



web!MASTER – HTML Media Player User Manual

Product No. 9000019

The specifications are subject to change without prior notice. The colour and the appearance may differ depending on the product.

The contents of the manual are subject to change without notice to improve the quality.

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Symbols Used in This Document

Warning

Instructions that, if ignored, could result in death or serious personal injury caused by incorrect operation of the equipment. These must be observed for safe operation.

Important

Instructions including important information. To avoid damage and injury or improper use of the product, be sure to read these indications.

Note

Instructions including notes for operation and additional explanations.

1. Before Using the Product

Warning

Cleaning

- Wipe the cabinet with a clean, dry and soft cloth.

Safety

- Do not spray water or other fluids on the product.
- Do not use a damaged LAN cable.
- Do not bend or pull the LAN cable with force.
- Do not place the LAN cable under heavy objects.
- Keep the LAN socket where the LAN cable is connected unobstructed.
- Hold the connector when disconnecting the LAN cable from the LAN socket.
- Do not install the monitor within the reach of young children.
- Keep the plastic packaging out of the reach of children.

On operation

- Do not place objects on top of the product.
 - Do not install the product in places with exposure to fine dust, chemical substances or significant moisture.
 - Do not expose the product to direct sunlight, heat, or other hot objects.
 - If the controller generates a burning smell or smoke, disconnect the power cord immediately.
 - Do not insert object into the controller.
 - To move the product, disconnect all cables first.
 - Do not allow children to play with the controller.
-

2. What is Included

When unpacking, make sure that all components listed below are included in the shipment:

- web!MASTER HTML Media Player
- Power Supply 100-240V AC, 5V, 2.5A DC
- Quick Setup Guide

3. Functional Description

web!MASTER is a media player for displaying HTML- or HTML5-structured information in industrial or commercial applications. This includes web pages loaded from Internet or Intranet and information provided by Content Management Systems or other computer systems.

To display information, web!MASTER requires a monitor with FHD resolution (1920x1080 pixel) and HDMI or DVI connector. The monitor itself is not part of the shipment. At users option, all standard monitors meeting the above specification and with any display size may be used.

The configuration of web!MASTER is done with an Internet browser from any PC in the network.

After connecting web!MASTER to an AC outlet, it will automatically boot and display the information found at the specified URL-Address. An interval for refreshing the browser display can be entered if necessary.

web!MASTER is designed for continuous operation in industrial applications. Cooling domes, integrated into the massive aluminium case, guide heat to the surface and keep the system temperature within a comfortable range, even at highest CPU load.

4. Installation

4.1 Requirements

- Monitor with HDMI or DVI connector and 1920x1080 pixel resolution (not included)
- HDMI-HDMI or HDMI-DVI video cable (not included)
- LAN access and LAN cable (not included)
- PC with Internet browser
- AC outlet for power supply

►► Note

If your monitor is equipped with a HDMI port, use a HDMI-HDMI cable. If your monitor supports only DVI, use a HDMI-DVI cable or a HDMI-HDMI cable and a HDMI-DVI adapter.

4.2 External Connection

Connect a monitor to the web!MASTER using a HDMI-HDMI or HDMI-DVI cable and switch the monitor on. Make sure that the input source is configured correctly or that the monitor scans all input connectors periodically for signals. Connect the web!MASTER to LAN and optionally an active speaker system to the analogue stereo jack.

Connect the power supply to the micro USB port (PWR IN) and then to an AC outlet.

»» Important

Do not install the web!MASTER in poorly ventilated spaces such as bookcases or closets. Poor ventilation will increase the internal system temperature and may cause damage to the device.

4.3 Getting Started

web!MASTER is shipped with pre-configured parameters to make the installation as fast and easy as possible.

Factory settings:

- User name: admin
- Password: admin
- Host name: webmaster
- IP Configuration: DHCP
- Time Zone: Europe/Berlin
- Time Server 1: 0.europe.pool.ntp.org
- Time Server 2: 1.europe.pool.ntp.org
- Display: always on
- Browser: chromium-kiosk
- Display this URL defaultpage.html
- Refresh every [minute] 0

When connected to power, the initial boot process starts automatically and takes approximately 20 seconds. Then all parameters of the current network and system configuration are displayed for about 30 seconds (Figure 1). Finally, your web!MASTER will display the web page found at the URL-address specified at configuration (factory setting is the internal web page defaultpage.html).

»» Note

The factory setting for the network is DHCP. A DHCP server is required for the first system configuration, which provides all necessary network parameters. Enter a static IP address in the configuration form if your network environment for operation does not support DHCP.



Figure 1: Network- and System Parameters

5. Configuration

5.1 Login

Configure web!MASTER according to your requirements.

Connect a PC to the network and open the Internet browser. To access the web!MASTER Configuration Login Page (Figure 2), enter the host name of the web!MASTER as URL (http://webmaster or webmaster/) or enter the IP address displayed in the Network- and System Parameter page during boot.

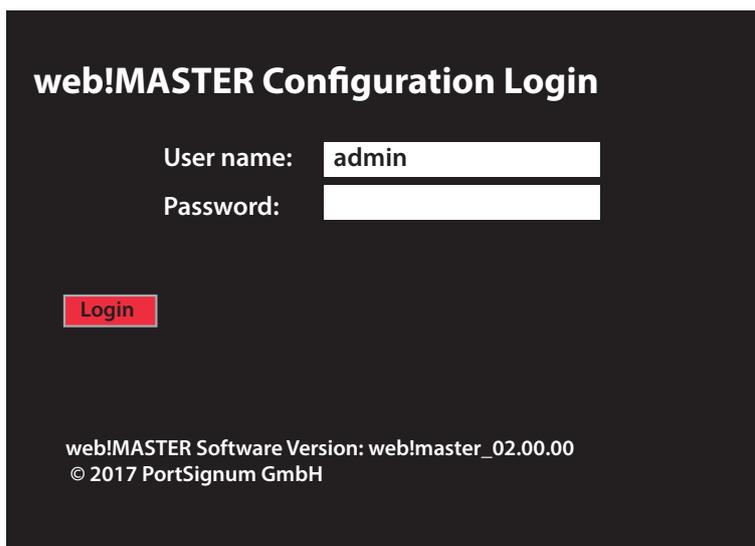


Figure 2: web!MASTER Login Window

To access the system configuration (Figure 3), login with:

- **User name:** *admin*
- **Password:** *admin*

The screenshot shows the 'web!MASTER Configuration' interface. It is divided into two main sections: 'LAN' and 'System'.
LAN Section:
 - IP Addressing: Static DHCP
 - Hostname:
 - IP Address:
 - Netmask:
 - Gateway:
 - DNS Server:
 - MAC Address:
System Section:
 - Time Zone:
 - Select Time Zone:
 - Time Server 1:
 - Time Server 2:
 - Display off [h]:
 - Display on [h]:
 - Browser:
 - Display this URL:
 - Refresh every [m]:
 - User Name:
 - Password [two times]:
 At the bottom left, there is a red button labeled 'Submit and Reboot'.

Figure 3: web!MASTER Configuration Form

Click on the red „Submit and Reboot“ button after having changed the configuration data. All parameters will be checked for correctness. If all parameters are correct, the web!MASTER loads the new configuration and reboots.

If incorrect data has been detected, an error message is displayed and no data is stored. Correct your entries to continue.

5.2 LAN Configuration

»»» Important

A wrong network configuration can compromise the stability of the whole network and cause a breakdown of the network. Please contact your network administrator before making changes to the LAN configuration of the web!MASTER.

web!MASTER is shipped with DHCP setting and will receive the network configuration from a DHCP server. Do not change this setting unless a static network configuration is required.

Change from DHCP to a static IP address

Perform the following steps if a static IP address is required:

- Select radio button **Static**.

Enter the following network parameters:

- **IP-Address:** IP address of the web!MASTER.
- **Netmask:** Network mask.
- **Gateway:** IP address of the gateway.
- **DNS-Server:** IP address of the DNS server.

Change from a static IP address to DHCP

To change from a static IP address to DHCP:

- Select radio button **DHCP**.

Change the host name

- **Host name:** Enter the new host name.

5.3 System Configuration

Select your time zone

The local time zone is required for time dependent functions. Please select your time zone.

- **Time Zone:** Current time zone setting.
- **Select Time Zone:** Drop-down menus to select a time zone.

Select the continent first and then your area.

Select your time servers:

The local date and time provided by time servers is required for time dependent functions.

- **Time Server 1:** Address of time server 1.
- **Time Server 2:** Address of time server 2.

If a time server is available within your network, enter the IP address or host name of your server. Enter one of the public time servers if web!MASTER has access to the internet.

Select display on/off time

- **Display off [h]:** Enter a time [0-23] to switch the display off.
- **Display on [h]:** Enter a time [0-23] to switch the display on.

For display always on, leave the two fields empty.

Select browser mode

Choose between a full screen or normal browser mode.

- **Browser Chromium Kiosk** Full screen without menu.
- **Browser: Chromium** Browser with menu and tool bar.
This mode allows data entries with keyboard and mouse.

»» Note

Connect keyboard and mouse to the USB ports of the web!MASTER and surf the Internet, if your browser mode is Chromium.

Displayed web page

Enter the URL of the web page to be displayed after boot, e.g. <http://www.portsignum.net> for the Port-signum web page.

- **Display this URL:** The URL of the web page to be displayed.

Please enter the full URL format <http://www.x.y> for public web pages.

Refresh interval

Enter a time interval in minutes to refresh the displayed browser image, if your web page does not support an automatic refresh mechanism.

- **Refresh every [m]:** Interval in minutes [0-59].

Enter 0 to disable the refresh.

Change user name and password

A login is required to enter the web!MASTER configuration page. It is recommended to assign a new password or user name.

- **User Name:** Enter a new user name.
- **Password:** Enter a new password (two times).

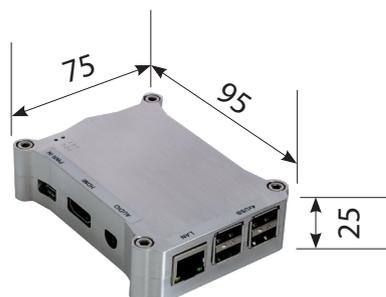
6. Software License

This product contains software, which in whole or in part is licensed as Open Source Software under the terms of the GNU General Public License Version 3 or GNU Lesser General Public License. Please refer to the following link for further information on the software and its respective licensing requirements and copyright notices. <https://www.gnu.org/licenses/gpl-3.0.en.html>.

The open source software contained in this package is distributed WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. The warranty for hardware components shall be unaffected from the above limitation.

7. Product Specification

Product	Model	web!MASTER
	Order Number	9000019
Controller	Architecture	Raspberry PI3@, ARMv8
	Type	Quad-Core Cortex-A53, 1.2 GHz
Software	Operating System	Linux (read-only)
	Browser	Chromium
	Application	Display of web pages
	HTML5 Support	Yes
Interfaces	LAN	RJ45, 100 MBit
	Video	HDMI
	Audio	Analogue, 3,5mm stereo jack
	USB	4 x USB 2.0
Power Supply	Voltage	5V DC, micro USB
	Power Consumption [W]	< 5
Environment	Operating Temperature [°C]	0 to +40
	Operating Humidity [%]	20 to 90, non condensing
Mechanical	Case	Aluminium, CNC milled
	Dimensions [mm]	95 x 25 x 75 [B x H x T]
	Weight [g]	230
Certification	CE	Class A
	FCC	Class A



8. CE/FCC Declaration

EU DECLARATION OF CONFORMITY	
Name and address of the Manufacturer	
PortSignum GmbH Hirtenweg 1a 82041 Deisenhofen Germany	
This declaration is issued under the sole responsibility of the manufacturer.	
Object of Declaration:	
Product name:	web!MASTER
Model name:	web!MASTER, Product. No. 9000019
The object of the declaration described above is in conformity with the relevant EU harmonization legislation:	
EMC Directive 2014/30/EU	
EN 55032 : 2012 EN 55024 : 2010 EN 61000-3-2 : 2006 + A1 : 2009 + A2 : 2009 EN 61000-3-3 : 2013	
RoHS Directive 2011/65/EU	
EN 50581 : 2012	
Signed for and behalf of:	
PortSignum GmbH Hirtenweg 1a 82041 Deisenhofen Germany	Name and Surname, Function Werner Schubert, Managing Director
Date of Issue: 1. February 2018	 <hr style="width: 20%; margin: auto;"/>

FCC Class A



This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference. (2) This device must accept any interference received, including interference that may cause undesired operation.

This product has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of the FCC Rule. These limits are designed to provide reasonable protection against harmful interference in a non-residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference with radio or television reception, which can be determined by turning the equipment off and on, you are encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the antenna of the radio/television receiver.
- Increase the separation between this equipment and the radio/television receiver.
- Plug the equipment into a different outlet so that the equipment and the radio/television receiver are on different power mains branch circuits.
- Consult a representative of PortSignum or an experienced radio/television technician for additional suggestions.