

# 800xA for Advant Master

Operation

System Version 6.0

Power and productivity  
for a better world™





# 800xA for Advant Master

Operation

System Version 6.0

---

## NOTICE

This document contains information about one or more ABB products and may include a description of or a reference to one or more standards that may be generally relevant to the ABB products. The presence of any such description of a standard or reference to a standard is not a representation that all of the ABB products referenced in this document support all of the features of the described or referenced standard. In order to determine the specific features supported by a particular ABB product, the reader should consult the product specifications for the particular ABB product.

ABB may have one or more patents or pending patent applications protecting the intellectual property in the ABB products described in this document.

The information in this document is subject to change without notice and should not be construed as a commitment by ABB. ABB assumes no responsibility for any errors that may appear in this document.

In no event shall ABB be liable for direct, indirect, special, incidental or consequential damages of any nature or kind arising from the use of this document, nor shall ABB be liable for incidental or consequential damages arising from use of any software or hardware described in this document.

This document and parts thereof must not be reproduced or copied without written permission from ABB, and the contents thereof must not be imparted to a third party nor used for any unauthorized purpose.

The software or hardware described in this document is furnished under a license and may be used, copied, or disclosed only in accordance with the terms of such license. This product meets the requirements specified in EMC Directive 2004/108/EC and in Low Voltage Directive 2006/95/EC.

## TRADEMARKS

All rights to copyrights, registered trademarks, and trademarks reside with their respective owners.

Copyright © 2003-2014 by ABB.  
All rights reserved.

Release: August 2014  
Document number: 3BSE030352-600

---

# Table of Contents

## **About This User Manual**

General .....	7
User Manual Conventions .....	7
Feature Pack .....	7
Warning, Caution, Information, and Tip Icons .....	8
Terminology.....	9
Released User Manuals and Release Notes.....	10

## **Section 1 - Operating Overview**

Operator Workplace.....	11
-------------------------	----

## **Section 2 - Faceplates**

## **Section 3 - Alarm and Event**

## **Section 4 - Hot Keys**

Predefined Hot Keys .....	21
---------------------------	----

## **Section 5 - Quick List**

How to use the Quick List.....	26
Configuration Examples.....	30

## **Appendix A - Indicators**



---

# About This User Manual

## General



Any security measures described in this User Manual, for example, for user access, password security, network security, firewalls, virus protection, etc., represent possible steps that a user of an 800xA System may want to consider based on a risk assessment for a particular application and installation. This risk assessment, as well as the proper implementation, configuration, installation, operation, administration, and maintenance of all relevant security related equipment, software, and procedures, are the responsibility of the user of the 800xA System.

This user manual describes operating the 800xA for Advant Master within the 800xA System. The 800xA for Advant Master is a software product that enables you to connect the Operator Workplace to a system of AC 400 series controllers in a MasterBus 300 network. This also extends the total functionality of the Operator Workplace utilizing the AC 400 Series controller functionality.

## User Manual Conventions

Microsoft Windows conventions are normally used for the standard presentation of material when entering text, key sequences, prompts, messages, menu items, screen elements, etc.

## Feature Pack

The Feature Pack content (including text, tables, and figures) included in this User Manual is distinguished from the existing content using the following two separators:

## Feature Pack Functionality

<Feature Pack Content>

Feature Pack functionality included in an existing table is indicated using a table footnote (\*):

\*Feature Pack Functionality

Feature Pack functionality in an existing figure is indicated using callouts.

Unless noted, all other information in this User Manual applies to 800xA Systems with or without a Feature Pack installed.

## Warning, Caution, Information, and Tip Icons

This User Manual includes Warning, Caution, and Information where appropriate to point out safety related or other important information. It also includes Tip to point out useful hints to the reader. The corresponding symbols should be interpreted as follows:



Electrical warning icon indicates the presence of a hazard which could result in *electrical shock*.



Warning icon indicates the presence of a hazard which could result in *personal injury*.



Caution icon indicates important information or warning related to the concept discussed in the text. It might indicate the presence of a hazard which could result in *corruption of software or damage to equipment/property*.



Information icon alerts the reader to pertinent facts and conditions.



Tip icon indicates advice on, for example, how to design your project or how to use a certain function

Although Warning hazards are related to personal injury, and Caution hazards are associated with equipment or property damage, it should be understood that operation of damaged equipment could, under certain operational conditions, result



in degraded process performance leading to personal injury or death. Therefore, fully comply with all Warning and Caution notices.

## Terminology

A complete and comprehensive list of terms is included in *System 800xA System Guide Functional Description (3BSE038018\*)*. The listing includes terms and definitions that apply to the 800xA System where the usage is different from commonly accepted industry standard definitions and definitions given in standard dictionaries such as Webster's Dictionary of Computer Terms. Terms that uniquely apply to this User Manual are listed in the following table.

Term/Acronym	Description
AC 400	Advant Controller 400 Series with Master software - The ABB family of controllers: AC 410 and AC 450
Control Builder A	The configuration tool for Advant Master Controller. Control Builder A consists of Application Builder, Bus Configuration Builder, Function Chart Builder and the option On-Line Builder.
Control connection aspect (CCA)	Contains the name, data type, access rights (read/write) and subscription update rate of each attribute and the name of the corresponding OPC item (object of the controller). CCA also contains a user interface to inspect the object type attribute information. It can also be used to subscribe for the current value of each attribute.
Function Chart Builder	Part of the configuration tool Control Builder A.
MB 300	MasterBus 300 - the control network communication protocol that is used by the AC 400 Series controllers.
RTA	Real Time Accelerator board - the Communication board that is used for connection to the MasterBus 300 control network, a PU515A RTA board or a PU410 unit.
TTD	Time Tagged Data - the name of the log functionality in Safeguard and AC 400 Series Controllers.

## Released User Manuals and Release Notes

A complete list of all User Manuals and Release Notes applicable to System 800xA is provided in *System 800xA Released User Manuals and Release Notes (3BUA000263\*)*.

*System 800xA Released User Manuals and Release Notes (3BUA000263\*)* is updated each time a document is updated or a new document is released. It is in pdf format and is provided in the following ways:

- Included on the documentation media provided with the system and published to ABB SolutionsBank when released as part of a major or minor release, Service Pack, Feature Pack, or System Revision.
- Published to ABB SolutionsBank when a User Manual or Release Note is updated in between any of the release cycles listed in the first bullet.



A product bulletin is published each time *System 800xA Released User Manuals and Release Notes (3BUA000263\*)* is updated and published to ABB SolutionsBank.

---

# Section 1 Operating Overview

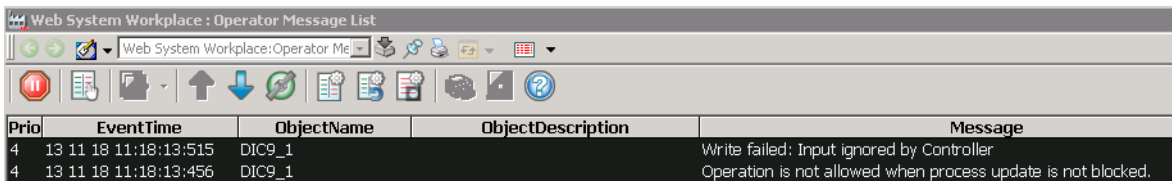
The Operator Workplace functionality is generic for all controller types. For more information about operation, refer to *System 800xA, Operation (3BSE036904\*)*.

The 800xA for Advant Master provides the following additional functionality/tools:

- Operator Workplace
- Faceplates
- Advant Master specific information in Alarm & Event Lists
- Hot Keys in 800xA for Advant Master
- Quick List

## Operator Workplace

The 800xA for Advant Master uses the standard 800xA Operator Workplace. For more information on the Operator workplace, refer to *System 800xA, Operation (3BSE036904\*)*.



Prio	EventTime	ObjectName	ObjectDescription	Message
4	13 11 18 11:18:13:515	DIC9_1		Write failed: Input ignored by Controller
4	13 11 18 11:18:13:456	DIC9_1		Operation is not allowed when process update is not blocked.

*Figure 1. Operator Message List example*



The 800xA Advant Master messages displayed in an operator message list (see [Figure 1](#)) or operator message line of the workplace contains messages received from all the users of the system.



# Section 2 Faceplates

This section describes about the faceplates specific to 800xA for Advant Master. For more information on faceplates, refer to the *System 800xA, Operation (3BSE036904\*)*.

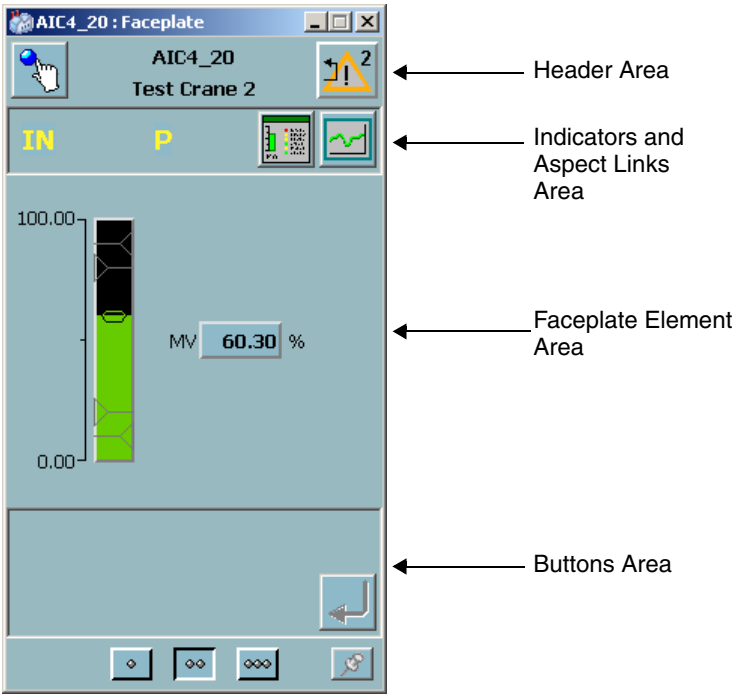
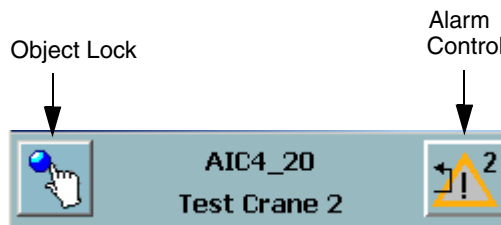


Figure 2. Advant Master Faceplate Example

## Header Area

The header area of an 800xA for Advant Master faceplate contains two buttons as shown in [Figure 3](#).

- Object Lock
- Alarm Control



*Figure 3. Header Area - Example*




## Object Lock


The **Object Lock** button is shown as activated starting from the time the user has locked the object until the object lock is released.

Object lock provides the access to operate the object. If autolock is enabled, the object is locked while starting to operate the faceplate.

No operation is possible on the faceplates, if the object is locked by another user. [Table 1](#) shows the different object lock states and the corresponding indications.

Table 1. Lock States Displayed in the Object Lock.

Lock status	Button	Icon	Background Color
Unlocked	Raised		Bluegrey
Locked by me	Sunken		White
Locked by other	Flat		Yellow

When the object is released by another user, the button changes from flat to raised. Click  to lock the object.

To release a lock on an object, click the lock button or close the faceplate.

## Alarm Control

Alarm control indicates the alarm state and allows to acknowledge the object alarms from the faceplate. When the object is disabled by the user, priority is not indicated in the alarm icon.

For more information about alarm control and alarm states, refer to *System 800xA, Operation (3BSE036904\*)*.

## Indicators and Aspect Links Area

### Indicators

Indicators display different modes, blocks, and interlocks in the Indicators area.

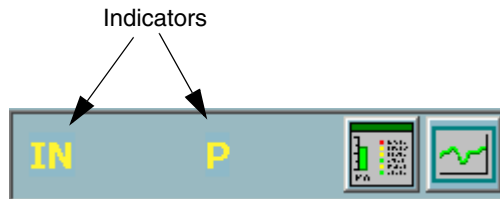


Figure 4. Indicators Area - Example

For information regarding indicators for the different object types, see [Appendix A, Indicators](#).

### Aspect Links

In the aspect links area of an 800xA for Advant Master Faceplate, available aspect link shortcuts are displayed as shown in [Figure 5](#).



These aspects can also be accessed through the context menu of the object.

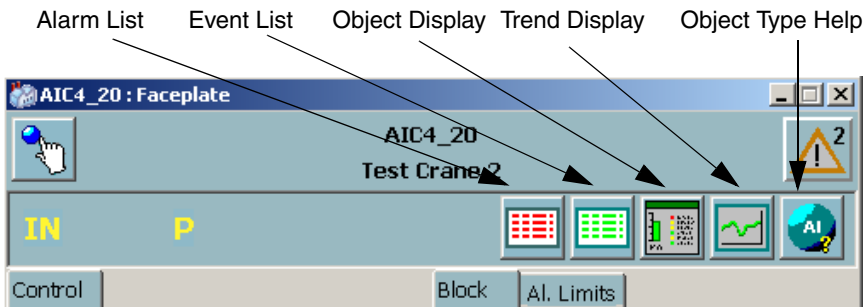


Figure 5. Aspect Links Area - Example



## Alarm List

The Alarm List button displays an alarm list containing the alarms for the object.

## Event List

The Event List button displays an event list containing the events for the object.

## Object Display

The Object Display contains all available information about the process object.

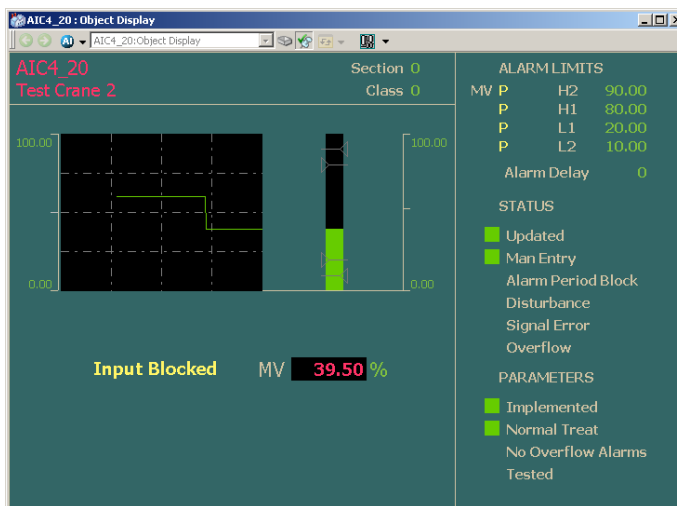


Figure 6. Object Display Example

## Trend Display

The Trend Display button displays a trend display for the selected object.

## Object Type Help

The Object Type Help button displays the on-line help.

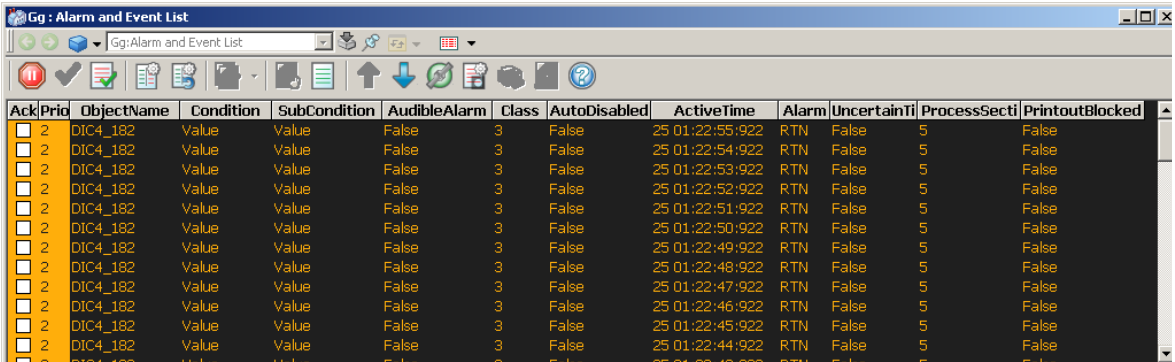


## Section 3 Alarm and Event

800xA for Advant Master uses the common alarm and event list provided by System 800xA.

800xA for Advant Master defines four specific columns that can be added to the alarm/event list:

- ProcessSection - section of the plant from which the alarm/event is received.
- Class - classification of the object.
- UncertainTimeTag - indication of uncertain time tagging (true).
- PrintoutBlocked - blocking of alarm logger printout (true).



Ack	Pri	ObjectName	Condition	SubCondition	AudibleAlarm	Class	AutoDisabled	ActiveTime	Alarm	UncertainTi	ProcessSecti	PrintoutBlocked
<input type="checkbox"/>	2	DIC4_182	Value	Value	False	3	False	25 01:22:55:922	RTN	False	5	False
<input type="checkbox"/>	2	DIC4_182	Value	Value	False	3	False	25 01:22:54:922	RTN	False	5	False
<input type="checkbox"/>	2	DIC4_182	Value	Value	False	3	False	25 01:22:53:922	RTN	False	5	False
<input type="checkbox"/>	2	DIC4_182	Value	Value	False	3	False	25 01:22:52:922	RTN	False	5	False
<input type="checkbox"/>	2	DIC4_182	Value	Value	False	3	False	25 01:22:51:922	RTN	False	5	False
<input type="checkbox"/>	2	DIC4_182	Value	Value	False	3	False	25 01:22:50:922	RTN	False	5	False
<input type="checkbox"/>	2	DIC4_182	Value	Value	False	3	False	25 01:22:49:922	RTN	False	5	False
<input type="checkbox"/>	2	DIC4_182	Value	Value	False	3	False	25 01:22:48:922	RTN	False	5	False
<input type="checkbox"/>	2	DIC4_182	Value	Value	False	3	False	25 01:22:47:922	RTN	False	5	False
<input type="checkbox"/>	2	DIC4_182	Value	Value	False	3	False	25 01:22:46:922	RTN	False	5	False
<input type="checkbox"/>	2	DIC4_182	Value	Value	False	3	False	25 01:22:45:922	RTN	False	5	False
<input type="checkbox"/>	2	DIC4_182	Value	Value	False	3	False	25 01:22:44:922	RTN	False	5	False
<input type="checkbox"/>	2	DIC4_182	Value	Value	False	3	False	25 01:22:43:922	RTN	False	5	False

Figure 7. Common Alarm List with added Advant Master Specific Columns



---

## Section 4 Hot Keys

A Hot Key is a specific combination of keys or a single key on a computer keyboard or an additional keypad defined to perform a specific function. The hot key operations can be global (independent of highlighted object), or affect the highlighted object. A few actions such as starting and stopping a motor, increasing or decreasing a value on highlighted objects can be operated using a hot key.

When you open a faceplate, the corresponding object in the graphic display will be highlighted and surrounded by blue corner brackets. The user can then operate the active faceplate using hot keys.

Hot Keys are only available to a user who is logged on as an Operator, and only from the Operator Workplace.



To secure that all hotkeys can be used, refer to the procedure described in *Hot Keys* section in *System 800xA, Operations, Operator Workplace Configuration (3BSE030322\*)*.

### Predefined Hot Keys

Table 2 and Table 3 describe the set of hot keys predefined in the product.

Table 2. Predefined Hot Keys 1

Object Type	Acknowledge	On/Start/ Open/True	Off/Stop Close/False	Man	Auto
	CTRL+ SHIFT+ Q	CTRL+ SHIFT+ 1	CTRL+ SHIFT+ 0	CTRL+ SHIFT+ Y	CTRL+ SHIFT+ U
AI	X				
AO	X			X	X
DI	X	X	X		
DO	X	X	X	X	X
PIDCONA	X			X	X
PIDCON	X			X	X
MANSTN	X			X	
RATIONSTN	X			X	X
MOTCON	X	X	X	X	X
VALVECON	X	X	X	X	X
GROUP	X	X	X	X	X
SEQUENCE	X	X	X	X	X
GENBIN	X	X	X	X	X
GENCON	X			X	X
GENUSD	X			X	X
DATB		X	X		
TEXT_DATA	X	X	X	X	X
DRICONE	X	X	X	X	X

Table 2. Predefined Hot Keys 1 (Continued)

Object Type	Acknowledge	On/Start/ Open/True	Off/Stop Close/False	Man	Auto
	CTRL+ SHIFT+ Q	CTRL+ SHIFT+ 1	CTRL+ SHIFT+ 0	CTRL+ SHIFT+ Y	CTRL+ SHIFT+ U
DRICONS	X	X	X	X	X
MOTCON_I	X	X	X	X	X

Table 3. Predefined Hot Keys 2

Object Type	E1	E2	Small Increase	Small Decrease	Large Increase	Large Decrease
	CTRL+ SHIFT+ O	CTRL+ SHIFT+ P	CTRL+ SHIFT+ K	CTRL+ SHIFT+ H	CTRL+ SHIFT+ L	CTRL+ SHIFT+ J
AI						
AO			X	X		
DI						
DO						
PIDCONA	X	X	X	X	X	X
PIDCON	X	X	X	X	X	X
MANSTN	X		X	X	X	X
RATIONSTN	X		X	X	X	X
MOTCON						
VALVECON						
GROUP						

Table 3. Predefined Hot Keys 2 (Continued)

<b>Object Type</b>	<b>E1 CTRL+ SHIFT+ O</b>	<b>E2 CTRL+ SHIFT+ P</b>	<b>Small Increase CTRL+ SHIFT+ K</b>	<b>Small Decrease CTRL+ SHIFT+ H</b>	<b>Large Increase CTRL+ SHIFT+ L</b>	<b>Large Decrease CTRL+ SHIFT+ J</b>
SEQUENCE						
GENBIN						
GENCON	X	X	X	X	X	X
GENUSD			X	X	X	X
DATB						
TEXT_DATA						
DRICONE						
DRICONS						
MOTCON_I						



---

## Section 5 Quick List

### Quick List User Interface

This section describes about the categories of Quick List and the procedure to configure and operate Quick Lists.

Two Quick List categories are available:

- **Quick List Operator**, which can be created and configured by an operator.
- **Quick List**, which can be used by an operator but has to be configured by an application engineer.

Figure 8 shows the Quick List configuration view.

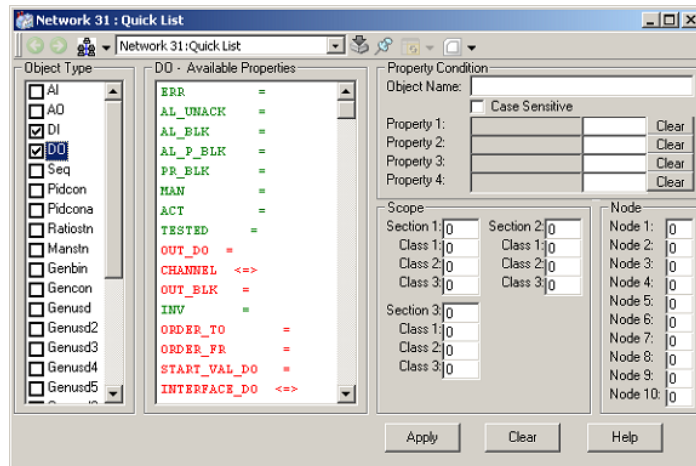


Figure 8. Configuration View - Quick List

## How to use the Quick List

The Quick List aspect can be pre-configured with search criteria. For example, one aspect can be configured with search criteria for a specific Process Section. If an aspect is pre-configured, the search will start automatically when the aspect is opened and the result is presented in the Quick list main view.

### The Quick List Aspect

The Quick List aspect is created and handled as other aspects in the Operator Workplace. The configure a Quick List:

1. Open an existing Quick List aspect by selecting Config View in the Object Browser tool, see [Figure 9](#).

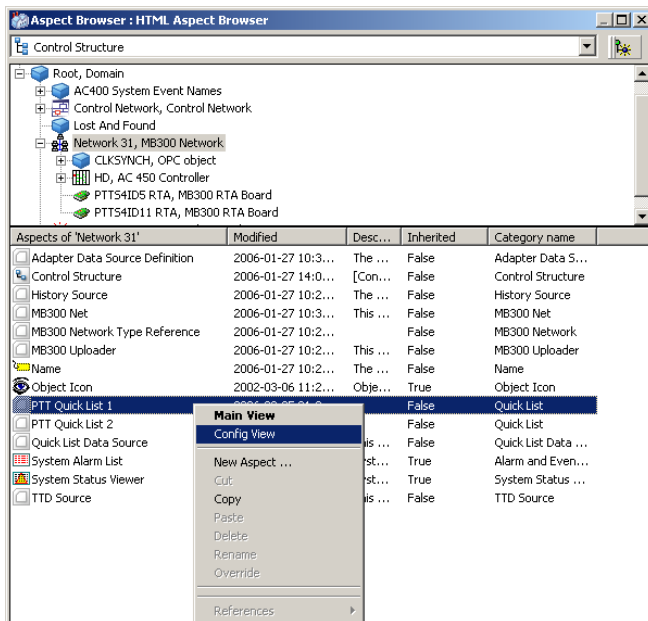


Figure 9. Opening the Quick List

2. Select the Config View from the tool bar panel on top of the aspect window. The configuration view is shown as in [Figure 10](#).

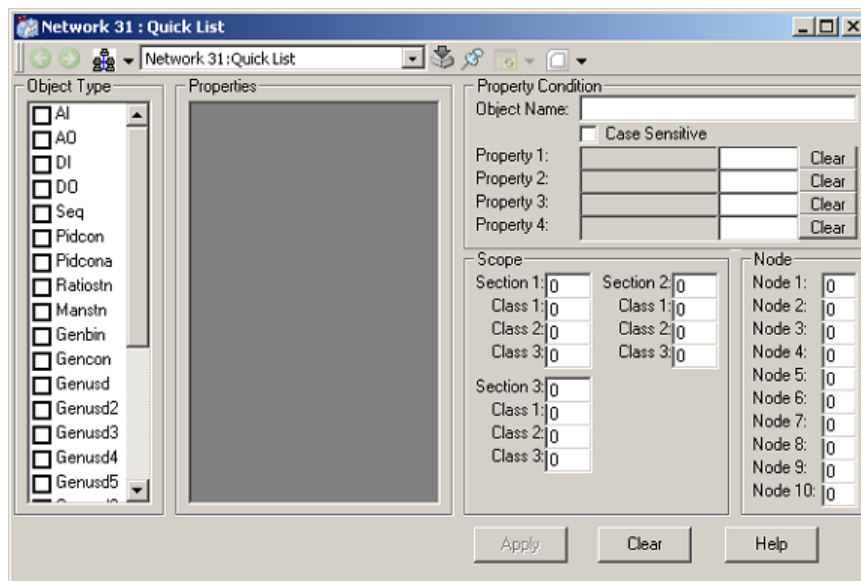


Figure 10. Quick List Config View

3. Configure a simple search criteria. For example, to know the Digital Input and Digital Output signals that are in an error state (Error flag set) and alarm state in the nodes with controller node 73 and 74.
4. Select the **DI** and **DO** checkbox respectively in the **Object Type** area.  
The properties common to both these object types are shown in Green color (Red colored are not common, and are not possible to select in the **Properties** area). See [Figure 11](#).
5. Click on the property for error state (ERR) in the **Properties** area and the text ERR followed by a “=” appears in the **Property1** text field.
6. Type “1” or “TRUE” in the **Property1** text field.
7. Click on the AL\_UNACK property in the list and type “1” or “TRUE” to the **Property2** text field (press CR).

8. Change the text fields **Node1** to “73” and **Node2** to “74”. Click **Apply** to store the configuration. Now the configuration should look like [Figure 11](#).

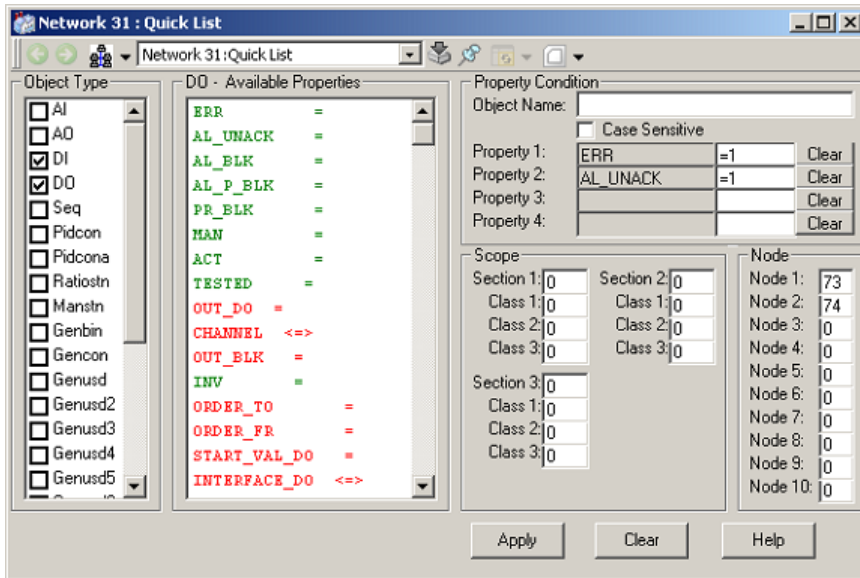


Figure 11. Quick List Configuration Example.



The property “STATUS\_DO /” accepts hexadecimal values. For example: “/H:5”

9. To present the result, just change to the Main view and the search will start automatically. See [Figure 12](#).

Unact	Lim	Coming	Name	Description	Prop text	Event text	Value	Unit	Proc
	H2	*	GAM_AIC4_48	1661238	Lim H2	90.00 %	100.00	%	
	H2	*	GAM_AIC4_49	1661239	Lim H2	90.00 %	100.00	%	
	H2	*	GAM_AIC4_50	1661240	Lim H2	90.00 %	100.00	%	
	H2	*	GAM_AIC4_51	1661241	Lim H2	90.00 %	100.00	%	
	H2	*	GAM_AIC4_52	1661242	Lim H2	90.00 %	100.00	%	
	H2	*	GAM_AIC4_53	1661243	Lim H2	90.00 %	100.00	%	
	H2	*	GAM_AIC4_54	1661244	Lim H2	90.00 %	100.00	%	
	H2	*	GAM_AIC4_55	1661245	Lim H2	90.00 %	100.00	%	
	H2	*	GAM_AIC4_56	1661246	Lim H2	90.00 %	100.00	%	
	H2	*	GAM_AIC4_57	1661247	Lim H2	90.00 %	100.00	%	
	H2	*	GAM_AIC4_58	1661248	Lim H2	90.00 %	100.00	%	
*	H2	*	GAM_AIC4_59	1661249	Lim H2	90.00 %	100.00	%	
	H2	*	GAM_AIC4_78	1661268	Lim H2	90.00 %	100.00	%	
	H2	*	GAM_AIC4_79	1661269	Lim H2	90.00 %	100.00	%	
				End of search on Node: 4					

Figure 12. Main View

To stop the search, click **Cancel** or select the **Config View**.

To print the search result, click **Print**.

To start a new search, click **Search**.



If the service is down or the RTA board is not properly configured you get the error message: "Connect Fail".



An illegal search option will give the message: "Syntax of entered property match value is illegal".

## Configuration Examples

### Example 1

List all Analog Inputs (AI) of process section 2 in the nodes 5,6, and 7, which has the string “Temp” in position 7-10 in the name and are in a state of alarm and have the alarm processing blocked.

1. Click the check box for the AI in the Object Type List. The properties of AI which are available for searching are displayed in the list view for available properties.
2. Place the pointer on the **Section1** text field and enter the value ‘2’.
3. Enter the values ‘5’ to ‘7’ in the **Node1** to **Node3** text fields.
4. Select the **Object name** text field and enter ‘?????Temp’. The six question marks mean that the first six characters may be any alphanumeric characters. Move the cursor to another field.
5. Use the text field for **Property1**. When an analog signal is in state of alarm, the flag DISTURB (disturbance) is set high. Specify the conditions you want for **Property1 - Property4**:
  - Click on the label DISTURB in the list of available properties. The text ‘DISTURB = ’ is copied to the first free text field. Add the value ‘1’ or ‘TRUE’ to the text field.
6. The alarm blocking property is called AL\_BLK and has the number 4. Enter this property in the **Property2** text field by clicking on the label AL\_BLK in the property list and add ‘1’ to the **Property2** text field.
7. Now all the necessary parameters of the list are defined and the search criteria can now be activated. Click the **Apply** button to save the configuration data.

## Example 2

List all the motors in node 7, 8 and 9, process section 3, class 1 or 2, which are in any of the following modes: LOCAL, TEST or STAND BY. All motor controls have been implemented by using the object type MOTCON.

1. Click on the check box representing MOTCON in the list for object types. A checked box signifies an active parameter. The accessible properties of MOTCON appear in the list of available properties. Select the **Node1** text field and enter the value '7'. Move cursor to the **Node2** text field.
2. Enter the value 8 in the **Node2** text field. Move cursor to the **Node3** text field and enter the value 9.
3. Move the cursor to the **Section1** text field and enter the value '3'. Move the cursor to the **Class1** text field and enter the value 1. Move the cursor to the **Class2** text field and enter the value '2'.
4. In order to ascertain whether the motors are in any of the modes, LOCAL, TEST or STAND BY, look at the block item IND2\_MOTCON containing these indications.
5. See the description of MOTCON in AdvaCommand User Interface Reference Manual. The block item is defined as Property 1. In this way, an OR condition is created.

On the other hand, if the three indications IND2\_01, IND2\_02 and IND2\_03 were specified one by one as Property 1, Property 2 and Property 3, an AND condition would be specified. In this case, the block item IND2\_MOTCON is to have the value H'E, which corresponds to the three indications. Specify the property like this.

- Move the cursor to the list with available properties and click on the label 'IND2\_MOTCON'. The text 'IND2\_MOTCON //' will be copied to the first free text field for **Property 1 - Property 4** and the input focus will be moved to the actual text field. Add the value HE to the text fields.
6. Click on the **Apply** button to save the configuration data.



If a single motor is in STAND BY at the same time it is in LOCAL mode, two message lines appear on the list. This type of block item condition generates a message line for every high bit that corresponds to the actual value in the data base.





## Appendix A Indicators

This appendix lists the indicators used in faceplates and display elements in 800xA for Advant Master.

Object Type	Indicator	Remark
AI, DI	IN (Yellow)	Input blocked
	P (Yellow)	Printout blocked
AO, DO	M (Cyan)	Manual Mode
	A (Magenta)	Auto Mode
	OUT (Yellow)	Output blocked
DRICONE, DRICONS	M (Dark green)	Manual Mode
	A (Dark green)	Auto Mode
	O (Light brown)	Out of Service
	D (Yellow)	Drive local
	J (Yellow)	Jog running from motor place
	L (Dark green)	Local. controlled from local panel.
	C (Dark green)	Central. Controlled from operator station.
	P (Yellow)	Printout blocked
	X (Yellow)	B - Interlock 3 B - Interlock 4

Object Type	Indicator	Remark
DRICONE, DRICONS (cont.)	X (Green)	C - Interlock B - Interlock 1 B - Interlock 2 B - Interlock 3 B - Interlock 4 IA - Interlock
	BX (Red)	Override Interlock and Interlock active
	BX (Yellow)	Override Interlock and Interlock active
GENBIN	M (Dark green)	Manual mode
	A (Dark green)	Auto mode
	B (Dark green)	Blocked mode
	S (Dark green)	Stand By mode
	C (Dark green)	Central control mode
	L (Dark green)	Local control mode
	R (Dark green)	Remote control mode
	P (Yellow)	Printout blocked
GENCON	M (Dark green)	Manual mode
	A (Dark green)	Auto mode
	MFd (Dark green)	Manual Forced mode
	E1 (Dark green)	External 1 mode
	E2 (Dark green)	External 2 mode
	P (Yellow)	Printout blocked

Object Type	Indicator	Remark
GENUSD	M (Dark green)	Manual mode
	A (Dark green)	Auto mode
GENUSD (cont.)	B (Dark green)	Blocked mode
	S (Dark green)	Stand By mode
	M1 (Dark green)	Operator position M1
	M2 (Dark green)	Operator position M2
	M3 (Dark green)	Operator position M3
	Q1 (Red)	Signal error 1
	Q2 (Red)	Signal error 2
	P (Yellow)	Printout blocked
GROUP ALARM	P (Yellow)	Printout blocked
GROUP, MOTCON	M (Dark green)	Manual mode
	A (Dark green)	Auto mode
	S (Dark green)	Sequence. Controlled from groupstart.
	C (Dark green)	Central. Controlled from operator station.
	L (Dark green)	Local. Controlled from local panel.
	T (Yellow)	Test. Running from motor place.
	O (Kakhi)	Out of service. No control possible.
	P (Yellow)	Printout blocked
	X (Dark green)	Safety interlock or Operator interlock
	BX (Red)	Override Interlocks. Interlock IB1 or IB3 active
	BX (Yellow)	Override Interlock

Object Type	Indicator	Remark
MANSTN	M (Dark green)	Manual mode
	E1 (Dark green)	E1 mode
	P (Yellow)	Printout blocked
MOTCONI	M (Dark green)	Manual mode
	A (Dark green)	Auto mode
	S (Dark green)	Sequence. Controlled from groupstart.
	C (Dark green)	Central. Controlled from operator station.
	L (Dark green)	Local. Controlled from local panel.
	LM (Yellow)	Local - MCC
	T (Yellow)	Test. Running from motor place.
	O (Kakhi)	Out of service. No control possible.
	P (Yellow)	Printout blocked
	X (Dark green)	Safety interlock or Operator interlock
	BX (Red)	Override Interlocks. Interlock IB1 or IB3 active
	BX (Yellow)	Override Interlock
	W (Yellow)	Collective Warning Indication
F (Red)	Collective Fault Indication	

<b>Object Type</b>	<b>Indicator</b>	<b>Remark</b>
PIDCONA	BaLo (Dark green)	Bal Local mode
	Bal (Dark green)	Bal mode
	MCp (Dark green)	Manual Clamped mode
	MFd (Dark green)	Manual Forced mode
	M AT (Dark green)	Manual mode and Autotuning
	M (Dark green)	Manual mode
	A AT (Dark green)	Auto mode and Autotuning
	A Ad (Dark green)	Auto mode and Adaption
	A (Dark green)	Auto mode
	E1 AT (Dark green)	E1 mode and Autotuning
	E1 Ad (Dark green)	E1 mode and Adaption
	E1 (Dark green)	E1 mode
	E2 AT (Dark green)	E2 mode and Autotuning
	E2 Ad (Dark green)	E2 mode and Adaption
	E2 (Dark green)	E2 mode
	E3 AT (Dark green)	E3 mode and Autotuning
	E3 (Dark green)	E3 mode
	P (Yellow)	Printout blocked

<b>Object Type</b>	<b>Indicator</b>	<b>Remark</b>
PIDCON	BaLo (Dark green)	Bal Local mode
	Bal (Dark green)	Bal mode
	MCp (Dark green)	Manual Clamped mode
	MFd (Dark green)	Manual Forced mode
	M (Dark green)	Manual mode
	A (Dark green)	Auto mode
	E1 (Dark green)	E1 mode
	E2 (Dark green)	E2 mode
	E3 (Dark green)	E3 mode
	P (Yellow)	Printout blocked
RATSTN	M (Dark green)	Manual mode
	A (Dark green)	Auto mode
	E1 (Dark green)	E1 mode
	P (Yellow)	Printout blocked
SEQ	M Un (Dark green)	Manual mode
	M (Dark green)	Manual mode
	A (Dark green)	Auto mode
	HOLD (Yellow)	Hold mode
	P (Yellow)	Printout blocked
TEXT	M (Dark green)	Manual mode
	A (Dark green)	Auto mode

Object Type	Indicator	Remark
VALVECON	M (Dark green)	Manual mode
	A (Dark green)	Auto mode
	S (Dark green)	Sequence. Controlled from groupstart.
	C (Dark green)	Central. Controlled from operator station.
	L (Dark green)	Local. Controlled from local panel.
	T (Yellow)	Test. Running from motor place.
	O (Kakhi)	Out of service. No control possible.
	P (Black)	Printout blocked
	X (Green)	Safety interlock or Operator interlock
	BX (Green)	Override interlocks
	BX (Yellow)	Override interlock







# Contact us

[www.abb.com/800xA](http://www.abb.com/800xA)  
[www.abb.com/controlsystems](http://www.abb.com/controlsystems)

Copyright© 2003-2014 ABB.  
All rights reserved.

3BSE030352-600

Power and productivity  
for a better world™

