Frequently Asked Questions

FAQ 10030 How can I update my panel firmware?

This FAQ is relevant to computer based consoles which have panels or control surfaces connected by USB.

Occasionally Avolites Ltd. may release a firmware upgrade to fix a particular problem or add an improvement to a panel. Normally firmware upgrades are issued at the same time as console version releases and the user is prompted to upgrade the panel firmware automatically during the install process. This method describes how to upgrade the panel firmware using (.hex) files provided by Avolites outside of the normal upgrade procedure.

Avolites provides a utility called UsbExpert, which will already be installed on your console and can be used to upgrade panel firmware.

1. Copy the new firmware file to the correct location on the console:

Insert a USB pen drive with the new firmware file into the console. Select *Tools* – *Folders* in order to open an Explorer window.



Browse to the .hex firmware file on the USB pen drive (the console may not be set up to show file extensions so you may just see the file name with no .hex extension Eg ew_sb in case of the Expert Wing firmware). Right click on the file and select *Copy*. Next browse to C:\Program Files\Avolites\UsbExpert\Panel Software\ which is the location of the firmware files in the console.



Right click on the folder and select *Paste*. You will be asked if you want to update the existing file and you should confirm this by clicking *Yes*. Now close this window.

2. Open UsbExpert:

Select Tools – Control Panel – UsbExpert



Note: If UsbExpert Console does not open then you can open it under *Switch Task* (as shown in above picture).



You can see the current firmware version programmed in a panel by highlighting it in the left hand pane and looking under Software Version in the right hand pane. (If the *Info* tab along the top is selected). Make a note of this version in order to check the update later.

3. Update the firmware in the panel: Select the *Service* tab and *Enter Boot*.

	Screen Wheels Dmx Tanecode MIDI Service Test Bench		
Time Stamp	No Boot Panel Selected		
Vectors	Enter Boot Mode		
ode 80 KeyState 0	Before you can perform service operations you must Enter Boot put the panels in boot mode.		
lode: 79 KeyState: 0	Service Operations		
Code: 77 KeyState: 0	-Set Panel Index		
ode 76 KeyState 0	The current panel index is 1, change it to 1 - Apply		
Code: 75 KeyState: 0 Tode: 74 KeyState: 0			
Code: 73 KeyState: 0	Program Software		
Lode: 72 KeyState: 0	Updates the famware software of the		
Dode: 71 KeyState: 0 Dode: 70 KeyState: 0	selected panel Frogram		
Code: 69 KeyState: 0	[no hex file selecteded]		
Code: 68 KeyState: 0			
Code: 67 KeyState: 0 Code: 66 KeyState: 0			
Code: 65 KeyState: 0	Status: Pinase select a Re?		
Code: 64 KeyState: 0			
Code: 63 KeyState: 0 Code: 62 KeyState: 0	AutoUpdate		
Code: 61 KeyState 0	Updates exist for the following panels. Update Now		
Code: 60 KeyState: 0			

Any panels with new firmware available will appear in the Auto Update window.

000000	Updates the forware software of the selected panel [no fees lie selecteded]	Poyse
	Status: Please select a like? Auto Update Updates exist for the following panels.	Update Now
		Est Boot
		d

Click Update Now.

When programming has finished the panels will automatically exit boot mode. Check the firmware version has been updated by going back to the Info tab, highlighting the panel, and looking at SoftwareVersion once again.

Time Stamp Vectors ode: 80 KeyState: 0 ode: 79 KeyState: 0 ode: 72 KeyState: 0 ode: 75 KeyState: 0 ode: 75 KeyState: 0 ode: 75 KeyState: 0 ode: 72 KeyState: 0 ode: 71 KeyState: 0 ode: 70 KeyState: 0 ode: 65 KeyState: 0	Touch Wing Panel 1			
	Description DeviceId Id Index Name RevisionNumber BootVersion ChipRevision SoftwareVersion	Device vid 0xAD9, pid 0x260, ifc 99762816 145 1 Touch Wing Panel 1 Nov 12 2009 15:24:01 XPWING_E 6 Oct 08 2010 13:15:17 XPWING_M		
	28: 63 KeyState: 0 de: 68 KeyState: 0 de: 65 KeyState: 0 de: 65 KeyState: 0 de: 65 KeyState: 0 de: 63 KeyState: 0 ode: 40 KeyState: 0 ode: 33 KeyState: 0 ode: 34 KeyState: 0 ode: 35 KeyState: 0 ode: 37 KeyState: 0 ode: 58 KeyState: 0 ode: 58 KeyState: 0 ode: 59 KeyStat	E State Status	Reset	

Close UsbExpert and re-start the console.

Note:

Running a recovery CD will overwrite all files on the C drive. If the firmware version on the CD is earlier than the updated version then be careful not to burn over the updated version in the panel (or you will have to repeat the update procedure).