MC² AUDIO

Ti Series
Integrated Audio Management

Ti1048

Empowered By
iCORE

Offering full matrix mixing and a palette of EQ functions to satisfy even the most demanding application, the Ti1048 doesn't compromise your processing.

24-bit high end converters, coupled with a 96k sample rate ensure a bandwidth in excess of 30kHz and a dynamic range of over 112dB.

A brand new software package, iCore, has been developed to work alongside all Ti Series components (amplifiers, breakout boxes, processors) and provides a centralised point for all control and monitoring. Via either the front USB or an RS485 link, the Ti1048 is entirely configured under iCore.

XTA's world class limiters, offering unrivalled transparency (even when being driven hard) give peace of mind when configuring a system to "set and forget", guaranteeing it will always sounds its best and be safe.

Set-up of timed preset recalls, along with full real time monitoring and control offer complete peace of mind. Then just unplug the USB and you're good to go!

Main Specifications

Inputs: 4 Electronically Balanced; **Input CMRR:** >65dB, 50Hz – 10kHz **Max Input Level:** +22dBu
Outputs: 8 Electronically Balanced; **Source Impedance:** <60 ohms; **Max Output Level:** +20dBm (600 ohms)
Frequency Response: 20Hz to 20kHz (+0dB / -0.5dB), -3dB @ 32kHz
Dynamic Range: >112dB, 20Hz – 20kHz unweighted
Latency (analogue in to out): 1.5mS
Power Requirements: 60 to 250V +15% @ 50/60Hz, <30W
Dimensions: 1U rack space – (mm)44(h) x 482(w) x 300(d)
        Boxed (shipping size – UK)230 x 580 x 560 (Single boxed)
        Boxed (shipping size – all except UK)250 x 610 x 600 (Double boxed)
Weight: 3.3kg, Boxed (shipping weight) 4.7kg

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Additional Specifications

Gain Ranges: +6dB to -40dB in 0.1dB steps (Input); +15db to -40dB in 0.1dB steps (Output)
        +6dB to -40dB in 0.1dB steps plus mute (Matrix)
Parametric Filter Suite: 8 bands per input, 9 Bands per output
        Filter Gain: +15dB to -30dB in 0.1dB steps
        Freq. Range: 19.7Hz – 32kHz in 1/36 octave steps
        Filter 'Q'/Bandwidth: 0.4 to 128 / 2.5 to 0.008
        Switched to shelving response LF: 19.2|Hz to 1kHz; HF: 1kHz to 32kHz
        Additional filter types: High/Low Variable "Q" (resonant), High/Low Pass Elliptical,
                Band Pass, Notch, Phase, All Pass, High/Low Shelving
Crossover Filters: High Pass: 10Hz to 16kHz, Low Pass: 35Hz to 22kHz, in 1/36 octave steps
        Responses: 1st order 6dB/oct; Bessel/Butterworth/Linkwitx-Riley 12-24dB/oct.
                Bessel/Butterworth 18dB/oct.

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5 Year Warranty

Additional Specifications

Maximum Delay Setting: 650mS (Input to Output), Minimum step size 0.3uS
Program Limiter: Threshold +22dBu to -10dBu; Attack Time 0.3mSto 90mS; Release Time 2/4/8/16/32x Atk*
**"D-Max" Clip Limiter:** Attack Time ~60uS; Release Time Slow/Medium/Fast*

Real Time Clock and Calendar: Updated automatically when synced with PC
User Memories and Timers: Up to 20 user memories; Up to 10 Timer Recalls

GPI Recalls: Simple (one recall per input); Complex (up to 16 recalls - binary encoded); Wall Panel Mode**

*Limiter attack and release times can be set to automatically track the high pass filter
on each output channel (recommended).
**For use with MC2 preset recall wall panel only
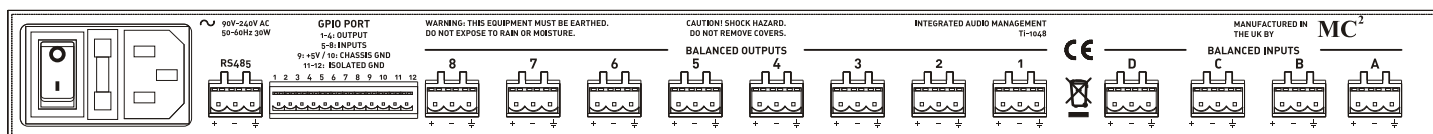
Controls, Indicators & Connectors

Front Panel: Input metering: 5 point LED db from clip; Output metering 5 point LED dB from limit
USB comms for direct connection to PC - also relays comms onto RS485 bus
Preset up/down and OK(recall) buttons - also used for menu navigation
Direct access buttons for Comms, GPI and System settings
2 x 16 backlit LCD for clock/calendar and preset information

Rear Panel: All audio inputs(4) and outputs(8): 3-way Phoenix connectors*
RS485 comms network connection: 3-way Pheonix
GPI port: 12-way mini-Phoenix connector
Power: Standard 3-pin IEC switched mains inlet

*Electronically balanced

Architect's and Engineer's Specification

The digital processor shall provide 4 inputs,and 8 outputs. It shall provide four into eight channels of matrix mixing, with each input channel including 8 bands of parametric EQ, all with adjustable response types. Each output channel shall provide high and low pass filters, 9 bands of parametric EQ (with adjustable response types), a program limiter ad a clip limiter.
There shall be up to 650mS of delay available on each output, in 300nS increments. Any output may be fed from a mix of any of the four inputs with variable matrix mixing for the relative levels of the four inputs.

Headroom metering shall be available for inputs and outputs.. Parameter information shall be shown on an LCD display. Only basic set-up of interface options and preset recalls shall be available from the front panel, and this may be locked out either completely or allowing preset recalls only. A additional security lockout facility shall be provided to limit remote access, augmented by full remote control from a PC via USB, or RS485.

The unit shall offer front panel recall of up to 20 memories, up to 16 of which are also available via closed contact GPI recall interface. A real time clock and calendar will also allow for automatic recalls on either a one-shot or repeated weekly basis.

The audio processing shall meet or exceed the following specifications:- Frequency Response +-0.5dB 20Hz - 20kHz (-3db @ 32kHz). Dynamic Range > 112dB 20Hz - 20kHz unw.

Inputs and outputs shall be via "Phoenix" connectors and be electronically balanced. GPI connections shall be via "Phoenix" mini-connector strip. The digital audio processor shall be a 1U, 19" rack mount device capable of operating from a 60V AC - 240V AC 50/60Hz supply. The digital audio processor shall be the MC2 Audio model Ti1048.