



Synway CTI Series

SHT-2B/USB

SHT-4B/USB

USB Voice Box

Product Introduction



Synway Information Engineering Co., Ltd

www.synway.net

➤ Functions

- Equipped with an audio amplifier, a speaker (able to simulate ringing) and an audio output port to directly drive the speaker in headset or phone handset.
- Detects the ringing current on the trunk channel, the pickup/hangup behavior on the station channel, the phone line voltage and the polarity reversal. Transmits the ringing current.
- The trunk and station channels are connected directly during power outage, which improves the system security to a great extent.
- Automatically checks the USB voice box to determine the model and number of modules installed on it.
- Uses SPECDial - a professional driver algorithm - to perform a complete automatic dial process through analog lines, accurately identify called-party statuses and precisely determine whether the answering is from the subscriber, the answering machine or the fax machine.
- Calling party info (Caller ID) detection/transmission, DTMF and FSK support; adopts the echo cancellation algorithm conforming to the telecom standard; supports the Barge-in feature for IP phone application and speech recognition.
- Supports signal modulation and demodulation, enabling communication of FSK signals with such information terminals as PDA and information phones.
- Supports simultaneous full-duplex recording and playback on 4 channels, each with a different format (CCITT A/ μ -Law 64kbps or IMA ADPCM 32kbps)
- Programmable tone analyzer detects all kinds of tones on analog channels
- Automatic Gain Control (AGC) support in recording operation
- Adaptive echo cancellation

➤ Characteristic Features

- **USB1.1 Bus Support**

Includes USB1.1 bus; supports hot-swap and PNP (plug and play) features; provides portable application and easy installation without the need for any external power supply when it serves as a virtual phone or uses trunk channels.
- **Module Configurable**

4 on-channel modules can be freely arranged in pairs or groups for various complex,

multi-functional applications, such as call center and recording functions available on a single USB voice box.

- **Available Analog Phone Line Jack**

Adopts the RJ11 jack to connect the phone line directly, eliminating the need for extra junction boxes, making connection easy and malfunctions rare.

- **Available Audio Output Jack**

Equipped with an audio amplifier to directly drive the speaker of the headset or phone handset.

- **Programmable Tone Detector**

Detects single or dual tones at any frequency, offering facility for use with a variety of PBXes and key telephone systems

- **Realtime Analog Line Voltage Detection**

Determines whether the phone line is broken and judges the pickup/hangup behavior of the phone on a same line.

- **Polarity Reversal Detection**

Includes the API interface to detect the polarity of the analog phone line.

- **Various CODECs Support**

Offers a large selection of voice CODECs, including G711 A-Law, μ -Law, Linear PCM, IMA-ADPCM, MP3 and VOX.

- **Supports WAV File**

The recorded voice files can be edited and played by audio tools such as Cooledit.

- **Hardware Serial Number & Authorization Code Identification Circuit**

Each voice box has a unique hardware serial number and an authorization code identification circuit, designed for software safety. Users can apply to our company for an exclusive authorization code.

- **Synway's Unified SynCTI Driver Development Platform**

Synway owns the intellectual property rights for the unified high-intelligence SynCTI driver development platform. Each system supports up to 2048 channels. All features are available via simple function calls on the driver platform, without having to understand complex call procedures.

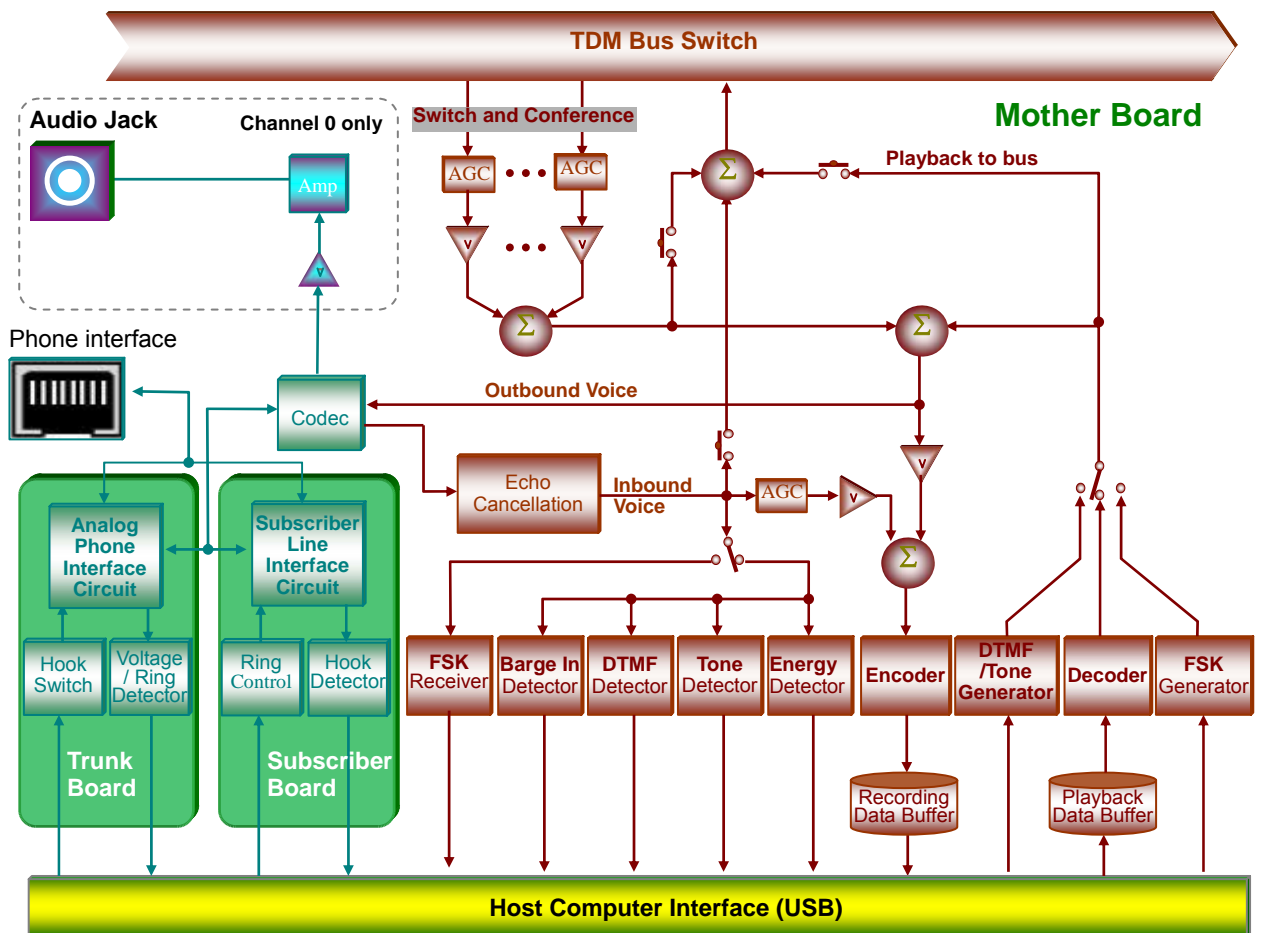
Support More Application Environments

The freely configured dual-channel modules enable the USB voice box to be widely used in various application environments. The SynCTI driver development platform which is independently developed by Synway supports up to 2048 channels. The tapping point for the CTI Series USB voice box can be set flexibly on the communication line between Central Office Terminal (COT) and PBX, COT and telephones, PBX and telephones, etc. allows monitoring of any analog tone signal.

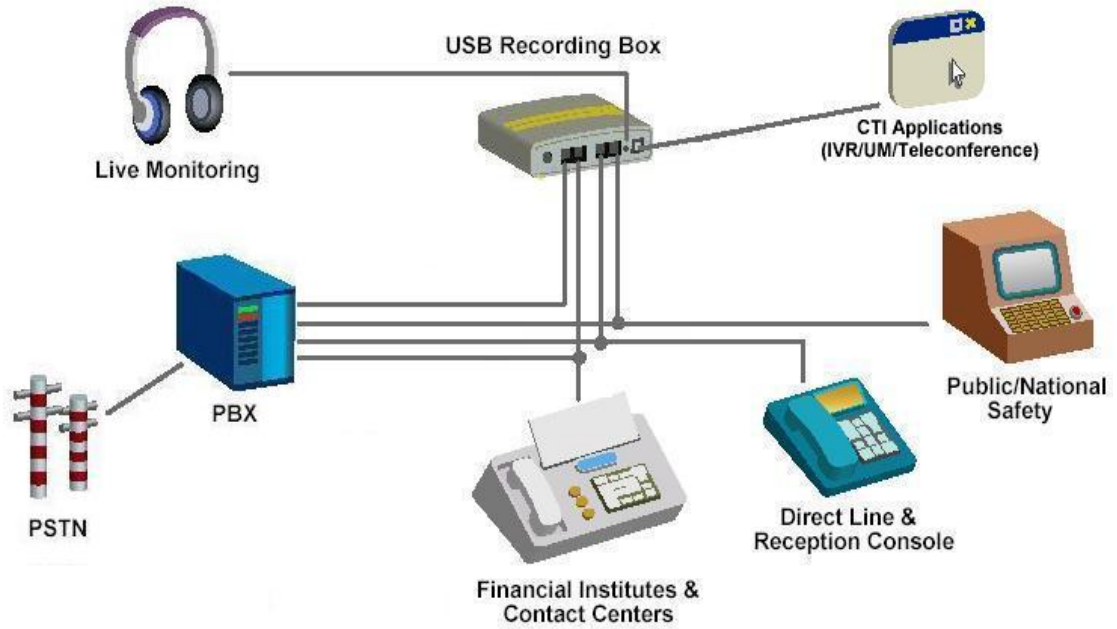
Support Worldwide Analog Phone Applications

Because the CTI Series USB voice box includes the programmable tone analyzer, and is able to detect the voltage, the polarity and the rings of the analog phone line, it surely provides a strong technology background for the internationalization of your company and your products.

➤ Operation Principle



➤ Typical Application



► Technical Specifications

Dimensions

170 x 130 x 20mm³

Weight

≈200g (exclusive of ringing current & battery feed power supply)

Environment

Operating temperature: 0 °C—55 °C

Storage temperature: -20 °C—85 °C

Humidity: 8%—80%, non-condensing

Input/output Interface

Headset jack: One ϕ 3.5 stereo jack

Telephone line jack: Four 4-pin RJ11 connectors

USB jack: One USB1.1 standard interface

Audio Specifications

CODEC: CCIT A/ μ -Law 64kbps,

IMA ADPCM 32kbp

Audio output power: \geq 50mW

Distortion: \leq 3%

Frequency response: 300-3400Hz (\pm 3dB)

Signal-to-noise ratio: \geq 38dB

Echo suppression: \geq 40dB

Maximum System Capacity

Up to 8 USB voice boxes concurrently per system; up to 4 channels per box.

Audio Encoding & Decoding

16Bit PCM 128kbps

8Bit PCM 64kbps

A-Law 64kbps

μ -Law 64kbps

VOX 32kbps

ADPCM 32kbps

GSM 13.6kbps

MP3 8kbps

Impedance

Insulation resistance for PC isolation from telephone line: \geq 2M Ω /500V DC

Telephone line impedance:

Compliant with the national standard

impedance for three-component network

Power Requirements

+5V DC: \leq 400mA

Power: \leq 2.1W

Safety:

Lightning resistance: Level 4

Safety certificates: FCC; CE

Maximum Subscriber Line Length for Station Channel

5.5km

➤ Purchasing Guide

The Synway CTI Series USB voice box provides a complete range of features to meet all requirements.

➤ Model Description

Model	PC Bus	Voice Channels	Voltage Detection	Audio Jack	Conferencing	TDM	Faxing
SHT-2B/USB	USB	2	√	√	√	N/A	N/A
SHT-4B/USB	USB	4	√	√	√	N/A	N/A

➤ Technical/sales Support

Headquarters

Synway Information Engineering Co., Ltd

<http://www.synway.net/>

9F, Synway D&R Center, No.3756, Nanhuan Road, Binjiang District, Hangzhou, P.R.China, 310053

Tel: +86-571-88860561

Fax: +86-571-88850923

Technical Support

Tel: +86-571-88864579

Mobile: +86-13735549651

Email: techsupport@sanhuid.com

Email: techsupport@synway.net

MSN: scycindy_sh@hotmail.com

Sales Department

Tel: +86-571-88860561

Tel: +86-571-88864579

Fax: +86-571-88850923

Email: sales@synway.net

TIPS

- ☒ All the content and data herein have been scrupulously checked. However, we do not guarantee the absence of errors.**
 - ☒ Product specifications and relevant data are subject to conditions on the purchase contract.**
 - ☒ Our company reserves the right to modify this document without prior notice and the right for final explanation.**
-