

## **Human Machine Interface (HMI) GOT**

### **Comment Display (Basics)**

This online training system (e-learning) is intended for those who use the comment display of the GOT2000 Series HMI for the first time.

In this course, we will learn how to set a comment display or switch a display using the screen design software GT Designer3.

You can learn more efficiently by preparing a personal computer on which GT Designer3 is installed and checking each operation during the course.

As prerequisites for this course, you should have already completed the following courses or possess the equivalent knowledge in:

- FA Equipment for Beginners (HMIs)
- GOT2000 Basics (GOT Introduction)
- GT Works3 (GT Designer3) Basics (Screen Design Introduction)
- GT Works3 (GT Designer3) Basics (Elementary Screen Design)
- Comment (Introduction)

The contents of this course are as follows.  
We recommend that you start from Chapter 1.

#### Chapter 1 Overview

We will learn the overview including the settings for the comment display to be created.

#### Chapter 2 Switching a Display by Turning On/Off a Device (Bit Comment)

We will learn the settings to switch a display by turning on/off a device.

#### Chapter 3 Switching a Display According to the Device Value (Word Comment)

We will learn how to switch a display according to the device value.

#### Final Test

Passing grade: 60% or higher.

Following is an explanation of how to use the graphical user interface.

Go to the next page		Go to the next page.
Back to the previous page		Back to the previous page.
Move to the desired page		"Table of Contents" will be displayed, enabling you to navigate to the desired page.
Exit the learning		Exit the learning. Window such as "Contents" screen and the learning will be closed.

**Safety precautions**

When you learn based on using actual products, please carefully read the safety precautions in the corresponding manuals.

We will learn the settings for a comment display to be created in this course.  
In addition, we will prepare comments and a comment group required for the settings.

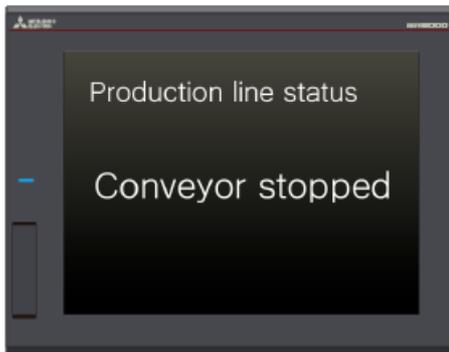
1.1 Settings for a comment display to be created in this course

1.2 Preparing comments and a comment group

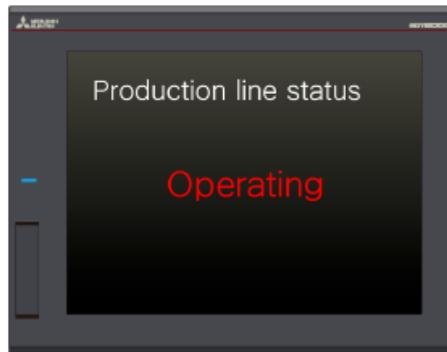
## 1.1 Settings for a comment display to be created in this course - 1

In this course, we will create the following GOT screen and learn how to switch a display by turning on/off a device, and how to switch a display according to the device value.

(1) Switching a comment by turning on/off a device (bit comment)

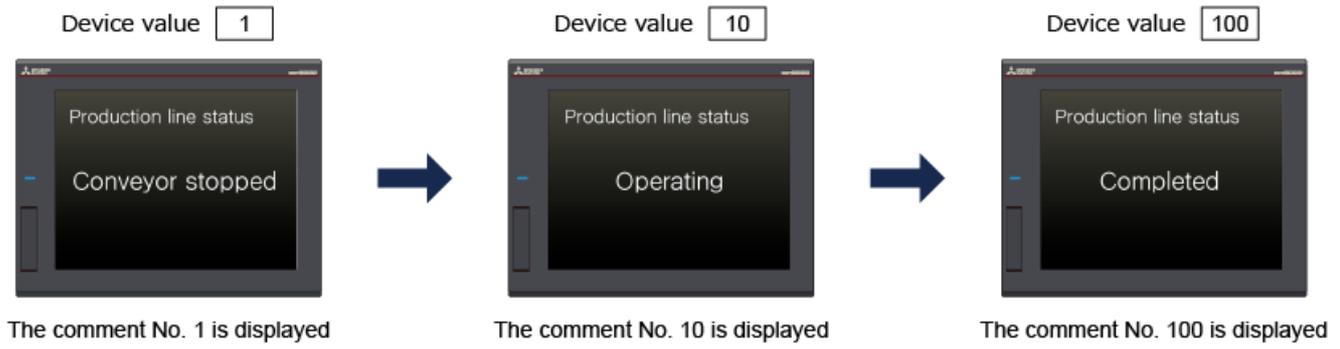


Comment of when the device is off



Comment of when the device is on

(2) Switching a comment according to the device value (word comment)



Create a comment group and comments used in this course.

For how to create a comment group and comments, take "Comment (Introduction)" course.

(1) Select [Common] → [Comment] → [New Comment Group] from the menu.

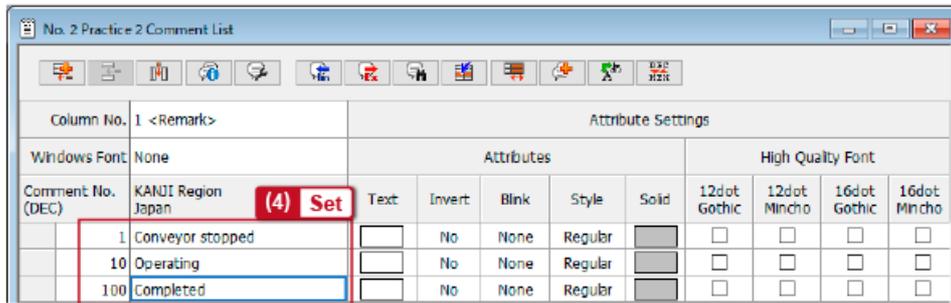
(2) Set a number and name for the comment group in the [Comment Group Property] dialog.

Column	KANJI Region	Remark	Windows Font	Character Set
<input checked="" type="checkbox"/> 1	Japan		None	
<input type="checkbox"/> 2	Japan		None	
<input type="checkbox"/> 3	Japan		None	
<input type="checkbox"/> 4	Japan		None	
<input type="checkbox"/> 5	Japan		None	

Item	Setting example
Group No.	2
Title	Practice 2

(3) Click the [OK] button to close the dialog. The [Comment List] window is displayed.

(4) Set a comment number and a comment.



Comment No.	Setting example
1	Conveyor stopped
10	Operating
100	Exit

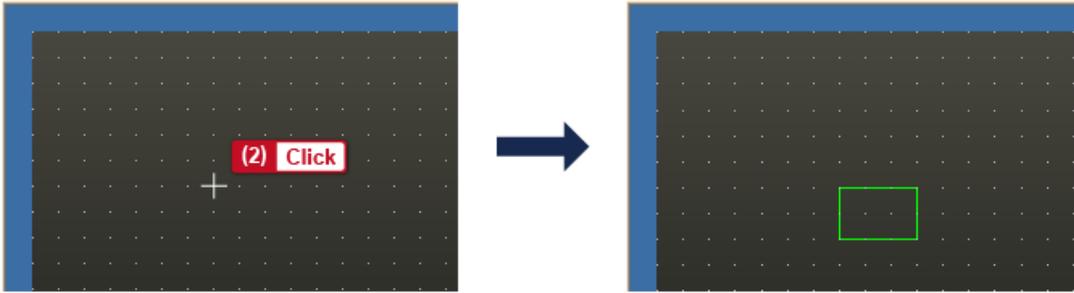
(5) Preparation is completed.

We will learn the settings to switch a display by turning on/off a device while creating a screen.

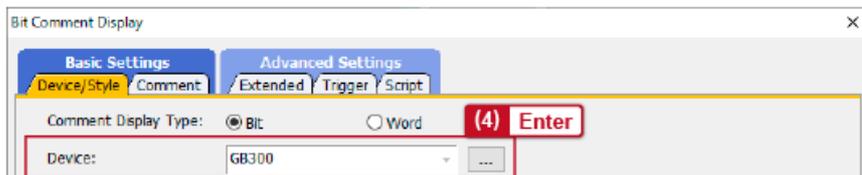
- 2.1 Setting a device ([Device/Style] tab)
- 2.2 Setting a comment to be displayed ([Comment] tab)
- 2.3 Creating a switch to turn on/off the device
- 2.4 Adding a title/adjusting a display
- 2.5 Checking the created data

Set a device to be monitored.

- (1) Select [Object] → [Comment Display] → [Bit Comment] from the menu.
- (2) Click an intended point on the drawing screen to place the comment object.



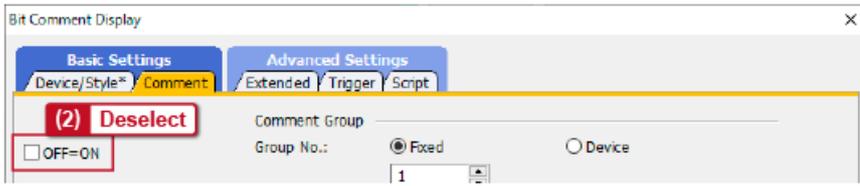
- (3) Double-click the object to display the [Bit Comment Display] dialog.
- (4) Set a device to be monitored in [Device].



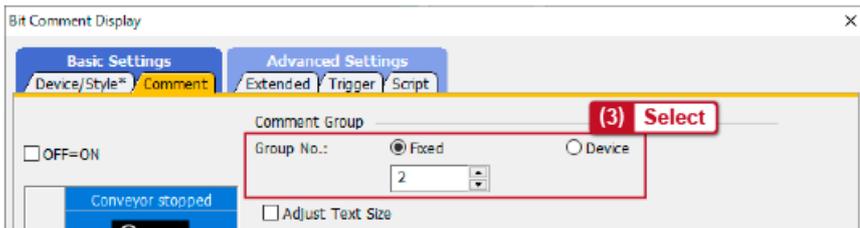
Item	Setting example
Device	GB300

Set a comment to be displayed.

- (1) Open the [Comment] tab in the [Bit Comment Display] dialog.
- (2) Deselect [OFF=ON].

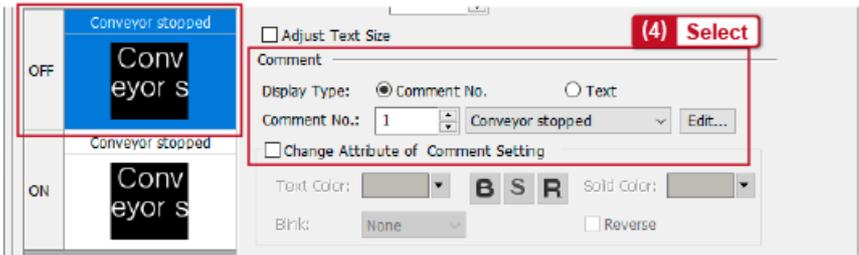


- (3) Select a comment group number displayed to be used for [Group No.].



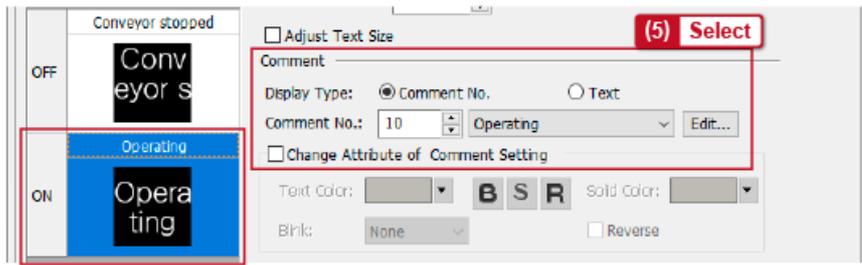
Item	Setting example
Group No.	2

(4) Select a comment displayed when the device is off.



Item	Setting example
Comment No.	1 (Conveyor stopped)

(5) Select a comment displayed when the device is on.



Item	Setting example
Comment No.	10 (Operating)

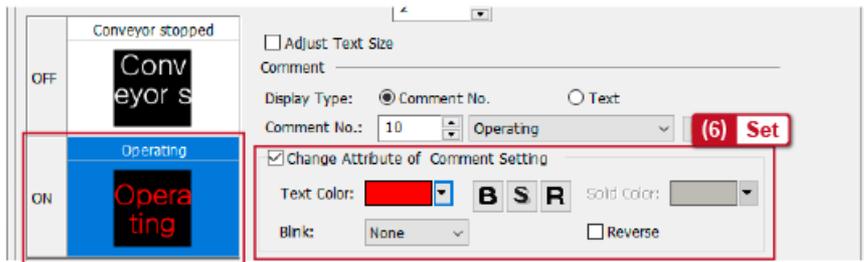
 Select [Adjust Text Size] to adjust the text size automatically.  
\* The text size cannot be smaller than the specified minimum text size.

Comment Group

Group No.:  Fixed  Device

Adjust Text Size Minimum Size:

(6) Select [Change Attribute of Comment Setting], and set a text color for [Text Color].



Item	Setting example
Text Color	Red (224)

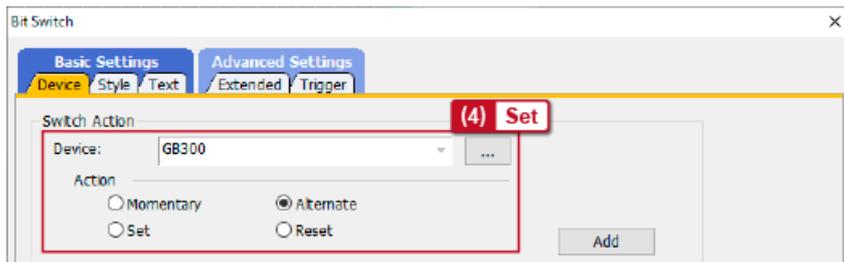
(7) Click the [OK] button to close the dialog.

\* This procedure is prepared only for this course to check that the comment display is switched by turning on/off a switch.

- (1) Select [Object] → [Switch] → [Bit Switch] from the menu.
- (2) Click an intended point on the drawing screen to place the switch object.



- (3) Double-click the object to display the [Bit Switch] dialog.
- (4) Set a device and action.



Item	Setting example
Device	GB300
Action	Alternate

(5) Set the lamp function. After the settings are completed, click [OK] to close the dialog.



Item	Setting example
Lamp	Bit-ON/OFF
Device	GB300

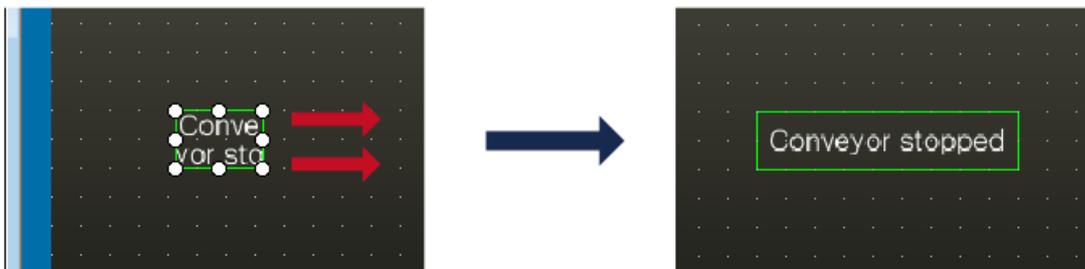
### Adding a title

- (1) Select [Figure] → [Text] from the menu and click an intended point on the drawing screen to place the text object.
- (2) Input a text to be displayed in [Text].



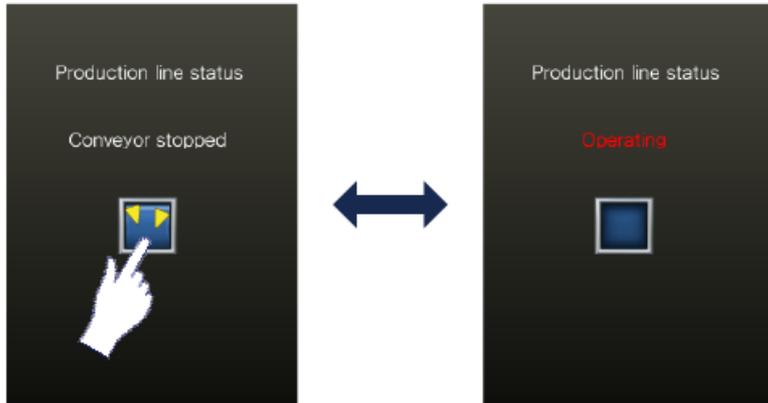
### Adjusting a display

- (1) Select the comment display object and adjust the object size so that a whole comment will be displayed.



Check the operation of the created project data by transferring data to the GOT or starting the simulator.  
(For how to transfer projects or use the simulator, refer to "GT Works3 (GT Designer3) Basics (Elementary Screen Design)".)

(1) Press the switch and check that the display is switched.



In this chapter, we will learn how to switch a display according to the device value while creating a screen in two methods.

3.1 How to display a word comment

3.2 Selecting the comments by the display method [Comment No.]

3.3 Selecting the comments by the display method [Indirect Device]

The word comment can switch a display according to the value of the monitored device. The three display types are as follows. Select a display type depending on the applications for your convenience.

(1) [Comment No.]

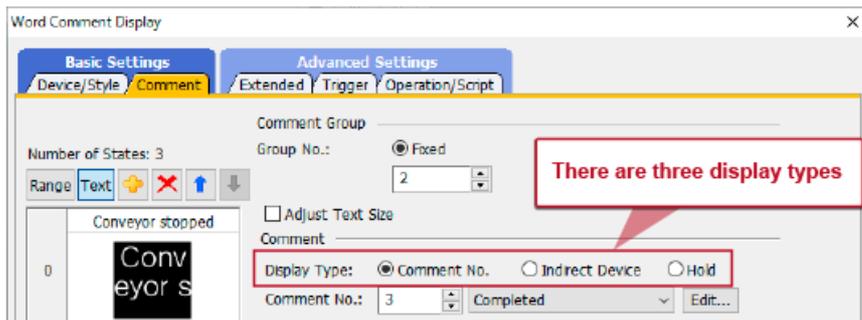
Displays the comment of the comment number that is specified for the value of the monitored device.

(2) [Indirect Device]

Displays the comment of the comment number that is the same as the value of the monitored device.

(3) [Hold]

Holds the comment being displayed.



The following shows application examples.

We will explain the examples by monitoring the value of the GD400 device.

### (1) Example of using [Comment No.]

Example 1) When specifying the comment number to be displayed for the value of the monitored device (GD400)

Value of the monitored device	Comment No. (comment) to be displayed	
10	1 (Conveyor stopped)	Comment Display Type: <input checked="" type="radio"/> Comment No. <input type="radio"/> Indirect Device <input type="radio"/> Hold Comment No.: 1   Conveyor stopped   Edit...
20	2 (Operating)	Comment Display Type: <input checked="" type="radio"/> Comment No. <input type="radio"/> Indirect Device <input type="radio"/> Hold Comment No.: 2   Operating   Edit...
30	3 (Exit)	Comment Display Type: <input checked="" type="radio"/> Comment No. <input type="radio"/> Indirect Device <input type="radio"/> Hold Comment No.: 3   Completed   Edit...

Specify each comment No.



**Monitored device**

Column No.	1 <Remark>
Windows Font	None
Comment No. (DEC)	KANJI Region Japan
	1 Conveyor stopped
	2 Operating
	3 Completed

**Settings for the comment No.**

Example 2) When specifying the comment number to be displayed within a range of the monitored device values

Value of the monitored device	Comment No. (comment) to be displayed
20 or less	1 (Conveyor stopped)
20 to 40	2 (Operating)
40 or more	3 (Exit)

Specify each comment No.



Monitored device

Column No.	1 <Remark>
Windows Font	None
Comment No. (DEC)	KANJI Region Japan
	1 Conveyor stopped
	2 Operating
	3 Completed

Settings for the comment No.

## (2) Example of using [Indirect Device]

Example) When the monitored device value and the comment number to be displayed are the same

Value of the monitored device	Comment No. (comment) to be displayed	
1	1	(Conveyor stopped)
10	10	(Operating)
100	100	(Exit)

Comment  
Display Type:  Comment No.  Indirect Device  Hold

**Batch setting when the device value and comment No. to be displayed are the same**



**Monitored device**

Column No.	1 <Remark>
Windows Font	None
Comment No. (DEC)	KANJI Region Japan
	1 Conveyor stopped
	10 Operating
	100 Completed

**Settings for the comment No.**

**(3) Example of using [Hold]**

Example) When holding the previous comment (Setting [Hold] when the monitored device value is "2" and switching the devices in order of A to C)

Value of the monitored device	Comment No. (comment) to be displayed	Comment Display Type
A 1	1 (Conveyor stopped)	<input type="radio"/> Comment No. <input checked="" type="radio"/> Indirect Device <input type="radio"/> Hold
B 2	1 (Conveyor stopped)	<input type="radio"/> Comment No. <input type="radio"/> Indirect Device <input checked="" type="radio"/> Hold
C 3	3 (Exit)	<input type="radio"/> Comment No. <input checked="" type="radio"/> Indirect Device <input type="radio"/> Hold



**Monitored device**

Holding the previous comment display

Column No.	1 <Remark>
Windows Font	None
Comment No. (DEC)	KANJI Region Japan
	1 Conveyor stopped
	2 Operating
	3 Completed

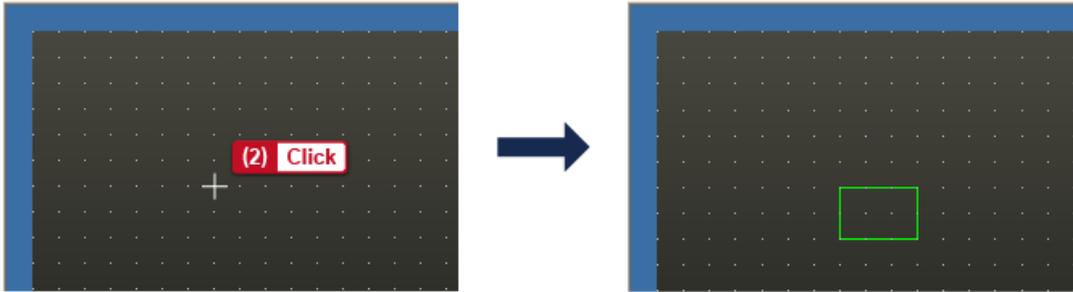
**Settings for the comment No.**

We will learn how to configure the settings for display method [Comment No.].  
Set a comment number to be displayed for each value of the device to be monitored.

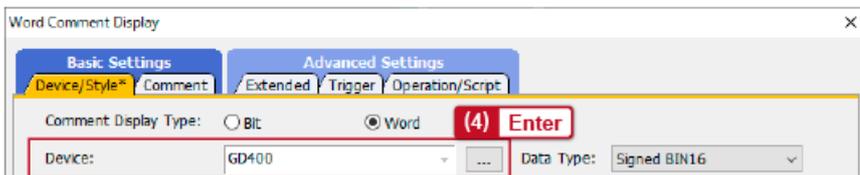
- 3.2.1 Setting a device ([Device/Style] tab)
- 3.2.2 Setting a comment to be displayed ([Comment] tab)
- 3.2.3 Creating a numerical input
- 3.2.4 Adding a title/adjusting the display
- 3.2.5 Checking the created data

Set a device to be monitored.

- (1) Select [Object] → [Comment Display] → [Word Comment] from the menu.
- (2) Click an intended point on the drawing screen to place the comment object.

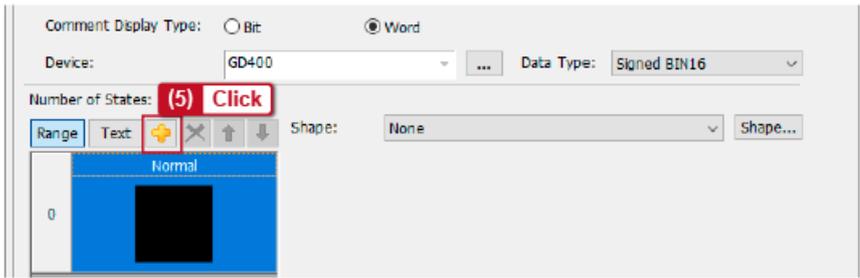


- (3) Double-click the object to display the [Word Comment Display] dialog.
- (4) Set a device to be monitored in [Device].

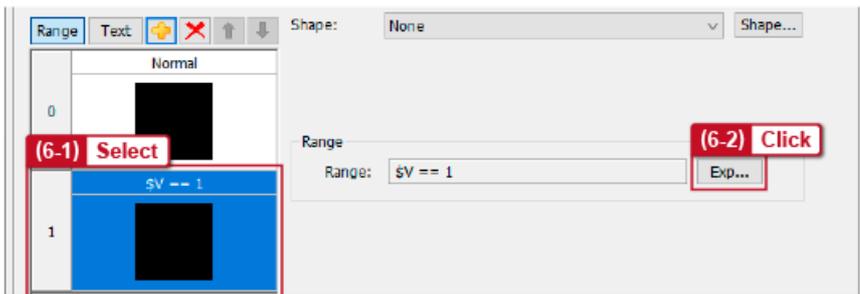


Item	Setting example
Device	GD400

(5) Click the [+] button to add a new condition (state) for the comment to be displayed. Add three states.



(6) Configure the settings when the device value is 1, 10, and 100. First, configure the settings when the device value is 1. Select state 1 and click the [Exp] button to display the [Edit Range] dialog.



(7) Since the device value is 1, set the device value 1 to [Constant].

Item	Setting example
Constant	1

(8) Configure settings for state 2 and 3 as well and set device values 10 and 100 to [Constant].

Item	Setting example
State 2	10
State 3	100



The following condition can be set for [A] in the [Edit Range] dialog.

Edit Range ×

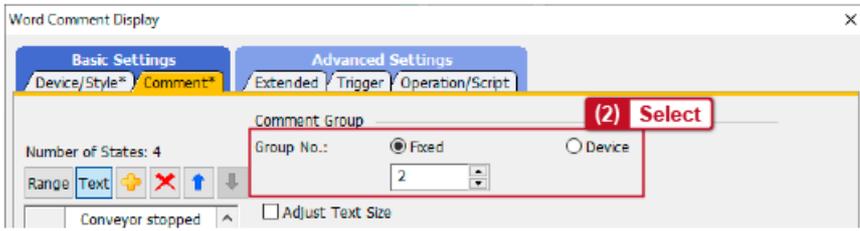
\$V -- 1

A -- B None C

<	The left side value is smaller than the right side value.
<=	The left side value equals or smaller than the right side value.
=	The left side value equals the right side value.
!=	The left side value and the right side value are different.

Set a comment to be displayed.

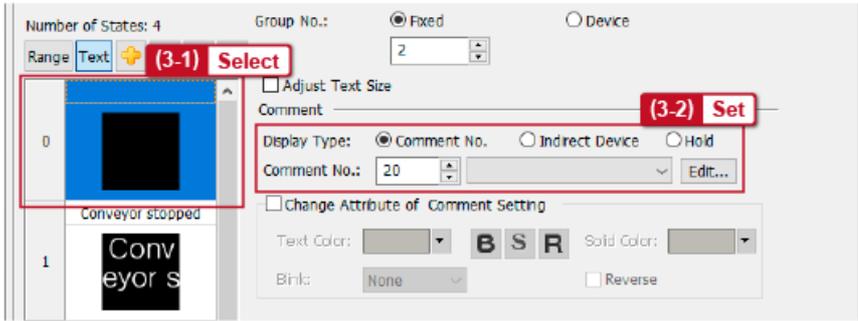
- (1) Open the [Comment] tab in the [Word Comment Display] dialog.
- (2) Select a comment group to be used.



Item	Setting example
Group No.	2

(3) Set [Display Type] for states 0 to 3. In this course, we will configure the settings so that the comments for states other than states 1 to 3 will be hidden.

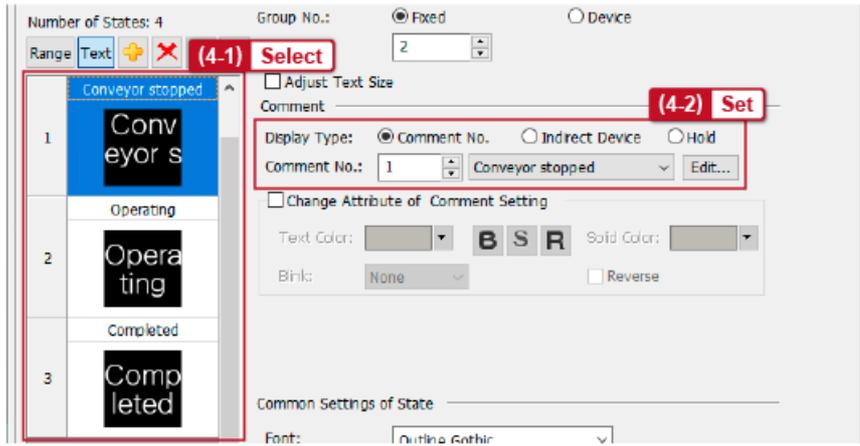
Select state 0, then select values of [Display Type] and [Comment No.].



Item	Setting example
Display Type	Comment No.
Comment No.	20 (Comment number for which no comment is set)

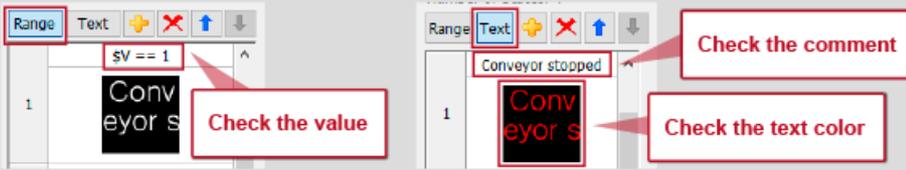
 The comment set for state 0 is displayed when any of the other conditions (states) are not satisfied.

(4) Select states 1 to 3, then select [Display Type] and [Comment No.].



Item	Display Type	Comment No.
State 1	Comment No.	1 (Conveyor stopped)
State 2	Comment No.	10 (Operating)
State 3	Comment No.	100 (Exit)

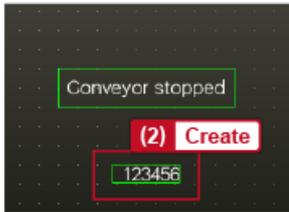
 You can check the range set with the [Range] button and the comment displayed with the [Text] button. The text color can also be checked in the preview screen.



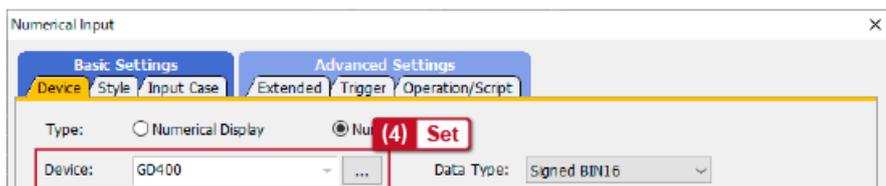
Create a numerical input to enter a device value to switch a comment.

\* This procedure is prepared only for this course to check the comment display is switched by setting a device value.

- (1) Select [Object] → [Numerical Display/Input] → [Numerical Input] from the menu.
- (2) Click an intended point on the drawing screen to create a numerical input object.



- (3) Double-click the object on the screen to display the [Numerical Input] dialog.
- (4) Set a target device.



Adding a title

- (1) Select [Figure] → [Text] from the menu and click an intended point on the drawing screen to place the text object.
- (2) Input a text to be displayed in [Text].

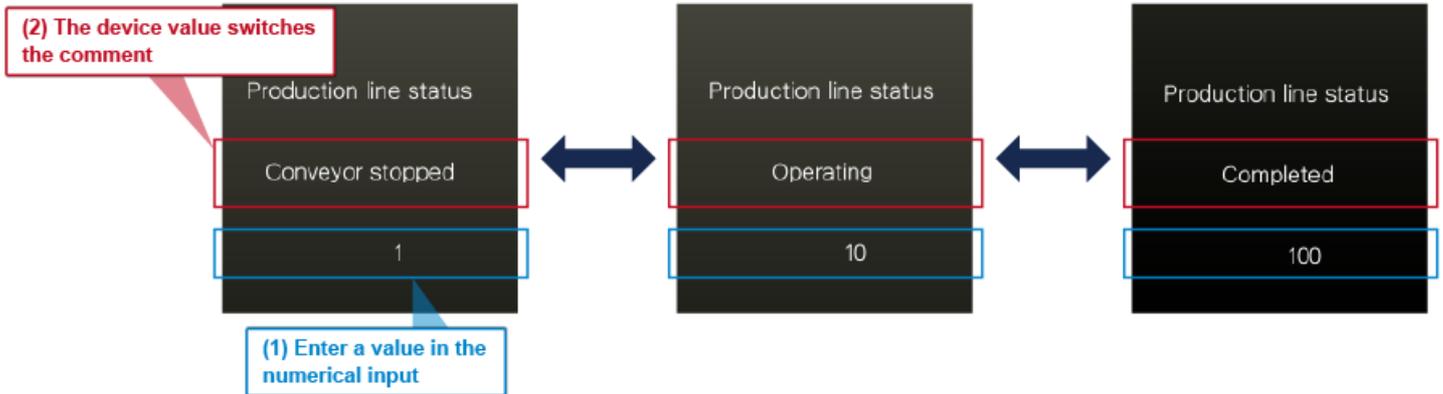
Adjusting a display

- (1) Select the comment display object and adjust the object size so that a whole comment will be displayed.



Check the operation of the created project data by transferring data to the GOT or starting the simulator.  
(For how to transfer projects or use the simulator, refer to "GT Works3 (GT Designer3) Basics (Elementary Screen Design)".)

(1) Input [1], [10], or [100] in the numerical input object and check that the comment is switched.



We will learn how to configure the settings for display method [Indirect Device].

We use this method when the value of the monitored device is the same as the comment number of the comment to be displayed.

You do not need to set the comment number to be displayed for each device value.

3.3.1 Setting a device ([Device/Style] tab)

3.3.2 Setting a comment to be displayed ([Comment] tab)

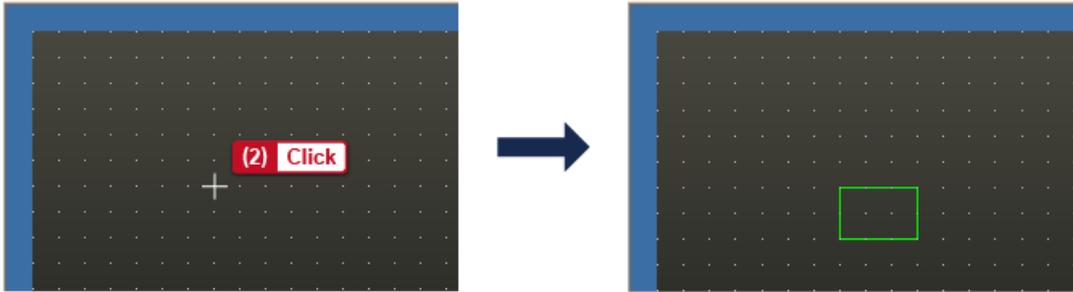
3.3.3 Creating a numerical input

3.3.4 Adding a title/adjusting the display

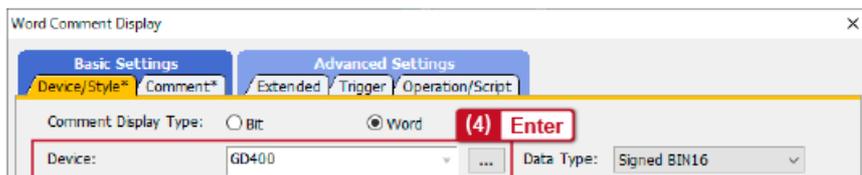
3.3.5 Checking the created data

Set a device to be monitored.

- (1) Select [Object] → [Comment Display] → [Word Comment] from the menu.
- (2) Click an intended point on the drawing screen to place the comment object.



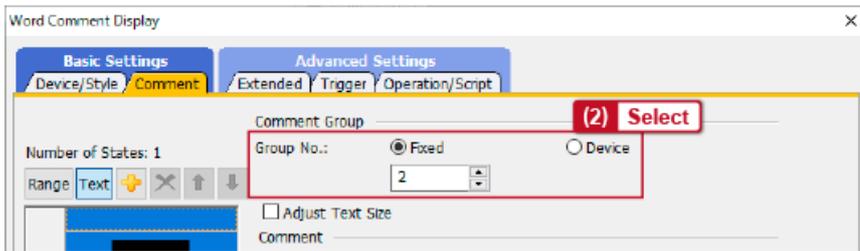
- (3) Double-click the object to display the [Word Comment Display] dialog.
- (4) Set a device to be monitored in [Device].



Item	Setting example
Device	GD400

Set a comment to be displayed.

- (1) Open the [Comment] tab in the [Word Comment Display] dialog.
- (2) Select a comment group to be used.



Item	Setting example
Group No.	2

(3) Select [Display Type].

Number of States: 1    Group No.:  Fixed     Device

Range

Adjust Text Size

Comment  **(3) Select**

Display Type:  Comment No.     Indirect Device     Hold

Change Attribute of Comment Setting

Text Color:  **B** **S** **R**    Solid Color:

Blink:      Reverse

Item	Setting example
Display Type	Indirect Device

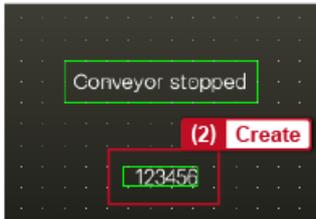


When [Indirect Device] is selected, the comment of the comment number which is the same as the value of the monitored device can be displayed.  
You do not need to set a comment number for the value of the monitored device.

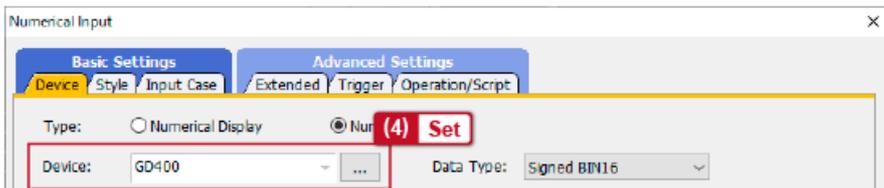
Create a numerical input to enter a device value to switch a comment.

\* This procedure is prepared only for this course to check the comment display is switched by setting a device value.

- (1) Select [Object] → [Numerical Display/Input] → [Numerical Input] from the menu.
- (2) Click an intended point on the drawing screen to create a numerical input object.



- (3) Double-click the object on the screen to display the [Numerical Input] dialog.
- (4) Set a target device.

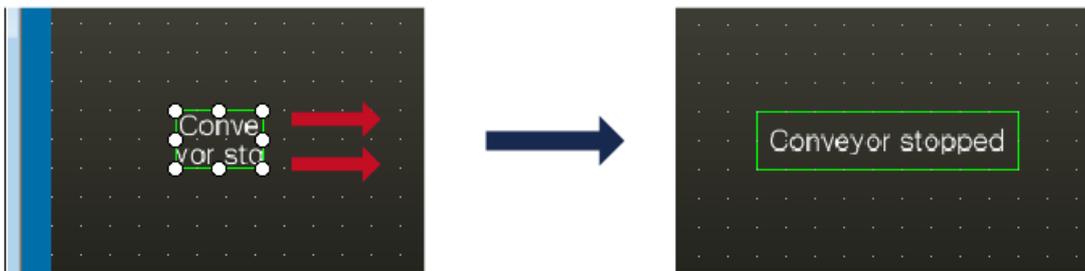


Adding a title

- (1) Select [Figure] → [Text] from the menu and click an intended point on the drawing screen to place the text object.
- (2) Input a text to be displayed in [Text].

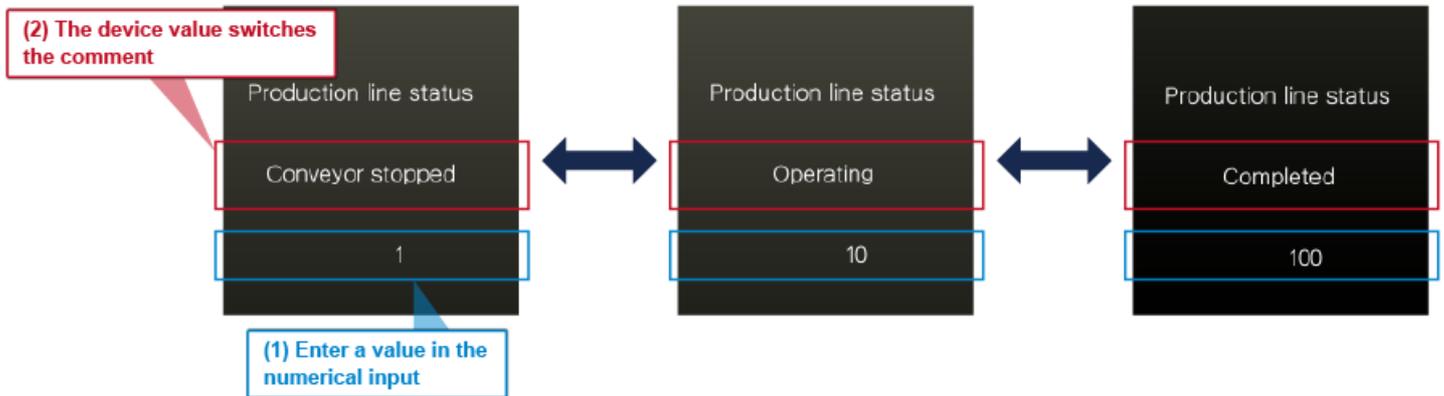
Adjusting a display

- (1) Select the comment display object and adjust the object size so that a whole comment will be displayed.



Check the operation of the created project data by transferring data to the GOT or starting the simulator.  
(For how to transfer projects or use the simulator, refer to "GT Works3 (GT Designer3) Basics (Elementary Screen Design)".)

(1) Input [1], [10], or [100] in the numerical input object and check that the comment is switched.



Now that you have completed all of the lessons of the **Comment Display (Basics)** course, you are ready to take the final test. If you are unclear on any of the topics covered, please take this opportunity to review those topics.

**There are a total of 4 questions (4 items) in this Final Test.**

You can take the final test as many times as you like.

**Score results**

The number of correct answers, the number of questions, the percentage of correct answers, and the pass/fail result will appear on the score page.

		1	2	3	4	5	6	7	8	9	10	
Retry	Final Test 1	✓	✓	✓	✗							Total questions: <b>28</b> Correct answers: <b>23</b> Percentage: <b>82 %</b>
	Final Test 2	✓	✓	✓	✓							
	Final Test 3	✓										
	Final Test 4	✓	✓									
	Final Test 5	✓	✓									
Retry	Final Test 6	✓	✗	✗	✗							
	Final Test 7	✓	✓	✓	✓							
	Final Test 8	✓	✓	✓	✓	✓						
	Final Test 9	✓	✓	✓	✓							
Retry	Final Test 10	✗										

To pass the test, **60%** of correct answers is required.

Select the correct answer from the options.

Select the correct comment display used to switch that comment display by turning on/off a device.

**Q1**

**Bit comment**

**Word comment**

**Simple comment**

**Comment group**

Select the correct answer from the options.

Select the correct comment display used to switch that comment display according to the device value.

**Q1**

**Bit comment**

**Word comment**

**Simple comment**

**Comment group**

Select the correct answer from the options.

Select the correct display method of word comment to display a different comment number with a device value being monitored.

### Q1

**Comment No.**

**Indirect device**

**Hold**

Comment

Display Type:  Comment No.  Indirect Device  Hold

Comment No.: 1 Edit...

Change Attribute of Comment Setting

Text Color: [dropdown] **B S R** Solid Color: [dropdown]

Blink: None  Reverse

[ + ]

Select the correct answer from the options.

You are configuring the word comment settings.

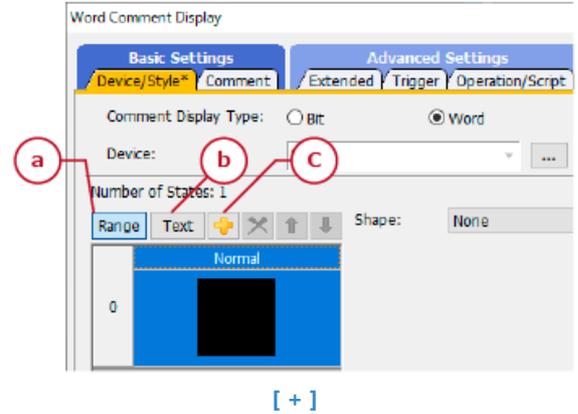
Select the correct button to add a new condition (state).

### Q1

a

b

c



You have completed the Final Test. Your results are as follows.  
 To end the Final Test, proceed to the next page

	1	2	3	4	5	6	7	8	9	10
Final Test 1	✓									
Final Test 2	✓									
Final Test 3	✓									
Final Test 4	✓									

Total questions: **4**  
 Correct answers: **4**  
 Percentage: **100 %**

Clear

**You have completed the **Comment Display (Basics)** course.**

Thank you for taking this course.

We hope you enjoyed the lessons and the information you acquired in this course will be useful in the future.

You can review the course as many times as you want.

**Review**

**Close**