9 Software Parameters

The following chapter details the names and functions of the parameters used by the software for the NetPod instrumentation. The system parameters are described in two parts, global and channel. Global parameters are those that are stored within the main processor board. They contain manufacture, warranty and parameters that describe instrument operations. Channel parameters, are those that describe the setup and operation of a particular analogue input module. Just like the global parameters they are retained even if the channel is removed, stored or moved to another instrument.

9.1 Global Configuration Parameters

The following page details the global User Defined parameters that can be assigned by an operator to assist in the control and configuration of the control units for project specific tasks. Some of the parameters you can adjust when you configure the instrument. Others are set on manufacture and are used to assist us to provide technical support.

The following details are assigned via the EDIT POD menu. See *Assigning Pod System Information* for further instructions on how to apply parameters.

FACTORY SPECIFIED MANUFACTURE DETAILS

I.D	Pod Instrument Identification number.
Part No	DSP mother board part number. Used to indicate PCB version and firmware level.
Serial No	Pod serial number. Used to identify the client details.
Manufacture Date	Date on which instrument was shipped for operations.
ADC Type	Details the resolution of the ADC system installed in the instrument.
Ethernet Address	Default Ethernet network address assigned at manufacture time.

CONFIGURATION DETAILS

Name.	User specified instrument identifier. Used to identify instrument location or source of data.
IP Address	User specified IP address. Used to identify instruments on a local area network.
Sample Rate	Global instrument sampling rate. Sets sample rate for acquisition.
Packet Size	Data block packet size. Used to adjust packet rates sent down the network. Used to optimize data transmission rates for local area network operations.
Comments. (Box)	Area for user defined comments and reports. Maximum length 1024 characters.
Digital Button	Used to define status of the digital I/O interface for a specified POD.
Default Button.	Used to set the default status of the digital I/O interface.
OK Button.	Used to assigns new configuration parameters or control operations.
Cancel Button.	Used to reset all recent configuration details. Prevents new user parameters from being assigned to an instrument.

9.2 Analogue Channel Parameters

Each of the configuration settings shown below are stored directly within each channel using the onboard EEPROM.

The following details are configured at the time of manufacture. No parameter contained within the "Factory Configured Details" list can be adjusted by the operator. Information is used to confirm warranty information.

FACTORY CONFIGURED DETAILS

Channel.	Is the position within the instrument where the interface is installed. See layout for more details.
Part No.	Part number associated with the analogue interface.
Description.	Details the operations of the specified analogue interface.
Serial Number.	System management information. Reference for client - distributor application.
Manufacture date.	Record of manufacture date.

The following section details the user configurable channel parameters.

CONFIGURATION

Name.	User definable channel name. Use this parameters to identify source of input data.
Gain.	Gain setting for channel pre-amp. Range is sample rate limited.
Range.	Shows the direct analogue input signal range.
Noise.	Shows the expected noise level for a set sample rate and pre-amp gain configuration.
Calibration.	Insert linear calibration details for specified channel. Offset and gain settings only.

The processing section provides the user with a simple pull down menu system which is used to assign the type of sensor attached to a specified analogue input channel.

Processing

Setup. Assign sensor type and operating characteristics.
OK Button. Select this button to confirm the selection of the new configuration details.
Cancel Button. Select this button to cancel any modifications made to the configuration details.

Confirm Menu

Yes Select this button to store new configuration details to EEPROM.
No Select this button to reject any changes to the config details stored within the channel EEPROM. Note. This is same effect as pressing cancel button mentioned above.