# Analog Amplifier AM6504 Product Details and Specifications 


#### Abstract

Bertec's amplifiers are designed for use with our line of force plates and force transducers. Their solid construction will handle the rigors of any application as our products are used internationally in research, clinical, and industrial facilities. The AM6504 amplifier has a digital input and provides an analog output with selectable gains to offer flexibility with a simplified setup.


## Design

The AM6504 amplifier uses the digital input to produce an analog output. The gain of the analog output is user selectable, and has four different settings (1,2,5,10). Gain selection switches are provided in the top panel. The digital input is a female 9-pin D-Sub connector; whereas, the analog output is a female 15 -pin D-Sub connector (see pin assignment). The six output channels provide an analog signal in the range of $\pm 5 \mathrm{~V}$ or $\pm 10 \mathrm{~V}$. Six analog scale factors are provided with the force plate to convert the analog signals to force and moment units. The auto zero button is utilized to remove tare load offset for each channel output. The main power input is a universal input with the range $100-250 \mathrm{~V}, 50-60 \mathrm{~Hz}$.

Note: The analog outputs provide calibrated full-scale outputs per rated load range of each channel of the attached transducer. For example: If the transducer has a $\pm 1000 \mathrm{~N}$ load range in the Fz channel, the -5.00 V output on the Fz will correspond to a -1000 N load and +5.00 V corresponds to +1000 N .

## Unique Features

- Crosstalk-free calibrated outputs
- 6 channels of $+/-5 \mathrm{~V}$ OR +/- 10 V analog output
- Mains powers 100-250V. $50-60 \mathrm{~Hz}$
- 30ppm accurate digital gain ratios and 50ppm accurate analog output autozero


## Gain Switch Settings



Front Panel


| CH1 : Pin 3 | CH5 : Pin 7 |
| :--- | :--- |
| CH2 : Pin 4 | CH6 : Pin 8 |
| CH3 : Pin 5 |  |
| Auto Zero : Pin 9 |  |
| CH4 : Pin 6 |  |
| GRND : Pin 10 |  |

