# Multimedia solution No.1

## **Features**

- ♦ Adopt DA32UD or DA32UQ decoder to realize digital audio decoding function.
- ♦ One group of fiber digital input, two groups of coaxial digital input, and one group of analog input. Adding power amplifier, transformer, case etc can compose various audio products such as active sound box and bass blaster etc.
- ♦ All functions and operation have power-fail recovery system.
- ♦ Built-in analog input mute circuit, 6-channel 2-order low pass filter, volume control, and input mute circuit.
- ♦ Built-in Dolby digital AC-3, HDCD, MP3 decoding system etc. and support DOLBY PRO-LOGIC and PRO-LOGIC II surround channel decoding etc. also support replaying mode. There is no need to change hardware for upgrade, and support all digital compression code rate such as MPEG II so as to suit different markets.
- ♦ Automatically search input signal, volume quick reset function, and remote control function.
- ♦ 5.1 channel output, 63dB electronic volume control. For each channel, +/-20dB can be adjusted.
- ♦ Many kinds of listening modes and 8 kinds of DSP sound effects.
- → Two pieces of 7-segments LED modules and several LED status indicator lights. Multimedia No.1 has six buttons (mute, information input, mode, volume +/-, and noise test).
- ♦ Can select single CPU or dual CPU communication mode.
- ♦ Dual CPU communication mode adopts the universal AT89C51 series singlechip, user can use own singlechip to directly debug whole machine program.

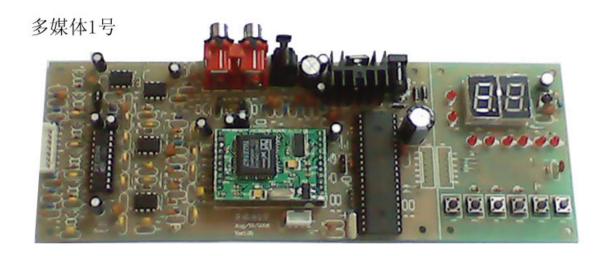
## **♦** Whole machine control, audio part

- Finish home audio all functions, adding power amplifier can finish whole machine.
- Adopt 2 seven segments LED display and t LED indicator lights.
- Solution is mature, function is complete, circuitry is simple, and cost is low.
- All functions and operation have power-fail recovery memory.
- Automatically eliminate noise. Automatically turn down volume when no sound so as to get better signal to noise.
- Stainless steel case avoids disturbance to the sound and other components and provides an excellent EMT function.
- Metal case is installed directly on the board, and can compose the product of integration with audio board, doing like this improves the connection of the traditional decoder, and enhances the reliability of product.



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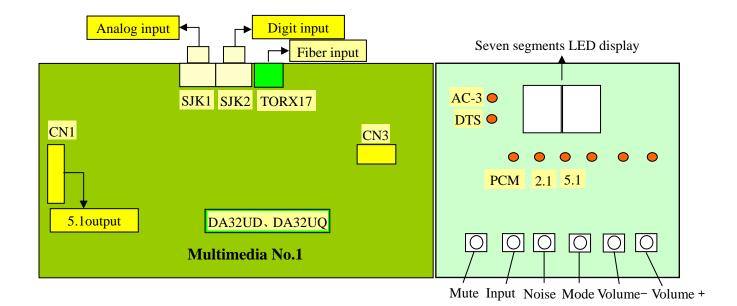
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## Multimedia No.1

# **♦** Relevant technology files

➤ 《DA32UQ user manual》-------hsavd217.pdf
➤ 《DA32UD user manual》------hsavd216.pdf
➤ 《ST-991AR5 upgrade device user manual》------cnstl201.pdf

# **♦** Connection block diagram



## Connection instruction

DA32UD, DA32UQ socket connects with DA32UD, DA32UQ decoder.

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TORX173 interface is fiber input interface.

SJK1 interface is one group of analog input interface.

SJK2 interface is two groups of digit input interface.

CN1 interface is 5.1 output interface.

CN3 interface is upgrade interface.

## **♦** Button instruction

The first is mute button.

The second is input switch button.

The third is noise test button.

The fourth is listening mode button.

The fifth is volume-.

The sixth is volume+.

# **♦** Indicator light instruction

The first is AC-3 indicator light.

The second is DTS indicator light.

The third is PCM indicator light.

The fourth is 2.1 indicator light.

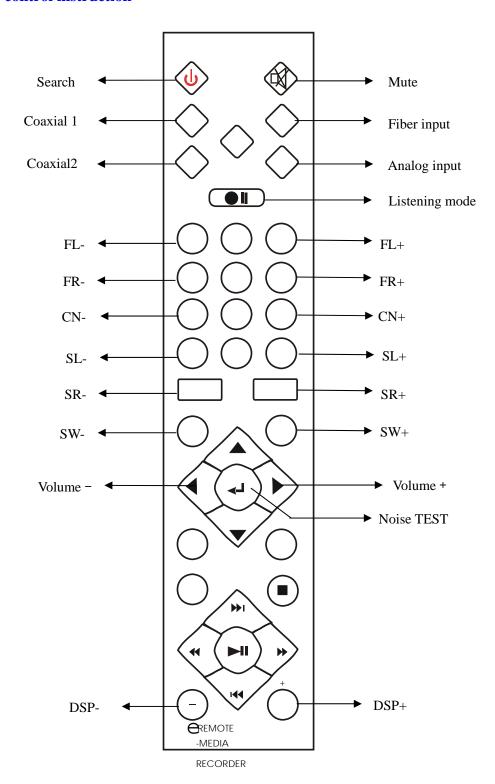
The fifth is 5.1 indicator light.

The sixth is reserved.

The seventh is reserved.

The eighth is reserved.

# Remote control instruction



Remote-control diagram



# Opeartion function and use

## (A) remote control input function

- (1) Pressing "coaxial 1" switches to coaxial 1 signal input.
- (2) Pressing "coaxia2 1" switches to coaxial 2 signal input.
- (3) Pressing "fiber input" switches to fiber signal input.
- (4) Pressing "analog input" switches to analog signal input.

## (B) other functions

1, mute

Pressing "mute" eliminates all signals and realize the effect of no voice.

2. volume control

Available range is 0 dB to 80 dB.

3. fine tuning

Front right and left channel, back right and left channel, central channel and super bass. The available range is -10 dB to +10 dB.

- 4. Pressing "listening mode" can realize many kinds of listening effects.
- 5. Pressing sound filed mode buttons can realize the corresponding sound filed effect.

#### (C) indicator light function

- 1. The first indicator light turns on when user presses "DSP+"button.
- 2. When user presses the listening mode buttons on the remote control or panel:
  - It is 2.1 output when the second indicator light turns on.
  - It is 3.1 output when the third indicator light turns on.
  - It is 5.1 output when the fourth indicator light turns on.
- 3. The fifth indicator light turns on when HDCD signal is inputted.
- 4. The sixth indicator light turns on when DTS signal is inputted.
- 5. The seventh indicator light turns on when AC-3 signal is inputted.
- 6. The eighth indicator light turns on when PCM signal is inputted.