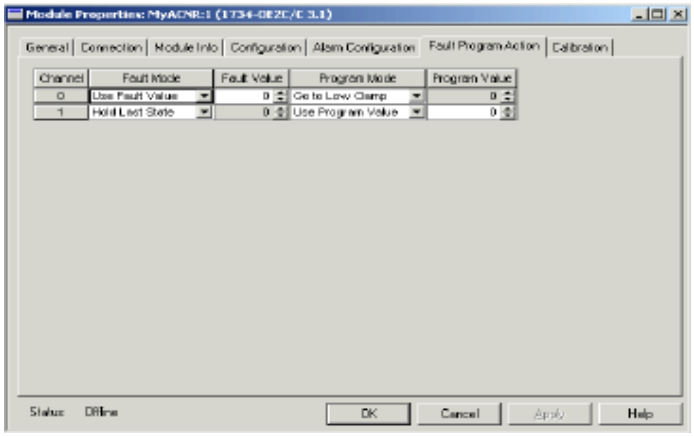
You see a Fault/Program Action dialog.



2. From the Fault/Program Action dialog, complete items, referring to the table.

For This Value	Select	Comments
Fault Mode	Hold Last State Go to Low Clamp Go to High Clamp Use Program Value	Default is Go to Low Clamp.
Fault Value	-32768…32767	Default is 0.
Program Mode	Hold Last State Go to Low Clamp Go to High Clamp Use Program Value	Default is Go to Low Clamp.
Program Value	-32768…32767	Default is 0.

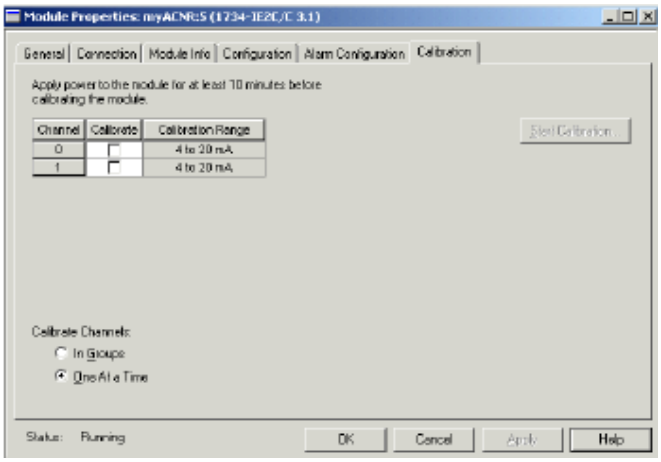
3. From the bottom of the dialog, perform one of the following:
   - Click another tab at the top of the dialog.
     or
   - Click OK to save changes and close the dialog.
     or
   - Click Cancel to return to default values.
     or
   - Click Apply to save changes you made on any of the dialogs and continue to display the dialog, noting that you enable the Apply button when you make changes to any of the dialogs

Work with the Calibration Dialog

To complete entries on this dialog, proceed as follows. Perform calibration in Hard Run or Remote mode. For information about the tools and steps for calibration, refer to the Calibrating Your Analog Module section of this manual.

1. From the General dialog, click Calibration.

You see the Calibration dialog for a current or voltage output module, depending on the module type.



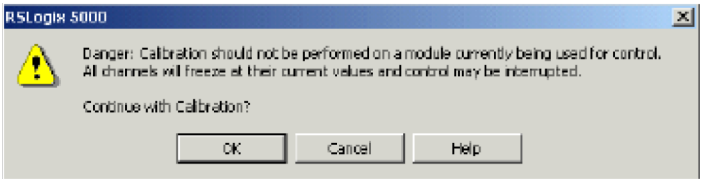
2. From the Calibration dialog, click one of these:

- In Groups
- One At a Time

3. From the Calibration dialog, check the Calibrate checkbox to specify which channel to calibrate.
4. From the Calibration dialog, click Start Calibration, which is active when:
   - the system is online, and
   - you selected at least one of the channels.

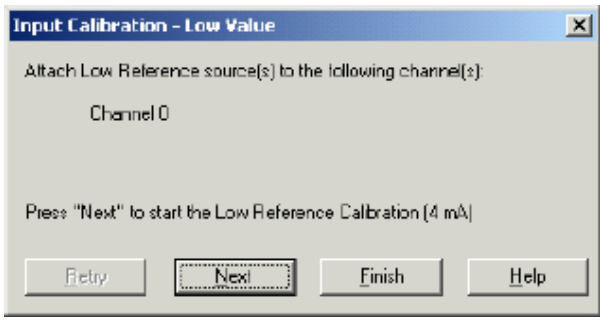
   Note that when you press the F1 button on your keyboard or click Help from the wizards and warning messages that appear during calibration you get detailed information about related procedures.

   You see a Danger dialog.



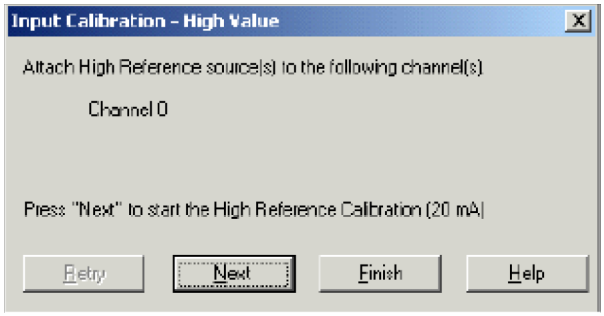
5. From the Danger dialog, for a module not currently used for control, click OK.

You see a Low Value dialog.

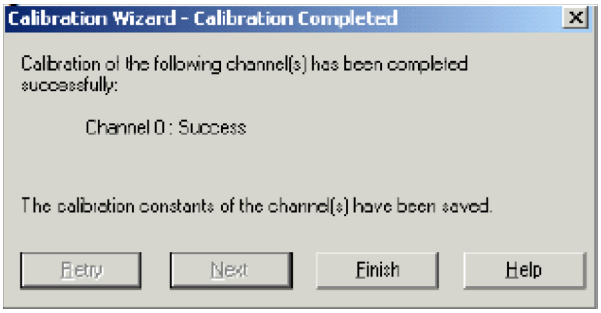


6. From the Low Value dialog, follow the instructions you see and click Next.

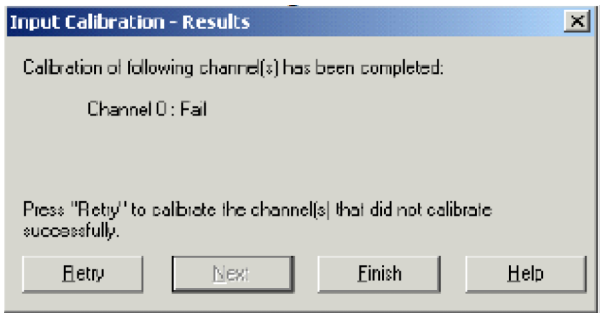
   You see the High Value dialog.



7. From the High Value dialog, follow the instructions you see and click Next to start calibration.
8. If calibration completes successfully, you see the Calibration Completed dialog.



If calibration fails, the Results dialog shows a failed calibration.



9. If calibration is successful, click Finish; otherwise, from the Results dialog, click Retry to calibrate the channel that did not calibrate successfully and repeat the process until calibration is successful.
10. Repeat calibration for each channel, if applicable.

Notes:

Configure POINT I/O Modules for DeviceNet Networks

About This Appendix

Read this appendix to learn how to configure POINT I/O modules in a DeviceNet network. If you are using a ControlNet, EtherNet/IP, or PROFIBUS network, refer to the appropriate manual.

- POINT I/O ControlNet Adapter User Manual, publication 1734-UM008
- POINT I/O EtherNet/IP Adapter User Manual, publication 1734-UM011
- POINT I/O PROFIBUS Adapter Module User Manual, publication 1734-UM005

Configuring POINT I/O Modules

To configure POINT I/O modules, use RSNetWorx software to identify the network and configure the I/O modules with electronic data sheet (EDS) files. To obtain EDS files for use in configuration, go to http://www.ab.com/networks/eds.

Commissioning a Node

Methods for commissioning nodes are the following:

- RSNetWorx commissioning pull-down
- Sequential Auto Addressing feature
- Third-party configuration software

Using the RSNetWorx Commissioning Tool

The RSNetWorx commissioning tool lets you commission devices (set the node address and the data rate parameters) that are either connected to a DeviceNet network or connected via a point-to-point connection.

The node commissioning tool works through RSLinx software; RSNetWorx software does not have to be online when performing the operation.

Before you can add any device to a DeviceNet network, you must commission it. This means you must program into the device a node address and data rate. Some devices are precommissioned, meaning a node address (usually set to 63) and a data rate (usually set to 125 Kbps) are programmed into the device at the factory prior to shipment. You need to commission other devices in the field. Once a

device has been commissioned and attached to a network, you can use the RSNetWorx for DeviceNet node commissioning tool to edit the node address and data rate that were set previously.

Exercise caution while editing node addresses when on a network. When you apply a new node address, it immediately overwrites the node address data in the device currently specified. If you decide to reassign node addresses, you should first determine the order in which this needs to be done so that all the devices still have unique node addresses when you finish.

For example, if two of the devices on your network are a photoelectric sensor and a hand controller and you accidentally change the node address of the hand controller to be the same as that of the photoelectric sensor, then the photoelectric sensor no longer has a unique address. This means it is not able to provide data to the scanner. If you cannot access a device, because you have used its node address for another device, you have to remove it from the network, recommission it, then reinstall it on the network.

ATTENTION: Do not change the data rate of devices while they are connected to a network. Erratic operation may result. We recommend that if you need to change the data rate of a device, you should remove it from the network, establish a point-to-point connection between the PC, which hosts the RSNetWorx for DeviceNet software, and the target device, recommission it, and then, reconnect it to the network.

Use Sequential Auto Addressing

Sequential Auto Addressing (SAA) reassigns the node address of every module to the right of the one you select on the POINTBus network. Each module changes its node address to one greater than its neighbor.

IMPORTANT Make sure the node address of the selected module is the desired value before issuing the SAA command.

When this command is set, each module to the right gets a new address one greater than its neighbor. The addressing ripples through a line of POINT I/O modules, assigning a node number to each module installed in a mounting base on the same POINTBus network.

Follow these steps to Auto Address a line of POINT I/O modules.

1. Set the address of the first module you want to address.
2. Set the Auto Address command to Sequential Address.

   All modules in line reset with new sequential addresses.

For example, assume you have five POINT I/O modules in a line, and the address of the first module is 10. After the Sequential Address command is sent to the first module, the node address of the line is 10, 11, 12, 13, and 14.

Using Third-party Configuration Software

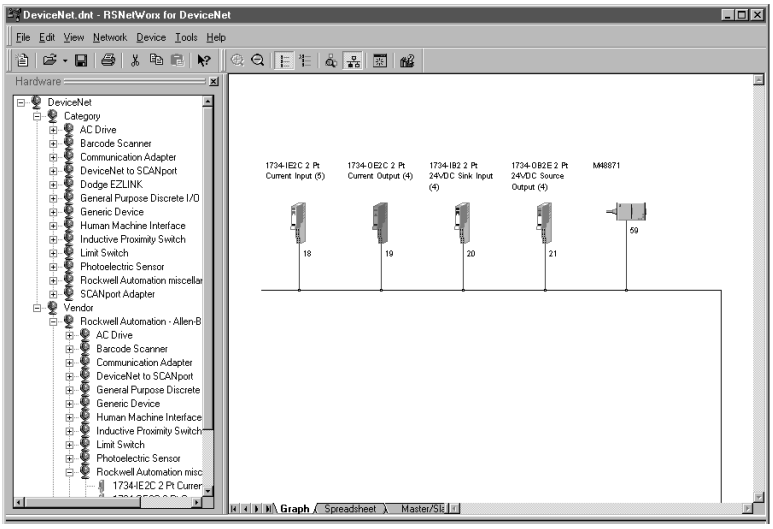
When using third-party configuration software, load the EDS files into the software and follow the designers instructions.

Configure Digital Modules Using RSNetWorx Software

To configure digital input modules, proceed as follows, noting that input modules use dialogs similar to the one for the 1734-IB4 modules used in this procedure.

1. Open your RSNetWorx for DeviceNet software.
2. Using the selections on the left, construct your system.

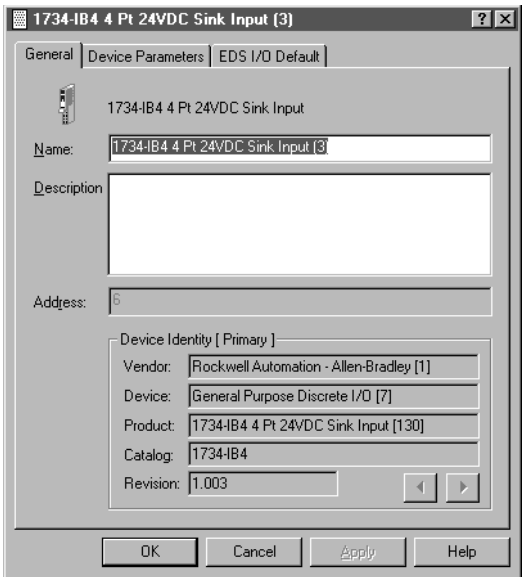
   If your network is up, click Browse.



3. After setting up your system, double-click the module you want to configure.

   If you are online, upload the configuration.

A dialog similar to the following appears.



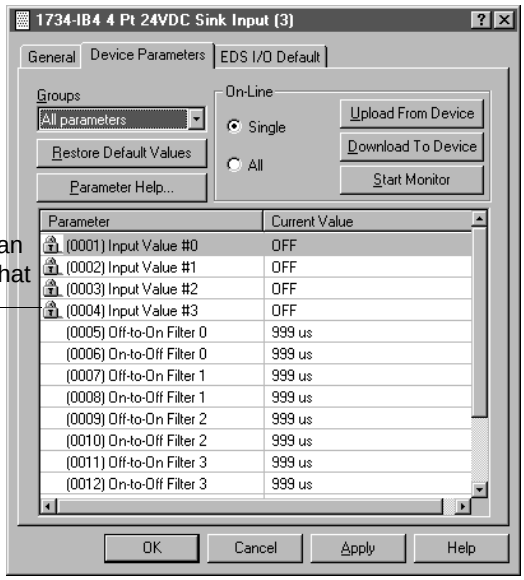
4. Click the Device Parameters tab to get to the dialog for setting the parameters.

Configure Input Modules

See the figure for a Device Parameters dialog for a 1734-IB4 input module example. All digital input modules have parameters similar to this example.

On this dialog, you see all the parameters for the module. These include filters, autobaud, sequential addressing, and communication rate(if not using autobaud).

If you see a lock next to an entry, you can't change that parameter.

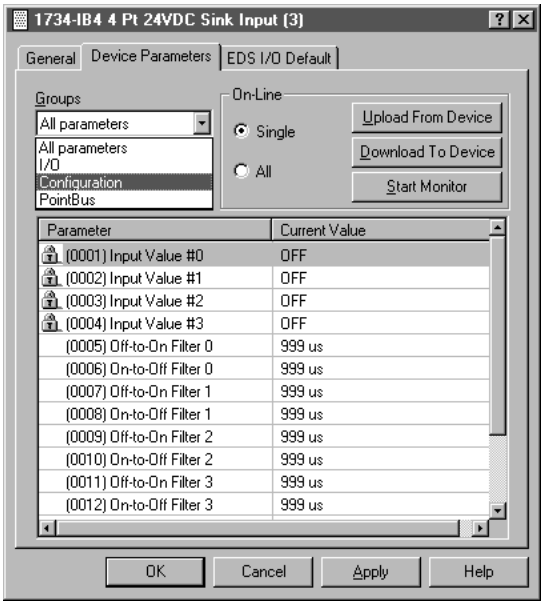


The Group's pull-down includes the following:

- All parameters
- I/O
- Configure
- POINTBus

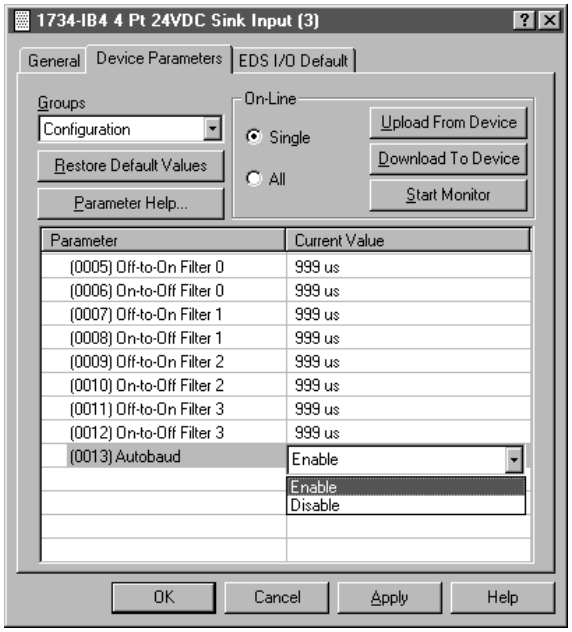
To complete entries from the Device Parameters dialog, use this procedure.

1. From the General Parameters dialog, at the groups list Select Configuration and the parameters you want.
2. From the Device Parameters dialog, select Single and change or configure parameters one at a time, or select All to change all selections at once.

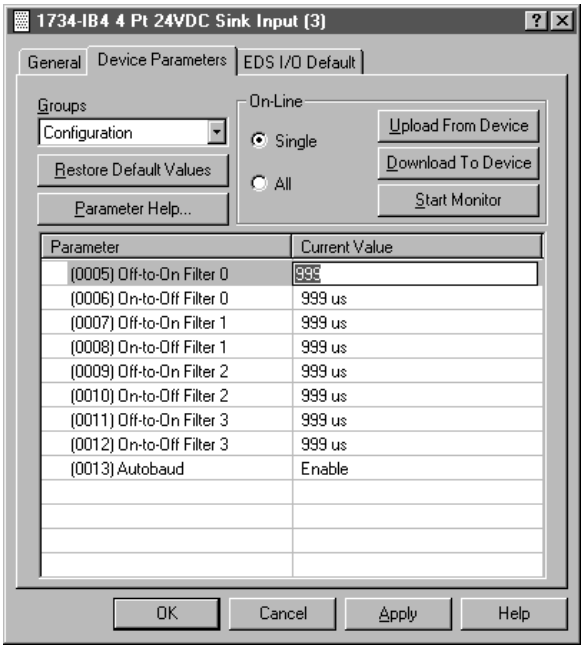


Note that if autobaud is selected, the communication rate of this module automatically matches the communication rate of the existing devices on

the network, and you are prevented from selecting a specific communication rate.



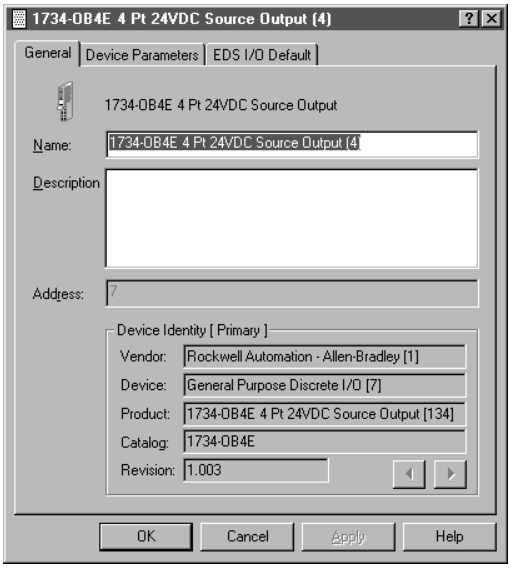
3. From the Device Parameters dialog, select the filter of your choice by selecting and typing in the filter time, noting that each input channel can have its own time selection.
4. From the Device Parameters dialog, click Download to Device.



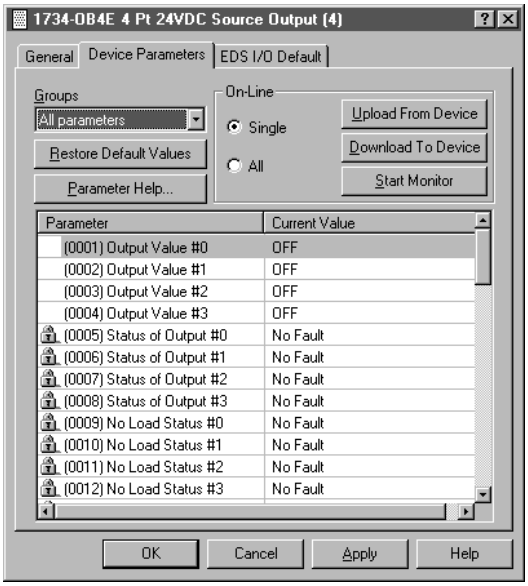
Configure Output Modules

To configure output modules, follow this procedure. Output modules use dialogs similar to the one for the 1734-OB4E output module used in this procedure.

1. From the General Parameters dialog, click Device Parameters to get the dialog for setting parameters.



2. From the Device Parameters dialog, set parameters for the module to include sequential addressing and autobaud or, if not using autobaud, communication rate.

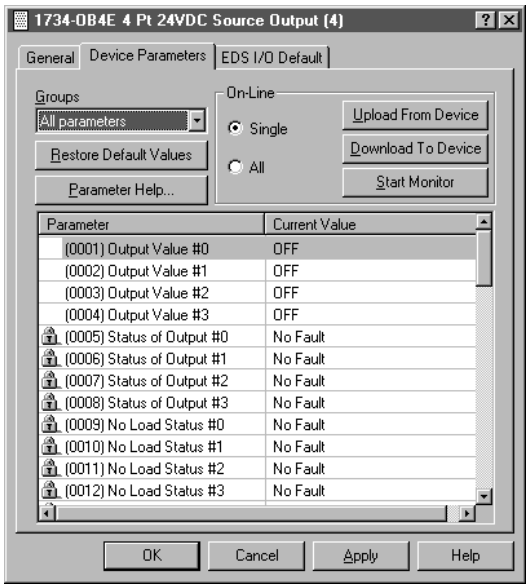


The Group's pull-down menu includes the following:

- All parameters
- I/O output value

- I/O output status
- Reset services
- POINTBus
- Configuration

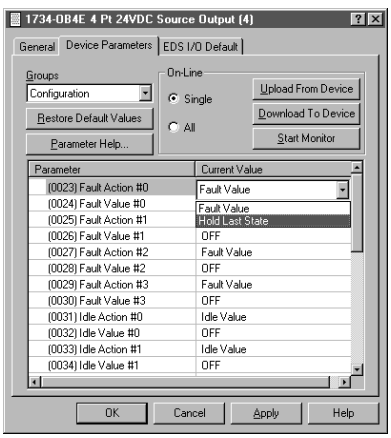
3. At the Groups pull-down menu, select Configuration and the parameters you want.

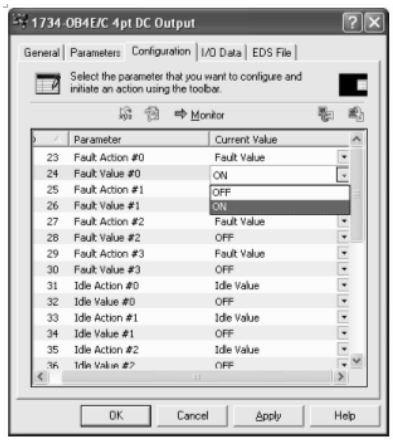


4. Select Single to change or configure parameters one at a time, or All to change all selections at once, noting that configurable parameters include the following:
   - Fault Value - Off/on
   - Fault Action - Fault value/hold last state
   - Idle Value - Off/on
   - Idle Action - Idle value/hold last state
   - Enable no load - No load enabled/no load disabled
   - Reset mode - Latch off/auto restart
   - Autobaud - Enable/disable

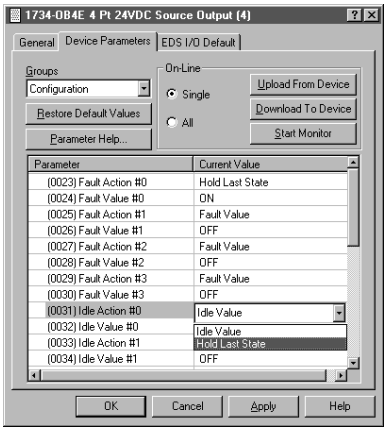
   Note that if autobaud is selected, the communication rate of this module automatically matches the communication rate of the existing devices on the network and you are locked out from selecting a communication rate.

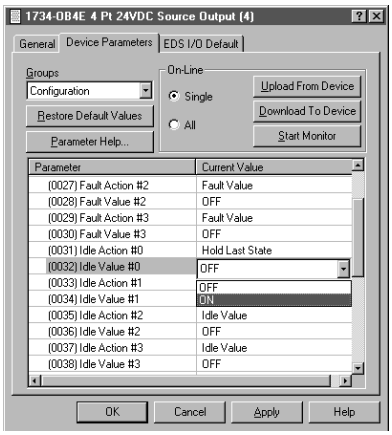
See the figures for dialogs for selecting Fault Action and Fault Value.



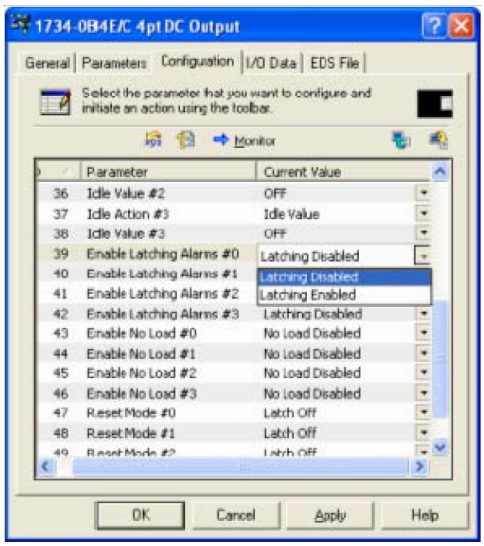


See the figure for a dialog for selecting Idle Action and Idle Value.

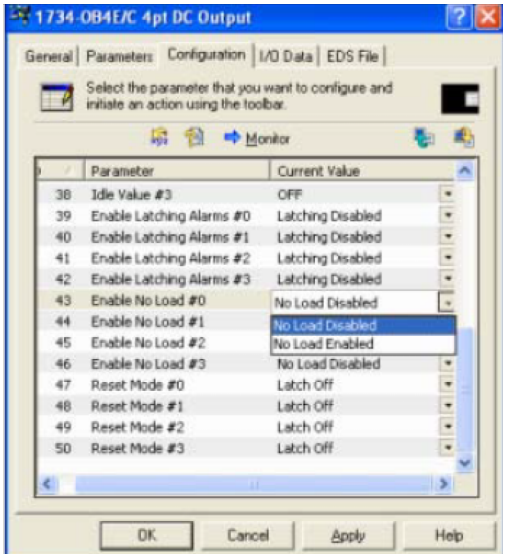




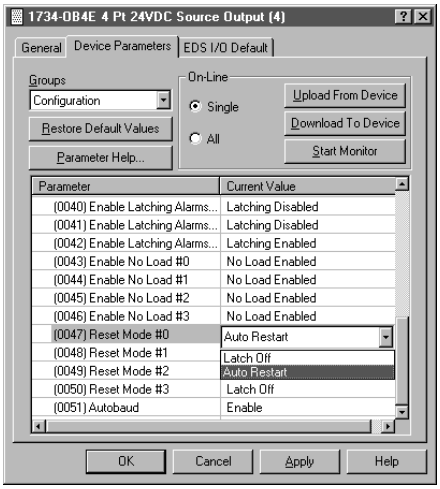
See the figure for a dialog for Latching Alarms parameter select.



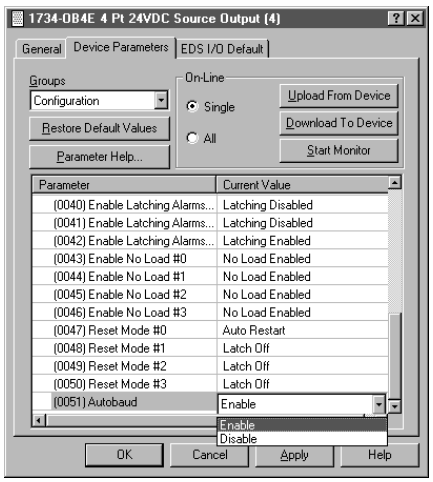
See the figure for a dialog for selecting Enable No Load.



See the figure for a dialog for selecting Reset Mode.



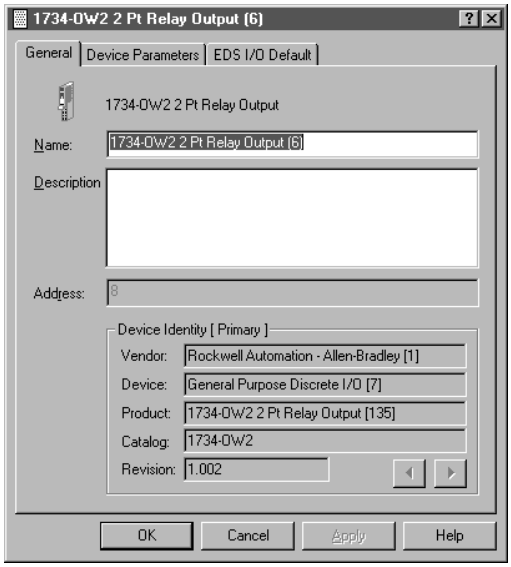
See the figure for a dialog for selecting autobaud.



5. From the Device Parameters dialog, click Download to Device.

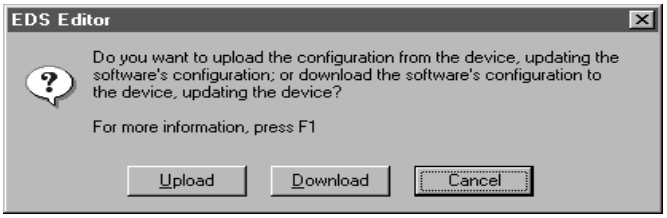
To configure the 1734-OW2 relay output module, use this procedure.

1. From the General dialog, click Device Parameters to get the dialog for setting parameters.

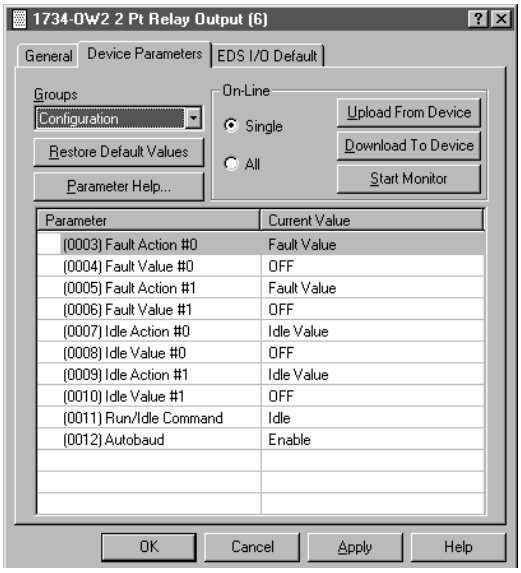


You see the EDS Editor.

2. From the EDS Editor, click Upload to load the latest information.



3. From the Device Parameters dialog, click Configuration to set the parameters for the module to include sequential addressing and autobaud, or, if not using autobaud, the communication rate.



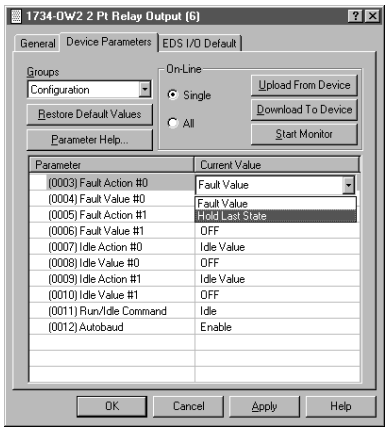
The Groups pull-down menu includes the following:

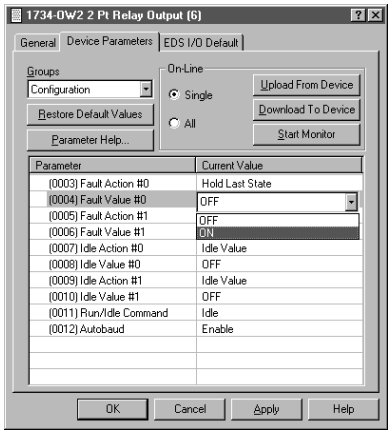
- All parameters
- I/O
- POINTBus
- Configuration - Select to set the paramters

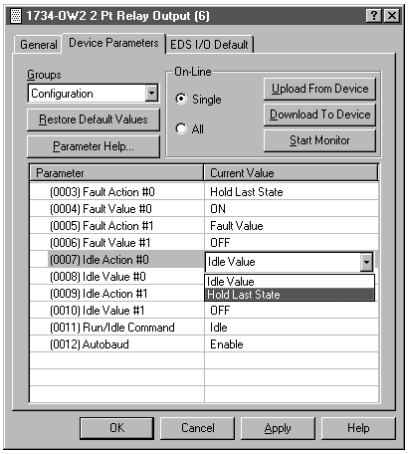
Note that configurable parameters include the following:

- Fault Action - Fault value/Hold Last State
- Fault Value - Off/On
- Idle Action - Idle value/Hold Last State
- Idle Value - Off/On
- Run/Idle Command - Idle/Run

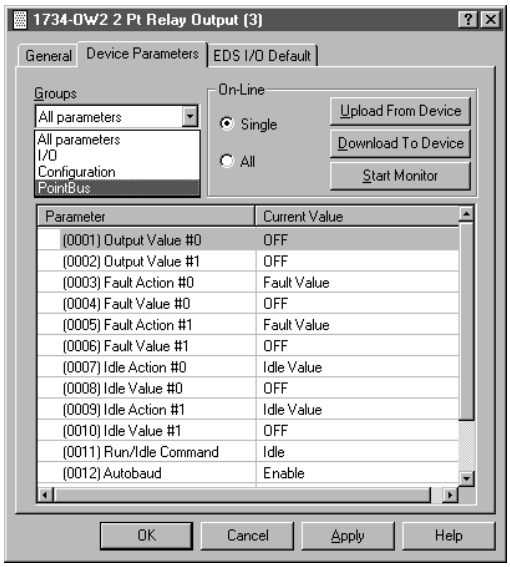
- Autobaud - Enable/Disable





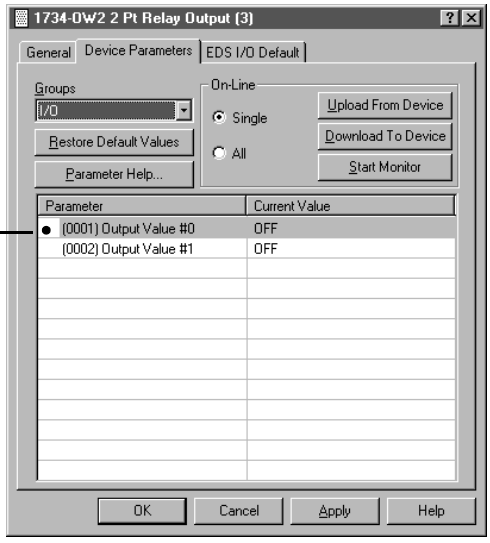


4. From the Device Parameters dialog, at Groups select All parameters to display each item and POINTBus to display only the run/idle command and autobaud.



5. From the Device Parameters dialog, to monitor the output, click Start Monitor, noting the following:
   - The output value is displayed for each scan.
   - Click All to scan all values.
   - The Start Monitor button turns to Stop Monitor during monitoring.
   - Click Stop Monitor to stop monitoring the selected parameters.
   - Identify monitoring by a ball appearing momentarily next to the selected item during each scan.

Monitoring is identified by the ball appearing momentarily next to the selected item during each scan.



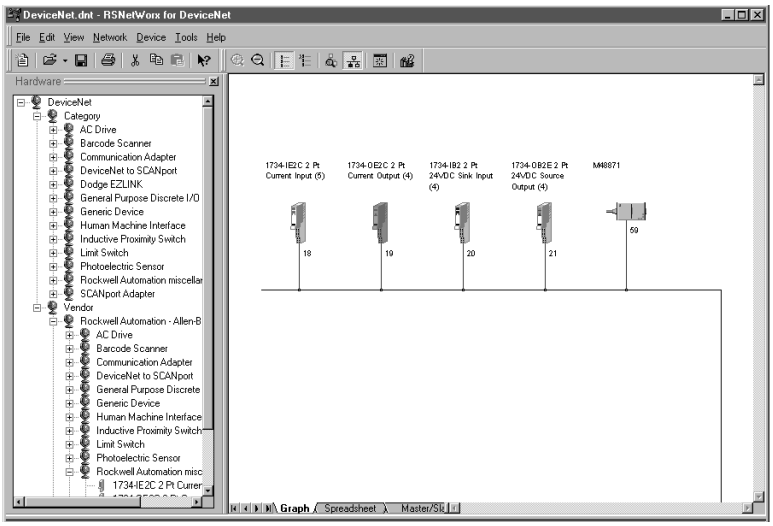
Configure Analog Modules Using RSNetWorx Software

Read this for a description of how to configure any analog module. The 1734-IE2C and 1734-OE2C modules in this procedure are representative of input and output analog modules. The actual dialogs for your particular module may not be identical to the ones shown here. To configure analog input modules, proceed as follows.

1. Open your RSNetWorx for DeviceNet software.

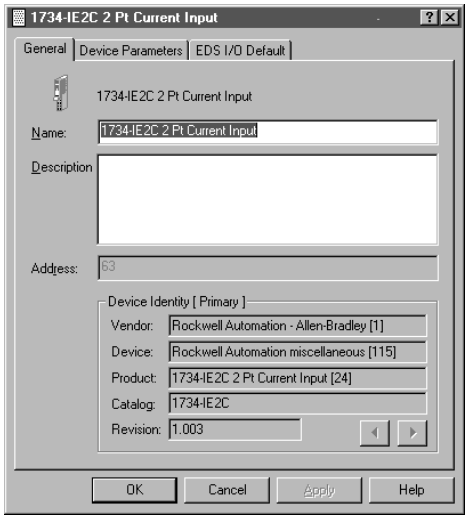
   You see the RSNetWorx for DeviceNet dialog.

2. From the RSNetworx for DeviceNet dialog, use the selections in the window on the left construct your system, or if your network is up, click Browse.



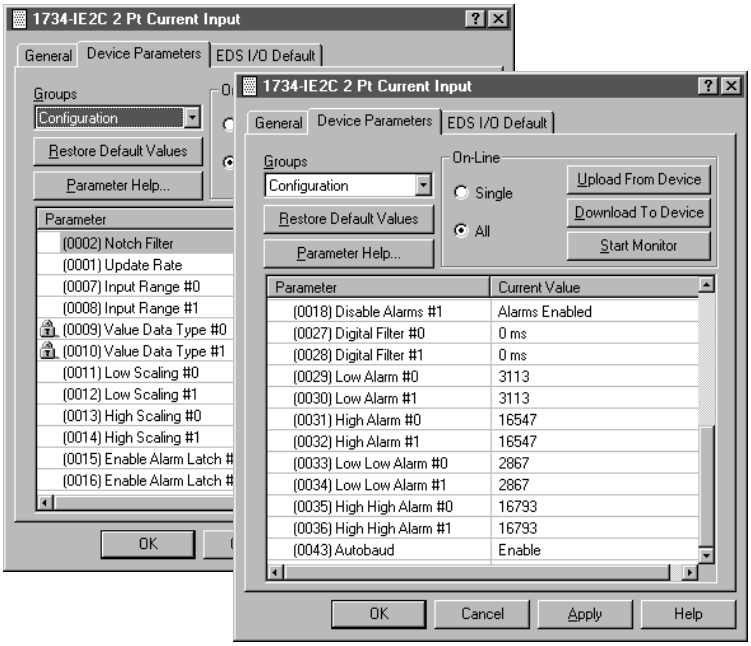
3. Double-click the graphic for the desired module to display the General dialog.

4. From the General dialog, click Device Parameters to see the dialog for setting parameters.



An EDS Editor dialog appears.

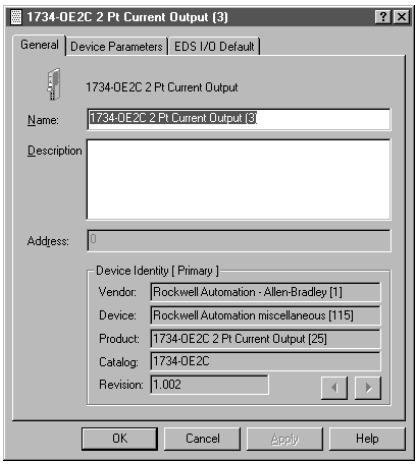
5. From the EDS Editor dialog, click Upload to upload existing parameters from the device.
6. From the Device Parameters dialog, at the Groups list select Configuration to select parameters.
7. Select Single to change or configure parameters one at a time or All to change all selections at once.
8. Change the configuration, or apply the uploaded parameters, noting that to change the parameters you must downlown to the device.



To configure the analog output module, use this procedure.

1. Double-click the icon.

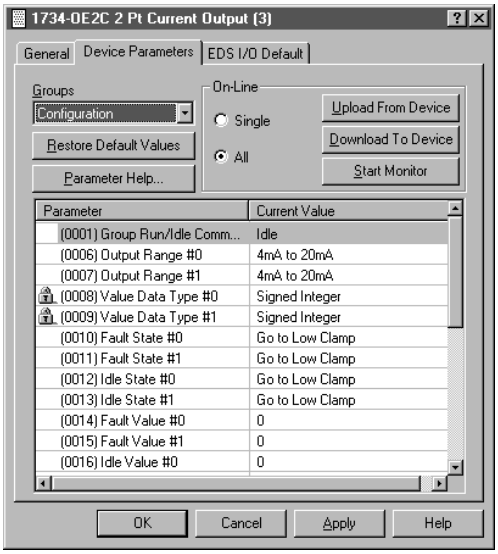
   The General dialog appears.



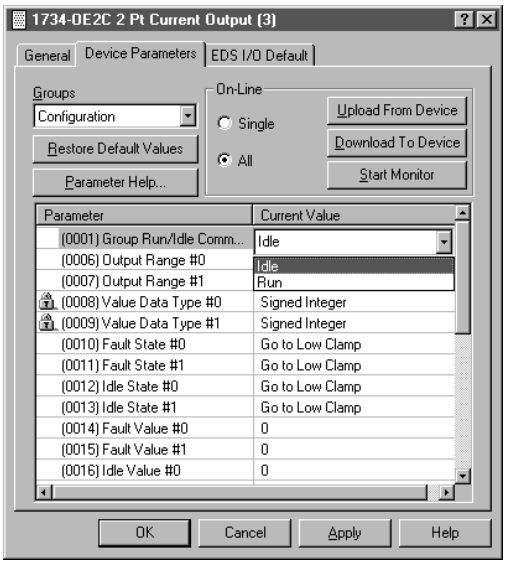
2. From the General dialog, click Device Parameters to set parameters.

   You see the EDS Editor dialog.

3. From the EDS Editor dialog, click Upload to upload existing parameters from the device.
4. From the Device Parameters dialog, from Groups select Configuration.



5. From the Device Parameters dialog, set Run or Idle, noting that any parameter with a lock indicated next to it is nonchangeable..



6. Select values for current or voltage.

   For current, click one of the following:

   - 4...20 mA
   - 0...20 mA

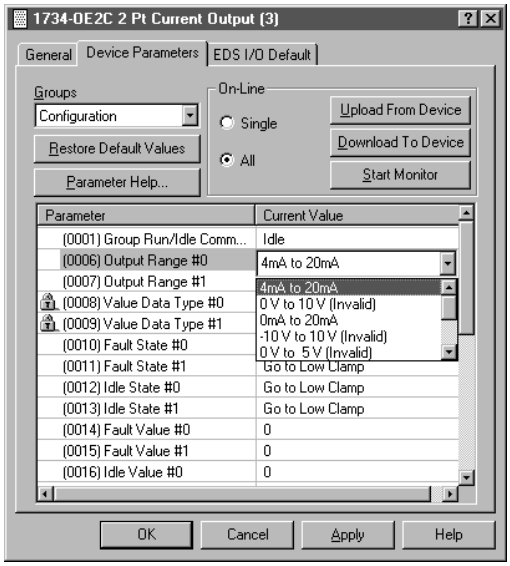
   For voltage, click one of the following:

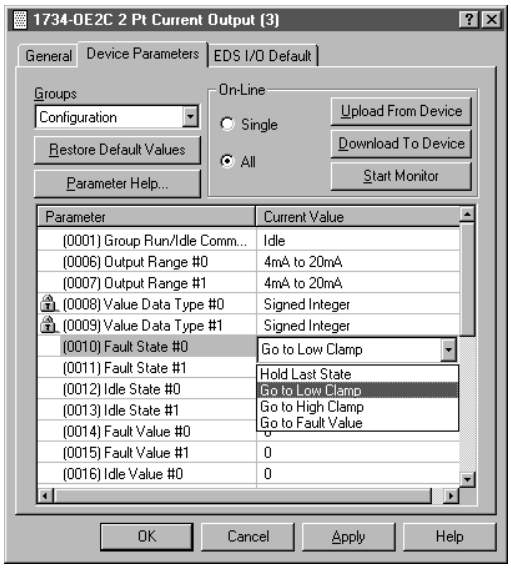
   - 0...10V
   - -10...+10V

   Note that fault states include the following:

   - Hold Last state
   - Go to Low Clamp
   - Go to High Clamp

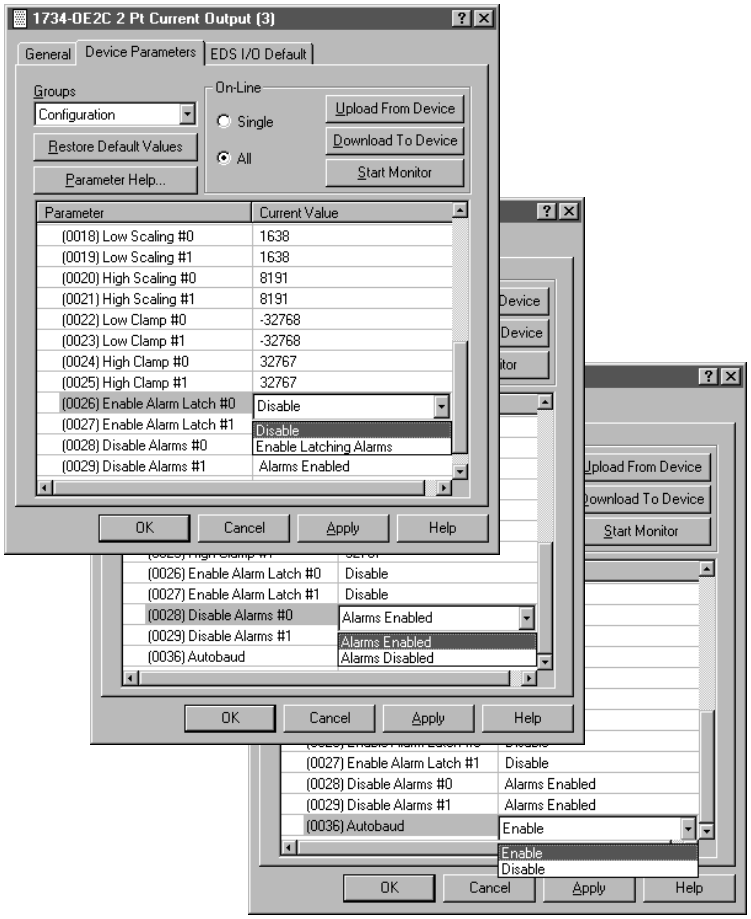
- Go to Fault Value





7. For Enable Alarm Latch, select Enable Latching Alarms or Disable.
8. For Disable Alarm, select Alarms Enabled or Alarms Disabled.
9. For Autobaud, select Enable or Disable.

With current or voltage modules if you change range values, note that it affects range or scaling of the module.



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