



## ChyTV HD-mini Quick Start Guide

Rev. 8 – 12/7/2017

Thank you for your interest in the ChyTV HD-mini graphics system. This Quick Start Guide is a supplement to the **ChyTV User Guide**, which can be found in the USB thumb drive **Manuals** folder. It can also be found at [www.chytv.com/support](http://www.chytv.com/support). While most of the information in the current ChyTV User Guide is applicable to the HD-mini, ChyTV Plus, HD 100, HD 150, HD 250, HD-mini, HD Alert, and other ChyTV products, this addendum includes brief descriptions of HD-mini specific information not included in the current User Guide.

Please contact ChyTV Customer Support with any questions at:  
**631-845-2092.**



## ***HD-mini Hardware and Connections***

The HD-mini chassis includes a number of connections and ports. This includes:

- HDMI – Outputs video to the screen. Note that the HD-mini will do an EDID auto-detect upon power up to ascertain the screen's optimal resolution and adjust its output resolution accordingly.
- Ethernet – Hardwire network connection. DHCP is enabled by default.
- USB – There are several open USB ports. Earlier version of the HD-mini included Wi-Fi dongle. Newer versions have WiFi internal.
- Power – Included is a MicroUSB power supply rated at 5.1V, 1A.

## ***Order of Operations***

The HD-mini supports DHCP to obtain an IP address and other networking information, as well as HDMI EDID negotiation with the monitor. These are obtained at boot-up. Therefore out of the box, it is suggested to connect the following in order:

1. HDMI
2. Networking
3. Power

## ***Turning On / Off***

The HD-mini is powered on simply by plugging in the MicroUSB power supply. In general it takes about 30 seconds or so to boot. Occasionally it will run some internal diagnostics, so boot time may vary. It will immediately begin playing the current *Project*.

The HD-mini device is running an operating system (Linux) and like other computers and operating systems, behaves better with a graceful shut-down. There is no power switch, so pulling the plug will work and generally should not cause any problems. However the recommended shut-down method would be to use the “**Shutdown ChyTV**” button found in **ChyTV Tools 2** under **Options / Settings**. See more on **ChyTV Tools 2** below.

The device takes 20 seconds or so to shut down completely. Occasionally (approximately every 30 drive mountings), some extra time booting will be required verify drive consistency. In this case, booting may take several minutes to complete.

**Note:** *When power is removed, the ChyTV HD-mini may still retain a small amount of power from a combination of the HDMI and Ethernet cables. If the HD-mini is unplugged, it is generally a good idea to wait 20 or so before reapplying power again.*

## ***General Work Flow***

Like all standard ChyTV devices, content is created, updated and managed using the ChyTV Tools interface. The ChyTV Tools software is run on a separate PC and connects to the ChyTV HD device via the network. ChyTV Tools works hand-in-hand with ChyTV Author, a WYSIWYG content layout tool.

Alternately, rather than using a direct connection from ChyTV Tools, content can be delivered across the Internet to the ChyTV HD device via the ChyTV.net web service. In this case, the content is still authored and managed off-line on a separate Windows PC. When completed, the project is packaged and uploaded to the ChyTV.net server's appropriate account and group. Complete ChyTV.net operations are described elsewhere. Contact ChyTV Customer Support for more information.

### ***Setting the IP Address of the HD-mini***

Before the ChyTV HD device can be connected to directly across the network from ChyTV Tools, it must be configured with a valid IP address. Since the ChyTV HD device is a stand-alone appliance, configuring custom parameters such as the IP address are achieved using the included USB thumb drive. By default, the ChyTV HD device leaves the factory set to DHCP for dynamic IP allocation. However, it can also be set to a static IP which will ensure consistent connections with ChyTV Tools going forward.

Upon boot-up, a gray informational screen is displayed for several seconds that shows the system's IP Address along with MAC Address, software version, screen resolution and other information. If the system is set for DHCP the IP address should be noted.

To modify the ChyTV HD device's network settings, please take the following steps:

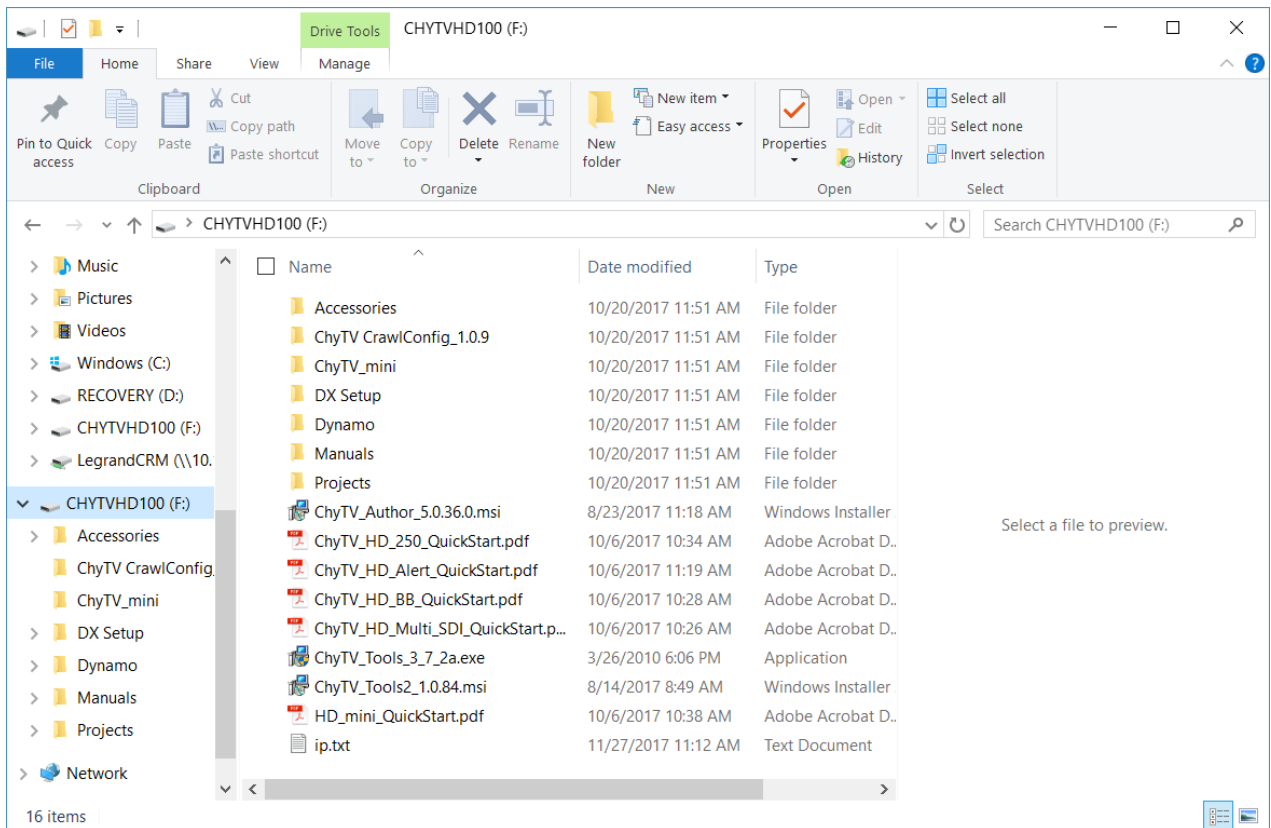
1. Using a Windows PC, insert the included ChyTV HD device USB thumb drive into an empty USB slot.
2. Using Notepad, open the file IP.TXT for editing.
3. Modify the above networking parameters to their appropriate settings. Note that in the IP.TXT file, a '#' symbol as the first character on a line indicates that the line is "commented out" (i.e. ignored).
4. Save IP.TXT file and properly stop and eject USB thumb drive.
5. Power on ChyTV HD device. Wait for complete boot.
6. On the ChyTV HD device, insert the USB thumb drive into an empty USB slot. Note that only USB 2.0 is currently supported. Therefore the best choice would be one of the USB slots on the rear panel next to the Ethernet port. The 'blue' USB 3.0 slots should not be used.
7. Wait approximately 20 seconds. The ChyTV HD device will automatically collect the new networking parameters from the IP.TXT file.
8. Remove the USB thumb drive and restart the ChyTV HD device by turning off and on again.

The new IP address can be confirmed by 'pinging' from a PC on the network.

### ***Installing the Software***

The ChyTV management and creation applications can be found on the included USB thumb drive. The drive also includes several Sample Projects and utilities and can be used to initialize the ChyTV device IP address.

Opening the USB drive on a PC will show something like the following:

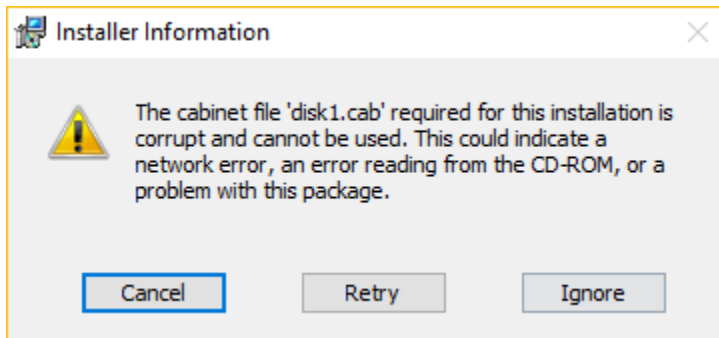


The same exact thumb drive image is used for all of our products. The CHYTVHD100 volume label is actually used as a 'precaution' for using the thumb drive for configuration updates. The IP.TXT file on the thumb drive can be modified for a variety of commands to the device, most commonly is to change the networking parameters. When a thumb drive is inserted in the device, it first checks for the CHYTVHD100 volume name, otherwise no action is taken.

The standard files to be installed are **ChyTV\_Author\_xxxx.msi** and **ChyTV\_Tools2\_xxxx.msi**. ChyTV CrawlConfig is only required for a ChyTV HD-Alert system and Dynamo is only for certain legacy purposes.

**Note:**

*Some versions of Windows may generate the error below if an "msi" installation script is executed directly from the USB drive.*



*If this error occurs, simply copy the “msi” files from the USB drive to a temporary folder on the PC and re-execute.*

## **ChyTV Tools**

Standard with all ChyTV products, ChyTV Tools is an intuitive software utility to create, manage, schedule and distribute content for the ChyTV Video Graphics Information Display Systems. ChyTV Tools enables integration of dynamic graphic and text content with a variety of animations. All graphic pages can be individually controlled via a schedule that permits looping on duration or specific days of the week and time of day. For multiple device deployments, ChyTV Tools enables you to control many IP devices from a single location over the network. ChyTV Tools combines powerful graphic, video, and audio capabilities with an easy to use interface. Page layout and design are readily composed with the also include ChyTV Author WYSIWYG tool.

Having set the IP address on the ChyTV HD device, the device can be connected to via any Windows PC on the network using ChyTV Tools. A newer version of ChyTV Tools is available on the shipped USB drive and is called **ChyTV\_Tools2\_1.0.xxxx.msi**. At the time of this Quick Start's writing, the ChyTV User Guide still reflects the earlier version of ChyTV Tools (ver 3.7.2). The newer version is very similar and has number of enhancements, including improved compatibility with newer versions of Windows such as Windows 10. However there are some subtle differences. Later Versions will be available for download from [www.chytv.com/support](http://www.chytv.com/support).

To install ChyTV Tools, double-click the installation msi file:  
**ChyTV\_Tools2\_1.0.xxxx.msi.**

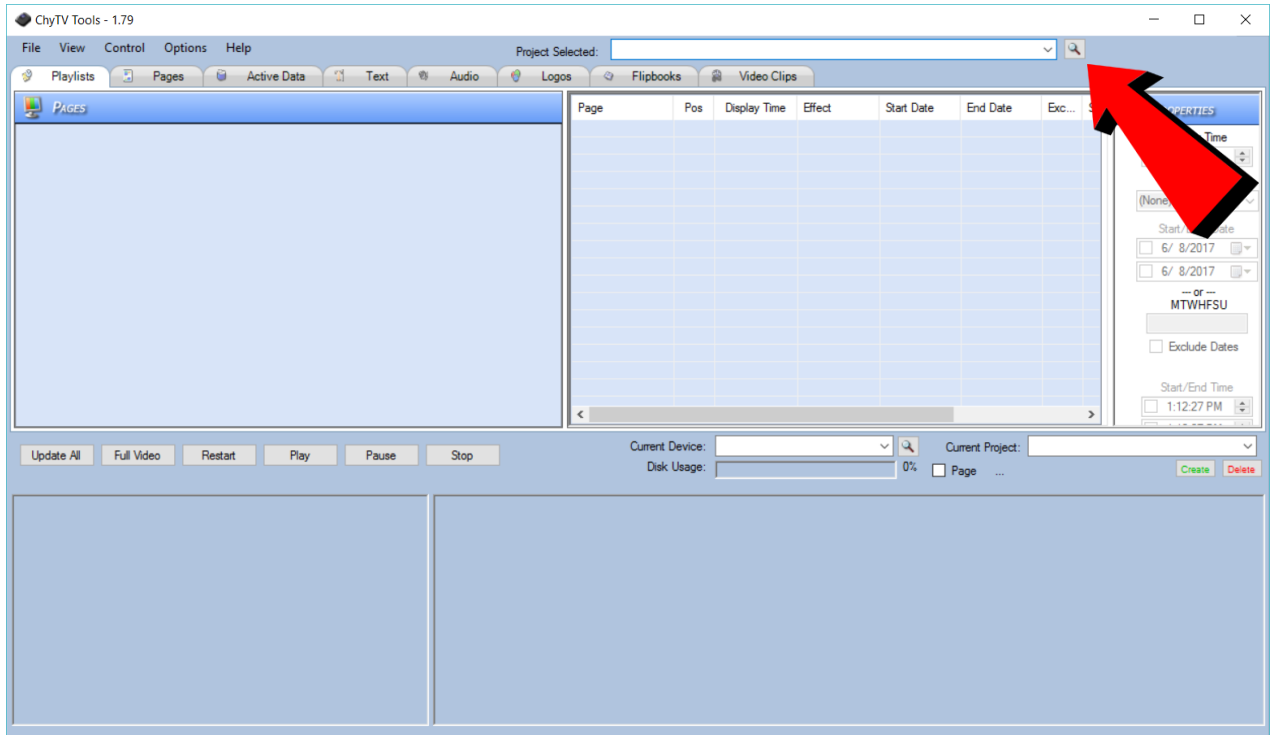
Please contact ChyTV customer support at 631-845-2092 for help and training.

## **Configuring Projects Using ChyTV Tools**

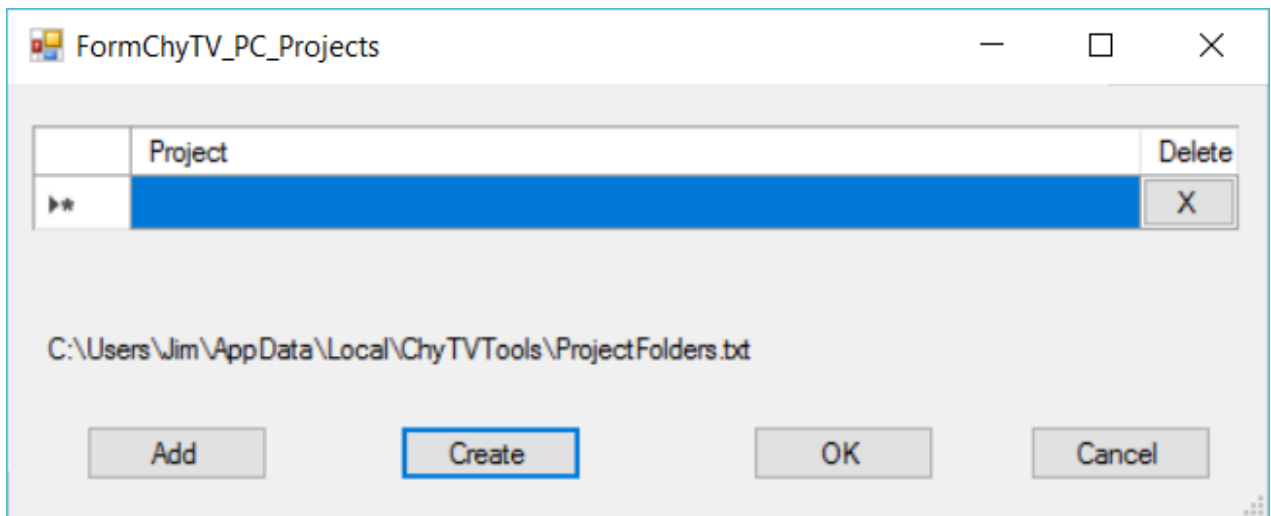
A ChyTV **Project** is a folder that includes all content, assets and schedule information for playback. A project is resident on a PC and managed using ChyTV Tools. When appropriate, ChyTV Tools is used to transfer the project from the PC to the HD-mini

device. Multiple projects can exist on the PC side as well as on the HD-mini device. However, there is always a concept of the **Current Project**. This is the schedule and content that the HD-mini is currently playing.

To Create a new project, or to add an existing one to the **Project Selected** list, click on the magnifying glass icon next to the Project Selected list drop-down box.

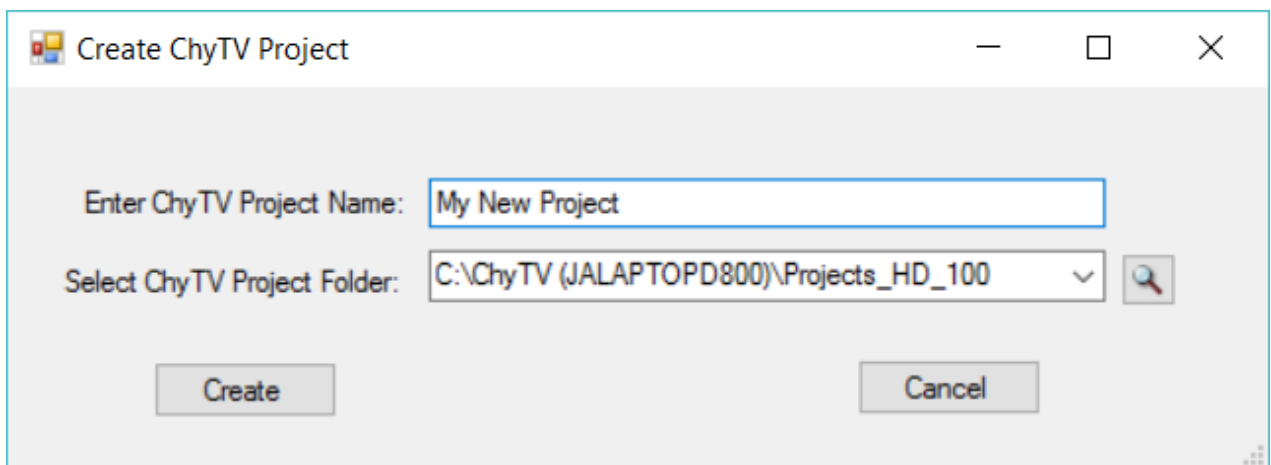


This will bring up the **Project Add / Create** box.



To Create a new project, select **Create**. Use the Magnifying Glass button to navigate to a location on the PC for your projects to go. As you develop new projects, you may want to keep them together in the same place. Different Projects will have their own unique name. Enter the new Project Name. In the example below, upon clicking Create, and new blank project called “My New Project” will be created under:

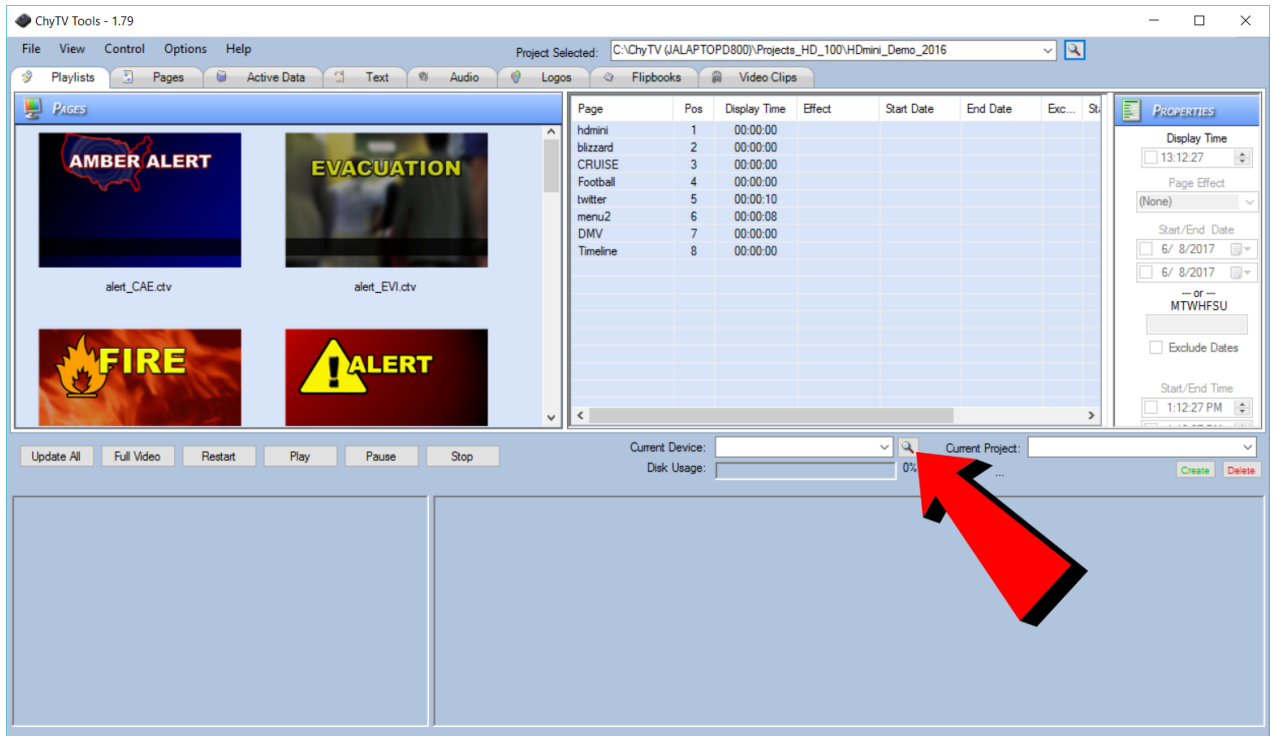
C:\ChyTV (JALAPTOPD800)\Projects\_HD\_100



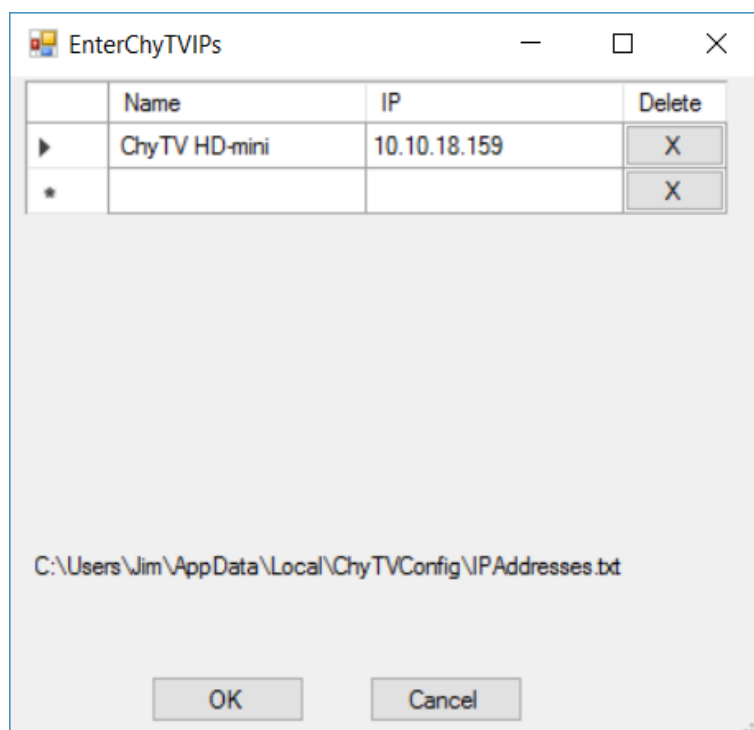
Alternately, selecting Add will allow you to navigate to an existing project and add that to the Project List. Note that several sample projects can be found on the USB drive under the Projects folder. These can be copied to a location of your choice on the PC and added to the Project List. In particular, HDmini\_Demo\_2016 and HD\_mini\_menus correspond directly to sample projects pre-loaded on your HD-mini device.

## Configuring IP Addresses in ChyTV Tools

To connect to one or more ChyTV devices, the IP addresses must be configured in ChyTV Tools. To add IP Addresses, select the magnifying glass next to the **Devices** drop-down on the middle Tools menu bar. See image below:

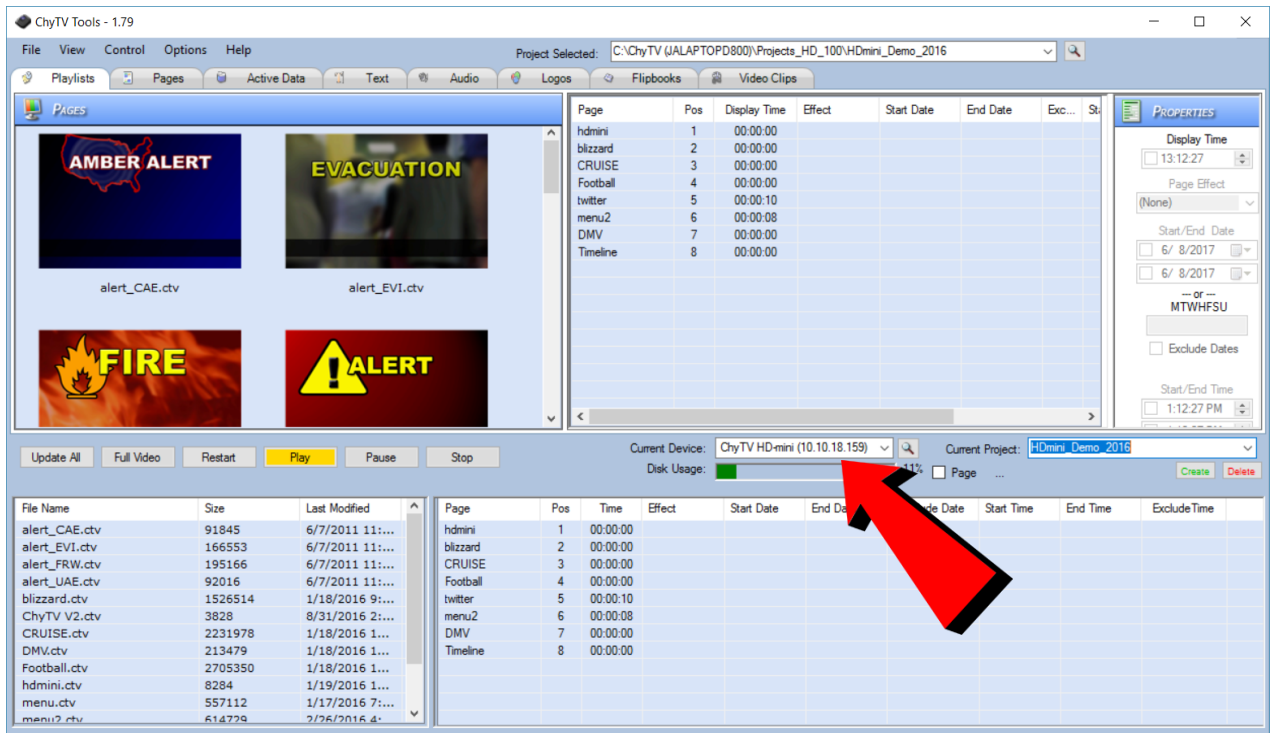


Next give the device and name and enter its IP address. See image below:





The device can now be selected from the Device drop-down. See image below:

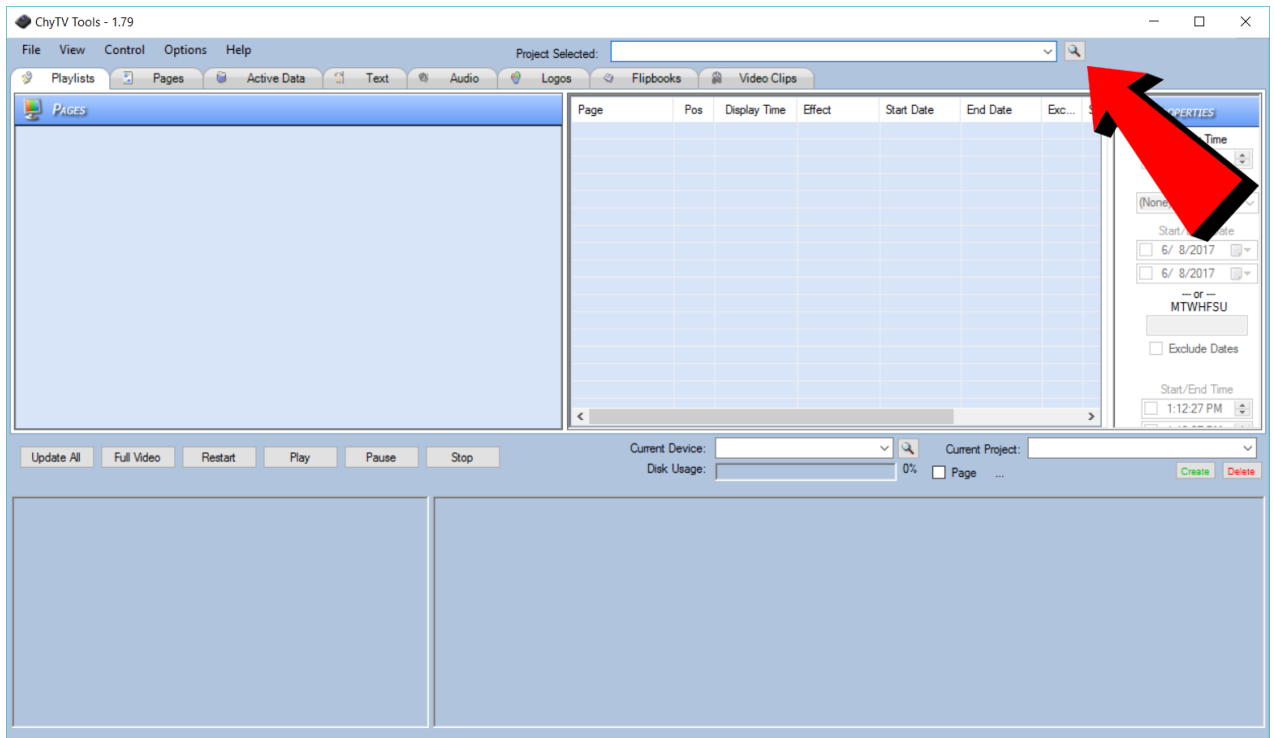


Note that alternate projects can be selected to be the current project from the **Current Project** dropdown.

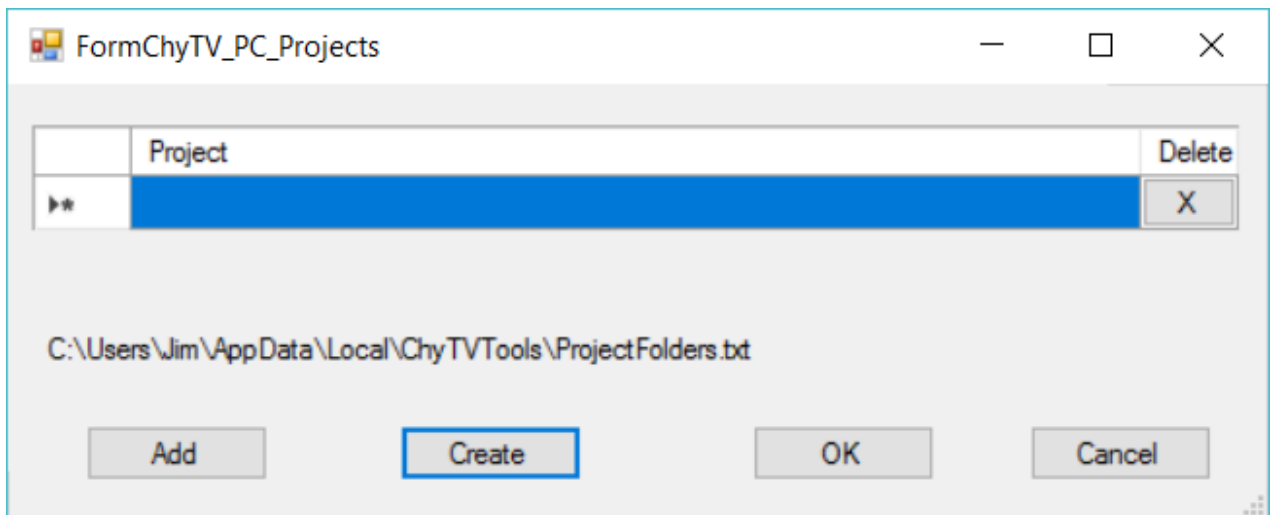
### ***Configuring Projects Using ChyTV Tools***

A ChyTV **Project** is a folder that includes all content, assets and schedule information for playback. A project is resident on a PC and managed using ChyTV Tools. When appropriate, ChyTV Tools is used to transfer the project from the PC to the HD-mini device. Multiple projects can exist on the PC side as well as on the HD-mini device. However, there is always a concept of the **Current Project**. This is the schedule and content that the HD-mini is currently playing.

To Create a new project, or to add an existing one to the **Project Selected** list, click on the magnifying glass icon next to the Project Selected list drop-down box.



This will bring up the **Project Add / Create** box.



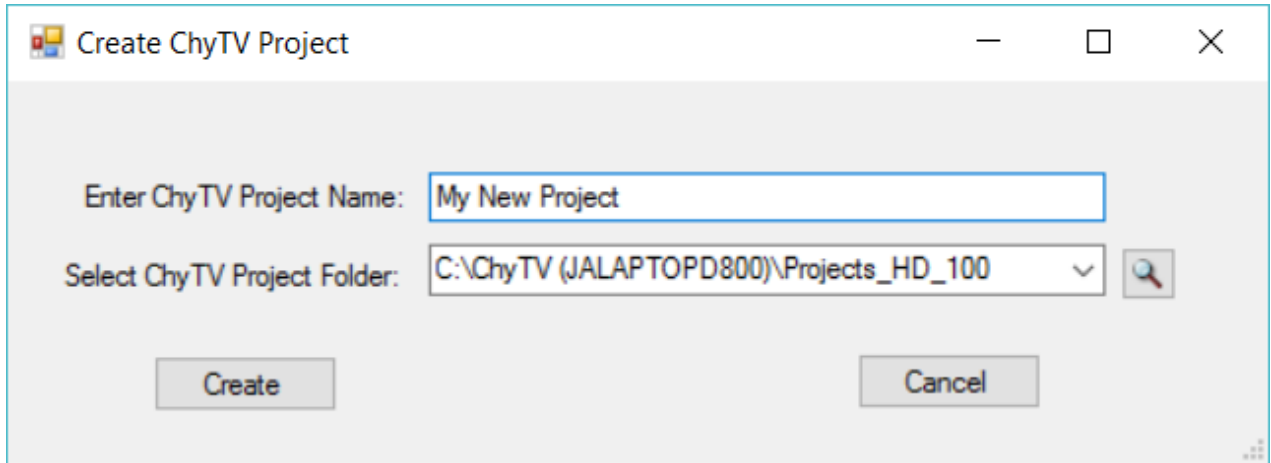
To select an existing project, select **Add** and navigate to the desired project. Note that there are several sample projects include under the **Projects** folder on the included USB drive. These can be copied to the PC hard-drive to a location of your choice. Typically, though not necessarily, the Projects reside under: **C:\Program Files (x86)\ChyTV\ChyTV Tools2\Projects**.

Our ChyTV devices do ship with several demos pre-installed that match the system's particular capabilities. However, there is no direct correlation between the thumb drive projects and the ones pre-installed on the system.

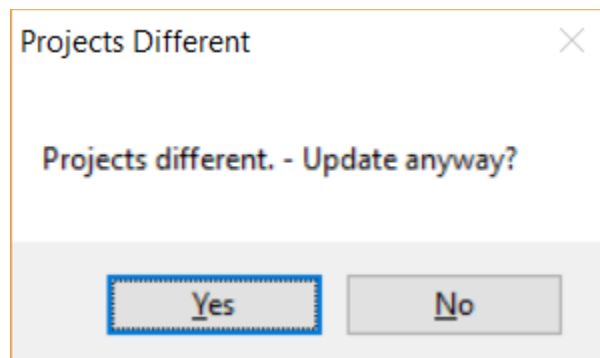
To Create a new project, select **Create**. Use the Magnifying Glass button to navigate to a location on the PC for your projects to go. As you develop new projects, you may want

to keep them together in the same place. Different Projects will have their own unique name. Enter the new Project Name. In the example below, upon clicking Create, and new blank project called “My New Project” will be created under:

C:\ChyTV (JALAPTOPD800)\Projects\_HD\_100



The **Update All** button is used to transfer the currently selected project from the PC to the ChyTV device. Users will generally want their computer project (top half of Tools) to match the device project (bottom half of Tools). If there is any kind of mismatch in the two project names, Tools will generate the following warning.



This prevents content and the schedule from the computer project inadvertently overwriting the project on the device. What would typically be done is to click the green **Create** button below the device’s **Current Project** drop-down. The user is then prompted to name the new project, but it is pre-loaded with the same name as the computer project. Selecting **OK** will create a new, blank project on the device that matches the computer project name. Then **Update All** will download all content and the projects will be ‘synchronized’.

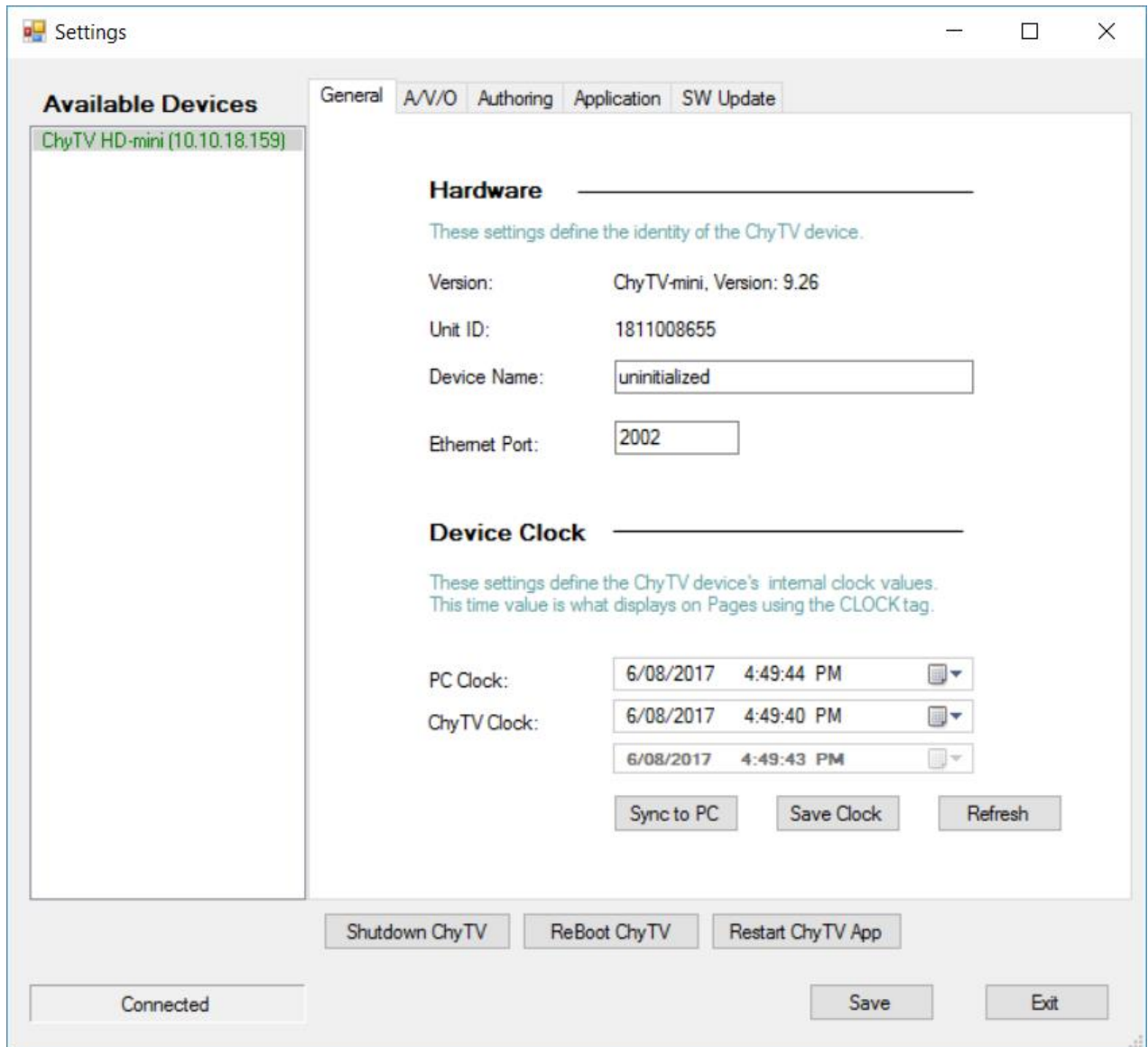
### ***Configuring the Hardware***

The Hardware Configuration Manager has been incorporated into ChyTV Tools. It is used to set a variety of system settings, including:

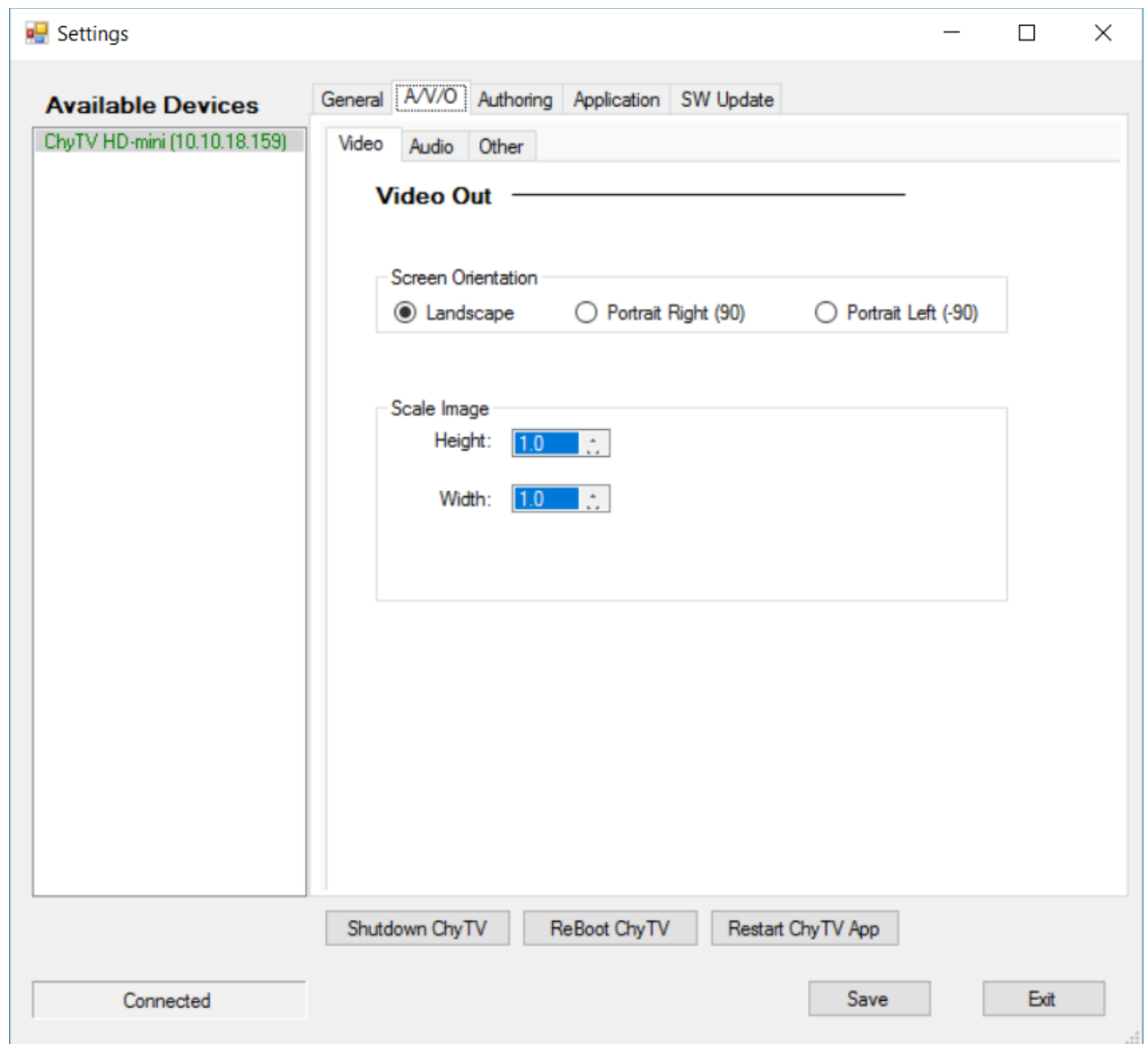
- Audio volume levels for Line In, Video Clip and Line Out.
- Video Settings for Input Source.

- Landscape or Portrait mode display.

To use the Hardware Configuration Manager select Options / Settings from the top menu bar in Tools. Then left click on the desired device. See image below:



Select **A/V/O** menu. See image below:



To modify audio settings, modify the settings to desired values and press **Save** to send the settings to the ChyTV device. Select Restart ChyTV App to apply the settings.

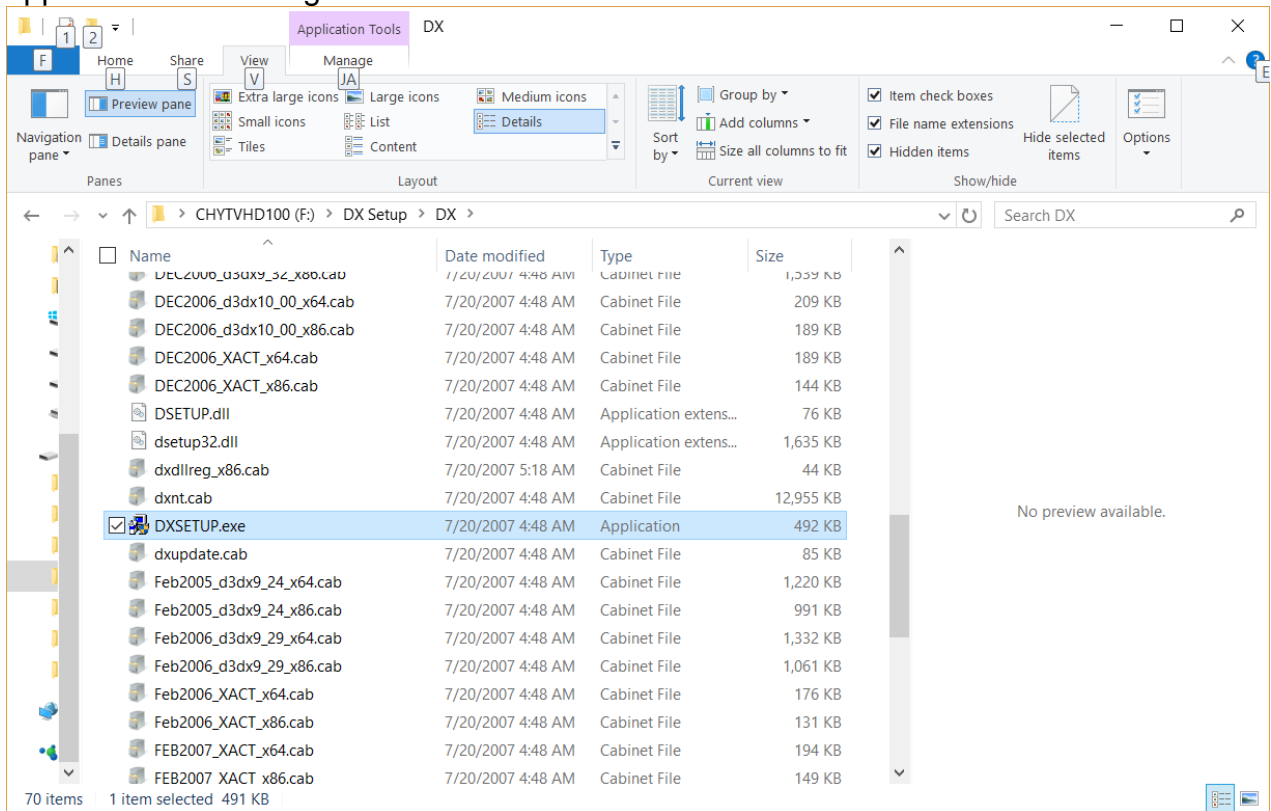
To modify video settings, select the **Video** Tab and modify settings to desired values and press **Save** to send the settings to the ChyTV device. Select Restart ChyTV App to apply the settings. See image below:

## Authoring Content

ChyTV Author is a WYSIWG authoring that works in conjunction with ChyTV Tools. Version **ChyTV\_Author\_5.0.34.0.msi** or later is included on the USB drive. Later Versions will be available for download from [www.chytv.com/support](http://www.chytv.com/support).

To install ChyTV Tools, double-click the installation msi file:  
**ChyTV\_Tools2\_1.0.xxxx.msi.**

ChyTV Author also requires version 9.03C of DirectX. This can be found on the USB drive in the “**DX Setup / DX**” folder. Navigate there and run the “**DXSETUP.exe**” application. See image below:



ChyTV Author is a WYSIWYG content authoring tool for creating ChyTV pages. An alternative to ChyTV's former PowerPoint based add-in, ChyTV Author works hand in hand with ChyTV Tools project management software to create stunning content with sophisticated animations and crisp, dynamic text from any TrueType font. The ChyTV Author canvas can be configured in a variety of formats, including NTSC, PAL, HD 720 and HD 1080, all in 4 x 3 or 16 x 9 and landscape or portrait. ChyTV Author imports a wide variety of graphic, animation and video clip formats, including jpg, png, tif, tga, bmp, mpg, mov, quick-time and more.

## ChyTV Tools vs. ChyTV Tools 2

Existing customers may be familiar with the ChyTV Tools user interface for ChyTV

*Project* management. ChyTV Tools works well with Windows XP, Windows 7 and other Windows versions. However, with Windows 8 and beyond some functionality that the original ChyTV Tools was based on has been removed. Therefore ChyTV is moving forward with a newer **ChyTV Tools 2** version specifically architected for Windows 8 and beyond systems.

The original ChyTV Tools will work with the HD-mini. However, some new features and functions specifically targeting the HD-mini have been added to ChyTV Tools 2 and it is recommended that ChyTV Tools 2 be used with the HD-mini.

The recommended applications to install are:

<b><i>Application</i></b>	<b><i>Installation file name</i></b>	<b><i>Location on USB</i></b>
ChyTV Tools 2	ChyTV_Tools2_1.0.x.msi	\ (root)
ChyTV Author	ChyTV_Author_5.0.x.x.msi	\ (root)
DirectX 9.0c	DXSETUP.exe	\DX Setup
Mini Network Setup	ChyTV-mini_Network_Setup_1.0.x.msi	\ChyTV mini

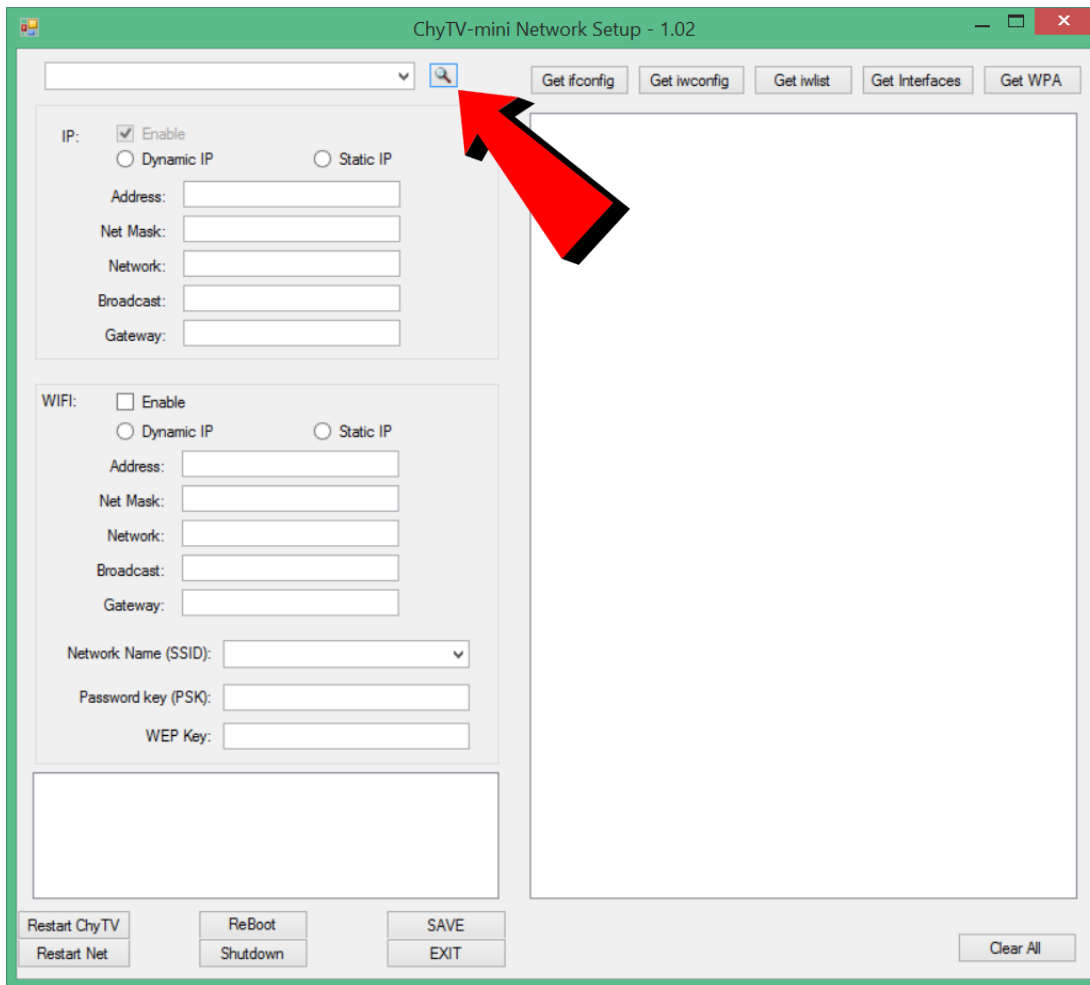
*Note: DirectX 9.0c is required for ChyTV Author. This particular version is required due to Microsoft removing some necessary functionality in later versions.*

### ***Setting up Wireless Networking***

The HD-mini also includes a Wi-Fi dongle in addition to the hard-wire connection. The most convenient method is to use the ChyTV-mini Network Setup utility shown below. However this requires a hard-wire connection. It is possible to configure the Wireless only using a USB thumb drive method. If this is required, please contact ChyTV support for more information.

To use the ChyTV-mini Network Setup utility, follow the steps below:

1. Run ChyTV-mini Network Setup.
2. Select the “Magnifying Glass” button to enter the Wired IP address. This would have been displayed in the “Gray” information screen on boot-up.



3. Select IP Address from drop-down box. The ChyTV-mini should connect and show some diagnostics in the lower left window.
4. Select "Get iwlist". This will collect information about the available Wireless networks in the area.
5. Check the "Wi-Fi Enable" box. Check "Dynamic" or "Static" IP. If static, enter correct parameters as provided by IT department.
6. From "Network Name (SSID)" drop-down box, select desired network to connect to.
7. Enter the network's password in the "Password key (PSK)" field.
8. Select "Save".
9. Select "Reboot".

The Wi-Fi should now be enabled. Both wired and Wi-Fi addresses will be displayed in the "Gray" screen. This Wi-Fi address can now be used in ChyTV Tools 2 and any other utility that connects to the device.