

# Docking Station LITE

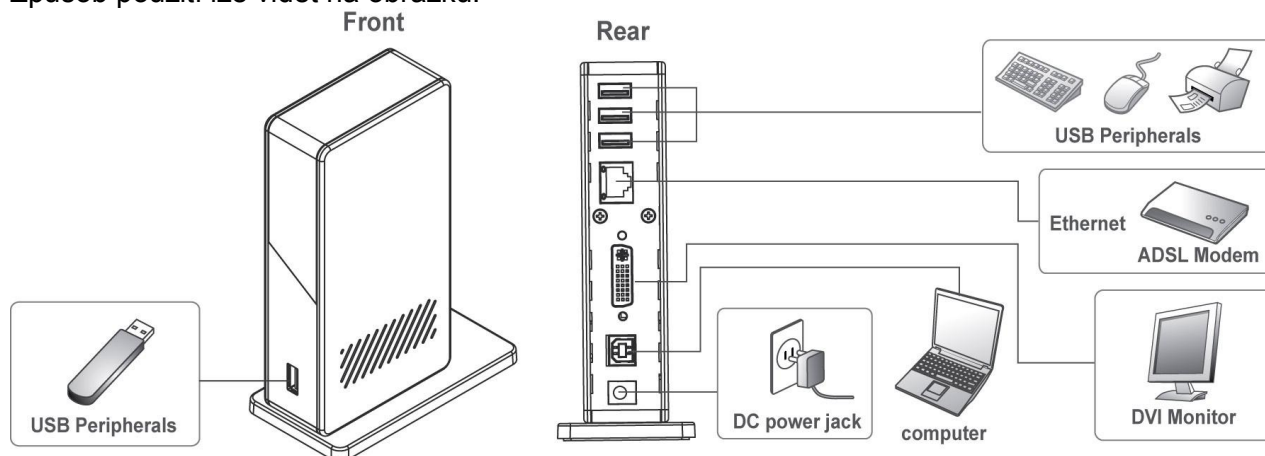
# Manuál



## ÚVOD

Děkujeme za zakoupení „i-tec USB 2.0 Docking Station LITE“. Jde o jednoduchou dokovací stanici s možností připojit veškeré Vaše oblíbené periferie, jako např. plnohodnotnou klávesnici, Ethernet, stolní displej, atd. Všechny zmíněné produkty pak připojíte k Vašemu notebooku v okamžiku jediným USB 2.0 kabelem. Jako zobrazovací zařízení pak můžete využít prakticky jakýkoli displej, protože dokovací stanice je vybavena DVI konektorem s adaptérem na VGA pro moderní LCD a plazmové displeje a televizory. Grafický čip podporuje dokonce Full HD rozlišení (1920 x 1080 pixelů).

Způsob použití lze vidět na obrázku:



## OBSAH BALENÍ

- 1) USB 2.0 Docking Station
- 2) Napájecí zdroj
- 3) USB kabel (jeden konec konektor typ A, druhý konec typ B) – pro připojení k PC/NB
- 4) DVI to VGA adaptér
- 5) CD s ovladači a manuálem
- 6) Quick Start

## SPECIFIKACE

- podpora USB 2.0 (max. 480Mb/s) i USB1.1 (max.12Mb/s) - doporučujeme použití PC/NB s USB 2.0 porty
- využitelné porty na USB 2.0 Docking Station:
  - 1x DVI port (s přiloženým adaptérem DVI-VGA lze připojit i VGA monitor)

| Rozlišení | Obnovovací frekvence<br>16 bit kvality obrazu | Obnovovací frekvence<br>32 bit kvality obrazu |
|-----------|-----------------------------------------------|-----------------------------------------------|
| 640x480   | 60 72 75 85                                   | 60 72 75 85                                   |
| 800x600   | 56 60 72 75 85                                | 56 60 72 75 85                                |
| 1024x768  | 60 70 75 85                                   | 60 70 75 85                                   |
| 1280x960  | 60 85                                         | 60 85                                         |
| 1280x1024 | 60 75                                         | 60 75                                         |
| 1360x768  | 60                                            | 60                                            |

|           |          |          |
|-----------|----------|----------|
| 1366x768  | 50 60    | 50 60    |
| 1368x768  | 60       | 60       |
| 1400x1050 | 60 75 85 | 60 75 85 |
| 1440x900  | 60       | 60       |
| 1600x1200 | 60       | 60       |
| 1680x1050 | 60       | 60       |
| 1920x1080 | 60 50    | 60 50    |
| 1920x1200 | 60       | 60       |

- 4x USB 2.0 port typ A – připojení USB periférií
  - 1x USB 2.0 port typ B- určen pro připojení k USB portu PC/NB
  - 1x Ethernet 10/100Mb/s LAN RJ-45 port
  - 1x napájecí adaptér: vstup ~100-240V/50-60Hz/0,5A ; výstup =5V/2,5A
- pracovní teplota: 0-40°C
  - skladovací teplota: -10 až +80°C
  - vlhkost prostředí: do 85%

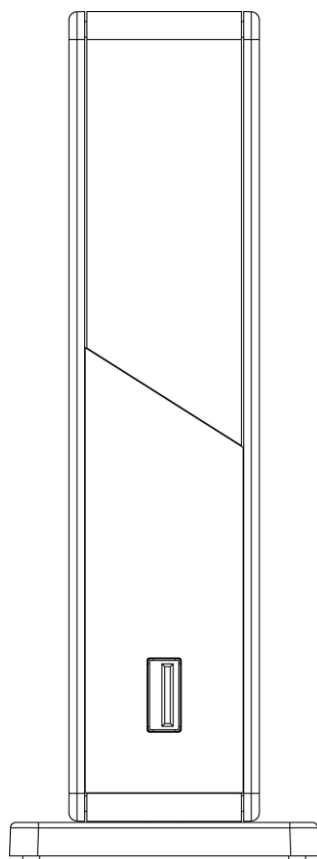
### **POPIS DOCKING STATION:**

*Přední panel:*

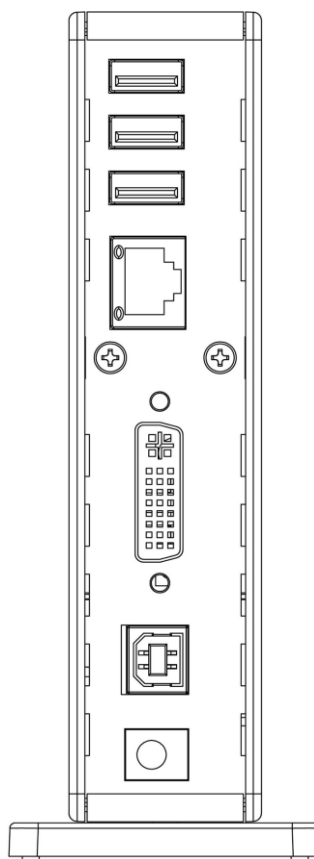
1xUSB 2.0 port typ A

*Zadní panel – shora dolů:*

3xUSB 2.0 port typ A, 1xRJ45 Ethernet 10/100 port, DVI port, 1x USB port typ B, 1xkonektor pro napájení



Přední panel



Zadní panel

## **SYSTÉMOVÉ POŽADAVKY**

- 1) Hardwarové požadavky: PC, Notebook s volným portem USB 2.0. Pokud máte USB 1.1 bude rychlost přenosů omezena. Procesor Intel Pentium 1.2GHz a vyšší, 512MB RAM
- 2) Operační systém: Windows 2000SP4/ XPSP2 / Vista 32\_64 bit/ Win7 32\_64 bit
- 3) Pro přehrávání DVD na přídavném monitoru je třeba mít minimálně procesor Intel Pentium 2.0 a vyšší, 1GB RAM a nastaveno rozlišení obrazovky 800x600 a 16 barev

### *Poznámka:*

- a) Instalace USB hubu (pro USB 2.0 porty typ A) je automatická ze systému, ostatní zařízení-porty se instalují z dodaného CD
- b) 10/100Mb/s LAN port i Video (Display) port je nutno poprvé instalovat před vlastním připojením Docking Station k PC/NB z příloženého CD a pak až připojit Docking station

## **INSTALACE VE WINDOWS 2000SP4/XPSP2/VISTA/WIN7 (32\_64BIT VERZE)**

**Nepřipojujte docking station před prvním použitím k PC/NB, dokud nenainstalujete příslušné ovladače pro LAN a Video (Display) port z příloženého CD. Ovladače zařízení je třeba nainstalovat pouze při prvním použití.**

1. Vložte CD s ovladači do mechaniky a instalujte ovladače - postupujte následovně:

pro LAN i Video (Display) port – volte instalaci z CD soubor Setup.exe z adresáře CD:/Driver - v systému je pak LAN zobrazen jako „**ASIX AX88772 USB2.0 Fast Ethernet Adaptér**“.

Poznámka pro instalaci Video (Display) portu - instalace bude následovat v několika krocích.

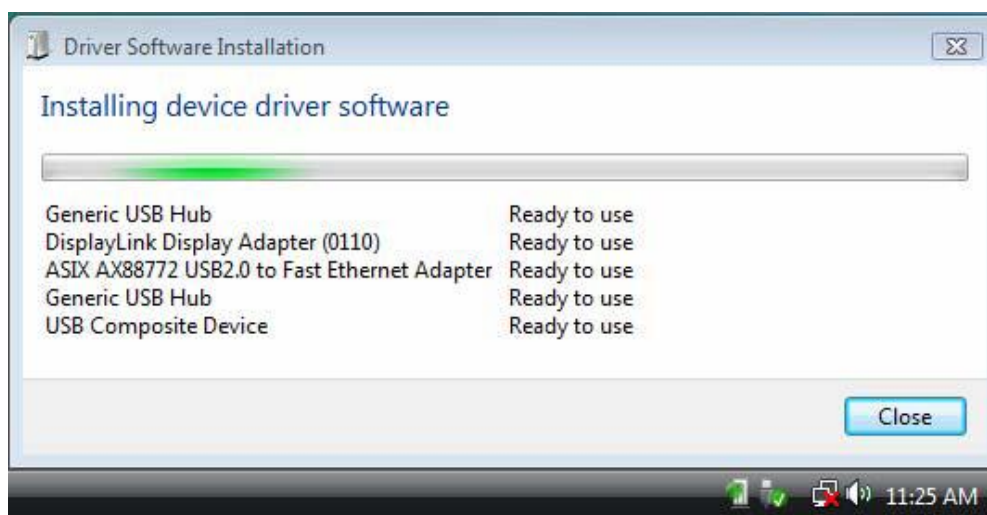
Pro Vista/7 OS instalujte jako uživatel Administrator a po instalaci restartujte PC/NB;

Pro Win2000 OS: v případě nutnosti stažení patche toto proveďte a po jeho instalaci znovu spusťte SETUP.EXE

- a) obrazovka může v průběhu instalace ovladačů problikávat, to je standardní proces
- b) doporučujeme opětovný restart po dokončení instalace ovladačů
- c) v systému je pak zobrazen jako USB zařízení „**DU2800D1**“ a v grafických adaptérech jako „**DisplayLink Grafic Adapter**“ a „**DisplayLink Mirror Adapter**“

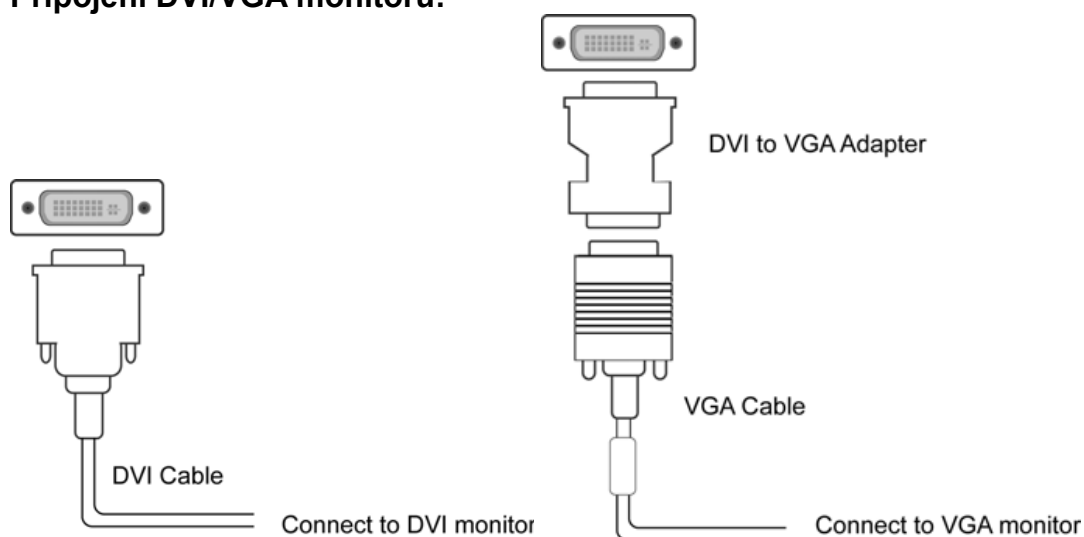
## **HARDWAROVÁ INSTALACE**

- 1) Zapněte PC/NB a připojte napájecí adaptér k USB 2.0 Docking Station – zadní panel USB 2.0 Docking Station
- 2) Zapojte USB kabel do portu USB typ B - na zadním panelu USB 2.0 Docking Station
- 3) Zapojte napájecí zdroj do sítě 220V
- 4) Připojte USB kabel k PC/NB do volného portu USB 2.0 (případně USB 1.1).
- 5) Následně se zahájí automatická instalace portů v jednotlivých systémech



6) Restartujte PC/NB.

### Připojení DVI/VGA monitoru:

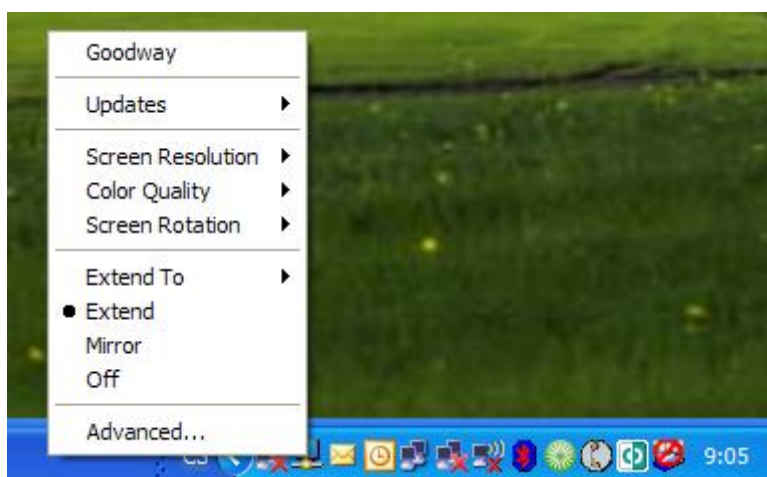


Po připojení může monitor problikávat, což je standardní stav.

### ZPŮSOB POUŽITÍ PRO USB 2.0 DISPLAY ADAPTER

1. Vedle času na liště Start klikněte na ikonku síťového připojení





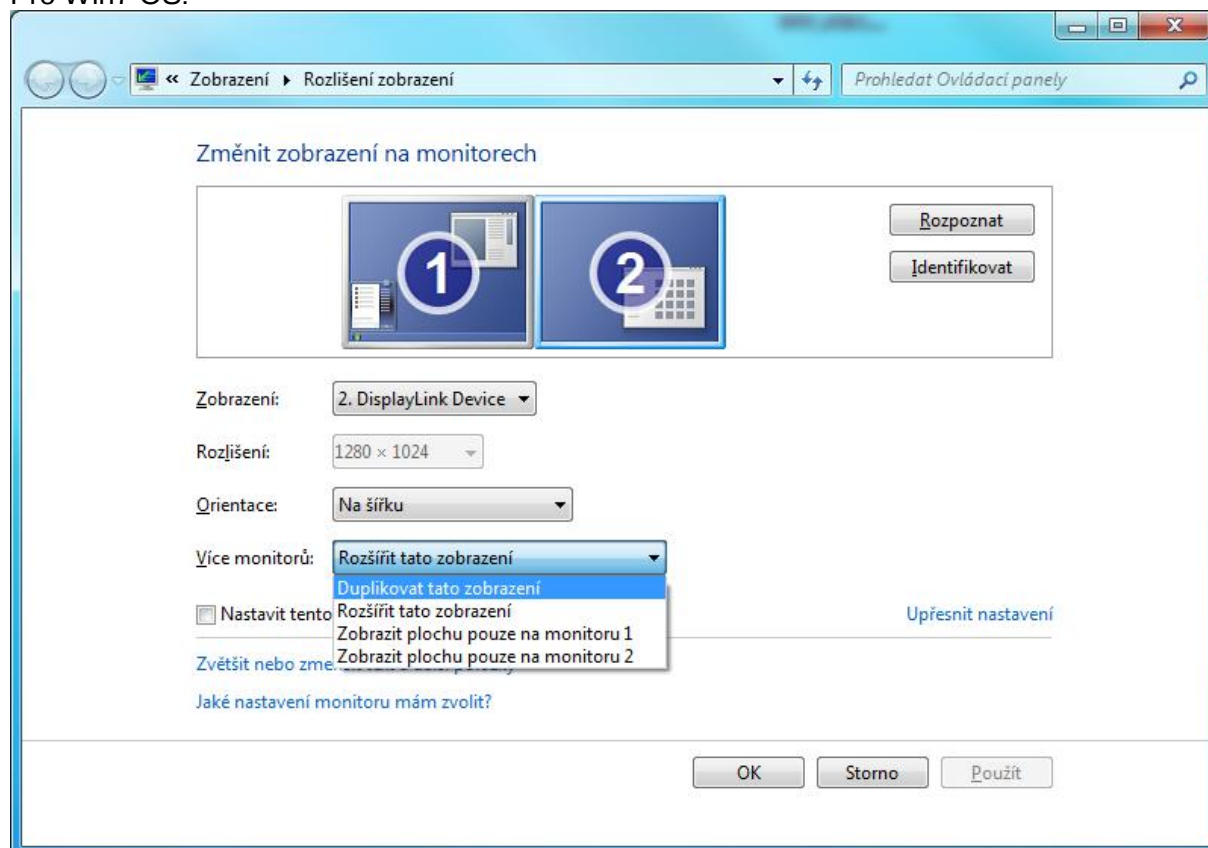
Zde pak můžete volit konfiguraci Update a stažení Update; dále rozlišení obrazovky (Screen Resolution), kvalitu barev (Color Quality) - Medium (16bit) nebo High (32bit), otočení obrazovky (Screen Rotation).

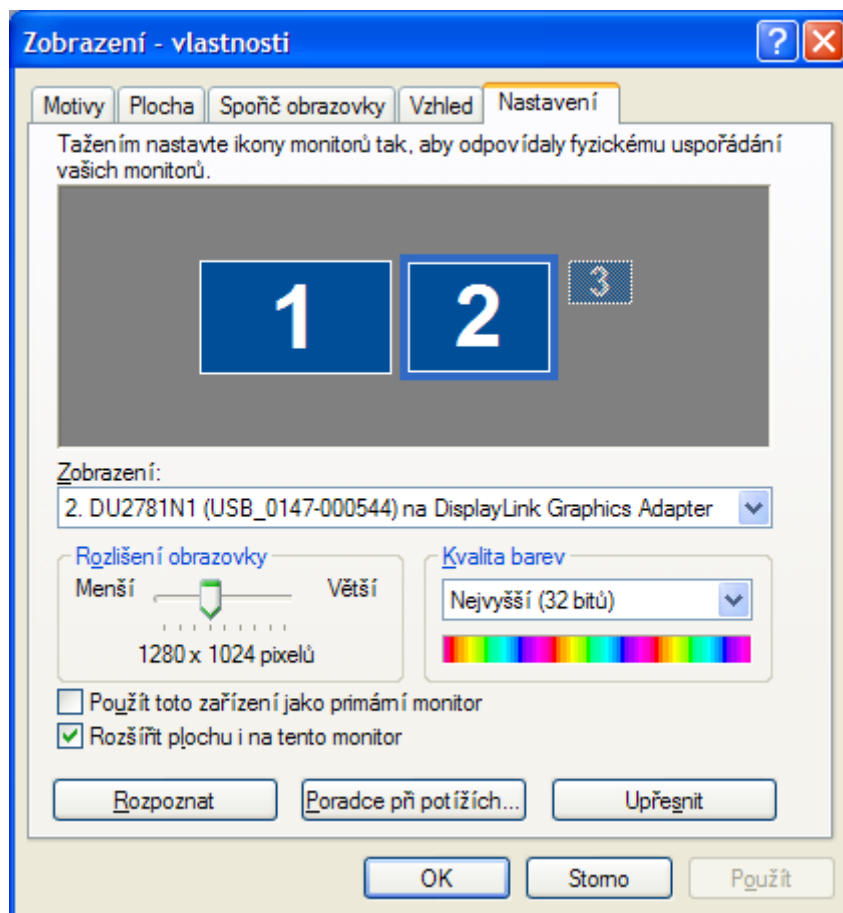
### Následuje důležité nastavení:

Můžete zvolit Extend nebo Mirror pro způsob nastavení další obrazovky. Volba Extend Vám rozšíří stávající monitor o právě nainstalovaný a pomocí Extend To si zvolíte jeho umístění, nebo volba Mirror Vám umožní mít „zrcadlo“ na další obrazovce. Volba Off vypne Display adapter.

Rozšířená nastavení (Advanced) – po kliknutí na Advanced se inicializuje systémové **Nastavení zobrazení** (lze zvolit i přímo ze systému):

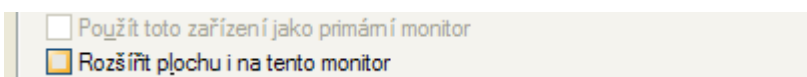
Pro Win7 OS:





2. Nyní lze provádět období nastavení jako pomoci bodu 1 - Extend a Mirror

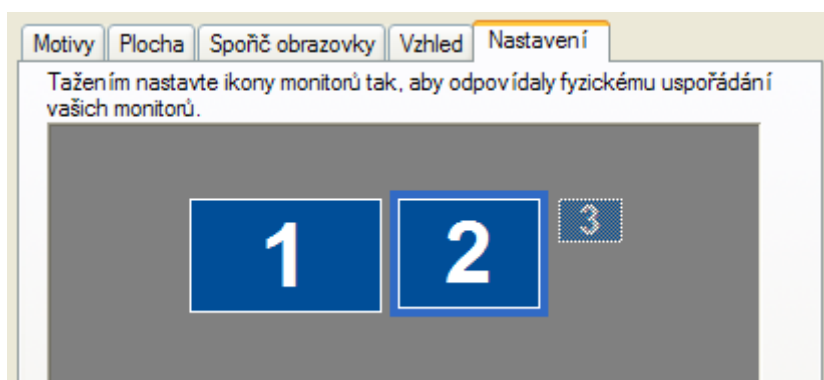
- a) pro **Mirror**: na liště Nastavení zobrazení zvolte adaptér „DU2800D1(USB\_0147...“ a nechte prázdné políčko Rozšířit plochu i na tento monitor



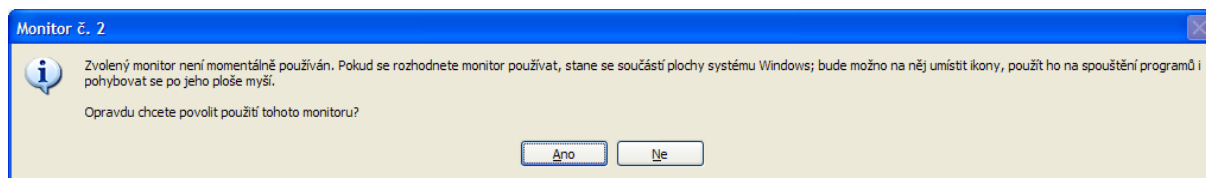
- b) pro **Extend**: na liště Nastavení zobrazení zvolte adaptér „DU2800D1(USB\_0147...“ a zaškrtněte políčko Rozšířit plochu i na tento monitor.

**Poznámka:** Zaškrtnutím pole „Použít toto zařízení jako primární monitor“ si jej zvolíte jako hlavní

Po kliknutí na uvedený monitor (zde monitor 2) a jeho přetažením si jej umístíte podle potřeby.



Potvrďte upozornění pro změnu nastavení zobrazení.



Nyní můžete kurzorem myši pracovat na obou monitorech a umísťovat si otevřené aplikace podle potřeby.

### Poznámky pro použití:

- 1) Standby/Hibernate režim a Video port: po aktivaci PC/NB z Standby/Hibernate režimu se zobrazuje primární monitor, proto doporučujeme používat jako primární ten, který je integrován s PC/NB, aby jste se mohli opětovně přihlásit do systému
- 2) Mirror režim: přídatný monitor se řídí parametry toho původního v systému, tj. jestliže si nastavíme mirror a integrovaný monitor má rozlišení 1280x1024, pak se obrazovka přenáší v rozlišení maximálně 1280x1024 (i když jej přestavíme na vyšší rozlišení)
- 3) Používejte a nastavujte monitory podle manuálu, tj. monitor s nižším rozlišením než nastavení na Video adaptéru může poškodit monitor (např. **nenastavujte** pro monitor s max. rozlišením 1024x768 hodnotu 1280x960 a vyšší na Video adaptéru)

### Odinstalování ovladačů

Standardně používejte přes Ovládací panely-Přidat nebo odebrat programy (Programy)-Odebrat :

- AX88772 pro Ethernet ovladače
- DisplayLink Core Software pro Video ovladače

## **BEZPEČNOSTNÍ POKYNY PRO POUŽITÍ USB 2.0 DOCKING STATION**

- nevystavujte extrémním teplotám a vlhkosti vzduchu
- používejte zařízení na plochých podložkách – vyvarujte se tím sklouznutí a pádu na zem
- uschovejte ovladače i manuál pro pozdější možné použití

V součinnosti se servisním oddělením:

- ověřte funkčnost po pádu do vody, na zem
- ověřte funkčnost při prasknutí krytu
- reklamujte nefungující zařízení dle manuálu

### Často kladené otázky

**Otázka:** Jak správně instalovat Docking Station ve Windows OS?

**Odpověď:** Nepřipojujte Docking Station do USB portu v PC/NB, dokud nenainstalujete ovladače. Pro grafickou část nutno instalovat aktuální ovladače od DisplayLinku (pro interní chipset DL-165) zde: <http://www.displaylink.com/support/index.php> a pro LAN část od ASIX - AX88772A zde: <http://www.asix.com.tw/download.php?sub=driverdetail&PItemID=97>. Ostatní ovladače jsou integrovány v operačním systému Windows a po připojení Docking Station do USB portu PC/NB se instalují automaticky.

**Otázka:** Jsou ovladače Windows 8 32/64bit pro Docking Station ?

**Odpověď:** Ano, pro grafickou část nutno instalovat aktuální ovladače od DisplayLinku (pro interní chipset DL-165) zde: <http://www.displaylink.com/support/index.php>. Nepřipojujte Docking Station, dokud nenainstalujete tyto ovladače. Ostatní ovladače jsou integrovány v operačním systému W8 a po připojení Docking Station do USB portu PC/NB se instalují automaticky.

**Otázka:** Mohu získat podrobnější informace o problémech s Docking Station?

**Odpověď:** Jistě, lze se obrátit na naši podporu nebo při problémech s grafickou částí Docking Station lze najít užitečné informace na FAQ stránkách DisplayLinku zde: <http://www.displaylink.com/support/knowledgebase.php>.

Docking Station LITE

# User's Manual



## **ABOUT THIS MANUAL**

This manual is designed for use with the Docking Station LITE. Information in this document has been carefully checked for accuracy; however, no guarantee is given to the correctness of the contents. The information in this document is subject to change without notice. The manufacturer does not make any representations or warranties (implied or otherwise) regarding the accuracy and completeness of this document and shall in no event be liable for any loss of profit or any commercial damage, including but not limited to special, incidental, consequential, or other damage.

## **SAFETY INSTRUCTIONS**

Always read the safety instructions carefully:

- Keep this User's Manual for future reference
- Keep this equipment away from humidity
- If any of the following situation arises, get the equipment checked by a service technician:
  - The equipment has been dropped and damaged.
  - The equipment has obvious sign of breakage.
  - The equipment has not been working well or you cannot get it to work according to the User's Manual.

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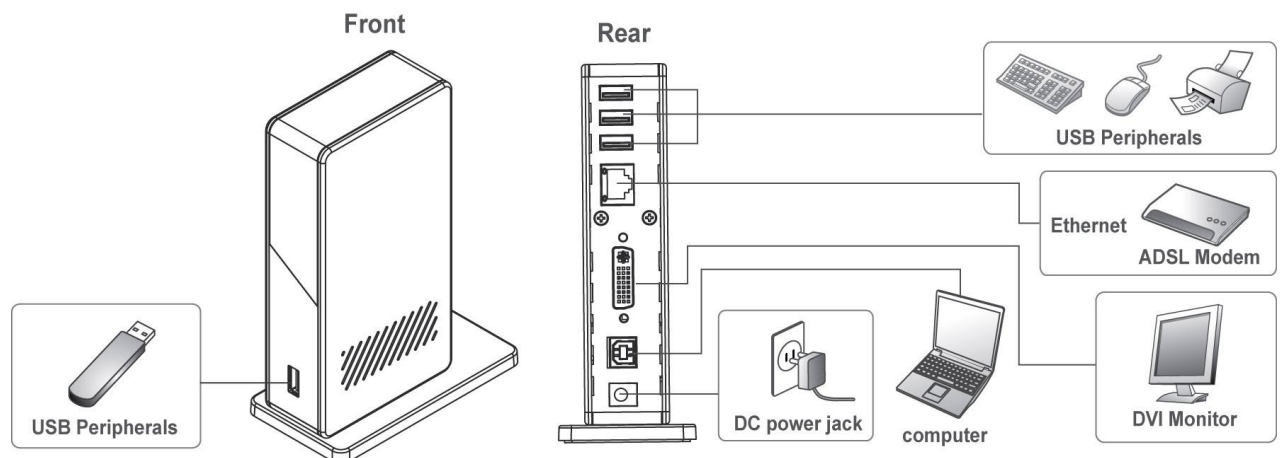
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# 1. Introduction

Docking Station LITE is a unique expansion unit designed for computers that have extra connectivity demands. Just with one USB port on the computer, its connection can be extended not only to USB peripherals, Ethernet network, speaker, and microphone but also an additional connect or disconnect the peripherals from the rear of a computer.

With the video port your computer can be connected to one more monitor, LCD or projector. The connected monitor can be configured to either mirror your primary screen, or extend the Window desktop allowing visibility of more applications at the same time. No more stacking windows within the confines of a single display.



## Features

- DualView let you expend your work area across your notebook screen and external monitor.
- Build-in DisplayLink chipset solution-Have Extender (DualView) and Mirror mode.
- DVI resolution up to 1920x1080 pixels for regular monitor.
- Gain instant access to your keyboard, monitor, mouse and all peripherals with one USB plug.
- Mini tower design reduces desktop footprint.
- Plug-n-play and hot pluggable, so you can connect to the dock and swap devices without shutting down.
- Front USB port makes connections quick and easy.
- Supports Windows®2000 SP4, XP SP2, Vista™ , Windows® 7

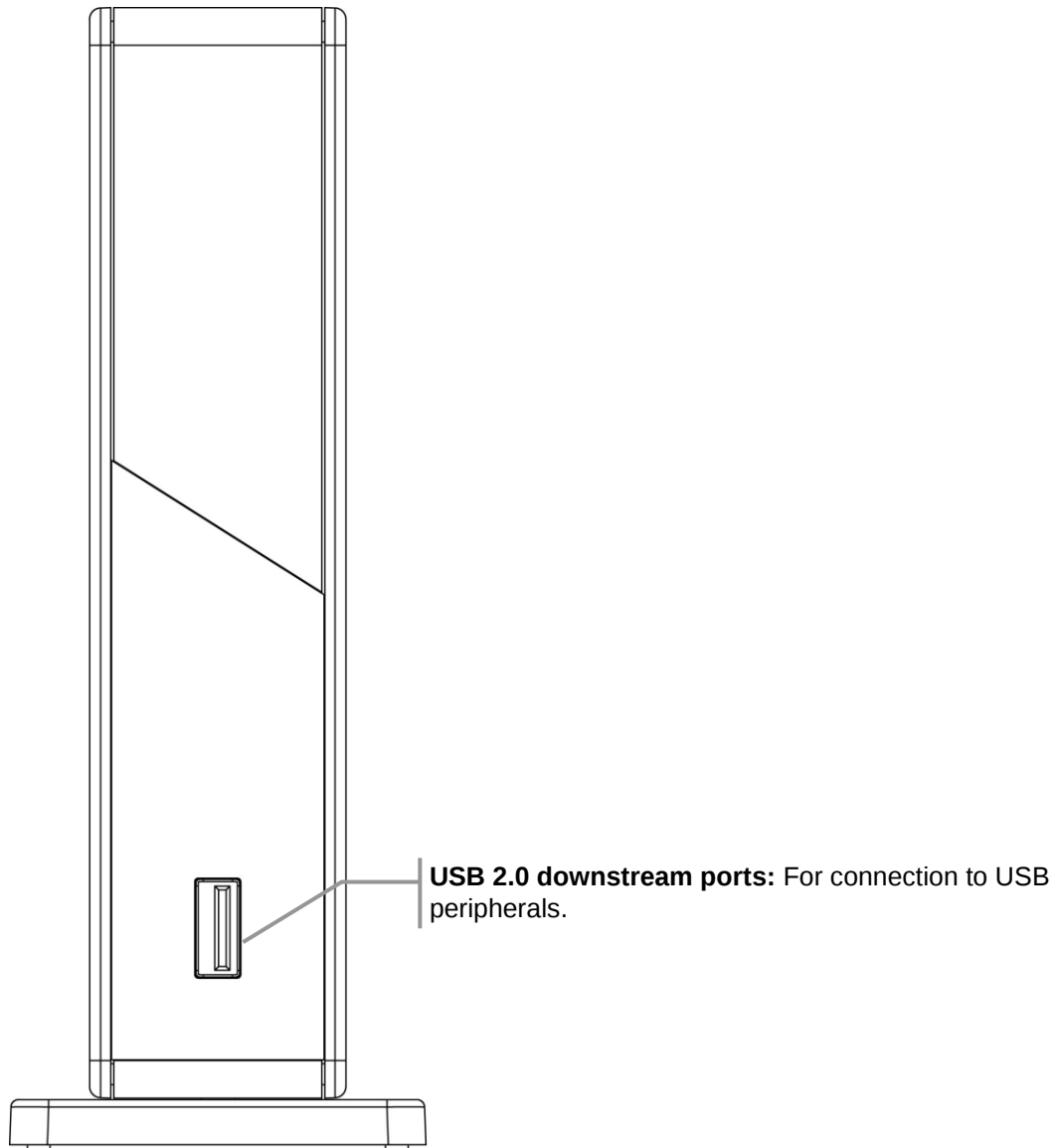
## Package Contents

- |                                 |    |
|---------------------------------|----|
| ■ Docking Station LITE          | x1 |
| ■ USB 2.0 Cable                 | x1 |
| ■ Power Adapter                 | x1 |
| ■ DVI-to-VGA adapter            | x1 |
| ■ CD (Driver and User's Manual) | x1 |
| ■ Quick Installation Guide      | x1 |

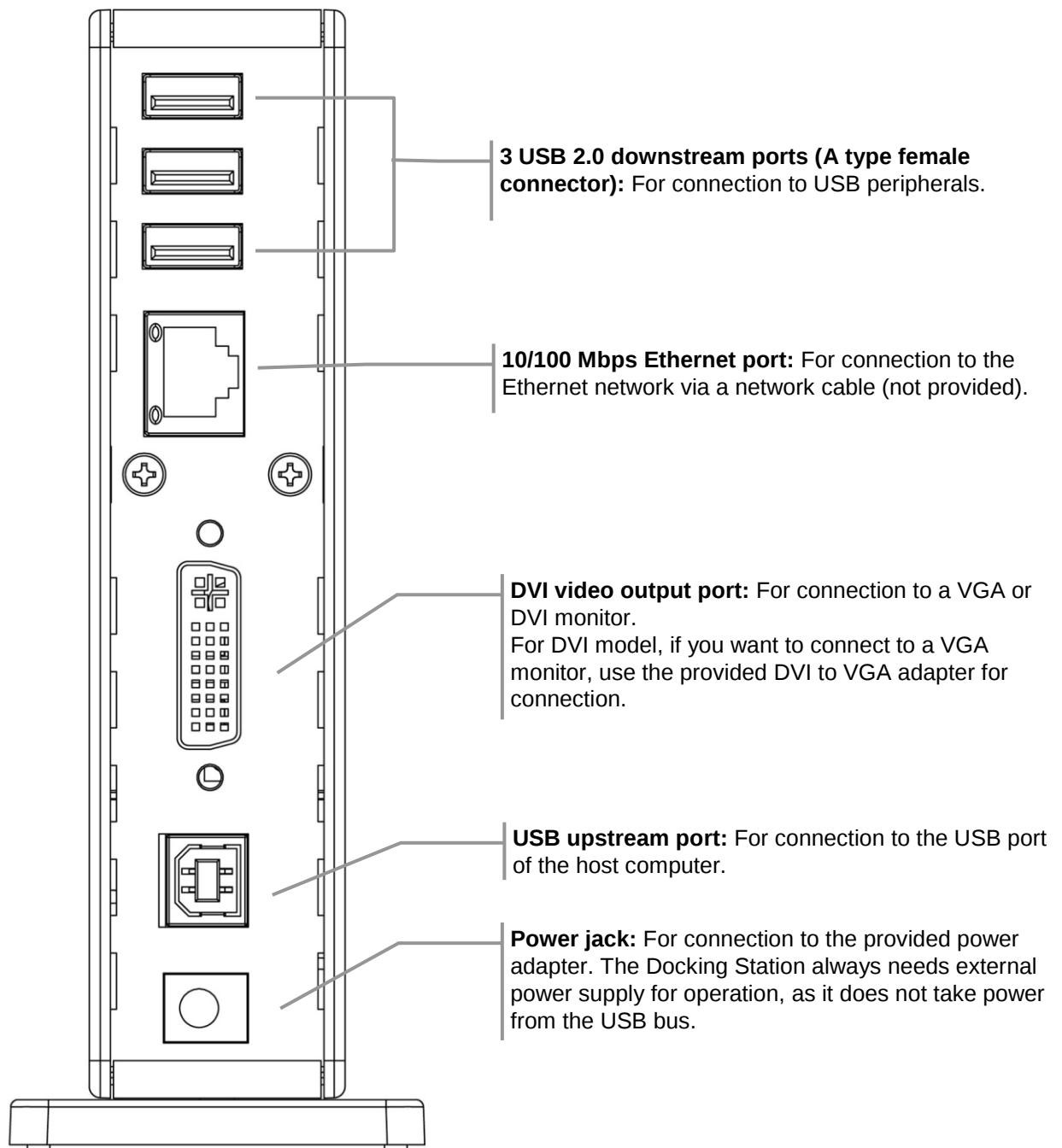
## System Requirements

- Windows®2000 SP4, XP SP2, Vista™ , Windows® 7

## Front Panel



## Rear Panel



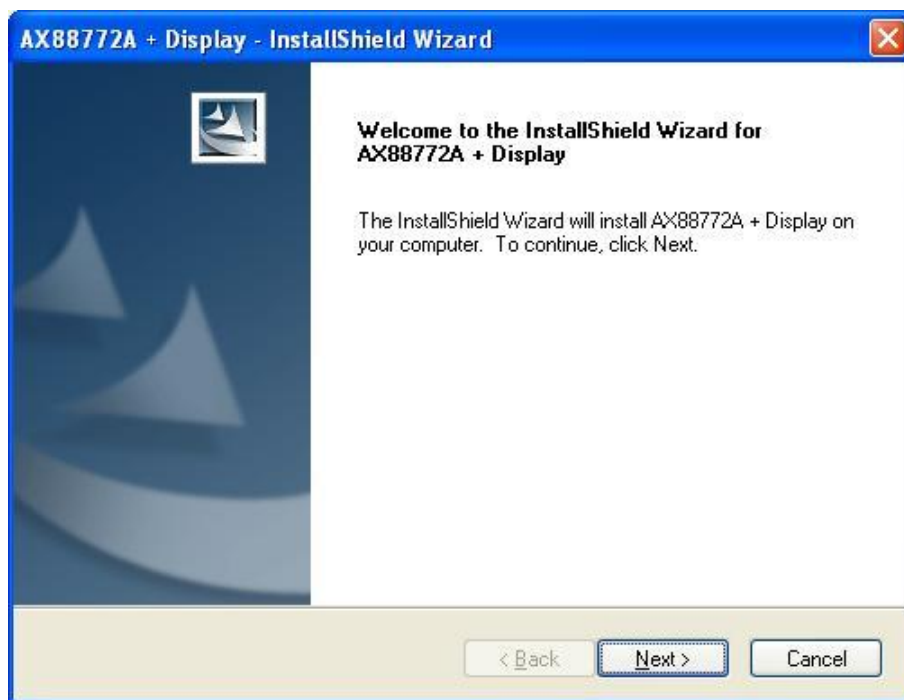
## 2. Installation

As the Docking Station LITE comprise several components and some components require specific installation procedure, please follow the steps described in this manual to install the drivers first and then make the connection.

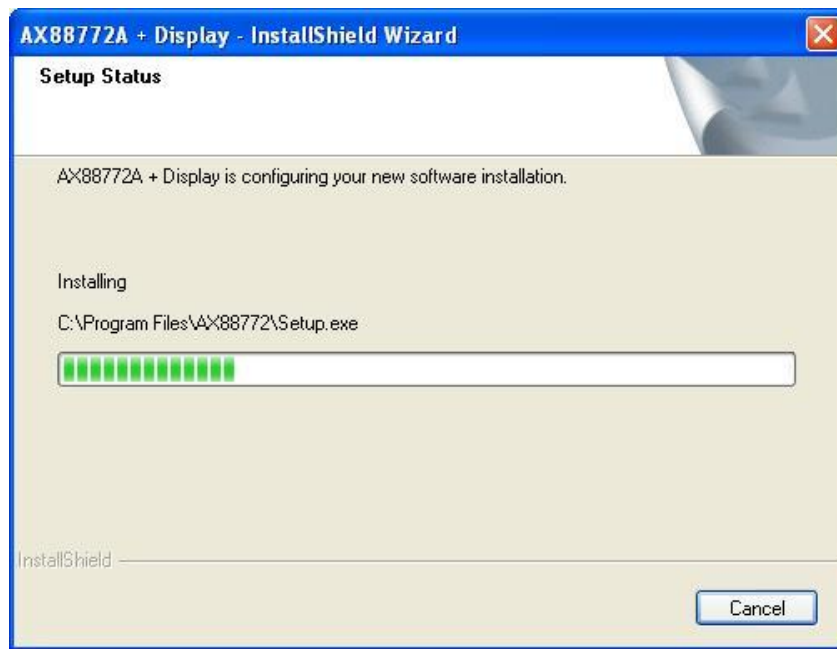
### A. On Windows 2000 / XP / Vista

To install the Driver:

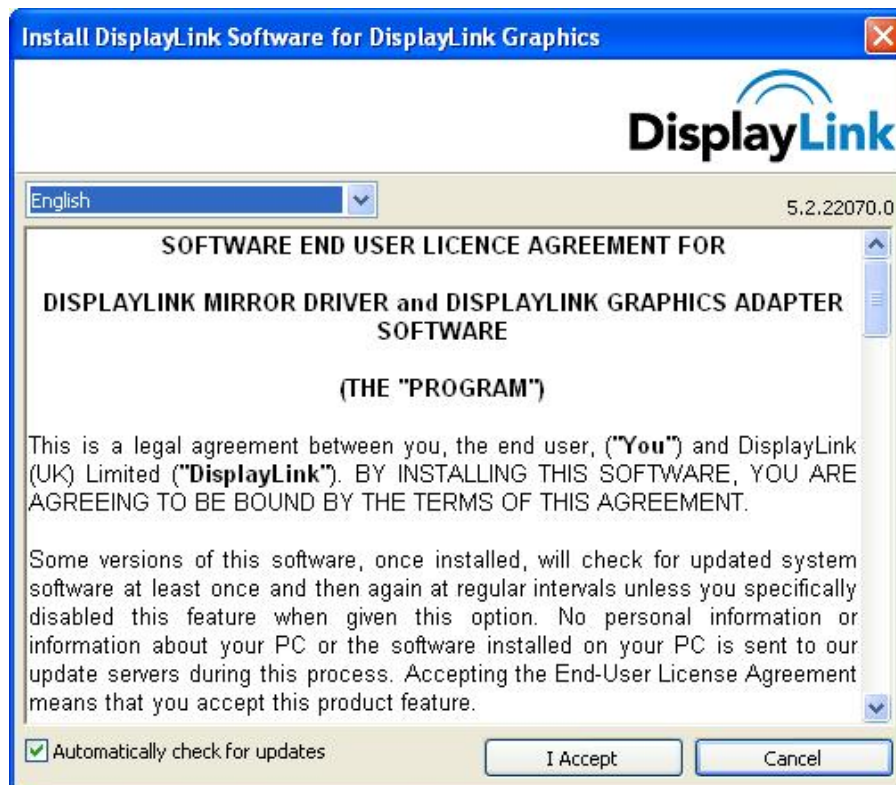
1. Insert the provided CD into your disc drive, locate and double-click the **Setup.exe** file under **E:\Driver** where E is your disc drive letter. Click **Next** to the next step for installation.



2. Please wait when installation.



3. Please click **I Accept** after reading the statement of “**Software End User License Agreement**”.



**Do not connect the docking station to your computer at this stage.** Please proceed to next section to continue with the video component installation.

- Please wait while Windows configures DisplayLink Core Software. Your screens may temporarily go black or flash during this process.



**Note:** You may need to restart your system for the configuration changes made to DisplayLink Graphics to take effect.

- After the installation is completed, you will see the DisplayLink Manager Icon in System Tray that looks like a monitor as below. Click on the icon to bring up the menu.



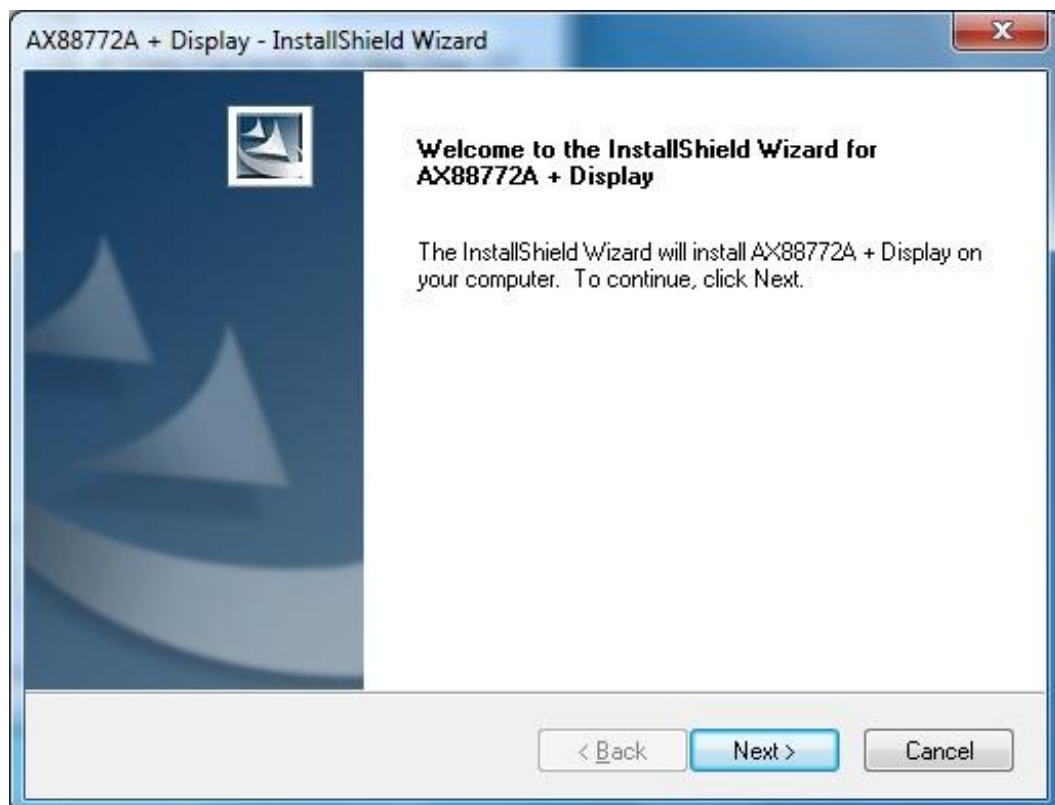
- Extend Mode:** The screen is part of the extended desktop.
- Mirror Mode:** The screen copies the contents of the primary screen.
- Off Mode:** The screen is black.
- Set as Main Monitor:** The screen is the primary screen.
- Notebook monitor off:** The Notebook screen is black and the DisplayLink screen is the primary screen.

*\*Actual strings depend on your operation system. These screen shots are from Windows XP SP2 and Vista, it might vary slightly for each operation system.*

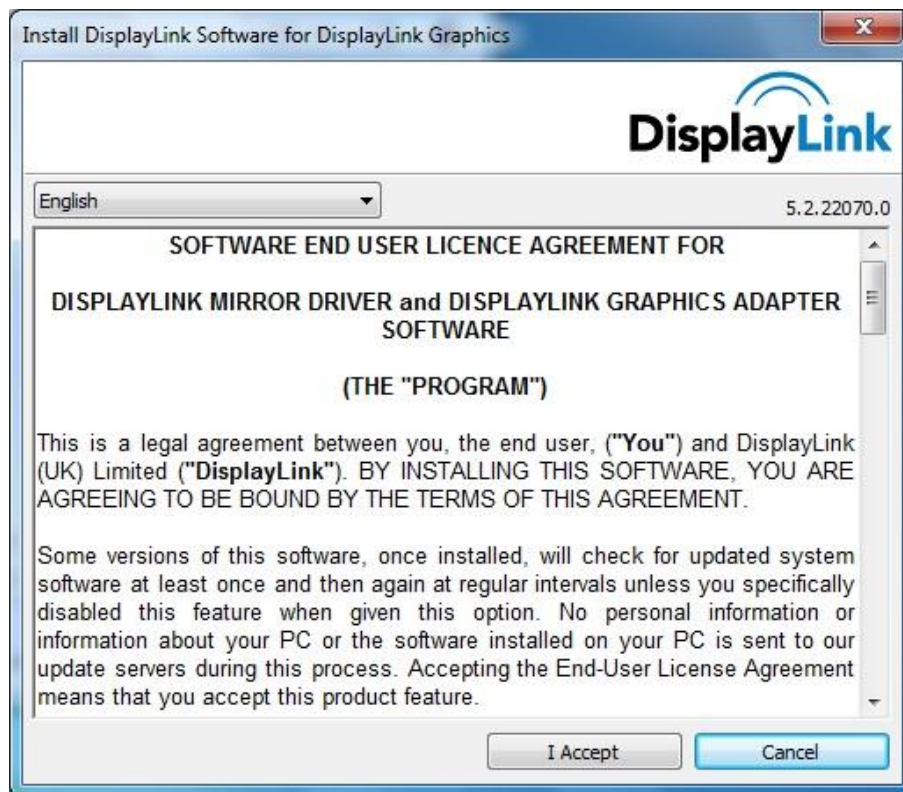
## B. On Windows 7

To install the Driver:

1. Insert the provided CD into your disc drive, locate and double-click the **Run Setup.exe** file under **E:\Driver** where E is your disc drive letter. Click **Next** to the next step for installation.

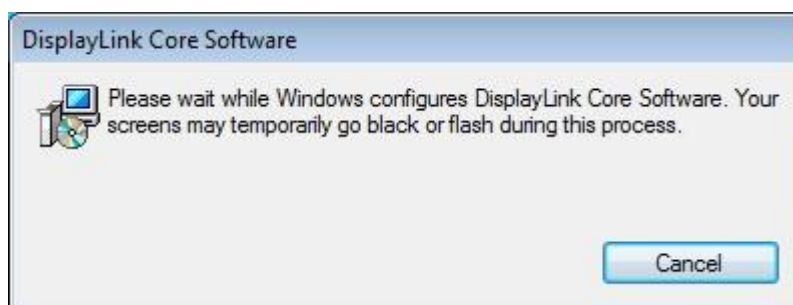


2. Please click **I Accept** after reading the statement of "**Software End User License Agreement**".

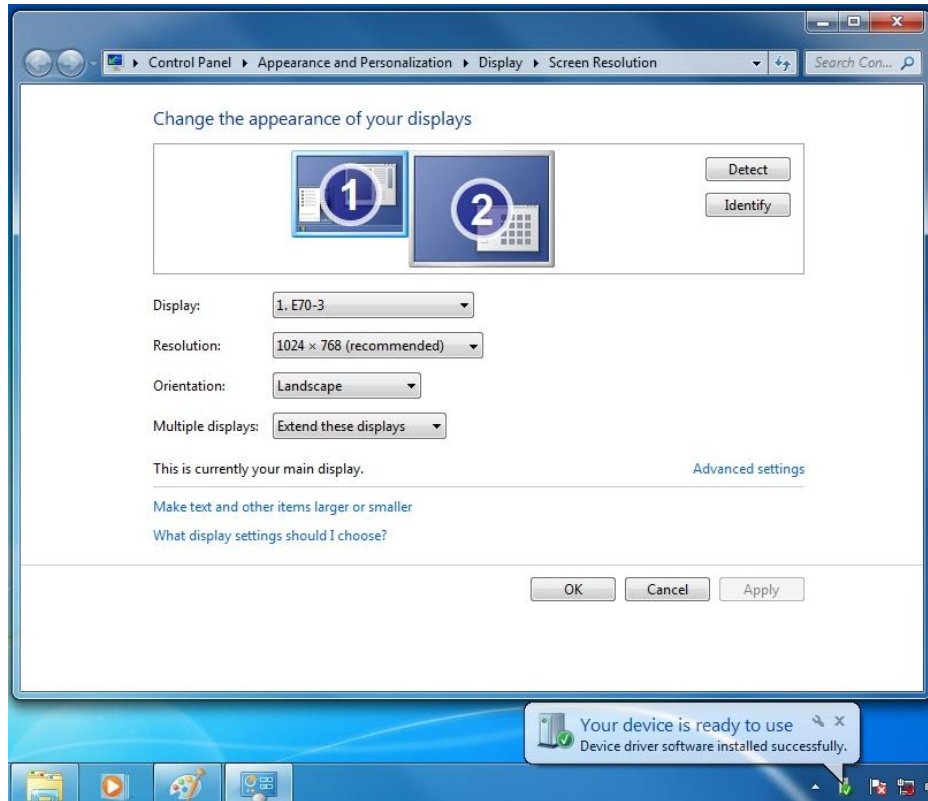


**Do not connect the docking station to your computer at this stage.** Please proceed to next section to continue with the video component installation.

3. Please wait while Windows configures DisplayLink Core Software. Your screens may temporarily go black or flash during this process.



4. After the installation is completed, the following Window will pop up. You can change the appearance of your displays through the Window. Moreover, additional controls are available in Windows 7: Orientation (Portrait, landscape, rotated portrait, rotated landscape)



5. To control the behavior of an attached DisplayLink device (or screen), it is possible to use **Windows Key+P** to display a menu (and cycle through it) to allow: Disconnect Projector, Duplicate, Extend, Projector Only.



*\*Actual strings depend on your operation system. These screen shots are from Windows 7 and might vary slightly for each operation system.*

## C. Connecting the Docking Station to Computer

1. Plug the power cord of the power adaptor into the **DC IN** jack on the back of the docking station and then connect the power adapter to a working electrical outlet.

The **Power** indicator on the front panel glows when the docking station is powered on.

2. Plug the square end of the USB cable into the USB upstream connector at the back of the docking station.
3. Plug the other end of the USB cable into an available USB 2.0 port on your computer.

Upon the USB connection, your computer will automatically complete the remaining installation, including installing Windows built-in drivers for the USB hub.

A pop-up message will appear in the notification area indicating the installation status. Wait for the final message indicating the driver software installation is successful. Then the docking station is ready for use.

## D. Connecting Devices to the Docking Station

Now the installation is complete. You can connect the peripherals/monitor to appropriate ports on the docking station as required. If required, you can connect and disconnect the peripherals/monitor any time without disconnecting the docking station from the USB port on your computer.

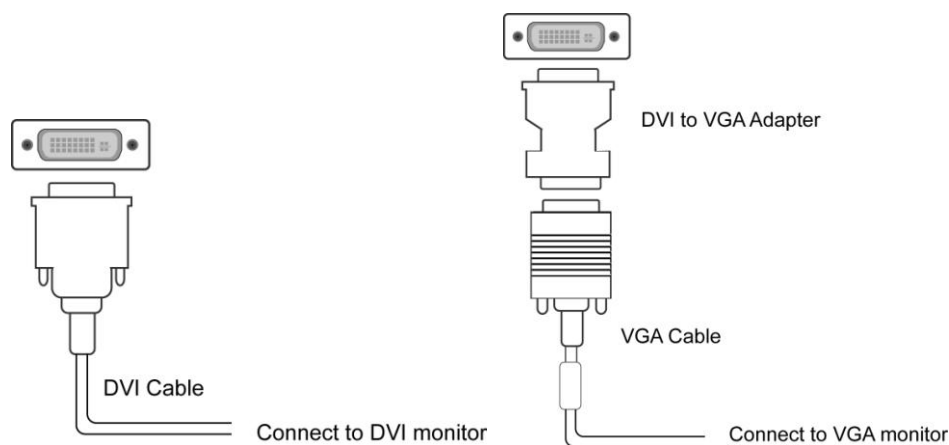
### Connecting Ethernet network device

1. Connect an Ethernet cable to the **Ethernet** port on the docking station.
2. Connect the other end of the Ethernet cable to your network hub, switch or router.

### Connecting DVI Monitor

- **For DVI model:** The equipped DVI-I (DVI-Integrated) connector transmits both the digital and analog signals. This means it supports either of these two connection types:

- It can be connected to a DVI-D (digital) monitor using a DVI cable (not provided)
- Or, it can be connected to an analog VGA monitor using the provided DVI-I to VGA adapter and a VGA cable (not provided).



Upon the connection it's normal that the screen flicks black a couple of times. Once the connection is done, an extended screen will appear on the add-on monitor. Sometimes it takes time for the add-on monitor to show the video. Please wait for while.

**For Windows Vista, if the add-on monitor has been blank for a while, please reboot your system again.**

To change the display mode, see next chapter for instructions.

## Connecting USB Devices

Connect your USB devices to the USB ports on the docking station. As long as one USB device is connected to the port and the connection works properly, the USB LED glows green (on). When no USB device is connected to the port, the LED light is off.

If your USB device, such as a printer or optical drive, etc., came with its own AC adaptor, make sure that it is plugged into the device and a working electrical outlet.

## 3. Using the Docking Station with Video

### USB 2.0 Ports

The four USB ports on the docking station function just like the ports on a USB hub. Just connect any USB device to the docking station's USB ports when required.

- All the four USB ports provide power when the computer is either off, suspended or hibernated. This means you can use the USB port for power charging purpose.
- The USB port supports hot-plug feature. You may plug and unplug an USB device from the docking station at any time when required.
- Some USB devices, e.g., printers and optical drives, require higher power to operate. To use these devices, the power adapter shipped with the device should be plugged into the device and the mains.

### Ethernet Port

The Ethernet port supports Ethernet 10/100 Mbps function. To connect your computer to a network through the docking station, attach one end of a network cable (not provided) to the **Ethernet** port on the docking station and the other end to your network hub, switch or router for network access.

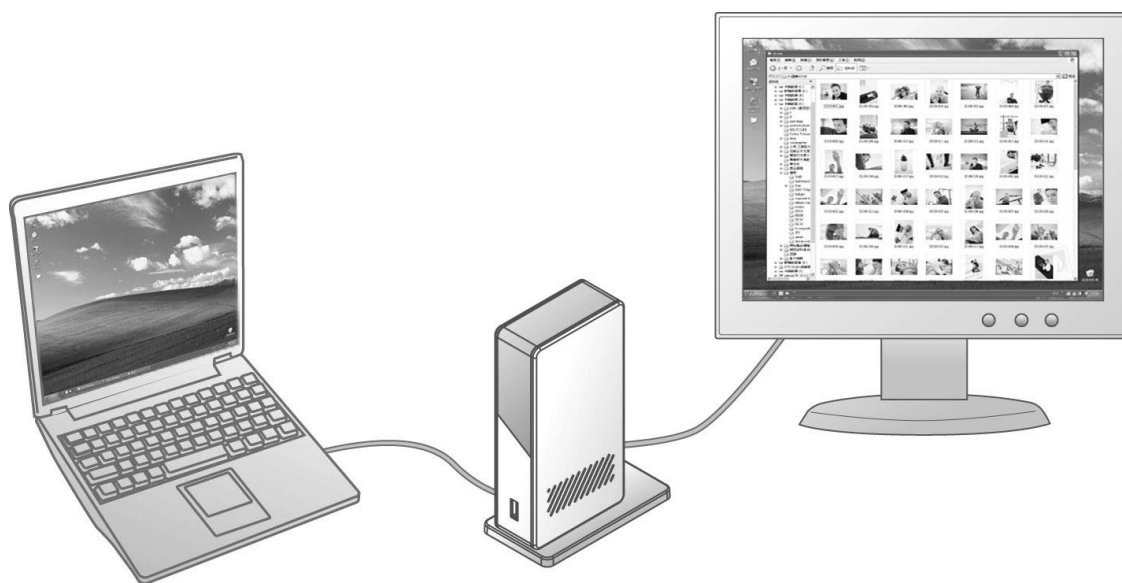
## Video Port

### Display Modes

There are several ways you can utilize the monitor attached on the docking station. The add-on monitor can be configured to use either “mirror mode”, “extended mode” or be the primary display as described in this section.

#### *Extend Your Windows Desktop to Add-on Monitor (Default)*

In this so-called “extended mode”, your display will be spread over the add-on monitor(s). This mode allows you to perform multiple tasks more effectively without overlapping windows.

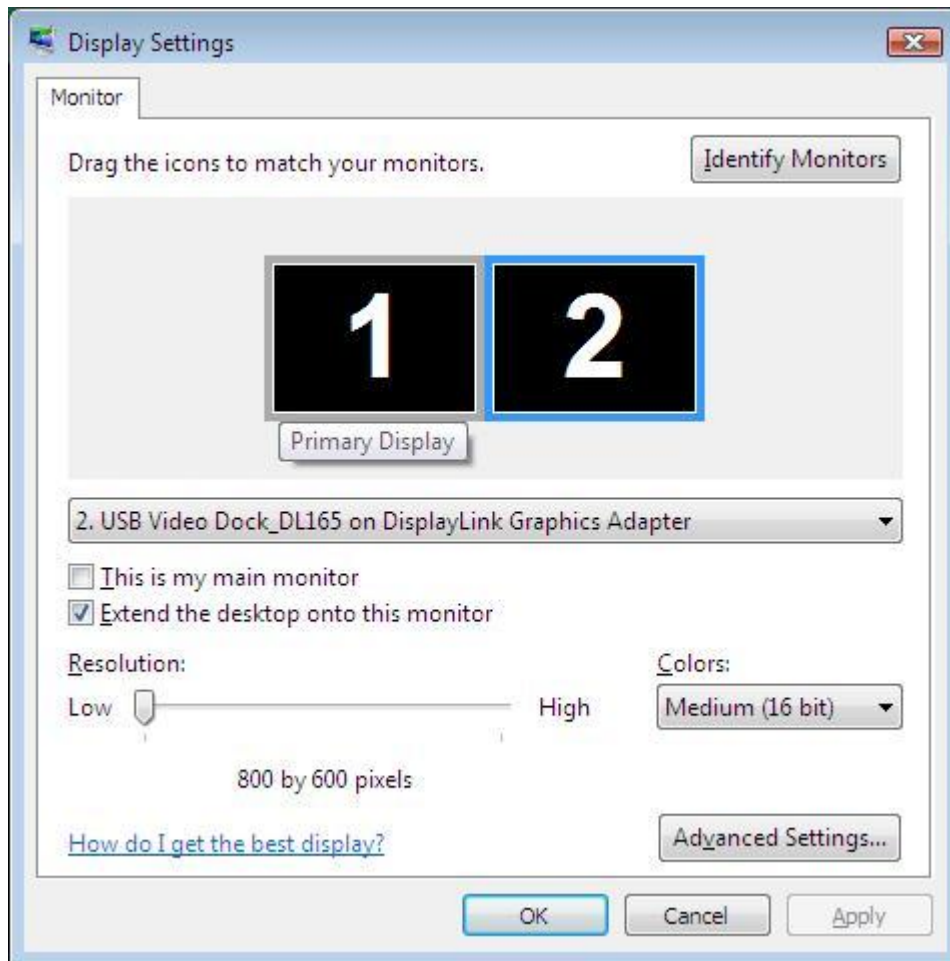


Extended mode is the default setting. To set up the video component to use or restore extended mode, follow these steps:

1. Position the mouse anywhere on your computer desktop, right-click and select **Screen Resolution** on Win 7, **Personalize > Display Settings** on Vista or **Properties > Settings** on XP/2000.
2. In the **Display** drop-down menu, select the option with the string “**DisplayLink Graphics Adapter**”.
3. Check the **Multiple Displays> Extend these displays** on Win 7, **Extend the desktop onto this monitor** box on Vista or **Extend my Windows desktop onto this monitor** box on XP/2000.
4. Drag the icons in the window at the top of the screen to match the physical arrangement of your primary monitor and add-on monitor.

The add-on monitor connected to the docking station may be identified as either "2" or "3", depending on your computer, although there may not be a total of 3 screens connected.

5. Click **OK** to close the settings screen.



Once the setting is done, to use your extended desktop, simply drag and drop your open windows over to your second monitor. However, note that some applications may not support display on the extended desktop.

### **Cursor disappeared ?**

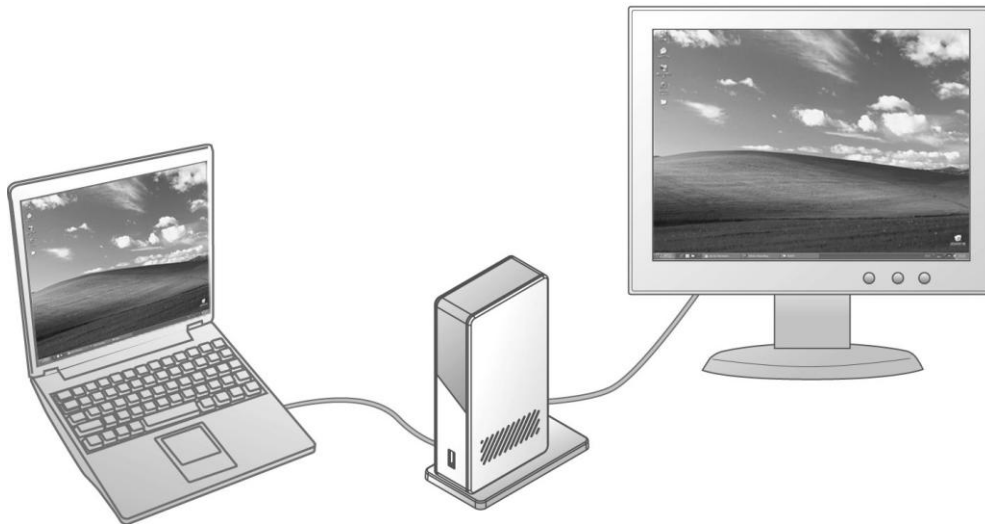
If you're in extended mode but the add-on monitor is not connected, the desktop still pans to the add-on monitor and it's possible that your cursor has moved to the extended desktop so that you cannot find it on the primary display. To solve the problem in such a case, connect the add-on monitor to the docking station or keep moving your mouse to try or unplug the docking station first to restore the cursor.

### *Video and DVD Playback in Extended Mode*

On Windows Vista with extended mode, it's suggested that you run video or DVD playback programs on your primary monitor instead of the add-on monitor to ensure the playback performance.

### *Mirror Your Windows Desktop*

This mode is referred to as “mirror” or “clone” mode. In this mode, your original screen (the primary display) will be mirrored to the add-on monitor.



In mirror mode, the video component will automatically select the settings (screen resolution, color quality and refresh rate) for the add-on monitor. But you can manually adjust the settings as required. However, the settings of the add-on monitor are limited by that of the primary monitor. For example, even though your add-on monitor supports a resolution of up to 1680x1050, you can only configure it to use 1280x1024 due to the primary monitor only supports a resolution of up to 1280x1024.

If you change the video output to extended mode and then want to switch back to mirror mode, follow these steps:

1. Position the mouse anywhere on your computer desktop, right-click and select **Screen Resolution** on Win 7, **Personalize > Display Settings** on Vista or **Properties > Settings** on XP/2000.
2. In the **Display** drop-down menu, select the option with the string “**DisplayLink Graphics Adapter**”.
3. Check the **Multiple Displays> Duplicate these displays** on Win 7, uncheck the **Extend the desktop onto this monitor** on Vista or **Extend my Windows desktop onto this monitor** on XP/2000.
4. Click **OK** to close the settings screen.

### *Be the Primary Monitor*

To make the add-on monitor the primary display:

1. Position the mouse anywhere on your computer desktop, right-click and select **Screen Resolution** on Win 7, **Personalize > Display Settings** on Vista or **Properties > Settings** on XP/2000.
2. In the **Display** drop-down menu, select the option ends with **DisplayLink Graphics Adapter**.
3. Check the **This is my main monitor** box on Vista/Win 7 or **Use this device as the primary monitor** box on XP/2000.

On some PCs and laptops it is necessary to disable the main display (i.e. uncheck the **Extend the desktop onto this monitor** or **Extend my Windows desktop onto this monitor** box for the main display) as part of the same settings change.

4. Click **OK** to close the settings screen.

The add-on monitor stays primary if the PC enters hibernate or suspend mode or is rebooted. If the add-on monitor is unplugged, the main display becomes primary again.

## **Adjusting Resolution, Color Depth and Refresh Rate**

There are three components that make up the screen mode:

**Resolution:** In common usage, this refers to the number of pixels displayed on screen horizontally and vertically.

**Color Depth:** This defines the number of different colors that can be shown on the screen at the same time.

**Refresh rate:** Measures the speed that the entire screen is rescanned. Higher frequencies reduce flicker.

Some monitors advertise the supported modes through the video connector. If this is the case, the video component identifies the supported modes from the monitor. If the monitor does not advertise the supported modes, the video software chooses a set of common screen modes for the monitor.

The software supports the modes listed below.

| <b>Color Depth<br/>Resolution</b> | <b>Refresh rates available at<br/>16 bit color quality</b> | <b>Refresh rates available at<br/>32 bit color quality</b> |
|-----------------------------------|------------------------------------------------------------|------------------------------------------------------------|
| <b>640x480</b>                    | 60 72 75 85                                                | 60 72 75 85                                                |
| <b>800x600</b>                    | 56 60 72 75 85                                             | 56 60 72 75 85                                             |
| <b>1024x768</b>                   | 60 70 75 85                                                | 60 70 75 85                                                |
| <b>1280x960</b>                   | 60 85                                                      | 60 85                                                      |
| <b>1280x1024</b>                  | 60 75                                                      | 60 75                                                      |
| <b>1360x768</b>                   | 60                                                         | 60                                                         |
| <b>1366x768</b>                   | 50 60                                                      | 50 60                                                      |
| <b>1368x768</b>                   | 60                                                         | 60                                                         |
| <b>1400x1050</b>                  | 60 75 85                                                   | 60 75 85                                                   |
| <b>1440x900</b>                   | 60                                                         | 60                                                         |
| <b>1600x1200</b>                  | 60                                                         | 60                                                         |
| <b>1680x1050</b>                  | 60                                                         | 60                                                         |
| <b>1920x1080</b>                  | 60 50                                                      | 60 50                                                      |

### About the resolutions and refresh rates available to users

The resolutions and refresh rates available to the user through Windows are a comprise of the support from the following elements:

- The video component of the docking station
- The primary monitor and the add-on monitor
- The primary video card on your computer and installed drivers

Therefore, for example, if your monitor doesn't support a resolution of 1600x1200, then 1600x1200 is not possible though your docking station's video component supports 1600x1200. This ensures that the monitor cannot be put into an unsupported mode, which might damage it.

If cloning the primary display, the video component will try to use the preferred monitor mode. In some cases, this may not be the most appropriate mode for the cloned desktop. It is recommended that the primary display resolution be changed to closer match the default resolution of the add-on monitor.

To configure the three components (resolution, color depth and refresh rate) of a screen mode, follow these steps:

1. Position the mouse anywhere on your computer desktop, right-click and select **Screen Resolution** on Win 7, **Personalize > Display Settings** on Vista or **Properties > Settings** on XP/2000.
2. In the **Display** drop-down menu, select the option ends with **DisplayLink Graphics Adapter**.
3. To change the screen resolution or color quality, select those options on the screen. Be sure to select one of the supported resolutions and color quality numbers in the table above. For an add-on monitor, you can also select any resolution or color quality supported by that monitor.
4. To change the refresh rate, click **Advanced...** and then click **Monitor**.
5. Select a refresh rate from the **Screen** refresh rate drop-down list and then click **Apply**.
6. Click **OK** to close the settings screen.

## Disconnecting the Docking Station

If the docking station is unplugged from the computer, the add-on monitor goes blank. All windows and icons move to the primary screen.

On reconnection of the docking station, the docking station returns to the same mode as it was before disconnection. However, windows and icons that were previously on the screen will not be moved back.

## **How Standby or Hibernate Mode Affects Devices Attached to the Docking Station**

### **External Monitors**

When the docking station is connected to a computer and an external monitor, if the computer goes into standby or hibernate mode, the external monitor display goes blank.

When the computer returns to an active state, the external monitor display keeps the same settings it had before the computer went into standby or hibernate mode. However, if the add-on monitor was set for extended mode, windows that were previously on the external monitor will not move back to that secondary monitor. Also, if the add-on monitor is in extended mode and the computer requires a login after standby or hibernate mode, the login screen appears on the primary computer monitor, not the external monitor.

If the computer is shut down, restarted and logged in, again the add-on monitor returns to the same mode as it was before shutdown.

### **Other Devices**

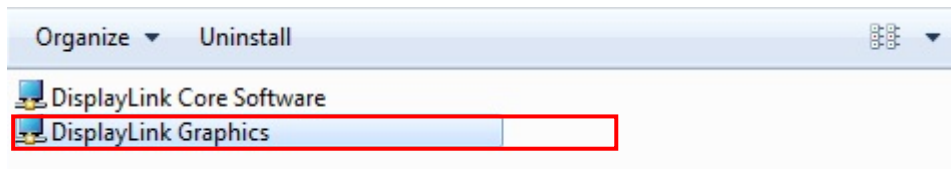
If another device is connected to a port on the docking station and the computer goes into standby or hibernate mode, that device will not function. For example, if you are using the Ethernet port for high-speed network access, network access will not be available until the computer returns to an active state.

## 4. Uninstalling the Drivers

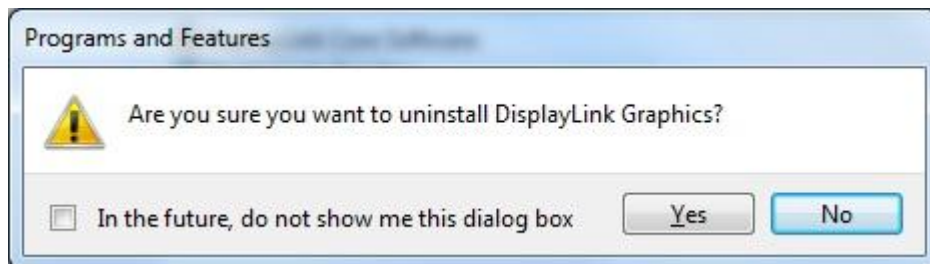
### Uninstalling the Driver

Please take these steps to uninstall Drive:

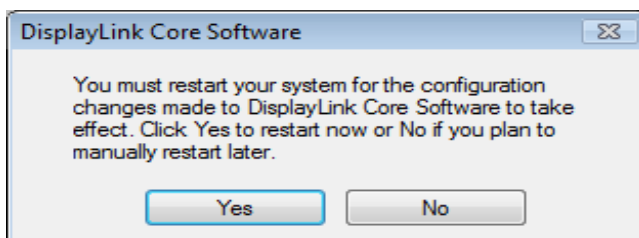
1. Open the **Control Panel** and double-click **Uninstall a Program** on Win 7, **Programs and Features** on Vista or **Add or Remove Programs** on 2000/XP.
2. Select **DisplayLink Graphics...** and click Uninstall or Remove



3. Click **Yes** to confirm the removal.



4. Click **Yes** to restart your computer. You can also disconnect the video connection now.



## 5. Specifications

| General                  |                                                                                                            |                 |
|--------------------------|------------------------------------------------------------------------------------------------------------|-----------------|
| Host Interface           | USB 2.0                                                                                                    |                 |
| Operating System Support | Windows® 2000 SP4, XP SP2, Vista™, Windows® 7                                                              |                 |
| Ports and Connectors     |                                                                                                            |                 |
| Upstream                 | 1 x USB Type B Female (Black)                                                                              |                 |
| USB Hub Downstream       | 4 x USB Type A Female (Black)                                                                              |                 |
| Video Output Port        | 1 x DVI Female (White).                                                                                    |                 |
| LAN                      | 1 x RJ-45 Female                                                                                           |                 |
| Power                    | 1 x DC Jack (Black).                                                                                       |                 |
| LEDs                     |                                                                                                            |                 |
| Power LED                | On: Power is supplied to the docking station.<br>Off: No power is supplied to the docking station.         |                 |
| USB Hub LED              | On: Any of the four USB downstream ports is connected to a USB device.<br>Off: No USB device is connected. |                 |
| LAN LEDs                 | 10/100                                                                                                     | 1 x LED (Green) |
|                          | Link                                                                                                       | 1 x LED (Green) |

\* Specification is subject to change without further notice.

## 6. Regulatory Compliance

### FCC Conditions

This equipment has been tested and found to comply with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference
- (2) This device must accept any interference received. Including interference that may cause undesired operation.

### CE

This equipment is in compliance with the requirements of the following regulations:  
EN 55 022: CLASS B

### WEEE Information

For EU (European Union) member users:

According to the WEEE (Waste electrical and electronic equipment) Directive, do not dispose of this product as household waste or commercial waste. Waste electrical and electronic equipment should be appropriately collected and recycled as required by practices established for your country. For information on recycling of this product, please contact your local authorities, your household waste disposal service or the shop where you purchased the product.



## FAQ

**Question:** How correctly install Docking Station in Windows OS?

**Answer:** Don't plug Docking Station to USB port in PC/NB before installing drivers. For graphic part of Docking Station we recommend actual driver from DisplayLink page (for internal chipset DL-165) here: <http://www.displaylink.com/support/index.php> and for LAN part from ASIX - AX88772A here: <http://www.asix.com.tw/download.php?sub=driverdetail&PItemID=97>. Other drivers are integrated in Windows OS and after inserting of Docking station to USB port of PC/NB are installed automatically.

**Question:** Is there a drivers for Windows 8 32/64bit for Docking Station?

**Answer:** Yes, for graphic part of Docking Station you can download actual driver from DisplayLink page (for internal chipset DL-165) here: <http://www.displaylink.com/support/index.php>. Don't plug Docking Station to USB port in PC/NB before installing drivers. Other drivers are integrated in Windows OS and after inserting of Docking station to USB port of PC/NB are installed automatically.

**Question:** Can I obtain more detailed information about problems with Docking Station?

**Answer:** Of course, you can contact our support or for graphic part of Docking Station you can find useful information on FAQ pages of DisplayLink company here: <http://www.displaylink.com/support/knowledgebase.php>.

# Docking Station LITE

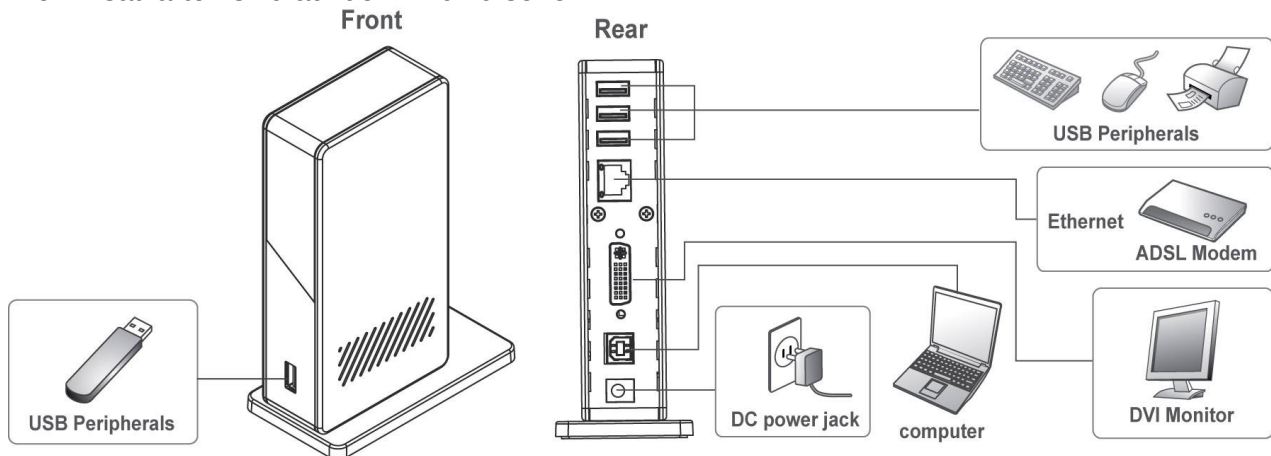
# Handbuch



## **EINLEITUNG**

Wir bedanken uns für den Ankauf der „i-tec USB 2.0 Docking Station FullHD Video“. Es handelt sich um eine einfache Docking-Station mit der Möglichkeit, alle Ihre beliebten Peripherien wie z.B. eine vollwertige Tastatur, Ethernet, Tischbildschirm, usw. anzuschließen. Alle erwähnten Produkte können Sie dann an Ihr Laptop schnell mit einem einzigen USB-2.0-Kabel anschließen. Als Abbildungsanlage können Sie dann praktisch einen beliebigen Bildschirm nutzen, weil die Docking-Station mit dem DVI-Konnektor mit Adapter für VGA, für moderne LCD- und Plasmabildschirme und Fernsehen, ausgestattet ist. Der graphische Chip unterstützt sogar die Full- FP-Auflösung (1920 x 1080 Pixel).

Die Einsatzarten sind auf dem Bild zu sehen:



## **LIEFERUMFANG**

- 1) USB 2.0 Docking Station
- 2) Stromversorgung
- 3) USB - Kabel (ein Ende Konnektor Typ A, zweiter Ende - Typ B) – für den Anschluss an das PC/NB
- 4) DVI to VGA – Adapter
- 5) CD mit Treiber und Handbuch
- 6) Quick Start

## **SPEZIFIKATION**

- Unterstützung USB 2.0 (Max. 480Mb/s) sowie USB1.1 (Max.12Mb/s) – wir empfehlen Verwendung von PC/NB mit USB 2.0-Ports
- Verwendbare Ports für USB 2.0 Docking Station:
  - 1x DVI-Port (mit beigelegtem Adapter DVI-VGA kann man auch VGA-Bildschirm anschließen)

| <b>Auflösung</b> | <b>Wiederholfrequenz<br/>16 Bit Bildqualität</b> | <b>Wiederholfrequenz<br/>32 Bit Bildqualität</b> |
|------------------|--------------------------------------------------|--------------------------------------------------|
| 640x480          | 60 72 75 85                                      | 60 72 75 85                                      |
| 800x600          | 56 60 72 75 85                                   | 56 60 72 75 85                                   |
| 1024x768         | 60 70 75 85                                      | 60 70 75 85                                      |
| 1280x960         | 60 85                                            | 60 85                                            |
| 1280x1024        | 60 75                                            | 60 75                                            |

|           |          |          |
|-----------|----------|----------|
| 1360x768  | 60       | 60       |
| 1366x768  | 50 60    | 50 60    |
| 1368x768  | 60       | 60       |
| 1400x1050 | 60 75 85 | 60 75 85 |
| 1440x900  | 60       | 60       |
| 1600x1200 | 60       | 60       |
| 1680x1050 | 60       | 60       |
| 1920x1080 | 60 50    | 60 50    |
| 1920x1200 | 60       | 60       |

- 4x USB 2.0 Port Typ A – Anschluss von USB-Peripherien
- 1x USB 2.0 Port Typ B- bestimmt für Anschluss an das USB-Port PC/NB
- 1x Ethernet 10/100Mb/s LAN RJ-45 Port
- Stromversorgungsadapter: Eingang ~100-240V/50-60Hz/0,5A ; Ausgang =5V/2,5A
- Arbeitstemperatur: 0-40°C
- Lagerungstemperatur: -10 bis +80°C
- Umgebungsfeuchtigkeit: bis 85%

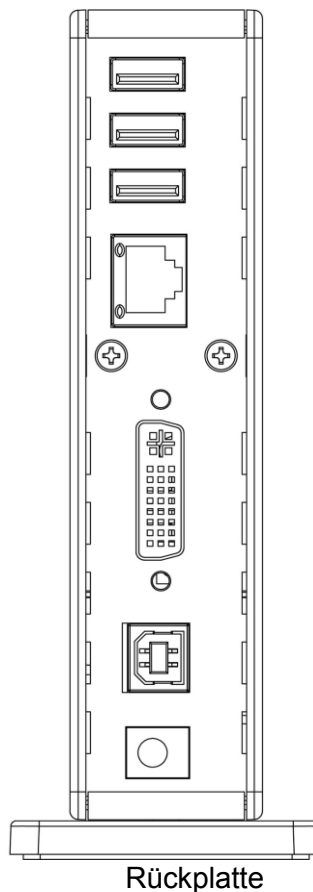
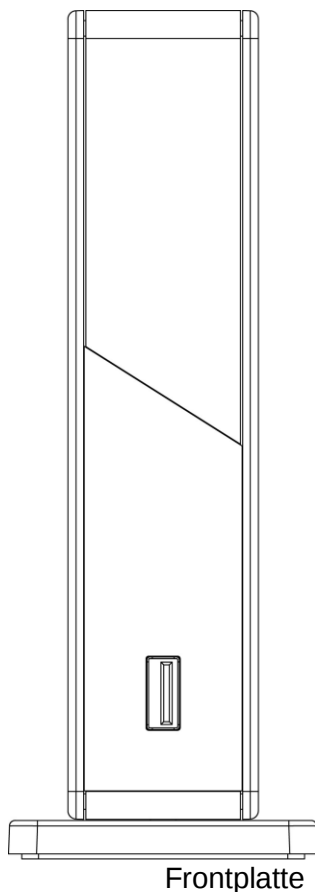
### **BESCHREIBUNG DOCKING STATION:**

*Frontplatte :*

1xUSB 2.0 Port Typ A

*Rückplatte – von oben nach unten:*

3xUSB 2.0 Port Typ A, 1xRJ45 Ethernet 10/100 Port, DVI Port, 1x USB Port Typ B, 1xKonnektor zur Versorgung



## **SYSTEMANFORDERUNGEN**

- 1) Hardwareanforderungen: PC, Notebook mit freiem Port USB 2.0 (Falls Sie USB 1.1 haben, wird die Geschwindigkeit der Übertragungen beschränkt), Prozessor Intel Pentium 1.2GHz und höher, 512MB RAM.
- 2) Für DVD-Abspielen auf einem Zusatzbildschirm ist es erforderlich, mindestens Prozessor Intel Pentium 2.0 und höher, 1 GB RAM und die Auflösung des Bildschirms 800x600 und 16 eingestellt zu haben.
- 3) Operationssystem: Windows 2000SP4/ XPSP2 / Vista 32\_64 bit/ Win7 32\_64 bit

### **Bemerkung:**

- a) Installation von USB-Hubs (für USB 2.0 -Ports Typ A) erfolgt systemautomatisch, andere Anlagen-Porte sind aus dem beigeestellten CD zu installieren
- b) 10/100Mb/s LAN Port sowie Video (Display) Port sind zum ersten Mal vor dem eigenen Anschluss von Docking Station an das PC/NB aus dem beigeestellten CD zu installieren und erst dann die Docking Station anzuschließen.

## **INSTALLATION IN WINDOWS 2000SP4/XPSP2/VISTA/WIN7 (VERSION 32\_64BIT)**

**Kein Anschluss der Docking Station an PC/NB vor der ersten Anwendung, solange Sie die entsprechenden Treiber für LAN und Video (Display) Port aus dem beigeestellten CD nicht installiert haben.**

**Die Anlagentreiber sind nur bei der ersten Verwendung zu installieren.**

1. Legen Sie CD mit Treiber ins Laufwerk ein und installieren Sie die Treiber – setzen Sie folgend fort:

Für LAN und Video (Display) Port – wählen Sie Installation aus dem CD, Datei Setup.exe aus dem Verzeichnis CD:/Driver – im System wird dann LAN als „**ASIX AX88772 USB2.0 Fast Ethernet Adapter**“ abgebildet.

Hinweis für Video (Display) Port Installation – Die Installation erfolgt in mehreren Schritten.

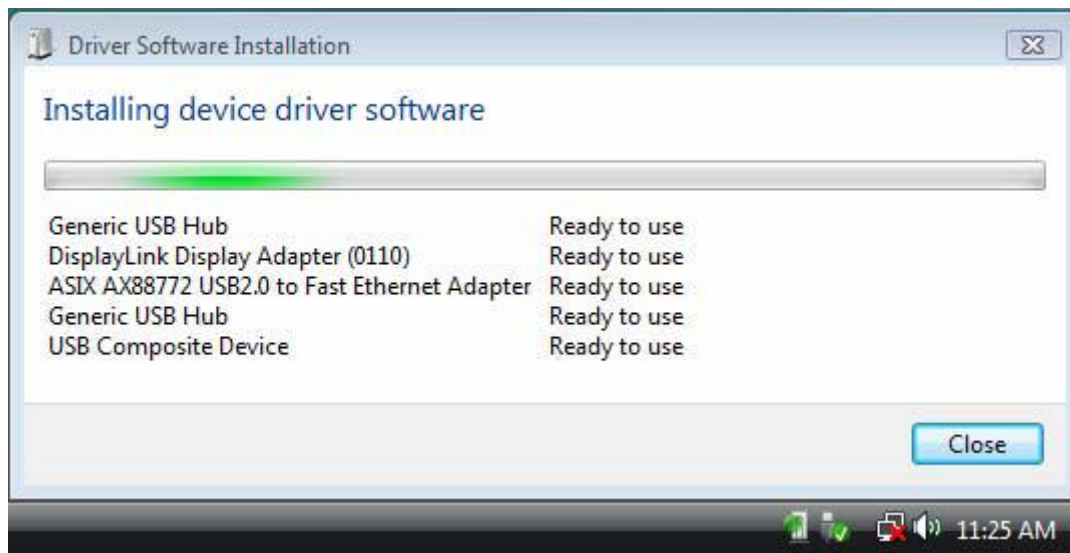
Für Vista/ W7 OS installieren Sie als Benutzer Administrator und nach der Installation ist Restart von PC/NB durchzuführen;

Für Win2000 OS: falls das Herunterladen von Patche notwendig, führen Sie dies durch und nach dessen Installation ist erneut SETUP.EXE zu starten.

- a) Der Bildschirm kann im Laufe der Installation der Treiber blinken, das ist ein Standardprozess
- b) Wir empfehlen wieder Restart nach der Beendigung der Installation der Treiber
- c) Im System wird es dann als USB-Anlage „**DU2800D1**“ und in den Graphischen Adapters als „**DisplayLink Grafic Adapter**“ und „**DisplayLink Mirror Adapter**“ angezeigt.

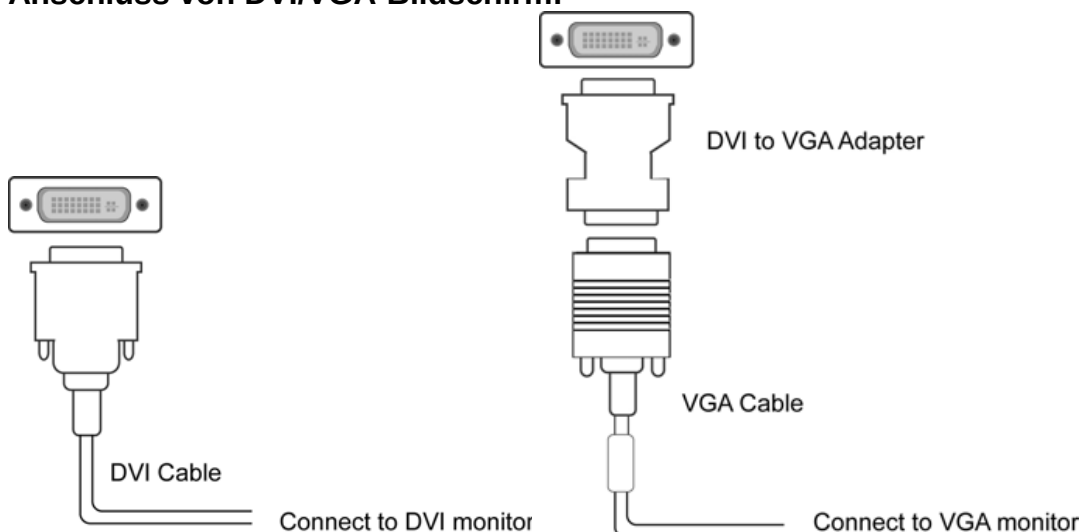
## **INSTALLATION VON HARDWARE**

- 1) Schalten Sie PC/NB ein und schließen Sie den Stromversorgungsadapter an die USB 2.0 Docking Station an – Rückplatte USB 2.0 Docking Station
- 2) Schließen Sie den USB-Kabel in Port USB Typ B ein – auf der Rückplatte USB 2.0 Docking Station
- 3) Schließen Sie die Versorgungsquelle ans 220V-Netz an
- 4) Schließen Sie den USB-Kabel - PC/NB in einen freien USB 2.0 Port (gegebenenfalls USB 1.1) ein.
- 5) Nachfolgend startet eine automatische Port-Installation in einzelnen Systemen.



6) Führen Sie Restart von PC/NB durch.

### Anschluss von DVI/VGA-Bildschirm:

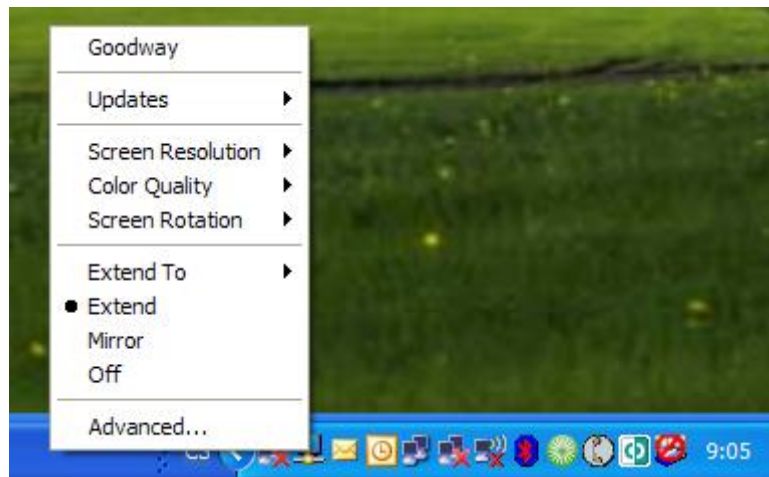


Nach dem Anschluss kann das Bildschirm blinke, was ein Standardzustand ist.

### **EINSATZART FÜR USB 2.0 DISPLAY ADAPTER**

1. Neben der Uhrzeit auf der Leiste Start klicken Sie auf die Ikone Anschluss an die Netzspannung





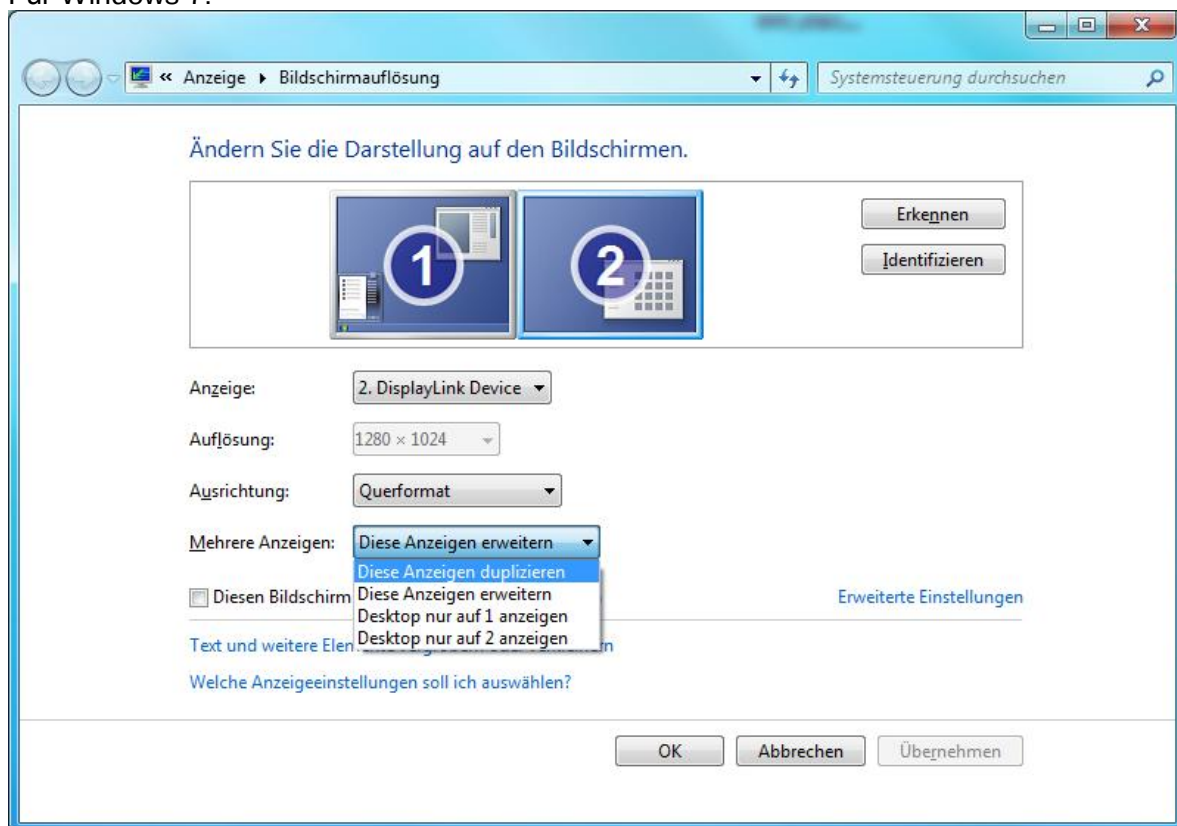
Hier können Sie dann die Konfiguration Update und Herunterladen von Update wählen; ferner Auflösung des Bildschirms (Screen Resolution), Farbenqualität (Color Quality) - Medium (16bit) oder High (32bit), Umdrehung des Bildschirms (Screen Rotation).

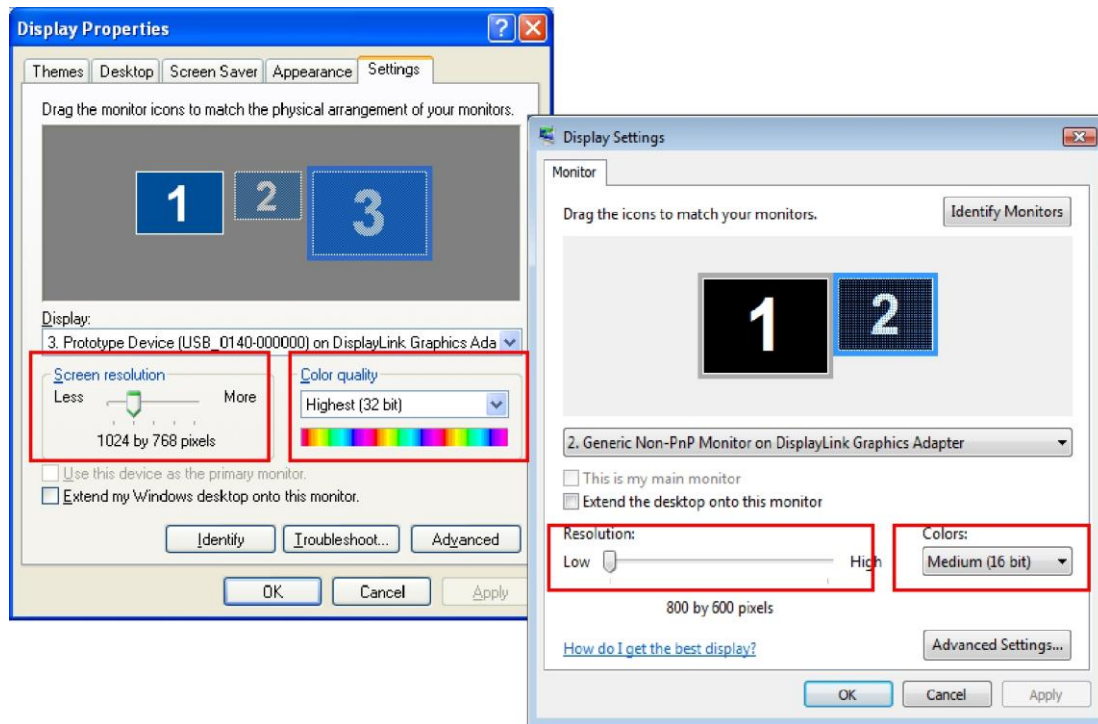
### **Nachfolgend erfolgt eine wichtige Einstellung:**

Sie können Extend oder Mirror für die Einstellungsart eines weiteren Bildschirms wählen. Die Wahl Extend erweitert den bestehenden Bildschirm um den gerade installierten und mittels Extend To wählen Sie dessen Positionierung oder die Wahl Mirror ermöglicht Ihnen ein „Spiegel“ auf dem weiteren Bildschirm zu haben. Die Wahl Off schaltet den Display Adapter aus.

Erweiterte Einstellungen (Advanced) – nach dem Klick auf Advanced läuft die System-Einstellung der **Abbildung** (kann auch direkt aus dem System gewählt werden) an:

Für Windows 7:





2. Jetzt kann man ähnliche Einstellungen wie mittels des Punktes 1 durchführen - Extend und Mirror

- a) für **Mirror** : auf der Leiste Einstellung der Abbildung wählen Sie Adapter „DU2800D1(USB\_0147...“ und lassen Sie das freie Feld „Die Fläche auch für diesen Bildschirm erweitern“
- b) für **Extend** : auf der Leiste Einstellung der Abbildung wählen Sie Adapter „DU2800D1(USB\_0147...“ und kreuzen Sie das Feld „Die Fläche auch für diesen Bildschirm erweitern“ an.

**Bemerkung:** Mit Ankreuzen des Feldes „Diese Anlage als Primärbildschirm verwenden“ wählen Sie dieser als Hauptbildschirm.

Nach dem Klicken auf den betroffenen Bildschirm und dessen Überziehung können Sie diesen nach Bedarf positionieren.

Bestätigen Sie den Hinweis zur Änderung der Einstellung der Abbildung.

Jetzt können Sie mit dem Mauscursor auf beiden Bildschirmen arbeiten und die geöffneten Applikationen nach Bedarf positionieren.

### Bemerkungen zu der Verwendung:

- 1) Standby/Hibernate – Betrieb und Video-Port: nach der Aktivierung von PC/NB aus dem Standby/Hibernate – Betrieb bildet sich ein Primärbildschirm ab, deshalb empfehlen wir denjenigen als Primärbildschirm zu verwenden, der mit PC/NB integriert ist, damit Sie sich wieder ins System anmelden können.
- 2) Mirror - Betrieb: ein Zusatzbildschirm richtet sich nach den Parametern des ursprünglichen Bildschirms im System, d.h. falls wir Mirror einstellen und der integrierte Bildschirm hat eine Auflösung von 1280x1024, so überträgt sich der Bildschirm in einer maximalen Auflösung von 1280x1024 (auch wenn wir diese auf eine höhere Auflösung umstellen).
- 3) Die Bildschirme sind nach dem Handbuch zu verwenden und einzustellen, d.h. der Bildschirm mit einer niedrigeren Auflösung als die Auflösung auf dem Video-Adapter kann

den Bildschirm beschädigen (z.B. für einen Bildschirm mit einer max. Auflösung von 1024x768 ist **nie** der Wert von 1280x960 und höher auf dem Video-Adapter **einzustellen**)

### Deinstallation der Treiber

Verwenden Sie standardmäßig die Steuerpaneele „Programme Hinzufügen oder Entnehmen“:

- AX88772 für Ethernet-Treiber
- DisplayLink Core Software für Video-Treiber

## **SICHERHEITSHINWEISE ZUR VERWENDUNG VON USB 2.0 DOCKING STATION**

- den Extremtemperaturen und der Luftfeuchtigkeit nicht aussetzen
- die Anlage ist auf eine flache Unterlage zu verwenden – so vermeiden Sie Abrutschen und Sturz auf den Boden
- die Treiber sowie das Handbuch sind für eine eventuelle Verwendung aufzubewahren

In Zusammenarbeit mit der Serviceabteilung:

- nach dem Sturz ins Wasser, auf den Boden ist die Funktionsfähigkeit zu überprüfen
- beim Bruch der Abdeckung ist die Funktionsfähigkeit zu überprüfen
- eine funktionslose Anlage ist nach dem Handbuch zu reklamieren

## FAQ

**Frage:** Wie soll der USB Display Adapter im Windows BS richtig installiert werden?

**Antwort:** Schließen Sie den USB Adapter an den USB Port in PC/NB nicht an, bis die Treiber nicht installiert sind. Für den grafischen Teil ist es nötig die aktuellen Treiber von Display Link (für den internen Chipsatz DL-165) hier: <http://www.displaylink.com/support/index.php> für den LAN-Teil die Treiber von ASIX - AX88772A hier:

<http://www.asix.com.tw/download.php?sub=driverdetail&PItemID=97> zu installieren. Andere Treiber sind im Betriebssystem Windows integriert und werden nach dem Anschluss von Docking Station an den USB Port von PC/NB automatisch installiert.

**Frage:** Sind die Treiber für Windows 8 32/64bit für die Docking Station verfügbar?

**Antwort:** Ja, für den grafischen Teil ist es nötig, die aktuellen Treiber von Display Link (für den internen Chipsatz DL-165) hier: <http://www.displaylink.com/support/index.php> zu installieren. Schließen Sie den USB Display Adapter nicht an, bis diese Treiber nicht installiert sind. Andere Treiber sind im Betriebssystem W8 integriert und werden nach dem Anschluss von Docking Station an den USB Port von PC/NB automatisch installiert.

**Frage:** Wo kann ich nähere Informationen bezüglich der Probleme mit Docking Station bekommen?

**Antwort:** Natürlich, Sie können sich an unseren Support wenden oder hilfreiche Informationen bezüglich des grafischen Teils sind sowie unter FAQ auf der Internetseite von DisplayLink hier: <http://www.displaylink.com/support/knowledgebase.php> zu finden.