# Kensington





### Agenda

- Introduction to Docking Stations
- Proprietary vs Universal
- Kensington Universal 4K Dock K33983EU
  - What is 4K
  - Technology & Specifications
  - Comparison and Features
  - Set-Up
  - Hints & Tips
- Summary

### **Introduction to Docking Stations**

- A dock provides a simplified way of "plugging-in" a laptop computer to common peripherals
- A dock can allow a laptop to become a substitute for a desktop computer, without losing the mobile computing functionality
- Mobile devices have different connectors and ports and therefore specific docks are made for that model of device in mind, but there are also universal

### **Proprietary vs Universal**

### **Proprietary Docks**

Docking receiver to place a laptop on



Laptop connectors on the base, fits to the specific connector for that brand and model

Expands the number of ports, output to a display screen and charging the device

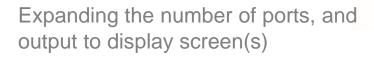
Model Specific, need to replace dock if model changes



#### **Universal Docks**



Using a single USB cable, connect any laptop to the Universal docking station



Connect any device to the docking station using a single USB connector; flexibility covering multiple devices over multiple device lifetimes





K33983EU

**4K Universal USB Docking Station** 

# Kensington

### What does 4K mean to a business?



## Ultra High Definition Resolution

Display more applications on one screen with same quality as two 19" screens, using either HDMI or DisplayPort



# Backward Compatibility

Use a 4K monitor
even with
computers without a
4K graphics card



#### **Universal Dock**

Single cable to connect various laptops, ultrabooks and hybrids, running Windows 7 or 8



#### **Economic Savings**

80% less power consumption using USB, desk space and cabling savings than using two monitors



#### **Future Proof**

Supports dual-monitor up to 2k on each, for those not ready to migrate to 4K



### K33983EU - SD4000



#### 4K for Better Productivity





#### **Key Features:**

A high speed universally compatible docking station, powered by DisplayLink. Designed for 4K UHD monitors resolution for increased productivity

#### 4K Ultra HD for One Monitor

Give your computer the screen space, power and clarity of Ultra HD, with 3840x2160 resolution via USB 3.0, increasing the content available on your monitor for improved productivity.

#### No Need for 4K Graphics Card

The SD4000 takes care of all the work for you so you don't have to upgrade or modify your laptop to enable the higher resolution on the screen

#### **HDMI or DisplayPort Options for 4K**

Both connections are available on the back of the dock and can be accessed through a sliding panel that covers the connection port you're not using to protect the electronics

### K33983EU - SD4000



#### 4K for Better Productivity





#### **Key Features:**

#### **2K for Dual Monitors**

Ideal for users not ready to make the transition to 4K, this option can support the typical two-monitor setup with 1920x1200/2048x1152 resolution for each screen

#### **USB 3.0 Ports/2.1A Charging Port**

Expand your device's productivity capabilities by plugging your peripheral accessories into any of three USB 3.0 ports that support transfer speeds up to 5 Gbps, which is 10 times faster than USB 2.0. One port allows you to fast charge a tablet or smartphone.

#### **Gigabit Ethernet Port**

Provides a reliable wired connection to a network or the Internet

### **Technology and Specifications**



#### **USB** (Universal Serial Bus)

Communication cable between devices:-Keyboards, Mice, Hard-Drives, Printers, Digital Cameras

One USB – always on for charging of devices

Connect USB-B cable to the dock and USB-A to a laptop

Single cable to provide connection to the laptop for all peripheral devices connected the dock and Ethernet connection

Takes connections from the Laptop to display content on the monitors, sharing audio and microphone input features

### **Technology and Specifications**





#### **DVI (Digital Video Interface)**

Display digital video content Connect a monitor directly

#### **DP** (DisplayPort)

Digital display interface for video content and audio where a display has it available

Select either DP or HDMI for a single 4K display, or use either with DVI for dual 2K Display

#### **HDMI** (High Definition Multimedia Interface)

Is an interface for transferring video data and digital audio from a HDMI source device, to a compatible display Select either DP or HDMI for a single 4K display, or use either with DVI for dual 2K Display

### **Technology & Specifications**

#### **Kensington Security Slot**

Secure your docking station as well as your laptop, with a Kensington lock (sold separately)

#### **DisplayLink 4K Plug and Display**

The Docks have been thoroughly tested by both DisplayLink and Kensington to reach the highest levels of quality and interoperability for a true Plug and Display connection with multiple laptops

#### Mini-Jack Audio 2.1

Connect headphones or speakers using a 3.5mm connector

#### Microphone

Input using a 3.5mm socket to connect an external microphone

### **Technology & Specifications**

#### 4K UHD 3840x2160 (Single Display) Resolution

Resolution means the number of lines on the display screen and the amount of information that can be sent to fill those lines, giving a high-definition quality image

4K resolution has 4 times more pixles than 1080p – producing a clearer picture

#### Single & Dual Display

Preference to us a single display screen using 4K resolution or to two display screens using up to 2K for each screen





### **Comparison and Features**

	SD3000 – Single Dock K33970EU	SD3500 – Dual Dock K33972EU	SD4000 – 4K Dock K33983EU
Product Description	A high speed universally compatible docking station. Connection of up to 6 USB peripheral devices from a single USB connection.  Designed for HD video on a single monitor for increased productivity	A high speed universally compatible docking. Connection of up to 6 USB peripheral devices from a single USB connection. Designed for HD video on a dual monitor set up for increased productivity	A high speed universally compatible docking station.  Designed for 4K UHD monitors for increased productivity, without the need to have a 4K graphics card. Connection of 3 USB peripherals, 1 of which is always on for charging without a laptop connected.  Option of HDMI, DVI or Displayport for Display connection
Device	Laptop/Desktop		
Operating System	Windows/Mac	c (Plug n Play)	Windows (Plug n Play)
Video Quality	Single HD 1080p	Dual HD 1080p	4K UHD (single monitor) 2K (Dual monitors)
USB Ports	3 USB 3.0 ports 1 port is available for fa 2 USB 3.0 ports on the front of the docking station and 4 additional USB 2.0 ports on the rear sync, charging a device without laptop co (2.1A fast charging port)		
Video Output	DVI (HDMI & VGA with adapters)	DVI & HDMI (VGA with adapters)	HDMI, DVI & DisplayPort
Gigabit Ethernet	Yes		
Audio in/out	Yes		
Benefits	Universal USB 3.0 connectivity; Connect an external monitor to your laptop; Expands the USB port access up to 6 additional to connect peripheral devices to, Ethernet connection via single USB cable. Hot docking/undocking feature so the laptop remains running when connecting, saving time and remaining productive	Universal USB 3.0 connectivity; Connect 2 external monitors to your laptop; Expands the USB port access up to 6 additional to connect peripheral devices to, Ethernet connection via single USB cable. Hot docking/undocking feature so the laptop remains running when connecting, saving time and remaining productive	Universal USB 3.0 connectivity; Connect up to 2 monitors – one 4K monitor, or 2 monitors displaying 2K or less. Expands port access to 3 additional USB peripherals, with one port always ready for charging devices. Ethernet connection to laptop and all accessed via a single USB cable. Saving set-up time, no 4K graphics card needed or upgrade to display on a 4K monitor.
Security	Kensington Security Slot		

### **Packaging and Contents**





### K33983EU - SD4000

#### Get 4K your way for Better Productivity



#### **Technical Specifications:**

#### **Summary:**

4K Ultra HD resolution (3840x2160) to one monitor via an HDMI cable or DisplayPort connection

Enables 4K UHD even if laptop does not have 4K graphics card 2K resolution (1920x1200/2048x1152) for two-monitor setup via DisplayPort or HDMI/DVI 3 universal USB 3.0 ports for seamless productivity with your accessories 2.1A fast charging port to power up a tablet or smartphone

Gigabit Ethernet port for wired connectivity to the Internet Includes speaker port, microphone jack, Kensington Security Slot Compatible with Windows 8.1/8/7

#### **Product Specifications:**

Dimensions: 19.5 cm x 85 cm x 2.75 cm

Minimum system requirements (office, productivity, web):

- Processor: Intel Core i5 2+ GHz / AMD Llano or better
- Memory: 4GB
- Video Card: Intel HD3000, ATI Radeon HD5/6xxx, NVidia GeForce 4xxM or better

Recommended requirements (full-screen video playback):

- Processor: Intel Core i7 2+ GHz / AMD Llano or better
- Memory: 8GB
- Video Card: Intel HD4000, ATI Radeon HD5/6xxx, NVidia GeForce 4xxM or better
- Disk: 7200 RPM or SSD

### 4K Display Set-Up



#### **4K Display Configuration**

HDMI or DisplayPort connection to a 4K display

Single USB cable from Dock to Laptop

Using the 2 of the 3 USB ports to connect Mouse and Keyboard

Using the always on USB port to charge a tablet/smartphone

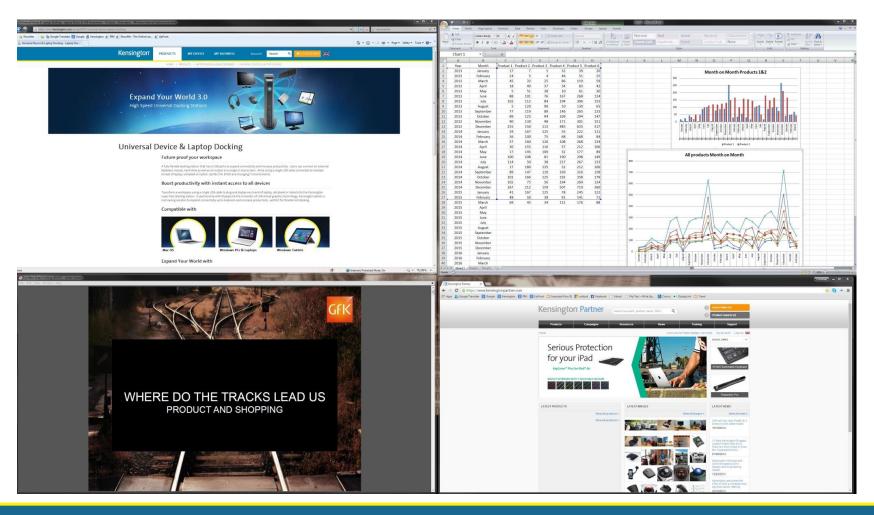
Audio 2.1 socket, connect a 3.5mm cable to desktop speakers

#### Results

Display Ultra HD from a non-4K graphics PC to a Single Display to get more detailed information on the screen. Increase productivity and saving space and energy cost to run a second screen

### One 4K Display – Multiple Applications

No loss of quality or resolution for each programme



### **Dual Display Set-Up**



#### **Dual Display Configuration**

DisplayPort or HDMI to one display and DVI to the second display with either support up to 2K resolution Single USB cable from Dock to Laptop

Using the 2 of the 3 USB ports to connect Mouse and Keyboard

Using the always on USB port to charge a tablet/smartphone

Audio 2.1 socket, connect a 3.5mm cable to desktop speakers

#### Results

Using a 4K dock, to future proof an investment to display on 2 screens of 2K resolution, with simplicity and productivity remaining on a universal dock

### **Hints & Tips**

#### Windows 7 & 8 – Snap to Fit

#### To arrange windows side by side

- Drag the title bar of a window to the left or right side of the screen until an outline of the expanded window appears.
- Release the mouse to expand the window.
- Repeat steps 1 and 2 with another window to arrange the windows side by side.
- To return the window to its original size, drag the title bar away from the top of the desktop and then release.

#### Tip

 To snap an active window to the side of the desktop using the keyboard, press either Windows logo key +Left Arrow or Windows logo key +Right Arrow

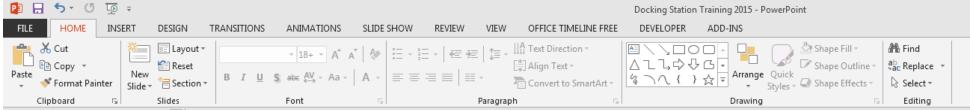
### **Hints & Tips**

#### Getting the best image from Windows on a 4K Display

- You can make the centre image bigger but to change the ribbon on applications you need to go into the Display settings and adjust to sizing
  - Windows 7 possible to 125/150 (depending on PC)
  - Windows 8 should increase to 150-200%
  - Note you need to shut down after changing the settings, when using the laptop out of the dock the text may seem too larger for the display

100%





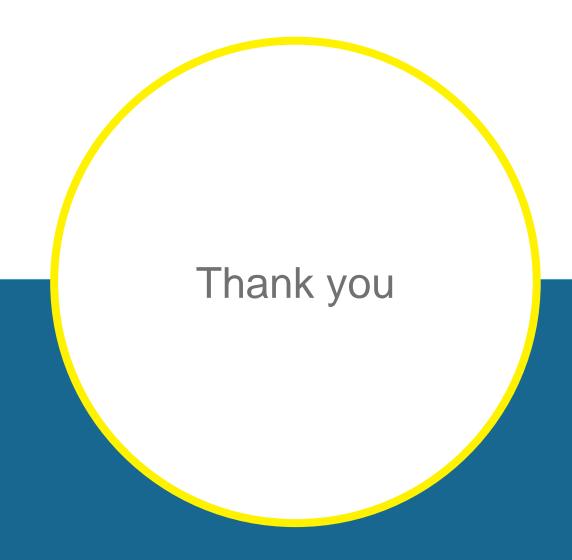
150%

### **Summary**



### 4K Universal Docking Station

- Upscale to 4K without a 4K PC or graphics card
- Dual display at 2K to increase productivity
- Investment for the future for technology
- Hot Desk solution for multiple PC's
- Longer investment in IT hardware
- Expanding peripheral devices for smaller laptops
- Offering Ethernet connectivity to Chromebooks



# Kensington