

Fully Conditioned Analog Output

Note: Before beginning these instructions, complete the *Quick Start Guide (Gen 5 or OPTIMA)*

Configure the 'Fully Conditioned' analog mode in NetForce

- Double click NetForce to run.
- Select **'Setup'** then **'Hardware Installation'**, and click on **'Modify'** to open the **'AMTI System Configuration'** window.
- Under **'Global Settings'**, and **'Digital Outputs'** select the appropriate units.
NOTE: When integrating with a 3rd party system, determine if it is expecting metric or English units and choose accordingly (for Nexus choose English units, for Cortex or QTM choose metric).
- Set **'Analog Outputs'** to **'Fully Conditioned'**. Press **'Apply'** and **'Save'**.
- Under the list of **'Installed Amplifiers'** click on the **'Configure'** button for the amplifier of interest. This will open the **'Amplifier Configuration SN:XXXX'** window (see image below).
- The gain and excitation should have been selected already, if not return to step 6 of the *Quick Start Guide* (OPTIMA or Gen 5 version, as applicable).
- Once the Gain and Excitation are set, click the **'Analog Adjust'** button. This will set the **'Analog Scale Factor'** such that the **'Analog Outputs'** for each channel match the **'Amplifier Range'** (see image below). This ensures that the +/-5V output of the amplifier corresponds to the working range of the system (defined by the gain settings).
NOTE: If your version of NetForce does not have an **'Analog Adjust'** button simply enter values for the **'Analog Sensitivities'** and press apply. Adjust the values you enter until the **'Analog Outputs'** are similar to the **'Amplifier Range'**
- Record the values for the **'Analog Scale Factor'**/**'Analog Sensitivities'** for each channel. These are used to convert voltages to forces and moments in the 3rd party software. You will simply divide the voltage (in mV) by the **'Analog Scale Factor'**/**'Analog Sensitivity'** for that channel.
- Click **'OK'**, then in the **'AMTI System Configuration'** window be SURE to press **'Save'**.

