



Cronus T24D

DIGITAL AUDIO PROCESSOR



Cronus T24D is a network audio processing platform designed for medium/large audio systems. The arriving of Cronus T24D will change the design and installation of the A/V system with a brand new network audio user experience. Cronus T24D has a flexible I/O design, supporting 6 I/O cards slot of 4 channels each with a total configurable 24 processed signals, fully matrix. Additionally, there is a build-in TZ-LINK cascade interface in the main enclosure, the end-user may use an optional Dante module with I/O interfaces or other outboard gears to make a more functional digital network audio system that meets with different demands.

Cronus T24D has an object-based drag & drop, user friendly and intuitive controllable software, which allows the user to design the signal flows and complete the system configuration, transmission, controlling, management and monitoring, that realises your designing ideas come true more easily. The software also provides users with logical controlling components, such as audio recording & playback. You can use these tools with other audio processing modules to make a new system. Moreover the software has a user interface tool, which suggests users the flexibility to customize the graphic control interface easily and quickly, set multi-users authority management. The software is possible to run on PC, on iPad or on a mobile phone. Future software updates will offer the system with more features and allow more TENDZONE devices available in the system, increasing the added value of the product.

A number of extensive controlling interfaces offer more control options. The two-way RS-232 port makes a third-party control interface available for the system. For example, the audio system can be managed with an AMX or a Crestron touch panel and other external devices. The master device can send control commands to other external devices such as video matrix, light modulator and CD/DVD player through programming. Cronus T24D has a 16-channels GPIO controlling port, which can receive external switching signal and specify some relative functions by programming. The users can also drive LED and electric relays by GPIO. In other words, it's the logical controlling feature between internal module and external devices. The RC port is capable of PoE powering, which can be connected with a TENDZONE RC panel that allows remote configuration and programming options.

Network Compatibility

Dante™ is an Ethernet-based digital audio network protocol with a full compatibility of IT devices. The end-users can set-up a digital audio network with the off-the-shelf IT devices. With Dante, you can transfer hundreds or even thousands channels of high quality audio signal thru a 100Mbps or 1Gbps Ethernet. The audio can be shared and processed with any manufacturer of Dante enabled device.

T24D can send or receive 64 x 64 channels of Dante audio with installed Dante Brooklyn II card, 250ms super low delay time.

Inspiration and Design

Cronus T24D is armed with 8 TI L138 high speed DSP processing unit. This unit has multiple audio processing and logical controlling modules and can almost meet all audio processing demands, offer users superb control abilities.

Flexible mixing and routing, capable of assigning any input signal to any output channel with full functions of equalization, compression, cross-over, delay, phase, limiting, auto-gain. The unique '3A' algorithm (AFC, AEC, ANC) helps you fulfill your originality.

1+1 Redundant Back-up

Cronus T24D has a 1+1 hot back-up design that ensures the system can be switched to the redundant back-up unit when the master device encounters a problem, and the master will take over the work when it recovers. This advanced feature has the capability to manage over all digital audio network products.

It has one AC power port and one 24VDC aux power port. If equipped with UPS, Cronus T24D will be with full reliability by forming a perfect back-up system.

Cronus Specifications

Processor	8pcs TI L138 3648MIPS/2746MFLOPSDSP
I/O	6 slots, 4 channels per slot, total of 24ch max
Network	128(Dante), 256(TZ-Link)
Sampling Rate	48 kHz/96 kHz optional
Bit Depth	24Bit
Frequency Response	20Hz-20kHz, ±0.5dB
Dynamic Range	> 114dB, A加权 (A Valued)
Channel isolation	> 108dB@1kHz, + 24dBu
Delay	<1ms, Input (Ana) to Output (Ana)
GPIO Analog control input	0-3.3VDC
GPIO Logical output	Active 0V, Non-active 5V
Max logical output external voltage	24 VDC
Max logical output external current	50 mA
Max logical output current	10 mA
RS 232 aux serial I/O	Baud rate: 38.4(default), 8 data bit, 1 stop bit, no o/e (parity) checking, no hardware control, only use pin 2, 3 and 5
RS-485 serial I/O	Baud rate: 38.4(default), 8 data bit, 1 stop bit, o/e (parity) checking, no hardware control
Ethernet cable	Standard CAT5, allow distance less than 100M
Dante cable	Standard CAT6, allow distance less than 100M
RC cable	Standard CAT5, distance depends on the number of devices
Max storage preset number	999

Rear panel



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