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# WWVB51USB: WWVB Radio Clock for the Universal Serial Bus (USB)

The WWVB51USB is a Radio Clock that receives the WWVB long wave time signal and synchronizes a PC or laptop using a USB connection. The compact plastic housing includes an integrated antenna, an external antenna can be connected as an option to improve reception quality in noisy environments. This device is a perfect alternative for synchronizing computer systems where no PCI slot or serial port is available for time synchronization.

## **Important Note**

This product is no longer available and may have been replaced by a newer product. We will, of course, continue to provide support for units that have already been purchased and are still in use. Please contact our [1]Sales Department for further details.

## **Key Features**

- Universal Serial Bus (USB)
- Reception status indicated by LED
- Buffered hardware clock
- Powered by USB (no extra power supply required)
- Connector for an external antenna
- Plastic case
- 2 year warranty



## Description

The WWVB51USB shows the reception quality via its status LED and uses a buffered real time clock to maintain the time while powered off. There is no power supply required, the radio clock is powered by the Universal Serial Bus.

This USB clock offers a professional solution for your time synchronization requirements in mobile applications like field data acquisition with a laptop/notebook. It can be deployed whenever you need to synchronize a standalone PC, laptop or server with the WWVB time signal broadcasted by the U.S. National Institute for Standards and Technology (NIST). The **Windows** driver package includes a time synchronization service which runs in the background and adjusts the Windows system time continuously and invisibly. This package also includes a monitor program to enable the user to check the status of the device and time adjustment service. If the monitor program is run with administrator rights, it can also be used to modify configurable parameters.

The **Linux** and **FreeBSD** driver packages include a kernel driver which allows the product to be used as a reference time source for the NTP daemon included in most Unix-like operating systems. This also allows the computer to be used as an NTP time server to provide accurate time to NTP clients on the network. Some command line tools can be used to modify configurable parameters and monitor the status of the clock in use.

The Meinberg Single-Driver-Concept simplifies driver installation dramatically - there is only one driver who supports all Meinberg PCI and USB devices and if you use our API to access your Meinberg timing device from within your own applications, you can use the same source code for both PCI and USB devices.

| Receiver Type          | Integrated WWVB long wave radio receiver 60kHz ([2] <u>WWVB website</u> )   |
|------------------------|---|
| Accuracy               | < ±5 ms to UTC  |
| Synchronization Time   | 2-3 minutes after signal reception has been established   |
| Antenna Connector      | SMB subminiature coaxial connector  |
| Current Draw           | 40mA  |
| Physical Dimensions    | 73mm x 117mm x 24mm (L x W x H)   |
| Supported Temperature  | Operational: 0 - 50 °C (32 - 122 °F)<br>Storage: -20 - 70 °C (-4 - 158 °F)  |
| Supported Humidity     | Max. 85 % (non-condensing) at 40 °C   |
| Contents of Shipment   | Radio Clock, 3 m USB cable  |
| RoHS Status of Product | This product is fully RoHS-compliant.   |
| WEEE Status of Product | This product is handled as a B2B (Business to Business) category product. To ensure<br>that the product is disposed of in a WEEE-compliant fashion, it can be returned to the<br>manufacturer. Any transportation expenses for returning this product (at end-of-life)<br>must be covered by the end user, while Meinberg will bear the costs for the waste<br>disposal itself. |

## Characteristics



### Manual

There is no online manual available for this product.: [3]Contact us

#### Links:

- [1] mailto:sales@meinberg.de
- [2] https://www.nist.gov/time-and-frequency-services/nist-radio-stations/wwvb
- [3] mailto:info@meinberg.de