

## ATA-214 High Voltage Amplifier

- Single Channel
- Maximum Output Voltage: 400 Vp-p ( $\pm 200$  Vp)
- Maximum Output Current: 300mA<sub>p</sub>
- Bandwidth (-3dB): DC~500kHz
- Slew Rate:  $\geq 444.3$  V/ $\mu$ s



### INTRODUCTION

The ATA-214 is an ideal single-channel high-voltage amplifier capable of amplifying both AC and DC signals. It delivers a maximum output of 400 Vp-p ( $\pm 200$  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 0~100x, 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 50 $\Omega$  or 5k $\Omega$ , perfectly matching both high and low impedance signal sources.

### OUTPUT

The output uses banana sockets, with a maximum output voltage of 400 Vp-p ( $\pm 200$  Vp) and a maximum output current of 300 mA<sub>p</sub>.

### 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

|                                 |                                                              |
|---------------------------------|--------------------------------------------------------------|
| Model                           | ATA-214                                                      |
| Number of Channel               | 1                                                            |
| Output Type                     | Single-ended Output                                          |
| Bandwidth (-3 dB)               | DC~500kHz                                                    |
| Maximum Output Voltage          | 400Vp-p ( $\pm 200$ Vp)                                      |
| Maximum Output Current          | 150mA <sub>p</sub> (DC~50Hz) 300mA <sub>p</sub> ( $> 50$ Hz) |
| Maximum Output Power            | 60Wp                                                         |
| Voltage Gain                    | x0~100 (0.1step/1step)                                       |
| Load RL Upper Limit             | $\geq 1323\Omega$ (DC~50Hz) $\geq 657\Omega$ ( $> 50$ Hz)    |
| Output Impedance                | 10 $\Omega$ /2.5k $\Omega$                                   |
| Slew Rate                       | $\geq 445$ V/ $\mu$ s                                        |
| Input Impedance                 | 50 $\Omega$ / 5k $\Omega$                                    |
| Input Amplitude                 | 0~10 Vp-p MAX                                                |
| Output Voltage Error            | $\leq \pm 3\%$ FS @ 1 kHz                                    |
| Voltage Monitoring              | 10mV/V( $\pm 5\%$ @Output,FS)                                |
| Current Monitoring              | 10V/A( $\pm 5\%$ @Output,FS)                                 |
| Total Harmonic Distortion (THD) | $\leq 0.1\%$ @1kHz, 100Vp-p                                  |
| Output Voltage Drift            | $\leq \pm 0.3$ V                                             |
| Signal-to-Noise Ratio           | $\geq 80$ dB                                                 |
| Output Interface                | 4mm Banana socket                                            |
| Fuse                            | 2A/250V                                                      |
| Protection                      | Over Current Protection                                      |
| Signal Ground                   | Connected to chassis and power line ground                   |

## Others

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

## Ordering Information

|             |                                                                                                                                                                                                        |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Model       | ATA-214 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). |
| Contact Us  | +86-29-88865020                                                                                                                                                                                        |