

# **Text Display Operate Instruction**

2009-4

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# 1. Brief introduction of EZ600-DS04 Text Display

## 1.1. Brief instruction

EZ600-DS04 Text Display is a simple & small human-machine interface. It use text, data monitor, indicator lamps, bar graph, etc to show the values or states of the internal registers or relays in the PLC(or inverter, temperature controller), and you can change these values and states on its panel.

EZ600-DS04 is general operation and display panel of PLC. Through it, we can monitor, set the values, and alarm the errors of internal relays and data registers of the PLC. It also supports the communication with the MCU.

## 1.2. Features

### 1.2.1. EZ600-DS04 features

- The largest display area is 192\*64(24 ENGLISH characters \* 4 lines, equal to 12 CHINESE characters \*4 lines).
- We can configuration and program through EZeditor on the computer, then download to EZ600-DS04 by series port. It can be used in many situations. It has text, message display, data display/set, bar graph, indicator lamp, Image and so on.
- Communication protocol and data of screens can be downloaded to EZ600-DS04 together, no need to program the PLC.
- Smart communication ports(COM1:RS232/RS422/RS485 for your choice),
- It will afford password protection to its parameter setting.
- It has lists of alarm errors.

## 1.3. Main Functions

- Monitoring

Display the values of internal registers in format of DEC/BCD/+DEC.

Display the status of internal switch through Indicator lamp.

- Setting

Modify the values of internal data, and set the scope of the input data, if exceed, reject the input data.

We can set the internal switch ON or OFF.

- Message display

It will display relative information according to the values of internal registers.

- Alarm information

It can monitor the status of important switching variables, and it will automatically show the alarm information when the switch is on the status of "ON". You can set the alarm information in the software.

- Password protection

EZ600-DS04 has the function of password protection; it will avoid unauthorized users to modify the important,

- Adjustment of contrast

Users can adjust the contrast of screen edit according to the environment and his interest.

## 2. SPEC of EZ600-DS04 and Information about version

### 2.1. Hardware Spec

Project	EZ600-DS04
Input Voltage	DC16V-DC32V
Power dissipation	The typical 3W
Allow momentary power off	Less than 20 ms
Voltage shock test	AC1000V--10Ma,1 minutes (between Signal and ground)
Insulation impedance	DC500V—about 10MΩ(between Signal and ground)
Operating temp	0~50℃
Storage temp	-10~60℃
Environment humidity	20~85%(no condensation)
Bear libration	10-25Hz(x,y,z orientation, 30 minutes )
Anti-interference	Voltage noise: 1000Vp-p
Pulse width	1us,pulse rising edge: 1ms
Circumambience gas	No causticity gas
Protected configuration	Adapt to IP65F
Cooling	Natural cooling
LCD	192*64 concolorous
Button	Film button
Memory	64KB FLASH
COM1	232/422/485

### 2.2. Software spec

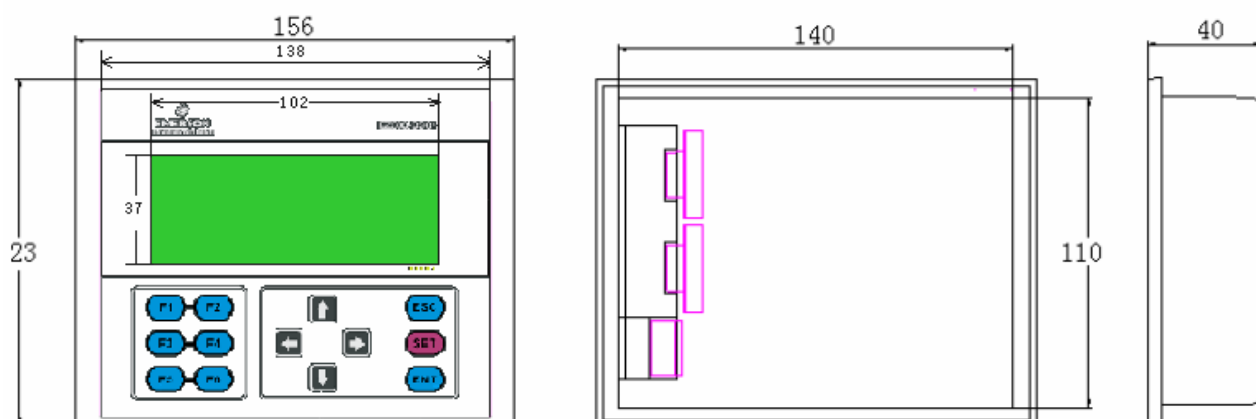
Project	Spec	instruction
Items of screen	1-199	
Items of alarm information	0-48	Single alarm message has 24 characters at most. A alarm list maximum supports 48 alarm
Items of types of Lamp	0-29	No limit in Using the same type of indicator lamps
Items of imported BMP	0-29	No limit in using the imported BMP

pictures		screen
Items of static texts can be laid in single screen	0-96	Single message has 12*Chinese characters or 24*characters at most .
Items of messages display can be laid in single screen	0-96	Single message has 12*Chinese characters or 24*characters at most .
Items of data monitors can be laid in single screen	0-96	
Items of bar graphs can be laid in single screen	0-48	
Items of indicator lamps can be laid in single screen	0-48	
Items of picture can be laid in single screen	0-48	
Password of operation	0-9999	
Function keys : F1-F6	Switch screen for displaying the different relays.	It can be configured differently in different screens.
ESC	Cancel or exit	
SET	Data setting	
ENT	Ack	
Direction Key	screen change / data setting	
Data setting screen	System special/users no edit	It is used to data setting
Password screen	System special/users no edit	It is used to input password to set data
Alarm screen	System special/users no edit	It is used to display the alarm messages when alarms happen.
0th screen	System special/users no edit	It is screensaver's special screen. Background lights close when EZ600-DS04 Text display enter the 0th screen. It will return the previous screen if any key is pressed.

## 3. Introduction of Parts and Installation

### 3.1. Figure and Installation

#### 3.1.1. Figure and Dimensions

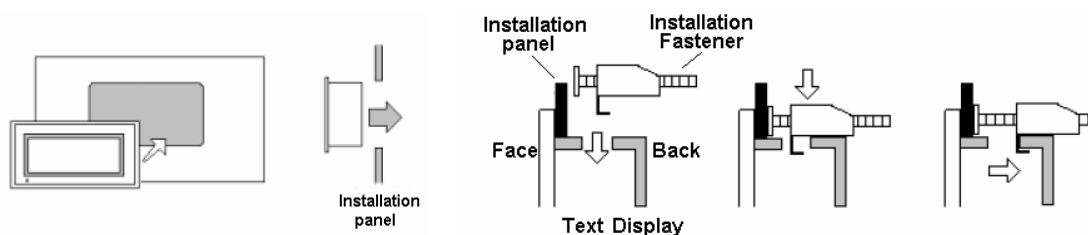


Dimension Unit: mm

	EZ600-DS04
Outline	156*123*40
Cut Out	140*110

#### 3.1.2. Installation Guide






Cut a hole in the installation panel according to the dimensions of cut out. Insert EZ600-DS04 Text Display into the panel (as left picture). Attach the Installation Fasteners from the inside of the panel (as the right picture).







## 3.2. EZ600-DS04 Introduction of parts

### 3.2.1. Keys

EZ600-DS04 has 13 keys, including F1~F6, Direction key, ESC, SET, ENT. Each key has many functions.

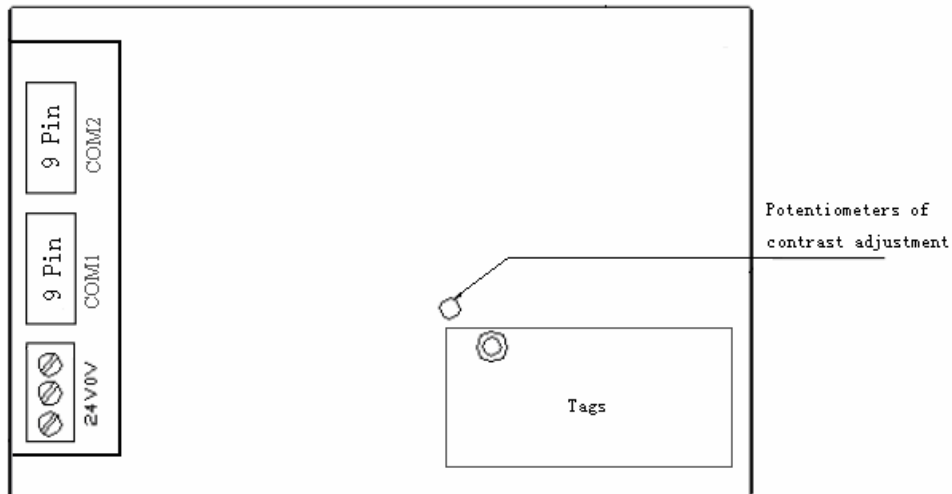
Keys	Functions
 ~ 	<p>Screen jump: EZ600-DS04 text display support 199 screens most. In addition, you can configure the scope of screen jump act. If you designate it "All Screens", namely, screen jump will act on all screens and EZ600-DS04 Text Display changes to the screen you configured; if you designate it "Current Screen", screen jump will act only on this screen.</p> <p>Bit operation: It can control the statuses of the internal relays of devices such as PLC through Bit Set, Bit Reset, Momentary, Bit Invert. Notes: Momentary, namely, click once, the relay will be ON, others, it will be OFF. Bit Invert, namely, ON changes to OFF, or OFF changes to ON.</p>
	<p>Previous Screen Function: That is, the screen n jumps to the screen n-1.</p> <p>Screen Jump Function: Jump directly to any existing screen.</p> <p>Digit subtracts 1 function: To modify the data of register, Digit subtracts 1.</p> <p>Parts of Data Setting Switch Function: If a screen has a number of parts of Data Setting, they can switch among the various parts.</p>
	<p>Screen Jump Function: Jump directly to any existing screen.</p> <p>Digit Cursor Moves Left Function: To modify the data of register, digit cursor moves left once.</p> <p>Parts of Data Setting Switch Function: If a screen has a number of parts of Data Setting, they can switch among the various parts.</p>
	<p>Screen Jump Function: Jump directly to any existing screen.</p> <p>Digit Cursor Moves Right Function: To modify the data of register, digit cursor moves right once.</p> <p>Parts of Data Setting Switch Function:</p>



	If a screen has a number of parts of Data Setting, they can switch among the various parts.
	<p>Next Screen Function: That is, the screen n-1 jumps to the screen n.</p> <p>Screen Jump Function: Jump directly to any existing screen.</p> <p>Digit subtracts 1 function: To modify the data of register, Digit subtracts 1.</p> <p>Parts of Data Setting Switch Function: If a screen has a number of parts of Data Setting, they can switch among the various parts.</p>
	<p>Exit Function: When current screen is of Data Setting, click once to withdraw from this screen.</p> <p>Return to the initial screen: Regardless of EZ600-DS04 Text Display in which user screen, once this button pressed return to the initial screen, the initial screen is designed by the user (for the default values on the 1st screen), the initial screen is usually configured as main menu screen or the screen of highest frequency.</p>
	<p>Data setting Function: To start Data Setting when you press this key. When current Data Monitor is anti-color, Then click into the Data Setting Screen, in which the digit will be modified is flashing, to modify the data. If the screen dose not include part of Data Setting, the implementation of an air operation.</p>
	<p>Data Setting Function: To write the data you have set to the internal register.</p>

### 3.2.2. Others

EZ600-DS04's back equipped with power terminal, communication outlets and potentiometer of contrast adjustment.



An external power supplies power terminal DC24V, COM1 can be used to RS232/RS485/RS422 communications, can also be used to download the screens (with download cable connected PC).

Use a EZ600-DS04 Text Display, if not suitable for LCD screen contrast, can use small screwdriver rotating potentiometer in the back, until a suitable contrast reached.

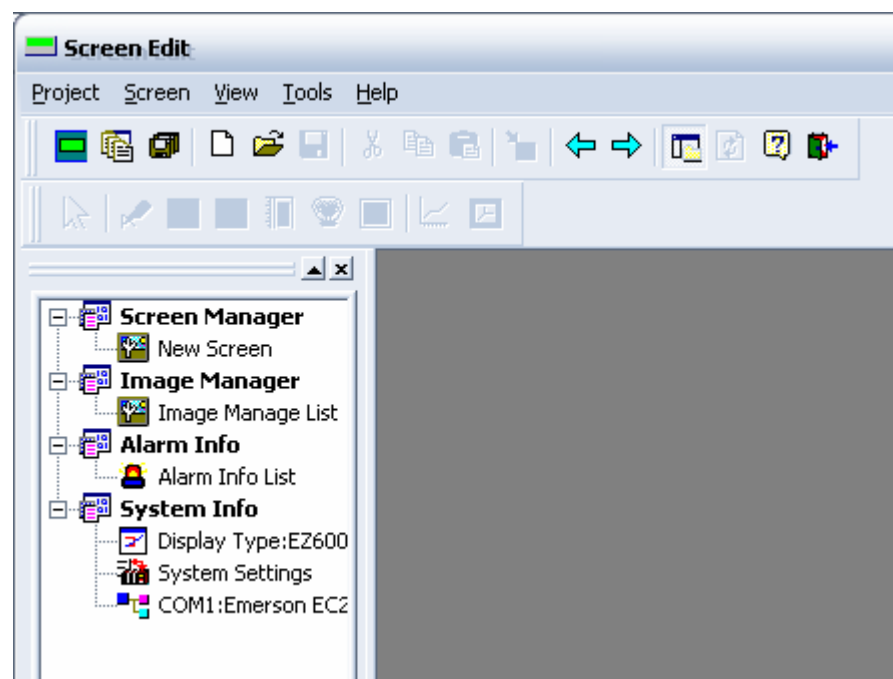
## 4. Program

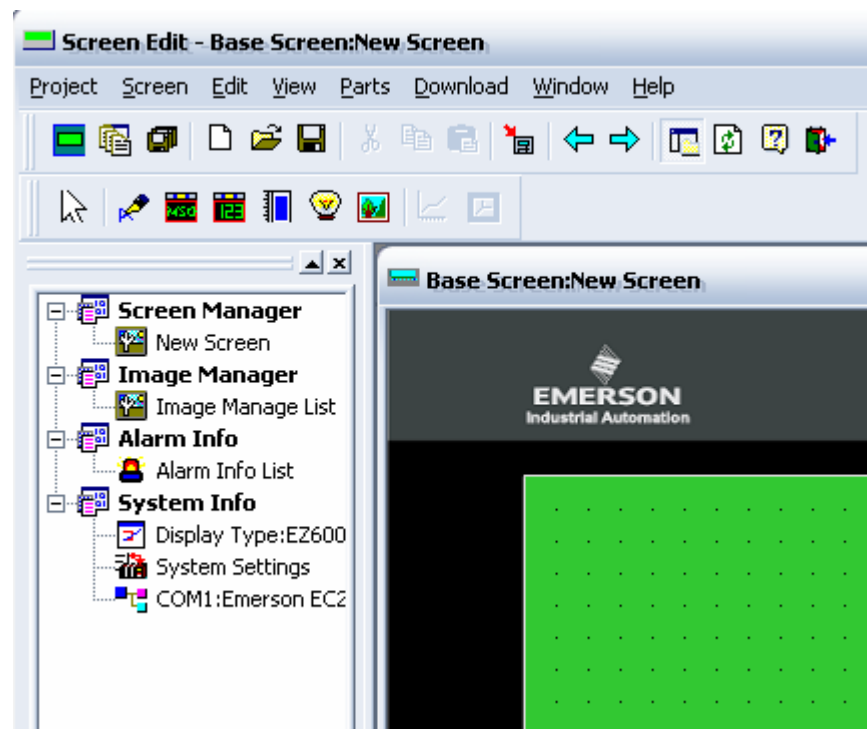
### 4.1. Compactable System and configuration









Compactable system: Support Windows 2000/XP.








The Minimum configuration: Pentium133,32M RAM,100M Hard disc, screen area has at least 800×600 pixels, keyboard, mouse and other interface devices.

### 4.2. Program software interface and instruction





menu	item	instruction	prompt
Project	New project	Create a new project	
	Open project	Open an existed project	
	Save project	Save the current project	
	Save project as	Save current project to another path	
	Close project	Close the project	
	Recent project	Open the current project	
	Exit	Exit from the screen edit	
Screen	New screen	Create a new screen	
	Open screen	Open an existed screen	
	Save screen	Save the current screen	
	Save screen as	Save current project to another path	
	Delete screen	Delete the selected screen	
	Close screen	Close the current screen	
Edit	Undo	Undo	
	Cut	Copy and delete the object	

	Copy	Copy current object	
	Paste	Paste the object	
	Delete	Delete the object	
View	Tool bar	Display/hide tool bars	
	Status bar	Display/hide status bars	
	Component bar	Display/hide component bars	
	System manage list	Display/hide system manage list	
	Screen information	Display the relative statistic message of this screen	
Tools	Language select	Switch between English and Chinese	
Parts	Text	Add the “text” part	
	Message display	Add the “Message display” part	
	Data monitoring	Add the “Data monitoring” part	
	Bar screen	Add the “Bar screen” part	
	Indicate lamp	Add the “indicate lamp” part	
	Image	Add the “Image” part	
	Trend screen	Add the “trend graph” part	
	Time	Add the “time” part	
Download	Download to display	Download the current project into the screen edit	
Window	First screen	Display the first screen	
	Previous screen	Display the previous screen	
	Next screen	Display the last screen	
	Last screen	Display the last screen	
Help	Help Topics	Operation Instruction and Link Reference	
	About	About the EZ600-DS04 software	

## 4.3. System manage list

### 4.3.1. List

#### Screen manager:

———New screen	//create a new screen (double-click)
———B: 1	//switch screen 1 to be the current screen
———B: 2	//switch screen 2 to be the current screen
...	
———B: N	//switch screen N to be the current scree

#### Image manager

-----Image list	//open the Image Library
-----------------	--------------------------

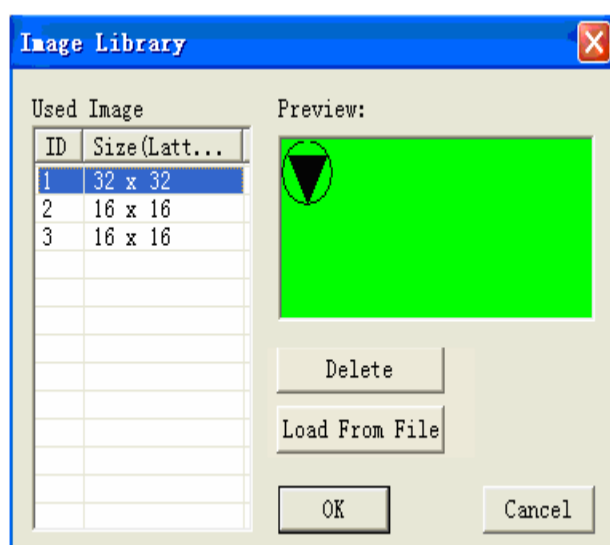
#### Alarm Info:

———Alarm Info list	//edit the alarm message list1
--------------------	--------------------------------

#### System Info:

———Display type:	//display or set the EZ600-DS04 Text Display type
———System setting:	//Set the system parameter of the screen //edit
———COM1:	//display or set the protocol of COM1

### 4.3.2. Image manager



Double click the “Image manager”, EZEDITOR will pop up the dialog box of Image Library, in this dialog box, you can convert the concolorous bitmap file into Image Library, then you can use the image.

### 4.3.3. Alarm Info List

**Alarm Info List**

Monitor Start Address

Com Port: COM1    Node No.: 0    Type: M    Address: 0000 #

Serialize Monitor Num: 48

☐ Buzzer (Alarm Hint)

Information	Address
Undefined	0000=ON
Undefined	0001=ON
Undefined	0002=ON
Undefined	0003=ON
Undefined	0004=ON
Undefined	0005=ON
Undefined	0006=ON
Undefined	0007=ON
Undefined	0008=ON
Undefined	0009=ON
Undefined	0010=ON
Undefined	0011=ON
Undefined	0012=ON
Undefined	0013=ON
Undefined	0014=ON
Undefined	0015=ON
Undefined	0016=ON
Undefined	0017=ON

OK    Cancel

Double click the “alarm message”, it will pop up the dialog box of Alarm Info List. In this dialog box, you can set the alarm bit and respective message. When the alarm bit is on, the screen will alter to alarm screen automatically. According to sequence of the offset addresses, the alarm message will arrange from top to bottom.

Monitor Start Address:

Set the port, Node and Address.

Serialize Monitor Num:

Set the number of alarms. The max amount in an alarm list is 48. The two alarm lists support 96 alarms together.

Information:

Set the alarm messages for alarm bits, max 24 character.

### 4.3.4. System Message

- Display type

View or modify the model of EZ600-DS04 Text Display.

Notes:

Before view or modify the model of EZ600-DS04 Text Display, all current screens must be closed.

- System setting

**System Settings**

Initial Screen:

Screen Saves  
Waiting  Minutes, Change to Screen

Display->PLC

COM	Port	Node No.	Type	Address
Start Address	COM1	1	D	0000 #

Address+0 ☐ Screen No.  
 Address+1~+3 ☐ Time  
 (+1:High 8 bits-Year/Low 8 bits-Week-BCD Format)  
 (+2:High 8 bits-Month/Low 8 bits-Day-BCD Format)  
 (+3:High 8 bits-Hour/Low 8 bits-Minute-BCD Format)

PLC->Display

COM	Port	Node No.	Type	Address
Start Address	COM1	1	D	0000 #

Address+0 ☐ Screen No.  
 Address+1 ☐ Print Control

Others

Set Parameter Password:

Return Alarm Screen After:  Minutes

☐ Don't Display COM1's Communication Error Info  
☐ Don't Display COM2's Communication Error Info

OK Cancel

Initial Screen:

Set the initial screen.

Screen saves:

It can set screensavers like PC. When EZ600-DS04 Text Display stays in a screen for a long time which has exceeded the setting time, EZ600-DS04 Text Display will change to the screen configured or screensavers if screen 0th is configured. If the time is set 0, this function will be forbidden.

Display ->PLC:

Write the status of EZ600-DS04 Text Display into PLC



**Start address:**

Set the start address of EZ600-DS04 status.

**Screen No.:**

Save the number of current screen no. into PLC register. It will work only when the check box is pitched on.

**Time:**

Write the current time of EZ600-DS04 into PLC register. It will work only when the check box is pitched on.

**PLC-> Display:**

PLC writes the command into EZ600-DS04

**Start Address:**

Set the init address of command which PLC uses to control the EZ600-DS04.

**Screen number:**

According to the value of PLC register, EZ600-DS04 will alternate the screen. It works only when the check box is pitched on.

**Parameter password setting:**

Set the password, when you set the values, you can choose to set the pin or not to protect the PLC data.

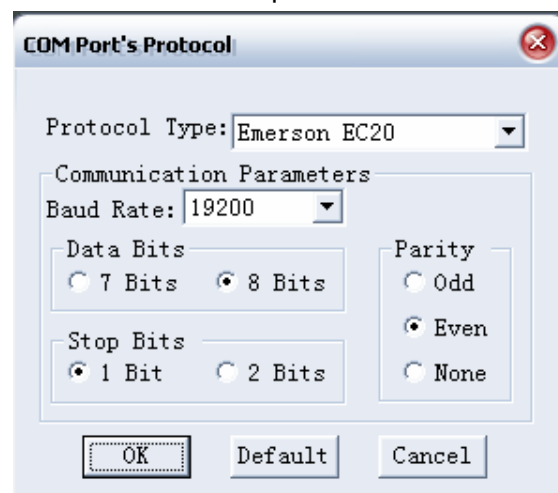
**Alarm time return after:**

Set the return time, when the alarm happens, it will automatically alternate to the alarm screen. After checking it over, you can change back to the previous screen by yourself. When the time exceeds the settings and alarm bit is still on, the screen will return back to alarm screen..

**Not show error messages about COM1:**

When this item is selected, there will be no error messages when the communication errors of COM1 happen.

- Communication port

**Protocol type:**

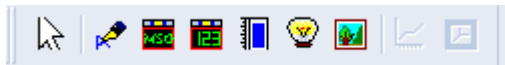
Select protocol type.

**Communication parameters:**

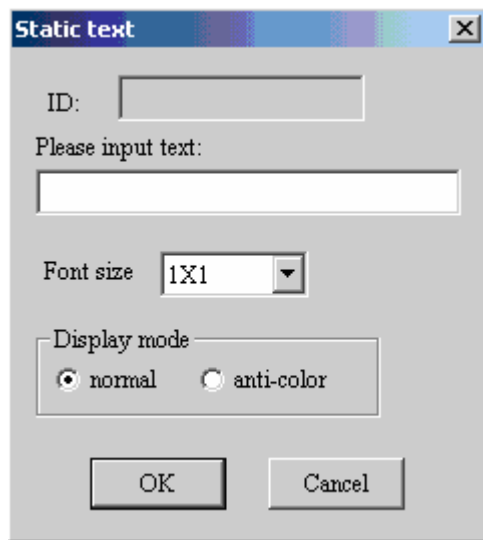
Select baud rata, data bits, stop bits and parity. Communication parameters must be as same as PLC's).

## 4.4. Parts

EZ600-DS04 Text Display supports a variety of parts, as follows:



### 4.4.1. Text



Input text:

Be used to import text, the max size is 24 characters.

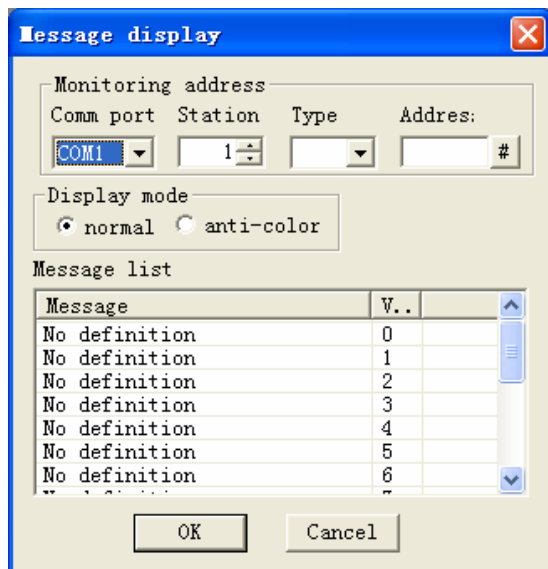
Font size:

There are four types 1×1, 1×2, 2×1, 2×2.

Display mode:

You can display the text in normal color or anti-color.

## 4.4.2. Message display



Monitoring address:

You can configure the communication port, PLC station, type and address of the register.

Display mode:

You can display the text in normal color or anti-color.

Message list:

Display the relative message according to the value of appointed register (0~15);

When the value is 0, the screen edit will display the message of 0#;

When the value is 1, the screen edit will display the message of 1#;

.....

When the value is 15, the screen edit will display the message of 15#;

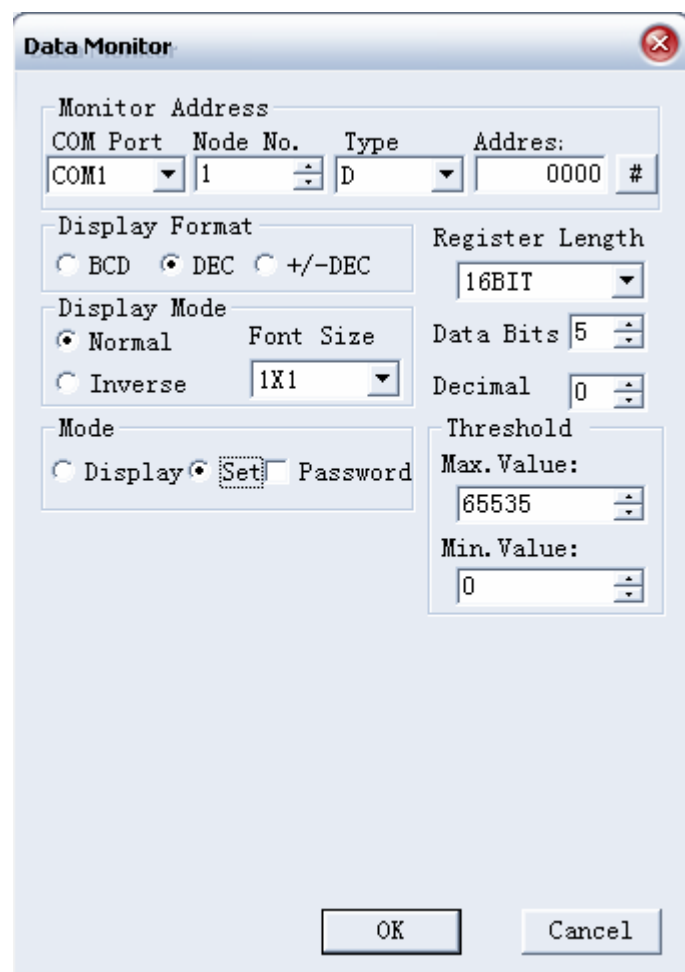
When the value exceed 15, it will display the previous valid message .If the value exceed at the beginning, it will display blank.

Message can be character or Chinese character. The max size is 12 Chinese characters or 24 characters.

The attribute of message display has coordinate(x coordinate, y coordinate), normal /anti-color display, parameters of communication (include series port, station, register type, register address).

There are at most 96 items of message in a screen.

### 4.4.3. Data monitor



Monitor Address:

Configure the communication port, station, register type and register address.

Display format:

BCD(BCD format)、DEC(Decimal format)、 +/-DEC(Decimal format with sign). If the display format of data in EZ600-DS04 is BCD, the data can only be configured "Display".

Display mode:

You can choose normal or anti-color.

Font size:

Support four types 1×1,1×2,2×1,2×2.

Mode:

Enable the data be modified or not. If the display format of data in EZ600-DS04, the data can only be configured "Display", namely, the data can not be modified.

Password:

It will require password to enter into the data setting.

Register length:

16 bit of word or 32 bit of double word.

Data Bits:

Set the number of digits of the data.

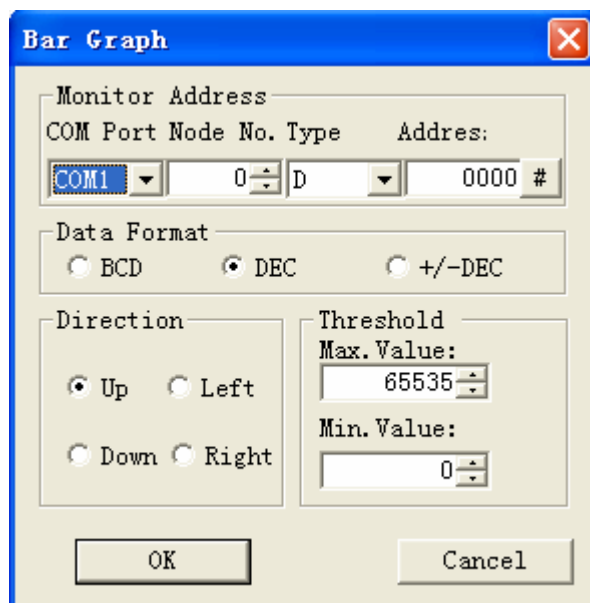
Decimal:

Set the position of the decimal point.

Threshold:

Set the Max. value and Min. value.

#### 4.4.4. Bar screen



Monitoring Address:

Set the communication port, station, register type and register address.

Data Format:

BCD(BCD format)、DEC(Decimal format)、 +/-DEC(Decimal format with sign).

Direction:

Set the direction of bar graph.

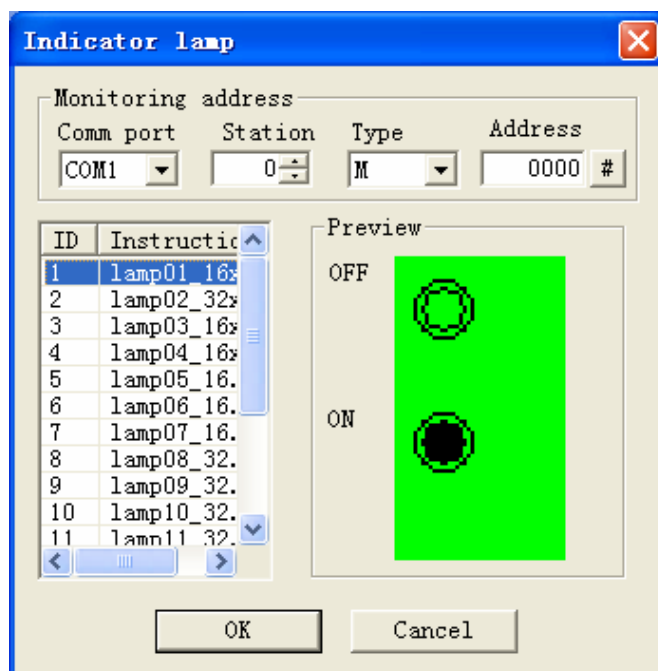
Range:

Set the min and max value of the data.

Notes:

When you select BCD format, the range is 0-9999.

## 4.4.5. Indicator Lamp



Monitoring address:

Appoint to comm. Port, station, signal type and address.

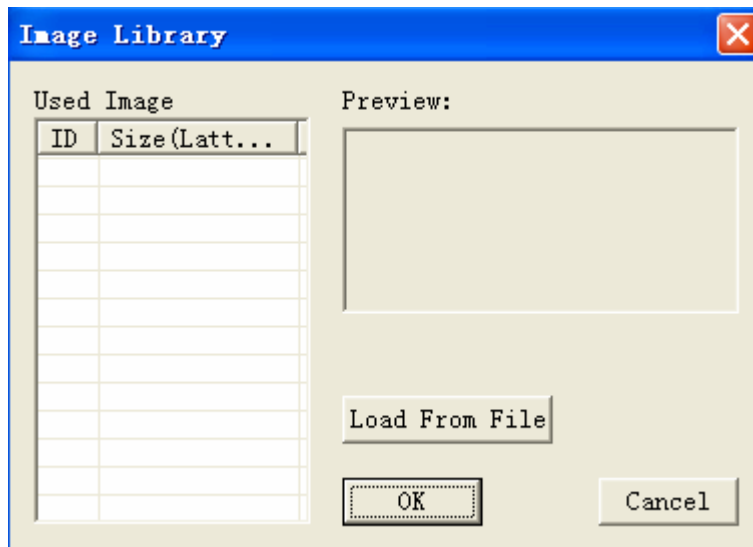
Preview:

Preview the figures of the lamp.

Notes:

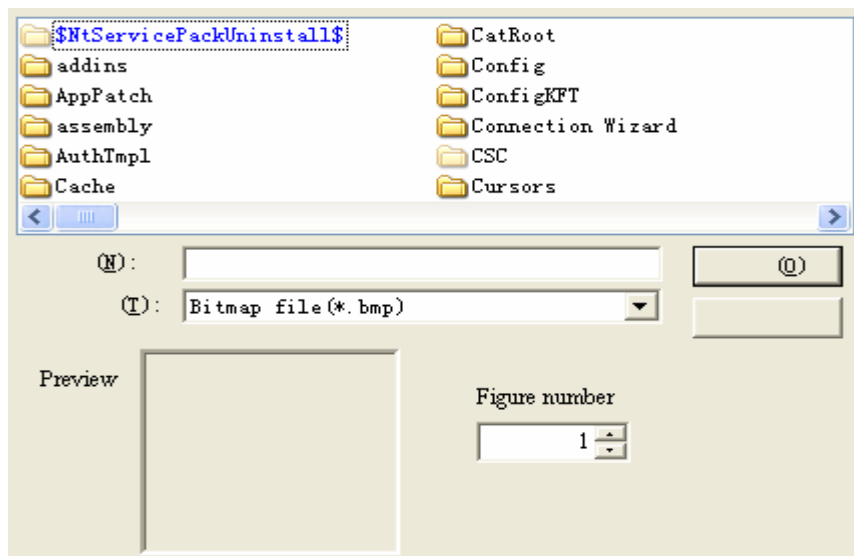
One screen can place as many as 29 indicators, others will be neglected.

#### 4.4.6. Image



You can convert the concolorous bitmap file into Image Library, then you can use the image.

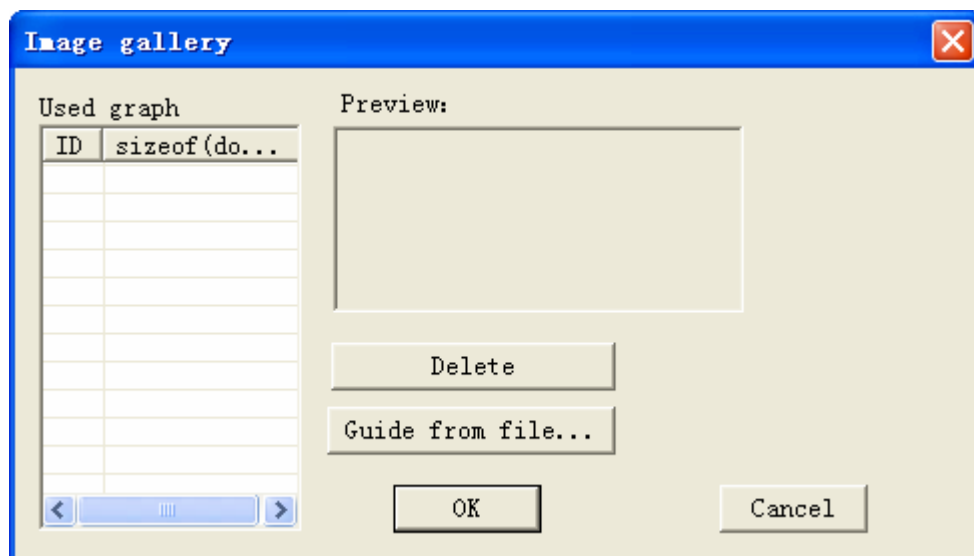
Click the “Guide from file” will appear below window.



From here you can select the BMP file which you want to deal with.

Notes:

Only concolorous BMP files can be converted .Then you can click “open”, below screen will appeared



There will be a preview of the files when you select the converted files  
Through “image gallery”, you can convert the local concolorous bmp to screen edit for  
future use.

Notes:

You can at most import 48 pictures .There will be no limit in use the pictures.

#### 4.5. Keys on the panel

The panel of EZ600-DS04 provides 6 function keys, 4 direction keys , and 3 operation keys.

#### 4.5.1. Keys for screen switch

1.function key F1-F6 : switching screen

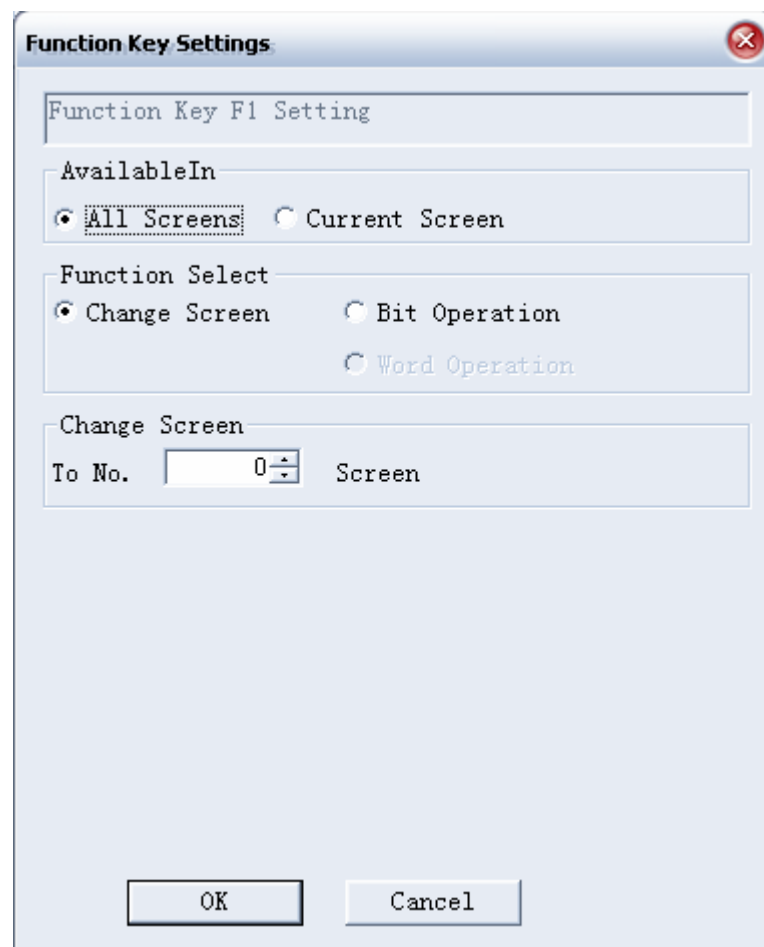
Function key of F1-F6 is used for screen switching.

Before the screen switch, you must select the certain screen which you want to switch to. When the number=0, it will not switch at all .If the number is not exist , it will not switch too. The switching screen number must in user screen number must between 1 and 199, when the number is 0, we can't use this function key.

When choose all range , the function key in all screen is same ; when choose current screen , the function key in only valid in current screen .

Suppose the screen shows as below:





Operation instruction:

If F1 is set as switch screen to 18 , the current screen is 19 .

Component 1	Component 2	Component 3
Graph 19		

Click “F1”, it will switch to screen 18

Component 1	Component 2	Component 3
Graph 18		

## 2. direction key switching screen

When the direction key is used for screen switching ,you must select the screen which you want to switch to . The setting way is the same as function key F1-F6.

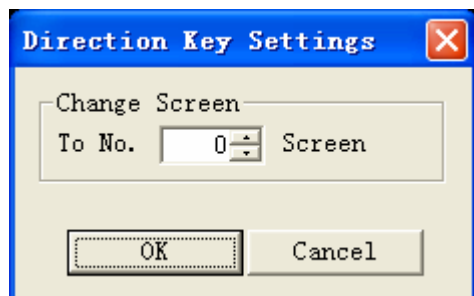
If you didn't select the screen, click the default key “up” and “down” will switch the screen . click “left” and “right” will not work.. click “up” key is to switch the smaller number of screen , and click “down” switch to bigger ones .

The default setting can only switch to the previous one or the next one .If the screen is not

exist , it will not work.

Each direction key can set the number of screen separately which you want to switch to  
The number must between 1-199.If it is 0,it will call the default function.

If the screen of the software like this:



Operate instruction:

If the “up” key of screen 20 is set to switch to screen 19,and the “up” key of screen 19 is set to switch to 30.The operation as below:

The current one is screen 20

Component 1	Component 2	Component 3
Graph 20		

Click “up”, it will switch to screen 19

Component 1	Component 2	Component 3
Graph 19		

Click the “up” again , it will switch to screen 30

Component 1	Component 2	Component 3
Graph 30		

If the “up” key of screen 20 has not been set , and the “up” key of screen 19 is set to switch to screen 30. The operation as below:

The current one is screen 20

Component 1	Component 2	Component 3
Graph 20		

Click “up” , it will switch to screen 19

Component 1	Component 2	Component 3
Graph 19		

Click “up” key again , it will switch to screen 30

Component 1	Component 2	Component 3
Graph 30		

### 3. ESC for switching screen

ESC key can return back to the previous screen from the specific screen (data input screen/ password input screen/alarm message) ; ESC key also can return back to the initial screen from the user screen. The operation as below:

If the current screen is the data input screen , and “I” is the cursor .The previous screen is 20 .

Data input screen
Current value : 1I2 3 4 5

Click ESC , it will return back to 20.

Component 1	Component 2	Component 3
Graph 20		

If the current screen is password input screen, and “I” is the cursor. The previous screen is 20 .

Data input screen
Current value : 1I2 3 4 5

Click ESC, it will return back to screen 20

Component 1	Component 2	Component 3
Graph 20		

If the current screen is the alarm message screen and “I” is the cursor. The previous screen is screen 20

Alarm 1	alarm message list
Alarm 2	
Alarm 3	
Alarm 4	

Click ESC ,it will return back to 20.If there are buzzer ,it will shut down the buzzer when switching screen.

Component 1	Component 2	Component 3
Graph 20		

#### 4.ENT for switching screen

ENT can be used for switching to data input screen or return back to the original screen from the data input screen. You can refer to the button for data input .

#### 5. SET for switching screen

Set can be used for switching to data input screen, you can refer to the button for data input.

### 4.5.2. Keys for bit operation

Function key F1-F6 can be used for bit operation. Bit operation can modify the states of the relays.

When Function key F1-F6 change the states of PLC relays , it must set the comm. Setting of the PLC ( including series port number , station , type of the relay , address of the relay ) , and the operations after click the button ( set , reset , momentary , invert ).

Set : when click this key ,the state of the PLC relay will be ON , when release it , the state of the relay is still ON ;

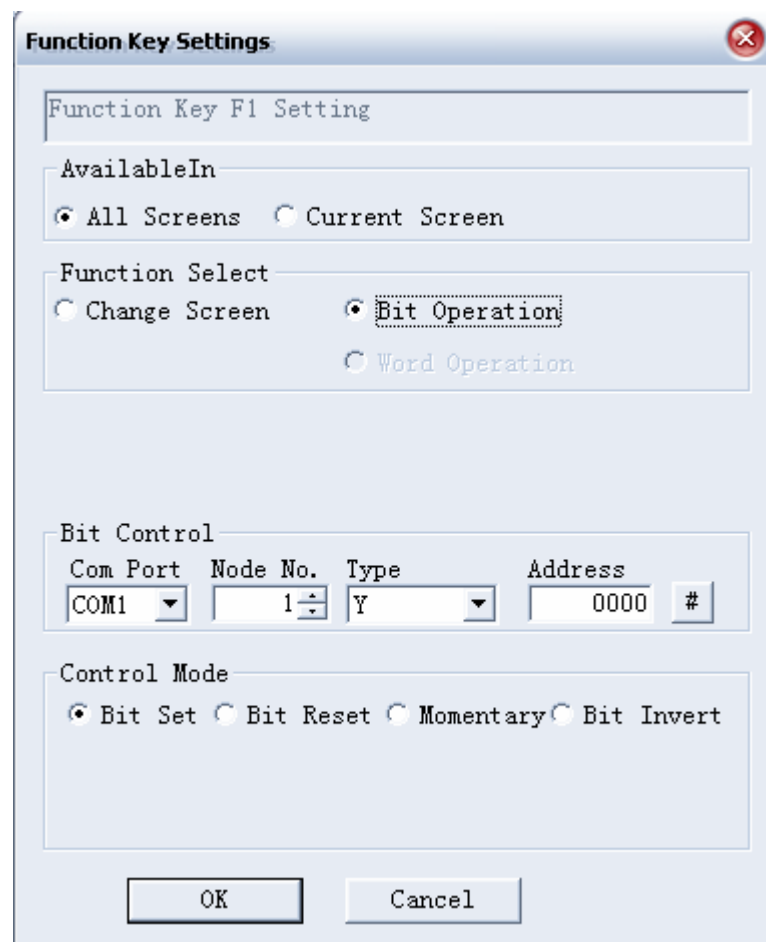
Reset: when click this key , the state of the PLC relay will be OFF , when release it ,the state of the relay is still OFF ;

Momentary: when click this key , the state of PLC relay will be ON ,when release it , the state of the relay is OFF;

Invert : when click this key , the states of the PLC relay will invert , when release it , the state of relay will keep this state .

When choose all range, the function key will be valid in all the screen ; when choose current screen ,the function will be valid only in this screen .

Suppose the screen in the edit software as below



**Function Key Settings**

Function Key F1 Setting

AvailableIn  
☒ All Screens ☐ Current Screen

Function Select  
☐ Change Screen ☒ Bit Operation  
☐ Word Operation

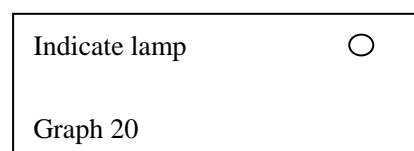
Bit Control  
 Com Port: COM1 Node No.: 1 Type: Y Address: 0000 #

Control Mode  
☒ Bit Set ☐ Bit Reset ☐ Momentary ☐ Bit Invert

OK Cancel

Operation instruction:

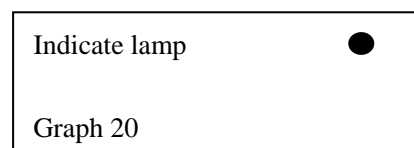
If F1 is appointed to “set” PLC M0000 relay which is on COM 1 , station 0 , the current screen is screen 20 , and there is a state indicate lamp which stands for M0000 . The current state of M0000 is OFF .



Indicate lamp ☐

Graph 20

Click “F1” , the state of M0000 is ON , and the indicate lamp is lightening .

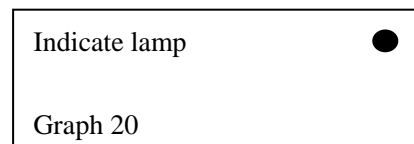


Indicate lamp ☒

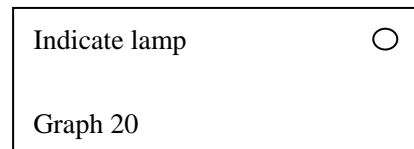
Graph 20

If the M0000 relay have already been ON , the state of indicate lamp will keep .

If F1 is appointed to “reset” PLC M0000 relay which is on COM 1 , station 0 , the current screen is screen 20 , and there is a state indicate lamp which stands for M0000 . The current state of M0000 is ON .

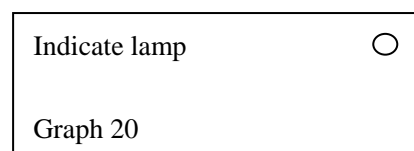


Click "F1", the state of M0000 is OFF , then the indicate lamp will crush out .

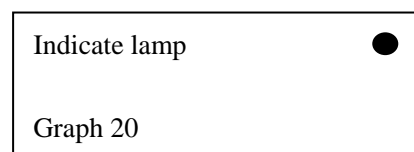


If the state of M0000 relay have already been OFF , the state of the indicate lamp will keep .

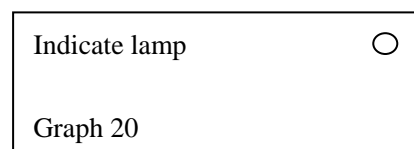
Suppose F1 is appointed to be "momentary "PLC M0000 relay which is on COM 1, station 0 , the current screen is screen 20 , and there is a state indicate lamp which stands for M0000 . The current state of M0000 is OFF .



Click "F1" and keep it , the state of M0000 is ON , and the indicate lamp is lightening .

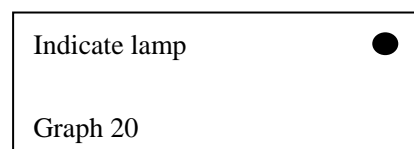


Release "F1" , the state of M0000 become OFF , then the indicate lamp will crush out .



If the state of the M0000 relay is ON , click "F1" and keep , the state of the M0000 will keep . Release "F1" , the state of M0000 become OFF .

If F1 is appointed to "invert "PLC M0000 relay which is on COM 1, station 0 , the current screen is screen 20 , and there is a indicate lamp which stands for M0000 . The current state of M0000 is ON .



Click "F1" , the state of M0000 become OFF , then the indicate lamp will crush out . Release "F1" , then the state of M0000 will keep .

Indicate lamp	<input type="radio"/>
Graph 20	

Click “F1” again , the state of M0000 become ON again , the indicate lamp will crush out .  
Release “F1” , the state of M0000 will keep .

Indicate lamp	<input checked="" type="radio"/>
Graph 20	

### 4.5.3. Keys for data setting

We can modify the value of the data setting component by click the keys, we also can write this value into the PLC register in the same way.

If there are 3 components in the screen 20 , and only component 2 is for data setting .

Component 1	Component 2	Component 3
Graph 20		

After clicking “SET”, the cursor will appear on component 2 ( the cursor is shining , and the below is same)

Component 1	<b>component 2</b>	component 3
Graph 20		

When the cursor appear on EZ600-DS04 , we enter data input screen or password input screen only by clicking SET.

Data input screen
MAX. value: 1 2 3 4 5
MIN. value: 1 2 3 4 5
Previous value: 1 2 3 4 5

Password input value
1 2 3 4

If the data is signed , when we enter the data input screen ,the cursor I will appear on the right of the lowest bit.

Data input screen
Max : + 1 2 3 4 5
Min : - 1 2 3 4 5
Curr: + 1 2 3 4 5
New: + 1 2 3 4 5 <b>I</b>

We shift the direction of cursor and modify the data by clicking the direction keys . click the “right” and “left” key , the cursor will shift one bit to left or right , “up” “down” can change the data which is on the left of the cursor , “up” can circle the number from 0- to >9 , “down” can circle the number from 9- to >0 . if the cursor appear on the right of the signed , the “up” will change the sign to “+” , the “down” will change the sign to “-” .

When the data have been modified , click the “ENT” in the data setting screen , then the data will be wrote into PLC register , and it will return to the screen 20 automatically at the same time . when it return , the cursor still appear on the data component . when the data is being wrote into the register wrongly , it will stay on the data setting screen .

After inputting password , clicking “ENT” can input the password in password screen . If the password is correct , we will enter a data setting screen ; if the password is wrong , we will stay in the password setting screen .

When we click “ESC” in the data setting screen , it will exit from data setting screen , and return to original screen , and the cursor will disappear .

When we click “ESC” in the password setting screen , it will exit the password setting screen , and return to original screen , and the cursor will disappear .

If there are several data setting components in the current screen . the data setting operation as below :

If there are 6 components in screen 20 , and among these components , component 2, component 4, component 6 are data setting components

Component 1	Component 2	Component 3
Component 4	Component 5	Component 6
screen 20		

click “SET”, the cursor will appear on component 2(the cursor is shining , and the below is same)

Component 1	<b>component 2</b>	Component 3
Component 4	Component 5	Component 6
screen20		

Click the direction key can switch the cursor among the data setting component . Click “UP” and “left” key can shift the cursor to previous data setting component , Click “down” or “right” can shift the cursor to the next one . the cursor shift from left to right first , then shift from up to down .

Shift the cursor to the components which need to be modified . the following operation is the same as the previous data modification .

When the cursor on component appear , clicking ESC can cancel the cursor . Its operation as below:

If there are 3 components in screen 20 , component 2 is the data setting component , and



the cursor have already appeared .

Component 1	<b>Component 2</b>	Component 3
Graph 20		

When click the ESC , the cursor which appear on the component 2 will disappear at once .

Component 1	Component 2	Component 3
Graph 20		

Then click “ESC” , the screen will be switched . It can be referenced to “switching screen” .

## 4.6. Special Function Application

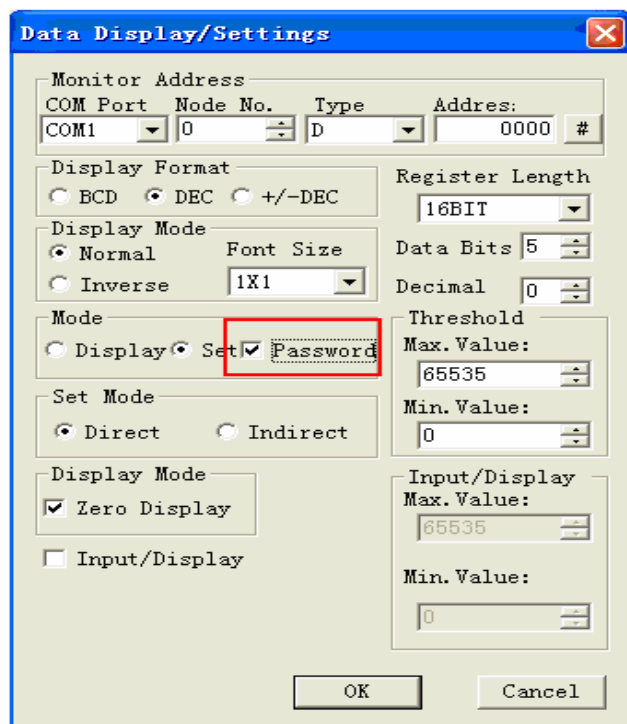
### 4.6.1. Password Protection

Password can prevent unauthorized users to change the critical data of .

EZ600-DS04 Text Display has only one password (shared among all parts). Password is set up in the dialog box of System Setting, as the following picture:

- Password protection of data setting

If the parts of the data setting need password protection, pitch on the check box of Password, as the following picture:



Notes:

Only select the "Set" in the "Mode", the password will be operational.

## 4.7. Download

The last step of program is downloading, the specification is as follow:

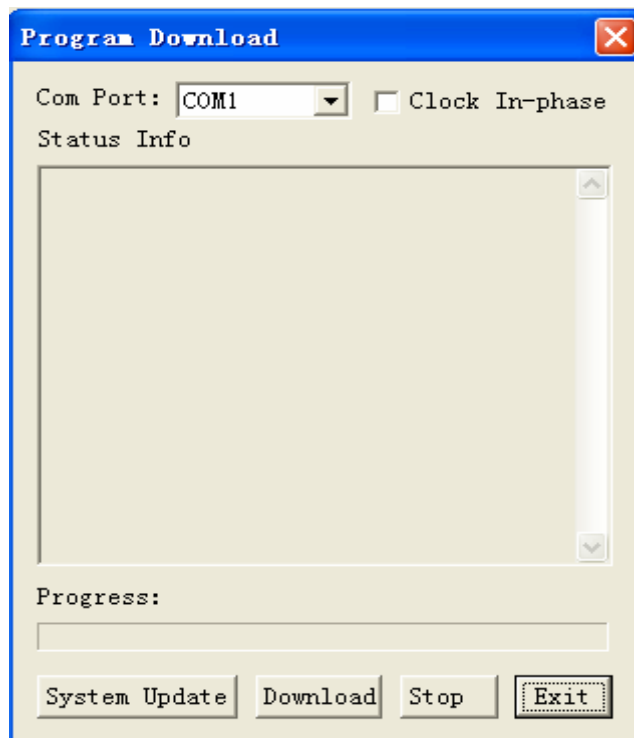
Cut off the power of the EZ600-DS04 Text Display.

Hold a program cable, one port is connected to the program port of EZ600-DS04 Text Display; another is connected to the series port of the PC.

Give a power to the EZ600-DS04 Text Display.

Open "download menu" in the edit software, choose "download to display", or click the download icon directly. If the screen and the process is not be saved, the text edit will mention you to save or not. If we have already saved the screen and process, the edit will jump to the screen of downloading process.

Click the series port which connect to the screen edit, click the button of "down load", then it will begin to download.



Comport:

Specify the download communication port

Status Info:

Show the information of download process.

Download process:

Show the process bar of the download.

System Update:

Update the system file of EZ600-DS04 Text Display.

Download:

Click this button, it will begin to download.

Stop:

Stop the download process.

Exit:

Close the dialog box of download.

Notes:

The system file of EZ600-DS04 Text Display is the latest one before delivery, so users do not have regular system update.

The situation to update the system file includes: EZ600-DS04 Text Display does not work well after download the data of screen into it; company's Web site released new EZEDITOR to notify users to update.

When the system update, the power can't be cut off, otherwise it won't complete the update and the system file in EZ600-DS04 Text Display will be damaged.

The system file with suffix of 'E' means English version.

## **4.8. Communication error Instruction**

If there are parts of communication such as Indicator Lamp or Data Monitor on the screen downloaded into EZ600-DS04 Text Display and the communication with PLC is not normal, EZ600-DS04 Text Display will appear tips of error at the bottom left of the screen.

The instruction of the tips as follows:

C0.01: The communication of COM1 with other external device is not normal.

The function of communication error is for communication parts on current screen rather than other screens.

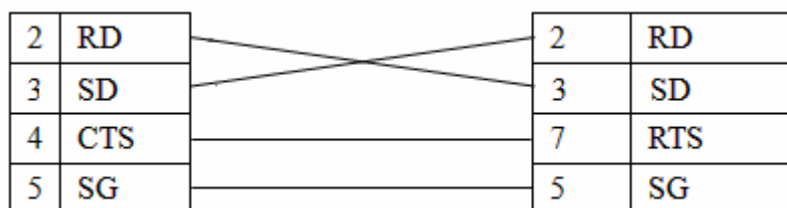
## 5. Communication and transmission port

COM1 can be used for downloading data of screens and system files, it can also be used for communicating with the PLC.

Pin	Define	Instruction
1	+5V	+5V power
2	RXD	Receive the 232 communicate data
3	TXD	Transmit the 232 communicate data
4	CTS	Special use
5	SG	Signal GND
6	RD+	Receive the 422 communicate data +/ 485 communicate A
7	SD+	Transmit the 422 communicate data +/485 communicate A
8	RD-	Receive the 422 communicate data -/ 485 communicate B
9	SD-	Transmit the 422 communicate data -/485 communicate B

project	EZ600-DS04
The numbers connect to slaver	1: 1(PLC)
communicate mode	232/422 full duplex,485 half duplex
Communicate standard	232/422/485
Communicate parameter	8 bit/7 bit data, 1 /2 stop bit, odd /even/no parity
Communicate baud rate	1200、2400、4800、9600、19200、38400
Communicate length	The longest length of 232 is 15 meter, The max distance of 422or 485 is 100 meter

Download cable



The mode of communication with the PLC is reference to link manual.

## 6. Alteration record

Date	Main alteration		