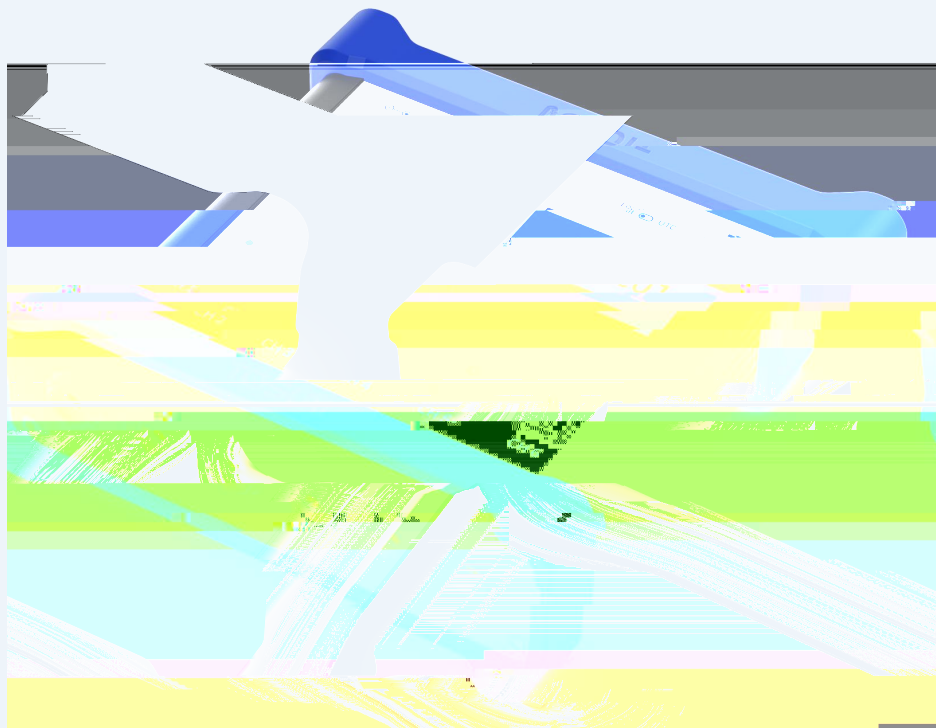




TSync01 Product Manual

Version V1.0 | English

tosunai.com



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What Is TSync01

TSync01 is a high-precision time synchronization device designed for systems requiring accurate time synchronization. By integrating advanced GPS satellite reception technology, it ensures system time accuracy and consistency.

TOSUN Devices Supporting TSync01

- TC1014 Pro
- TC1018 Pro
- TC1034 Pro+
- TC1038 Pro
- Tlog1038
- TC1054 Pro
- TC1055 Pro
- ...



Contents

1. Ab

1. About this User Manual

1.1 Disclaimer

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2. TSync01

2.1 Product Overview

TSync01 is a high-precision time synchronization device designed for systems that require accurate and stable timekeeping. By integrating advanced GPS satellite receiver technology, it

em

2.2 Features

- ✓ us (microsecond)-level time synchronization to meet the needs of various time-sensitive applications.
- ✓ Support for multiple GPS satellite systems. TSync01 is compatible with BeiDou, GPS, GLONASS, and other global satellite systems, ensuring optimal time signal reception in diverse environments.
- ✓ Flexible synchronization modes. Users can configure the device for either relative or absolute time synchronization based on actual requirements.

Relative Time Synchronization: Adjusts the slave device time dynamically by analyzing pulse signals, ensuring relative synchronization among multiple slave devices. (Suitable for scenarios where absolute time is not required, but synchronized timing among devices is essential.)

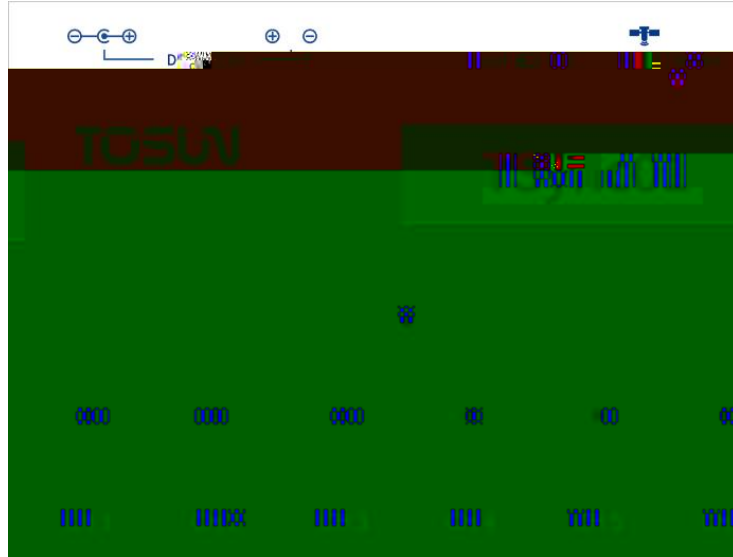
2.7 Hardware Interface



- GPS antenna interface
- Mode switch
- Phoenix terminal power supply port
- Power adapter supply port

2.8 LED

Diagram of LED indicator:



Description of indicator:

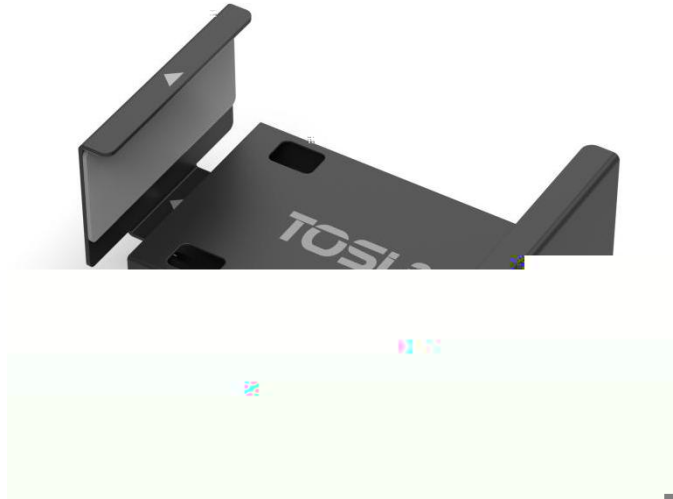
Indicator	Definition
Time Service	Satellite positioning indicator
TSync01	Mode indicator
CH 1-6	Synchronization channel 1-6 indicator

Description of LED color:

Color	Description
Time Service Green	Satellite positioning successful
TSync01 Green	Relative time synchronization mode
TSync01 Yellow	Absolute time synchronization mode
CH 1-6 Green	Synchronization channel connected to a device

2.9 Optional Accessories

1. Enclosure mounting bracket



3. Quick Start

3.1 System Connections

When the master device is in the slave mode, it can receive the time information from the GPS satellite and transfer it to the slave devices, ensuring accurate synchronization and multiple slave devices.

It is suitable for scenarios requiring high-precision timing and absolute time reference.

Absolute time synchronization mode requires an antenna connection to receive GPS signals.

Please ensure the antenna is securely connected and placed in an unobstructed environment to guarantee GPS accuracy.

4. Inspection and Maintenance

The main electrical components of the HTSync01 product are semiconductor components. Although the equipment has a long service life, they may

temperature of enclosed environments) Check the ambient humidity. (Including the internal humidity of enclosed environments) Check for the accumulation of dust, powder, and metal shavings Check for any contact with water, oil, or chemical sprays on the equipment Check for the presence of corrosive or flammable gases in the equipment area Check for levels	range. The relative humidity must be within the range of 10% to 90% No accumulation No contact No presence	Use a hygrometer to check the humidity and ensure that the ambient humidity within the acceptable range. Clean and protect the equipment. Clean and protect the equipment if necessary. Inspect by the smell, or using a sensor.
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