

# CZH-T501 USER MANUAL

## 1. Attention before use:

- 1) Make sure the supplied voltage is within the acceptable range.
- 2) Only professionals can do the maintenance.
- 3) Please make sure the antenna has lightening protection.
- 4) Please don't touch the antenna when the machine is connected with power supply.
- 5) Please don't power on the machine without connecting antenna.
- 6) Please don't use the transmitter in explosive environment(e.g. gas station, places with gas or steam)
- 7) Please don't use the transmitter in extreme dusty, damp, hot environment.
- 8) Please use the transmitter under the regulations by local wireless administration institutions.

## 2. Menu

- 1) Product features
- 2) Product configuration
- 3) Product user guide
- 4) Product specification
- 5) Troubleshoot

## 3. Product Features

CZH-T501 is a multi-functional FM transmitter. It has stable structure, excellent performance , super good sound quality and is very easy to use.

### \*Main Features:

- Stereo/Mono optional
- RF output power is continuously adjustable from 0~50watt.
- One button controls all functions.
- Auto volume control function. It can detect and adjust volume automatically and ensure the best modulation.
- SWR protection. When antenna is not well connected, the transmitter will turn to protection mode automatically.
- Temperature protection. When the temperature of transmitter is too high, it will turn to protection mode automatically.
- External encoder input interface (available for SCA or RDS encoder )

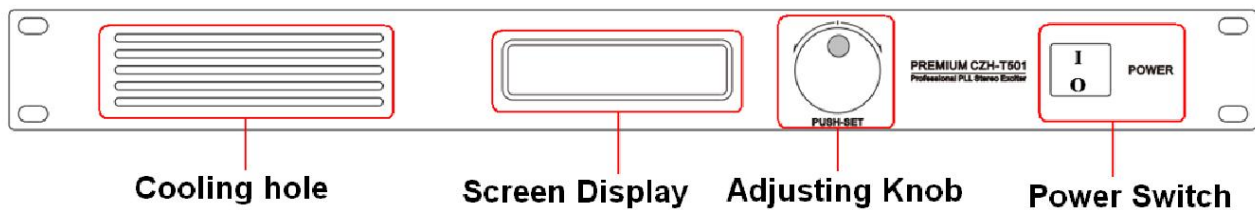
#### 4. Product configuration

NO	NAME	DESCRIPTION	QTY	UNIT	PORT
1	FM transmitter	CZH-T501	1	PCS	NO
2	ALLUMINUM ANTENNA	1/4 OR 1/2 WAVE	1	SET	RF OUT
3	AC POWER CORD	THREE PHASE DC	1	PCS	AC INPUT
4	AUDIO CABLE	1 TO 2 - 3.5mm TO RCA	1	PCS	LINE IN
5	USER MANUAL	ELECTRONIC VERSION	1	PCS	NO

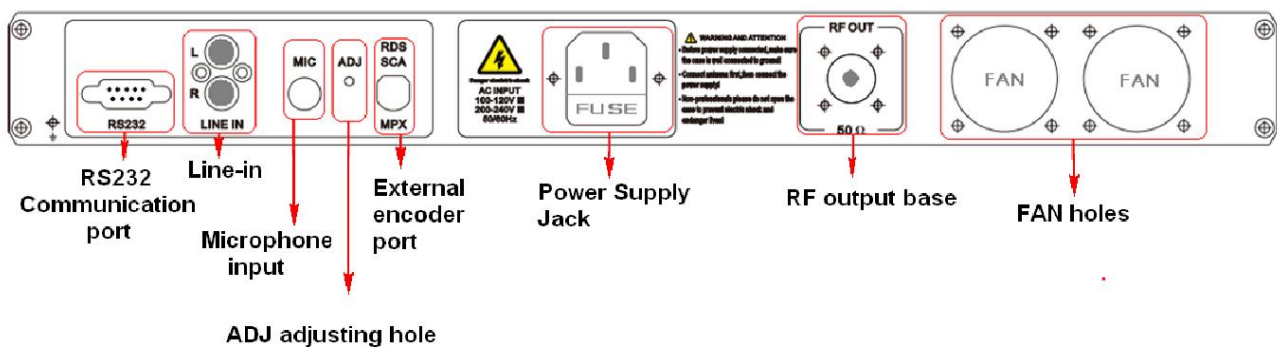
#### 5. User Guide

##### 1) Front and Back Panel description

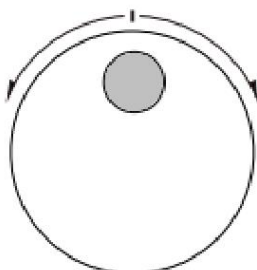
###### Front Panel



###### Back Panel



##### 2) Knob description



**PUSH-SET**

Action	Definition	Description
Turn left/right	Adjust, shift	Main page, adjusting page, shift ( turn clockwise to increase, turn Counterclockwise to reduce )
Short press	Confirm	Enter/Exit Menu page
Press and hold	Confirm	On Main page, press and hold to enter Menu

### 3) Operation Instruction

#### a). Turn ON

Check the antenna first, make sure it's well connected. Then connect the power cord to home socket, press the power button to I position to turn ON the transmitter. O position means OFF. See picture on the right.



After power on, the transmitter goes into working status. The screen will show working status which has 2 pages, turn the knob to shift between the two pages. See picture below:

Display Page 1:

```
FM 98.3MHz  TEMP:43°C
P:29.7W  R:0.3W  S:1.2
```

Display page 2:

```
ST LINE:06  MIC:66
MIN-----MAX
```

Page 1 description:

- I Real-time working frequency: **FM 98.3MHz**
- I Real-time internal working temperature : **TEMP:43°C**
- I RF output power: **P:29.7W**
- I Reflecting power : **R:0.3W**
- I SWR : **S:1.2**

Page 2 description:

- I Sound Mode : **ST** , ST means Stereo , MO means Mono.
- I Line-in Volume : **LINE:06** ,Volume is 0-13 ,AUTO means automatic control.

I    Microphone Volume : **MIC: 66** , Volume range is 0~79.

I    Volume indicator : **MIN**-----**MAX** ,

it shows real time display of the volume.

### b). Function and Parameter setting

Press the knob to enter Menu page. Turn the knob to shift pages. There are 8 pages altogether.

1	MENU FREQUENCY SET	2	MENU LINE VOLUME
3	MENU RF POWER SET	4	MENU STEREO OR MONO
5	MENU TEMP SET	6	MENU SWR SET
7	MENU MIC VOLUME	8	MENU EXIT

#### I    Frequency setting

On the Menu page, turn the knob to page 1 FERQ setting, press the knob to enter setting. Turn the knob to adjust the frequency by stepping of 0.1MHz, then press the knob to confirm setting and exit.

**FREQ**  
**98.30MHz**

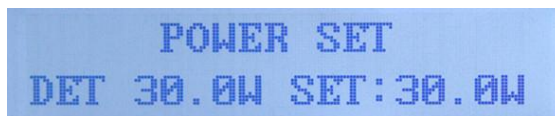
#### I    Line-in Volume setting

On the Menu page, turn the knob to page 2 LINE VOLUME setting, press the knob to enter setting. Turn the knob to adjust the volume within the range of 0~79, then press the knob to confirm setting and exit.

**LINE VOLUME**  
**06**

I    **RF output power setting**

On the Menu page, turn the knob to page 3 RF POWER setting, press the knob to enter setting. Turn the knob to adjust the output power within the range of 0-50w, then press the knob to confirm setting and exit.



I    **Sound mode setting**

On the Menu page, turn the knob to page 4 ST<OR>MO setting, press the knob to enter setting. Turn the knob to shift the sound mode between Stereo and Mono, then press the knob to confirm setting and exit.



I    **Temperature Protection Setting**

On the Menu page, turn the knob to page 5 TEMP setting, press the knob to enter setting. Turn the knob to adjust the protection temperature point within the range of 50-70 , then press the knob to confirm setting and exit.



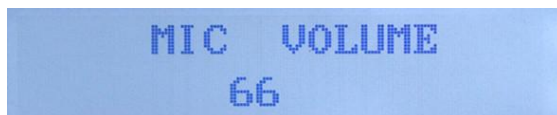
I    **SWR protection setting**

On the Menu page, turn the knob to page 6 SWR SET setting, press the knob to enter setting. Turn the knob to adjust the SWR protection point within the range of 2.0-3.5, then press the knob to confirm setting and exit.



I    **MIC volume setting**

On the Menu page, turn the knob to page 7 MIC VOLUME setting, press the knob to enter setting. Turn the knob to adjust the microphone volume within the range of 0-79, then press the knob to confirm setting and exit.



**I Exit setting**

On the Menu page, turn the knob to page 8 MENU EXIT, press the knob to exit setting and return to main page.



**6. Technical Specification**

NO	Item	Specification
1	Working Voltage	AC110V/50Hz/60Hz ( choose Manually ) AC220V/50Hz/60Hz ( choose Manually )
2	Working Current	< 1A
3	Frequency Range	87~108MHz
4	Frequency Stability	±10PPM
5	Frequency Stepping	100KHz
6	Environment temperature	-10 -45
7	Output Impedance	50
8	RF output power	0W~50W
9	Harmonic, clutter radiation	- 60dB
10	Audio distortion	0.2%
11	Frequency Response	50Hz~15000Hz
12	Separation	35 dB
13	Input level	15 dBV
14	Frequency Modulation	±75KHZ
15	SNR	70dB
16	Size	21cm ( L ) *48 cm ( W ) *4.5 cm ( H )
17	Net Weight	About 2800g

## 7. Troubleshooting

NO	Problem description	Possible Reasons
1	Unable to Power ON	1 ) Socket is not connected with electricity 2 ) Power cord is not well plugged. 3 ) The fuse is not working properly in socket.
2	SWR Alarm	1 ) Antenna is not well connected. 2 ) SWR value is too high because antenna doesn't match transmitter 3 ) There are too many reflecting objects close to antenna.
3	Temperature Alarm	1 ) Fan is not working ; 2 ) Antenna doesn't match transmitter, the SWR value is too high, thus temperature rises up. 3 ) The fan holes are jammed.
4	SWR value is too high	1 ) Antenna not well connected. 2 ) SWR value is too high because antenna doesn't match transmitter 3 ) There are too many reflecting objects close to antenna.
5	Short transmitting distance	1 ) High loss of feeder cable. 2 ) Poor broadcasting environment. 3 ) Output power is low. 4 ) Antenna is not placed high enough. 5 ) Antenna and transmitter doesn't match. 6 ) Radio receiver has low sensitivity.
6	No power output	1) RF output power needs to be adjust higher 2) Transmitter is powered OFF.
7	No audio output	1 ) Transmitter line-in volume is too low. 2 ) Line-in audio signal is abnormal.
8	No microphone output	1 ) Microphone is not working well. 2 ) Microphone volume is too low. 3 ) Microphone is dynamic type. 4 ) Microphone is not well plugged.
9	Poor sound quality	1 ) Microphone quality is low. 2 ) Audio source quality is low. 3 ) Antenna is not well assembled and connected. 4 ) Audio signal or transmitter line-in volume is

		not adjusted well.
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