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REPRINTED FROM NOVEMBER 11, 2006

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Chyron ChyTV Plus Information Display

by Stephen Murphy

In 2004, the venerable broadcast television graphics system developer, Chyron Corp., broadened its market with the introduction of the ChyTV digital signage system. ChyTV provides standalone dynamic graphics and information display with live video keying/pass-through, and is intended for use on single or multi-unit TV display systems such as those found in governmental facilities, office buildings and commercial establishments.

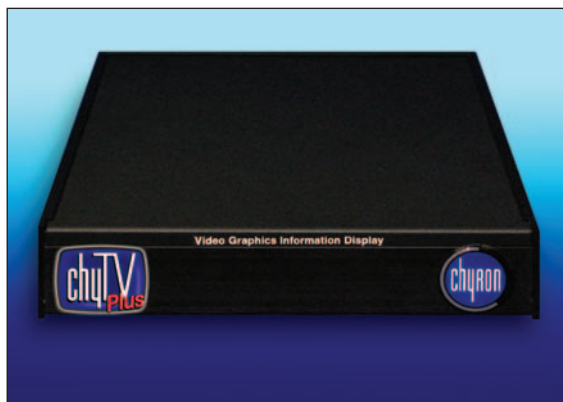
The ChyTV system consists of a standalone hardware unit that can be programmed, scheduled and updated via computer using included software. Last year, Chyron significantly updated the original composite video-only, molded-plastic ChyTV hardware unit with the new metal-encased, rack-mountable ChyTV Plus system. The new unit provides a number of professional-level video and computer interface features. Included with both hardware versions is the latest release of the ChyTV Tools creation and scheduling software (Version 3.x), which adds a significant number of new creation and scheduling enhancements.

FEATURES

The ChyTV Plus hardware box features a light steel chassis that can sit on a desktop (or a set top), or can be mounted in a standard equipment rack using optional hardware. All audio, video and computer connectors are mounted on the rear of the single rack-space, half-width unit.

Unlike the original ChyTV hardware unit, which has only composite video in/out (on RCA connectors), the ChyTV Plus model boasts composite and component

video I/O (all on BNC connectors) and adds S-Video I/O. ChyTV Plus also includes both USB 1.1 and 10/100 Ethernet connections (the original ChyTV is either/or) and adds 9-pin serial control and a GPI interface. The remaining connectors found on the back panel are the stereo audio I/O (RCA) and a power receptacle for connecting the includ-



The Chyron ChyTV Plus digital signage display unit.

ed line-lump style A/C adapter.

The front panel of the unit features a rocker-style power switch and an adjacent three-LED display. The upper LED, confusingly labeled "IN," simply indicates that an A/C adapter is in fact, connected. The second LED, labeled "ON," indicates the status of the power switch, while the last LED, labeled "ACT" indicates when there is read/write activity to/from the memory card inserted in the front-panel Compact Flash slot.

Note that the ChyTV Plus unit uses a specially formatted Compact Flash card for non-volatile storage of system and user files. The system will not function without a card inserted. One CF card is included with the unit, and additional standard CF cards can be formatted for ChyTV by the user.

The ChyTV Tools software is the interface hub of the ChyTV Plus system. From the application, the user can launch an HTML editor or Microsoft PowerPoint for page creation, manage audio and visual assets, create playlists and page scheduling and transfer playlists and files to/from multiple ChyTV hardware units.

Users can also manage hardware settings of all attached ChyTV units, including video output settings (such as format, NTSC/PAL, brightness and color balance); video input settings (composite/component/S-Video/auto detect, saturation, contrast and hue); and IP addresses.

ChyTV Tools will automatically import and convert PowerPoint slides and HTML pages for use with ChyTV systems. For editing, pages are reopened in their native format in the appropriate external editor, and re-imported/converted when saved.

IN USE

The ChyTV Plus software requires a PC-compatible computer running either Windows 2000 or XP and a 32-bit graphics card. Installation of the system was easy and essentially uneventful—install the software from the CD, connect the hardware unit via a USB cable and turn on, install through the "New Hardware Found" interface. Note that the ChyTV Tools software requires Microsoft .Net 1.1 to be installed.

I fed the hardware box with a variety of sources during the course of the review, including a GPI-controllable composite MPEG player, live TV and corporate promos

and other programming through the component output of a DVD player. For display, I used a 50-inch Panasonic plasma monitor, a 45-inch Panasonic LCD monitor and a variety of CRT TVs. The visual image was very good in all cases and I noticed very little degradation of the video throughput. The ChyTV programming can be bypassed (thus defaulting to full-screen video and audio throughput) via the audio, component and S/Composite “bypass” switches. One thing to note is that the unit has a louder-than-expected variable speed fan, the proximity to which over long periods can be quite irritating—equipment room mounting is highly recommended!

Though Chyron announced Version 3.3 of the software in June, the latest version available for download as of September 2006 is Version 3.1.2 (the same version that came on the shipped CD). Some of the improvements and enhancements expected in Version 3.3 can be found in a 3.2 beta release available for download.

After using Version 3.1.2 for some time, I installed the beta release, which contained some significant interface enhancements (such as resizable dividers between sections) and many additional options and choices in the settings and page creation dialogs. I also experienced several lock-ups and other strange behaviors in the earlier version that were not present in the beta release—hopefully the official release of the new software is imminent, as it provided an entirely more enjoyable and bug-free experience.

In general, I was impressed by the ChyTools application. I was able to navigate through nearly all of the page creation, scheduling and uploading processes without cracking the manual, thanks to a highly intuitive icon system, organized screen layout, and an exceptionally easy settings interface. The interface is divided horizontally into two sections, with the local (offline) file listings and scheduling interface above and the hardware unit’s (online) respective listings below.

One of the things that I liked most was an incredibly helpful PowerPoint add-on called ChyTV Elements. When a new PP page is created (or an existing page is edited) from within the ChyTV application, PowerPoint is automatically opened, as is the ChyTV

Elements interface. Essentially a floating sidebar, the Elements interface displays a button for each of the elements (background, logo etc.) and embedded tags (GPI

FAST FACTS

Application

Digital signage graphics

Key Features

Rack-mountable, BNC connectors, accepts composite and component video, USB/Ethernet connections

Price

\$1,995

Contact

Chyron Corp.
631-845-2000
www.chyron.com

calls, Active Data references etc.) that one can use on a ChyTV page.

With the Elements interface, new ChyTV-formatted page creation within PowerPoint is a breeze. Buttons included on the Elements interface include Create New Page (which offers a set of basic layouts, which, when one is chosen, open up a variety of pre-designed templates), Set Background (color or image file), Video Window (adds video throughput window), Graphics, Crawl, Audio, Text Effect, Clock, Active Data, Logo, FlipBook (animations), and Save/Convert.

Playlist creation and scheduling is drag-and-drop, with the available pages in the project on the left side of the window and the playlist-in-progress on the right. Once pages are placed into the playlist, transitions, display times and scheduling (include/exclude pages based on time and date ranges, specific times and days of the week).

There are a few items that could be improved with the interface, most notably with file handling. The most egregious is the fact that all the elements referenced on a page (image and audio files for instance) need to be manually placed into respective subfolders a few levels into the overall project folder.

As an example, if you use the Elements

interface to locate and choose a sound effect or image file from your hard drive to include on a page, you still have to manually locate the file (using My Computer etc.), copy it, open up the Program Files folder on your C: drive, go into the ChyTV Folder and another three or four subfolder branches later, paste the object into a respective Audio or Graphics folder within the current project folder. The fact that it has an interface to find and add a file to a page, yet doesn’t do the routine work to place a copy of the item in your project is somewhat baffling.

The ability to easily copy an existing page from one project to another (without having to lookup the names of the files referenced by the page, find them across three or four different subfolders in the old project and place them within their respective subfolders in the new project) would be most welcome. I would also like to see more options regarding audio transitions, such as smooth fades and crossfades. As it is, I experienced pops when files ended or looped (files that otherwise play without pops and loop perfectly).

Working on pages for a 16:9 display proved to be possible, but cumbersome in that all creation work for that format had to be in anticipation of the stretching that would occur on the NTSC output of the hardware box. I wouldn’t be surprised if Chyron is working on an HD, 16:9 native version, as this is quickly becoming the prevalent commercially installed display format.

SUMMARY

The ChyTV digital signage/display system provides a number of unique programming and creation features, and the upcoming release of Version 3.3 software promises some significant enhancements to its already intuitive interface. The addition of component and S-Video connectors, plus the inclusion of USB, Ethernet, serial and GPI interfaces makes ChyTV Plus system appropriate for a wide variety of professional applications.

Stephen Murphy is a technical engineer at the National Press Club’s Broadcast Operations Center, and an independent video editor/audio engineer with more than 20 years of broadcast and production experience.