

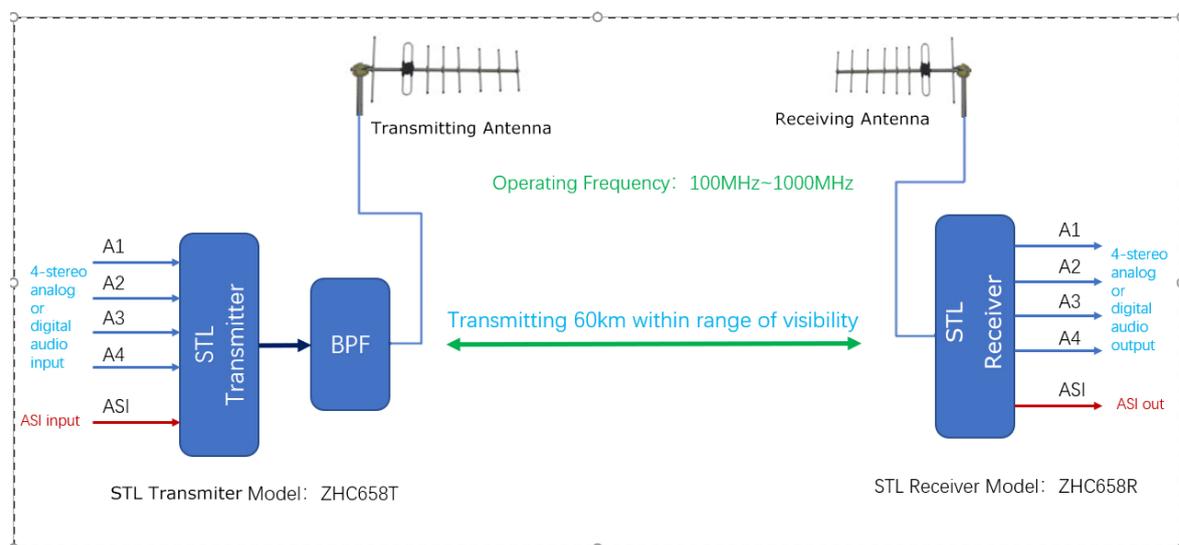
Digital STL Audio & Video Transmission System

1. Functional overview:

The digital STL audio and video transmission system device is a professional package that can transmit 4 stereo (or 8 mono) analog/digital audio signals and 1 digital video signal wirelessly from the studio to the transmitting station. The device uses state-of-the-art software-defined radio (SDR) technology, digital code modulation, digital demodulation and decoding to transmit and receive, enabling audio/video signals to be transmitted at very high quality and with virtually no damage.

A set of standard configuration STL system equipment has a transmission distance of 60 kilometers in line of sight. The transmission system consists of STL transmitter, transmission filter, transmitting antenna feeder, receiving antenna feeder and STL receiver.

The diagram as below:



2. Technical specifications:

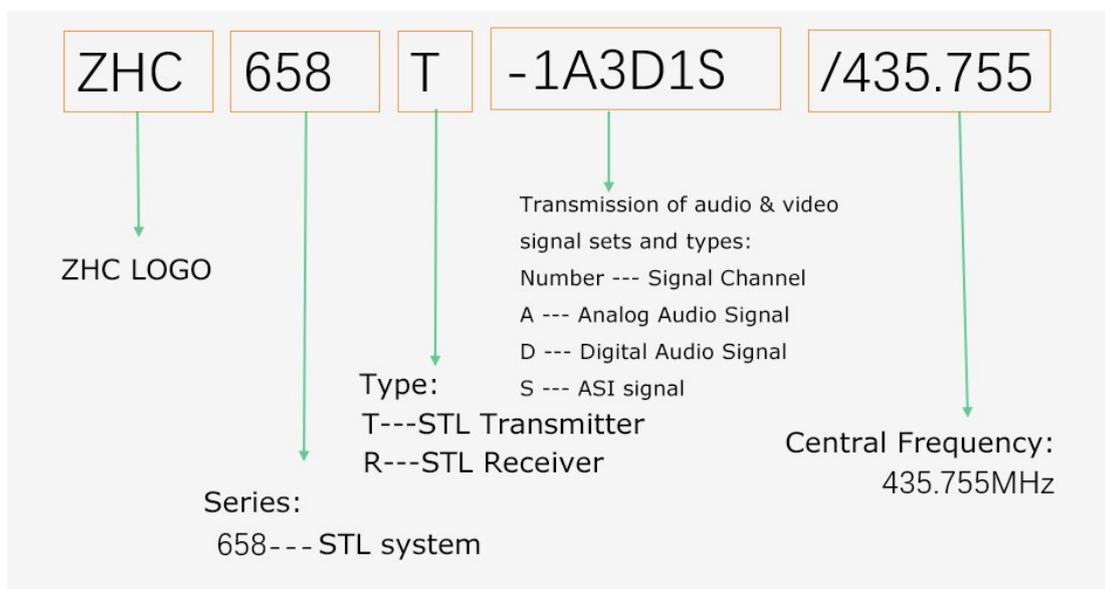
Item	Value
General Technical Specifications	
Working Frequency	100MHz~1000MHz, continuously adjustable, stepping amount 10KHz
Frequency stability	2ppm
Transmitting power	2W @ shoulder >45dB, out-of-band spurious <-80dBc

Modulation type	Stereo audio signal 32QAM@1M; ASI signal 15MBit/S@5M
Receive sensitivity	32 QAM/-78dBm @80dB S/N
Input/output audio signal	Analog audio signal or digital audio signal (AES/EBU)
Input/output video signal	ASI
Working temperature	-10°C ~+50°C
Audio Technical Specifications	
Signal to noise ratio	>85dB @1KHz,0dBm
Distortion	<0.05% @30Hz~15000Hz,0dBm
Audio frequency response	±0.1dB @30Hz~15000Hz,0dBm
Left and right channel separation	>80dB @30Hz~15000Hz,0dBm
Video Technical Specifications	
Band Shoulder	>50dB
MER	>45
Power Demand	
Power Supply Voltage	90~260VAC full range
Power Consumption	50W
Mechanical Dimensions	
Transmitter	19-inch standard chassis, height 2U
Receiver	19 inches, height 1U
Cooling system	forced air cooling, three anti-treatment
Noise	<50dB
Input & Output	
Audio Mono Analog Audio (MPX)	-15dBm~+15dm, 600Ω, XLR interface
Audio stereo dual channel	-15dBm~+15dm, 600Ω, XLR interface
Digital Audio AES/EBU	-39dBFS~0dBFS, 110Ω, XLR interface
Digital Video ASI	1Vp-p, BNC interface
RF input and output interface	N (Female)

3. Ordering information (please inform the **working frequency and transmission distance** when ordering):

1. The STL transmitter and the STL receiver are continuously adjustable for operating frequencies from 100 MHz to 1 GHz;
2. Select the center frequency of the output filter according to the operating frequency;
3. Select the transmit and receive antennas according to the operating frequency (the antenna working bandwidth is 20MHz);

4. Select the length of the transmit and receive cables according to the distance between the transmitter and receiver and the antenna;
5. Flexible selection of input and output audio signals based on actual needs is analog or digital.
6. The ordering description as follows:



For example:

ZHC658T-1A3D/345.895

STL Transmitter (Input Signal: 1way Analog Audio + 3way Digital Audio, Central Frequency 345.895MHz)

ZHC658T-2D1S/758.975

STL Receiver (Output Signal: 2way Digital Audio + 1way ASI, Central Frequency 758.875MHz)