

**User Interface Guide**

**For**

**DeltaV™ Connect - Bailey**

**Command Series / NETWORK 90® / INFI 90®**

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## Introduction

This document will instruct the user how to configure DeltaV Connect - Bailey (DVCBLY) control modules, how to assign DeltaV faceplates to DVCBLY control modules, and identify graphical dynamos available for use on process displays.

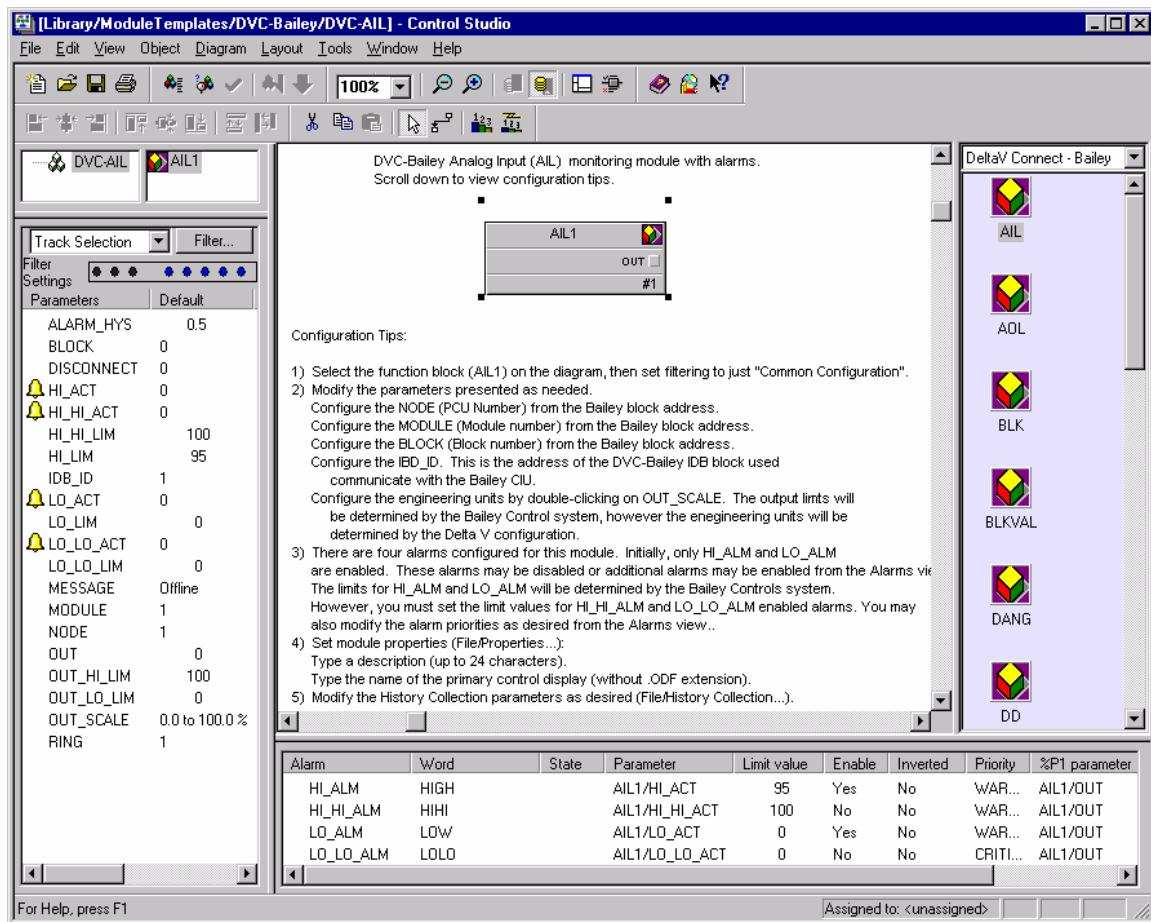
## AIL – Analog Input / Loop

### Control Module Configuration

To configure an AIL in the DeltaV system, use the DVC-AIL control module template. This template is located in DeltaV Explorer under LIBRARY/MODULE TEMPLATES/DVC-BAILEY.

To use the template, drag it from the library into the desired control area in DeltaV Explorer. This will create a new control module named DVC-AIL\_1. Right click on this new control module and select RENAME to give the control module the desired name.

The figure below shows the DVC-AIL control module template in Control Studio:

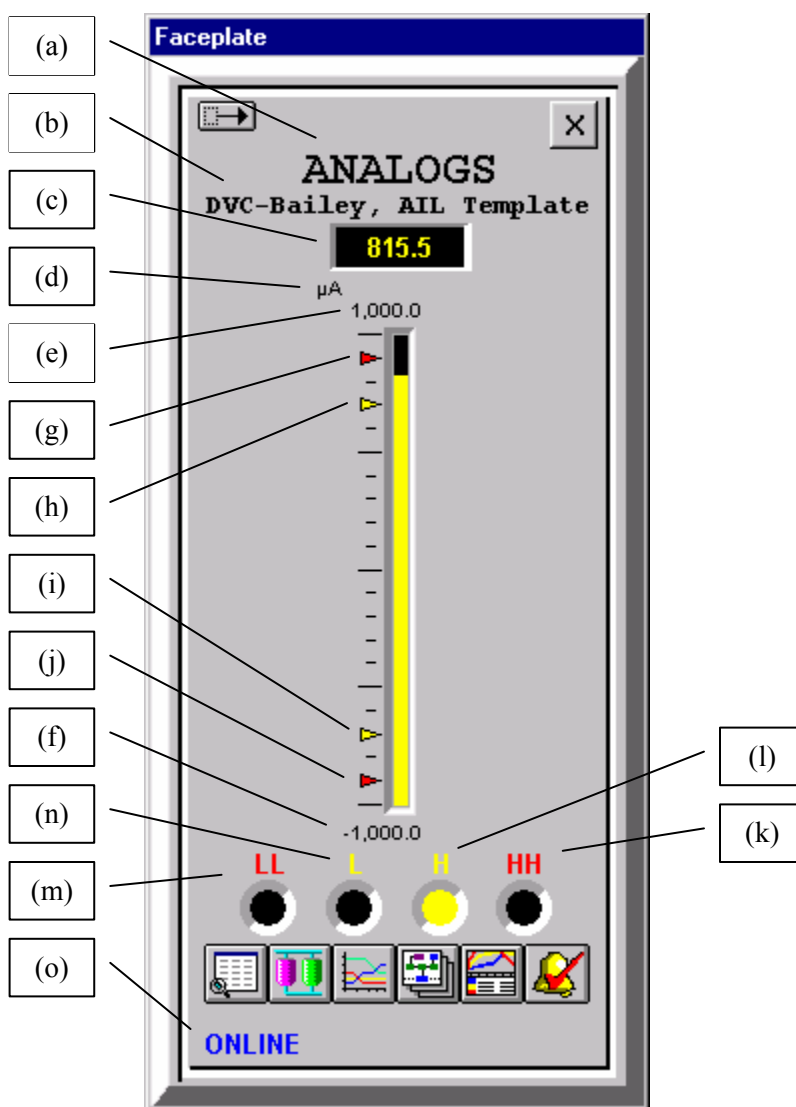


The template includes instructions for configuring the control module.

## Faceplate Control

The AIL is associated with the AIL.iaf control faceplate, AIL.det detail faceplate, and AIL.trn real-time trend faceplate. The control faceplate and detail faceplate definitions are in the control module properties dialog. If you use the DVC-AIL control module template, the appropriate faceplates have been pre-assigned.

The figure below shows the AIL control faceplate:

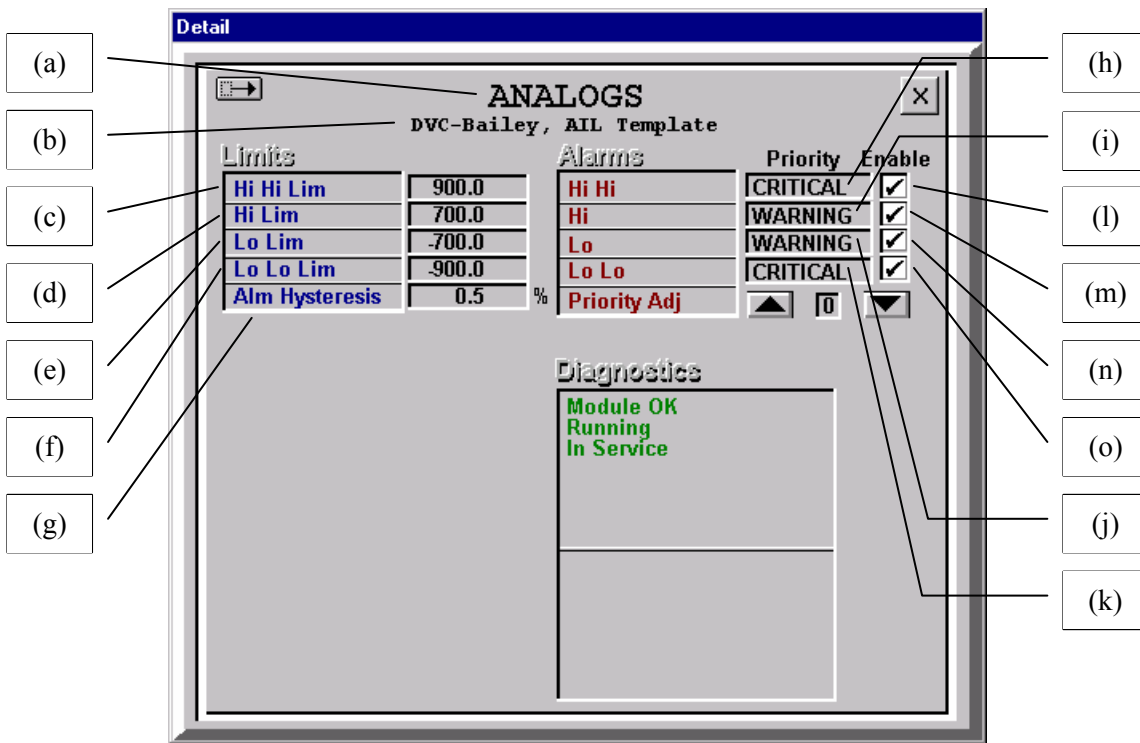


The faceplate includes the following information:

- (a) Tagname – Derived from the DeltaV control module name.
- (b) Description – Derived from the DeltaV control module description property.
- (c) Output Value – Displays the output of the AIL block.
- (d) Engineering Units – Displays the engineering units defined for OUT\_SCALE in the AIL block.

- (e) Output High Limit – Displays the high limit of the output value.
- (f) Output Low Limit – Displays the low limit of the output value.
- (g) Hi-hi Alarm Limit Indicator – Displays a tick mark at the hi-hi alarm limit point on the bar graph. Not shown on illustration or at same value as high.
- (h) Hi Alarm Limit Indicator – Displays a tick mark at the hi alarm limit point on the bar graph.
- (i) Lo Alarm Limit Indicator – Displays a tick mark at the lo alarm limit point on the bar graph.
- (j) Lo-lo Alarm Limit Indicator – Displays a tick mark at the lo-lo alarm limit point on the bar graph. Not shown on illustration or at same value as low.
- (k) Hi-hi Alarm Indication – Indicates a hi-hi alarm condition. The color of the alarm indication is based on the alarm priority.
- (l) Hi Alarm Indication - Indicates a hi alarm condition. The color of the alarm indication is based on the alarm priority.
- (m) Lo-lo Alarm Indication - Indicates a lo-lo alarm condition. The color of the alarm indication is based on the alarm priority.
- (n) Lo Alarm Indication - Indicates a lo alarm condition. The color of the alarm indication is based on the alarm priority.
- (o) Communication Status – Indicates the communication status with the IDB block and Bailey. Online means the block has received data from Bailey, offline or any other message means the block is not receiving data from Bailey.

The figure below shows the AIL detail faceplate:



The faceplate includes the following information:

- (a) Tagname – Derived from the DeltaV control module name.
- (b) Description – Derived from the DeltaV control module description property.

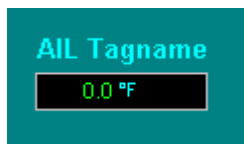
- (c) Hi-Hi Alarm Limit – Displays hi-hi alarm limit for the output value. Allows an individual with proper security to change the hi-hi alarm limit.
- (d) Hi Alarm Limit - Displays hi alarm limit for the output value. The hi alarm limit can be modified from this display which causes it to be automatically tuned in the associated Bailey block. It can also be changed using the block tune function.
- (e) Lo Alarm Limit - Displays lo alarm limit for the output value. The lo alarm limit can be modified from this display which causes it to be automatically tuned in the associated Bailey block. It can also be changed using the block tune function.
- (f) Lo-lo Alarm Limit - Displays lo-lo alarm limit for the output value. Allows an individual with proper security to change the lo-lo alarm limit.
- (g) Alarm Hysteresis – Displays the alarm hysteresis value. Allows an individual with proper security to change the value.
- (h) Hi-hi Alarm Priority – Displays the hi-hi alarm priority in text.
- (i) Hi Alarm Priority – Displays the hi alarm priority in text.
- (j) Lo Alarm Priority – Displays the lo alarm priority in text.
- (k) Lo-lo Alarm Priority – Displays the lo-lo alarm priority in text.
- (l) Hi-hi Alarm Enable Checkbox – Checkbox to enable/disable the hi-hi alarm for individuals with proper security.
- (m) Hi Alarm Enable Checkbox – Checkbox to enable/disable the hi alarm for individuals with proper security.
- (n) Lo Alarm Enable Checkbox – Checkbox to enable/disable the lo alarm for individuals with proper security.
- (o) Lo-lo Alarm Enable Checkbox – Checkbox to enable/disable the lo-lo alarm for individuals with proper security.

#### Graphical Display

The value of the AIL can be displayed on a graphic using the AIL graphic dynamo supplied in the !BLYPROC and !BLYUTIL dynamo sets included in Graphic Studio. These sets defined DVC-Bailey dynamos associated with process and utility industry color conventions.

This dynamo displays the output value of the AIL block as well as the engineering units. It is also dynamically linked to the AIL control faceplate. The operator can access the AIL control faceplate by simply clicking on the AIL value displayed.

The figure below shows the AIL dynamo:



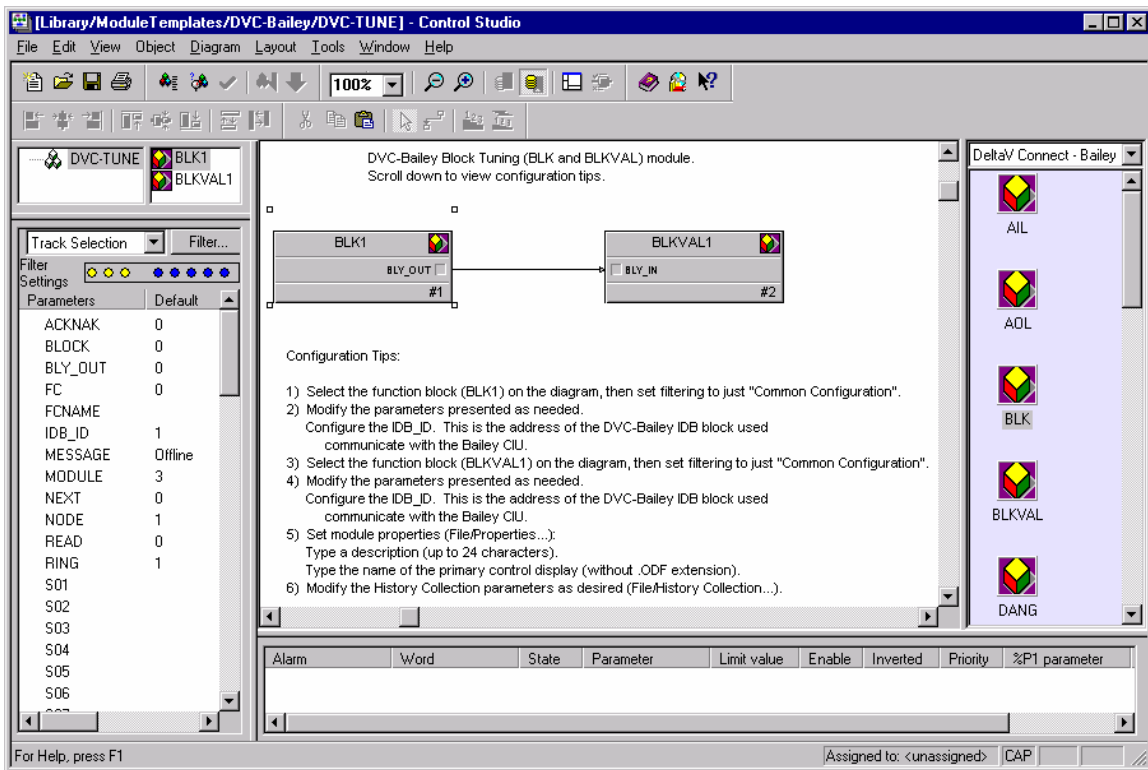
## BLK (and BLKVAL) – Block Tuning and Specification Values

### Control Module Configuration

To configure a BLK and BLKVAL pair of DVC blocks in the DeltaV system, use the DVC-TUNE control module template. This template is located in DeltaV Explorer under LIBRARY/MODULE TEMPLATES/DVC-BAILEY.

To use the template, drag it from the library into the desired control area in DeltaV Explorer. This will create a new control module named DVC-TUNE\_1. Right click on this new control module and select RENAME to give the control module the desired name.

The figure below shows the DVC-TUNE control module template in Control Studio:

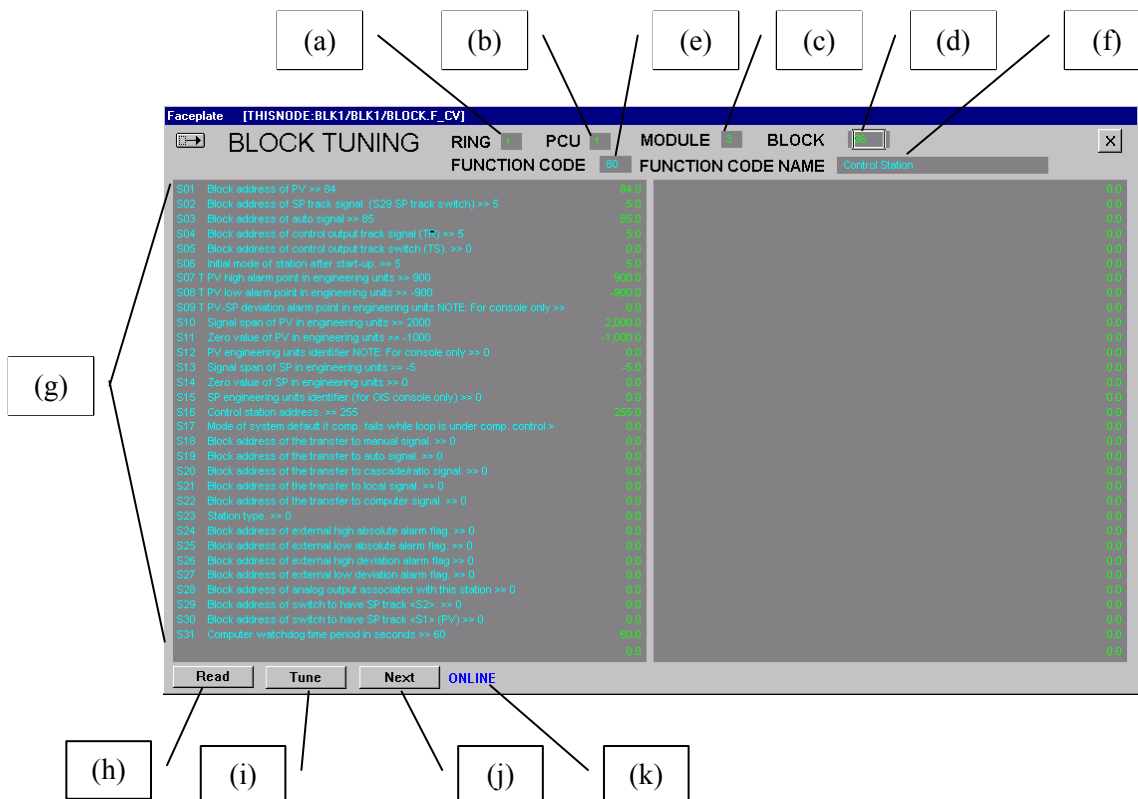


The template includes instructions for configuring the control module.

## Faceplate Control

The BLK and BLKVAL function blocks are associated with the TUNE.iaf control faceplate. The control faceplate definition is in the control module properties dialog. If you use the DVC-TUNE control module template, the appropriate faceplate has been pre-assigned.

The figure below shows the TUNE control faceplate:



The faceplate includes the following information:

- (a) Ring – Bailey Ring address of block to be tuned. Operator enters this value.
- (b) PCU – Bailey PCU address of block to be tuned. Operator enters this value.
- (c) Module – Bailey Module address of block to be tuned. Operator enters this value.
- (d) Block – Bailey Block address of block to be tuned. Operator enters this value.
- (e) Function Code – Bailey function code number of selected block.
- (f) Function Code Name – Bailey function code name of selected block.
- (g) S1 to S64 – Text describing the function code spec as well as the current value of the spec. The value to the right of the text is where the operator enters a new value for the spec if it is tunable.
- (h) Read Push Button – Push button to read the specs for the selected block.
- (i) Tune Push Button – Push button to send a new tunable value to the Bailey system for the selected block.
- (j) Next Push Button – Push button to go to the next function block in the module.

- (k) Communication Status – Indicates the communication status with the IDB block and Bailey. Online means the block has received data from Bailey, offline or any other message means the block is not receiving data from Bailey.

#### Graphical Display

There are not any dynamos associated with the BLK or BLKVAL blocks.

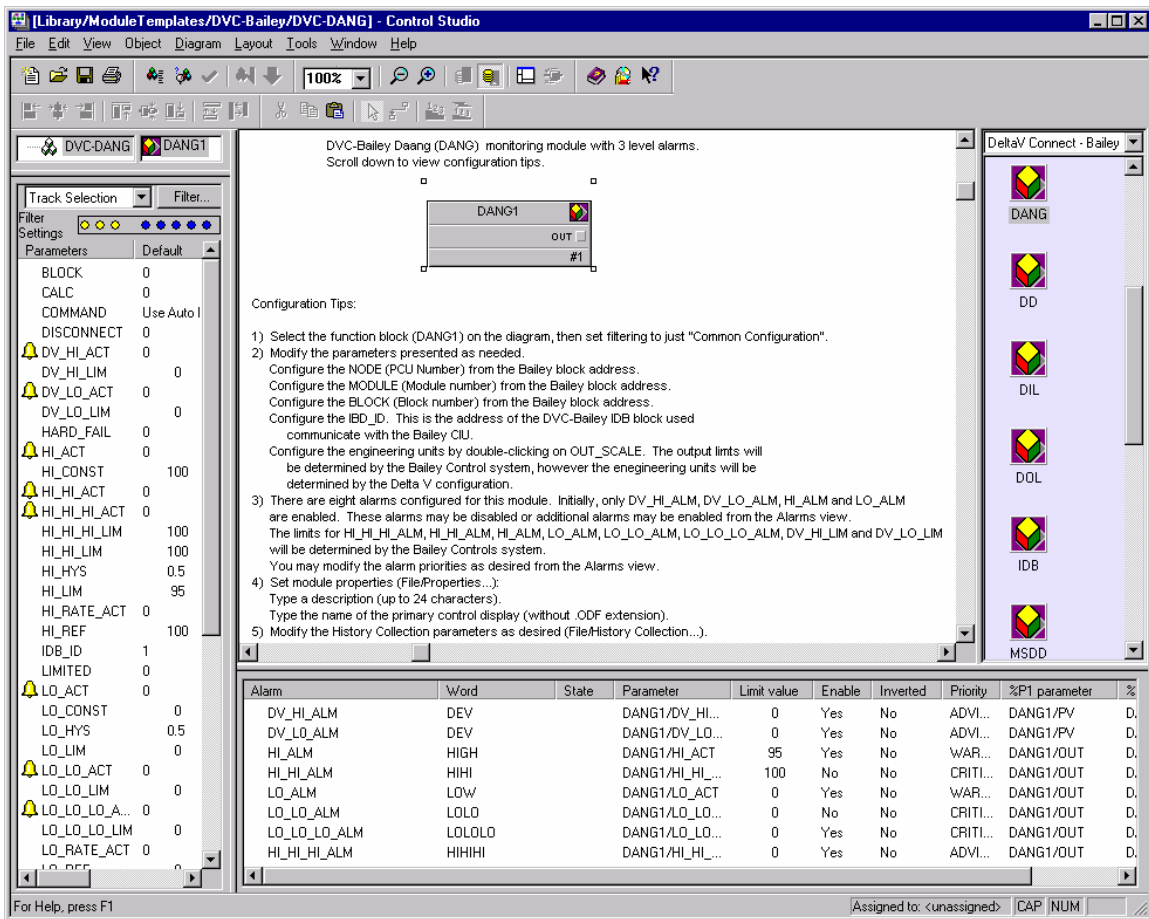
## DANG – Data Acquisition Analog

### Control Module Configuration

To configure a DANG in the DeltaV system, use the DVC-DANG control module template. This template is located in DeltaV Explorer under LIBRARY/MODULE TEMPLATES/DVC-BAILEY.

To use the template, drag it from the library into the desired control area in DeltaV Explorer. This will create a new control module named DVC-DANG\_1. Right click on this new control module and select RENAME to give the control module the desired name.

The figure below shows the DVC-DANG control module template in Control Studio:

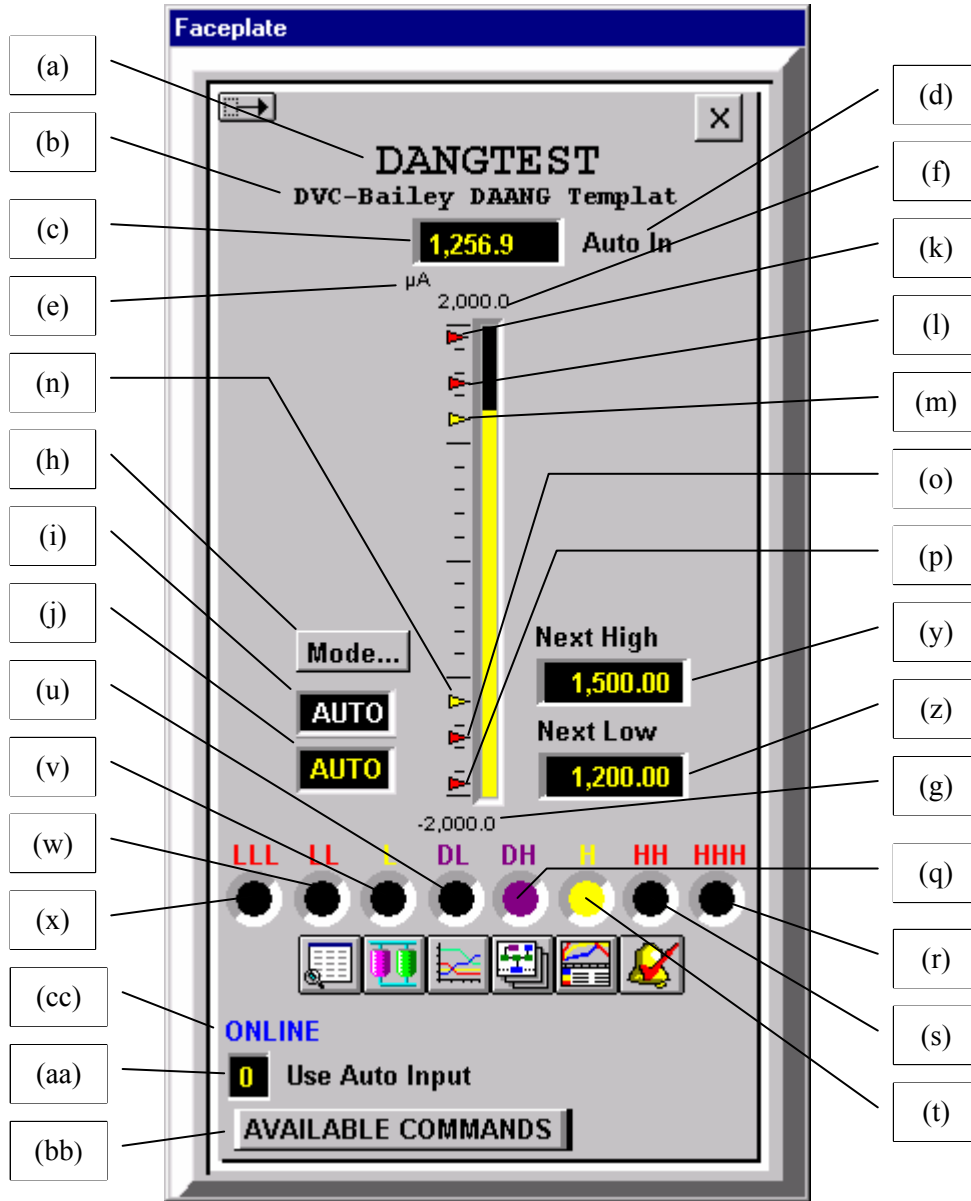


The template includes instructions for configuring the control module.

Faceplate Control

The DANG is associated with the DANG.iaf control faceplate, DANG.det detail faceplate, and DANG.trn real-time trend faceplate. The control faceplate and detail faceplate definitions are in the control module properties dialog. If you use the DVC-DANG control module template, the appropriate faceplates have been pre-assigned.

The figure below shows the DANG control faceplate:

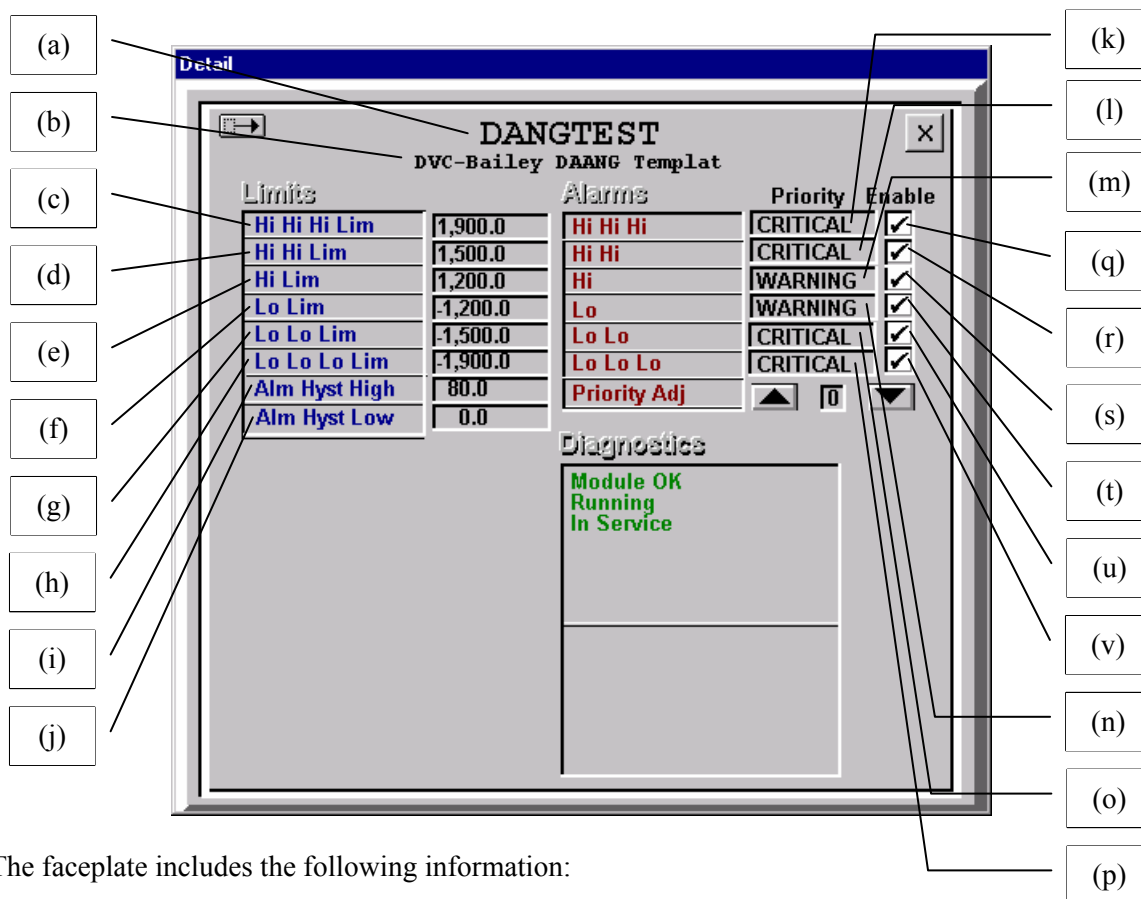


The faceplate includes the following information:

- (a) Tagname – Derived from the DeltaV control module name.
- (b) Description – Derived from the DeltaV control module description property.

- (c) Output Value – Displays the output of the DANG block.
- (d) Source of Output Value – Displays source of output value, possibilities being Auto Input, Calculated Input or User Input (manual mode) .
- (e) Engineering Units – Displays the engineering units defined for OUT\_SCALE in the DANG block.
- (f) Output High Limit – Displays the high limit of the output value.
- (g) Output Low Limit – Displays the low limit of the output value.
- (h) Mode Button – Button to access a pop-up for mode selection.
- (i) Target Mode Indication – Displays the target mode of the station.
- (j) Actual Mode Indication – Displays the actual mode of the station.
- (k) Hi-hi-hi Alarm Limit Indicator – Displays a tick mark at the hi-hi alarm limit point on the bar graph.
- (l) Hi-hi Alarm Limit Indicator – Displays a tick mark at the hi-hi alarm limit point on the bar graph.
- (m) Hi Alarm Limit Indicator – Displays a tick mark at the hi alarm limit point on the bar graph.
- (n) Lo Alarm Limit Indicator – Displays a tick mark at the lo alarm limit point on the bar graph.
- (o) Lo-lo Alarm Limit Indicator – Displays a tick mark at the lo-lo alarm limit point on the bar graph.
- (p) Lo-lo-lo Alarm Limit Indicator – Displays a tick mark at the lo-lo alarm limit point on the bar graph.
- (q) Hi Deviation Alarm Indication – Indicates a hi deviation alarm condition. The color of the alarm indication is based on the alarm priority.
- (r) Hi-hi-hi Alarm Indication – Indicates a hi-hi-hi alarm condition. The color of the alarm indication is based on the alarm priority.
- (s) Hi-hi Alarm Indication – Indicates a hi-hi alarm condition. The color of the alarm indication is based on the alarm priority.
- (t) Hi Alarm Indication - Indicates a hi alarm condition. The color of the alarm indication is based on the alarm priority.
- (u) Lo Deviation Alarm Indication – Indicates a lo deviation alarm condition. The color of the alarm indication is based on the alarm priority.
- (v) Lo Alarm Indication - Indicates a lo alarm condition. The color of the alarm indication is based on the alarm priority.
- (w) Lo-lo Alarm Indication - Indicates a lo-lo alarm condition. The color of the alarm indication is based on the alarm priority.
- (x) Lo-lo-lo Alarm Indication - Indicates a lo-lo-lo alarm condition. The color of the alarm indication is based on the alarm priority.
- (y) Next High – Displays the next high alarm level based on the current output value.
- (z) Next Low – Displays the next low alarm level based on the current output value.
- (aa) Command Input Field – Allows entry of Bailey DAANG block command. Commands are entered as a number in the range of 0 – 5. Click the available command button to see their meaning. Command entry allows changing operational characteristics of the Bailey DAANG block.
- (bb) Available commands button – Displays a legend of command numbers that may be entered on the command entry field to control operation of the Bailey DAANG block.
- (cc) Communication Status – Indicates the communication status with the IDB block and Bailey. Online means the block has received data from Bailey, offline or any other message means the block is not receiving data from Bailey.

The figure below shows the DANG detail faceplate:



The faceplate includes the following information:

- (a) Tagname – Derived from the DeltaV control module name.
- (b) Description – Derived from the DeltaV control module description property.
- (c) Hi-Hi-Hi Alarm Limit – Displays hi-hi-hi alarm limit for the output value. Allows an individual with proper security to change the hi-hi-hi alarm limit.
- (d) Hi-Hi Alarm Limit – Displays hi-hi alarm limit for the output value. Allows an individual with proper security to change the hi-hi alarm limit.
- (e) Hi Alarm Limit - Displays hi alarm limit for the output value. The hi alarm limit can be modified from this display which causes it to be automatically tuned in the associated Bailey block. It can also be changed using the block tune function.
- (f) Lo Alarm Limit - Displays lo alarm limit for the output value. The lo alarm limit can be modified from this display which causes it to be automatically tuned in the associated Bailey block. It can also be changed using the block tune function.
- (g) Lo-lo Alarm Limit - Displays lo-lo alarm limit for the output value. Allows an individual with proper security to change the lo-lo alarm limit.
- (h) Lo-lo-lo Alarm Limit - Displays lo-lo-lo alarm limit for the output value. Allows an individual with proper security to change the lo-lo-lo alarm limit.
- (i) Alarm Hyst High – Displays the high alarm hysteresis value. Allows an individual with proper security to change the value.
- (j) Alarm Hyst Low – Displays the low alarm hysteresis value. Allows an individual with proper security to change the value.
- (k) Hi-hi-hi Alarm Priority – Displays the hi-hi-hi alarm priority in text.
- (l) Hi-hi Alarm Priority – Displays the hi-hi alarm priority in text.

- (m) Hi Alarm Priority – Displays the hi alarm priority in text.
- (n) Lo Alarm Priority – Displays the lo alarm priority in text.
- (o) Lo-lo Alarm Priority – Displays the lo-lo alarm priority in text.
- (p) Lo-lo-lo Alarm Priority – Displays the lo-lo-lo alarm priority in text.
- (q) Hi-hi-hi Alarm Enable Checkbox – Checkbox to enable/disable the hi-hi-hi alarm for individuals with proper security.
- (r) Hi-hi Alarm Enable Checkbox – Checkbox to enable/disable the hi-hi alarm for individuals with proper security.
- (s) Hi Alarm Enable Checkbox – Checkbox to enable/disable the hi alarm for individuals with proper security.
- (t) Lo Alarm Enable Checkbox – Checkbox to enable/disable the lo alarm for individuals with proper security.
- (u) Lo-lo Alarm Enable Checkbox – Checkbox to enable/disable the lo-lo alarm for individuals with proper security.
- (v) Lo-lo-lo Alarm Enable Checkbox – Checkbox to enable/disable the lo-lo-lo alarm for individuals with proper security.

### Graphical Display

The value of the DANG can be displayed on a graphic using the DAANG graphic dynamo supplied in the !BLYPROC and !BLYUTIL dynamo sets included in Graphic Studio. These sets defined DVC-Bailey dynamos associated with process and utility industry color conventions.

This dynamo displays the output value of the DANG block as well as the engineering units. It is also dynamically linked to the DANG control faceplate. The operator can access the DANG control faceplate by simply clicking on the DANG value displayed.

The figure below shows the DANG dynamo:



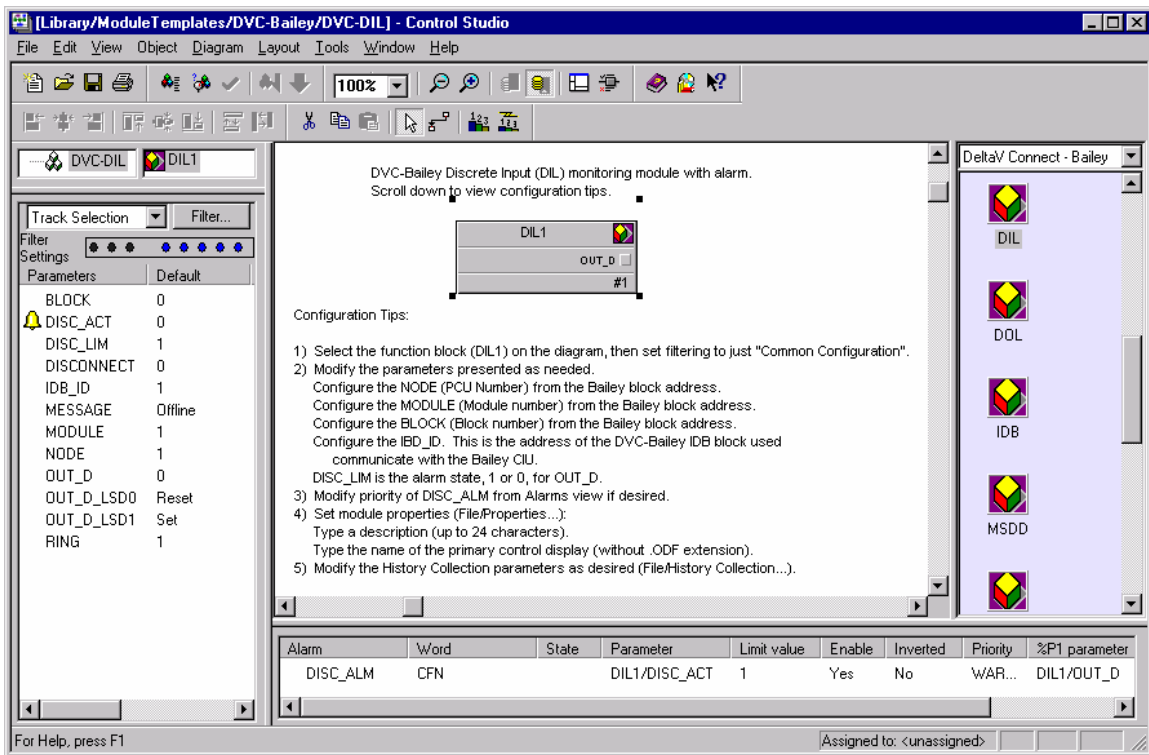
## DIL – Digital Input / Loop

### Control Module Configuration

To configure a DIL in the DeltaV system, use the DVC-DIL control module template. This template is located in DeltaV Explorer under LIBRARY/MODULE TEMPLATES/DVC-BAILEY.

To use the template, drag it from the library into the desired control area in DeltaV Explorer. This will create a new control module named DVC-DIL\_1. Right click on this new control module and select RENAME to give the control module the desired name.

The figure below shows the DVC-DIL control module template in Control Studio:

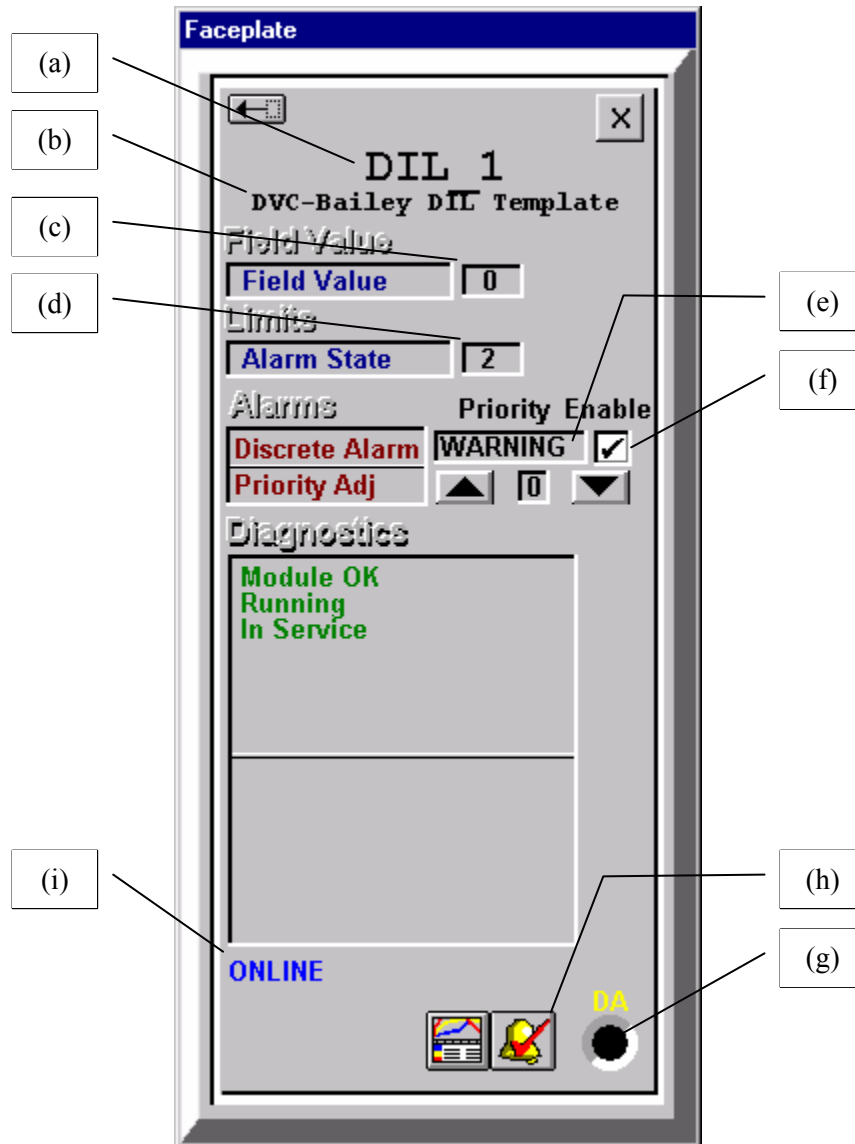


The template includes instructions for configuring the control module.

## Faceplate Control

The DIL is associated with the DIL.iaf control faceplate. The control faceplate definition is in the control module properties dialog. If you use the DVC-DIL control module template, the appropriate faceplate has been pre-assigned.

The figure below shows the DIL control faceplate:



The faceplate includes the following information:

- (a) Tagname – Derived from the DeltaV control module name.
- (b) Description – Derived from the DeltaV control module description property.
- (c) Field Value – Displays the output of the DIL block.
- (d) Alarm State – Displays the discrete alarm state.
- (e) Alarm Priority – Displays in text the alarm priority.

- (f) Alarm Enable Checkbox – Checkbox to enable/disable the alarm for individuals with proper security.
- (g) Alarm Indicator – Indicates an alarm. The color of the alarm indication is based on the alarm priority.
- (h) Alarm Acknowledge Button – Push button (bell symbol) used to acknowledge the alarm.
- (i) Communication Status – Indicates the communication status with the IDB block and Bailey. Online means the block has received data from Bailey, offline or any other message means the block is not receiving data from Bailey.

### Graphical Display

The value of the DIL can be displayed on a graphic using the DIL\_CHECK graphic dynamo supplied in the !BLYPROC and !BLYUTIL dynamo sets included in Graphic Studio. These sets defined DVC-Bailey dynamos associated with process and utility industry color conventions.

This dynamo displays a check when the value of the DIL block is one (1) and the check is not visible when the value of the DIL block is zero (0).

The figure below shows the DIL\_CHECK dynamo:



There are also dynamos available for valves and motors which have no control but have inputs for device status. The first pair of dynamos, DIL\_VLV\_HZT and DIL\_VLV\_VRT are designed for valves. The valve will be displayed in green when the value of the DIL block is zero (0) and the valve will be displayed in red when the value of the DIL block is one (1). The two dynamos are identical except for the orientation on the display. DIL\_VLV\_HZT is used for valves displayed horizontally and DIL\_VLV\_VRT is used for valves displayed vertically.

The figure below shows the DIL\_VLV\_HZT dynamo:



The second pair of dynamos, DIL\_PMP\_HZT and DIL\_PMP\_VRT are designed for pumps. The pump will be displayed in green when the value of the DIL block is zero (0) and the pump will be displayed in red when the value of the DIL block is one (1). The two dynamos are identical except for the orientation on the display. DIL\_PMP\_HZT is used for valves displayed horizontally and DIL\_PMP\_VRT is used for valves displayed vertically.

The figure below shows the DIL\_PMP\_HZT dynamo:



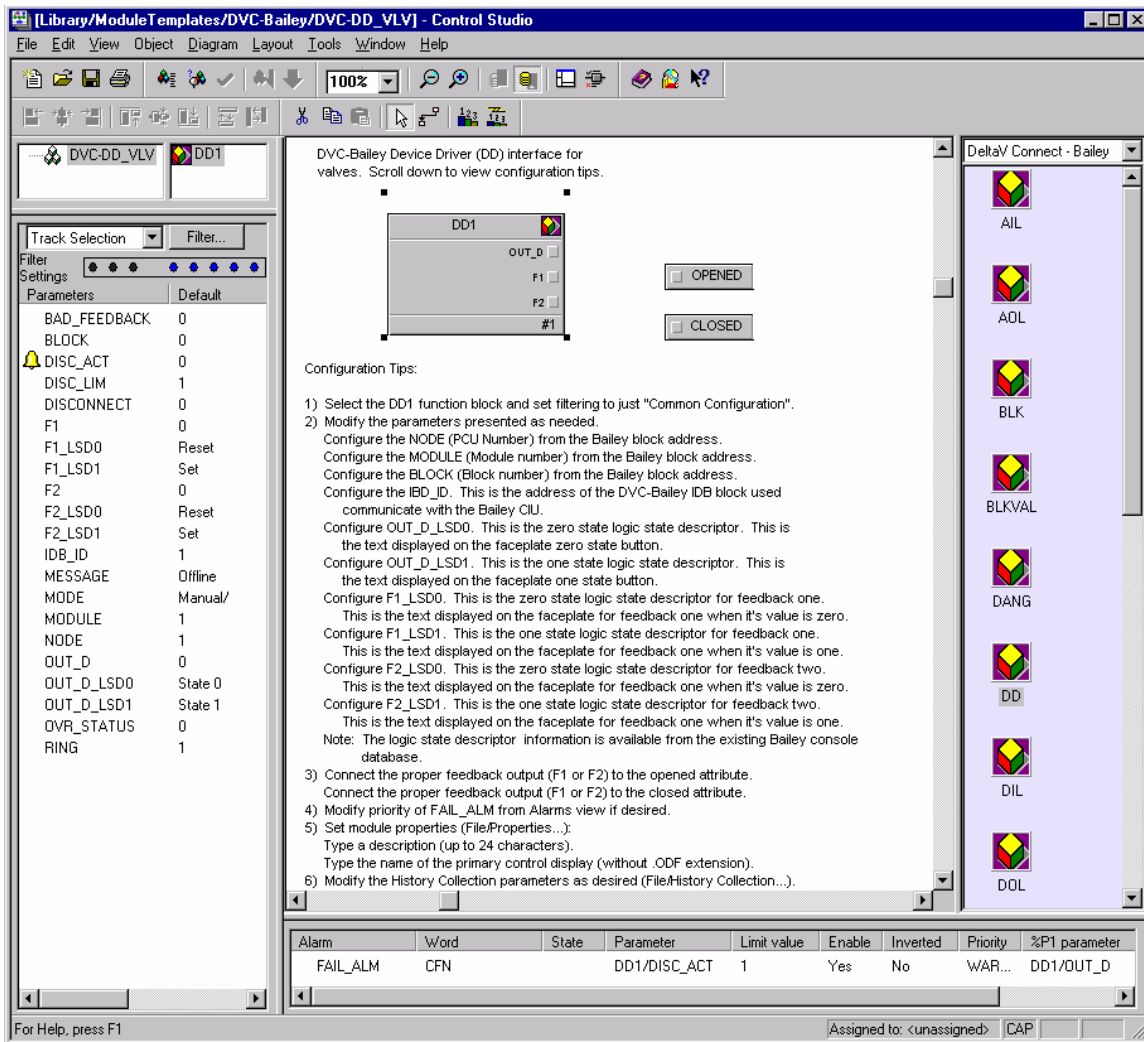
## DD – Device Driver

### Control Module Configuration

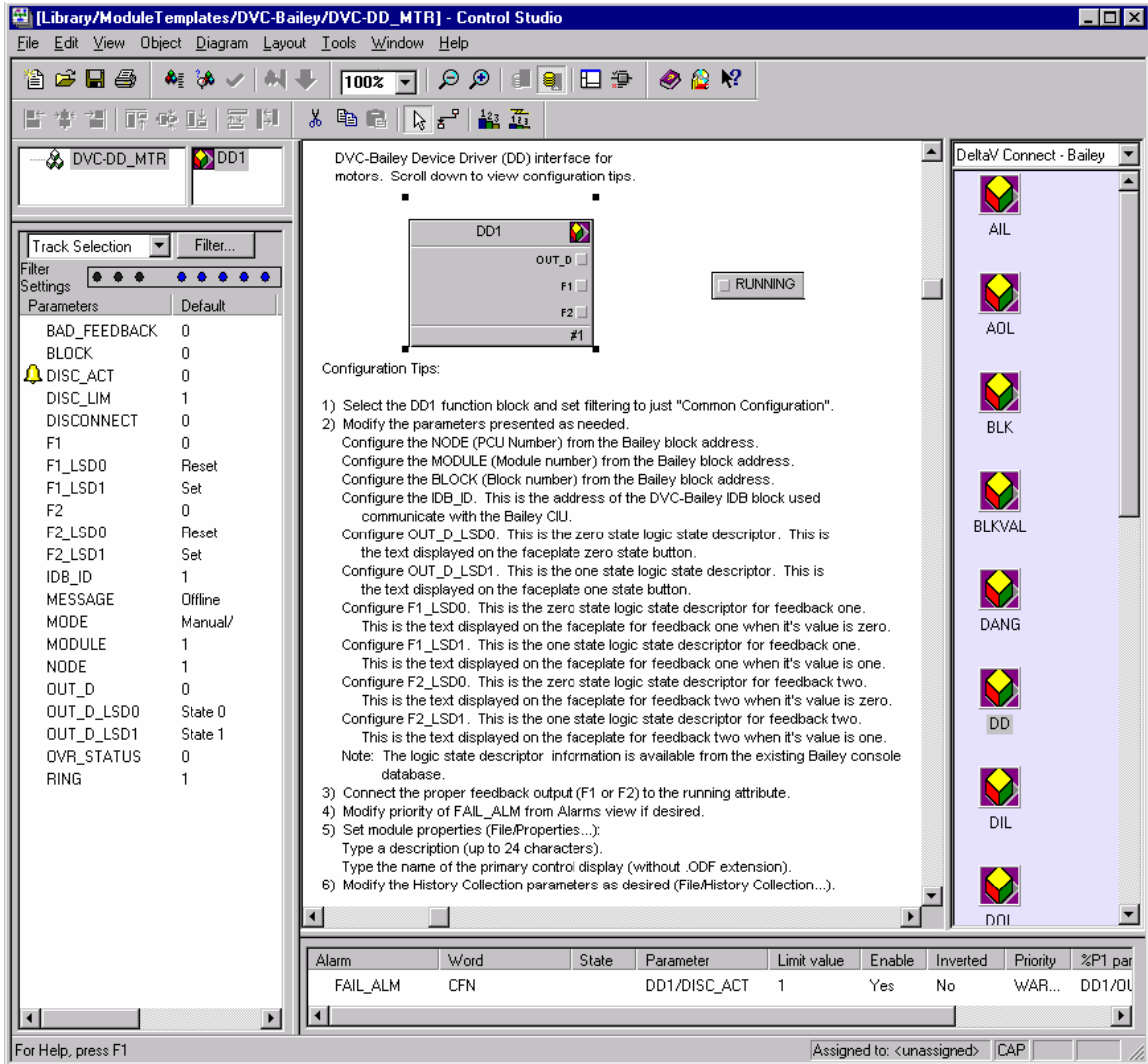
To configure a DD in the DeltaV system, use either the DVC-DD\_VLV or the DVC-DD\_MTR control module template. The DVC-DD\_VLV control module template is designed for DD's used to control valves and the DVC-DD\_MTR control module template is designed for DD's used to control motors. These templates are located in DeltaV Explorer under LIBRARY/MODULE TEMPLATES/DVC-BAILEY.

To use one of the templates, drag it from the library into the desired control area in DeltaV Explorer. This will create a new control module named DVC-DD\_VLV\_1. Right click on this new control module and select RENAME to give the control module the desired name.

The figure below shows the DVC-DD\_VLV control module template in Control Studio:



The figure below shows the DVC-DD\_MTR control module template in Control Studio:

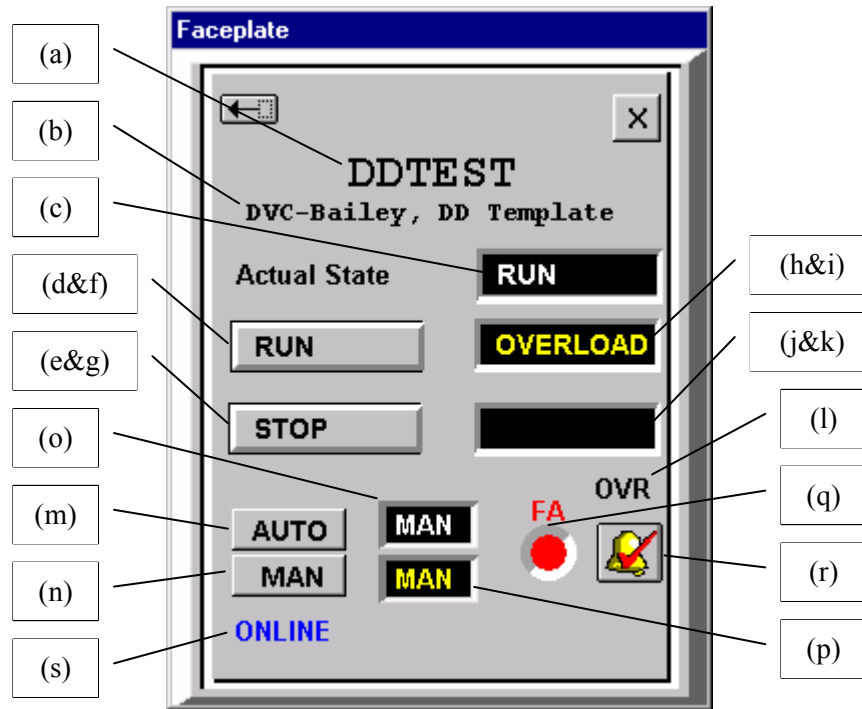


The templates include instructions for configuring the control modules.

## Faceplate Control

The DD is associated with the DD.iaf control faceplate. The control faceplate definition is in the control module properties dialog. If you use either the DVC-DD\_VLV or DVC-DD\_MTR control module template, the appropriate faceplate has been pre-assigned.

The figure below shows the DD control faceplate:



The faceplate includes the following information:

- (a) Tagname – Derived from the DeltaV control module name.
- (b) Description – Derived from the DeltaV control module description property.
- (c) Actual State – Control output state displayed as text (Output Zero and One Logic State Descriptor).
- (d) One State Push Button – Push Button to select the one state (upper push button).
- (e) Zero State Push Button – Push Button to select the zero state (lower push button).
- (f) One State Logic State Descriptor – Text displayed on the one state control push button (upper button).
- (g) Zero State Logic State Descriptor – Text displayed on the zero state control push button (lower button).
- (h) Feedback 1 Zero State Logic State Descriptor – Text displayed for feedback 1 when it has a value of zero.
- (i) Feedback 1 One State Logic State Descriptor – Text displayed for feedback 1 when it has a value of one.
- (j) Feedback 2 Zero State Logic State Descriptor – Text displayed for feedback 2 when it has a value of zero.
- (k) Feedback 2 One State Logic State Descriptor – Text displayed for feedback 2 when it has a value of one.
- (l) Override Status – Displays OVR when the device driver block is in the Override state.

- (m) Auto Mode Push Button – Push Button to select the Auto mode.
- (n) Manual Mode Push Button – Push Button to select the Manual mode.
- (o) Target Mode – Text displaying the target mode.
- (p) Actual Mode – Text displaying the actual mode.
- (q) Alarm Indicator – Indicates when the device driver block is in alarm. The color of the indication is determined by the alarm priority.
- (r) Alarm Acknowledge Button – Push button (bell symbol) used to acknowledge the alarm.
- (s) Communication Status – Indicates the communication status with the IDB block and Bailey. Online means the block has received data from Bailey, offline or any other message means the block is not receiving data from Bailey.

### Graphical Display

There are dynamos available for device drivers used to control valves and motors. The first pair of dynamos, DD\_VLV\_HZT and DD\_VLV\_VRT are designed for valves and are used with the DVC-DD\_VLV control module template. The color of the valve is linked to the OPENED and CLOSED variables of the control module templates. When OPENED is active, the valve will be red and when CLOSED is active the valve will be green. If neither OPENED or CLOSED are active, the valve will be yellow. The mode of the valve is also displayed next to the device. Finally, the valve is dynamically linked to the faceplate for the device so the operator can simply click on the valve to access the faceplate. DD\_VLV\_HZT is used for valves displayed horizontally and DD\_VLV\_VRT is used for valves displayed vertically.

The figure below shows the DD\_VLV\_HZT dynamo:



The second pair of dynamos, DD\_PMP\_HZT and DD\_PMP\_VRT are designed for pumps and are used with the DVC-DD\_MTR control module template. The color of the pump is linked to the RUNNING variable of the control module templates. If RUNNING is active, the pump will be red and if RUNNING is not active the pump will be green. The mode of the pump is also displayed next to the device. Finally, the pump is dynamically linked to the faceplate for the device so the operator can simply click on the pump to access the faceplate. DD\_PMP\_HZT is used for pumps displayed horizontally and DD\_PMP\_VRT is used for pumps displayed vertically.

The figure below shows the DD\_PMP\_HZT dynamo:



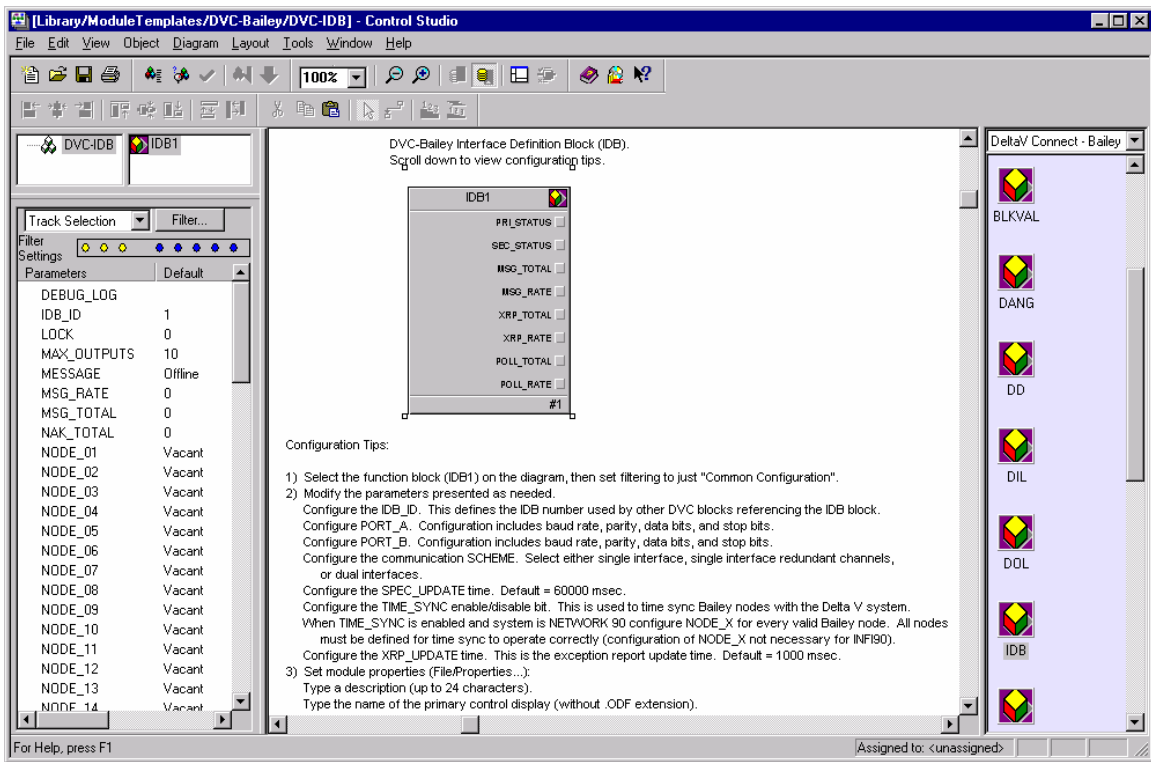
## IDB – Interface Definition

### Control Module Configuration

To configure an IDB in the DeltaV system, use the DVC-IDB control module template. This template is located in DeltaV Explorer under LIBRARY/MODULE TEMPLATES/DVC-BAILEY.

To use the template, drag it from the library into the desired control area in DeltaV Explorer. This will create a new control module named DVC-IDB\_1. Right click on this new control module and select RENAME to give the control module the desired name.

The figure below shows the DVC-IDB control module template in Control Studio:

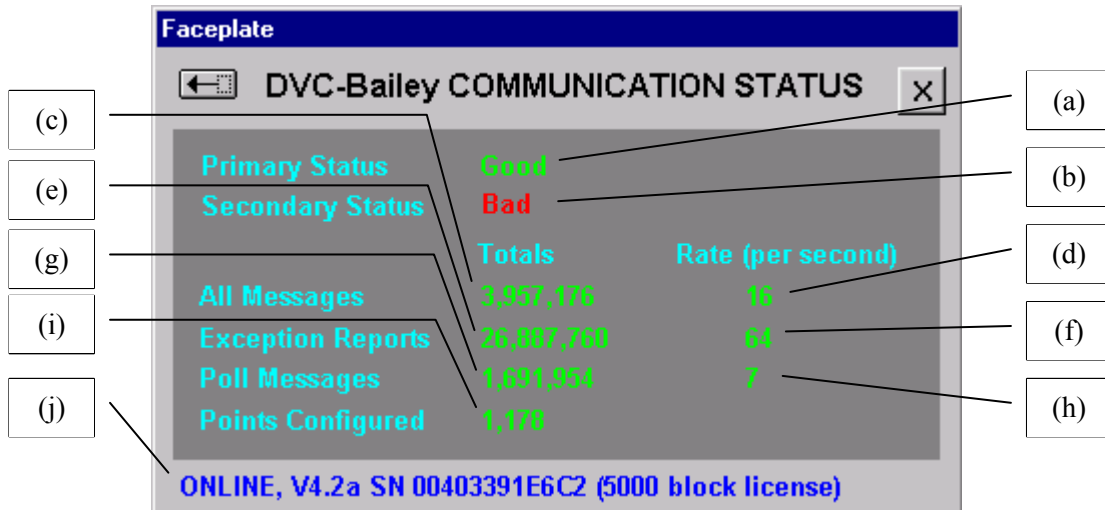


The template includes instructions for configuring the control module.

## Faceplate Control

The IDB is associated with the IDB.iaf control faceplate. The control faceplate definition is in the control module properties dialog. If you use the DVC-IDB control module template, the appropriate faceplate has been pre-assigned.

The figure below shows the IDB control faceplate:



The faceplate includes the following information:

- (a) Primary Status – Status of the primary communication port.
- (b) Secondary Status – Status of the secondary communication port.
- (c) Message Total – Count of total messages sent by the IDB block.
- (d) Message Rate – Rate (messages/sec) of messages being sent by the IDB block.
- (e) Exception Report Total – Count of exception report messages received by the IDB block.
- (f) Exception Report Rate – Rate (exception reports/sec) of exception report messages received by the IDB block.
- (g) Poll Message Total – Count of poll messages received by the IDB block.
- (h) Poll Message Rate – Rate (poll messages/sec) of poll messages received by the IDB block.
- (i) Points Configured – Total blocks configured for this IDB.
- (j) Communication Status – Indicates the communication status of the IDB block and Bailey. Online means the block is communicating with Bailey, offline or any other message means the block is not communicating with Bailey.

## Graphical Display

There are not any dynamos associated with the IDB block.

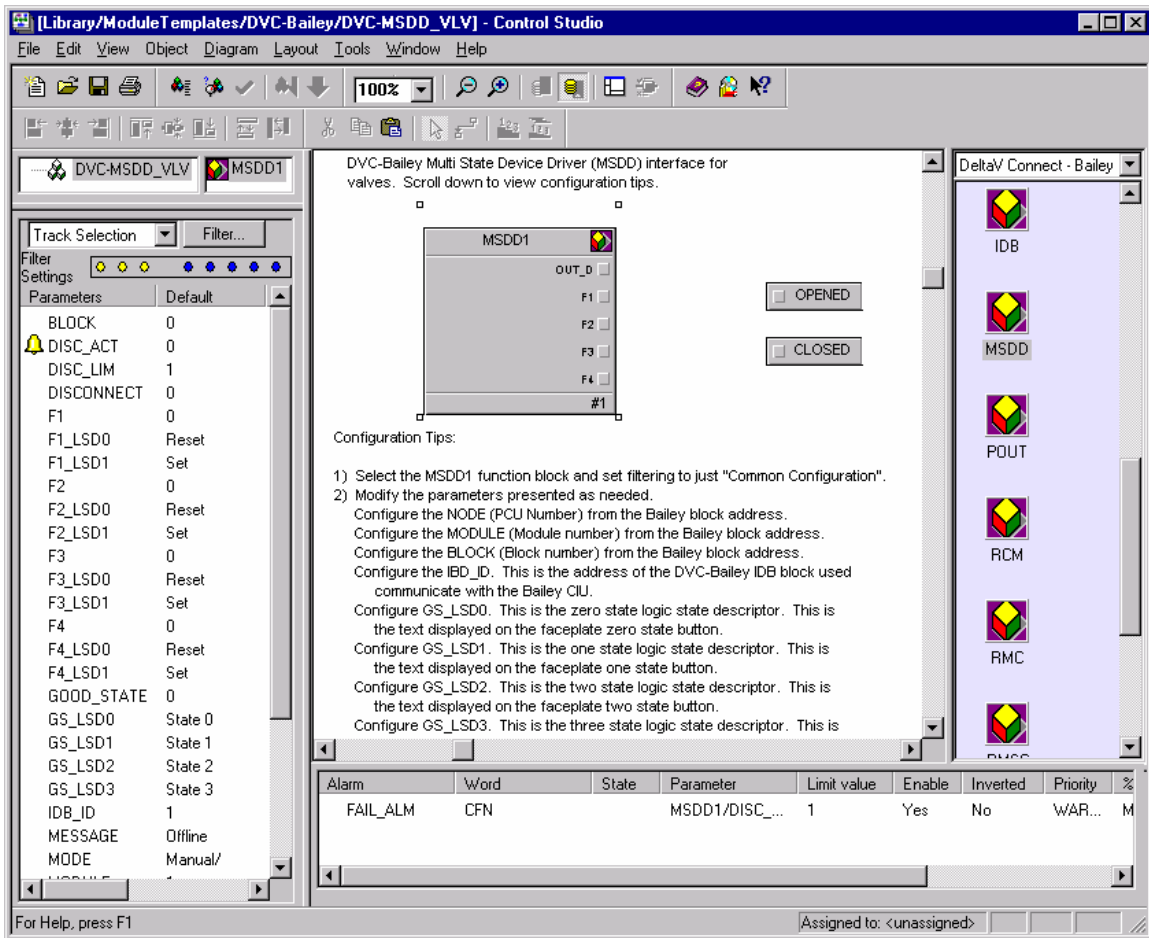
## MSDD – Multi-State Device Driver

### Control Module Configuration

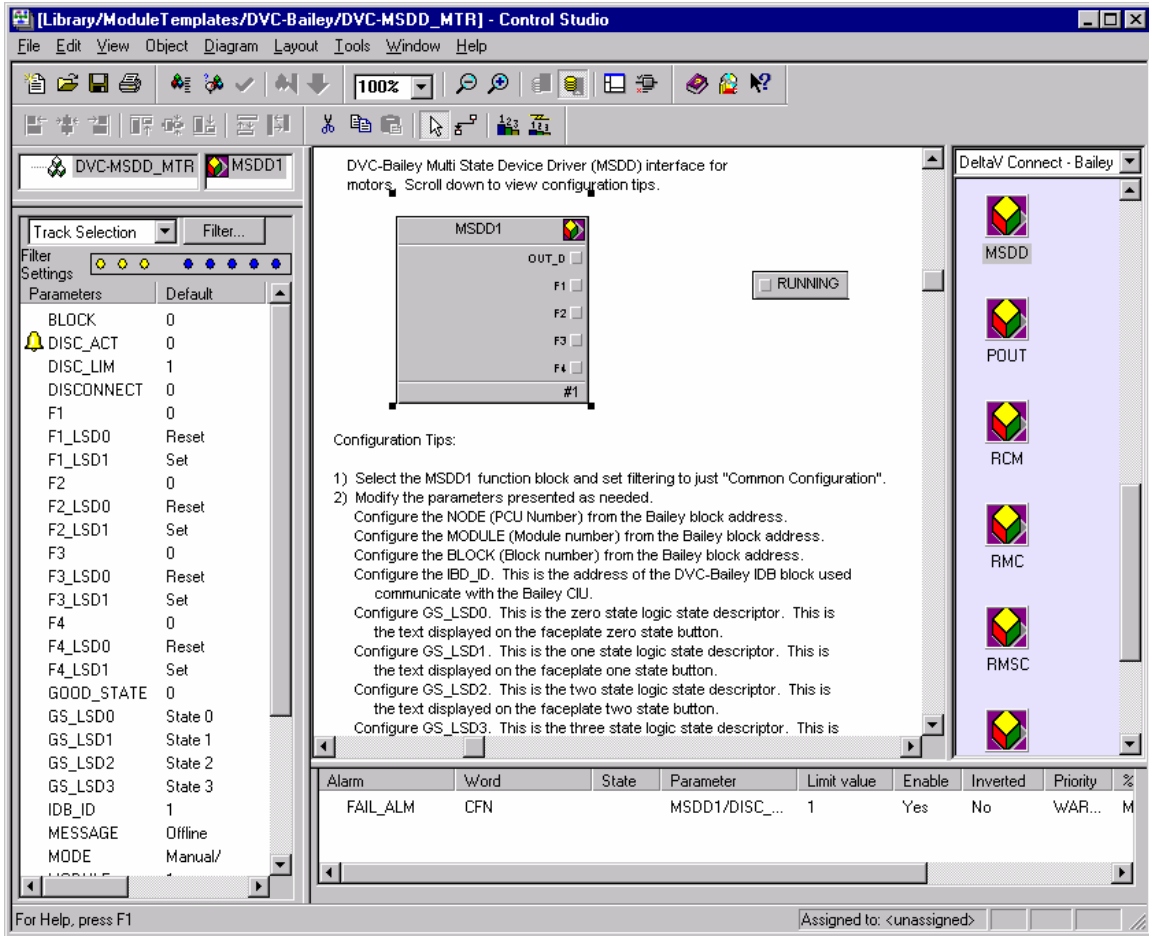
To configure a MSDD in the DeltaV system, use either the DVC-MSDD\_VLV or the DVC-MSDD\_MTR control module template. The DVC-MSDD\_VLV control module template is designed for MSDD's used to control valves and the DVC-MSDD\_MTR control module template is designed for MSDD's used to control motors. These templates are located in DeltaV Explorer under LIBRARY/MODULE TEMPLATES/DVC-BAILEY.

To use one of the templates, drag it from the library into the desired control area in DeltaV Explorer. This will create a new control module named DVC-MSDD\_VLV\_1. Right click on this new control module and select RENAME to give the control module the desired name.

The figure below shows the DVC-MSDD\_VLV control module template in Control Studio:



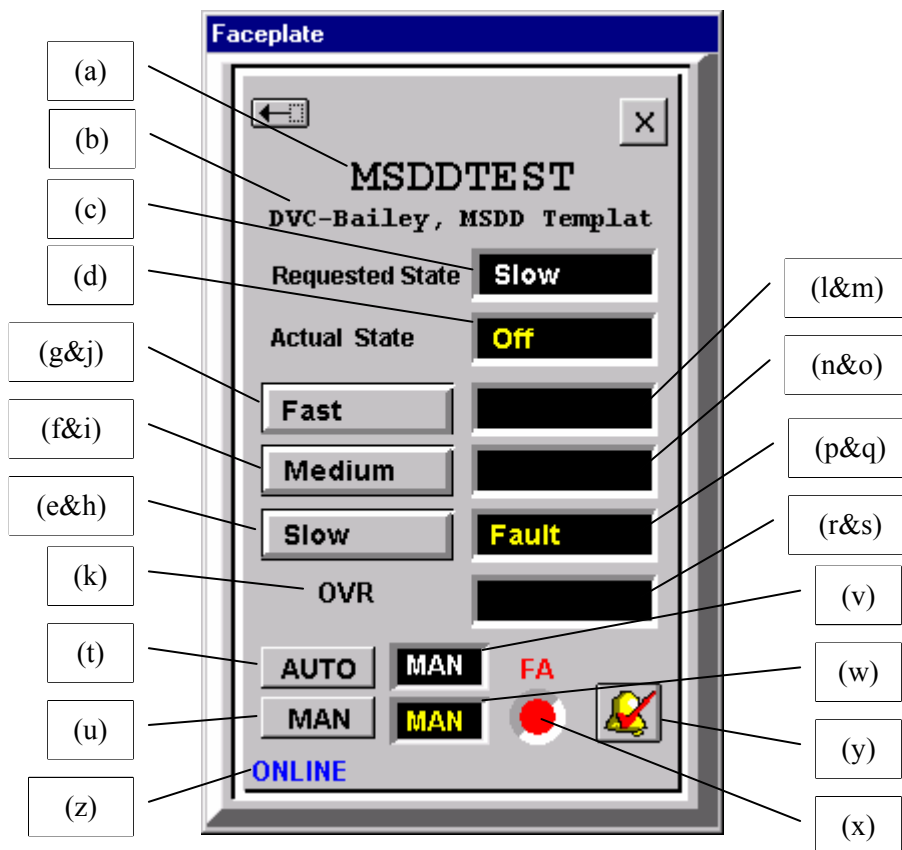
The figure below shows the DVC-MSDD\_MTR control module template in Control Studio:



## Faceplate Control

The MSDD is associated with the MSDD.iaf control faceplate. The control faceplate definition is in the control module properties dialog. If you use either the DVC-MSDD\_VLV or DVC-MSDD\_MTR control module template, the appropriate faceplate has been pre-assigned.

The figure below shows the MSDD control faceplate:



The faceplate includes the following information:

- (a) Tagname – Derived from the DeltaV control module name.
- (b) Description – Derived from the DeltaV control module description property.
- (c) Requested State – Control state displayed as text (Requested State Logic State Descriptor).
- (d) Actual State – Control state displayed as text (Good State Logic State Descriptor).
- (e) One State Push Button – Push Button to select the one state (lower push button).
- (f) Two State Push Button – Push Button to select the two state (middle push button).
- (g) Three State Push Button – Push Button to select the three state (upper push button).
- (h) One State Logic State Descriptor – Text displayed on the one state control push button (lower button).
- (i) Two State Logic State Descriptor – Text displayed on the two state control push button (middle button).
- (j) Three State Logic State Descriptor – Text displayed on the three state control push button (upper button).
- (k) Override Status – Displays OVR when the MSDD block is in the Override state.

- (l) Feedback 1 Zero State Logic State Descriptor – Text displayed for feedback 1 when it has a value of zero.
- (m) Feedback 1 One State Logic State Descriptor – Text displayed for feedback 1 when it has a value of one.
- (n) Feedback 2 Zero State Logic State Descriptor – Text displayed for feedback 2 when it has a value of zero.
- (o) Feedback 2 One State Logic State Descriptor – Text displayed for feedback 2 when it has a value of one.
- (p) Feedback 3 Zero State Logic State Descriptor – Text displayed for feedback 3 when it has a value of zero.
- (q) Feedback 3 One State Logic State Descriptor – Text displayed for feedback 3 when it has a value of one.
- (r) Feedback 4 Zero State Logic State Descriptor – Text displayed for feedback 4 when it has a value of zero.
- (s) Feedback 4 One State Logic State Descriptor – Text displayed for feedback 4 when it has a value of one.
- (t) Auto Mode Push Button – Push Button to select the Auto mode.
- (u) Manual Mode Push Button – Push Button to select the Manual mode.
- (v) Target Mode – Text displaying the target mode.
- (w) Actual Mode – Text displaying the actual mode.
- (x) Alarm Indicator – Indicates when the device driver block is in alarm. The color of the indication is determined by the alarm priority.
- (y) Alarm Acknowledge Button – Push button (bell symbol) used to acknowledge the alarm.
- (z) Communication Status – Indicates the communication status with the IDB block and Bailey. Online means the block has received data from Bailey, offline or any other message means the block is not receiving data from Bailey.

### Graphical Display

There are dynamos available for MSDD's used to control valves and motors. The first pair of dynamos, MSDD\_VLV\_HT and MSDD\_VLV\_VT are designed for valves and are used with the DVC-MSDD\_VLV control module template. The color of the valve is linked to the OPENED and CLOSED variables of the control module templates. When OPENED is active, the valve will be red and when CLOSED is active the valve will be green. If neither OPENED or CLOSED are active, the valve will be yellow. The mode of the valve is also displayed next to the device. Finally, the valve is dynamically linked to the faceplate for the device so the operator can simply click on the valve to access the faceplate. MSDD\_VLV\_HT is used for valves displayed horizontally and MSDD\_VLV\_VT is used for valves displayed vertically.

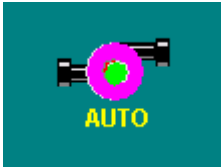
The figure below shows the MSDD\_VLV\_HT dynamo:



The second pair of dynamos, MSDD\_PMP\_HT and MSDD\_PMP\_VT are designed for pumps and are used with the DVC-MSDD\_MTR control module template. The color of the pump is linked to the RUNNING variable of the control module templates. If RUNNING is active, the pump will be red and if RUNNING is not active the pump will be green. The mode of the pump

is also displayed next to the device. Finally, the pump is dynamically linked to the faceplate for the device so the operator can simply click on the pump to access the faceplate. MSDD\_PMP\_HT is used for pumps displayed horizontally and MSDD\_PMP\_VT is used for pumps displayed vertically.

The figure below shows the MSDD\_PMP\_HT dynamo:



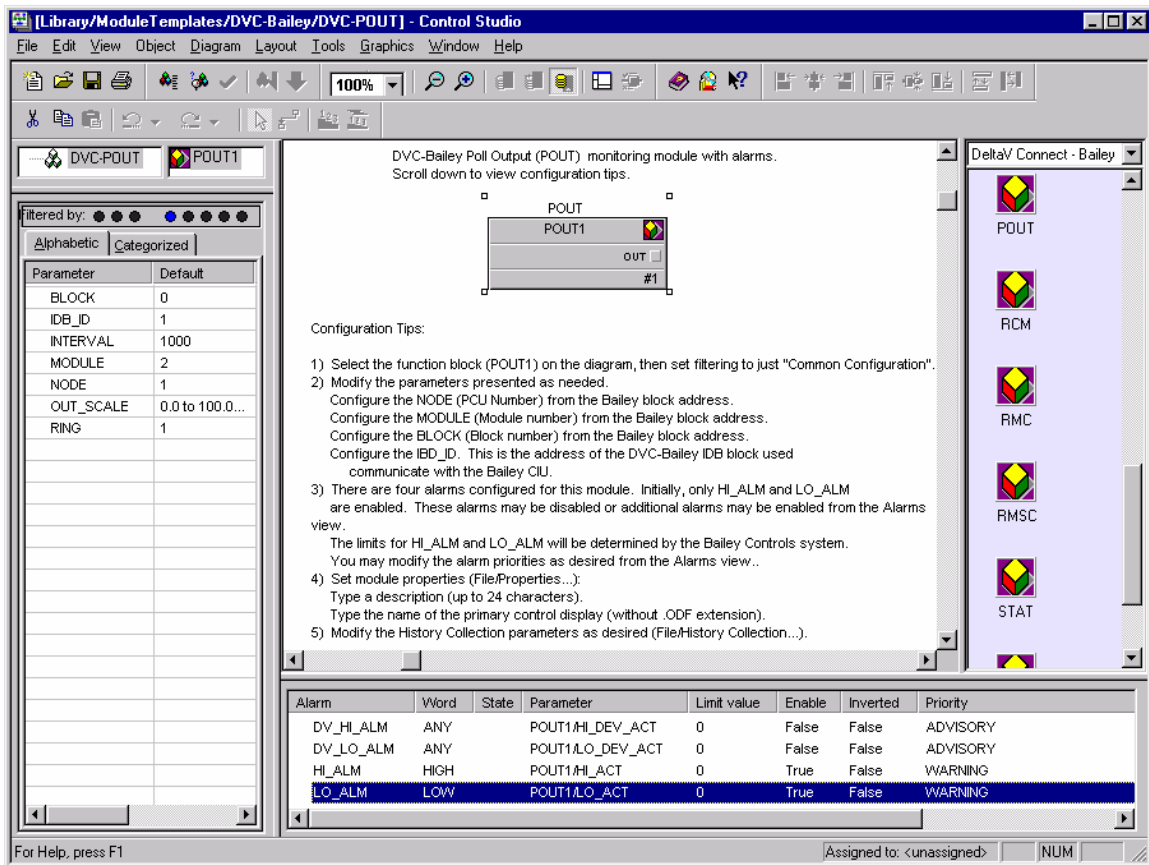
## POUT – Poll Output

### Control Module Configuration

To configure a POUT in the DeltaV system, use the DVC-POUT control module template. This template is located in DeltaV Explorer under LIBRARY/MODULE TEMPLATES/DVC-BAILEY.

To use the template, drag it from the library into the desired control area in DeltaV Explorer. This will create a new control module named DVC-POUT\_1. Right click on this new control module and select RENAME to give the control module the desired name.

The figure below shows the DVC-POUT control module template in Control Studio:

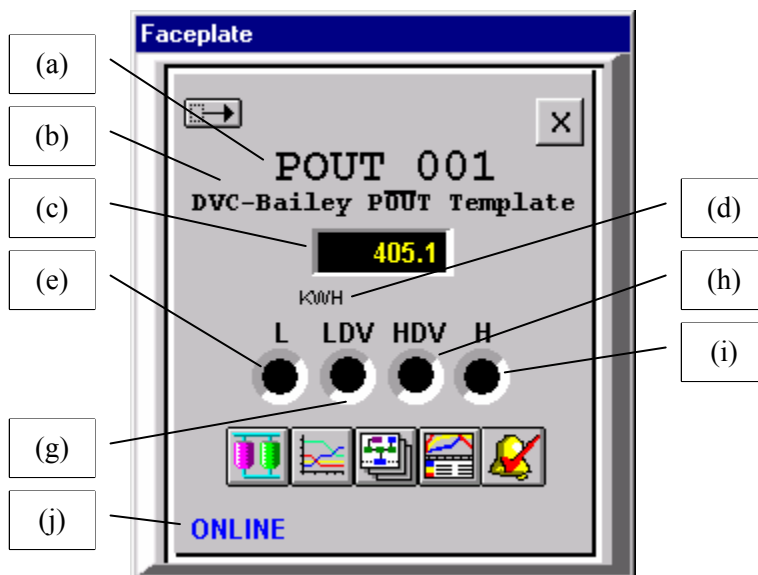


The template includes instructions for configuring the control module.

### Faceplate Control

The POUT is associated with the POUT.iaf control faceplate, and POUT.trn real-time trend faceplate. The control faceplate is in the control module properties dialog. If you use the DVC-POUT control module template, the appropriate faceplate have been pre-assigned.

The figure below shows the POUT control faceplate:



The faceplate includes the following information:

- (a) Tagname – Derived from the DeltaV control module name.
- (b) Description – Derived from the DeltaV control module description property.
- (c) Output Value – Displays the output of the AIL block.
- (d) Engineering Units – Displays the engineering units defined for OUT\_SCALE in the AIL block.
- (e) Hi Alarm Indication - Indicates a hi alarm condition. The color of the alarm indication is based on the alarm priority.
- (f) Hi Deviation Indicator – Indicates a high deviation alarm condition.
- (g) Lo Deviation Indicator – Indicates a low deviation alarm condition.
- (h) Lo Alarm Indication - Indicates a lo alarm condition. The color of the alarm indication is based on the alarm priority.
- (i) Communication Status – Indicates the communication status with the IDB block and Bailey. Online means the block has received data from Bailey, offline or any other message means the block is not receiving data from Bailey.

### Graphical Display

The value of the POUT can be displayed on a graphic using the POUT graphic dynamo supplied in the !BLYPROC and !BLYUTIL dynamo sets included in Graphic Studio. These sets defined DVC-Bailey dynamos associated with process and utility industry color conventions.

This dynamo displays the output value of the POUT block as well as the engineering units. It is also dynamically linked to the POUT control faceplate. The operator can access the POUT control faceplate by simply clicking on the POUT value displayed.

The figure below shows the POUT dynamo:



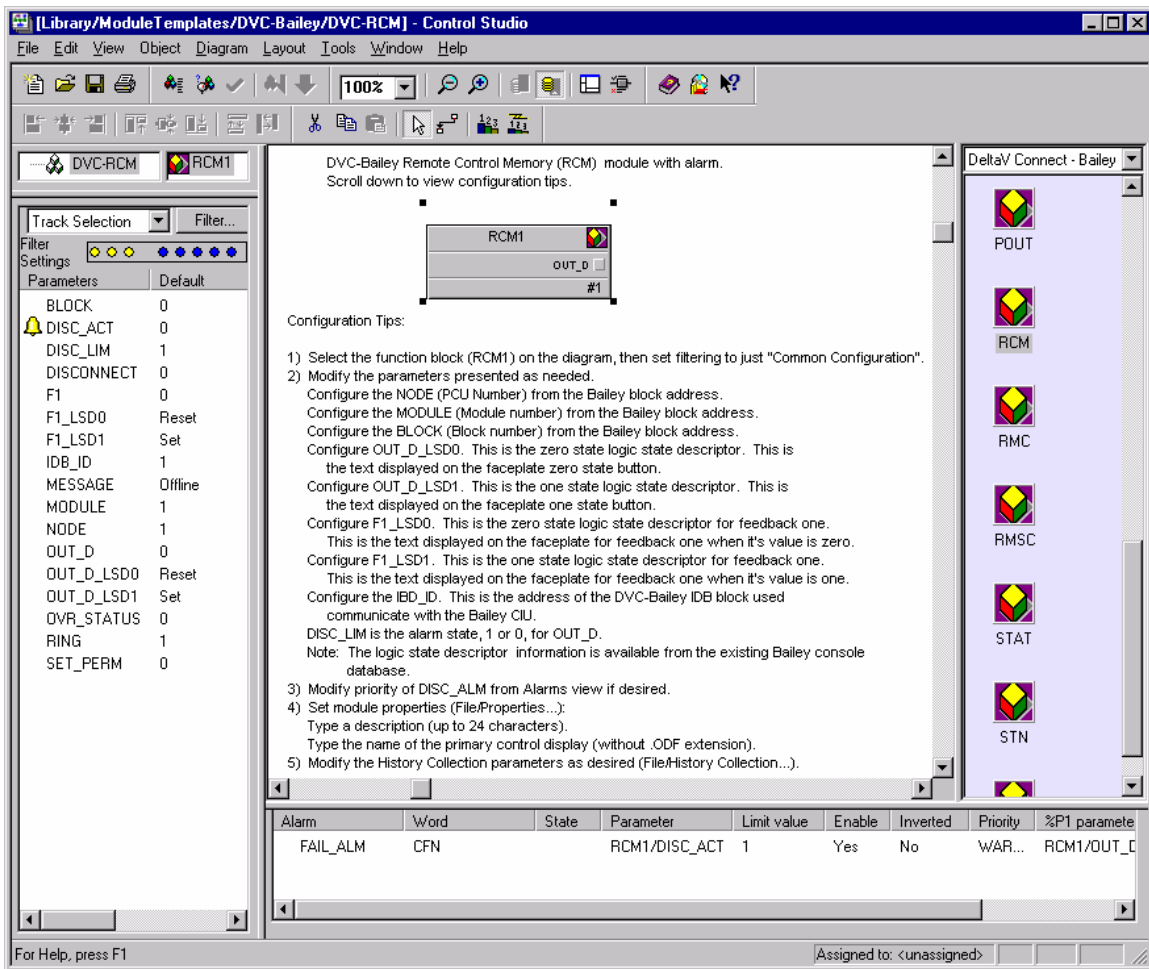
## RCM – Remote Control Memory

### Control Module Configuration

To configure a RCM in the DeltaV system, use the DVC-RCM control module template. This template is located in DeltaV Explorer under LIBRARY/MODULE TEMPLATES/DVC-BAILEY.

To use the template, drag it from the library into the desired control area in DeltaV Explorer. This will create a new control module named DVC-RCM\_1. Right click on this new control module and select RENAME to give the control module the desired name.

The figure below shows the DVC-RCM control module template in Control Studio:

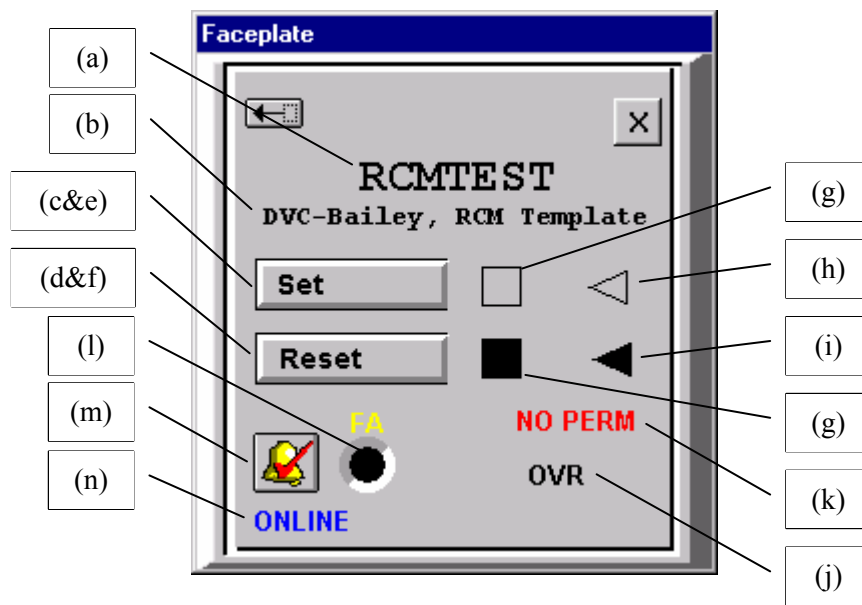


The template includes instructions for configuring the control module.

## Faceplate Control

The RCM is associated with the RCM.iaf control faceplate. The control faceplate definition is in the control module properties dialog. If you use the DVC-RCM control module template, the appropriate faceplate has been pre-assigned.

The figure below shows the RCM control faceplate:



The faceplate includes the following information:

- (a) Tagname – Derived from the DeltaV control module name.
- (b) Description – Derived from the DeltaV control module description property.
- (c) One State Push Button – Push Button to select the one state (upper push button).
- (d) Zero State Push Button – Push Button to select the zero state (lower push button).
- (e) One State Logic State Descriptor – Text displayed on the one state control push button (upper button).
- (f) Zero State Logic State Descriptor – Text displayed on the zero state control push button (lower button).
- (g) Output Indicator – Filled box indicates state of the output. When filled next to the Set button the output state is one. When filled next to the Reset button the output state is zero.
- (h) Feedback One State Arrow – Arrow to the right of the one state push button. The arrow will be solid black when the feedback is in the one state. The arrow will be gray with a black outline when the feedback is in the zero state.
- (i) Feedback Zero State Arrow – Arrow to the right of the zero state push button. The arrow will be solid black when the feedback is in the zero state. The arrow will be gray with a black outline when the feedback is in the one state.
- (j) Override Status – Displays OVR when the RCM block is in the Override state.
- (k) Permissive Status – Displays PERM when the RCM is permitted to go to the One State.
- (l) Alarm Indicator – Indicates when the device driver block is in alarm. The color of the indication is determined by the alarm priority.
- (m) Alarm Acknowledge Button – Push button (bell symbol) used to acknowledge the alarm.

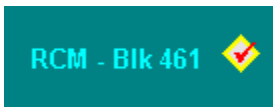
- (n) Communication Status – Indicates the communication status with the IDB block and Bailey. Online means the block has received data from Bailey, offline or any other message means the block is not receiving data from Bailey.

#### Graphical Display

The value of the RCM can be displayed on a graphic using the RCM\_CHECK graphic dynamo supplied in the !BLYPROC and !BLYUTIL dynamo sets included in Graphic Studio. These sets defined DVC-Bailey dynamos associated with process and utility industry color conventions.

This dynamo displays a check when the value of the RCM block is one (1) and the check is not visible when the value of the RCM block is zero (0).

The figure below shows the RCM\_CHECK dynamo:



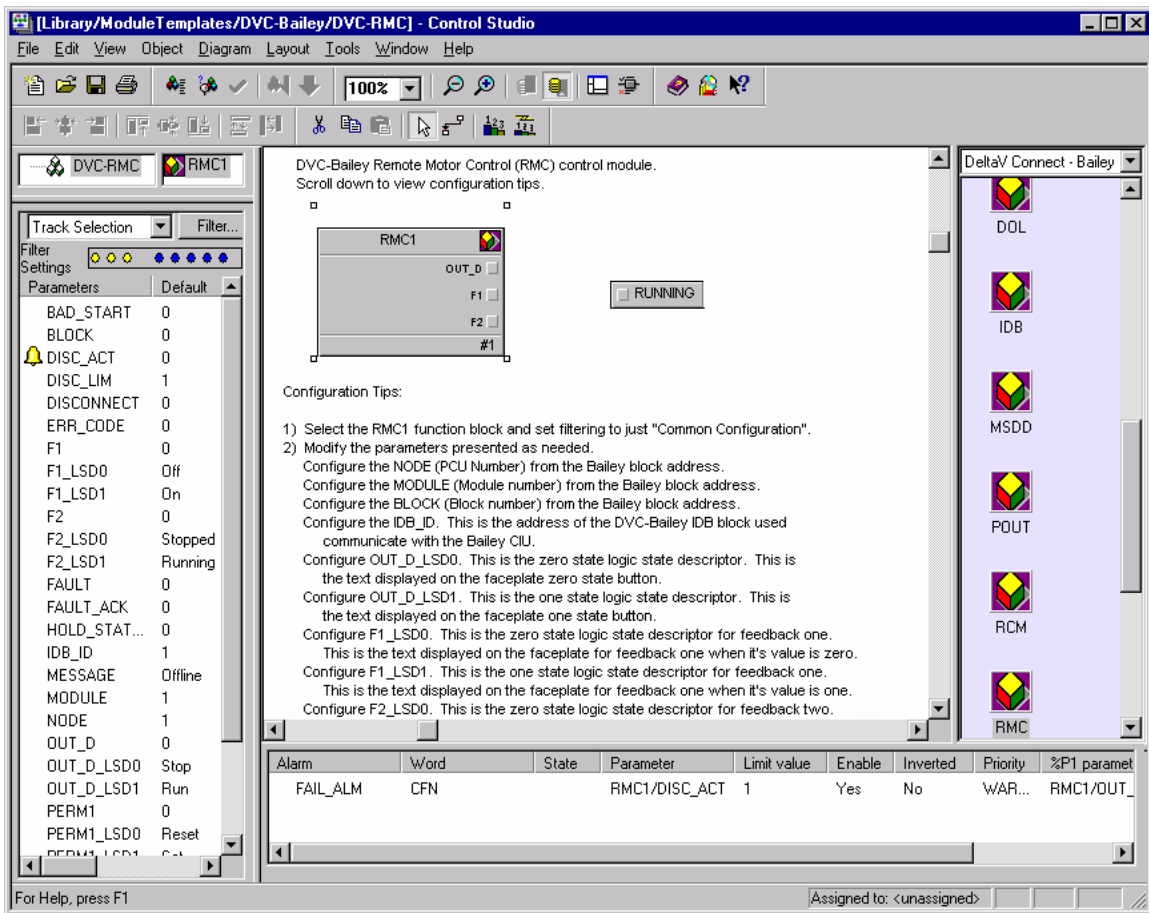
## RMC – Remote Motor Control

### Control Module Configuration

To configure a RMC in the DeltaV system, use the DVC-RMC control module template. This template is located in DeltaV Explorer under LIBRARY/MODULE TEMPLATES/DVC-BAILEY.

To use the template, drag it from the library into the desired control area in DeltaV Explorer. This will create a new control module named DVC-RMC\_1. Right click on this new control module and select RENAME to give the control module the desired name.

The figure below shows the DVC-RMC control module template in Control Studio:

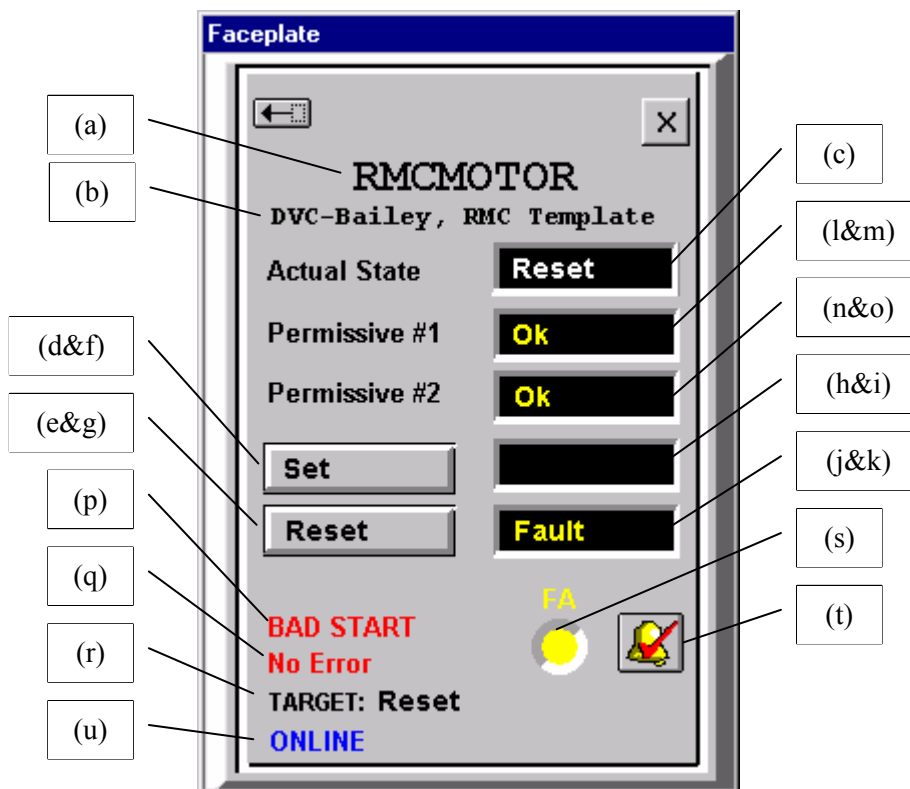


The template includes instructions for configuring the control module.

## Faceplate Control

The RMC is associated with the RMC.iaf control faceplate. The control faceplate definition is in the control module properties dialog. If you use the DVC-RMC control module template, the appropriate faceplate has been pre-assigned.

The figure below shows the RMC control faceplate:



The faceplate includes the following information:

- (a) Tagname – Derived from the DeltaV control module name.
- (b) Description – Derived from the DeltaV control module description property.
- (c) Actual State – Control output state displayed as text (Output Zero and One Logic State Descriptor).
- (d) One State Push Button – Push Button to select the one state (upper push button).
- (e) Zero State Push Button – Push Button to select the zero state (lower push button).
- (f) One State Logic State Descriptor – Text displayed on the one state control push button (upper button).
- (g) Zero State Logic State Descriptor – Text displayed on the zero state control push button (lower button).
- (h) Feedback 1 Zero State Logic State Descriptor – Text displayed for feedback 1 when it has a value of zero.
- (i) Feedback 1 One State Logic State Descriptor – Text displayed for feedback 1 when it has a value of one.
- (j) Feedback 2 Zero State Logic State Descriptor – Text displayed for feedback 2 when it has a value of zero.

- (k) Feedback 2 One State Logic State Descriptor – Text displayed for feedback 2 when it has a value of one.
- (l) Permissive 1 Zero State Logic State Descriptor – Text displayed for permissive 1 when it has a value of zero.
- (m) Permissive 1 One State Logic State Descriptor – Text displayed for permissive 1 when it has a value of one.
- (n) Permissive 2 Zero State Logic State Descriptor – Text displayed for permissive 2 when it has a value of zero.
- (o) Permissive 2 One State Logic State Descriptor – Text displayed for permissive 2 when it has a value of one.
- (p) Bad Start Indicator – Bad Start is displayed when the RMC block detects a bad start of the device.
- (q) Error Code Text – Ten different text messages are displayed depending on the error code in the RMC block.
  - 0. No Error
  - 1. Stopped
  - 2. Interlock 1
  - 3. Interlock 2
  - 4. Interlock 3
  - 5. Interlock 4
  - 6. Feedback 1 set to zero state
  - 7. Feedback 2 set to zero state
  - 8. Feedback 1 set to one state
  - 9. Feedback 2 set to one state
- (r) Target – Indicates the target state of the RMC block.
- (s) Alarm Indicator – Indicates when the device driver block is in alarm. The color of the indication is determined by the alarm priority.
- (t) Alarm Acknowledge Button – Push button (bell symbol) used to acknowledge the alarm.
- (u) Communication Status – Indicates the communication status with the IDB block and Bailey. Online means the block has received data from Bailey, offline or any other message means the block is not receiving data from Bailey.

### Graphical Display

There are dynamos available for remote motor control blocks. The pair of dynamos, RMC\_PMP\_HZT and RMC\_PMP\_VRT are designed for pumps and are used with the DVC-RMC control module template. The color of the pump is linked to the RUNNING variable of the control module template. When RUNNING is active, the pump will be red and when RUNNING is not active the pump will be green. Also, the pump is dynamically linked to the faceplate for the device so the operator can simply click on the pump to access the faceplate. RMC\_PMP\_HZT is used for pumps displayed horizontally and RMC\_PMP\_VRT is used for pumps displayed vertically.

The figure below shows the RMC\_PMP\_HZT dynamo:



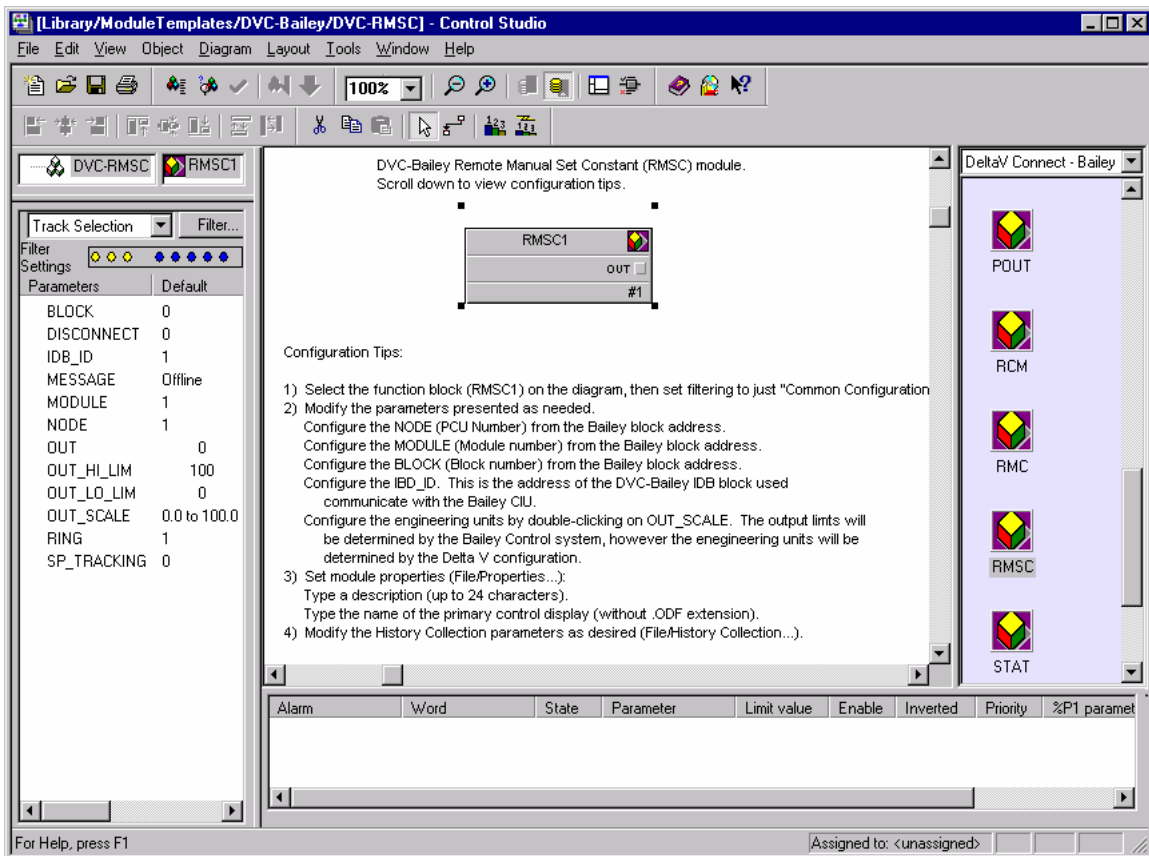
## RMSC – Remote Manual Set Constant

### Control Module Configuration

To configure a RMSC in the DeltaV system, use the DVC-RMSC control module template. This template is located in DeltaV Explorer under LIBRARY/MODULE TEMPLATES/DVC-BAILEY.

To use the template, drag it from the library into the desired control area in DeltaV Explorer. This will create a new control module named DVC-RMSC\_1. Right click on this new control module and select RENAME to give the control module the desired name.

The figure below shows the DVC-RMSC control module template in Control Studio:

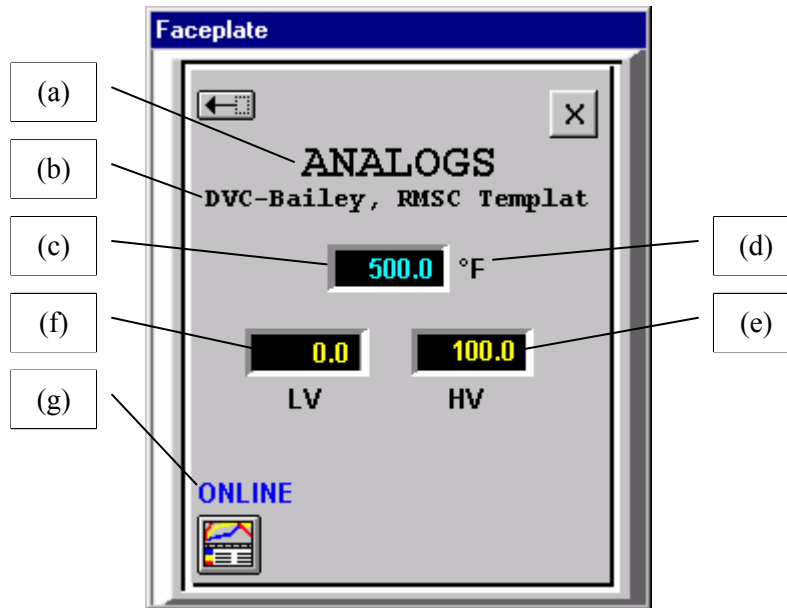


The template includes instructions for configuring the control module.

## Faceplate Control

The RMSC is associated with the RMSC.iaf control faceplate. The control faceplate definition is in the control module properties dialog. If you use the DVC-RMSC control module template, the appropriate faceplate has been pre-assigned.

The figure below shows the RMSC control faceplate:



The faceplate includes the following information:

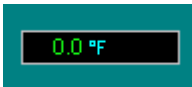
- (a) Tagname – Derived from the DeltaV control module name.
- (b) Description – Derived from the DeltaV control module description property.
- (c) Output Value – Displays the output of the RMSC block. Modifying this value causes it to also be changed in the Bailey RMSC block.
- (d) Engineering Units – Displays the engineering units defined for OUT\_SCALE in the AIL block.
- (e) High Limit – Displays the maximum acceptable value the operator can enter.
- (f) Low Limit – Displays the minimum acceptable value the operator can enter.
- (g) Communication Status – Indicates the communication status with the IDB block and Bailey. Online means the block has received data from Bailey, offline or any other message means the block is not receiving data from Bailey.

## Graphical Display

The value of the RMSC can be displayed on a graphic using the RMSC graphic dynamo supplied in the !BLYPROC and !BLYUTIL dynamo sets included in Graphic Studio. These sets defined DVC-Bailey dynamos associated with process and utility industry color conventions.

This dynamo displays the output value of the RMSC block as well as the engineering units. It is also dynamically linked to the RMSC control faceplate. The operator can access the RMSC control faceplate by simply clicking on the RMSC value displayed.

The figure below shows the RMSC dynamo:



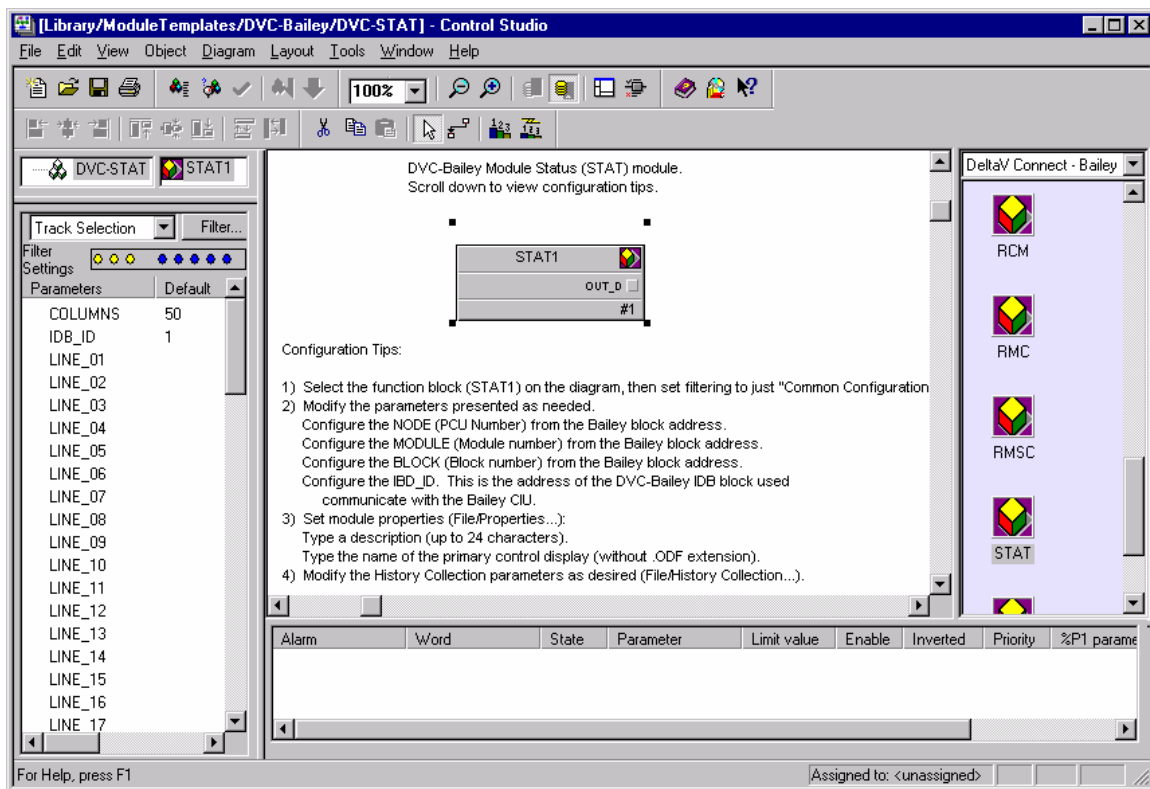
## STAT - Status

### Control Module Configuration

To configure a STAT in the DeltaV system, use the DVC-STAT control module template. This template is located in DeltaV Explorer under LIBRARY/MODULE TEMPLATES/DVC-BAILEY.

To use the template, drag it from the library into the desired control area in DeltaV Explorer. This will create a new control module named DVC-STAT\_1. Right click on this new control module and select RENAME to give the control module the desired name.

The figure below shows the DVC-STAT control module template in Control Studio:

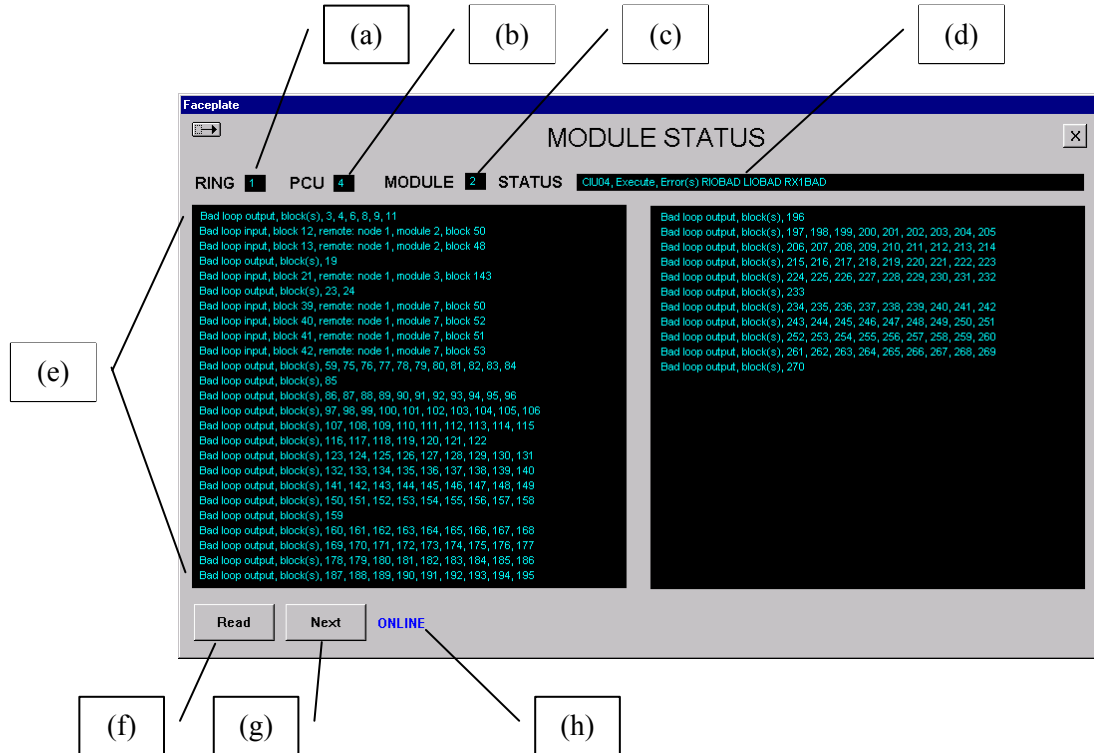


The template includes instructions for configuring the control module.

## Faceplate Control

The STAT is associated with the STAT.iaf control faceplate. The control faceplate definition is in the control module properties dialog. If you use the DVC-STAT control module template, the appropriate faceplate has been pre-assigned.

The figure below shows the STAT control faceplate:



The faceplate includes the following information:

- (a) Ring – The Bailey Ring address of the module.
- (b) PCU – The Bailey PCU address of the module.
- (c) Module – The Bailey Module address of the module.
- (d) Status – Message for the general status of the module.
- (e) Message Area – Up to 50 specific problem report error messages for the module.
- (f) Read Push Button – Push Button used to read problem report error messages for the module.
- (g) Next Push Button – Push Button to retrieve the next set of problem report error messages for the module.
- (h) Communication Status – Indicates the communication status with the IDB block and Bailey. Online means the block has received data from Bailey, offline or any other message means the block is not receiving data from Bailey.

### Graphical Display

The value of the STAT can be displayed on a graphic using the STAT graphic dynamo supplied in the !BLYPROC and !BLYUTIL dynamo sets included in Graphic Studio. These sets defined DVC-Bailey dynamos associated with process and utility industry color conventions.

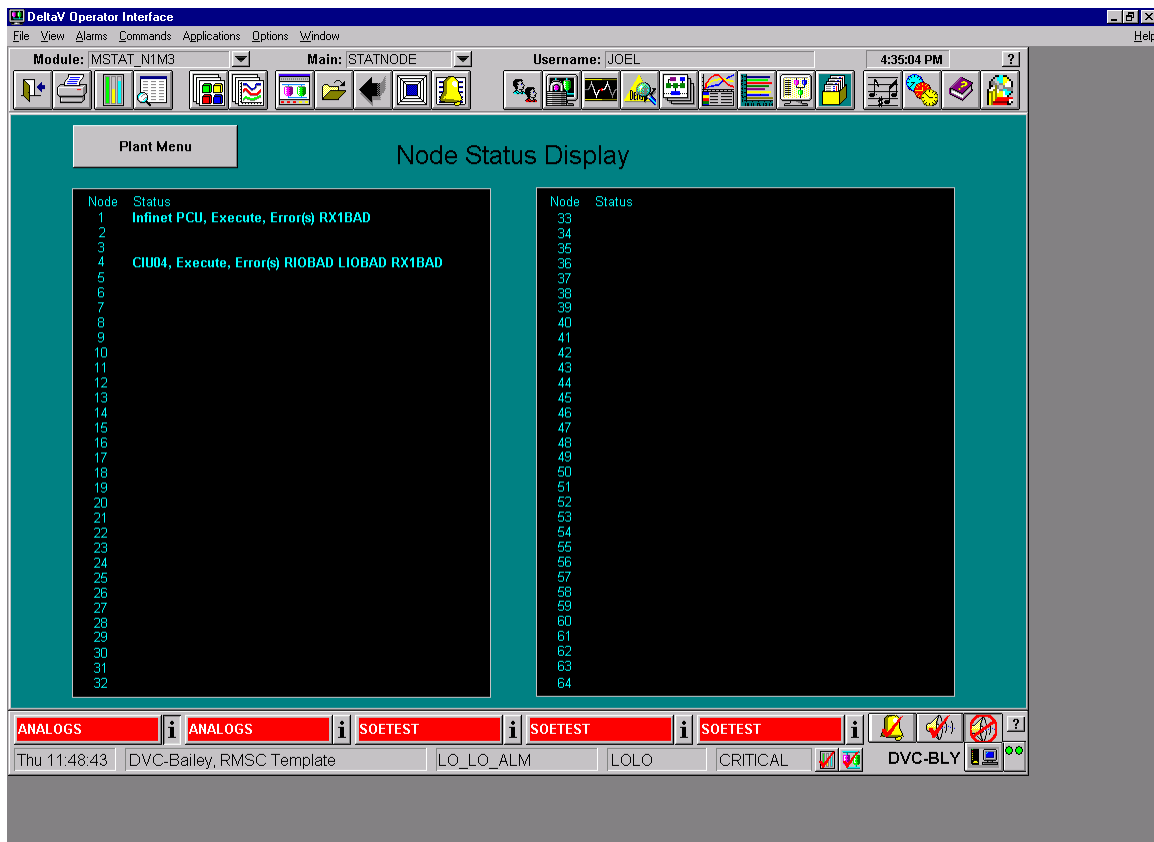
This dynamo displays the Bailey module address and status summary returned by the STAT block. It is also dynamically linked to the STAT control faceplate. The operator can access the STAT control faceplate by simply clicking on the STAT value displayed.

The figure below shows the STAT dynamo:



Additionally, there are two typical displays included with the DVC-BLY interface as templates for status indication. The first display is called STATNODE.odf. This display is intended to show the status of Nodes in the Bailey system.

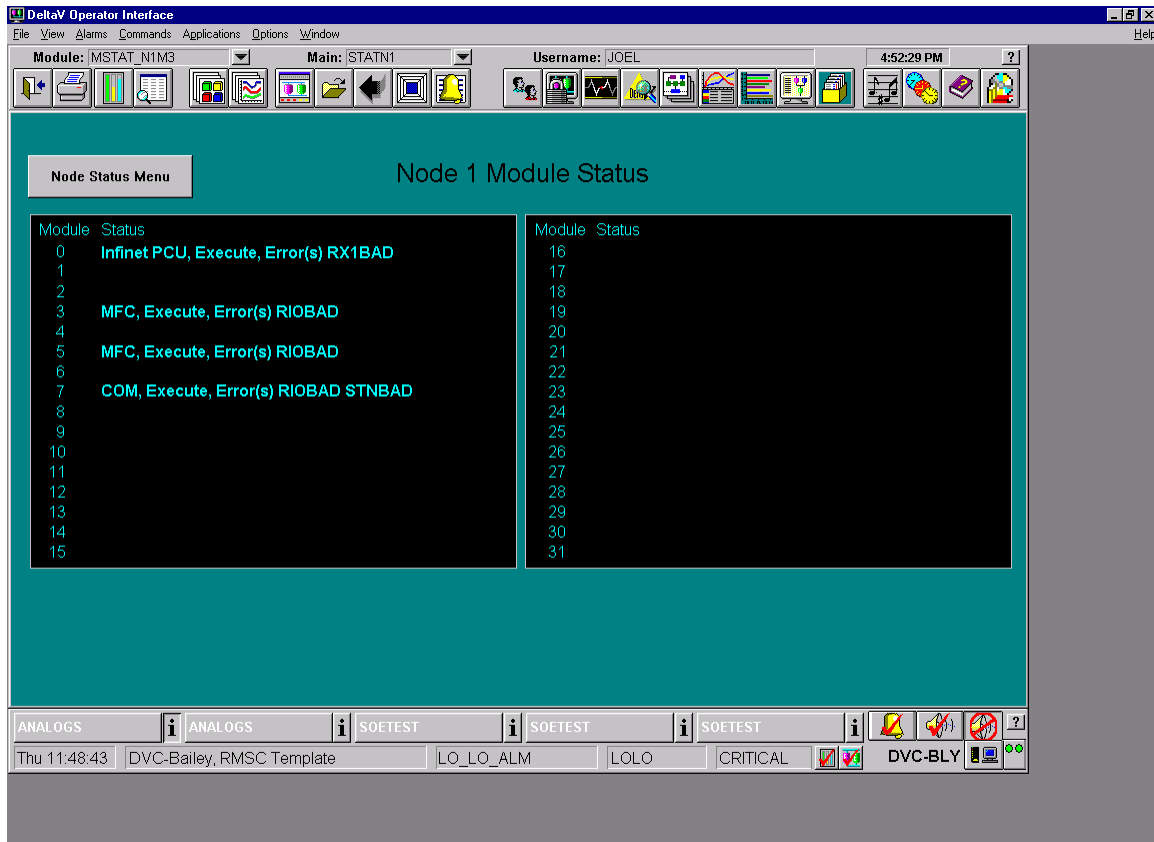
The figure below shows the STATNODE display:



The node number is dynamically linked to the status display for Node X. Also, the status message is displayed for each Node. The display template will come with the message configured for Node 1 only and the dynamic link configured for Node 1. Modules named, for

example, MSTAT\_N1M0 (where N1 represents the node number and M0 represents the module) must be configured for each module within every node to be reported by this display. Note, module 0 represents the module reporting status of every node with the exception of CIU nodes. For CIU nodes module 2 represents the CIU node status. Two tasks are required to configure the remainder of the display for the required Nodes in the Bailey system. First, modify the dynamic links for each required node number to point to the proper Node X status display (named as STATN1, STATN2, etc). Second, copy the message for Node 1 to the required Node's and modify the dynamic link for the messages to the correct module (i.e. MSTAT\_N2M0) for that Node.

The second display included with DVC-Bailey for module status is the specific node module status screen for Node 1. This template is called STATN1.odf. The following figure shows STATN1.odf:



This display shows the module status for each module for Node 1. The module number text is dynamically linked to the module status faceplate for module X. Also, the status message for each module is displayed. Only Module 0 will be pre-configured on the display template. Two tasks will be required to customize the display for a specific Node. First, modify the dynamic link for each module number text required so it is directed to the proper control module (i.e. MSTAT\_N1M0). Second, copy the status text from Module 0 to the required modules and modify the dynamic links to their proper control module.

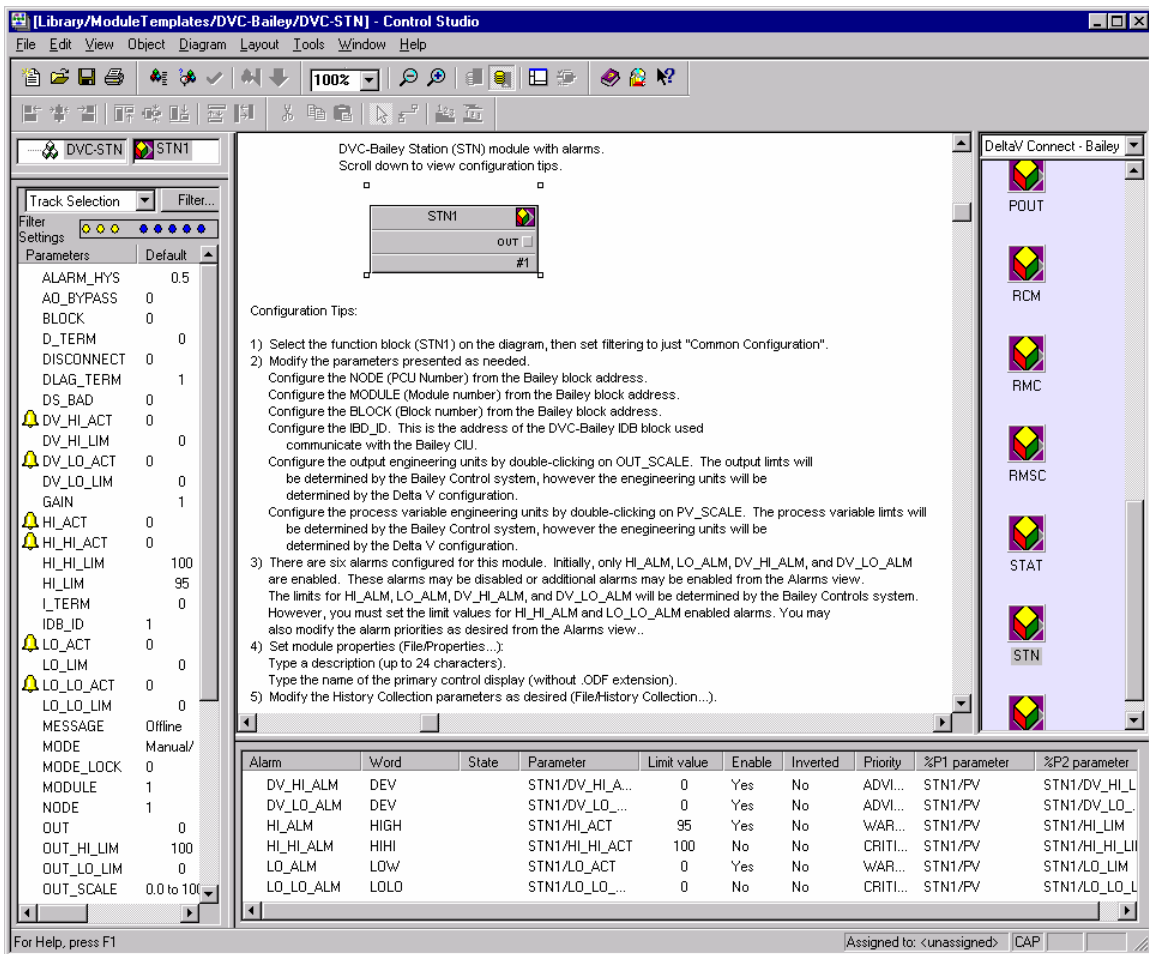
## STN - Station

### Control Module Configuration

To configure a STN in the DeltaV system, use the DVC-STN control module template. This template is located in DeltaV Explorer under LIBRARY/MODULE TEMPLATES/DVC-BAILEY.

To use the template, drag it from the library into the desired control area in DeltaV Explorer. This will create a new control module named DVC-STN\_1. Right click on this new control module and select RENAME to give the control module the desired name.

The figure below shows the DVC-STN control module template in Control Studio:

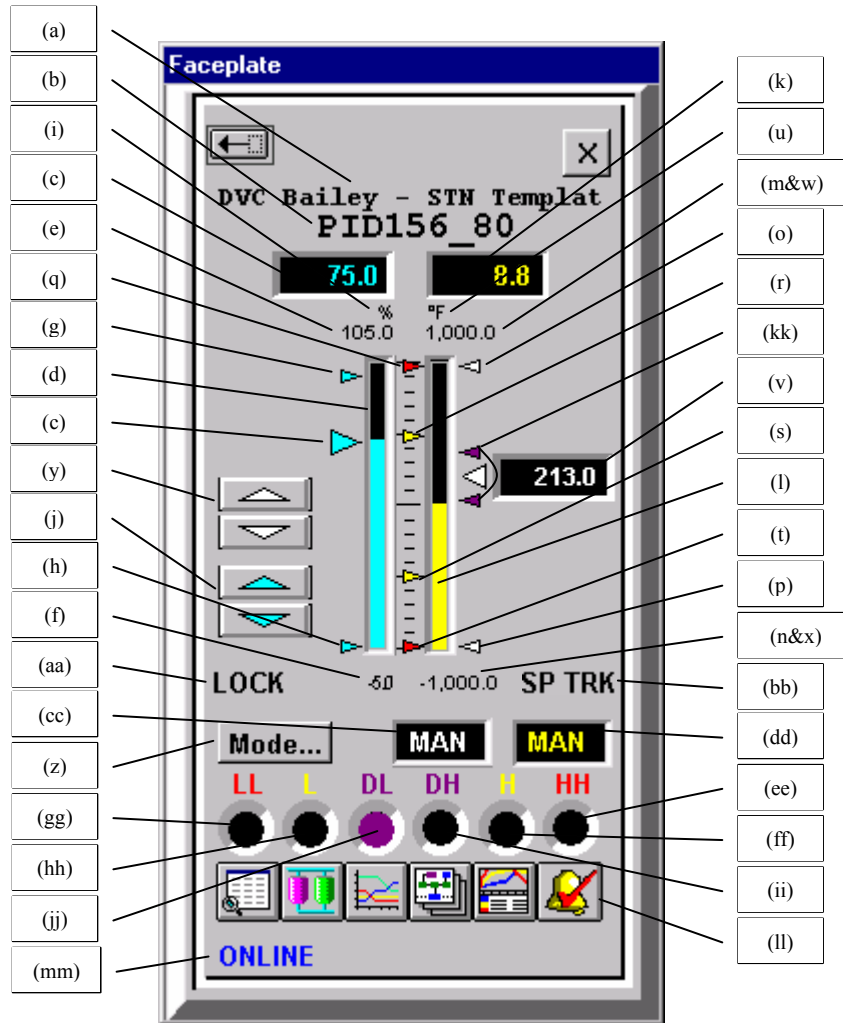


The template includes instructions for configuring the control module.

Faceplate Control

The STN is associated with the STN.iaf control faceplate, STN.det detail faceplate, and STN.trn real-time trend faceplate. The control faceplate and detail faceplate definitions are in the control module properties dialog. If you use the DVC-STN control module template, the appropriate faceplates have been pre-assigned.

The figure below shows the STN control faceplate:



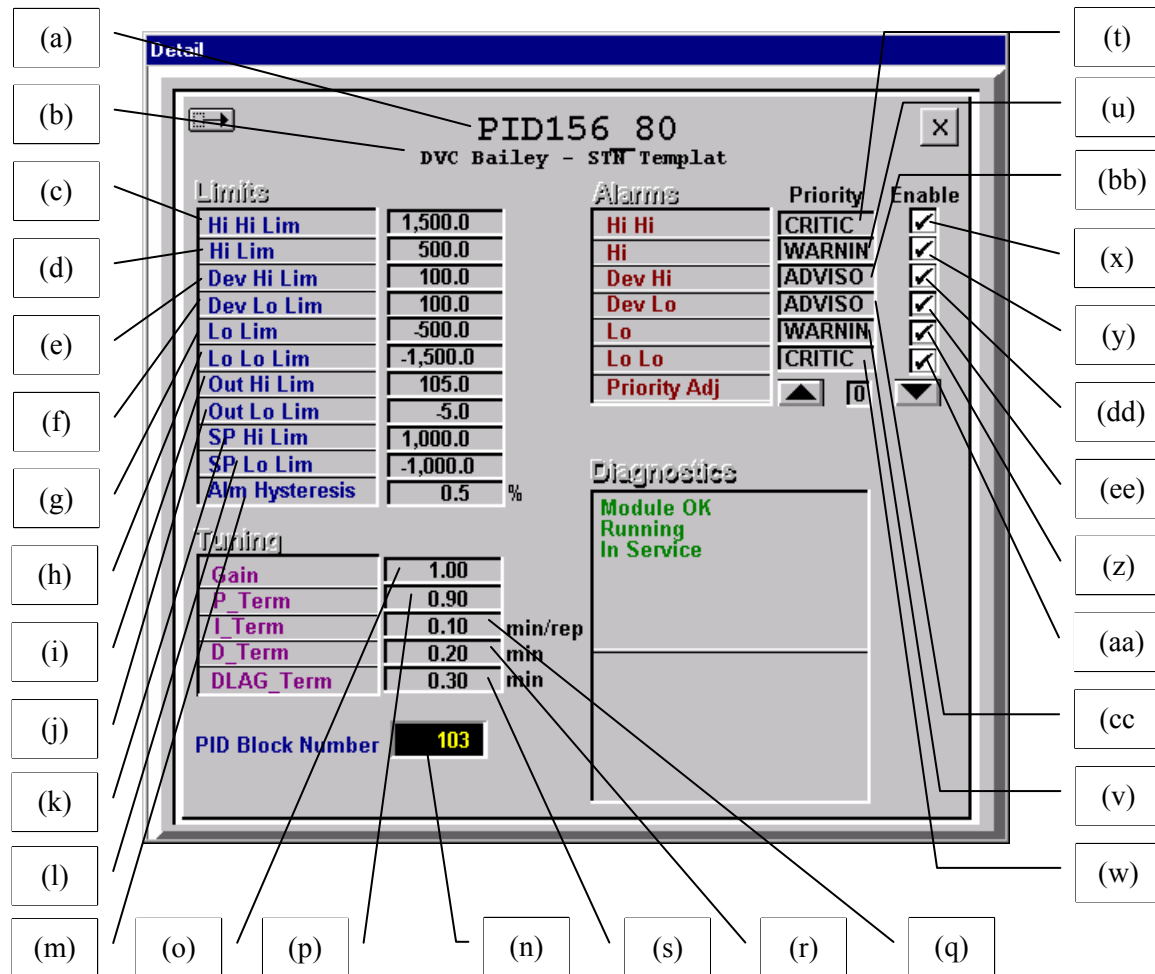
The faceplate includes the following information:

- (a) Tagname – Derived from the DeltaV control module name.
- (b) Description – Derived from the DeltaV control module description property.
- (c) Output Value – Displays the output of the STN block.
- (d) Output Indication Bar – Displays the output of the STN with a dynamic bar.
- (e) Output Maximum Value – Displays the maximum value of the STN output.
- (f) Output Minimum Value – Displays the minimum value of the STN output.
- (g) Output Maximum Limit Indicator – An arrow next to the output indication bar indicating the maximum output value.

- (h) Output Minimum Limit Indicator – An arrow next to the output indication bar indicating the minimum output value.
- (i) Output Engineering Units – Displays the engineering units defined for OUT\_SCALE in the STN block.
- (j) Output Up Down Buttons – raises and lowers setpoint with each click (only visible in manual mode).
- (k) PV Value – Displays the process variable of the STN block.
- (l) PV Indication Bar – Displays the process variable of the STN with a dynamic bar.
- (m) PV Maximum Value – Displays the maximum value of the process variable for the STN block.
- (n) PV Minimum Value – Displays the minimum value of the process variable for the STN block.
- (o) PV Maximum Limit Indicator – An arrow next to the PV indication bar indicating the maximum PV and SP value.
- (p) PV Minimum Limit Indicator – An arrow next to the PV indication bar indicating the minimum PV and SP value.
- (q) PV Hi-hi Alarm Limit Indicator – Displays a tick mark at the process variable hi-hi alarm limit point on the bar graph.
- (r) PV Hi Alarm Limit Indicator – Displays a tick mark at the process variable hi alarm limit point on the bar graph.
- (s) PV Lo Alarm Limit Indicator – Displays a tick mark at the process variable lo alarm limit point on the bar graph.
- (t) PV Lo-lo Alarm Limit Indicator – Displays a tick mark at the process variable lo-lo alarm limit point on the bar graph.
- (u) PV Engineering Units – Displays the engineering units defined for PV\_SCALE in the STN block.
- (v) Setpoint Value – Displays the setpoint variable of the STN block.
- (w) Setpoint Maximum Limit – Displays the maximum value of the setpoint for the STN block.
- (x) Setpoint Minimum Limit – Displays the minimum value of the setpoint for the STN block.
- (y) Setpoint Up Down Buttons – raises and lowers setpoint with each click.
- (z) Mode Button – Button to access a pop-up for mode selection.
- (aa) Lock Indicator – indicates controller is locked into current mode.
- (bb) SP TRK Indicator – indicates setpoint tracking is enabled.
- (cc) Target Mode Indication – Displays the target mode of the station.
- (dd) Actual Mode Indication – Displays the actual mode of the station.
- (ee) Hi-hi Alarm Indication – Indicates a hi-hi alarm condition. The color of the alarm indication is based on the alarm priority.
- (ff) Hi Alarm Indication - Indicates a hi alarm condition. The color of the alarm indication is based on the alarm priority.
- (gg) Lo-lo Alarm Indication - Indicates a lo-lo alarm condition. The color of the alarm indication is based on the alarm priority.
- (hh) Lo Alarm Indication - Indicates a lo alarm condition. The color of the alarm indication is based on the alarm priority.
- (ii) Deviation Hi Alarm Indication – Indicates a deviation hi alarm condition. The color of the alarm indication is based on the alarm priority.
- (jj) Deviation Lo Alarm Indication – Indicates a deviation lo alarm condition. The color of the alarm indication is based on the alarm priority.
- (kk) Deviation Alarm Indicator – tick marks indicating range PV must stay within SP to not be considered a deviation alarm.
- (ll) Alarm Acknowledge Button – Push button (bell symbol) used to acknowledge the alarm.

(mm) Communication Status – Indicates the communication status with the IDB block and Bailey. Online means the block has received data from Bailey, offline or any other message means the block is not receiving data from Bailey.

The figure below shows the STN detail faceplate:



The faceplate includes the following information:

- (a) Tagname – Derived from the DeltaV control module name.
- (b) Description – Derived from the DeltaV control module description property.
- (c) Hi-hi Alarm Limit – Displays hi-hi alarm limit for the output value. Allows an individual with proper security to change the hi-hi alarm limit.
- (d) Hi Alarm Limit - Displays hi alarm limit for the output value. Allows an individual with proper security to change the hi alarm limit. \*\*
- (e) Deviation Hi Alarm Limit – Displays deviation hi alarm limit. Allows an individual with proper security to change the deviation hi limit. \*\*
- (f) Deviation Lo Alarm Limit – Displays deviation lo alarm limit. Allows an individual with proper security to change the deviation lo limit. \*\*
- (g) Lo Alarm Limit - Displays lo alarm limit for the output value. Allows an individual with proper security to change the lo alarm limit. \*\*
- (h) Lo-lo Alarm Limit - Displays lo-lo alarm limit for the output value. Allows an individual with proper security to change the lo-lo alarm limit.

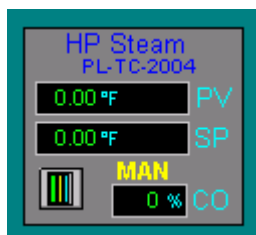
- (i) Output Hi Limit – Displays the hi limit for the station output. Allows an individual with proper security to change the output hi limit. \*\*
- (j) Output Lo Limit – Displays the lo limit for the station output. Allows an individual with proper security to change the output lo limit. \*\*
- (k) Setpoint Hi Limit – Displays the hi limit for the station setpoint.
- (l) Setpoint Lo Limit – Displays the lo limit for the station setpoint.
- (m) Alarm Hysterisis – Displays the alarm hysterisis value. Allows an individual with proper security to change the value.
- (n) PID Block Number – PID block number associated with the Bailey Station block. The interface attempts to determine this block number as part of its startup activity. A value of –1 indicates it was unable to determine the block number and it must be input by the user.
- (o) Gain – Displays the PID gain tuning constant. Allows an individual with proper security to change the value. \*\*
- (p) P\_Term – Displays the PID proportional tuning constant. Allows an individual with proper security to change the value. \*\*
- (q) I\_Term – Displays the PID integral tuning constant. Allows an individual with proper security to change the value. \*\*
- (r) D\_Term – Displays the PID derivative tuning constant. Allows an individual with proper security to change the value. \*\*
- (s) DLAG\_Term – Displays the PID derivative lag tuning constant. Allows an individual with proper security to change the value. \*\*
- (t) Hi-hi Alarm Priority – Displays the hi-hi alarm priority in text.
- (u) Hi Alarm Priority – Displays the hi alarm priority in text.
- (v) Lo Alarm Priority – Displays the lo alarm priority in text.
- (w) Lo-lo Alarm Priority – Displays the lo-lo alarm priority in text.
- (x) Hi-hi Alarm Enable Checkbox – Checkbox to enable/disable the hi-hi alarm for individuals with proper security.
- (y) Hi Alarm Enable Checkbox – Checkbox to enable/disable the hi alarm for individuals with proper security.
- (z) Lo Alarm Enable Checkbox – Checkbox to enable/disable the lo alarm for individuals with proper security.
- (aa) Lo-lo Alarm Enable Checkbox – Checkbox to enable/disable the lo-lo alarm for individuals with proper security.
- (bb) Hi Deviation Alarm Priority – Displays the hi deviation alarm priority in text.
- (cc) Lo Deviation Alarm Priority – Displays the lo deviation alarm priority in text.
- (dd) Hi Deviation Alarm Enable Checkbox – Checkbox to enable/disable the hi deviation alarm for individuals with proper security.
- (ee) Lo Deviation Alarm Enable Checkbox – Checkbox to enable/disable the lo deviation alarm for individuals with proper security.

\*\* Modifying this value causes it to be automatically tuned in the associated Bailey block. It can also be changed using the block tune function.

### Graphical Display

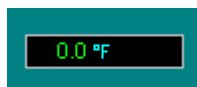
There are several dynamos supplied in the !BLYPROC and !BLYUTIL dynamo sets in Graphic Studio associated with the STN block. These sets defined DVC-Bailey dynamos associated with process and utility industry color conventions. The first dynamo is STN. This dynamo displays the tagname, description, output, process variable, setpoint, mode, and engineering units of the station. The dynamo is also dynamically linked to the station faceplate allowing the operator to simply click on the dynamo to access the faceplate.

The figure below shows the STN dynamo:



The next dynamo associated with the STN is called STN\_PV. This dynamo displays the process variable and engineering units for the STN. The dynamo is also dynamically linked to the station faceplate allowing the operator to simply click on the dynamo to access the faceplate.

The figure below shows the STN\_PV dynamo:



There is a pair of valve dynamos associated with the STN. They are called STN\_VLV\_HZT and STN\_VLV\_VRT. These dynamos show a valve which is green when the output of the station is less than 2% and is red when the output is greater than 2%. The mode of the station is also displayed next to the valve. Finally, the valve is dynamically linked to the station faceplate allowing the operator to simply click on the dynamo to access the faceplate.

The figure below shows the STN\_VLV\_HZT dynamo:



There is a pair of damper dynamos associated with the STN. They are called DMP\_HRZ and DMP\_VRT. These dynamos show a damper which is green when the output of the station is less than 2% and is red when the output is greater than 2%. The mode of the station is also displayed next to the damper. Finally, the damper is dynamically linked to the station faceplate allowing the operator to simply click on the dynamo to access the faceplate.

The figure below shows the DMP\_HZT dynamo:

