



MasonIP

Network Video Player



User Guide

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WELCOME

Thank you for purchasing the MasonIP network video decoder/player. Whether you plan to use the Mason for proofing your DVD authoring, checking your HD encoding, or as the hub of your home video playback system, we are confident that you will love its high quality, flexibility and robust design.

This User Guide will take you through the installation, configuration and use of your MasonIP. Please take a few minutes to read through it before you begin setting up your Mason.



Getting Help

If you need help with the setup or operation of your Mason, Wired offers a variety of support options.

- Start with our online FAQ database [Mason Knowledge-base](#) on our website at www.wiredinc.com. You'll find a wealth of detailed information there.
- We also offer unlimited technical support via e-mail at: masonsupport@wiredinc.com.
- For warranty repairs or other non-technical questions, contact customer service at info@wiredinc.com.

SYSTEM REQUIREMENTS

To use the Mason, you will need:

- A 100/1000base-T Ethernet network connection
- A computer with a web browser (for configuration)
- A TV or monitor with an available composite, s-video, component or DVI video input (*HDMI inputs can be used with an optional adapter.*)
- A computer or computers configured as a server to share the video files you want to play. (*The Mason can access files on NFS, SMB or HTTP servers.*)

Note *The Mason can also play files from a locally connected USB drive. See [‘Using USB Drives’](#) later in this guide for details.*

WHAT’S IN THE BOX

In the box you should find the following items (if anything is missing contact Wired at: masonsupport@wiredinc.com.)

- MasonIP unit
- Remote control and batteries
- Power cord
- this User Guide

Note *It’s a good idea to save the box and the protective foam in case you need to transport the Mason in the future.*

OVERVIEW OF OPERATION

Simply put, the MasonIP is a hardware device which connects to a TV or monitor and allows you to play digital video files that are stored on your server(s) over an Ethernet network. It uses a handheld remote control to navigate its on-screen menus and control selection and playback of your files.

The Mason is ideally suited for proofing the quality of video encoding in MPEG formats, as well as testing the functionality of authored DVDs.

Flexible Input and Output Formats

The Mason features a powerful video processor that enables it to decode and display a wide range of video formats. From the smallest MPEG-1 file to high-datarate HD files in the latest H.264 format, Mason can play them with ease. But that's just half the story. Mason's processor also handles output scaling. This is especially useful with high-definition monitors, as you can operate at the monitor's optimum resolution and let Mason's high-quality scaler take care of the rest.

No matter what the format or bitrate your source video, or what type of monitor you're using, the Mason will make it look its best.

The Ultimate DVD Player

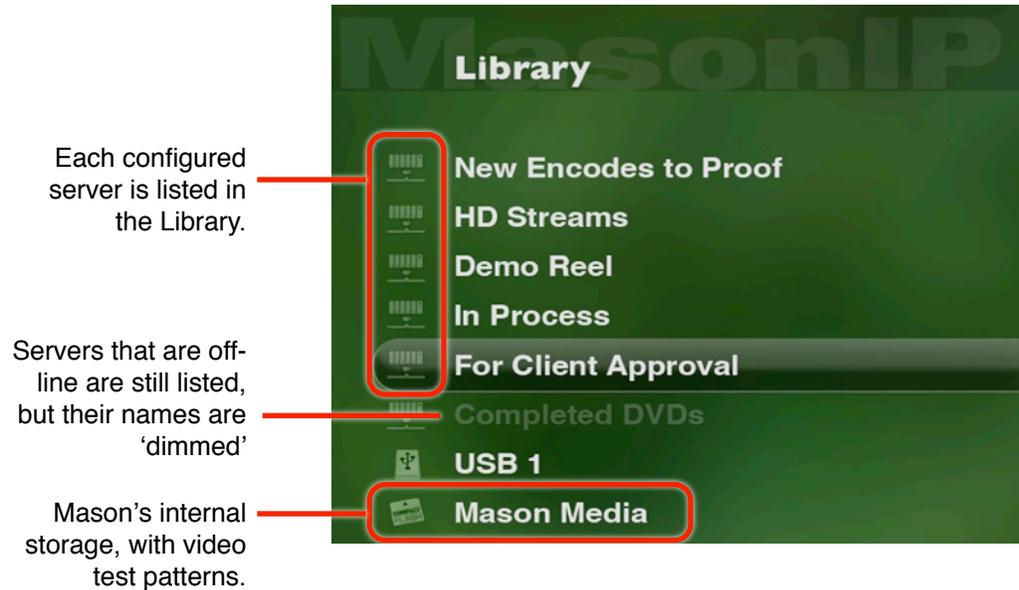
For playing or proofing authored DVD projects, the Mason gives unprecedented flexibility and convenience. You simply put your VIDEO_TS folders on your server and the Mason plays them just as if they were already written to a DVD. This can save huge amounts of time in the authoring process, because you don't have to burn a disc every time you want to check something.

Multiple Sources

The Mason can instantly access data located on up to eight different servers or mount-points. Each can be easily configured with the Mason's web-configuration page, and all playable items are displayed on the easy-to-navigate menus. You can even give your servers 'friendly' names, so they are easier to navigate.

The Library

The contents of all your configured servers are displayed on your TV in a unified listing called the 'Library'. The Library shows each server, as well as any connected USB drives.



You use the up and down arrow buttons on the remote control to move up and down in the list, the right arrow or enter button to move down 'into' your folders, and the left arrow button to back 'up' in the hierarchy of your files. If you have a video file or DVD highlighted, pressing 'enter' will start playback.

ABOUT SERVERS AND NETWORKS

The Mason plays files that are stored on your server(s). It is beyond the scope of this guide to cover all the details of choosing and configuring a file server and network, but here are some things to consider:

The Mason can connect to three types of file servers:

- NFS - common on UNIX/Linux systems
- HTTP - standard web servers
- SMB - the Windows standard for file sharing

Recommendations & Tools

You can access up to eight servers or mount points, and they can be of mixed types. Which type to use depends on a number of factors, but your computer type is probably the most significant.

- NFS** If your server computer is a **Macintosh** or a **Linux** machine, NFS is probably your best choice. It is very efficient, so gives excellent performance even with many users connected. NFS serving is built-in to both Linux and Mac operating systems. You can also configure a Windows machine for NFS sharing, but it requires installation of 'Services for UNIX for Windows' which is available from Microsoft's website. For Macs, there is a very handy tool called NFS Manager which greatly simplifies the configuration of NFS sharing. It costs about \$20. You can find it at www.bresink.com/osx/NFSManager.html. For Linux systems, see the documentation for your system for information on enabling and configuring NFS shares.
- SMB** For most **Windows machines** SMB will be the easiest option. It's built in to Windows and all you have to do is select a drive or folder and tell Windows to share it. Macs also support SMB serving, but as already mentioned, NFS is a better choice.
- HTTP** If you already store your data on an HTTP server, it can be utilized by the Mason. Mac, Windows, and Linux machines are all capable of running HTTP servers. Apache is the most common HTTP server application, and it is the one we recommend. However, other types will work also.

 Check the [Mason Knowledge-base](http://www.wiredinc.com) at www.wiredinc.com for useful tips and more details on network configuration.

Network Security

Even on an internal network, it is a good idea to configure your server to require authentication, to avoid any unauthorized access to your data. On a network that is accessible to the 'outside world' it is absolutely essential. The Mason supports authentication on all three types of servers.

About Network Speed

The Mason has a 100Base-T Ethernet port. This is more than fast enough to handle even the highest bitrate files that Mason can play (50 mbps). However, for best performance you'll want your server and your network switches to be gigabit speed. That will prevent the Mason from monopolizing your network, and allow multiple users and/or Masons to access the server without speed bottlenecks.

Normally, the Mason is used to play files that are located on your local network. It can be configured to access servers that are 'outside', but in most cases they will not be fast enough to support video playback. For example, you could set the Mason to read files from a public website that has video files. But unless you have an extremely fast internet connection, or the files are very low bitrate, this is not likely to work very well. But it doesn't hurt anything to try it.

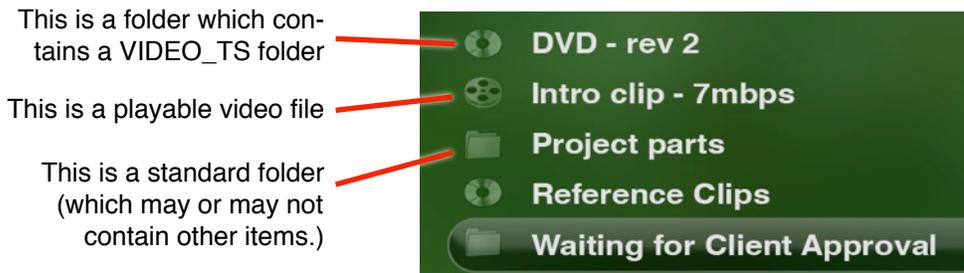
Organizing Your Data on the Server(s)

You can arrange your files on your servers any way that is convenient for you. The Mason can easily navigate any file hierarchy. But there are a few things to keep in mind:

- Authored DVD projects must contain a folder named VIDEO_TS which in turn contains the authored project files (VOBs, BUPs, etc.) The usual method is to make a folder which has the desired name (i.e. 'Client Test Project') then put the VIDEO_TS folder within that folder.
- Individual video files should have appropriate file extensions (.mpv, .mpg, .ts, avi, .m4v, etc.) This helps insure that the Mason can properly interpret them.
- If you have more than a few hundred items, it speeds and simplifies navigation to store them in sub-folders.

What Mason 'sees'

When you browse the Library, Mason only displays servers, folders and items it can play. Folders which contain a VIDEO_TS folder will be shown as DVDs, and any other playable files will be shown with a movie icon. No other files will be shown in the listing; incompatible files will just be ignored.



Compatible Files & Extensions

Mason recognizes the following file types/extensions for playback:

- .avc
- .avi
- .m2v
- .m4v
- .mp4
- .mpeg
- .mp3
- .mpa
- .mpg
- .mpv
- .ts
- .vc1
- .vob
- .wmv
- VIDEO_TS

Special Files

In addition to the above file formats, the Mason recognizes one special file type:

- **MasonIP_Image** - a special file containing Mason firmware updates. If this file is found on a mounted server or drive, you will be prompted to install the update.

SETTING UP THE MASON

There are three parts to setting up the Mason:

- Connect the Mason to power, network and your TV
- Configure the Mason's network address
- Use a web browser to configure your servers

The next few pages cover these items in detail.

Mounting the Mason

The Mason is a standard 1U rack-mount device, which can either be mounted in a standard equipment rack, or simply placed on a horizontal surface.

As shipped from our factory, the Mason has self-adhesive rubber feet on its bottom to prevent scratching any surface you may set it on.

1. If you will be mounting the Mason in a rack, you may need to peel off the rubber feet (depending on the clearance below the Mason).

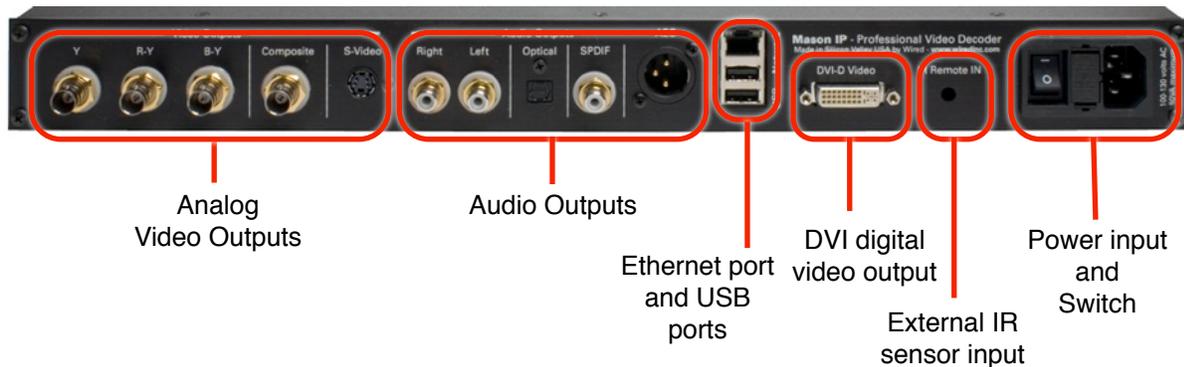
Alert *The Mason has vents on its left and right side panels. Be sure these vents are not blocked when you put the Mason in place.*

Batteries

2. If the batteries are not already in the remote control, install them now.

The Connections

All the connections to the Mason are made on its rear panel.



Power

3. Connect the included power cord to the rear of the Mason, and plug it into a standard 110 volt electrical outlet.

Connect Your Network

4. Connect your Ethernet network to the jack on the rear of the Mason.

Connect Your Monitor & Audio

5. Connect your TV monitor(s) to the desired output(s).

Note *You can connect more than one video output if you like, but depending on the resolution you select some will not be active.*



If your monitor has a HDMI input, you can connect it to the DVI output of the Mason using an HDMI-to-DVI adapter (not included).



6. Connect the desired audio output(s) to your sound system/amplifier. All audio outputs are active at all times, so you can connect them to different devices as needed.

Initial Power On

7. Turn on your TV monitor, then turn on the Mason's power switch (on the rear panel.) After a few moments you should see the main Mason menu on your TV. If you don't see anything, make check to be sure your TV is set to the correct input. The Mason is configured at the factory with these video settings:

Analog video..... 480i (NTSC)

Digital Video..... 480P

Note *If your monitor cannot operate at the default resolution, you can cycle through a variety of SD and HD output resolutions by pressing the 'TV Mode' button on the remote control. Each time you press the button the Mason will change to a different mode. Continue until you find one that works on your monitor.*

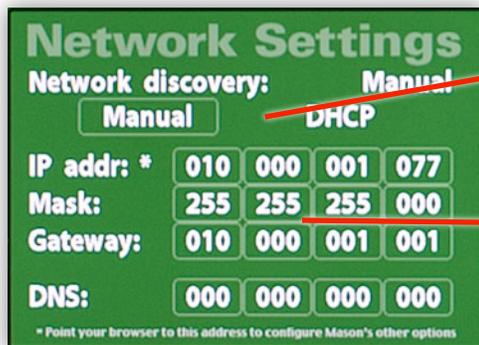
Setting the IP Address of the Mason

At the factory, the Mason is set to these network settings:

Net Discovery Manual
IP address..... 192.168.1.10
Mask.....255.255.255.0
Gateway..... 192.168.1.1
DNS..... not set

Most likely you will need to change these settings to something appropriate for your network.

8. With the remote control pointed towards the front of the Mason, press the 'Setup' button. The Network Settings window will be displayed.



Choose Manual or DHCP

Use the arrow keys on the remote to move from field to field, and the number keys to enter values.

9. Use the arrow keys on the remote to select Manual or DHCP for network discovery.

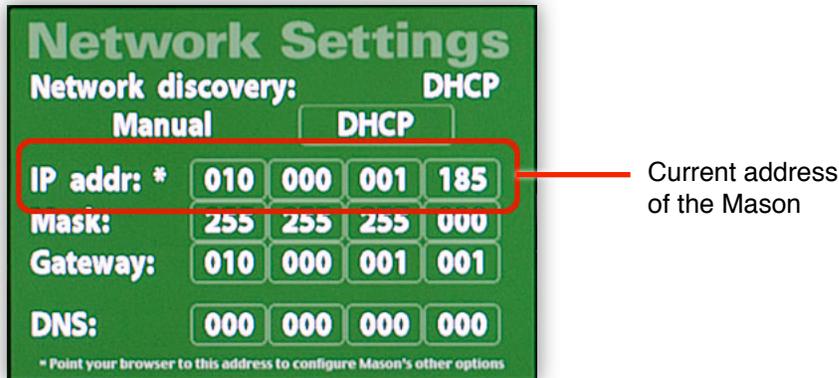
Manual..... Continue by entering the appropriate values in all the fields, using the remote to move from field to field, and the number keys to enter the values. Press the 'SELECT' button on the remote when you're done.

DHCP The IP Address should set itself (this may take a few seconds). *Make note of the address, as you'll need it later, then press the 'SELECT' button to save your setting and close the settings window.*

THE WEB CONFIGURATION SYSTEM

With the exception of initially setting the IP address, all of Mason's settings are made using its web-based configuration pages. To access the configuration pages, you simply enter the IP address of your Mason into the address field of your favorite web browser on your computer.

You can always find the current address of your Mason by pressing the 'setup' button on the remote control.



Alert *If you were unable to set the IP address in the earlier steps because your monitor could not display the default resolution, you will need to connect to the configuration page using the default address of 192.168.1.10. If the rest of your network is not using 192... addresses, you will need to temporarily connect your computer's Ethernet directly to the Mason's Ethernet port, using a standard Ethernet cable. This should allow it to communicate with the Configuration page so you can set the resolution.*

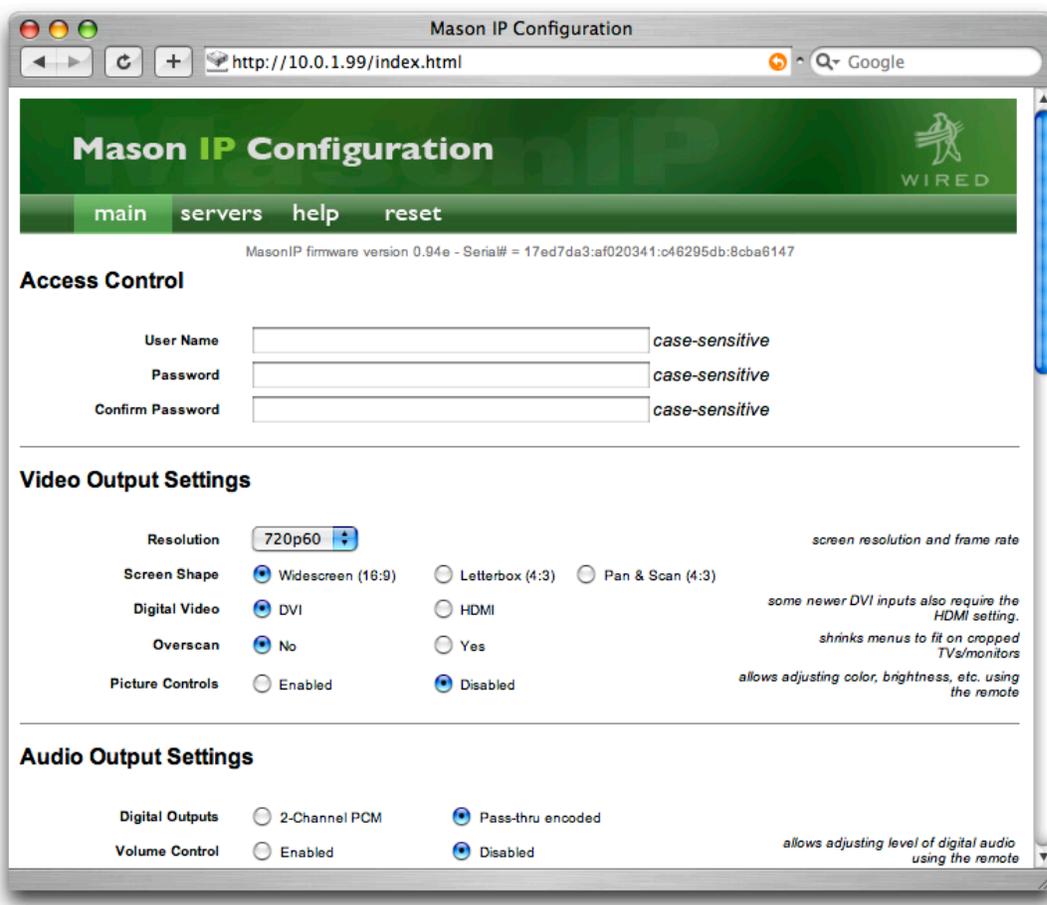
1. On your computer, enter the Mason's IP address in your browser and press 'enter'.



2. A browser authentication window will appear. Enter the user name and password and press 'return' or click the OK button in your browser.

Note *We ship the Mason with the user name set to 'admin', and the password 'admin'. If you have reset the Mason to the factory defaults, then there will be no user name or password set.*

The main configuration page will open. It should look something like this:



Notice that the MasonIP configuration pages are divided into four sections -

- **Main** - which is used to change operational settings
- **Servers** - where you set up access to your server(s)
- **Help** - online help for each setting
- **Reset** - allows you to reset your Mason back to factory settings

Each section is accessible by clicking on its tab near the top of the page.



Just below the section tabs, you'll see the firmware version and electronic serial number of your Mason.

Keep reading for details of each section and their settings.

Main Settings Page

Note *To save any changes to the Mason's settings, click the 'Save Changes' button at the bottom of the configuration page. Changes are applied as soon as you save them.*

Access Control

This section is used to specify the user name and password which is required to enter the Mason IP Configuration pages.

User Name	<input type="text"/>	case-sensitive
Password	<input type="password"/>	case-sensitive
Confirm Password	<input type="password"/>	case-sensitive

Alert *If you set an access password and then later forget it, you will not be able to access the configuration pages. To regain access you would need to do a complete restore of the Mason by downloading the latest firmware updater from the Wired website.*

Video Outputs Setting

These settings determine the resolution and format of the Mason's video output.

Resolution	<input type="text" value="720p60"/>		
Screen Shape	<input checked="" type="radio"/> Widescreen (16:9)	<input type="radio"/> Letterbox (4:3)	<input type="radio"/> Pan & Scan (4:3)
Digital Video	<input checked="" type="radio"/> DVI	<input type="radio"/> HDMI	
Overscan	<input checked="" type="radio"/> No	<input type="radio"/> Yes	
Picture Controls	<input type="radio"/> Enabled	<input checked="" type="radio"/> Disabled	

Resolution..... Normally you would select the highest resolution that your TV/monitor supports. Choose the desired resolution from the pop-up menu.

Screen Shape Specifies whether you have a widescreen or standard shape TV, and whether to use Pan & Scan or Letterboxing when fitting a wide movie on a standard TV.

Digital Video..... Specifies the video format for the digital input of your TV. If you are connecting to a HDMI input, be sure to select HDMI. Some newer TVs with DVI inputs also require this setting; choose the setting that gives the best results.

Overscan..... On some monitors (CRT & others), part of the image is usually obscured by the frame. Selecting 'overscan' will cause the Mason to slightly shrink everything so it will fit better on the screen.

Picture Controls... The Mason allows you to use the remote control to adjust the color, contrast and brightness of the image. You can disable these adjustments if you prefer.

Audio Output Settings

This group of settings controls the audio output format and optionally allows the volume to be controlled with the remote.



A screenshot of the 'Audio Output Settings' section. It contains two rows of settings. The first row is 'Digital Outputs' with two radio buttons: '2-Channel PCM' (unselected) and 'Pass-thru encoded' (selected). The second row is 'Volume Control' with two radio buttons: 'Enabled' (unselected) and 'Disabled' (selected).

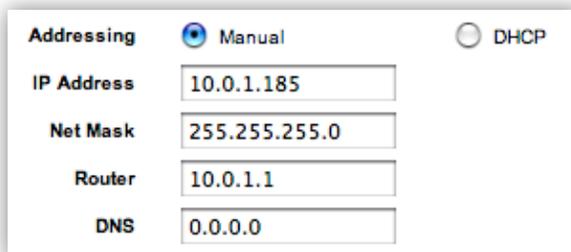
Digital Outputs..... Specifies what data is sent out of the **digital** audio ports (SP/DIF, TOSLINK and AES/EBU). Choose pass-through if you are using an external decoder (typically a receiver with built-in Dolby and DTS).

Volume Control..... The Mason's remote can be used to adjust the output sound level, or you can choose to disable this feature (recommended if you are using an external decoder.)

Network Settings

This section specifies the network address of the Mason IP itself. If you change the network settings and then click the 'Save' button, you will be disconnected from the web configuration pages. You will need to enter the Mason's new address into your browser to continue.

Note *Changing these is the same as changing the Network Settings using the remote control.*

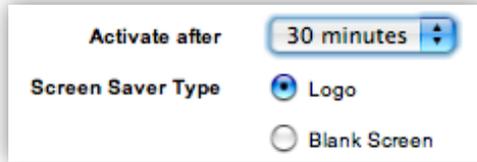


A screenshot of the 'Network Settings' section. It features an 'Addressing' section with two radio buttons: 'Manual' (selected) and 'DHCP' (unselected). Below this are four text input fields: 'IP Address' (10.0.1.185), 'Net Mask' (255.255.255.0), 'Router' (10.0.1.1), and 'DNS' (0.0.0.0).

Addressing..... Choose Manual or DHCP. If you choose DHCP, you don't need to complete the other fields.

Screen Saver

To help prevent burn-in on your TV, the Mason has a built-in screen saver function. You can specify how long it should wait before activating, and whether you want it to display a moving Wired logo, or simply blank the screen.



Activate after.....Choose how many minutes before the screen saver starts

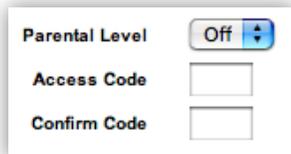
Type.....Choose 'Logo' to display a dark-gray Wired logo, or 'Blank screen'. (on Energy Star monitors, choose 'blank screen' to allow the monitor to sleep).



The screen saver will not activate during video or DVD playback, only while the Mason is displaying its menus.

Parental Controls

Some DVDs utilize a system to limit access to material that might be objectionable to certain viewers. You can enable this feature by entering a restriction level and access code. Then when you play a DVD with such restrictions, you will be asked to enter the code using the remote control before playback will proceed.



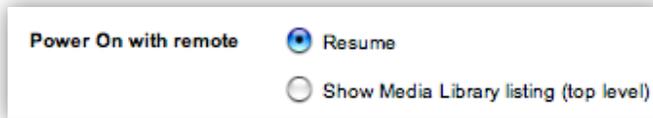
Parental Level.....Choose the desired control level

Access Code..... Enter the desired four-digit access code

Confirm Code..... Reenter the code to confirm it

Power On with Remote Behavior

You can specify what happens when you turn the Mason off and on using the remote control.



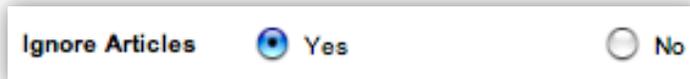
Resume The Mason will remember where you left off and start up again in the same place. This works whether you were watching a movie or browsing the library.

Show Library Choose this option to have the Mason display the main level of the Library directory when you turn it on. In this mode, the Mason will attempt to re-mount any configured servers when powering on.

Note If you turn the Mason on/off with the back panel power switch, it always starts at the main level of the Library.

Filtering & Sorting

This is a useful feature that causes Mason to ignore 'a' and 'the' at the beginning of file names. (i.e. a movie called 'The Greatest Movie Ever' would be listed with movies beginning with 'G', and not grouped with everything starting with 'The'.)



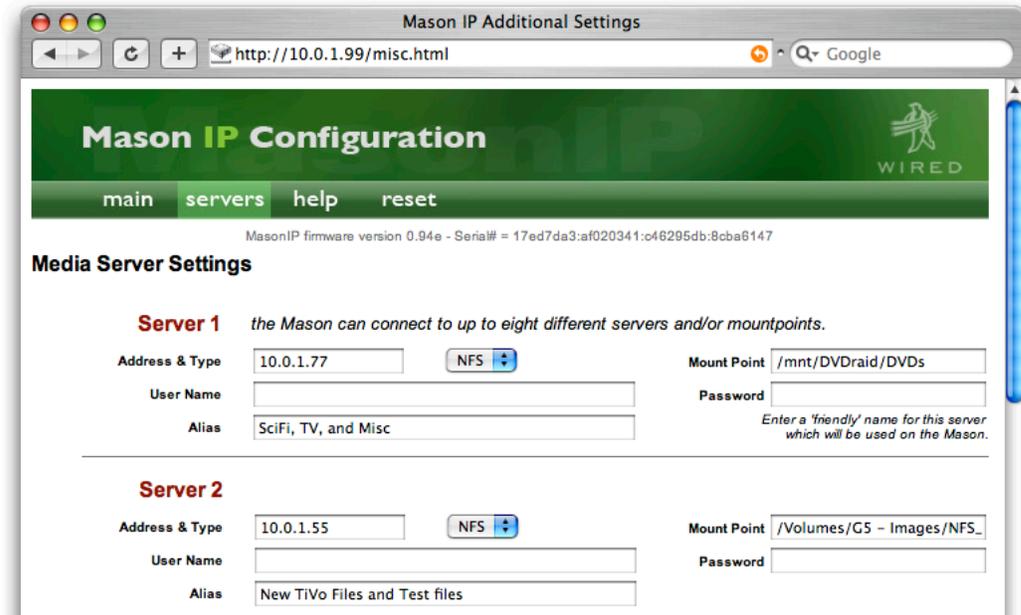
Zoom Presets

The Mason has four zoom levels which can be selected in rotation using the 'zoom' button on the remote control. You can specify the zoom percentages for three of the four settings.

	<i>Vertical Scaling Percentage</i>	<i>Horizontal Scaling Percentage</i>
Standard	100%	100%
Stretched	<input type="text" value="135"/> %	<input type="text" value="135"/> %
Zoomed	<input type="text" value="165"/> %	<input type="text" value="165"/> %
Custom	<input type="text" value="180"/> %	<input type="text" value="180"/> %

Servers Settings Page

This page allows you to specify up to eight servers and/or mount points which contain your media files. Mason can connect to Unix/Linux (NFS), Windows (SMB) and HTTP servers.



Each of the eight possible servers has the same settings.

Address..... The IP address of the desired server

Type Choose NFS, SMB or HTTP to match your server

Mount Point specify the mount-point path to the server.

User Name..... User name for the server (not needed for servers with guest access enabled.)

Password..... Password for the server (not needed for servers with guest access enabled.)

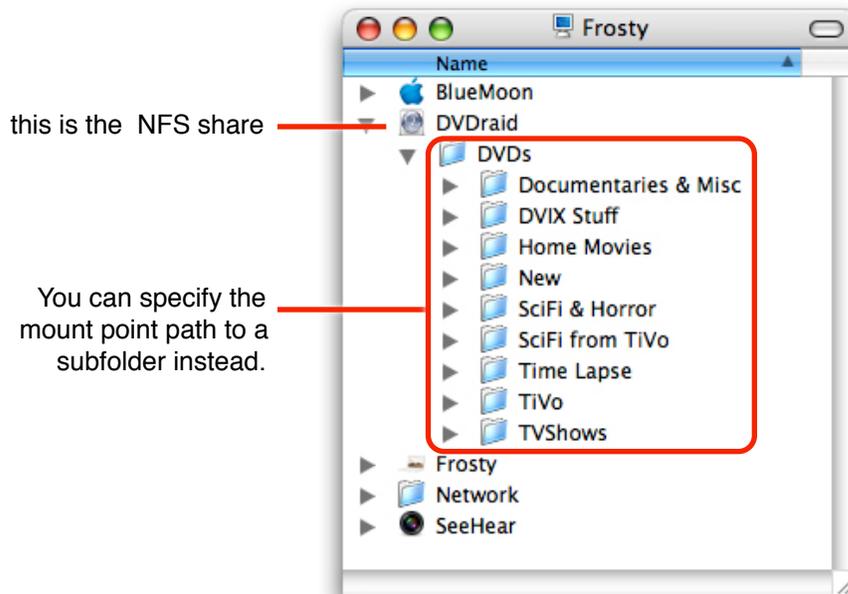
Alias..... The Mason allows you to specify a 'friendly' name for each server. This name will be used when navigating and selecting items on the Mason. (i.e. instead of seeing the name of a server as nfs://192.168.1.77/mnt/dvdstorage, you could give it the alias name 'DVDs' and Mason will always refer to it by that name.)

Note *The Servers appear in the main Library view in the order they are entered on the Configuration page. If you want them to show up in a different order, just reenter them in the desired order.*

More About Mount Points

It's important to note that the 'Server' entries don't all have to refer to different physical servers. You can enter a single server multiple times, specifying different sub-paths in the Mount Point field.

For example, if your directory structure looks like this -



The mount point would typically be entered like this:

Mount Point

When viewed in the Mason Library, the corresponding Server entry would contain the single folder named 'DVDs', and you would navigate into that folder to find the additional folders.

But the Mason also accepts mount point paths that point to lower levels of the shared item. You simply add the desired path to the end of the mount point path, like this for example:

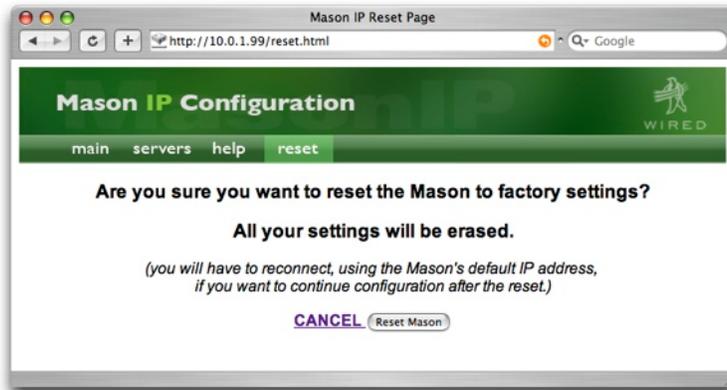
Mount Point

That would cause the Library to show only the contents of the folder 'New'. Any items 'outside' that folder in the hierarchy would not be accessible.

Note For more information on network configuration see the online [Mason Knowledge-base](http://www.wiredinc.com) on our website at www.wiredinc.com.

Reset Page

This page is used to reset the Mason to factory default settings.



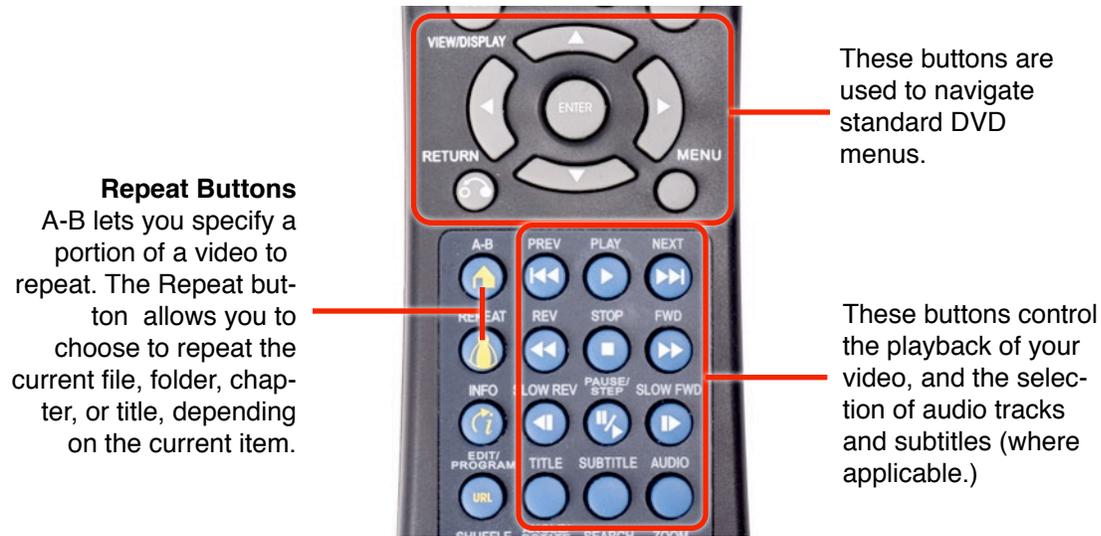
Reset Mason..... All your settings will be erased. The video resolution will revert to 480p for digital and 480i for analog, and the network settings will revert to 192.168.1.10. You would then need to use the remote control to set the IP address of the Mason before you can resume using the Web Configuration pages.

Cancel.....Goes back to the Main page without resetting the Mason

THE REMOTE CONTROL

The Mason's remote control is used to navigate the Library and control the playback of your video. It includes all the typical functions of a DVD player remote control, along with a few special functions.

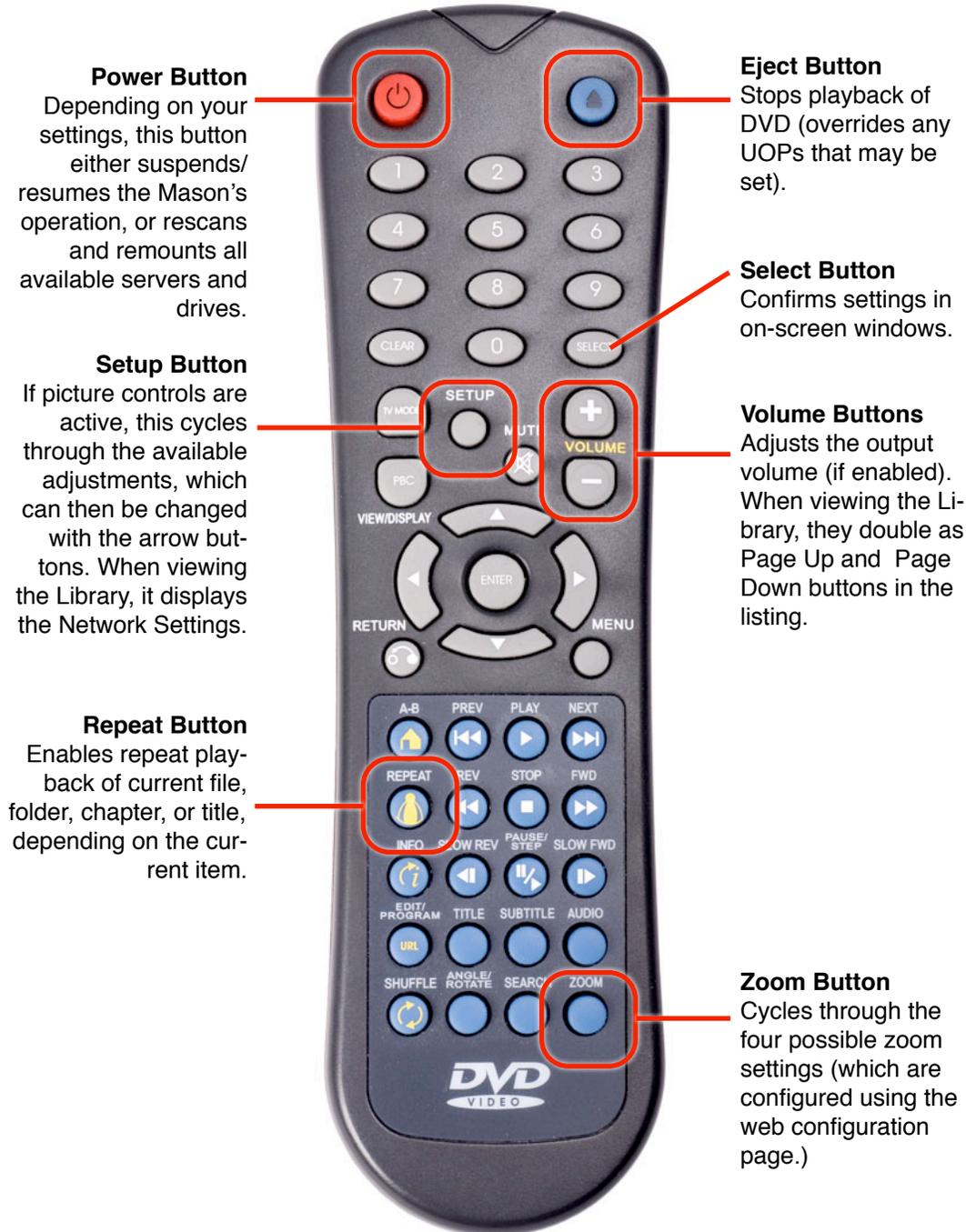
The most-used buttons are the navigation keys group, which includes the four-way arrows and 'Enter' key along with the 'Menu' and 'Return' function, and the standard playback buttons. In addition, the 'A-B' and 'Repeat' buttons can be used to play a specific portion of your video or group of videos in rotation.



Note Some functions may be inactive for certain types of files. For example, fast-reverse is not available for file playback.

Special & Multipurpose Buttons

Some of the buttons on the remote have special functions.



Page up - Page Down

The Volume '+' and '-' buttons are used to control the Mason's output volume, if you have enabled that feature on the Configuration page. But these buttons also double as 'Page Up' and 'Page Down' buttons when you are viewing the Library listing. They let you jump through long listings very quickly.

Reserved Buttons

Some of the buttons on the remote are reserved for future use, and are currently inactive. They are indicated here.



APPENDIX

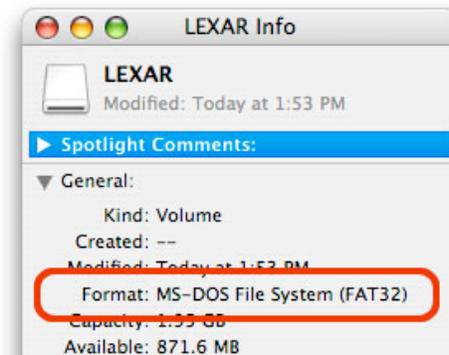
Using USB Drives

The Mason is primarily designed to play files located on network servers, but it can also play files from locally connected USB drives. This is ideal for situations where you need a ‘standalone’ player.

You can connect external USB hard drives or flash drives to the Mason’s USB ports.



The drive must be formatted in Windows format (MS-DOS/FAT32). If you are using a Mac, you can check the format by connecting it to your Mac, selecting the USB drive’s icon and choosing ‘Get Info’ from the File menu. If it is not in MS-DOS format, use the Apple Disk Utility tool to reformat it.



Note We recommend using USB drives which have their own power supplies, rather than drives which draw their power from the USB port.

Firmware Updates

The Mason has internal software/firmware that controls its operation and functionality. This firmware can be updated 'in the field'.

If Wired releases new firmware for the Mason, or if you want to completely reset the Mason to its original factory state, follow these steps to update the firmware.

1. First, download the appropriate firmware from the Wired website: www.wiredinc.com/category/support/firmware/. There will always be two variations of each firmware version -

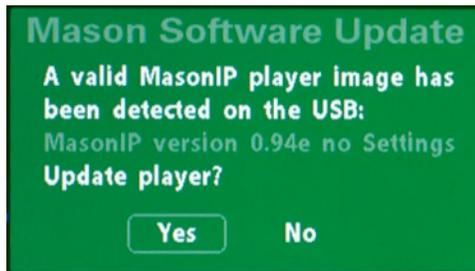
MasonIP_Image - This variation will update your Mason's firmware, but leave all your settings intact. This is the one you would normally use.

MasonIP_Image.complete - This variation will also update the firmware, but will completely reset your settings, including any access password you may have set. Use this one if you need to go back to factory-fresh settings.

2. Copy the downloaded file to a Windows-formatted USB flash drive.
3. The firmware file must be named exactly this way: **MasonIP_Image**
If you downloaded the 'complete' firmware file, change its name to 'MasonIP_Image'
4. Plug the USB flash drive into one of the USB ports on the rear of the Mason.

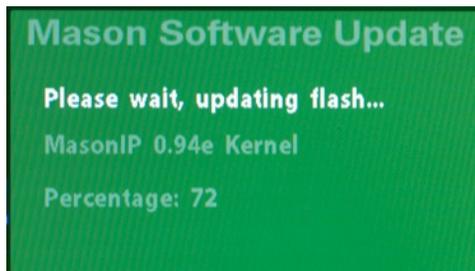


After a few moments, the Mason will recognize the firmware file and this window will pop-up, showing the version of the new firmware.



5. To proceed with the firmware update, use the arrow buttons on the remote to choose 'Yes' and then press the 'Enter' button. (to cancel without updating, choose 'No' instead.)

The firmware update will begin, and the progress will be shown in the window. It typically takes about two minutes for the update to complete.



Alert *Do not turn off the Mason or unplug the USB flash drive while the firmware is being updated; interrupting the update could cause your Mason to malfunction.*

6. When the update is finished, you will be prompted to restart the Mason by switching the power off and back on again.

External Remote Connection

The Mason's remote control sensor is located on the front panel.



If your Mason is located in an enclosed space it may not be able to properly pick up the signals. We offer an optional external IR sensor which plugs into the 'IR Remote IN' jack on the rear panel, and can be placed in an accessible location. Contact Wired at info@wiredinc.com for more information.

Note

You can also use a variety of standard IR extender/repeater systems.

Technical Specifications

Video Outputs	
Analog	composite via BNC, s-video, component via 3-BNCs
Digital	DVI (DVI connector, supports DVI and HDMI timing) SDI - optional - supports SD and HD with embedded audio
Available resolutions	480i (NTSC), 576i (PAL), 480p, 576p, 720p60, 720p50, 1080i60, 1080i50, 1080p60
Audio Outputs	
Analog	stereo line level via RCA
Digital	AES/EBU via XLR, SP/DIF via RCA, Toslink optical
Compatible Formats	
Video	MPEG-1, MPEG-2, AVC, VC-1, H.264, DIVX, Windows Media, VOB files, VIDEO-TS folders Bitrate up to 50 mbps
Audio	PCM, AAC, Dolby Digital, DTS, MPEG, MP3
Power Requirements	AC - 100-130 volts - .25 amps
Networking	
Network connection	Ethernet 100base-T
Addressing	manually set (static IP) or DHCP
Server Compatibility	Can access up to eight servers or mount-points on NFS, SMB or HTTP servers. Supports authentication.
Configuration	Built-in HTTP server allows configuration via any web browser.
Local Storage	
USB	Support USB flash drives or hard drives (MS-DOS/FAT32 format)