WaveCAST® C

REAL-TIME AUDIO OVER WI-FI

WaveCAST T5C is a real-time audio over Wi-Fi platform designed for pro-audio applications where high-quality sound is required. The WaveCAST T5 supports Telnet commands via an Ethernet port enabling AV professionals to control and monitor Wi-Fi audio through the use of third-party room control systems.

Audio streams from the WaveCAST transmitter to an app on personal devices or to the WAV Pro Wi-Fi receiver.

The system is built on a hardware-based DSP audio system architecture, allowing system optimization to achieve the highest quality experience for the particular audio stream being delivered. Hearing assistance can be optimized for hearing loss, music can be optimized for high-fidelity playback, and voice can be set for maximum speech intelligibility. Custom pre-sets can also be established for specific performance applications.

Key Features

- AV Pros can control the WaveCAST C system via third-party room controls using Telnet commands via Ethernet. Commands include power, audio gain, channel selection, DSP preset, and more.
- Audio seamlessly streams over Wi-Fi to iOS and Android personal devices or Williams AV handheld receivers to a free WaveCAST app
- DSP-based system for maximum intelligibility and supports multicast network configurations

Applications

- Assistive Listening
- Language Interpretation
- Audio Description

Markets

- Houses of Worship
- Healthcare - medical centers/waiting rooms
- Gaming / Casinos
- Education - classrooms & lecture halls
- Entertainment - stadiums, theaters
- Transportation - airports, train stations

Learn More at bit.ly/wavecast-c

Product Specifications: WaveCAST C (T5C)

Dimensions	8.45" W x 8.25" D x 1.72"H (21.5 cm x 21 cm x 4.4 cm)
Weight	Transmitter: 3.2 lbs (1.45 kg)
Color	Black
Rack Mount	Standard 19" Rack, one EIA rack space high, 1/2 space wide 1–2 units can be mounted in a single rack space with optional RPK 005 (single) or RPK 006 (double) Rack Mount Kits
Power Supply	Desktop Style Transformer (TFP 062); Input: 100-240 VAC, 50/60 Hz. IEC Line Cord; Output: 24 VDC, 750 mA, 18W. 2.5mm ID center positive barrel connector
Power ON Indicator	Push On/Push Off latching power button with backlight. Green backlight indicates power ON, backlight off indicates power OFF.
Temperature Range	Operating: +32° F to +122° F (0° C to 50° C); Storage: -4° F to +158° F (-20° C to 70° C)
Ethernet	RJ-45 on the back of the unit supports CAT 5e cable lengths up to 328 feet (100 meters); 10/100 Base-T IEEE 802.3 compliant, unique MAC address. The RJ-45 jack is used for web interface and streaming audio out. An external Router/ DHCP Server is required to stream audio to receiving devices.
Dante	(1x) RJ-45 jack, only available on WF T5CD
User Interfaces	1. 3.12" High-Resolution OLED display with selections via buttons, 2. Hosted Web page, 3. Telnet commands over ethernet (see our "WaveCAST and FM+ Programmers Guide" for available commands and protocol).
Audio Section	
Audio Inputs	(1x) Combination 3-pin XLR, 1/4" (TRS) jack for balanced or unbalanced line level, or balanced or unbalanced microphone with selectable phantom power. Optional RJ-45 Dante Input ("D" models only).
Audio Processor Functions	DSP based; Compression: 1:1, 1.5:1 or 2:1; High-pass and Low-pass Filter Frequency control, Music, Voice, and Hearing Assistance Audio Presets
Frequency Response	31-16000 Hz, ±3 dB (re: 1 kHz) ("Music" Audio Preset)
Signal-to-Noise Ratio	64 dB (typical) Transmitted RF @ 1kHz
Total Harmonic Distortion	Less than 0.25% @ 1 kHz (RF output)
Common Mode Rejection	Greater than 57 dB @ 1 kHz, Mic or Line mode
Audio Input Gain Adjust	Adjustable from +24dB to -60 dB, in 1dB steps from front screen or web page

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Phantom Power	14.4 VDC applied through 2.2 kOhms resistors to analog combo jack: Pin 2 and Pin 3 on XLR jack, or tip and ring on 1/4" TRS jack
Audio Level Display	Front screen bar graph display, each segment representing 3dB. It ranges from -18 (1 segment lit) to +12dB (10 segments lit). Over-range warning is indicated by 'OLVD' and flashing empty bar.
Headphone Output	1/4" TRS stereo jack, mono signal, 7.8 mW total power with 33 Ω.
Dante Output	(1x) RJ-45 jack, only available on WF T5CD

Input Level (Bal or Unbal) (at Audio Input Gain = 0dB)	Nominal (@7th Segment Lit)	Overload Warning (Displayed on Screen)	Absolute Max. Rating*
Microphone	-45 dBV (5.6 mV RMS)	-20 dBV (100 mV RMS)	+20 dBV (10.0 V RMS)
Line	-8.4 dBV (380 mV RMS)	+16 dBV (6.5 V RMS)	+20 dBV (10.0 V RMS)

Approvals	FCC, RoHS3, WEEE, Industry Canada, CE, RCM
Warranty	2-year warranty against component failure and manufacturing defects. See the Full Warranty statement on the website for details.* Stresses above these ratings may cause permanent damage or degrade reliability.