FCC ID: PNK2G4-AV

# CIRCUIT DESCRIPTIONS

## AVS2G4 Video Sender

The main function of AVS2G4 Video Sender is to send the video and audio signals to receiver unit by 2.4GHz RF signal with FM modulation. The receiver unit will pick up the 2.4GHz RF signal and do the FM demodulation, then put the video and audio signals to TV, or other AV device.
The circuit description as below：

**A. AV-T2G4 Video Sender Transmitter Unit：**

Consisting if (1) Voltage Regulator, (2) 2.4GHz TX RF Module, (3) Channel Setting.

**(1) Voltage Regulator** ： The unit converts the 9V DC output of the adapter to 5V DC by 78L05 voltage regulator, and supplies the 5V DC to the 2.4GHz TX RF Module and Channel Setting.

**(2) 2.4GHz TX RF Module**： The unit converts the audio –L channel, audio –R channel and video signals to FM modulated signals, and transmits these signals in 2.4GHz band.

**(3) Channel Setting** ： To set the transmitting frequency in fixed channel.

**B. AV-R2G4 Video Sender Receiver Unit：**

Consisting of (1) Voltage Regulator, (2) 2.4GHz RX RF Module, (3) Channel Setting PIC Microcontroller, (4) Audio R – channel FM Demodulator, (5) Audio L – channel FM Demodulator, (6) Audio R – channel Amplifier, (7) Audio L – channel Amplifier, (8) Video Amplifier.

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| **(1) Voltage Regulator** | ： | The unit converts the 9V DC output of the adapter to 5V DC by 78L05 voltage regulator, and supplies the 5V DC to the 2.4GHz RX RF module and channel setting PIC microcontroller. |
| **(2) 2.4GHz RX RF Module** | ： | The unit receiver the 2,4GHz band RF signals which come from the video sender transmitter, and converts the RF signals to audio –L channel IF signal, audio –R channel IF signal and video signal. |
| **(3) Channel Setting Up Microcontroller** | ： | The EM78P153 microcontroller sets the fix frequency channel for 2.4GHz RX RF module. |
| **(4) Audio R – channel FM Demodulator** | ： | To demodulate the audio R – channel FM modulated signal. |
| **(5) Audio L – channel FM Demodulator** | ： | To demodulate the audio L – channel FM modulated signal. |
| **(6) Audio R – Channel Amplifier** | ： | To amplify the audio R – channel signal. |
| **(7) Audio L – Channel Amplifier** | ： | To amplify the audio L – channel signal. |
| **(8) Video Amplifier** | ： | To amplify the video signal. |