# ATA-2031 High Voltage Amplifier

- Single Channel
- Maximum Output Voltage: 300 Vp-p (±150 Vp)
- Maximum Output Current: 120mAp
- Bandwidth (-3dB): DC~500kHz
- Slew Rate: ⩾334 V/μs

## INTRODUCTION

The ATA-2031 is an ideal single-channel high-voltage amplifier capable of amplifying both AC and DC signals. It delivers a maximum output of 300 Vp-p (±150 Vp), suitable for driving high-voltage loads. The digitally adjustable voltage gain allows precise tuning, with one-click saving of common settings, offering a simple and user-friendly operation. It is compatible with mainstream signal generators for seamless signal amplification.

## LCD PANEL DISPLAY

The LCD panel display dynamically shows the device status and parameters, offering a clear and intuitive interface.

## VOLTAGE GAIN

The voltage gain is digitally adjustable from 0~50x, with two modes: coarse adjustment (1 step) and fine adjustment (0.1 step). Combined with the LCD panel display, it enables quick and precise adjustment to the desired voltage value.

## INPUT

The input uses a BNC interface with selectable impedance of 50Ω or 5kΩ, perfectly matching both high and low impedance signal sources.

## OUTPUT

The output uses banana sockets, with a maximum output voltage of 300 Vp-p (±150 Vp) and a maximum output current of 120 mAp.

## MONITORING PORTS

10mV/V Monitor: This port voltage is 1/100 of the output port voltage. The monitoring port uses a BNC connector and can be directly connected to an oscilloscope for real-time monitoring of the output voltage.

10V/A Monitor: The monitoring port voltage is 10 times the output current. The monitoring port uses a BNC connector and can be directly connected to an oscilloscope for real-time monitoring of the output current.

## Specifications

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|---|---|
| Model | ATA-2031 |
| Number of Channel | 1 |
| Output Type | Single-ended Output |
| Bandwidth (-3 dB) | DC~500kHz |
| Maximum Output Voltage | 300Vp-p (±150Vp) |
| Maximum Output Current | 60mAp (DC~50Hz)  120mAp (＞50Hz) |
| Maximum Output Power | 18Wp |
| Voltage Gain | x0~50 (0.1step/1step) |
| Load RL Upper Limit | ≥ 2.45kΩ (DC~50Hz)  ≥ 1.2kΩ (＞50Hz) |
| Output Impedance | 50Ω/2.5kΩ |
| Slew Rate | ≥ 334V/μs |
| Input Impedance | 50Ω / 5kΩ |
| Input Amplitude | 0~10 Vp-p MAX |
| Output Voltage Error | ≤ ±3% FS @ 1 kHz |
| Voltage Monitoring | 10mV/V(±5%@Output,FS) |
| Current Monitoring | 10V/A(±5%@Output,FS) |
| Total Harmonic Distortion (THD) | ≤ 0.1%@1kHz, 100Vp-p |
| Output Voltage Drift | ≤ ±0.3V |
| Signal-to-Noise Ratio | ≥ 80dB |
| Output Interface | 4mm Banana socket |
| Fuse | 2A/250V |
| Protection | Over Current Protection |
| Signal Ground | Connected to chassis and power line ground |

## Others

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|---|---|
| Power Supply Voltage | AC220V±10%, 50Hz |
| Operating Temperature | 0℃ ~ 45℃ |
| Storage Temperature | -20℃ ~ 50℃ |
| Working Humidity | ≤ 80% RH, non-condensing |
| Warranty | 1 year |
| Dimensions | 366*164*369mm (W*H*D) |

## Ordering Information

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|---|---|
| Model | ATA-2031 Single Channel High Voltage Amplifier |
| Accessories | Power cable*1, BNC cable*3, red-black output cable*1 set, USB cable*1, fuse*1, user manual, usage guide, product qualification certificate, calibration certificate, and packing list (one copy each). |
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