

## **IAMP DSP SERIES**

**DSP Power Amplifiers** 

**iAMP 3020 DSP I iAMP 4020 DSP** 

### **iAMP 3020 DSP**

3000 Watt Digital Amplifier

## **iAMP 4020 DSP**

4000 Watt Digital Amplifier



#### **Features**

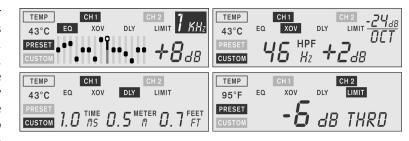
- ▶ High power output into stable 2 ohm loads for flexible operation
- ▶ Internal DSP offering variable crossover, speaker alignment delay, limiter and parametric EQ
- ▶ Selectable high-pass filters help to reduce distortion and protect speakers
- ▶ Delicate switchable filter specially tailored for Subwoofer usage
- ▶ Signal THRU/OUT modes for further expanding your system
- ▶ Fast-recovery design yields lower distortion if clipping occurs
- ▶ Variable-speed cooling fans keep the system running smoothly
- ▶ Protection circuitry prevents damage from short circuits, overheating, subsonic noise, RF interference, and output DC offset
- ▶ Power on/off muting protects speakers from sharp pops and spikes when turned on and off
- ▶ Detent level controls allow you to dial in precise volume settings
- ▶ Front-panel LED indicators and LCD display for viewing DSP status
- ▶ High-responsive switching power supply provide high power with low noise and huge weight reduction
- ▶ 2RU-height and shortened back case design fits into any standard equipment rack

#### Description

Phonic iAMP DSP power amplfiiers offer digital amplification at its finest, providing 1500 to 2000 Watts of sheer power per channel into loads as low as 2 ohms. The high-speed, high resolution class D circuitry works with the sturdy yet low-weight construction to create an amplifier strong enough for permanent installations yet light enough for portable sound purposes. An internal DSP offers quality digital processing on all input signals, incorporating a crossover for flexible 2-way operation, adjustable delay for alignment of speakers, adjustable peak limiter for better protection of speakers and circuitry, and parametric equalizers for contouring of your signal. Input to the iAMP is flexible, accepting both XLR and balanced 1/4" phone jack inputs via onboard combo jacks. Speakon jacks are provided for output to speakers.

#### **Digital Signal Processor**

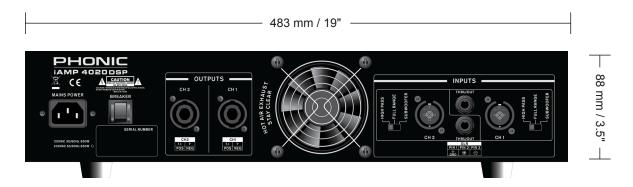
Phonic's iAMP 3020 DSP and iAMP4020 DSP offer onboard controls and LCD display that allow users to adjust all paramters of onboard signal processors. Three control buttons are available in total: Set/Enter, Prev/Up, and Next/Down. Users are able to utilize the DSP's graphic equalizers, crossovers, variable delay and limiter. A number of presets are also available to streamline initial setup. The DSP processor also provides increased system protection and gives real-time updates on activation of protection circuitry.



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# DSP Power Amplifiers



### **Specifications**

|                                | iAMP 3020 DSP  | iAMP 4020 DSP        |
|--------------------------------|--|----------------------|
| 1KHz, 0.5% THD                 | Continuous Output Per Channel  |                      |
| Output Power 8 ohms            | 600W   | 680W                 |
| Output Power 4 ohms            | 1000W  | 1200W                |
| Output Power 2 ohms            | 1500W  | 2000W                |
| Input Sensitivity              | 0.775 volts +/- 3% for 1 kHz 4 ohm rated power, $0.68$ volts +/- 3% for 1 kHz. 2 ohm rated power |                      |
| Input Connector                | One Combo Jack (XLR+1/4" TRS) per channel  |                      |
| Signal Through Out             | One 1/4" phone jack per channel  |                      |
| Frequency Response             | 10Hz – 50KHz   |                      |
| Speaker Output                 | One Speakon connector per channel  |                      |
| Built-in Filters               | High-Pass, Sub-woofer, switchable  |                      |
| Digital Signal Processor       | Crossover, Delay, Limiter, PEQ (all variable)  |                      |
| EQ                             | 15 band, +12dB, 25Hz to 16kHz  |                      |
| Crossover                      | HPF, LPF, 4-Type: -6,-12,-18,-24dB/oct   |                      |
| Delay                          | 0ms to 680ms   |                      |
| Limiter                        | 0dB to -50dB (Threshold)   |                      |
| S/N Ratio (20 Hz – 20 KHz)     | > 105dB A-Weighted   |                      |
| THD @ 1 kHz (10% Rated Output) | Less than 0.1%   |                      |
| Damping Factor (8 ohms)        | >225:1 - 1 kHz at 8 ohms   |                      |
| Slew Rate                      | > 12V/µs   |                      |
| Input CMRR                     | > -76 dB @ 1 kHz   |                      |
| Protection Circuitry           | Multiple Protection designs against DC bias, thermal fault, load mismatch, etc.                  |                      |
| Power Consumption              | 1500W 2Ω LOAD STEREO   | 3000W 2Ω LOAD STEREO |
| Dimensions (WxHxD)             | 483 x 88 x 415 mm (19" x 3.5" x 16.3")   |                      |
| Weight                         | 6.8 kg (14.9 lbs)  | <10 kg               |

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