

RedLab WebDAQ 1.3.1 Firmware Update
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1. Description
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RedLab WebDAQ firmware is bundled with the operating system, web server, and documentation in one software update (*.swu) file. Use the RedLab WebDAQ web interface to install the *.swu file onto RedLab WebDAQ Series hardware.

Firmware 1.3.1 was released to update WebDAQ product documentation.

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2. Accessing the RedLab WebDAQ web interface
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RedLab WebDAQ Series devices require a TCP/IP connection to a network or the Ethernet port of a computer. If a connection via TCP/IP cannot be established using this procedure, due to corrupt firmware or network settings for example, use section 4 to recover the device.

The IP address type is set by default for DHCP/Link-Local. When connected to a network, the device first attempts to receive an IP address from a DHCP server.

To access the RedLab WebDAQ web interface, open a browser window and enter `http://webdaq-xxxxxx.local`, where `xxxxxx` is the last 6 digits of the MAC address.

If your network is configured for the zeroconf protocol, the web interface opens. If the web interface does not open or an error is returned, install a device discovery tool such as Bonjour Print Services. Bonjour software is readily available as a free download; open a browser window and search for Bonjour Print Services.

If DHCP is disabled or not available, connect to a non-networked Windows PC using a link-local connection. Connect the RedLab WebDAQ Series hardware directly to the Ethernet port on the Windows PC. The RedLab WebDAQ Series device attempts to communicate with the host PC using the link-local address stored on the device (169.254.100.100). The host PC may accept this address or use a different address.

Once the device is detected on the local PC, proceed with section 3.

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3. Updating RedLab WebDAQ Series firmware

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Determine the installed firmware version:

To determine the firmware version currently installed on your RedLab WebDAQ Series device, open the web interface and tap Device. The currently installed firmware version is displayed on the Firmware panel.

Firmware update procedure:

These instructions are generic and may change with future firmware versions.

Check your device for instructions specific to the version you are using.

1. Download the 'WebDAQ_1.3.1.swu' file to your computer or to the root of a USB mass storage device or SD card. To avoid confusion, store only one *.swu file on internal device storage or external media at any time.
2. If downloaded onto external media, insert the media into the RedLab WebDAQ Series device and go to step 3. If downloaded onto a computer, upload the file onto the RedLab WebDAQ device:
 - a) Tap Data Files and select the location to upload the file (Internal Storage, SD Card, or USB Storage Device).
 - b) Tap the Upload icon, select the swu file, and choose Open to upload the file.
3. Tap the Update button on the Firmware panel. WebDAQ searches the root folder of each storage location for an update file. When a file is detected, the update is automatically installed, and the hardware restarted.

The time on the System Clock panel stops as the update is installed, and restarts when the update is complete.

After the update process is complete, refresh your browser window and verify the version on the Firmware panel*.

* The web page will be unable to automatically connect to the WebDAQ after the update if you connect to the WebDAQ using mDNS (User-name.local) and have set the device name to a custom value. In this case connect to the device using the default name `http://webdaq-xxxxxx.local`, where xxxxxx is the last 6 digits of the MAC address, and then change the name back to a custom value, if desired.

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4. WebDAQ Series firmware recovery

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Perform this procedure if a connection via TCP/IP cannot be established using section 2. If the device is working normally, the preferred method to update firmware is section 3.

Follow these steps to recover your device:

1. Power off the device.

2. Load the new firmware on removable media and insert it in the device.
3. Hold the media (FUNC) button while powering on the device.
4. Continue to hold the media button until the power led blinks yellow, then release.

The LEDs will flash for a minute or two. When the LED display stabilizes, the firmware update is complete. Go to section 2 to establish a TCP/IP connection.

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5. New features and improvements
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Version 1.3.1

* Documentation updates

Version 1.3.0

* Support for bridge and strain channel types
* Calibration for supporting WebDAQ devices
* Improved event support
* Performance updates

Version 1.2.3

* Support for multiple event types

Version 1.2.0

* On factory reset, the device name is set to webdaq-xxxxxx, where xxxxxx is the last 6 digits of the MAC address (printed on the label on the underside of the device).
* Support for the SMB (SAMBA) and FTP server protocol for data logging and file transfer
* Support for mapped network storage (via SMB or FTP client)
* Share account added
* Improved options for displaying FFT data
* Improved math functions for converting data

Version 1.1.19

* Convert WDD data to UFF and binary
* Power on mode via jumper W1 removal

Version 1.1.8

* Initial firmware release

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6. License information
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WebDAQ firmware uses open-source software components. Refer to <https://www.mccdaq.com/WebDAQ-Licenses/> for the licensing information of each component. WebDAQ open-source code is available upon request from info@mccdaq.com.

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7. Support

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Contact Meilhaus Electronic GmbH for technical support.

Technical Support: support@meilhaus.com

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