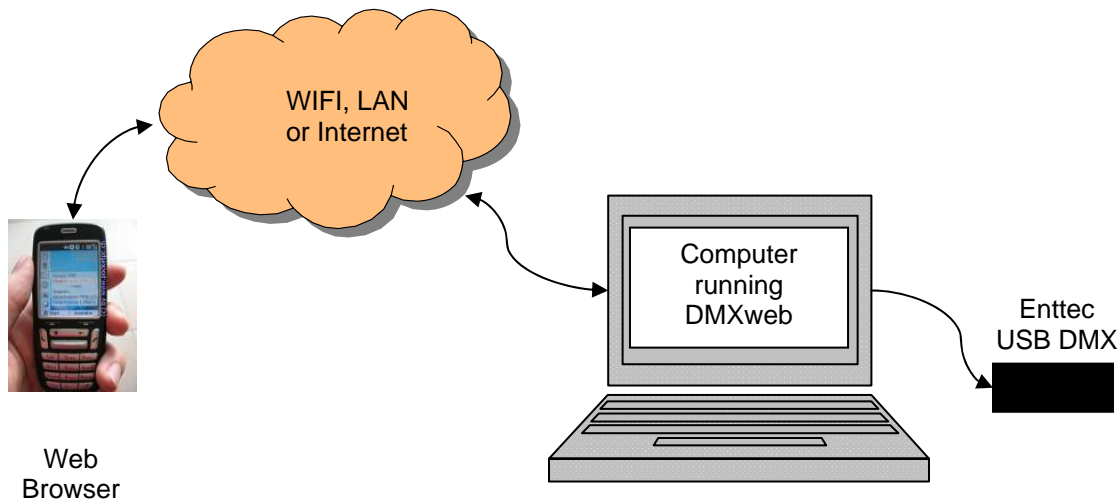# Chromakinetics DMXweb Ver 1.2

StageConsole Webserver

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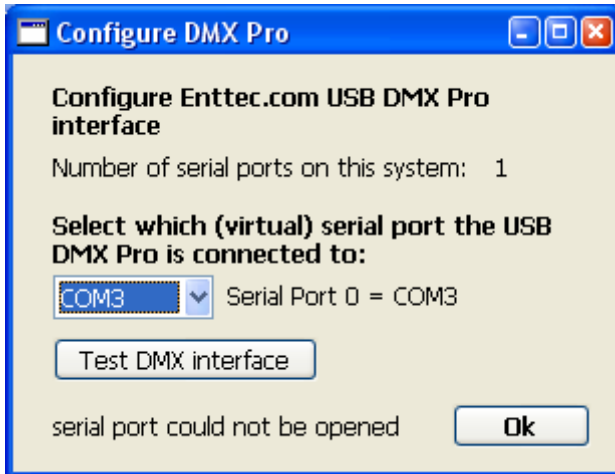www.chromakinetics.com
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DMXweb is a program that allows you to control stage lighting remotely via a web page over the Internet or a local area network (LAN). DMXweb is a small, simple web server that responds to requests from web browsers such as Microsoft Internet Explorer and Apple Safari. You can use a Pocket PC or Palm or cellphone that has a web browser to control your lights by surfing to the webpage provided by DMXweb.

DMXweb controls lighting with an Enttec USB DMX Pro interface. (www.enttec.com).
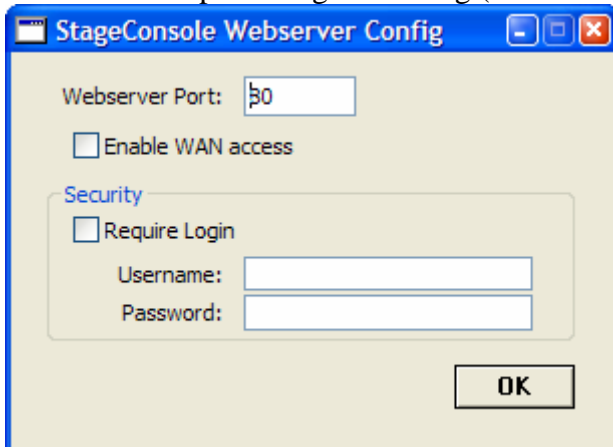
Setting the DMX interface serial port
When you start DMXweb, you need to set the port that the Enttec interface is connected to (Config menu).

Setting the Server port number

When you run DMXweb, it starts listening on the net for HTTP requests. If you are running another webserver (such as IIS or Apache) on your computer, DMXweb may fail to work.

Normally webservers listen on port 80. You can set the port number to another number if there is some conflict (as will be the case on Mac OSX and Linux due to security). Set the Webserver port using this dialog (from the Config menu)

If you get an Error 107, the port number you are trying to use is not usable. (more info on this below)

When you use a port number other than 80, you must include the port number – separated by a colon -- in the URL you give as the address in a browser. (e.g. for port 8080, give the following URL: **http://192.168.1.103:8080**)
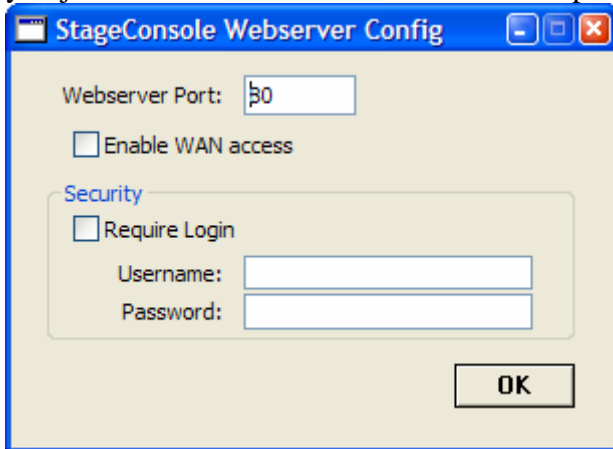
WAN Access

By default, access from the WAN (Wide Area Network) Internet (outside your LAN router) is disabled. You can enable WAN access on the Webserver config dialog, then your WAN IP address will be tested and displayed. Your router firewall must be

properly configured to allow outside computers on the Internet WAN to access the webserver port.
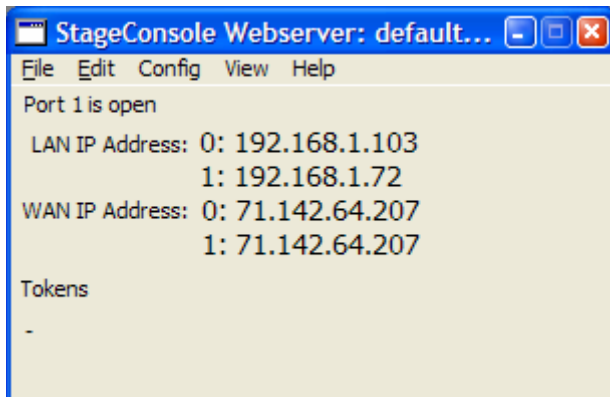
Web Security

You can enable Web security by setting the Require Login checkbox and providing a Username and Password. The web browser will then prompt for these the first time you attempt to submit a command. It will display the page and help regardless of security – you just cant submit commands without the proper username and password.

Accessing the webserver from a browser

DMXweb detects the LAN (and WAN IP addresses of WAN access is enabled) of the computer it is running on and displays them so that you know what URL address to enter into your browser. These addresses are the large numbers in the figure below.

The LAN address is the local Ethernet address (if you have a router or are using WIFI locally).
The WAN address will be displayed only if WAN access is enabled. It is the address of your computer on the World-Wide-Web if you are connected to the Internet.
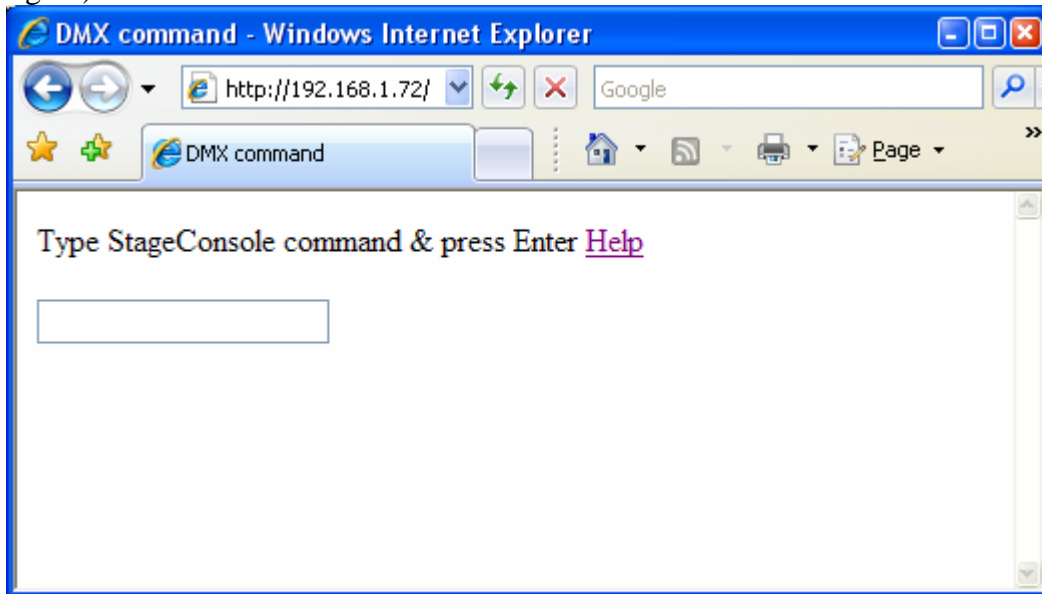
 If you are connecting locally (the most likely scenario,) use the LAN address as your URL for your browser address. If you have more than one Ethernet adapter, multiple addresses will be shown. In the figure above there are 2 Ethernet adapters, a WIFI

adapter and a normal CAT-5 wire adapter; numbered 0 and 1 respectively. The address 192.168.1.72 is the wired LAN adapter.

If you want to test or control things on the same computer you are running DMXweb from, you can use the following shortcut URL: **http://localhost**
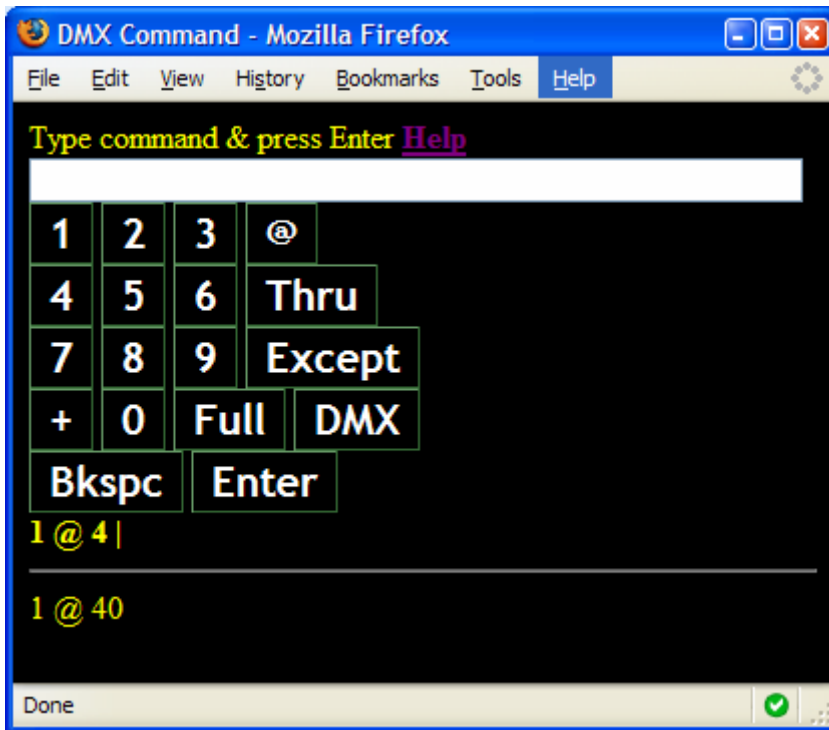
What the browser displays

Here is a browser window, running on another computer displaying the default page that DMXweb sends when you go to the URL **http://192.168.1.72** (use the correct numbers for *your* computer as given in the StageConsole Webserver window, above figure)

This web page is user-configurable. If you have a file named "DMXform.htm" in the same folder as the DMXweb program is installed, that file will be displayed instead of the simple default page. Two sample HTML files are provided.

One named "simpleDMXform.htm", is the same as the built-in default page.

The second sample named "buttonsDMXform.htm", is a complex entry form for use with Pocket PCs with buttons for touchscreen access. It displays in a browser like this:
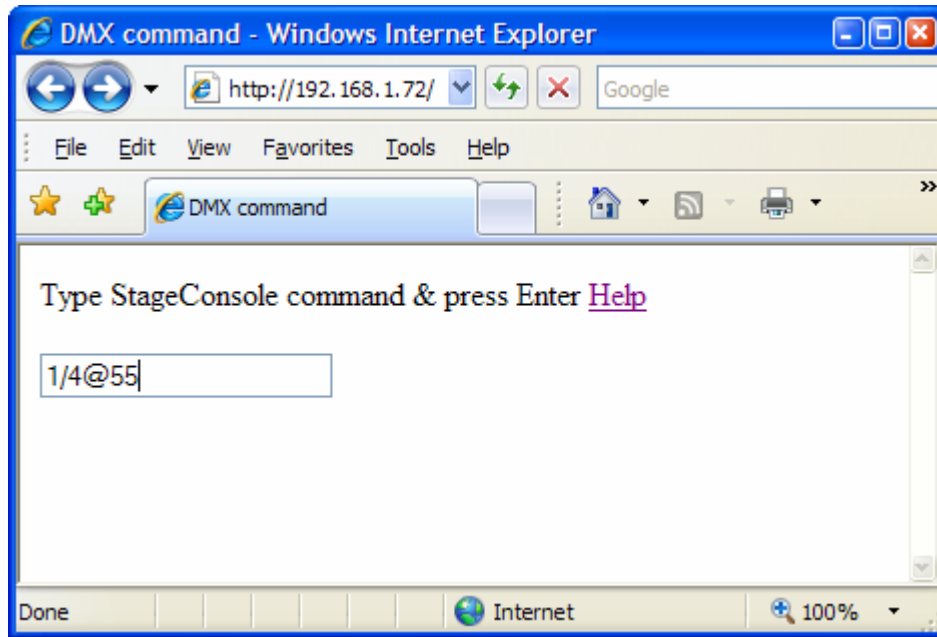
To use it, you must copy it and rename it to "DMXform.htm". If you know HTML and Javascript, you can edit it to customize the web page that DMXweb displays.
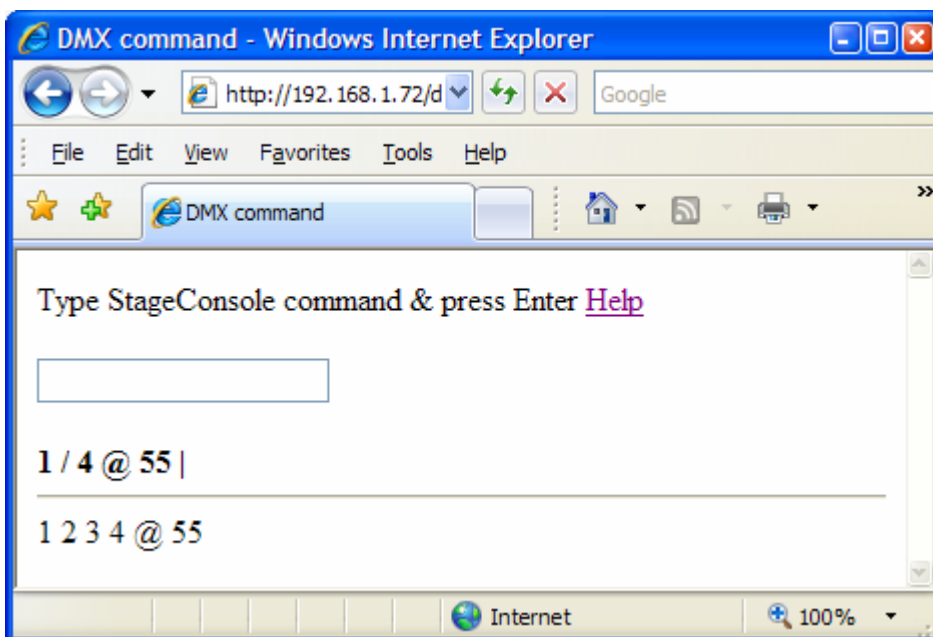
Controlling lights using a Web Browser

A simple form is displayed by the browser. You can now enter a command in the text field. Press Enter to submit the command. Clicking on Help gives a page detailing the command syntax. The syntax is similar to commands on popular lighting control consoles such as ETC Express.

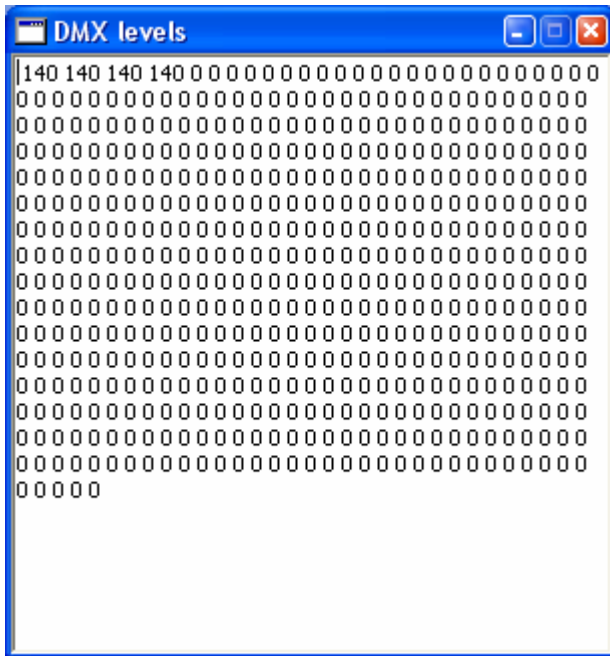Here, we are giving the command to set channels 1 thru 4 to 55%:

The command will be executed by the DMXweb server and control the lights connected to it.

Here is the result of entering the following command: **1/4@55**

The web page redisplays, showing you its recognition of the command and a list of the channels that were set.

Seeing the results on the Webserver computer

This window will display on the computer running the webserver. It continuously shows the actual current DMX levels (0 thru 255) being output to the DMX interface.

More into on Error 107

107 InvalidPortError This error means that the port you specified is invalid. This could mean that you entered a port number less than 0, or greater than 65,535. It could also mean that you do not have enough privileges to bind to that port. This happens under Mac OS X and Linux if you are not running as root and try to bind to a port below 1024. You can only bind to ports less than 1024 if you have root privileges. A normal "Admin" user does not have root privileges.

Command Syntax:

channel(s)@level

Keys to select channels:

Function	Keyboard keys
channel	0 1 2 3 4 5 6 7 8 9
AND	P or p or + (plus sign)
THRU	T or t or / (slash or division symbol)
EXCEPT	E or e or - (hyphen or minus)

Enter digits for channel numbers. To select multiple channels, you can use the AND, THRU and EXCEPT keys as well. See examples below.

Keys to set levels:

AT	A or a or @ or * (asterisk or multiply sign)
level	0 1 2 3 4 5 6 7 8 9
FULL	F or f or enter without a level number
DMX	D or d – interpret level as 0-255 DMX instead of percentage

If you enter a single digit for the level, it will be interpreted as ten times that number. For example if you enter just a 4 for the level, the level will be set at 40%. To set levels below 10% you must enter a zero before the digit. For example to set a level of 5%, enter 05 as the level.

The optional D for DMX must be entered just before the level digits.

If you do not enter any channel numbers - just entering: @ level, the previously selected channels will be set.

Examples

To select channel 34 and set it to 25%, enter:

   34@25 Enter

To select channel 504 and set it to 215 (DMX level), enter:

   504@D215 Enter

Use [And] to select channel 10 and 20 and set them to 50%, enter:

   10+**20@5** Enter

Use [Thru] to select a group of consecutively numbered channels, 3 thru 9 and set them to full, enter: (no level value is given after the @ symbol)

      3/9@ Enter - sets channels 3,4,5,6,7,8, and 9 to 100%

Use both [Thru] and [And] to select channels to include in a selection.

      1/5+**8**+**11@75** Enter - sets channels 1, 2, 3, 4, 5, 8 and 11 to 75%

Use [Except] to exclude each non-consecutive channel from a selection.

      1/5-2-4@6 Enter - sets channels 1, 3, and 5 to 60%

To exclude consecutive channels from a selected group of channels, press [Except] before entering the channels to exclude. To select channel 1 thru 10 except channels 4 thru 6 and set them to 30%, enter:

      1/7-4/6@3 Enter - sets channels 1, 2, 3, and 7 to 30%