



# Analogue Amplifier System

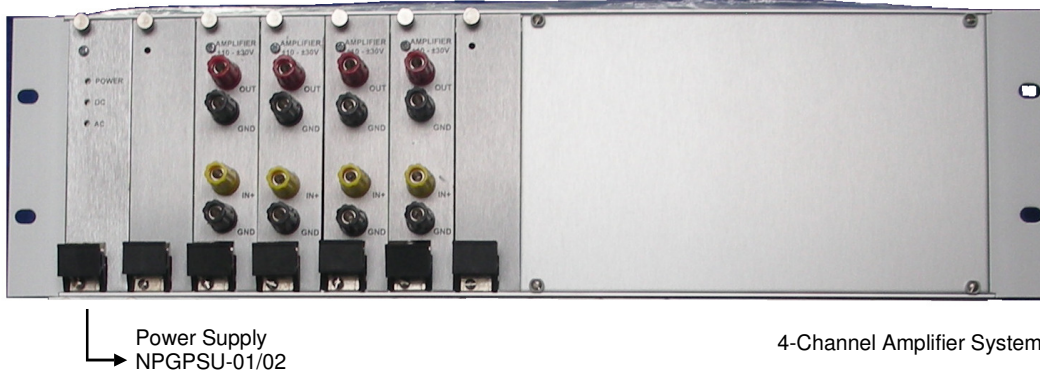
## Part Number - AMP-8-3U

### Universal Analogue Output Amplifier System

#### Introduction

The **AMP-8-3U** is a general purpose analogue amplifier system designed for use with the NetPod 4004 series data acquisition instrument. The NPAO16-1030 supports 8 independently-configurable amplifier cards in a standard 3U x 84HP rack. There are a range of amplifier cards offering gains from 3 to 60. The AMP-8-3U is used to alter the analogue output signal ranges from the NetPod 4004 analogue output cards. Currently the maximum output range available using the AMP-8-3U amplifier and the NetPod 4004 is +/- 600V.

**Important Note:** When using the AMP-8-3U amplifier system make sure the mounting screws for each card are correctly terminated in order to guarantee an electrical earth connection to the main instrument chassis. The Earth connection is essential for safety when operating with high voltages. Do not use this system if the mounting screws are not fitted amplifier cards.



4-Channel Amplifier System

**Important Notice - Do not handle this system if any parts or hands are wet**

**This system has to be earthed for reliable and safe operation**



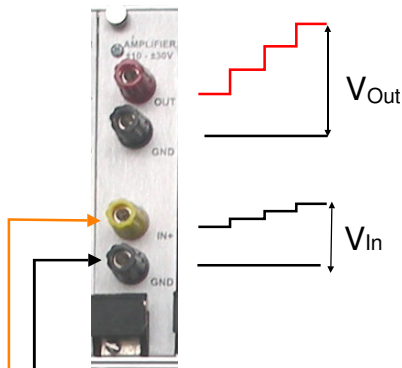
**Power Supply:**  
230V AC mains standard - others on request  
Power supply module: NPGPSU-02 standard

**Amplifier Cards:**  
Amplifier cards < 1 W Typical Power  
Low voltage cards < 50V use 4 mm pitch test terminals  
High voltage 7 mm pitch connector

Customised cards available upon request.

#### Amplifier Installation Wiring Diagram

#### Recommend Signal Installation Guide:



1. When installing any signal cabling to the AMP-8-3U system, do this with the mains power switched off to prevent any damage due to short circuits.

All the amplifiers contain short circuit protection, but prolonged use in this condition can cause permanent damage to the cards and will breach the warranty conditions.

#### Part Number:

<b>AMP-19/30-1</b>	30 V P-P amplifier card
<b>AMP-19/50-1</b>	50 V P-P amplifier card
<b>AMP-19/100-1</b>	100 V P-P amplifier card
<b>AMP-19/600-1</b>	600 V P-P amplifier card

Other ranges upon request

#### Isolation & Protection:

Each amplifier card is isolated from the back plane to a level 1000V DC.

Short circuit protection is 5 mins.

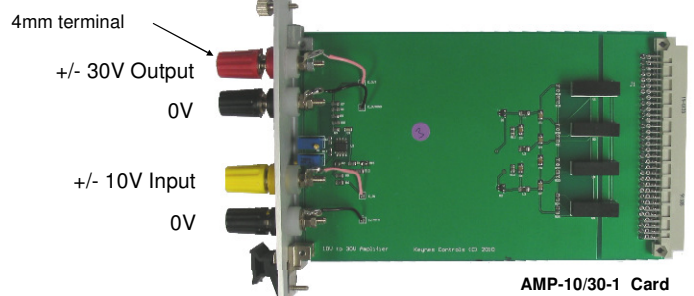
#### Amplifier Signal Connection

The image above demonstrates how the analogue output signal from the NetPod 4004 card is connected to the amplifier card used within the AMP-8-3U.

Simply connect the + Output of the NetPod 4004 to the IN+ channel of the amplifier.

Connect the 0V Reference as shown

Any adjustment on the input signal will be mirrored with amplification on the **OUT** terminals.



AMP-10/30-1 Card

NetPod 4004 Analogue Output Card

The amplifier card shown above is for a low voltage AMP-10/30-1 card. Keynotes Controls reserve the right to make changes without notice. Different amplifier cards use different input connectors depending upon operational voltages.