hama®

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C O M P U T E R

USB-Multifunktions-Server

USB Multifunction Server
Serveur USB multifonction

00062713

GB Operating Instruction

Contents

Package contents:

1 x Hama USB Multifunction Server
1 x 12 V power supply unit
1 x Printed operating instructions

Safety notes:

Do not use the device in moist or extremely dusty areas, on radiators or near heat sources. This device is not designed for use outdoors. Protect the device from pressure and impact. The device may not be opened or moved during operation.

Caution: Use the device with the enclosed power supply unit only. The use of other power supply units can cause damage to the device.

Introduction:

The USB Multifunction Server allows you to make USB devices such as printers, scanners or hard disks accessible on a network. In other words, every user on the network can access this device.

It is also possible to connect a USB hub to the USB port, however, keep in mind that only one device of each type (printer/hard disk) can be managed. You should not connect more than a total of two devices to the server.
Abbreviations in the text:
Hama USB Multifunction Server = MFS
Hama USB Multifunction Server Control Center = Control Center

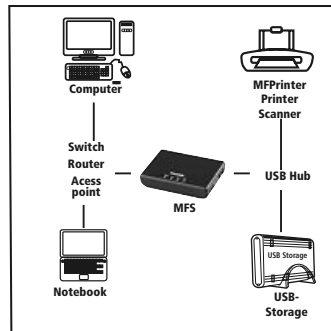**1. Connection**

Power supply connection   Reset to default settings (see 4.1.5)

Connection to USB device e.g. printer/scanner/HDD

Connection to network e.g. router/switch/hub

1. Connect the LAN port of the MFS to your network, such as to a switch or hub. Use at least a CAT5 patch cable (max. 100 m). Or connect your computer to the MFS directly using a crossover cable.
2. Connect the USB port on the MFS to the USB device which is to be made accessible on the network. Switch on the USB device.
3. Plug the included power supply unit into an empty socket and then connect it to the MFS.

Caution: Unsuitable power supply units can cause damage.

LED statuses

Name	State	Status
Power	On	Power supply unit is connected
	Off	Power supply unit is not connected
Link	On	Connected to network
	Off	Not connected to network
Active	Flashing	Data transfer
	Off	No data transfer
USB	On	USB device is connected and operating
	Flashing	Error with connected USB device
	Off	No USB device is connected

2. Control Center installation

Before installation, please save any open documents you may be working on. Then close all running programs. Insert the included CD-ROM. Usually, the CD starts automatically. If the menu does not start automatically, double-click the corresponding CD-ROM drive icon in My Computer/Computer. The following window opens after the program starts:

Select the required language.

This installation process is applicable for Windows 2000/XP/Vista.
Click Install to continue with the installation.
Click Show instructions to open the operating instructions. Adobe Reader is required to display the PDF files. If you have not yet installed Adobe Reader, you will find a free version on the enclosed driver CD.
Click Download driver to download the latest driver from the Hama website. This allows you to check whether drivers have now been developed for previously unsupported systems. Click Back to return to language selection.

When you select Install, the InstallShield Wizard is loaded. This can take a few seconds. Please wait until the InstallShield Wizard starts. Follow the instructions of the installation program and end the installation by clicking Finish. You may have to restart the operating system.

3. Network configuration

Your network must be configured properly in order for the device to function without problems. We recommend that you use a static IP address for the MFS as using dynamic IP addresses can cause a different configuration to be assigned the next time the device is used. It is possible that shortcuts to printers and hard disks will then no longer work. In general, there are three different scenarios:

A.) You have an existing network with a DHCP server
This means that the IP addresses on your network are automatically assigned and that the MFS will also receive an appropriate configuration.
Please note that with dynamic IP addresses, the MFS can be assigned a different configuration the next time the device is used. It is possible that shortcuts to printers and hard disks will then no longer work.

B.) You have an existing network and use static IP addresses
Please assign a static IP address to the MFS that works for your network. This is entered under Confi gure server/TCP/IP and then Static IP address.

C.) You do not have a network yet
Assign static IP addresses to your computer and the MFS.

Computers:

The TCP/IP protocol must be installed on all computers that are to use the device. Proceed as follows to check the settings on your PC:

Windows 2000/XP Start -> Settings -> Control Panel -> Network Connections

Select the connection (network adapter) via which your PC is connected to the device, e.g. **"LAN connection"**. When you right-click the appropriate connection, a menu is displayed; select Properties. Select the entry Internet Protocol (TCP/IP) from entry in the list and click Properties.

Select Use the following IP address and enter these addresses:
First PC   192.168.2.101, subnet mask 255.255.255.0
Second PC 192.168.2.102, subnet mask 255.255.255.0, and so on

Confirm with OK and Close.

Windows Vista

Start -> Network -> Network and Sharing Center -> Manage network connections

Select the connection (network adapter) via which your PC is connected to the device, e.g. "LAN connection". When you right-click the appropriate connection, a menu is displayed; select Properties. Select the entry Internet Protocol Version 4 (TCP/IPv4) from the list and click Properties.

Select Use the following IP address and enter these addresses:
First PC   192.168.2.101, subnet mask 255.255.255.0
Second PC 192.168.2.102, subnet mask 255.255.255.0, and so on

Confirm with OK and Close.

MFS

Please also assign a static IP address to the MFS that works for your network. This is entered under Configure server/TCP/IP and then Static IP address. An IP address that would work with the aforementioned addresses would be 192.168.2.30.

4. Control Center

Open the Control Center from Hama. To do so, click Start Start -> Programs -> Hama USB Multifunction Server -> Hama USB Multifunction Server Control Center.
If the program is already running in the background, you will find it in the task bar at the bottom right of the screen:

Click the circled icon to open the program from the task bar. The Control Center starts with the following view:

First, choose which language you would like to use. In the upper menu, choose Tools and then Configuration.

After completion, click OK.

All servers and connected devices are listed in the main window. If no servers or devices are displayed, click the button Update server list. If the window still does not display any devices, check the wiring and network settings.

4.1 Basic configuration

Select the MFS in the big window. Then click Configure server. Enter the username and password in the window that opens.
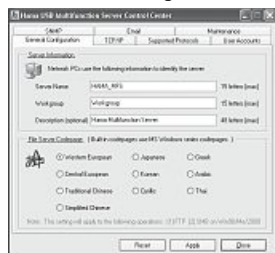By default, the following is set for the administrator:

Username: admin
Password: admin

End the configuration by clicking Close or, if you have made changes, Apply. The MFS must be restarted after setting changes. In this case, confirm the query.

4.1.1 General configuration

Server name: The server appears with this name in the overview.
Workgroup: Enter the workgroup name here. Letters, numbers, spaces and underscores are allowed. If you don't know the workgroup name, go to the desktop. Right-click My Computer and select Properties from the menu. The System Properties will now be displayed. Switch to the Computer Name tab. You can see the workgroup name here.
Description: The description is optional.
File server codepage: This setting is required for the use of Microsoft codepages and is matched to regions. Switch to the TCP/IP tab.

4.1.2 TCP/IP

You must now set up your network to be able to use connected devices.
Obtain IP from DHCP automatically: This option is selected by default. This means that the USB Multifunction Server automatically receives an IP address that works with your network if you are operating a DHCP server (these are usually integrated in DSL routers). Please note that with dynamic IP addresses, the MFS can be assigned a different configuration the next time the device is used. It is possible that shortcuts in the server modes to printers and hard disks will then no longer work.
Static IP: If you use static IP addresses on your network, you can configure the corresponding network settings here. For more on this, see item 3 in the operating instructions.

Switch to the Supported protocols tab.

4.1.3 Supported protocols

Specify which protocols you want to activate here.

LPR/IPP/RAW: Printer protocols, which are required for use as a printer server.
SMB/FTP: These protocols are required for access to connected storage media.

If you are unsure, leave the settings as they are.
On this page, you can also specify the mode you want the device to connect in.

Net USB mode: Connections to the connected USB device are direct. In other words, while one user is connected to the device, no other users can access it.
Server mode: In this mode it is possible for multiple users to access the connected device at the same time, such as with a connected hard disk.
Switch to the User accounts tab.

4.1.4 User accounts

You can control access to connected USB storage via user accounts. Users are prompted for their username and password when you select the option Activate server authentication on the Supported protocols tab.

Administrator account:
The most important account for all settings is the administrator account. By default, the following is set for the administrator:

Username: admin
Password: admin

To change the login data for the administrator, fill in the following fields under Administrator account:
Username: Enter a username of your choosing with a maximum of 15 characters (letters and numbers are allowed)

Password: Enter a password of your choosing with a maximum of 15 characters (letters, numbers, and punctuation marks are allowed)
Repeat password: Confirm the password by repeating it.
After this, click the button Apply. This sets the new values for the administrator account.
Creating user accounts
You can create up to 25 user accounts. To do so, proceed as follows:

Fill in the following fields under User account list:

Username: Enter a username of your choosing with a maximum of 15 characters (letters and numbers are allowed)
Password: Enter a password of your choosing with a maximum of 15 characters (letters, numbers, and punctuation marks are allowed)
Permission: This selection decides whether the user has read only or read and write access.
After this, click the button Add. The user then appears in the list under the entry fields.

Switch to the Maintenance tab.

4.1.5 Maintenance

Restart server: Click this button to restart the USB Multifunction Server.
Default values: To reload the default settings, click this button. Alternatively, you can press and hold the Init button (located on the housing). Disconnect the power supply unit from the power supply and reconnect it after a few seconds. You can now release the Init button.
Update system firmware: Here you can load a firmware update provided by Hama. Please note that loading a new firmware resets your settings.

4.1.6 E-mail

You can use these settings to be notified of status messages or errors per e-mail. These settings are not required for basic operation of the device.

4.1.7 SNMP

SNMP is a protocol for controlling network components remotely. You can change settings for this protocol on this page. These settings are not required for basic operation of the device.

5. Printer server (printer connection)

The integrated printer server allows you to share a USB printer on the network. A connected printer is displayed below the USB Multifunction Server, as shown in the image. If you have already used the printer on your computer, the drivers are already installed and you can continue with the next point. Otherwise, first install the printer driver on each computer that is to use this printer. Use the instructions and driver CD from the printer manufacturer. Depending on the manufacturer, you may need to connect the printer to the computer directly. After you have completed the installation of the driver, reconnect the printer to the MFS.

There are two ways of connecting to the printer.

5.1 Direct connection

In this mode, Windows will act the same as it would if the printer were connected via USB to your computer directly. The disadvantage is that only one computer can access the connected device at a time.

Select the printer in the main menu and then click Connect. The connection to the printer is established and the driver is linked again. The printer can then be used.

After installation is complete, you can add the printer to the list of automatic printers. This means that the connection to the printer must no longer be made manually. To do this, click Automatic printer in the Control Center and then Set auto-connect printer. Select the printer from the list and click Apply.
Please remember to disconnect. As long as you are connected, no other user can access the printer.

5.2 Network printers wither LPR

To use this function, you must activate the LPR printer protocol under Configure server/Supported protocols.

Windows 2000/XP
Choose Start => Printers and Fax Devices => Add a printer. Click Next on the initial screen.
On the following screen, select Local printer. Remove the check for Plug and Play printer. Then click Next.

On the next screen, choose Create a new port and then Standard TCP/IP Port under Type of port. Then click Next. This will now open the Add Standard TCP/IP Printer Port Wizard. Click Next on the initial screen. In the following window, enter the IP address of the MFS under Printer Name or IP Address. (To find this, switch to the Control Center. The IP address (such as 192.168.1.100) is displayed in the main window after the MFS name.) Then click Next.

Under Device Type, select Custom and then click Settings. In the new window, choose LPR. Under LPR Settings, enter USB1_LQ in the field Queue Name. Click OK and then Finish to close the wizard. Installation of the printer port is now complete.

Next, choose the driver (which has already been installed) for the connected printer. To do this, the Add Printer Wizard opens once the installation of the printer port is complete. Follow the instructions provided by the wizard.

Windows Vista

Choose Start => Control Panel => Printer => Add a printer. On the following screen, select Add a local printer. On the next screen, choose Create a new port and then Standard TCP/IP Port under Type of port. Then click Next. In the following window, enter the IP address of the MFS under Hostname or IP address. (To find this, switch to the Control Center. The IP address (such as 192.168.1.100) is displayed in the main window after the MFS name.)
Then click Next.

Under Device Type, select Custom and then click Settings. In the new window, choose LPR. Under LPR Settings, enter USB1_LQ in the field Queue Name. Click OK and then click Next. Installation of the printer port is now complete. You must then select the printer driver. Select the driver (which has already been installed) for the connected printer from the list and follow the instructions provided by the wizard.

Once the installation has been completed successfully, you will find the printer installed in the Printers and Faxes window. This installation of the printer is complete.

6. Network scanners

If you have already used the scanner on your computer, the driver is already installed and you can continue with the next point. Otherwise, first install the scanner driver on each computer that is to use this scanner. Use the instructions and driver CD from the scanner manufacturer. Depending on the manufacturer, you may need to connect the scanner to the computer directly. After you have completed the installation of the driver, reconnect the scanner to the MFS.

Select the scanner or multifunction device in the Control Center and then click Network scanner. Select the driver from the list and click OK. If you are informed that no driver is installed, you must first install the scanner driver from the manufacturer.

The integrated tool now opens. You can select the File name, File format and Save location here. After you have made the selection, click Scan. Depending on the driver used, the manufacturer's scanner tool will open and guide you through the scanning process. A preview is shown and the file is saved to the specified folder.

7. Addition of USB storage media to the network

This device allows you to make data such as videos, music, or pictures that are saved to a USB storage medium available to the entire network.
First, connect the USB data medium to the USB port on the MFS and turn it on. There are two options for accessing the data medium.

A) **Direct connection:** NetUSB mode must be activated
B) **Network access:** Server mode must be activated

Please make the appropriate setting under Configure server/Supported protocols.

7.1 Direct connection

In this mode, Windows will act the same as it would if the hard disk were connected via USB to your computer directly. The disadvantage is that only one computer can access the connected device at a time.

Select the storage device in the main menu and then click Connect. Windows now detects a new hardware component and installs the required driver. You can then find the storage device as a drive under My Computer/Computer.

7.2 Network access

Please note that network access requires communication using various ports and that they may be blocked by a firewall. You must enable these ports. In addition, some functions are not currently possible in the Windows Vista operating system.

Formatting the storage medium

Once the storage medium has been connected, it has to be formatted to the FAT file system before it can be used. Caution: Formatting causes all existing data on the storage medium to be lost.

Using user accounts

To regulate data access, you can use user accounts to control who can access which data. Once you activate server authentication under Settings/ Supported protocols, the connected storage medium requires users to enter a username and password. You must create a user account for every person that should have access. To do so, proceed as described in point 4.1.4.

7.2.1 Quick access

Select the storage device in the Control Center and then click Network storage. Open the folder usb_d1p1, or similar (d1 = storage medium 1 / p1 = partition 1). The contents of the storage device are now displayed.
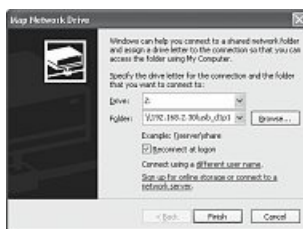
7.2.2 Installation of the SMB share on a PC

Open My Computer/Computer or Windows Explorer on your PC. From the Tools menu, choose Map Network Drive.
Drive: Select a drive letter that the network drive should be mapped to.
Folder: Enter the path to the desired folder, such as:
"\\IP address of the MFS\name of the folder"

Example: "\\192.168.1.100\usb_d1p1" where d1 stands for storage medium 1 and p1 for partition 1 If the connected hard disk only has one partition, you can use that as is.

You can also choose whether to reconnect the share after you restart or log on again.
Afterwards, click Finish. You may now be required to enter a username and password.
If the entry is correct, the selected folder will open and you can add, copy or delete files, depending on your authorisation.
If you are informed that the folder cannot be found or that the connection could not be established, check the specified path, username and password. Open My Computer/Computer to find the drive again later. The entry is displayed there under Network Drives.

7.2.3 FTP folder access

Open the browser and enter the following into the address bar: "ftp://IP_adresse_of_the_MFS/".
For example (default): "ftp://192.168.1.100/"
You must now enter your user data in the window that appears. All existing shares will then be displayed in the following way:

Folder d1p1 (where d1 stands for storage medium 1 and p1 for partition 1)

You can add, copy or delete files, depending on your authorisation.
If you are informed that the folder cannot be found or that the connection could not be established, check the specified path, username and password. In order to find the folder again later, we recommend you save it as a favourite in your browser.

8. Contact and support information

If the product is defective:
Please contact your dealer or Hama Product
Consulting if you have any product claims.

Internet/World Wide Web
Product support, new drivers or product information
can be found at www.hama.com

Support hotline – Hama product consulting:
Tel. +49 (0) 9091 502 115
Fax +49 (0) 9091 502 272
E-mail: produktberatung@hama.de

CE