



#### **Meinberg Radio Clocks**

Lange Wand 9

31812 Bad Pyrmont, Germany Phone: +49 (5281) 9309-0 Fax: +49 (5281) 9309-30 https://www.meinbergglobal.com

info@meinberg.de

# TCR51USB: IRIG Time Code Reader for the Universal Serial Bus (USB)

The TCR51USB is a Timecode Reader with USB interface in a compact plastic housing. This device is a perfect alternative for synchronizing computer systems or checking the output of an IRIG generator when no PCI slot or serial port is available. It supports both IRIG AM and DCLS signal types and decodes a number of different time codes.

## **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This product is no longer available and may have been replaced by a newer product.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
- NEW: Optional PPS output available
- Powered by USB (no extra power supply required)
- Connectors for IRIG AM and IRIG DCLS
- Plastic case
- Three-year warranty



## **Description**

The TCR51USB shows the LOCK/HOLDOVER status via an integrated LED and uses a buffered real time clock to maintain the time while powered off. There is no power supply required, it is powered by the Universal Serial Bus.

The TCR51USB provides a professional solution to your time synchronization requirements in mobile applications like field data acquisition with a laptop/notebook and can be deployed whenever you need to synchronize a standalone PC, laptop or server when no PCI or serial port is available.

With this device a technician can check the quality and validity of an IRIG signal in the field, due to the compact package and simple cabling (only one USB connection for both power and data is required).

The TCR51USB can be ordered with an additional PPS output option (either TTL or RS-232 level).

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 free 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.



## **Characteristics**

Receiver Type	Integrated IRIG time code reader, supports modulated (AM) and unmodulated (DCLS) IRIG signals
Synchronization Time	Two to three minutes after connecting an IRIG source
IRIG Time Code Input	IRIG - A132/A133, A002/A003, B122/B123, B002/B003, B126/B127, B006/B007, IEEE 1344, AFNOR NFS 87-500 and C37.118 (other codes on request)
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) Storage: -20 - 70 °C (-4 - 158 °F)
Supported Humidity	Max. 85 % (non-condensing) at 40 °C
Contents of Shipment	Timecode Reader, 3 m USB cable
Warranty	Three-year warranty
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 that the product is disposed of in a WEEE-compliant fashion, it can be returned to the manufacturer. Any transportation expenses for returning this product (at end-of-life) must be covered by the end user, while Meinberg will bear the costs for the waste disposal itself.

#### Manual

The English manual is available as a PDF file: [2] Download (PDF)

#### Links:

[1] mailto:sales@meinberg.de

[2] https://www.meinbergglobal.com/download/docs/manuals/english/tcr51usb.pdf