LINDY®

CONNECTION PERFECTION

USB User Client Windows® MultiPoint Server 2010®

User Manual *English*

LINDY No. 42660

CE

FC For Home and Office Use
Tested to Comply with
FCC Standards

www.LINDY.com

Introduction

Thank you for purchasing the USB User Client MultiPoint Workstation 8840. The MultiPoint Workstation 8840 (MWS8840) is designed specifically for Windows MultiPoint Server 2010. Simply connect it to an available USB port on the server and attach a monitor, keyboard and mouse to add a new workstation. The MWS8840 features four powered high-speed USB 2.0 ports, audio and microphone ports and a VGA port that supports resolutions up to 1600 x 1200. Add up to ten MWS8840s per server. The MWS8840 provides an inexpensive and reliable way to expand your Windows MultiPoint Server 2010.

Features

- Resolutions up to 1600 x 1200 (16 / 32 Bit)

- 4 self powered USB ports

- Stereo Audio Output (Speaker / Headphone) and Mono audio input (Mic)

- USB 2.0 compliant

- Plug and Play

Minimum System Requirements

- PC USB 2.0 Port

- CPU **–** one of the following:

  o x64-based computers that use Intel Pentium or Xeon family with Intel Extended Memory 64 Technology (EM64T)
  o Compatible processor (MultiPoint Server supports up to four CPUs on one server)

  Note: MultiPoint Server has not been tested on an Intel Itanium processor.

- RAM: The required RAM depends on the number of MultiPoint Workstation 8840s that are connected to the computer: 2 GB for 4 stations - 3 GB for 6 stations - 6 GB for 10 stations.

- Multi-core processor support: up to 4 multi-core processors in a CPU, such as dual-core or quad-core processors.

- Minimum disk space for setup: 32 GB

Operating Systems Supported

For optimal multimedia performance, we recommend the following CPUs:

- Dual-core processor: This type of processor can support up to four stations that are being used with high processing demand programs, such as multimedia programs.

- Quad-core processor: This type of processor can support up to six stations that are being used with high processing demand programs, such as multimedia programs.

- Core-i7 processor: This type of processor can support up to ten stations.

- Windows MultiPoint Server 2010

Package Contents

- MWS8840
- USB Cable
- AC Adapter
- Driver CD
- User Manual

Device Installation Software

Installing the device driver enables Windows MutliPoint Server 2010 to recognize the MWS8840. Please make sure the MWS8840 is unplugged from your server before executing the setup program.

Step 1
Boot the Windows MultiPoint Server 2010 into **Maintenance Mode** by pressing the **M** key when prompted at the startup screen.
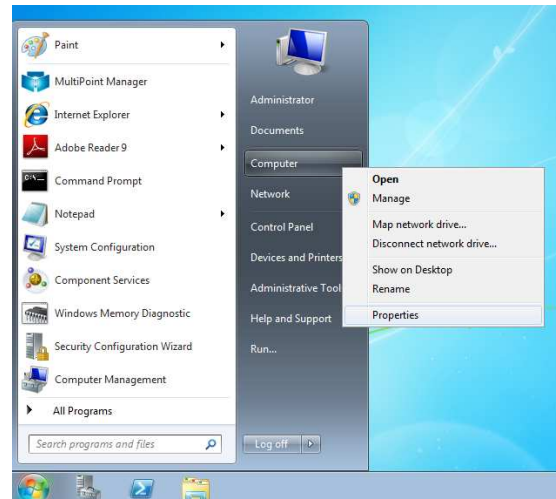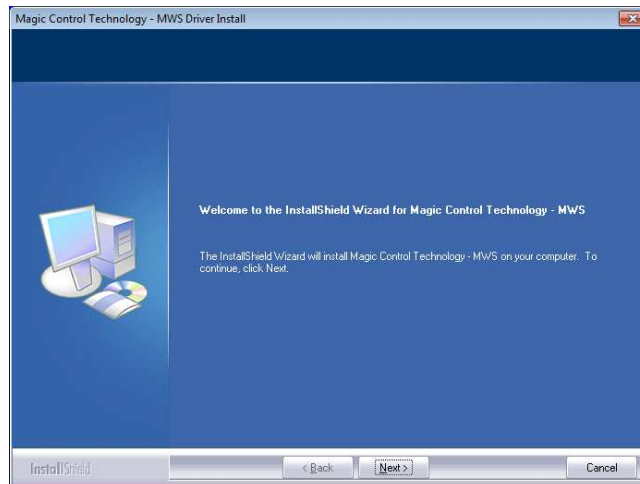
Step 2
Insert the Driver installation CD into the CD-ROM drive. The installer should start automatically. If it does not, double click **Setup.exe** to start the Installation Wizard.

Step 3
Driver Installation Wizard, click **Next** to continue
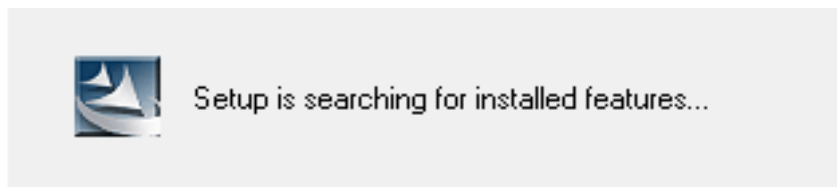

Step 4
License Agreement; review it and check **I accept the terms of the license agreement.** Click **Next** to accept the License Agreement.
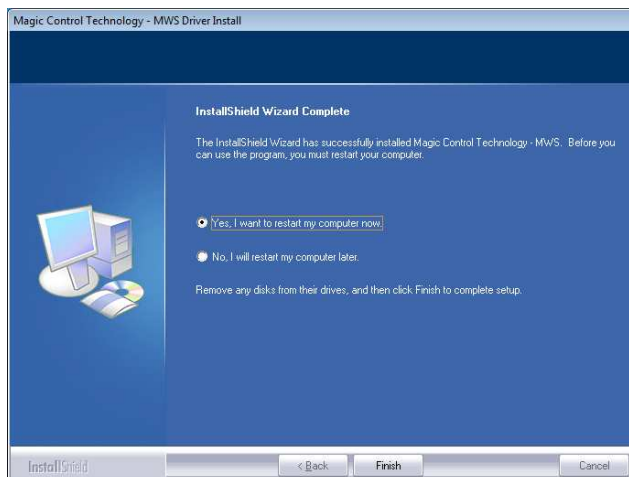
Step 5
Setup is searching for installed features...
*You may notice the screen flashes during hardware
installation. It is part of the normal process.
.

Step 6
Driver Installation Wizard, click **Finish** to continue and
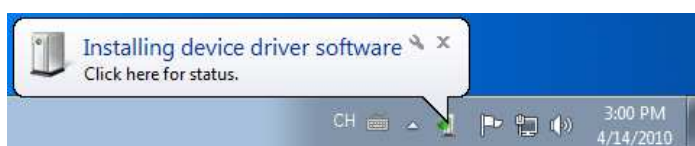restart the computer.

Installation of MWS8840

Step 1
Connect the monitor to the VGA connector of the MWS8840 and ensure the display device is
on. Connect the power adapter, keyboard, and mouse to the MWS8840.

Step 2
Connect one end of the USB cable to the
MWS8840 and the other to an available
USB 2.0 port of your server.

The driver installation will proceed automatically.
When the installation is complete you will
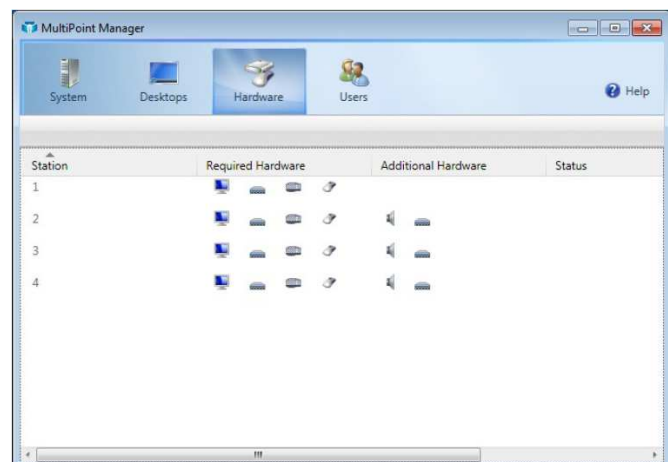see the login prompt appear on the workstation
screen.

Step 3
Repeat steps 1 & 2 for the remaining MWS8840s.

Verifying the MWS 8840 connection

Step 1
Open the **MultiPoint Manager** application and click on
the **Hardware** button. Each connected MWS8840 will
appear in the list of stations.

Adjusting the screen resolution

By default, Windows MultiPoint Server 2010 will select the recommended resolution for each
connected display. However, if you would like to choose a different resolution, follow these
steps:

Step 1
Boot the computer into **Maintenance Mode** by pressing the **M** key at the startup screen.
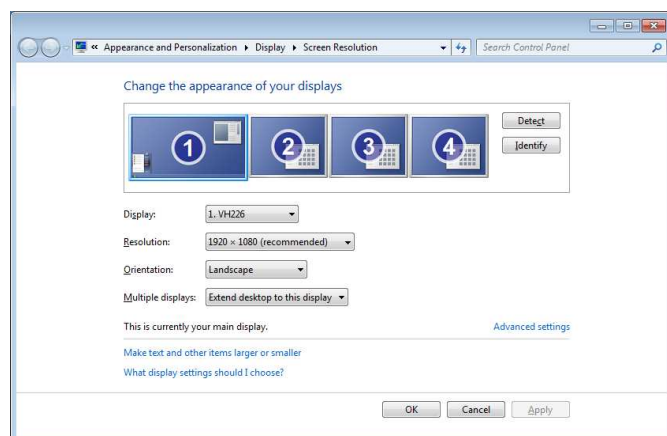
Step 2

Right click on the desktop and choose **Screen Resolution** from the contextual menu.
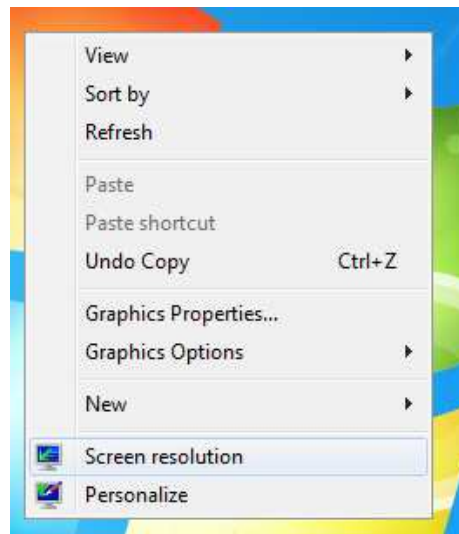
Step 3

Click **Identify** to identify each display. Then click on the display to be adjusted and choose the desired resolution from the **Resolution** dropdown menu.
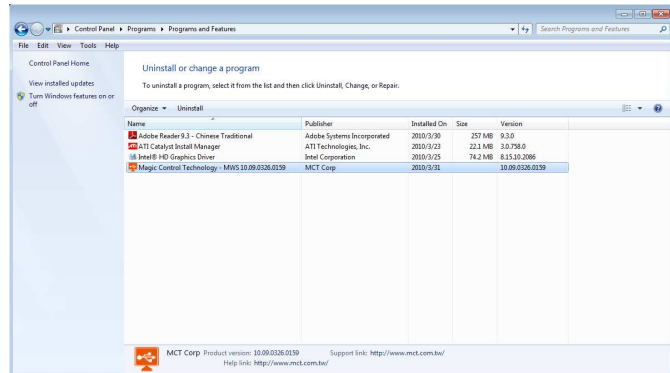
Device Driver Un-Installation

The following procedure allows you to uninstall the MWS8840's device driver. Please make sure all MWS8840s are unplugged from your server before executing the device driver uninstallation program.
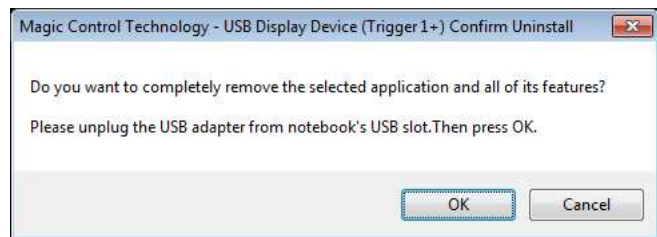
Step 1
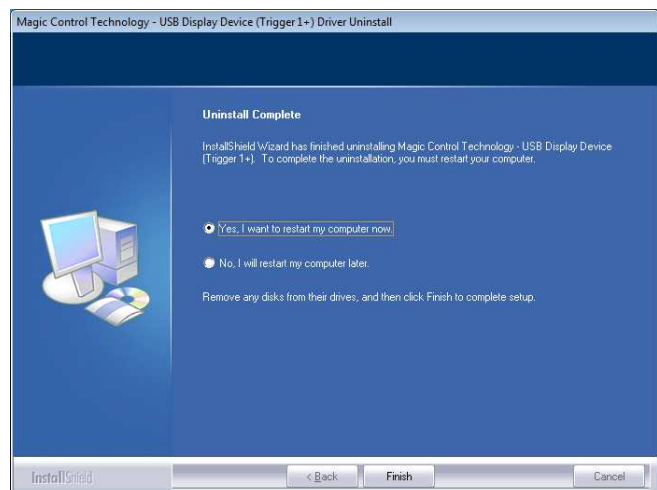Select the "Magic Control Technology – MWS xx.xx.xxxx.xxxx" item. Click **Uninstall** button.

Step 2
Click **OK** to continue

Step 3
Select **Yes, I want to restart my computer now** and click **Finish** to reboot. The driver is now uninstalled.

SETUP 1
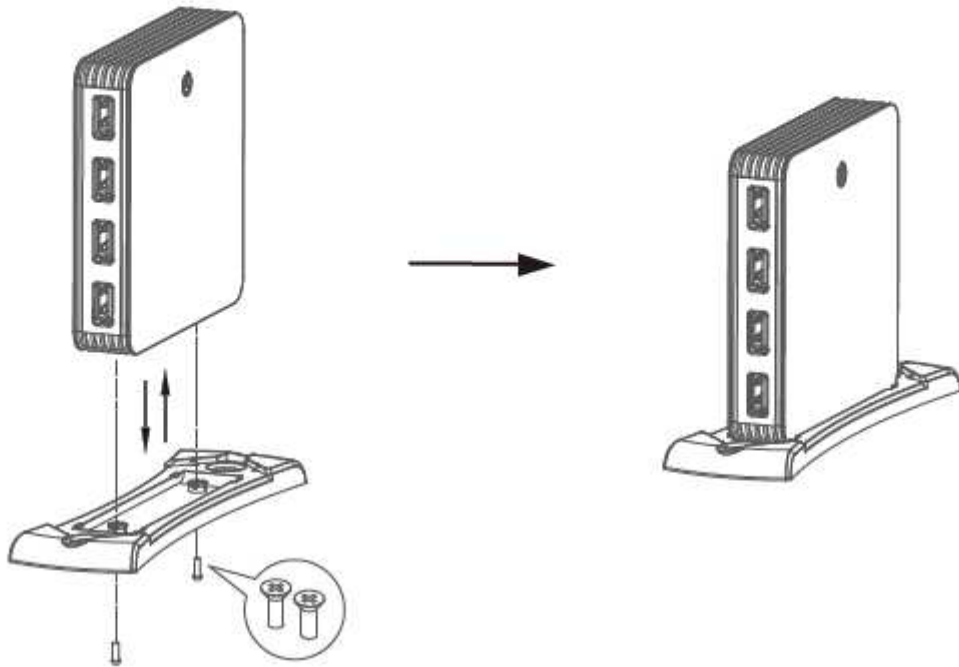
SETUP 2
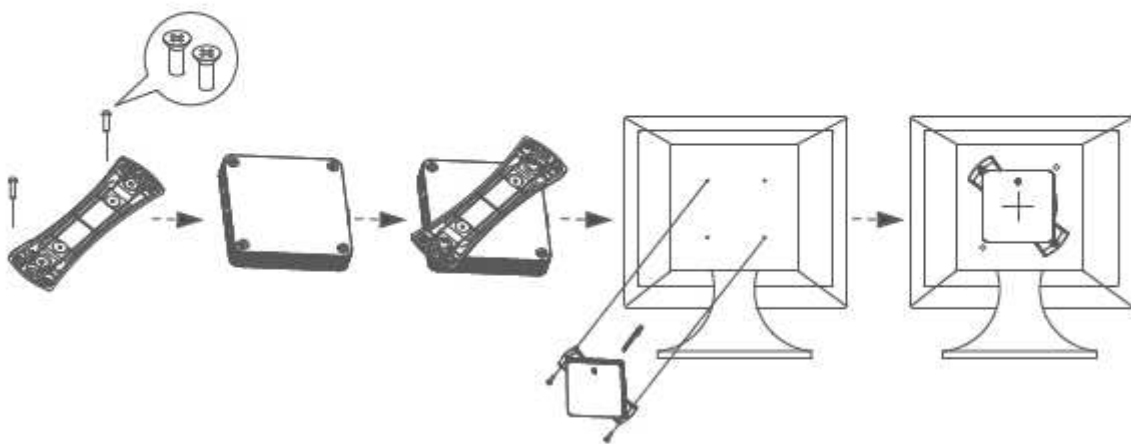
Troubleshooting Tips

The following troubleshooting tips may help if you are experiencing any difficulties using our device.

- Check to make sure that all connectors are plugged in correctly.
- Make sure that the USB port that you are using is USB 2.0.
- Try a different USB 2.0 port
- Check to see that the monitor is connected correctly and the power is ON.
- Make sure to restart the server after the driver installation.
- Unplug the adapter, wait a few seconds, then re-insert it.
- Check the website to make sure you have the latest drivers.
- Reset/refresh/resynchronize your monitor.

SYSTEM REQUIREMENTS:

For optimal multimedia performance, we recommend:

CPU:
*for 4 Station: Dual-core processor.
*for 6 Station: Quad-core processor.
*for 10 Station: Core-i7 processor.

Minimum required RAM:
*for 4 Station: 2 GB
*for 6 Station: 4 GB
*for 10 Station: 6 GB

Current Supported Video card and driver:
INTEL:
*Intel® G45 Express Chipset Intel® Graphics Media Accelerator X4500HD
*Intel® G43/G41/Q45/Q43 Express Chipset / Intel® Graphics Media Accelerator X4500
*Intel Driver: 15.16.5.64.2021 (8.15.10.2021)

ATI:
*ATI Radeon™ HD 4770
*ATI Radeon™ HD 4600
*ATI Driver: 10.1(8.69.0.0)

Known Issues when Install "ATI Graphics"
The ATI Catalyst Control Center is a tool provided by ATI to control ATI graphics cards. In the presence of MCT attached screens, some parts of the tool, such as its adjustments submenu, do not work. This is on all OS.

Some versions of the ATI Catalyst Control Center crash or show errors in the presence of MCT software. This has been observed with all ATI driver versions. This can cause problems when a screen is attached to the PC. To work around the problem, uninstall the ATI Catalyst Control Center.

The ATI External Event Utility can interfere with remembered settings for MCT screens. To avoid this, disable the ATI External Event Utility as follows: Navigate to Control Panel -> System and Maintenance -> Administrative Tools -> Services: ATI External Event Utility and change the startup type to Disabled.

Device not supported:
- MCT devices are not supporting AMD processor at this time.
- nVidia graphics card & processor are not recommended at this time.
- Do not use Multi-USB-Port Keyboard that will affect power operation

Known Factor & Notes:

1) Disconnecting a USB Workstation while videos are playing may cause stability issues.
   Do not disconnect USB Workstations during video playback.

2) Using different display resolutions on workstations may cause display issues if a station is disconnected. Set all workstations to the same resolution for the best performance.

3) When setting resolutions in Maintenance mode, a workstation display may not display correctly. Either choose to revert the changes in the dialog window that appears or, if the changes have been accepted, temporarily change the resolution to a different resolution and then change it to the desired resolution.

4) At this time, only one non-MCT video card per system is supported. Using more than one video card in the system will lead to system instability.

5) Video play back performance is rely on USB2.0 bandwidth and limited to maximum bandwidth of 480 Mbit/s [60 MB/s] , therefore smaller scale display window at lower resolution is recommend.

6) When all station needs for video playback, smallest scale window is recommended.
   eg. when all 10 station playing "YouTube", keep every video frame at original or smallest size. For better performance, upgrade to a higher CPU version and increase memory is recommended.

7) Multi-Video Playback at each workstation is not recommended, it occupied CPU's loading and lower each task performance, it could cause operation freeze when CPU consumption is over its limited.

8) Prior to installing the MCT driver, the computer should be running the most current build of Windows MultiPoint Server 2010 and have the appropriate graphics card driver from the list showed at "System Requirement" page.

9) Due to USB bandwidth limitation, for smooth playing preference, minimize video playback landscape is recommended when multiple videos playing across many monitors simultaneously, scale are recommend as below:
   *2 users: full screen
   *4 users: 1/3 landscape
   *6 users: 1/4 landscape
   *8~10 users: 1/8 landscape

10) Occasionally, when multiple video playing across many monitors and the CPU load is above 90 percent, there might be pauses in the video playback.

11) Warning: Incompatibilities exist when using other manufacture's video over USB devices on a single system. Please ensure that all other manufacture's video over USB drivers are uninstalled before continuing install MCT's driver.
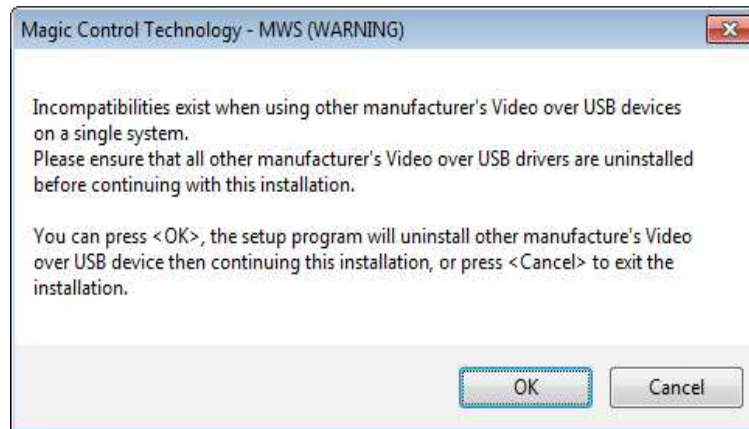
School Environmental and Behavior matrix

WMS means to simplify operation and provide safety environment in the class room! Teacher turn on computer first thing when the day begin, one button that turns on all station power simultaneously and continue all day with auto-mapping enables each individuals operation; turn off computer at end of date that shoot down all station power as well.

When student walk in the classroom, he/she only needs simply turn on the monitor and log in, then log out the workstation and turn off monitor after class; that leaves power idle thus convenient next class enable fast log on. For safety reason, nobody has to touch any device's power or USB connector to avoid strange behavior that may cause electronic power shock.

Radio Frequency Energy, Certifications

FCC Warning

This equipment has been tested and found to comply with the limits for a Class B Digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

* Reorient or relocate the receiving antenna
* Increase the separation between the equipment and receiver
* Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
* Consult the dealer or an experienced technician for help

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation

CE Statement, EMC Compatibilty

This device complies with EN Standards EN55022 and EN55024 according to the relevant EC EMC Directive. It must be used with shielded cables only to maintain EMC compatibility.

Dieses Produkt entspricht den einschlägigen EMV Richtlinien der EU und darf nur zusammen mit abgeschirmten Kabeln verwendet werden.

LINDY Herstellergarantie

LINDY gewährt für dieses Produkt über die gesetzliche Regelung hinaus eine zweijährige Herstellergarantie ab Kaufdatum. Die detaillierten Bedingungen dieser Garantie finden Sie auf der LINDY Website aufgelistet bei den AGBs.

**WEEE (Waste of Electrical and Electronic Equipment),
Recycling of Electronic Products**

In 2006 the European Union introduced regulations (WEEE) for the collection and recycling of all waste electrical and electronic equipment. The wheelie bin symbol shown indicates that this product must not be disposed of with household waste. Instead the product must be recycled in a manner that is environmentally friendly. For more information on how to dispose of this product, please contact your local recycling centre or your household waste disposal service. Each individual EU member state has implemented the WEEE regulations into national law in slightly different ways. Please follow your national law when you want to dispose of any electrical or electronic products.

More details can be obtained from your national WEEE recycling agency.

Germany / Deutschland
Die Europäische Union hat mit der WEEE Direktive umfassende Regelungen für die Verschrottung und das Recycling von Elektro- und Elektronikprodukten geschaffen. Diese wurden von der Bundesregierung im Elektro- und Elektronikgerätegesetz – ElektroG in deutsches Recht umgesetzt. Dieses Gesetz verbietet vom 24.März 2006 an das Entsorgen von Elektro- und Elektronikgeräten über die Hausmülltonne! Diese Geräte müssen den lokalen Sammelsystemen bzw. örtlichen Sammelstellen zugeführt werden! Dort werden sie kostenlos entgegen genommen. Die Kosten für den weiteren Recyclingprozess übernimmt die Gesamtheit der Gerätehersteller.

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