

## **Notice**

This document provides some important notes about using Decision SmartLab USB Digital I/O Series. If you have further question about using these products, you can contact us by e-mail to [decision@decision.com.tw](mailto:decision@decision.com.tw). We sincerely welcome users can provide us valuable experiences or any kind of suggestions to improve our products.

### ***1. Power Supply***

The power of our products can be supplied from USB or external DC 5V. When using power from external DC 5V or input signal voltage in input channel, please make sure the positive and negative ends are plugged in correctly. Otherwise the product might be damaged. If the board is out of function because this reason, you may try to reburn the firmware.

### ***2. Connect Failed***

When supplying power from USB, sometimes the connection between PC and the board may fail due to USB power supply insufficiently. The better and safe way is to supply power from external DC 5V.

### ***3. USB Power Management in Windows***

In Window System, USB communication might disconnect under Power Saving Mode or Sleep Mode. When connecting USB boards on PC, please make sure windows power management set in case interference with USB communication.

### ***4. Different Interface***

In some products which contain a 2 x 5 header can connect to an extension board (optional) to achieve serial communication by RS-232 or RS-422 / RS-485 which can also access and control the board as well as by USB. Please select one as interface you want to use and remove the other one because it may cause interference when you connect both of interfaces.

## 5. Set Init Values for Output Port

We provide a tool for users to set init value for output port (open/close). The default value is all open for safety. Please use this function carefully to avoid danger when power on.

## 6. Multiple Boards Connect

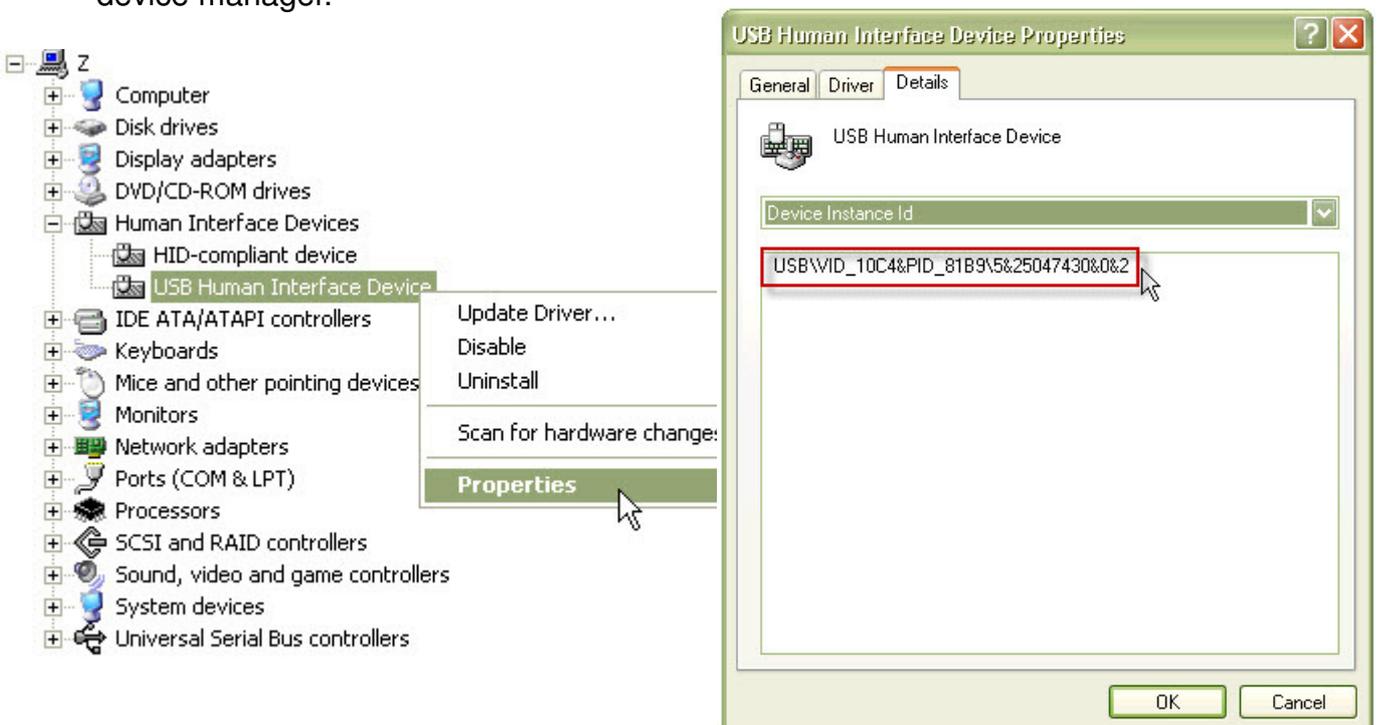
When you need to connect more than 3 boards on one PC, please make sure the following below

1. Set different ID for each board.
2. Supply external 5V to each USB board.
3. Supply external 5V to USB hub.

Please make sure your external 5V power supply enough for the USB I/O boards. If input voltage is below 4.8V for USB I/O board, it can't work normally and sometimes it will cause device manager keeping refreshing itself or can't recognize the device.

When connecting multi USB I/O boards under Windows XP, sometimes the phenomenon of "USB ID conflict" may happen and even force to reboot or show blue screen.

When you connect a HID device, you can find the device instance ID by device manager.



Usually device instance ID is PID + VID + Serial Number. If the serial number doesn't be assigned, XP will dispatch a set of serial number to distinguish one device from another. This conflict is basically caused by XP dispatching same device instance ID for connecting more than two same hid class devices. It won't happen under Windows Vista, Windows 7 or Linux.

We now have a solution for this issue which is to assign different serial number in each boards and reburn the firmware into the USB I/O boards by firmware update. If you need to connect more than 3 boards on one PC and do happen this kind of issue, please contact [decision@decision.com.tw](mailto:decision@decision.com.tw) to query hex files with fixed serial number for your specific USB I/O boards.

Successfully connect 15 USB32PHOTO into one computer.

