Ruby Series Digital Signal Processor T4

Ruby T4 Digital Signal Processor



RUBY T4 is a powerful digital signal processor which adopts 1.5 GHz quad-core CPU to provide perfect audio processing performance and meet diversified audio applications. It is built in web server which supports remote control and diagnosis, and supports mobile terminal control with IOS or Android operation system.

Features:

Excellent Processing Power

Employing quad core, advanced algorithm, and friendly software makes Ruby T series outstanding in audio processing.

Inputs & Outputs

12* balanced microphone /line input, with 48V phantom;

8* balanced line output;

Dante Channels

Supporting 16*16 Dante Channel

Cascading

Up to 4 Ruby T4 can be cascaded into a big one. Each one supports 16*16 Cascading audio transmission.

Independent AFC

AFC: Independent adaptive feedback cancellation for each channel, employing high-speed floating-point digital algorithm provides feedback suppression for each microphone to prevent the system from squealing;

4 Independent Auto Mixer Groups

AMG: Up to 4 group independent auto mixer, with threshold type and gain sharing type selectable, each group auto mixer can be configured with different mixing rules.

2*2 USB 2.0 Audio

USB2.0 audio interface, can transmit 2*2 channel USB audio, for USB debugging, VOIP conference or monitoring.

Up to 50*46 Full Function Matrix Mixing

Intuitive mixer, up to 50*46 mixer available for

single Ruby series DSP (Ruby T1: 28*28, Ruby T4: 50*46)

Video Tracking

Supporting video tracking camera

Zero Scene Recall Latency

Supporting up to 1000 presets management, supporting several devices configure preset and recall preset; the preset can be modularized and the sound will not be interrupt when recalling the preset.

Event Scheduling

Event scheduling: the event can be recalled via the schedule and trig the command to control the external equipment through GPIO or RS-232.

Unified Management

Up to 255 Ruby devices can be managed in the same software, making the management easy in a large venues which employing many Ruby devices

Other Features

Outstanding sound quality with 48 kHz sampling rate;

A variety of parameter equalization type, PEQ, High-Shelf, Low-Shelf, Notch, can be flexibly applied to variable occasions;

A variety of control methods

RS-232 port

GPIO port (both logical and voltage variables)
Supporting Tendzone RC panel:



Shenzhen Tendzone Intelligent Technology Co., Ltd.

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Ruby Series Digital Signal Processor T4

Specification

Item	Specification
Operation system	TDOS
Dante module	16*16
Analog inputs	12CHs balanced MIC / LINE in,48V phantom power
Input gain	OdB-60dB,6dB step
Analog outputs	8CHs balanced LINE out
Quantization bit	24bit
Sampling rate	48kHz
Frequency responding	20Hz-20kHz(±0.2dB)
Maximum input level	24dBu, balanced
Output level	24dBu, 18dBu, 12dBu, 6dBu, 0dBu, -31dBu
EIN	≤-125dBu
THD+NOISE	<0.006% @ 4dBu
Dynamic range $(20 \text{Hz} \sim 20 \text{kHz} @ 0 \text{dB gain})$	>108dB
Input impendence (balanced)	8ΚΩ
Output impendence (balanced)	200Ω
Input common-mode rejection@60Hz	85dB
Isolation@1kHz	105dB
Operation temperature	0°C-45°C
Power supply	100-240VAC±10% 50Hz/60Hz
Dimensions (H*W*L)	44mm×484mm×280mm

REAR PANEL



