1080dots DS Slim

How to configure your Raspberry Pi Digital Signage Player using the web based interface

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1. Login

Connect the Raspberry Pi (RPI) player to your network using the Ethernet connection, the HDMI port to a LED/LCD display, and plug in the micro USB cable to a power source. There are multiple ways of getting to the web interface, the easiest of which is opening the URL [http://1080dots-DSPlayer.local](http://1080dots-DSPlayer.local) in a browser (Bonjour required* - see below for details) or scanning the QR-code that is displayed on the display which will provide the RPI's current IP number. The QR-code is displayed at startup by default. If you have a licensed player you can turn off the QR-code at startup if you like, this is done in the System menu. Alternatively you can log into your network's router and locate the IP address from the local DHCP table.

*Apple Bonjour network discovery
Apple devices have Bonjour support by default, Windows users can download the driver from: [http://support.apple.com/kb/DL999](http://support.apple.com/kb/DL999)
After installing Bonjour and rebooting your computer you should be able to find the player by name: [http://1080dots-DSPlayer.local](http://1080dots-DSPlayer.local)
If you have booted multiple players then try [http://1080dots-DSPlayer-1.local/](http://1080dots-DSPlayer-1.local/) or -2, -3, depending the number of players you booted in your network.

Default user credentials
The default username is **admin** and the default password is **root**. Note that the username and password are case-sensitive! We strongly suggest that you change this default password, this can be done from the User menu.
2. The Status of your player

The status screen is displayed directly after you entered the credentials, this screen displays the network and player information and settings.

**Network**
- **MAC-address**: The unique MAC address from this piece of hardware.
- **IP address**: IP address from this player.
- **Hostname**: The player name. (You can change the name inside the System settings.)

**Player**
- **DS Player version**: Version number of this 1080dots DS Player release.
- **Proof of Play logging**: By default disabled, this is an optional feature within 1080dots DS Online.
- **HDMI on/off**: Status from the HDMI video output on/off switcher (See System setting).
- **DS Player running**: Status if the DS Player is up and running.
- **Temperature**: Current hardware temperature in Celsius and Fahrenheit.
- **Total disk space**: Total disk space.
- **Disk space used**: Used disk space.
- **Total RAM**: Total RAM used (Excluding video memory).
- **RAM using**: RAM in use.
- **CPU usage**: How busy is your player.
- **Uptime (hh:mm)**: Uptime after reboot (Player reboots every night at 04.00 hours).
- **Date and time***: Current day, month, year and time.
- **Timezone**: Your location, the corresponding time zone (You can adjust the time zone in the System menu).

*You need to have an internet connection for receiving the correct time.

![Status screen](image)
3. License key

If your player doesn’t have a valid license key, then the upper left graphical dot will be red, and the license screen says ‘no valid key found’.

3.1 How and where to get your license key

If you don’t have a license key, you can contact 1080dots for a key. Go to www.1080dots.com for more information. Remember that we need the MAC address to generate a valid license key.

Every given license key is hardware dependent, so whenever you receive a key remember to store the key in a safe place. Then you are able to re-enter the key if needed, for example if you replace the SD Card.

3.2 Enter your license key

If we send you a license key, you can copy and paste that key into the form field ‘License key’. You have to press the update button to activate the license, the player will reboot.

Note that the red graphical dot and the text ‘no valid key found’ will disappear and turn green after the reboot. Indicating that you have a valid license key installed.

3.3 Video codec licenses

The Raspberry Pi supports MPEG-4 (h.264) decoding out-of-the-box. To play video files which are encoded with MPEG-2 or WVC1 you will need to buy extra licenses. You can purchase these licenses online from www.raspberrypi.com. The “Serial” number will be required when buying these licenses. To apply one or both licenses simply enter in the correct field and hit “Update”.

![License screen](image)
4. Network configuration

4.1 Wired network configuration

If you logged in successfully then you already experienced the automatic DHCP network configuration. Your player received the IP and DNS settings automatically. Most of the time this is the most convenient setting. You can also set these network settings manually. Be very careful and be sure to fill in the correct network settings so that you are able to connect to this player after a reboot. If you change the manual settings and you have trouble connecting to the device you can always start-over with a rewritten SD card image.
4.2 Wireless configuration

If you need wireless connection you can use one of the following supported USB WiFi-dongles:

- REALTEK RTL-8188 CUS
- TP-LINK TL-WN723NV2
- TP-LINK TL-WN725N

*If you are able to confirm other USB WiFi sticks, then please send a message to support@1080dots.com – thanks!*

Put the USB WiFi-dongle in the player before booting. After logging into this web interface then the WiFi settings and available wireless networks will show up in this screen. Select the preferred SSID or enter the SSID manually. Select the WiFi authentication method, WPA2, WEP or OPEN and enter the password. Click the update button to save these settings, a reboot will follow.

**Wireless vs Wired connection**

Note that it is not always possible that the player can restore lost wireless connection when running. After a reboot, for example the default nightly reboot, which occurs at 4am local time, the player will attempt to connect again. Should connectivity loss occur during “waking hours” simply disconnect and reconnect the USB power cable. There is a built-in two (2) minute timeout while searching for the wireless access point before the player starts.

4.3 Proxy settings

DS Slim supports non-authenticated web proxies. To set this option, select yes from the Use proxy menu and enter your proxy’s URL or IP address in the Proxy name field.
5. System options

5.1 About the shutdown and reboot buttons

- Below the title Maintenance heading you can see two buttons, Reboot and Shutdown. The Reboot button will shut down and restart the RPI Player.
- The Shutdown button will shut down the system entirely.

Always remember that if you shut down the RPI player, you can only turn it back on by disconnecting and reconnecting the USB power cable.

5.2 Changing the name of your player

You can give your player a unique name, so you are able to identify your player easier. If you happen to have Apple Bonjour drivers on your computer then you can browse to this player using the URL: http://1080dots-{yourplayername}.local/

You can change the last part of this name, shown here within the brackets.
5.3 Audio settings
Audio output is turned off by default, but you can choose to turn on the audio over HDMI or over mini-jack. The supported video files .mp4 / h.264 will play audio if this option is turned on.

5.4 QR-code option at startup
By default the player starts with the QR-code, version number and MAC address in the screen. This information will disappear automatically approximately one (1) minute after starting the RPI. You can disable the QR code from displaying in the System settings.

*If you do not have a valid license, the QR-code cannot be disabled.*

5.5 Setting the correct time zone
It is important that you set the correct localized time zone, so that the player will correctly sync with the days and times that you schedule events in your DS Online playlists. Choose the zone that is within the preferred time zone and the clock will reset automatically after reboot (the RPI must be connected to the internet in order for this to take effect).

5.6 HDMI on/off scheduler
You have the ability to turn off the video (HDMI) output, based on the given scheduling information. This will turn off the HDMI and it will force the player to quit, however the systems keeps running, and starts the player again at the given time, the HDMI video output is then recovered. This feature gives you the ability to set screens in standby mode, you’ll save some energy.

*Most modern monitors and TV screen have the ability to go to standby/sleep mode whenever a HDMI input is disconnected. These screens will activate whenever HDMI input is recovered. Note that each monitor or TV screen type will acting differently, so always test this option. Also check the monitor and TV screen settings, like sleep time, energy modes and HDMI behaviors and settings.*

5.7 Activating zone
Zones is an advanced feature that is used to display different sets of content through the same player. Turning this option on will create one or more ‘virtual’ players in DS online. The playlist content of these virtual players can be used inside of another (main) playlist. The feature is typically used in conjunction with a separate image splitter/processor to show the image from a single signal on multiple LED screens.

5.8 Synced playout
You can synchronize the timing of multiple players to create a synced playout. This feature can also be used to play two or more parts of a video simultaneously, to create a simulated video wall playout. To sync multiple players, set the synced playout to enabled. After this you will need to enter a group name to identify the sync. You’ll need to use the same name on all players that you want to sync with each other.

*All players must have the same playlists or playlists with the same amount of items and the same amount of time per item. Also note that different brands and screens can have different input lag timings, so be sure to use the same screens for optimal results.*
5.9 Local mode
Local mode can be used if the player does not have an internet connection, but you still want to create a playlist with new content. To do this, set edit playlist to Locally. After you've done this the player will need to restart. Afterwards a new menu option called 'Local Editor' will appear in the top-left corner of the screen. This editor only supports images and video.

6. Tools

6.1 Screen orientation
If you wish to mirror or flip the screen you can switch the screen orientation. Choose the option you want and click "Update".

This option is not used when you need portrait mode (+90 degree rotated screen). If you need portrait, then use 720x1280 Photoshop template designs, and import this designs into the Templates Builder, they will be automatically positioned in portrait mode.

6.2 Factory reset
If the player isn’t working as expected you can try to restore the settings to factory default. This will resolve most problems. Note this will remove every piece of content and setting you added.
7. Remote control

7.1 Playlist Remote
This feature will allow you to control the playlist and toggle overlays on/off. You can quickly show a specific playlist item or skip an item using this page.

7.2 CEC Support
If your TV supports CEC, you can control the player with your TV’s remote. Your remote will have assigned next, previous and pause/play buttons.

Consumer Electronics Control (CEC) over HDMI, your remote control
If you happen to connect a television that supports CEC – for example most LG, SHARP, Sony & Philips brands – you will be able to use your remote control to navigate the playlist. Press the OK button to show the QR-code and version number, or press the left or right button to go back and forward in the playlist.

If you use CEC and navigate forward or backward in the playlist and land on a video it may not immediately play, or it may take a few seconds before it starts playing. If this happens the player will recover the normal playout after ending that playlist event. In normal play mode the first frames of the video are pre-loaded, this can not be done in manual mode, on remote the player has to read the video data as fast as possible, depending on the read speed from your Raspberry Pi and SD card.
8. Changing the default password

On the User settings page you can change the password used to login. Press the update button to save the settings and a reboot will follow. Remember that the username and password are case-sensitive!

Don’t forget your password and do not lose it; you will not be able to login to the RPI without it. If you do lose the password, you can always recover the system by rewriting a new SD card, but you will need to reconfigure the network and other settings.

User screen
1080dots DS Slim setup guide

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