

## Wireless 5.8Ghz Digital Audio Link Model No.: TL9010 / 15-1974

Spec.

Wireless spec.	
Item	Spec
<b>Modulation Method : BPSK (Binary Phase Shift Keying) Modulation</b>	
Receiver Sensitivity	,-90dBm@1E-3BER /1.92Mbps
Operation Distance	10m ( clear line of sight)
Antenna Port Impedance	50 Ohm
Unwanted Emission	ETSI EN300-220 FCC15.249
Audio Frequency	20Hz~20KHz,+/- 3 dB
Audio Dynamic Range	80dB min.
Audio Signal to Noise Ratio	80dB min.
Audio Channel Separation	70dB min.
Audio THD+ Noise	<= 0.1% @ 1KHz
Operating Temperature ( IC)	0~60 degree
Operating Temperature ( Module)	0~35 degree
Delay time	0.3 ms
Multi Channel selection: 6 channels	6 channels 5.725 ~ 5.875 GHz radio frequency
Tx output power	0dbm ( US)

### Product Description

This product using an audio transceiver chipset which is a low-cost 5-GHz radio that provides a high bit rate link of 6 Mbps for wireless audio applications, such as wireless speaker. This radio solution consists of high performance all-CMOS RF transmitter (GPE110), RF receiver (GPA110), and baseband modem chips (GPE112 and GPA112) to provide the lowest cost solution. GPA110 is a highly integrated radio receiver chip that includes LNA, down conversion mixer, baseband filter, DC offset cancellation loop, VGA and synthesizer.

Only a few external RF components are needed, such as bandpass filter and RF switch.

This wireless transmitter and receiver system use the latest 5.8 GHz technology that travels through walls, floors, ceilings and other obstacles, delivering high quality sound for your home theater system's rear surround speakers. Using this wireless system, you will experience movie theater quality sound in your own home using your current home theater surround system. We have designed this system for use with your surround sound home theater system to enhance the quality of the sound and balance coming from your speakers. You can now eliminate running long speaker wires through your rooms, while enhancing the sound coming from those speakers.

### How It Works

The transmitter converts the audio signal from your audio source into a 5.8GHz radio frequency and transmits it to the receiver. The receiver will pick up the best signal from one of its two antennas and convert the signal back to its original form. Using a powerful amplifier, the signal is passed to your connected rear surround speakers. The result is an enhanced sound quality resulting in a theater quality surround sound experience.

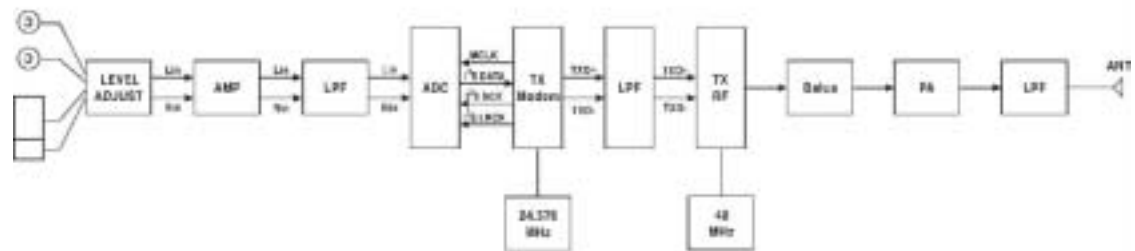
This system is compatible with most audio sources such as televisions, VCRs, stereo receivers/amplifiers, CD players, and personal stereos. This unit allows you to listen to wired speakers in any room in the house when a two-channel source is connected to the transmitter. The audio link system also tracks the volume setting of your audio source, so that when you increase or decrease the volume on the audio source,

the link's connected speakers respond accordingly.

Some of this system's other features include:

- 6 user-adjustable channels
- 2 diversity receiver antennas for optimal audio reception.
- Adjustable speaker and line level input control
- 256 option personal ID Code
- Ideal for Dolby 5.1 Digital, Pro Logic II, DTS, SCAD and DVD Audio Systems
- Provides digital transmission for superb audio clarity
- Immune to interference from microwave ovens and other popular 2.4GHz equipment
- Signal range of 30 feet

**TX BLOCK DIAGRAM**



**RX BLOCK DIAGRAM**

