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Kvaser Canbus User Manual

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# Installation

**NOTE:**Before using the Kvaser Canbus Driver, you must install the Kvaser Leaf Light HS drivers for Windows.

Download and install the latest version available from [**www.kvaser.com**](http://www.kvaser.com)at the following link:

<http://www.kvaser.com/index.php?option=com_php&Itemid=288&lang=&swprod=96510632fb7f0328b5b664767ac44121&ean=7330130002418>

# Configuration

The first time the system is configured it is necessary to enable and configure all devices you require. To configure a particular device select the ***Devices*** option from the main menu followed by the Lakeshore device. This will launch an application to configure the device.

From the list provided select a channel and double-click. Alternatively you can select a channel and then click on the Configure Channel button. 

This will launch a channel configuration dialog which enables you to configure individual channels.



# Advanced Device Configuration



## AutoEnable Device

To ensure that the device is enabled on the system check the Enable Device box.

## Scan Rate

To set the rate at which the device will scan, edit the text boxes associated with the Scan Rate field.

## Save Outputs

To enable this utility check the Save Outputs flag. All values in output channels are saved to disk when the system is disabled. The next time the system is restarted the values which were previously in output channels will be restored to the appropriate channel number.

### By Tag

Channel values can be saved and restored to channels using the channel tag instead of the channel number. In this way, channels can be rearranged within the modules and as long as the channel tags remain the same, the correct channel values will be restored to the appropriate channel number.

## Device Specific Button

When the Device Specific Button is pressed the following dialog appears to allow specific communication settings to be configured for the device.



### CAN Channel

Selects the CAN board and channel. The channels are listed as *interface type channel number on board.*

### Exclusive

Check this box to ensure that ScadaPro has exclusive access to the CAN channel.

### No Init Access

Check this box to remove init access from the channel, meaning that it will not try to (nor is it allowed to) change the prevailing bit rate on the physical channel.

### Bus Speed

Selects the speed in bits per second on the CAN bus.

### Import IMC

Import CAN Channel configuration from an excel spreadsheet.

# Analog Input Channel Configuration

When the user selects an analog input to be configured the following is displayed.



## Enable Channel

The Enable Channel check box must be checked to enable and allow a channel to be configured and ultimately included with all other configured channels in the overall system.

## Tag

The Tag field is a 12 character alphanumeric field that can contain channel information or wiring schedule references.

## Description

The Description field is a 32 character alphanumeric field in which a description of the channel can be detailed.

## Engineering Units

Specifies engineering details for this channel.

Minimum

Minimum engineering value for all Analog channels in addition to the unit field. The default is 0.

Maximum

Maximum engineering value for all Analog channels in addition to the unit field. The default is 100.

Descriptor

Describe the units of the measurement.

## Device Specific Button

When the Device Specific Button is pressed the following dialog appears to allow specific device configuration of the particular channel.



### CAN Identifier (decimal)

This is the ID of the CAN Message in decimal.

### Expiration (ms)

If no message is received after expiration time the value is set to error.

### Type

#### Value

Value from data in CAN Message.

#### Count

Count of the number of CAN messages with ID.

### Data Type

Choose from UNSIGNED INTEGER, SIGN INTEGER, 4 BYTE FLOAT, 8 BYTE DOUBLE

### Bit Offset

Offset in bits, from the beginning of the message data.

### Length in Bits

Length in bit of the data in the message.

### Little Endian/Intel Format (LSB First)

Byte in reverse order.