ZHC358N Network Audio Decoder

1. Overview

The ZHC358N network audio decoder realizes the high-quality transmission of audio signals by using online broadcasting. It is especially suitable for occasions where backup audio signals are required, and can further improve the level of safe broadcasting. The device receives online broadcast programs from various radio stations, decodes and outputs analog audio and digital audio signals (AES/EBU).

The ZHC358N network audio decoder uses the Raspberry Pi as the front-end device for network audio reception. The unbalanced analog audio output by the Raspberry Pi is differentially processed and converted to IIS signals and converted to AES signal processing inside the device. Output 1 AES signal and 1 differential balanced analog audio signal.

It has the following technical characteristics:

●The analog audio to digital audio IIS signal to AES signal circuit in ZHC358N

network audio decoder.

● X9C103S digital potentiometer circuit.

●Analog audio unbalanced to balanced differential circuit.

●Using high-speed MCU processor control, 1602 liquid crystal display and 4-button

human-computer interaction circuit and program.

●Provide remote control port

●19-inch 1U standard chassis

2. Technical Specifications

2.1 Technical indicators

Standard output level   0.775V

Audio output impedance   600 ohms

Volume gain   -20～+6dB

Stereo separation   >=45dB

Signal to noise ratio   >=60dB

Frequency response   <0.5dB

Distortion degree   0.3%

Power supply voltage   AC180V~ AC260V 47Hz~63Hz

2.2 Physical characteristics

Communication interface   RS232

Chassis standard   19 inches

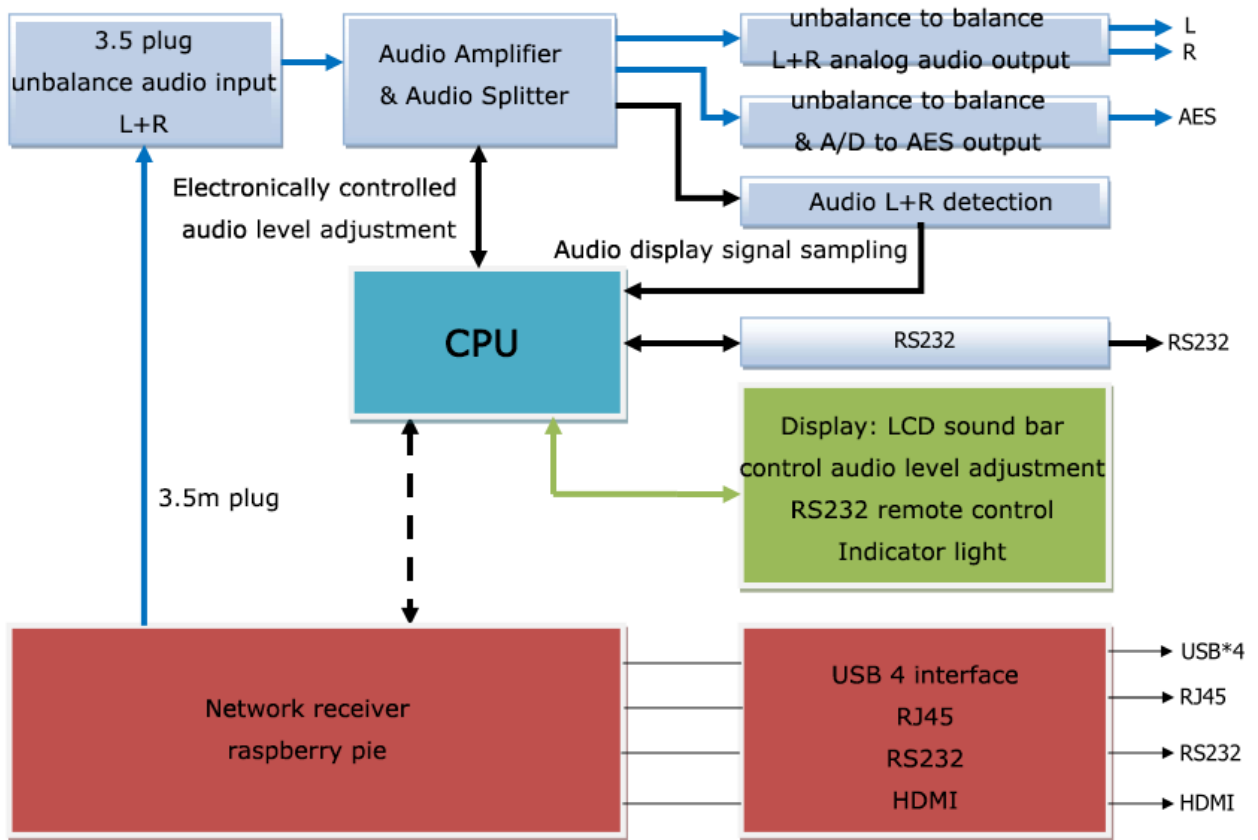Chassis size   1U (440mm×44mm×440mm)

Operating environment temperature   -5℃～+45℃

Relative humidity   ＜95%

Altitude   ＜4500m

3. System functional block diagram

Functional block diagram of ZHC358N network audio decoder