



AKL Technology Engineering & Services
23 Woodlands Industrial Park E1
#04-05, Singapore 757741
Tel: +65 6891 6266, Fax: +65 6891 6366
Website: www.akl-it.com
Email Address: sales@akl-it.com

Logicube USB Adapter™

Version: 1.1

Introduction

Thank you for purchasing the USB Adapter (AKA the USB Dongle). Together with your Solitaire Turbo it provides connectivity of your Master hard drive (the unit's internal drive) to any USB-enabled PC. Both USB 1.1 and USB 2.0 are supported.

The dongle can be used in two modes of operation: Drive management mode, and DOS cloning mode.

Minimum requirements

- A Logicube Solitaire Turbo cloning system. The USB dongle will not work with our standard Solitaire™, or any other 3rd party product.
- A 586 or better PC compatible computer
- An available USB port. Either USB 1.1 or USB 2.0 are automatically supported.
- Microsoft Windows 98/98SE/ME/2000/XP operating system (for drive access under Windows).
- A floppy drive (for DOS cloning mode, no operating system is required).
- A floppy drive to install drivers (for Windows 98/98SE). No drivers need to be installed for ME/2000/XP. (In some packages, both floppies are consolidated into one)

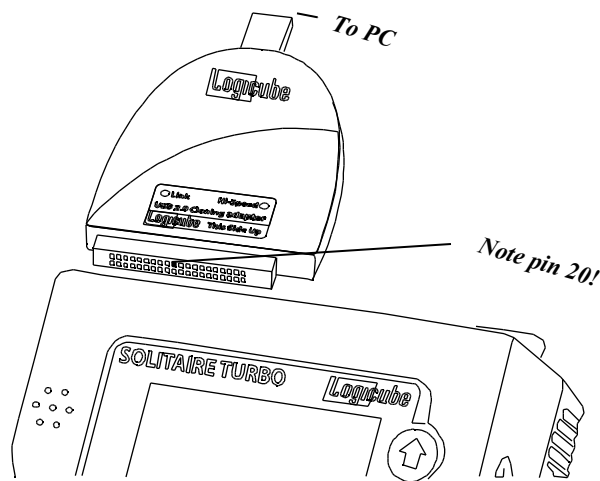
How to use

Use extreme care when attaching the USB Dongle to the Solitaire Turbo

Please refer to the diagram below:

1. Make sure a hard drive is properly attached inside your Solitaire Turbo.
2. Make sure your PC is running.
3. Please remove both data and power cables from the target connectors at the back of the unit. This is where the USB dongle will be connected.
4. Carefully align and insert the dongle 40-pin connector to the 40-pin header. Make sure the dongle is right side up, and the product sticker is facing upward. Also, note the key at pin-20.
5. Connect the USB cable (provided) to a PC USB slot on one end. Do not connect the other end to the USB Dongle yet.
6. Set the Solitaire Turbo to USB mode:
 - A. Press the SET button on the unit.
 - B. Scroll up to the MODE: entry. Press SELECT.

- C. Scroll down to the USB MODE entry. Press SELECT again.
The Solitaire Turbo will now check for the presence of the dongle. If found, it will power up the hard drive.
7. The Solitaire Turbo display will then read, "It is now OK to attach your USB cable to a PC". Attach the other end of the USB cable to the USB Dongle.
 8. You should now see some activity on your PC screen, which depends on the operating system.
 - A. If running ME/2000/XP your drive will automatically be mounted and drive letters assigned to all recognizable partitions.
 - B. If running 98/98SE you will be prompted to install drivers. At the "have disk.." prompt please point the PC at the drivers floppy (provided), and the installation should complete smoothly.
 9. On the USB Dongle, make sure the Link LED is turned on. If the PC USB port is 2.0, then the Hi-Speed LED should also be lit.



Removing USB devices

Before physically disconnecting the USB cloning adapter and/or shutting down power to the Solitaire Turbo, the unit has to be properly "dismounted" from Windows. To do that:

1. Locate the USB icon in the system tray (typically at the bottom right of screen).
2. Click it.
3. Wait for Windows to bring up a message that it is safe to remove the device. (Different versions of windows will behave slightly differently).

Cloning through the USB port

This mode allows cloning a drive that resides in a standard PC, using the USB port (1.1 or 2.0). Typically, the user will boot the computer from the provided DOS floppy. The floppy is equipped with USB drivers, and our client application that communicates with the hard drive lying inside the Solitaire Turbo unit. We must boot from a device different from the internal hard drive, to prevent alteration of its contents.

How to use:

1. Boot your PC using the enclosed floppy. The floppy is configured to load the USB drivers, and run our client application. You might need to update your PC's CMOS settings to allow booting from a floppy drive. Wait for the software to stop at the "hit any key to continue" prompt.
2. Attach a hard drive to the Master position of your Solitaire Turbo (inside the unit).
3. Connect the USB Dongle to the 40-pin target data connector on the Solitaire Turbo, as shown in the picture. Take care to align the adapter correctly. Then connect the USB cable to the USB Dongle on one end and the other end to the PC USB port.
4. Engage the Solitaire Turbo in USB mode. To do that, press the "SET" button, position the cursor by the MODE item, and press "SELECT". You will now see a list of available modes. Scroll all the way down to the USB mode, and press "SELECT" again.
5. The PC client software should now detect the presence of the Solitaire Turbo, and a link will be created.
6. Hit a key on the PC to continue. You should now see on your PC screen a virtual control panel that resembles the overlay on the Solitaire Turbo.
7. All functions will now be controlled from this virtual control panel in the exact same way they are used on the Solitaire Turbo. Please refer to your Solitaire Turbo user's manual for full details.
8. After setting the cloning mode and any other settings desired, press the "START/STOP" button twice to start the operation.

Things to remember:

1. In rare situations, the floppy will fail to fully boot due to lack of sufficient memory to load the drivers. We provide a flavor of DOS called DR DOS on the floppy. Installing WIN98 DOS over DR DOS can solve this problem. To do that, open a DOS window under Win98, change directories to c:\windows\command, and type sys a: , assuming the floppy in drive A. You would also need to copy himem.sys to the floppy.
2. The USB Cloning software refers to the attached drives as "Turbo" and "PC" instead of "Master and "Target". The Turbo drive is inside the Solitaire Turbo and the PC drive is in the host PC. Remember to keep this in mind when setting the direction for cloning.

SCSI drives

The USB Cloning software is actually able to clone to and from SCSI drives! Just make sure that the SCSI drive is the Primary Master in the PC and the SCSI Controller card has the "Interrupt-13" feature enabled.

Please visit the technical support area of our web site (www.akl-it.com) for updates, or call technical support at +65 6891 6266.