

Design W-LAN USB Remote Hub

MEDION® E89030 (MD 86097)



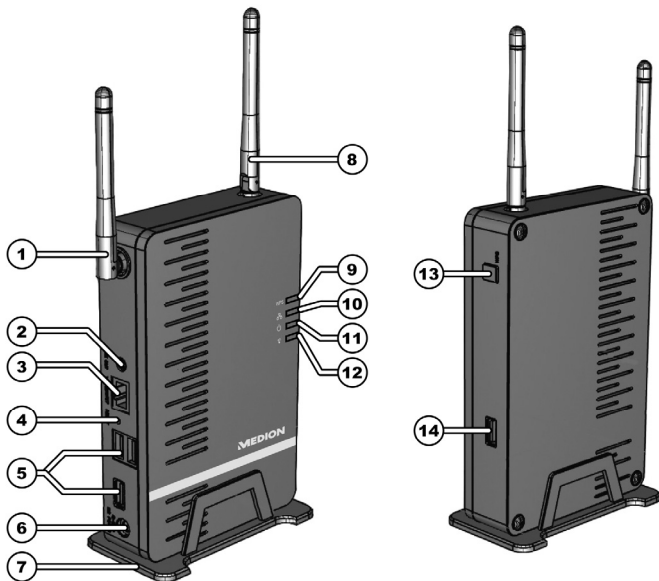
Instruction manual

Contents

Contents	1
Overview	3
About this device	5
Scope of supply	5
Use in accordance with regulations	6
Safety information	6
Safety in operation	7
Installing the USB hub software	9
Bringing the device into operation	13
Mains connection.....	13
WLAN-Connection (Access Point Mode)	14
Integrating the USB-Hub into an existing network (Station Mode)	17
Using the Control Utility	21
The Menu Bar.....	22
Connecting and Removing Devices	25
Using the Remote USB Audio.....	27
Requesting a Device and Disconnecting it for Others to Use	28
Setting up the USB-Hub	30
Accessing the configuration page.....	30
Wireless setting	31

System Setting	36
Wi-Fi Protected Setup (WPS)	41
Reset the unit.....	43
Customer service	44
First aid in the case of malfunctions	44
Technical Data	46
Cleaning	48
Recycling and Disposal	48
Licence disclaimer	49
Downloading Source Code	50

Overview



1. WLAN aerial
2. LINE OUT (A): For the connection of a device for remote audio reproduction (e. g. an amplifier or an active loudspeaker)

3. ETHERNET: LAN connection
4. RESET: Reset switch
5. USB 1,2,3: USB connections
6. DC POWER: Connection for a mains adapter
7. Stand
8. WLAN aerial
9. WPS LED: Lights up during the WPS function
10. LAN LED: Lights up during a LAN connection, flashes during data transmission
11. Operating LED: Lights up during power supply
12. WLAN LED: Lights up when the system has booted, flashes during data transmission
13. WPS button: To make a WPS connection
14. USB (F): USB connection

About this device

Scope of supply

Please check the completeness of the delivery and inform us within 14 days after purchase, if the delivery is not complete. You will have received the following with the package purchased by you:

- Wireless USB hub
- Mains adapter (Ktec KSAD1200150W1UK)
- Stand
- CD with software
- These Operating Instructions
- Guarantee documents

Copying this manual

This document contains legally protected information. All rights reserved. Copying in mechanical, electronic and any other form without the written approval of the manufacturer is prohibited.

Use in accordance with regulations

The wireless USB hub serves to connect USB devices * (USB-mass storage devices like external harddrives, USB sticks as the connection of USB-printers and -scanners) and will transfer the USB signals to computers connected to the USB hub by means of WLAN or LAN across a WLAN connection. USB devices can be connected wirelessly to a computer in this way. Apart from this, the device has an audio output through which the audio signal of a registered computer can be output, in the case of a corresponding setting.

This device is intended exclusively for private use and not for commercial purposes.

Safety information



Please read this Chapter and the whole Introduction through carefully and follow all the information given. You will guarantee reliable operation and a long useful life of your USB hub in this way.

Always keep these Operating Instructions ready to hand close to your device and keep them well, in order to be able to pass them on to the new owner in the case of a disposal.

Please contact our authorised service partners exclusively, if you have problems with the device.

* The compatibility with all other USB-devices cannot be guaranteed.

Safety in operation

- The device is not intended to be used by individuals with restricted physical sensory or intellectual abilities or a lack of experience and/or knowledge (including children), unless they are supervised by an individual responsible for their safety or have received instructions from such an individual about how the device is to be used. Children should be supervised to ensure that they do not play with the device.
- Also follow the instructions for use of devices that you connect to the USB hub.
- Do not place any containers filled with liquid, such as vases, on the device or in its closer surroundings. The container could tip over and the liquid could impair electrical safety.
- Keep the device away from moisture, drops of water and spray. Avoid vibrations, dust, heat and direct solar radiation, to prevent disruptions to operation. The operating temperature is +5 to +40 °C.
- Never open the casing. This will terminate any guarantee claim and will possibly lead to the destruction of the device.
- Wait until the device has reached the surrounding temperature after transportation. Moisture, which can cause electric shock, can form because of condensation in the case of wide fluctuations in temperature or moisture.

- The device is intended to be connected to computers with protected connection (Limited power source in the sense of EN60950).
- Only use the Ktec KSA1200150W1UK type mains adapter supplied.
- The socket must be close to the device and easily accessible.
- Lay the cable so that no-one can step on it or trip over it.
- Do not place any objects on the cable, because they could be damaged.



You should not operate the device under extremely dry conditions, in order to avoid static charges.

Incorrect functions of the device can arise under conditions with electrostatic charge. In this case, it will be necessary to set the device back to the factory settings.

Data security

The assertion of compensation claims for data loss and consequential damage arising because of it is excluded. Make security copies on external media (e.g. CD-R) after every updating of your data.

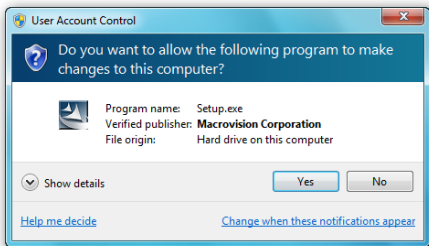
Electromagnetic compatibility

The Guidelines for Electromagnetic Compatibility (EMC) must be observed during connection. Maintain a minimum distance of one metre from high-frequency and sources of magnetic interference (TV device, loudspeakers, mobiles, etc.), in order to avoid disruptions to function and data loss.

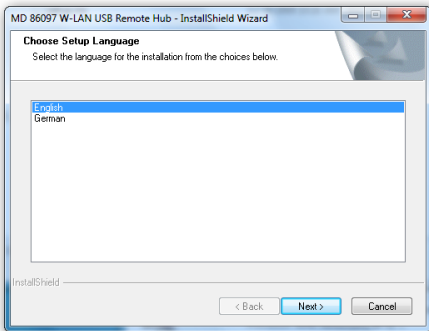
Installing the USB hub software

The software must be installed on all computers intended to use the USB hub, before you will be able to receive USB signals through the network.

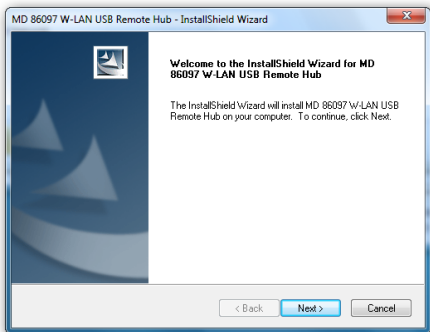
1. Launch the setup application. The Windows User Account Control will prompt for permission to install. Click **Yes**.



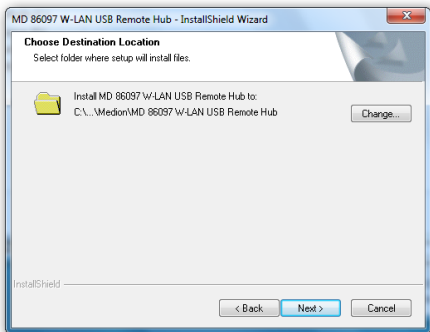
2. You will then see the **Language Selection** screen. Click **Next**.



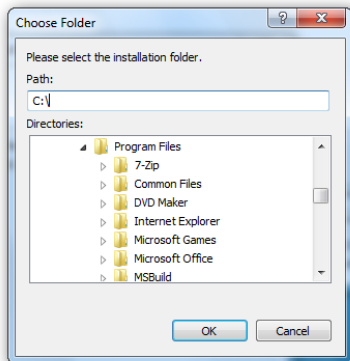
3. The Welcome screen appears. Click **Next**.



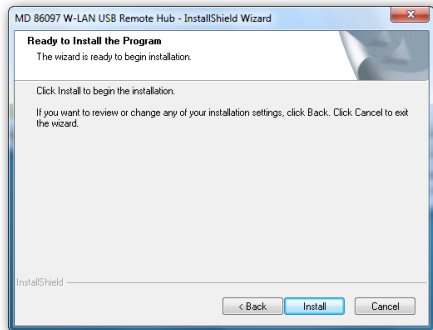
4. You can accept the default installation path and click **Next** to proceed. Instead, you can change the destination folder for the utility by clicking **Change....**



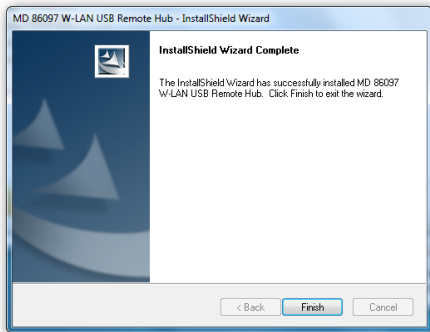
5. Choose the folder where you want to install the software into and click **OK**.



6. You are now ready to install the software. Click **Install**.

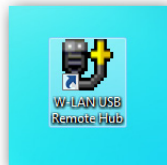


7. Wait for the installation to complete. Click **Finish**.



After installation, an icon will appear on your desktop, and a tray icon will appear:

8. Now you can double click on the desktop icon or the tray icon to launch the Control Utility.



Bringing the device into operation

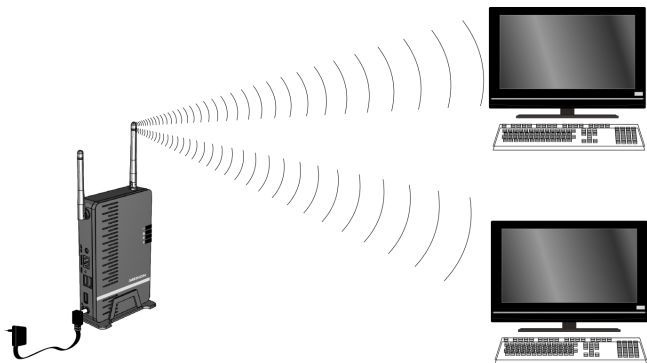
Mains connection

1. Connect the hollow jack of the mains adapter to the DC POWER socket on the device.
2. Plug the mains adapter into an easily accessible AC 230 v 50/60 Hz socket. The device is now ready for operation and the green POWER LED will shine continuously.



WLAN-Connection (Access Point Mode)

A simple WLAN connection is sensible if your PC is connected to a router by a cable (e.g. for access to the Internet) and your PC has an unused wireless network adapter apart from this.



1. Switch the USB hub on by connecting the mains adapter as described on Page 13.
2. Install the USB hub software as described on Page 9.
3. Click on the symbol for wireless networks in the Taskbar of your operating system.
4. The Network Connection window appears. Select W-LAN USB HUB and click on it.





5. As no encryption is set by default, Windows will notify that this connection is insecure. Click **Connect**. About how to enable an encryption mode see page 32.

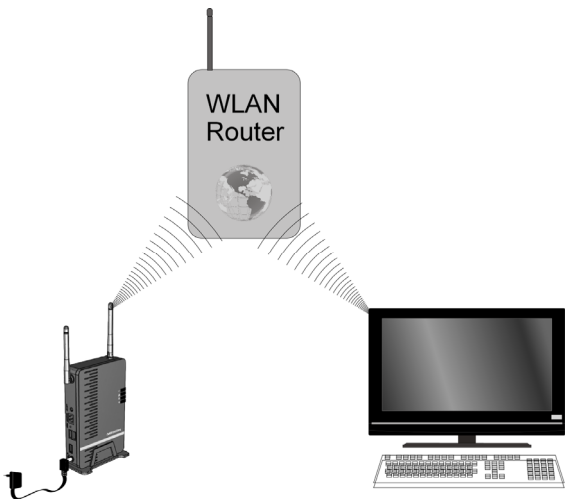
6. Wait until the connection is established. Now you will see your PC is connected to the Hub over Wi-Fi.



7. To configure the USB-Connections, start the USB Control Utility (See page 21).

Integrating the USB-Hub into an existing network (Station Mode)

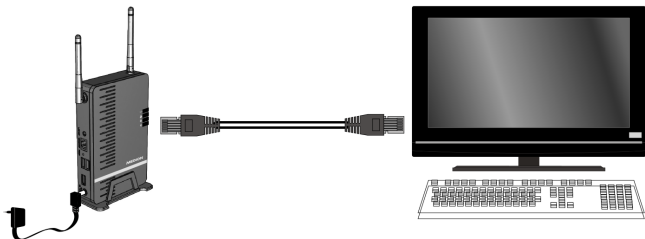
The integration of the device into an existing network is only sensible if your PC is already receiving access to an Internet router by means of a wireless network connection (WLAN) and it is additionally intended to connect the USB hub by means of WLAN.



Setting up the Station mode

If you are connected to a network router that uses Dynamic Host Configuration Protocol (DHCP), which most networks do, you do not need to set up your router. Please follow up the setting as below

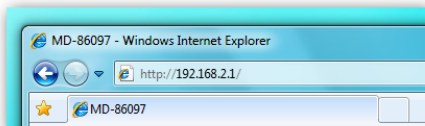
1. Please plug the AC adapter into the Hub.
2. Check the Power LED (green). It should be illuminated.
3. Plug the Ethernet cable into the Hub (only needed for configuration of the USB-Hub).



4. Plug the other side of the Ethernet cable into the socket of your PC.
5. Open your preferred Internet browser and enter the IP address of the Hub in the address bar. Press **Enter**.



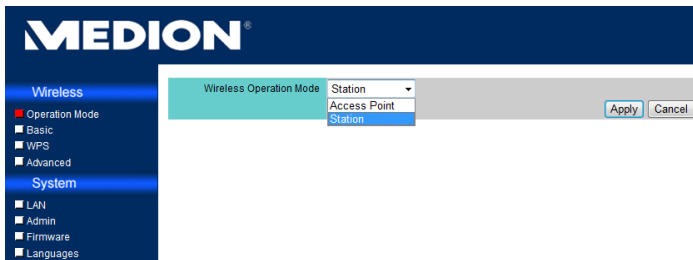
NOTE: the IP address of the Hub is displayed in the Control Utility (See page 21).



6. Enter username and password and click OK to enter the configuration page. The default username and password are both **admin**.



7. Check the LAN LED will be illuminated if the Ethernet connection is working.
8. In the Setup Menu of the USB-Hub choose Wireless -> Wireless Operation Mode and set **Station**.



9. After you selected **Station**, click on **Apply** and a message for rebooting the device will prompt.
10. After the device rebooted, it will be operating under **Station** mode.

Scan for available wireless networks

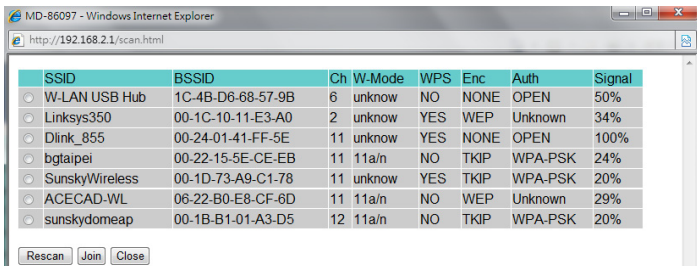
11. After the device rebooted, start the Setup-Menu of the USB-Hub and choose the menu item Wireless -> Basic.

Click on **Scan Wireless Network** to display all the Access Point or Router signals found within your area.

Rescan: Scan for more AP/Router signals within your area.

Join: Join the network you selected from the list.

Close : Close the Wireless Network window.



SSID	BSSID	Ch	W-Mode	WPS	Enc	Auth	Signal
W-LAN USB Hub	1C-4B-D6-68-57-9B	6	unknow	NO	NONE	OPEN	50%
Linksys350	00-1C-10-11-E3-A0	2	unknow	YES	WEP	Unknown	34%
Dlink_855	00-24-01-41-FF-5E	11	unknow	YES	NONE	OPEN	100%
bgtaipei	00-22-15-5E-CE-EB	11	11a/n	NO	TKIP	WPA-PSK	24%
SunskyWireless	00-1D-73-A9-C1-78	11	unknow	YES	TKIP	WPA-PSK	20%
ACECAD-WL	06-22-B0-E8-CF-6D	11	11a/n	NO	WEP	Unknown	29%
sunskydomeap	00-1B-B1-01-A3-D5	12	11a/n	NO	TKIP	WPA-PSK	20%

Rescan Join Close

12. Select the WLAN network into which the USB hub is intended to be integrated and click on **Join**. The wireless connection between the USB hub and the WLAN router will be made and the USB-Hub will be integrated into the WLAN network.

i Please note that some networks may be encrypted and require you to know the right encryption key or password.

13. Remove the Ethernet cable from the USB-Hub.

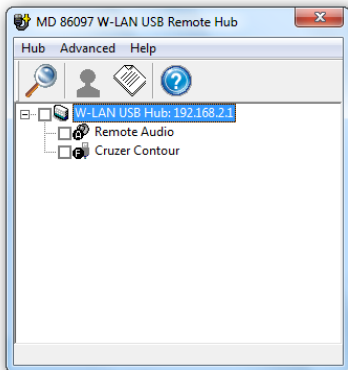
Using the Control Utility



Once the setup is completed, you can launch the Control Utility through the Start menu, the desktop icon or the tray icon. From the Control Utility you can connect/disconnect a USB device, view its status and request to use a device if it's

already in use by other computers.

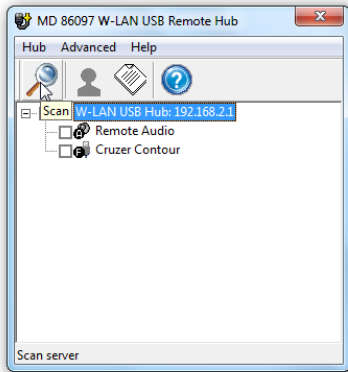
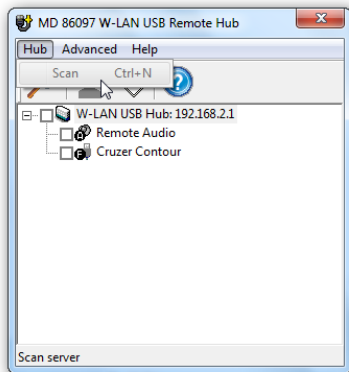
The Control Utility (see image below) gives you a visual depiction of your connection configuration.



The Menu Bar

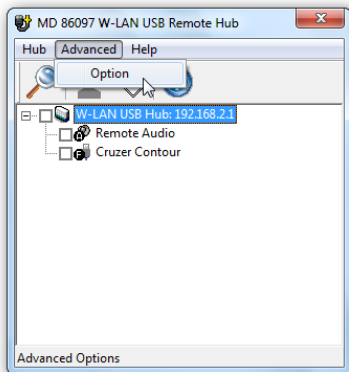
Hub

From the Control Utility you can scan for other Hubs by clicking **Hub** > **Scan**. Instead, you can click the **Scan** icon on the toolbar.

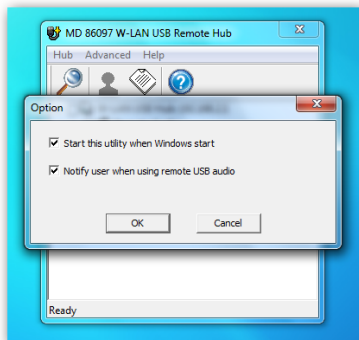


Advanced

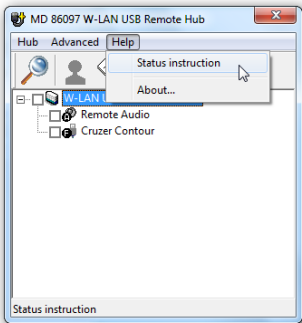
You can set advanced options by clicking **Advanced > Option**.



The **Option** window appears and allows you to set if the Utility should start when Windows starts, or if you want to be notified when using remote USB audio.



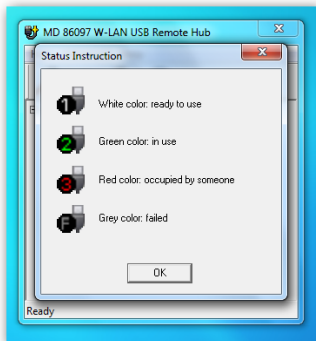
Help



You can check what device status icons represent by clicking **Help > Status instruction**.

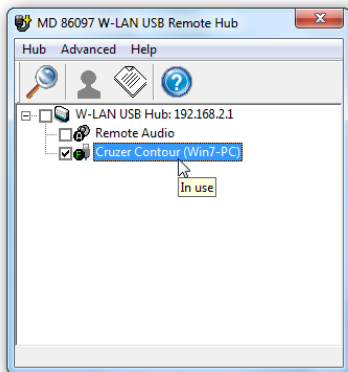
The **Status Instruction** window appears. There are 4 statuses for the devices connected to the Hub:

- A white icon means the device is not in use and is ready to use.
- Green means the device is already in use by you.
- Red means the device is in use by others, and if you want to use this device, you can send a request to the person who is using it to disconnect it.
- If the status icon is grayed out, it means the device has failed to work properly and you should contact its manufacturer for support.

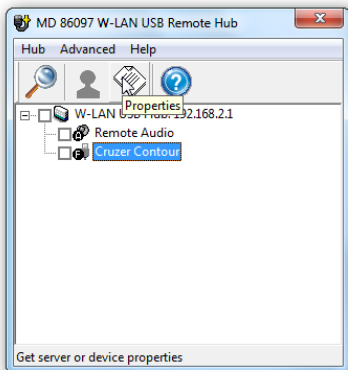


Connecting and Removing Devices

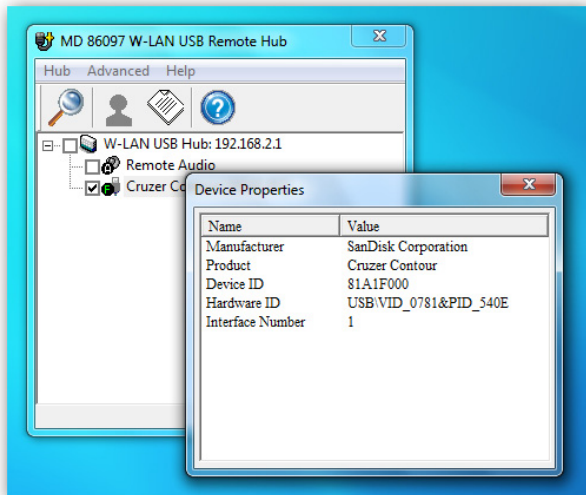
To connect a device attached to the Hub, simply click the checkbox in front of each of the devices displayed in the Utility. In addition, you can click the checkbox in front of the Hub to connect all the displayed devices.



You can view the properties of a connected device by selecting it in the Utility and click the **Properties** icon on the toolbar.



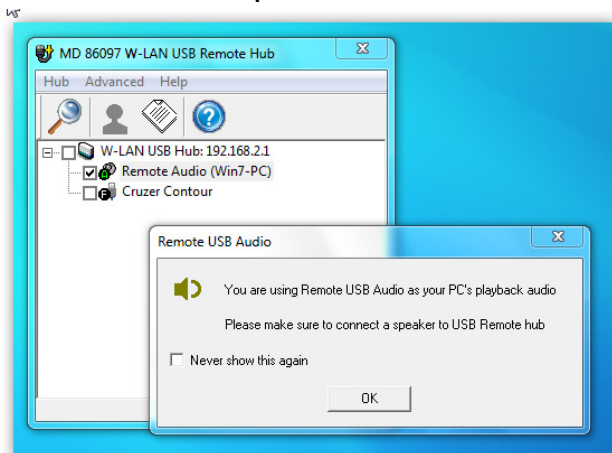
The **Device Properties** window appears with information on the selected device.



- ▶ To disconnect a device, uncheck the check box in front of it.

Using the Remote USB Audio

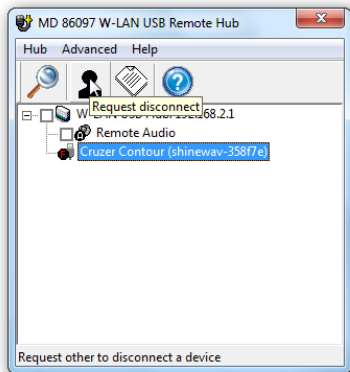
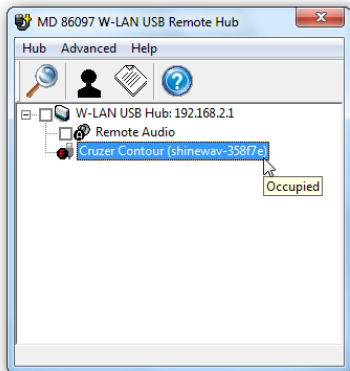
The Hub can be used as a remote USB audio device as well. Simply check the box in front of the **Remote Audio** device in the Utility, and you can listen to music through any speaker or headphone attached to the Hub. When the remote audio device is connected, a dialogue will appear to notify you that the Hub will now be used as your PC's audio playback device. You can turn this notification on or off in the **Advanced > Option** menu.



NOTE: If the Remote Audio function is activated, your PC-Speakers or speakers connected directly to the PC-Audio Out will be muted.

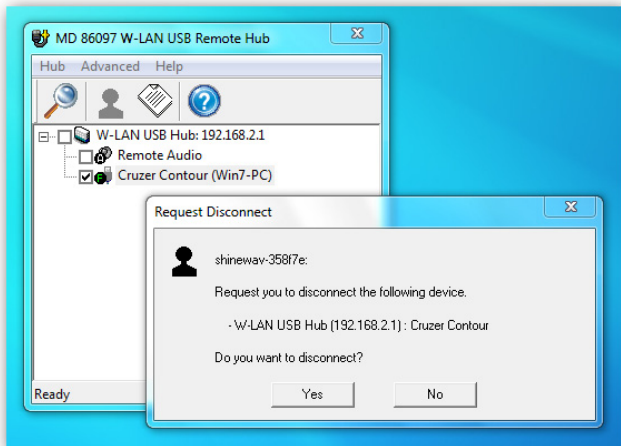
Requesting a Device and Disconnecting it for Others to Use

If you want to use a device that is in use by another person, you can send a request to that person to disconnect the device so you can use it.



To do so, first select a device in use, and click the **Request** icon on the tool bar.

The person who is using the device will see a popup asking to disconnect the device.



If the other person clicks **Yes**, the device will be disconnected from his/her Hub, and you will be able to connect it for use.

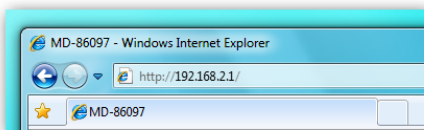
Setting up the USB-Hub

Accessing the configuration page

14. Open your preferred Internet browser and enter the IP address of the Hub in the address bar. Press **Enter**.



NOTE: the IP address of the Hub is displayed in the Control Utility (See page 21).

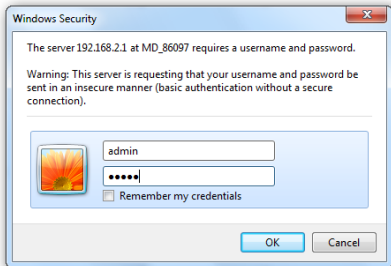


15. Enter username and password and click **OK** to enter the configuration page. The default username and password are both **admin**. You can change the password later in the configuration page (See page 37).

The configuration page appears (See next page).

The configuration page is divided into two sections:

Wireless setting and **System setting**.

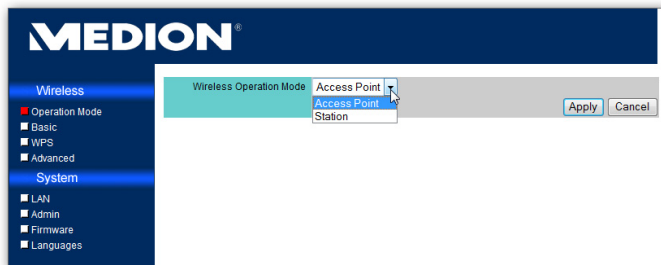


Wireless setting

The wireless setting is divided into 4 sections.

Operation Mode

The first section is the **Operation Mode** setting. You can change the wireless operation mode here.

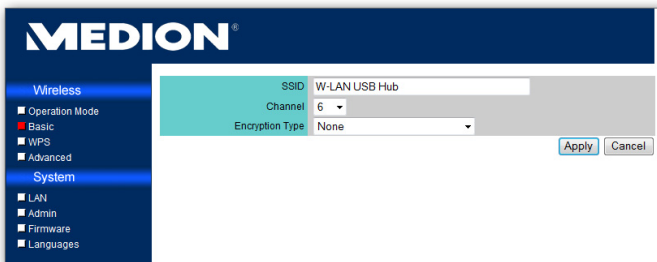


- ▶ Select **Access Point** (standard setting), to make a connection to the respective computer, if the USB hub is intended to represent an independent wireless network.
- ▶ Select **Station**, if you want to integrate the USB hub into an existing network as a client. You will find further information about client configuration under *Integrating the USB-Hub into an existing network (Station Mode)* on Page 17.

Basic Setting

The second section is the **Basic setting**. You can change the **SSID (Network Name)**, the wireless **channel (1-13)** and the **encryption type** here.

- ▶ Change the settings to your needs and click **Apply**.



The screenshot shows the MEDION wireless settings interface. On the left is a navigation menu with the following items: Wireless (selected), Operation Mode, Basic (highlighted with a red dot), WPS, Advanced, System, LAN, Admin, Firmware, and Languages. The main content area is titled 'W-LAN USB Hub' and contains three settings: SSID (text input field with 'W-LAN USB Hub'), Channel (dropdown menu with '6' selected), and Encryption Type (dropdown menu with 'None' selected). At the bottom right of the settings area are 'Apply' and 'Cancel' buttons.



If you set the encryption to **WEP** or **WPA-PSK** encryption, you will also need to set a security key or a passphrase.

MEDION

Wireless

- Operation Mode
- Basic
- WPS
- Advanced

System

- LAN
- Admin
- Firmware
- Languages

SSID: W-LAN USB Hub

Channel: 6

Encryption Type: WEP (54M only)

WEP Key 1:

WEP Key 2:

WEP Key 3:

WEP Key 4:

Enter WEP keys (5 or 13 ASCII) or (10 or 26 hex) characters

MEDION

Wireless

- Operation Mode
- Basic
- WPS
- Advanced

System

- LAN
- Admin
- Firmware
- Languages

SSID: W-LAN USB Hub

Channel: 6

Encryption Type: WPA-PSK

WPA Cipher Suite: TKIP CCMP

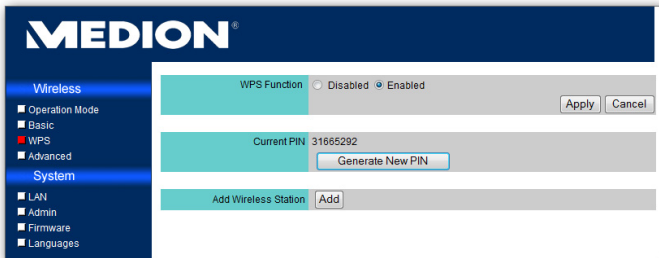
WPA Pass Phrase:

Enter passphrase (8-63 ASCII characters) or 64 hexadecimal characters

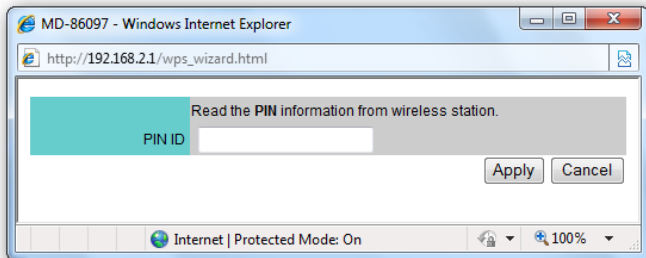
WPS

The Hub also supports the latest WPS encryption. The support is disabled by default (How to use the WPS-function: See page 41).

You can enable the feature in the WPS setting by selecting the **Enabled** radio button and click **Apply**.



You can also change the PIN number by clicking **Generate New PIN**. If you need to add another WPS station for easy connection, click **Add**. Enter the **PIN ID** in the popup and click **Apply**.



Advanced

In the Advanced setting, you can enable or disable WLAN and SSID broadcasting, and change other advanced settings.



System Setting

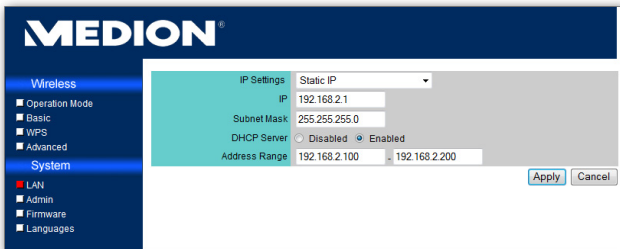
The system setting is divided into 4 sections as well.

LAN

The first section is **LAN** setting. You can change how the Hub acquires an IP address. By default this is set to **Static IP** and no further configuration is needed.



You can also enable or disable the built-in DHCP server and configure the IP address range which will be used by DHCP.



Admin

In the Admin section you can change the display name you will see in the Control Utility. You can also change the login password by entering the new password into **New Password** and **Retype Password** fields and click **Apply**.

The screenshot shows the MEDION Admin interface. On the left is a navigation menu with sections: Wireless (Operation Mode, Basic, WPS, Advanced) and System (LAN, Admin, Firmware, Languages). The 'Admin' option is selected. The main content area is titled 'W-LAN USB Hub' and contains the following fields:

Device Name	W-LAN USB Hub
Login Name	admin
New Password	•••••
Retype Password	•••••

At the bottom right of the form are two buttons: 'Apply' and 'Cancel'.

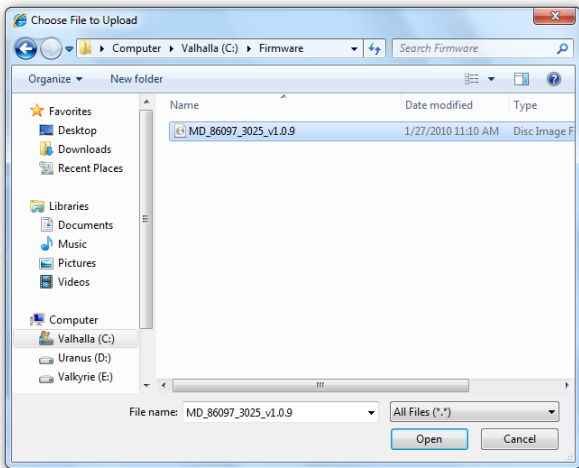
Firmware

The Firmware section allows you to upgrade the firmware of the Hub, to restore all Hub settings and to reboot the Hub. Have a look on the MEDION website www.medion.com for updates or ask the Medion service.

The screenshot shows the MEDION Firmware interface. On the left is the same navigation menu as in the Admin section, with 'Firmware' selected. The main content area displays the current 'Firmware Version' as 1.0.8 and includes the following options:

Firmware Version	1.0.8	<input type="button" value="Browse..."/>
Please do not turn off power during the period of upgrading firmware.		
<input type="button" value="Upgrade"/>		
<input type="button" value="Restore to Factory Default"/>	<input type="button" value="Restore Default"/>	
<input type="button" value="Reboot Device"/>	<input type="button" value="Reboot"/>	

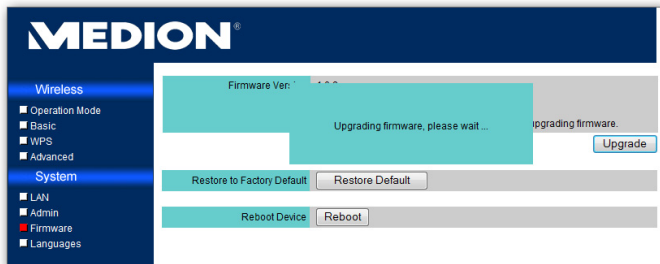
1. If you need to upgrade the firmware, first click **Browse...** to locate the firmware file. Once the correct file is located, click **Upgrade** to start upgrading.



2. The upgrade will begin. Please wait for the process to finish.



IMPORTANT: Do not power off the Hub during firmware upgrade. It may cause the Hub to stop operating normally.

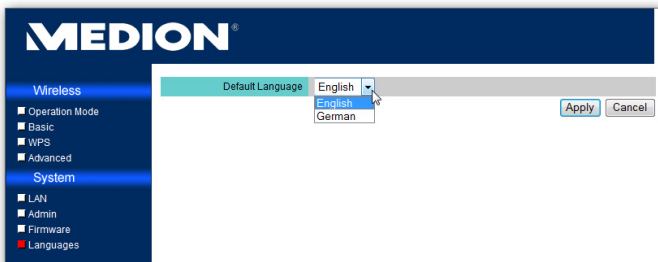


3. Once the upgrade is complete, the Hub will automatically be rebooted with the new firmware.



Languages

In the Language section you can change the display language for the configuration page. Select the desired language and click **Apply**.



Wi-Fi Protected Setup (WPS)

Wi-Fi Protected Setup (WPS) is an industry standard of LAN connecting defined by Wi-Fi Alliance. It allows devices with an WPS-function to connect automatically without entering a PIN manually.

i The WPS function must have been activated in the Setup Menu of the USB hub or of the other WPS-capable device (see Page 33), before you will be able to use the WPS function.

Generally, WPS can be accomplished by two methods, and we support both of them. The true benefit is that you may connect different devices of different manufacturers with minimum effort and time as long as they support WPS function.

Push Button Configuration (PBC)

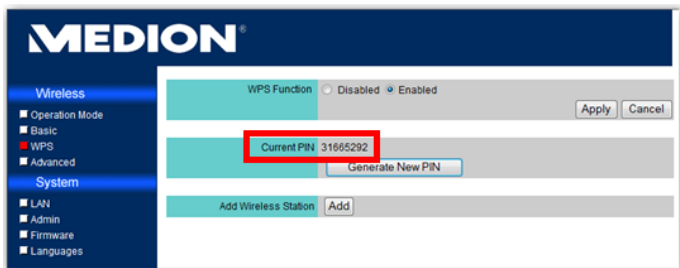
The steps below demonstrate how the PBC works:

1. Push the button on the USB-Hub.
2. Push the button on the WPS-device.
3. The device will be found and configured automatically.

Personal Identification Number (PIN)

There are two ways to demonstrate how the PIN method works:

1. One of enter the PIN code into your computer requested. You can find the W-LAN USB Remote Hub PIN code on the firmware under WPS setting page.



2. Either of enter the PIN code of the device that you want to connect to through **Add Wireless Station** on the firmware under WPS setting page.



3. Two devices will be found and connected whenever enter the right PIN code.



To use WPS for your device, your operating system should be Windows Vista or Windows 7.

To use WPS for your device, your wireless LAN card, station, router or Access Point should support WPS function

Reset the unit

You can set the device back to the status at delivery, if it can no longer be operated or errors arise.

- ▶ Press on the RESET button with a pointed object (e.g. a ball-point) for longer than 5 seconds to do this. After 10 seconds the WLAN-LED and afterwards the POWER-LED will turn off and then on again.

Customer service

First aid in the case of malfunctions

I have connected a USB device to the USB hub; however, it is not visible on the PC.

- The Control Utility software has not been installed.
- ▶ Install the software and start it.
- The connection at the USB hub to which you have connected the USB device is being used by another PC.
- ▶ Start the Control Utility software and release the connection for your PC (see Page 25).
- Your PC is not connected to the USB hub. The wireless connection to the USB hub has been separated.
- ▶ Recreate the connection to the wireless network of the USB hub.
- ▶ Check whether the WLAN adapter of your PC is possibly switched off and switch it on, if necessary.

The network into which I want to integrate the USB hub cannot be seen.

- The SSID of the network is invisible and it does not appear, even during the search for available wireless networks, for this reason.

- ▶ Set the identification of the SSID to visible, in the router of the network into which it is intended to integrate the USB hub.

The USB hub is not recognized by the PC

- The USB Hub is not being supplied with electricity.
- ▶ Switch on the USB hub by connecting the plug of the mains adapter and connecting the mains adapter with the electricity network.

No sound is output through the LINE OUT connection

- The Remote Audio function is not activated in your operating system.
- ▶ Switch on the Remote Audio function in your operating system.

No connection to a selected network can be made

- The network to which it is intended to make a connection is encrypted and requires the entry of a password.
- ▶ Enquire about the access data for the encrypted connection from the administrator of the respective network.

Technical Data

Model Name MD 86097

Audio

Output 3.5 mm Stereo Line out

LAN

10/100 Ethernet One 10/100 RJ45 Ethernet port

USB

USB 4 Type A USB 1.1/2.0 ports

Wireless

Standard IEEE 802.11 n/g/b

Operation Modes Infrastructure

Range Outdoor: 100m (may vary according to the environment)

RF Power 11g/n: 13 dBm (+1.0 / -1.0 dBm)

11b: 16 dBm (+1.0 / -1.0 dBm)

Encryptions WEP 64-bit and 128-bit

WPA-PSK / WPA2-PSK

Frequency 2.4 GHz ISM radio band (2.412~2.472 GHz)

Antenna Two 1.8 dBi dipole antenna

Power Adaptor

Model No: KSAD1200150W1UK

Manufacturer:	Ktec
Input:	100~240 AC, 0.4 A
Output:	12 V/1.5 A DC

Dimensions

Exterior	12 x 18 x 3.3 cm
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Subject to technical changes!

Information about conformity in accordance with R&TTE

The use of the device in France is only permitted within buildings, as a result of the performance of the installed LAN wireless solution (>100mW).

There are currently no restrictions in other EU countries. Find out locally about the respectively applicable legal regulations for the use of the device in other countries.

MEDION AG herewith declares that these devices are in accordance with the basic requirements and the other relevant terms of the 1999/5/EG Guideline. Complete Declarations of Conformity are obtainable at www.medion.com/conformity.



Cleaning



Attention!

This device does not contain any parts to be maintained or cleaned.

Pay attention to the fact that the USB hub is not soiled. Do not use any solvents, corrosive or gas-forming cleaning agents. Clean the casing with a moistened cloth, if necessary.

Recycling and Disposal

Packaging



The packaging from your flat bed scanner is produced mostly from materials which can be disposed of in an environmentally friendly manner and be professionally recycled.

Device



At the end of its life, the appliance must not be disposed of in household rubbish. Enquire about the options for environmentally-friendly disposal at your retail store.

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Downloading Source Code

You can download the machine-readable full source code of the corresponding licensed components, including any scripts to control compilation and installation of the object code, at the following website link. Please pay attention to the copyright notice, warranty disclaimer and the copy of the license agreement accompanying these source codes.
<http://www.medion.com>

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