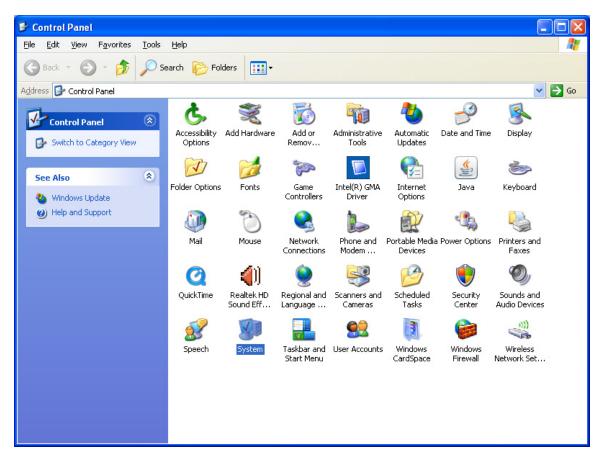


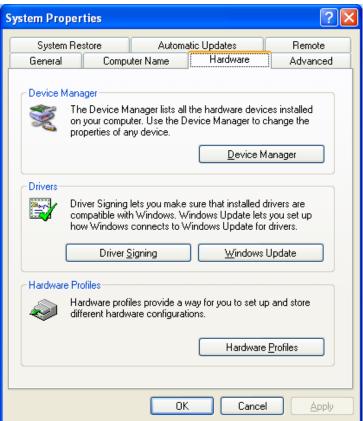
6) If the connection is not working, you will get an error message after a delay.

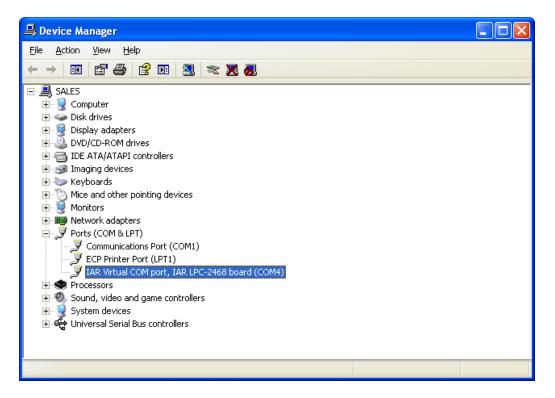


In this case, check to be sure the instrument is on and the download cable is fully seated. Click "Connect" to retry the connection. The computer should automatically establish connection with the meter. If you don't know the comport number, you can try all available ports or you can check your COM port assignments in the Device Manager section of the Windows Control Panel.

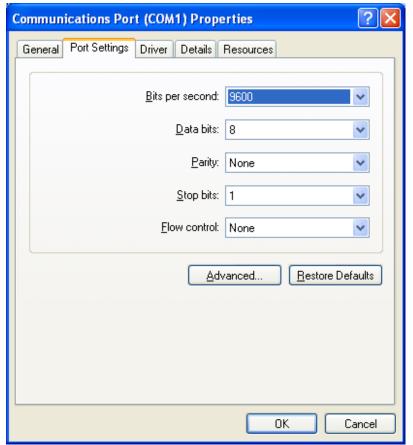
Path: Control Panel-->System-->Hardware Tab-->Device Manager button-->Ports (COM & LPT)



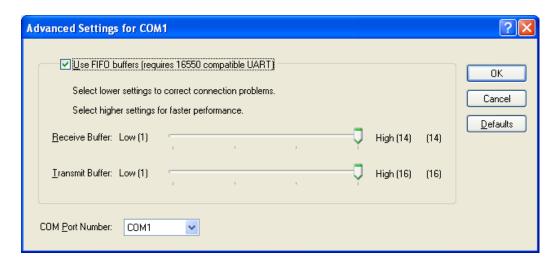




If you see that your Communications Port is set to something other than COM ports 1 through 12, you will need to reassign the COM port. To reassign the COM port, right click with your mouse on the desired COM port and select Properties. Then click on the Port Settings tab. Then click on the Advanced button. Using the drag down menu at the bottom of the Advanced Settings screen, reassign the COM port to an open (unused) port to any COM port from COM1 to COM12. Then press OK twice and exit out of the Device Manager and exit out of the Control Panel.



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7) As soon as the connection is established, the application will access the website and obtain the latest available versions for the various components. These will be compared with the versions installed on your instrument. Any component with a newer version available will be checked. Normally, there is no need to check anything that isn't already checked and we don't recommend manually check marking the boxes.



- 8) Select your desired Limit Values file: Dish Corp, Dish RSP, or No Limits. See Limit Values section below for more details.
- 9) Select your postal code region: USA ZipCodes, Canadian Postal, or No Postal Code (if located outside of North America).

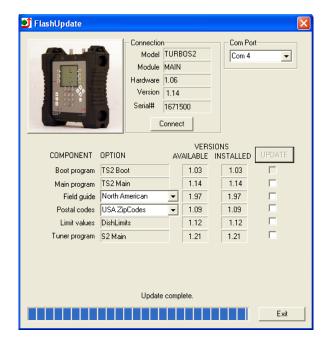
Click "UPDATE" to start updating the instrument. The progress bar at the bottom will show the installation progress of each component. In the screenshot from the example shown below, the program has detected that two components need to be updated (it automatically placed two check marks next to the items that need updated). The blue status bar at the bottom of the program will reset itself after each of the three components is downloaded.

The download process can take up to 2 minutes to complete, depending on the number of software components that need to be updated.



The word "REMOTE" should appear on the LCD screen of the AI Turbo S2 satellite meter to indicate that the instrument is being programmed and controlled remotely. Standby while the instrument is updated. Do NOT press any buttons on the AI Turbo S2 meter while the update is in progress. Do NOT bump or unplug the USB data transfer cable from the meter while the update is in progress.

10) When finished, the program will display "Update Complete", click "Exit". You may now disconnect the AI Turbo S2 meter from the computer and it is ready to use.



Field Guides

There are several global Field Guides (satellite transponder databases) available now and more may be added in the future. The different Field Guides cover different regions of the world. You can select the Field Guide you need using the pull down list.

If you simply want to change Field Guides even though no new versions are available, you may need to also put a check in the box before clicking "UPDATE". Only components that are checked will be updated.

Limit Values

For technicians that will be using the meter for Dish Network related work, there are two Limit Value databases available, 'Dish Corp' and 'Dish RSP'. If you work in an area that is served by Dish Corporate, select 'Dish Corp'. If you work in an area that is served by a Dish RSP, select 'Dish RSP'. If you won't be using the AI Turbo S2 for Dish Network applications, select 'No Limits'. You can select the Limit Values you need using the pull down list.

If you simply want to change Limit Values even though no new versions are available, you may need to also put a check in the box before clicking "UPDATE". Only components that are checked will be updated.

Postal Codes

Postal code files for the United States and Canada are available now and more may be added in the future. You can select the Postal Code file you need using the pull down list.

If you simply want to change your Postal Code file, even though no new versions are available, you may need to also put a check in the box before clicking "UPDATE". Only components that are checked will be updated.

If you are using the meter outside of the United States and Canada, then choose "No Postal Codes." This allows you to type in and save your latitude and longitude coordinates for your location. Based on the lat/long coordinates provided, the meter can still calculate the azimuth, elevation, and skew settings of the dish antenna as it relates to each satellite.

Future Updates

You may check for an update by connecting your AI Turbo S2 to your computer and performing the step in the section "Checking for Updates". Make sure your Internet connection is active (if you have a dial up connection to the Internet.) It is recommended you check for updates regularly.

If you have any problems or questions about the FlashUpdate program, call Applied Instruments' Tech Support team at (317) 782-4331.



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