



Orange-100 SignAll System

Users Manual

Version 1.01

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Introduction: The IMC **SignAll** Display system provides users with the ability to create custom graphic displays on standard, Hi-Def TVs equipped with HDMI inputs. The Orange 100 Network CPU provides a high resolution, HDMI output, 100Mb network connection, and two USB ports. The internal web browser is capable of displaying standard web pages as well as “pages” created with a word processor. The Orange 100 can be configured to access pages stored on the USB stick, included with the system, or via the internet. IMC offers hosting of your **SignAll** display or you may access content from your web site. Along with this manual (signall manual 101.pdf), the USB stick contains example pages in HTML and word processor formats, a text file containing the serial number of the USB stick included with the system (usb ser no.txt), and a text file containing a line of HTML code used for timed redirecting to another page (redirect.txt). More information on redirecting is included in the Software Setup section of this manual. Instructions for configuring the optional Wi-Fi are included in chapter 6 of this manual.



1. The USB stick -

The USB stick included with your system contains files with information required and/or useful for configuring your **SignAll** display. IMC recommends that you make a backup copy of these files immediately. Although the example files are available on www.imcsignall.com, your serial number is only provided on the USB stick. If the file is lost, the serial number can be retrieved by connecting a USB mouse to the Orange 100 and opening the file manager window. More information on this procedure is provided in section 4. (Software Setup) of this manual.

The USB stick is also used by the Orange 100 CPU to store page content as well as direct the browser to the source of the content. The source can be a file on the USB stick or a web site address such as www.imcsignall.com. The text file `redirect.txt`, included on the USB stick, contains one line of HTML code that can be copied and pasted into your page to redirect the browser to another page after a time interval you select. More information on this subject is included in section 3. (Creating Displays) of this manual. The USB stick allows users to make most configuration changes and store content from their desktop or laptop PC. In some cases, users may need to connect a keyboard, mouse, or USB hub to the Orange 100 to make advanced configuration changes. If your USB stick is lost or damaged, you can replace it but you will need to change the names of the files in the `redirect` line of your file to match the new serial number. No changes to Orange 100 configuration are required. The Orange 100 can also be configured to connect directly to a web site without the need to use the USB stick. This procedure is explained in section 4. (Software Setup) of this manual.

Orange 100

2. Hardware Setup - The Orange 100 Network PC requires very little setup to begin displaying your images. The **Signall** package includes a power supply, HDMI cable and USB stick. An optional Wi-Fi adapter is available from IMC which connects to the USB port. All basic configuration of the Orange 100 is done on your desktop or laptop PC in conjunction with the supplied USB stick. More information on configuration is provided in Section 4. (Software Setup) of this manual. Connect the Power supply to an AC receptacle and to the Orange 100 Power jack. Connect the HDMI cable from the Orange 100 HDMI video connector to the TV HDMI INPUT and insert the USB stick into one of the USB ports. Turn the TV on before turning the Orange 100 on to allow the Orange 100 to detect the TV settings. After a brief initialization, the IMC **SignAll** default page will be displayed. IMC recommends keeping the **SignAll** page as your startup page and modifying the redirect line in the file to immediately redirect to your content. This eliminates the need to connect directly to the Orange 100 PC. If you choose to use web based content, connect a suitable network cable to the network connector or install the optional Wi-Fi adapter using the instructions in Section 6. (Wi-Fi Setup) of this manual. Some advanced configuration options require connection of a mouse, keyboard or USB hub.

Note: The **SignAll system is capable of displaying HTML content however this manual does not include instructions for HTML. Generally, HTML code is only required when there is user interaction which does not involve standard **SignAll Displays**. IMC can create custom user interfaces and Kiosks including HTML code. Users can also create HTML content by using a web based page development tool, and saving the file to the USB stick or the IMC hosting site.*

3. Creating Displays - The included USB stick contains the files imcsignall.htm and page1.htm which were created with a word processor program. The file page1.htm will load automatically and can be replaced with your file or used to redirect to other files or a web site. This file can be opened by any web browser application to view its contents as they will appear on a TV. To use this file as a template, open it with your word processor application and save it as a web page with your file name. You may edit this document in any way your word processor application allows but you must save the file as a web page. To cycle through multiple pages, or to redirect immediately to a web site, open the file page1.htm with a basic text editor. Using your word processor may add hidden codes that will effect the appearance of your display. Most operating systems include an accessory application for basic text editing, such as MS Windows Notepad. Near the beginning of the file is a line of text (HTML code) that appears as seen below.

```
<meta HTTP-EQUIV="REFRESH" content="10; url= /media/####-####/page1.htm">
```

The segment [content="10] tells the browser to redirect in 10 seconds. Users can change this value to any desired time including 0 to redirect immediately. The segment [####-####] will appear as the serial number of the supplied USB stick. Finally, signallpage1.htm is the name of the next page to load. This filename can be replaced with the name of any .htm file or any website in the form of http://www.imcsignall.com. You must save this file as text only as explained above.

(3. Continued)

The file redirect.txt contains the above example line of HTML code intended to be copied and pasted into user pages. When inserting this line into the document, insert on a line by itself, immediately following the text <head>, near the beginning of the file. The example files included on the USB stick were also created with a word processor application and use multiple methods of creating content form, including clip art and text boxes.

4. Software Setup - The **SignAll** Display system is designed to require very minimal configuration and setup. Most configuration items have been covered in previous sections of this manual. Additional configuration options include connecting directly to an internet web site and storing files directly on the Orange 100's internal storage. IMC strongly recommends using the USB stick for both of these functions in most cases. The operating system includes a graphical file manager tool that allows users to copy files from the USB stick to a folder on the Orange 100's internal storage. Some folders are write protected and require opening them as "root", which is an available selection from the menus of the file manager tool. IMC recommends storing user files in the Desktop folder of the Orange 100's internal storage so the files are visible without the need to use the file manager tool. Connect a USB mouse to one of the Orange 100's USB ports. A cursor will appear on the screen anytime the mouse is moved. Right click the mouse anywhere on the display and select "Leave Fullscreen" from the list. Place the cursor over the "System" icon in the lower left corner of the display and click the left mouse button. Move the cursor to select "Accessories" and then "File Manager". The file manager tool will display the folders on the Orange 100's internal storage as well as the USB stick folder represented by the USB stick serial number.

(4. Continued)

options menu and select “Copy”. Select a folder on the Orange 100 by placing the cursor over the folder and clicking the left mouse button. Click the right mouse button to display the options menu and select “Paste” from the list. You may “re-boot” the Orange 100 by selecting “Logout” from the “System” menu in the lower right corner of the display or by removing and re-applying power.

To configure the **SignAll** Display system to connect directly to an internet web site without the need for the USB stick, connect a USB mouse and keyboard to the Orange 100. A cursor will appear on the screen anytime the mouse is moved. Right click the mouse anywhere on the display and select “Leave Fullscreen” from the list. Place the cursor over the menu icon in the upper right corner of the browser window and select “ Preferences” from the list. A dialog window will appear which allows users to select a startup page or “homepage”. Exit the browser application by left clicking the [X] in the upper right corner of the browser window to save the changes. You may “re-boot” the Orange 100 by selecting “Logout” from the “System” menu in the lower right corner of the display or by removing and re-applying power.

5. Operation -

The **SignAll** Display system uses very little power and can be operated indefinitely. In order for the Orange 100 to detect the TVs settings, the TV must be turned on before applying power to the Orange 100. After this sequence has been completed, the TV may be turned off and back on at any time as long as the Orange 100 remains on.

To display your file on the SignAll display, IMC recommends modifying the re-direct line in the default file page1.htm,

(5. Continued)

Example 1 – One user file on the USB stick

Edit page1.htm as shown below.

```
<meta HTTP-EQUIV="REFRESH" content="0; url= /media/####-####/"yourfile1".htm">
```

Example 2 – Two user files on the USB stick, 10 seconds each

Edit page1.htm as shown below.

```
<meta HTTP-EQUIV="REFRESH" content="0; url= /media/####-####/"yourfile1".htm">
```

Edit yourfile1.htm as shown below.

```
<meta HTTP-EQUIV="REFRESH" content="10; url= /media/####-####/"yourfile2".htm">
```

Edit yourfile2.htm as shown below.

```
<meta HTTP-EQUIV="REFRESH" content="10; url= /media/####-####/"yourfile1".htm">
```

Example 3 – Connect to www.imcsignall.com/"yourfolder"/"yourfile1.htm"

Edit page1.htm as shown below.

```
<meta HTTP-EQUIV="REFRESH" content="0;
url= http://www.imcsignall.com/"yourfolder"/"yourfile1".htm">
```

6. Wi-Fi Setup - The **SignAll** Display system can use an optional USB Wi-Fi adapter to connect to the internet. IMC Wi-Fi adapter part number IMC-WIFI-01-USB is available directly from IMC although the Orange 100 is compatible with most standard USB Wi-Fi adapters. The procedure included in this manual

(6. Continued)

The operating system used by the Orange 100 includes a Desktop Icon to access the Wi-Fi Setup application. The procedure to setup a Wi-Fi adapter involves entering your wireless network name and password directly on the Orange 100. In order to connect a Mouse, keyboard and the Wi-Fi adapter to the Orange 100, the use of a USB Hub is required. IMC USB Hub part number IMC-USBH1-01 is available directly from IMC although the Orange 100 is compatible with most standard USB Hubs. There are two alternatives to using a USB Hub. Combination keyboard/mouse devices are available from multiple manufactures in both wired and wireless USB types. IMC recommends using the following alternative. Create a text file on your desktop or laptop PC with two lines.

Line 1 - “Your Network Name”

Line 2 - “Your Network Password”

Install the USB stick into the Orange 100 and connect a mouse. Copy your text file containing your network name and password to the Desktop folder on the Orange 100. Remove the USB stick and install the USB Wi-Fi adapter. Open the text file on the Desktop by placing the cursor over the file Icon, right clicking and selecting “Leafpad”. Activate the Wi-Fi Setup application and follow the on-screen instructions. Copy and paste the network name and password into the Wi-Fi Setup window using the mouse and the options menu. After completing the setup procedure, IMC recommends deleting your text file from the Orange 100 by placing the cursor over the file Icon, right clicking the mouse and selecting “Cut” from the options menu. Always close all files on the Orange 100 before removing power to prevent loss of data.

Warranty - Internet Machines Corp. warrants the Orange 100 CPU, Power Supply and USB stick included with your SignAll Display System for a period of one year to cover defects in manufacturing and damage in shipping. The HDMI cable included with your system is covered by warranty for a period of 30 days.