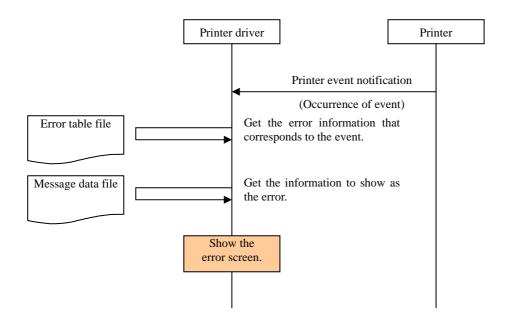
How to display an error/attention message

1. Purpose of error table file

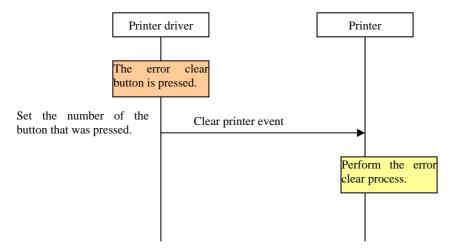
In the error table file, the detailed information for the events notified when an error/attention message is brought up on the printer is registered.

In order to notify the person who works on the printer driver of the event that has occurred on the printer, once the printer driver receives the printer event notification that notifies occurrence of an event from the printer, it will get the error information that corresponds to the event code it has received from the error table file and message data file, and show the contents on the screen.

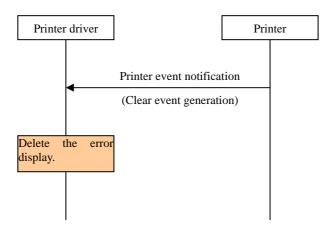


In case the application fails to access the error table file, an attention message that states the error table file has not been installed is shown.

When a clear button is pressed on the error display screen, send the clear printer event request to clear the printer event.



Once an error or an attention message is given on the printer, send the printer event notification to clear the event to the printer driver as soon as the error/attention message is cleared via the event clear notification from the printer driver or the auto clear by the printer. The printer driver will delete the corresponding error from the error display screen once it receives the notification.



2. Screen to show errors

Functions required to the error display screen:

- Multiple error display

List multiple errors, and show the detail of and clear the selected error.

This is to enable to show and clear error messages even if an error occurs on multiple printers at a time and/or multiple errors occur on a printer.

- Model name display (Fig. 1 - 1)

Show the printer model name.

- Error code display (Fig. 1-2)

Show the main and sub numbers of the error code with 5-digit number. When the value is less than 5 digits, then put 0 in front of the value.

A hyphen ("-") is inserted between the main and sub numbers. No sub number is shown for the errors whose SubNumType shows "0" in the error table file.

Show the error code notified via printer event notification.

- Main number of error code will be set to tag 1 (EventCodeMain) of the printer event notification.
- Sub number of error code will be set to tag 4 (EventParam[0]) of the printer event notification.
- Message display (Fig. 1 − 3)

Error message:

Get the message ID of the message to be shown as error message from the error table file using the

main number of error code as the key, and get the string to show from the message data file using the message ID as the key and show it on the screen.

How to address:

Get the message ID of the message to be shown as how to address from the error table file using the main number of error code as the key, and get the string to show from the message data file using the message ID as the key and show it on the screen.

Up to 10 lines of messages can be shown in combination of error message and how to address.

- Clear button display (Fig. 1 - 4)

Get the message ID of the string to show on the buttons from the error table file using the main number of error code as the key, and get the string to show from the message data file using the message ID as the key and show it on the buttons.

When a clear button is pressed, get the clear number assigned to the error that corresponds to ActionId of the printer event clear request from the error table file and set.

Up to 5 clear buttons will be available.

In case a button of a keyboard is assigned as the release button in the error table file, perform the operation to be performed when the corresponding release button is selected as soon as the button is pressed.

- Help button display (Fig. 1-5)

When the Help button is pressed, show the Help file.

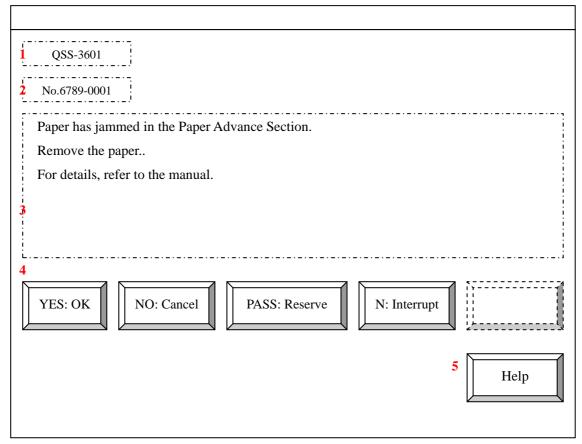


Fig. 1. Sample error display screen

3. Format of the error table file

Error table file is the text file of the keyword format (ini file format) that consists of the section and key names and the value.

It uses multi-byte character set (MBCS).

A section is assigned per event code.

There are 2 types of section name – event code (main number) notified via the printer event notification, and embedded string. See below for the description of these.

Table 1. Keys to be used with the event code (main number) section

Key	Description
Level	Show the priority of the error.
	Range: -1 - +7
	-1: Priority -1 – Error that will not be shown on the error display and not provide the
	error sound, but will be output as the error record information (Attention)
	0: Priority 0 – Error that will not be shown on the error display but provide the error
	sound (Attention)
	1: Priority 1 – Attention (low priority)
	2: Priority 2 – Attention (mid priority)
	3: Priority 3 – Attention (high priority)
	4: Priority 4 – Error (default)
	5: Priority 5 – Error (low priority)
	6: Priority 6 – Error (mid priority)
	7: Priority 7 – Error (high priority)
LogSave	Show whether or not to include the error to the error record information.
	Range: 0 – 1
	0: Not include to the error record information
	1: Include to the error record information
Message1	Show the message ID of the error/attention message.
Message2	Up to 6 messages can be set. Message1 contains the message of the 1 st line, Message2
Message3	of the 2 nd line, Message3 of the 3 rd line, etc.
Message4	Get the messages from the message data file using the message ID as the key. When the
Message5	embedded string is included, processing that conforms to the definition of each
Message6	embedded string is required. When the "\u2144" characters are included in the message,
	convert it to the line feed character to show it on the screen.
ButtonString1	Show message ID's of the string to show the clear buttons 1-5 on the error (attention)
ButtonString2	screen. Get the strings from the message data file using the message ID as the key.
ButtonString3	
ButtonString4	

ButtonString5	
ButtonKey1	Show the button on the keyboard assigned as the release button on the error (attention)
ButtonKey2	dialog.
ButtonKey3	Range: -1 to 1
ButtonKey4	-1: No assignment of the key on the keyboard
ButtonKey5	0: Enter
	1: F12
SoundPath	Show the relative path to the sound file.
	Relative path from the location where the error table file is located is set.
	When no value is set, error sound of Level1 will be played by default.
SubNumType	Show whether to display the sub number in the error display screen.
	0: Not show the sub number
	1: Show the sub number
Action	Show the message ID of how to address for the corresponding error/attention message.
	Get the how-to-address message from the message data file using the message ID as
	the key. When the "\underse n" characters are included in the message, convert it to the line
	feed character. to show it on the screen.

4-2. Embedded string

Embedded string is the string enclosed by 2 percent signs in the message.

There are 3 types of embedded strings – "%NUM%", "%STD__####%", and "%BIT__####%" (where "####" shows a string).

For the embedded string, values set in EventParam[1] through EventParam[3] of tag 4 of printer event notification ("parameter") are used by turns to switch the display.

1) "%NUM%"

Convert the parameter to the string, and replace it with %NUM%.

e.g.) When, in the printer event notification, EventCodeMain is set to 6027, EventParam[0] is 1, EventParam[1] is 20, and EventParam[2] is 8,

Error table file:

[6027] Level=5 LogSave=1 Message1=8243 Message2=30003 ButtonString1=4001 Action= 1806

Message data file:

1110000050 00000 11101			
[Message]			
4001="NO: Cancel"			
8243="Temperature is being adjusted. ¥n One			
moment please "			
30003="%NUM%.%NUM% deg C"			
1806="Refer to the manual."			

Resultant error display screen:

No.06027-00001		
Temperature is being adjusted.		
One moment please		
20.8 deg C		
Refer to the manual.		
NO: Cancel		

2) "%STD__####%"

Get the message ID from the error table file using the parameter as the key, in the section of the same name as the embedded string, and get the display message from the message data file using the message ID as the key. Then replace it with %STD_####%.

e.g.) When, in the printer event notification, EventCodeMain is set to 3183, EventParam[0] is 0, and EventParam[1] is 2,

Error table file:

[3183] Level=2 Message1=5720 Message2=30002 ButtonString1=4000 ButtonString2=4001 [STD_AFC_LANE] 1=5721 2=5722

Message data file:

```
[Message]

5720="Set the lane."

30002="%STD__AFC_LANE%"

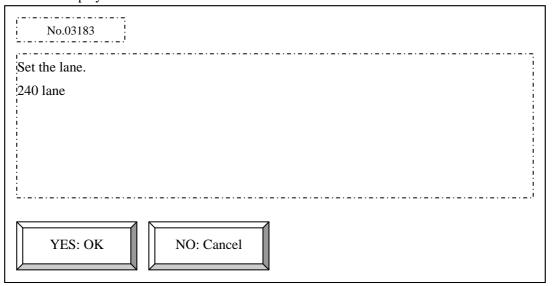
4000="YES: OK"

4001="NO: Cancel"

5721="135 lane"

5722="240 lane"
```

Resultant error display screen:



3) "%BIT__####%"

Get the message ID from the error table file using the parameter as the key, in the section of the same name as the embedded string, and get the display message from the message data file using the message ID as the key. Then replace it with %BIT__####%.

In case of %BIT__####%, convert the parameter to a binary number, and get all the message ID of the bit whose bit flag is ON, and show the display messages deliminating it with a half-angle space character. The keys to get messages are 0, 1, 2, 3, ..., 30, 31, from the 1st digit of the bit.

e.g.) When, in the printer event notification, EventCodeMain is set to 6012, EventParam[0] is 5, and EventParam[1] is 5,

Error table file:

Message data file:

[Message]
4001="NO: Cancel"
8245="CD"
8246="BF"
8247="STB"
8244="Processing solution temperature is extremely high."
30001="%BIT__PRIME%"

Resultant error display screen:

No.06012-00005	
Processing solution temperature is extremely high.	
CD STB	
<u> </u>	
NO: Cancel	

4. Format of the message data file

Message data file is the text file of the keyword format (ini file format) that consists of the section and key names and the value.

It uses multi-byte character set (MBCS).

Section name is fixed to "Message".

Key is the message ID specified in the error table file, and a string enclosed by the double-quotation marks is set in the value. When a pair of double-quotation marks is used within the string, it will result in using 2 pairs of double-quotation marks – a pair of double-quotation marks inside another pair of double-quotation marks. You can get the information on font to show the messages in the error display screen using the keys listed in Table 3 below.

Table 3. Information to be used to create font

Key	Description
3000	Font name
3018	Identifier of the character set (to be used to create font)