

No. TAA-1151

TWIN COLOR PRINTER

Models:

CB-426-T3-QQ

CB-426-T3-QP

EXPANSION I/O SPECIFICATION

First Edition: January 21, 1999

TEC CORPORATION

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1. SCOPE

This specification applies to expansion input/output (I/O) for the CB-426-T3-QQ and CB-426-T3-QP twin color printer.

2. OUTLINE

By using the expansion I/O, the printer can feed and issue labels, or indicate the printer state, according to the external input/output signals, in addition to using commands from the PC. This allows interfacing with external equipment such as a labeler.

3. ELECTRICAL SPECIFICATIONS

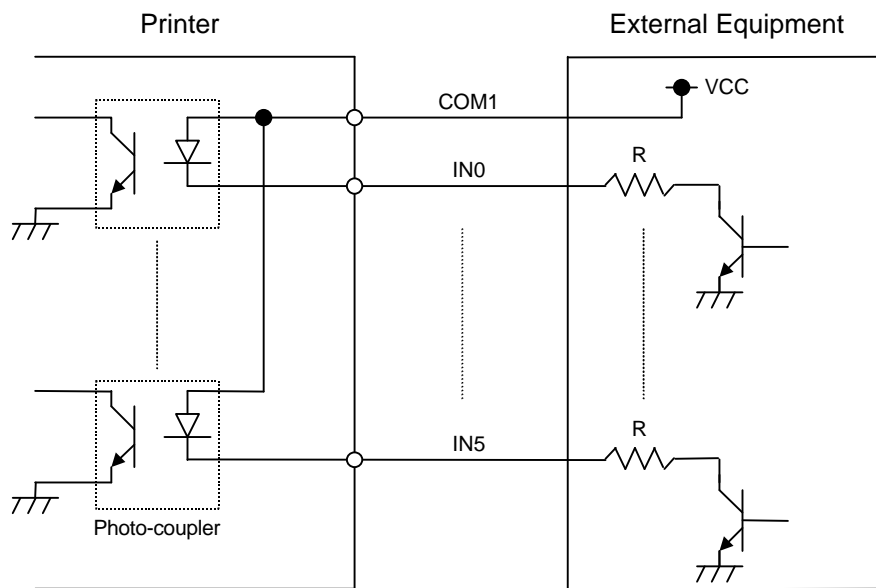
3.1 PIN ASSIGNMENT (Connector FCN-685J0024 or equivalent) (Connector for the controller: FCN-781P024-G/P or equivalent)

No.	Signal Name	Direction
1	IN0	
2	IN1	
3	IN2	
4	IN3	
5	IN4	
6	IN5	
7	OUT0	
8	OUT1	
9	OUT2	
10	OUT3	
11	OUT4	
12	OUT6	

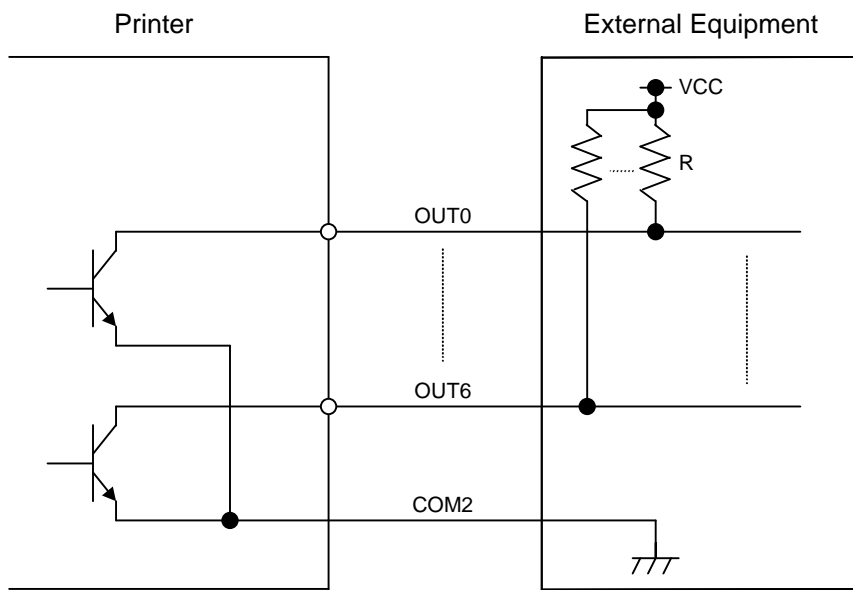
No.	Signal Name	Direction
13	OUT5	
14	N.C	
15	COM1	
16	N.C	
17	N.C	
18	N.C	
19	N.C	
20	N.C	
21	COM2	
22	N.C	
23	GND	
24	GND	

3.2 INTERFACE CIRCUIT

(1) Input circuit



(2) Output circuit



4. SOFTWARE SPECIFICATIONS

4.1 OUTLINE OF SIGNALS

Input

- IN0. FEED..... Feeds one label.
- IN1. ISSUE..... Issues one label.
- IN2. PAUSE Temporarily stops label printing.
- IN3. Not used
- IN4. Not used
- IN5. Not used

Output

- OUT0. REVERSE FEEDING Indicates the printer is performing a reverse feed.
- OUT1. FORWARD FEEDING Indicates the printer is feeding or issuing a label.
- OUT2. PAUSING Indicates the printer is in a pause state.
- OUT3. ERROR..... Indicates the printer is in an error state.
- OUT4. Not used The signal is always off.
- OUT5. Not used The signal is always off.
- OUT6. POWER ON Indicates the printer power is on.

4.2 DETAILED DESCRIPTIONS FOR SIGNALS

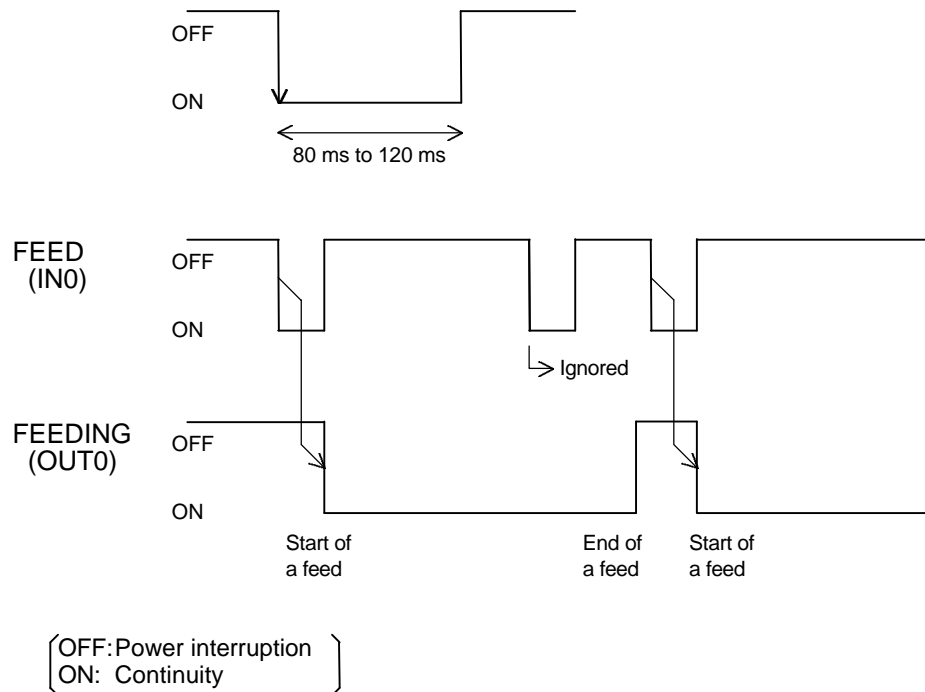
INO FEED

When the signal goes from off to on, the printer feeds one label.

The FEED signal input is ignored when the printer is in any of the following states.

- Issuing
- Feeding
- Communication error (command error, hardware error)
- Storing a writable character or a logo
- Checking broken head dots
- System mode

When the reflective sensor or transmissive sensor is selected, and cut interval is set to 1 or more by the Issue Command, the printer performs a back feed and cuts one label as a feed operation by the FEED signal.



IN1

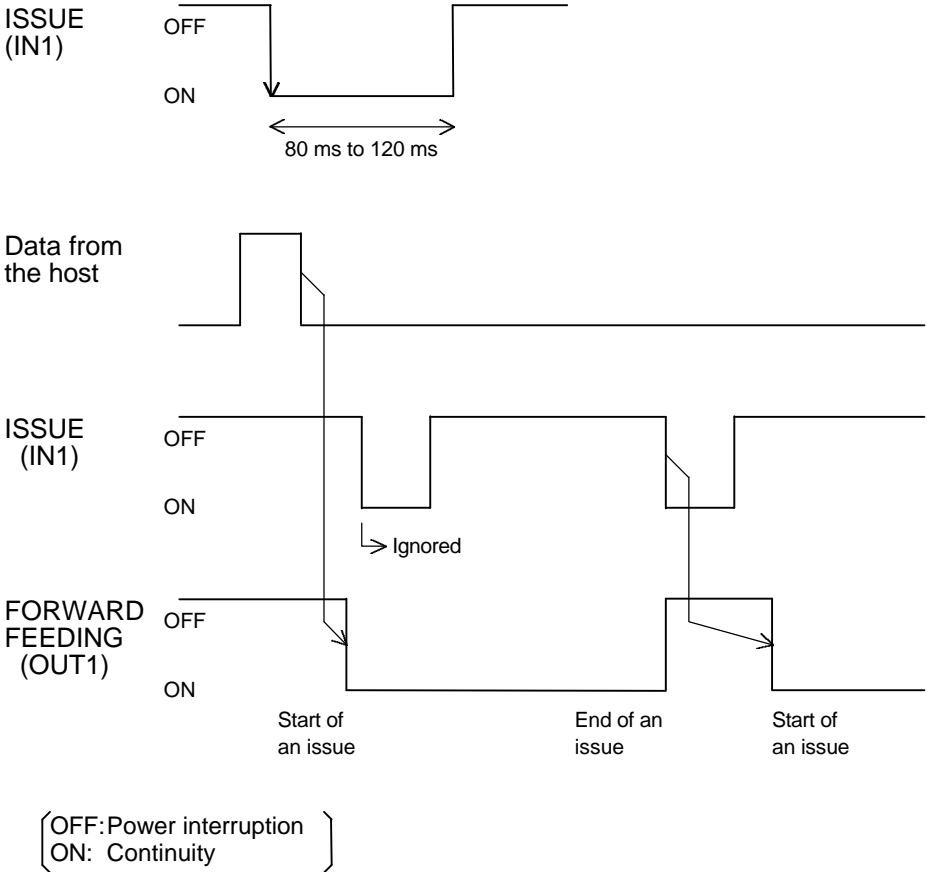
ISSUE

When the signal goes from off to on, the printer prints the contents in the image buffer on one label.

The ISSUE signal input is ignored when the printer is in any of the following states.

- Issuing
- Feeding
- Pausing
- Engine error
- Communication error (command error, hardware error)
- Storing a writable character or a logo
- Checking broken head dots
- System mode

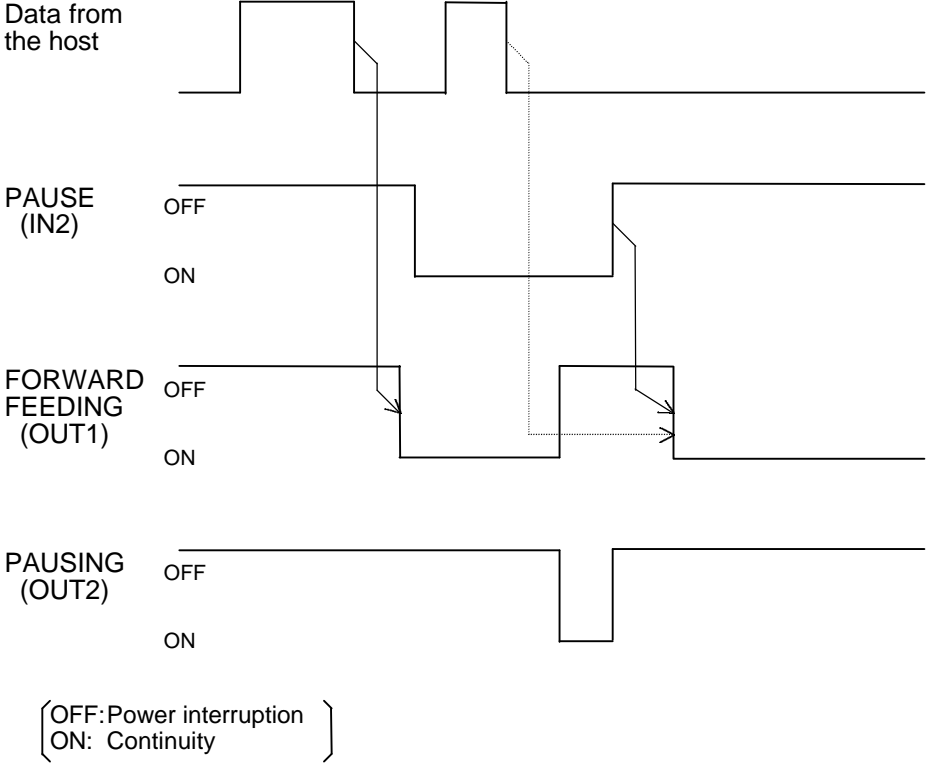
After a label is issued by the Issue Command from the host, the ISSUE signal allows the same label to be printed. However, this signal cannot substitute for the Issue Command. If a label is issued by the ISSUE signal without the Issue Command being sent from the host, printing may not be performed properly. If the Issue Command is sent from the host, printing may not be performed properly when the ISSUE signal is input before the printer processes the Issue Command.



IN2

PAUSE

The printer enters a pause state by this signal. While the PAUSE signal is ON, the printer does not issue a label. When the signal is turned off, the printer starts issuing. If the PAUSE signal is turned on while the printer is issuing or feeding, the printer does not stop an issue or a feed immediately. After issuing or feeding one label, the printer enters the pause state.



A pause state generated by the PAUSE signal cannot be cleared only by the RESTART key of the printer. The pause state generated by the PAUSE key can be cleared by turning the PAUSE signal from ON to OFF.

An error can be cleared only by the RESTART key of the printer.

OUT0

REVERSE FEEDING

This output signal is to indicate the printer is performing a reverse feed.

The signal is on during reverse feeding. Reverse feeding means the following states.

- Reverse feeding by the Reverse Feed Command
- Reverse feeding for a feed and cut
- Reverse feeding during issuing

When the printer completes a reverse feed, the signal is turned off.

If an error occurs during reverse feeding, the REVERSE FEEDING signal is turned off.

OUT1

FORWARD FEEDING

This output signal is to indicate the printer is performing a forward feed. Forward feeding consists of the following states.

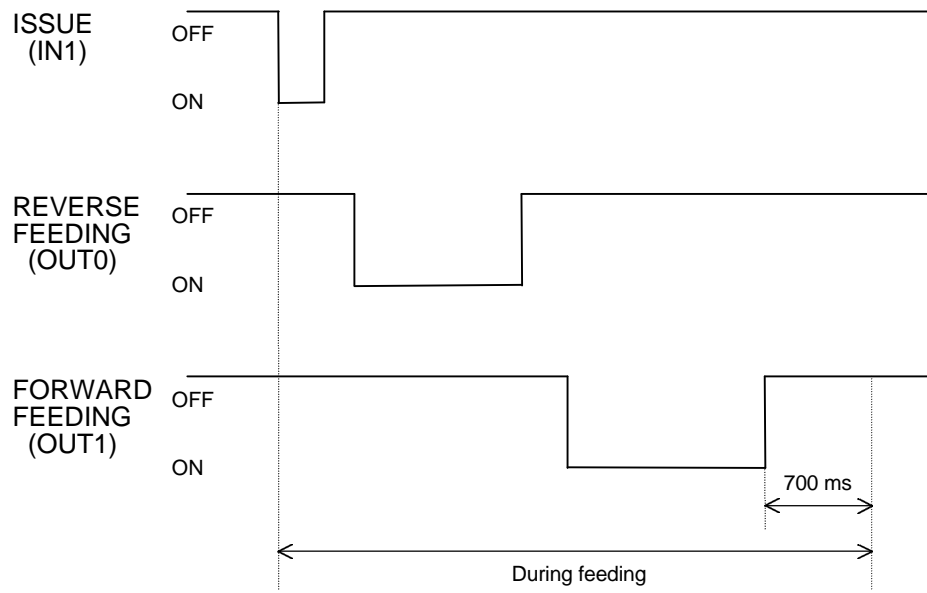
- Forward feeding for a feed
- Forward feeding for an issue

In the batch issue mode, the signal is turned off when the number of labels designated is completed being issued. However, when the printer is set to perform batch issues without stopping issuing between different batches, the signal remains on between the difference batches.

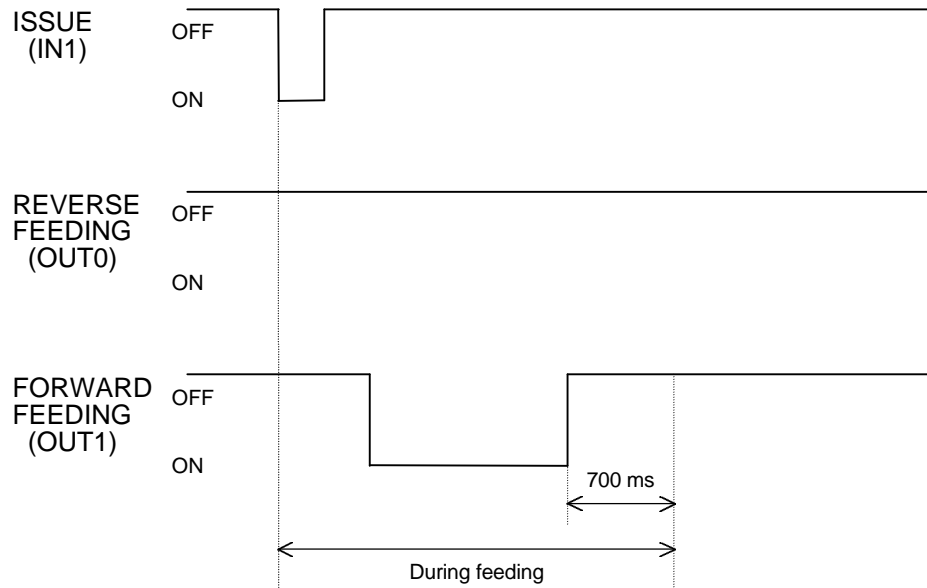
When an error occurs during forward feeding and then the printer stops feeding, the signal is turned off.

When the printer pauses during issuing one or more labels, the signal is turned off. After the pause state is cleared, the signal is turned on again and the printer resumes printing the remaining number of labels.

(1) Issue with a reverse feed



(2) Issue without a reverse feed



{ OFF: Power interruption }
{ ON: Continuity }

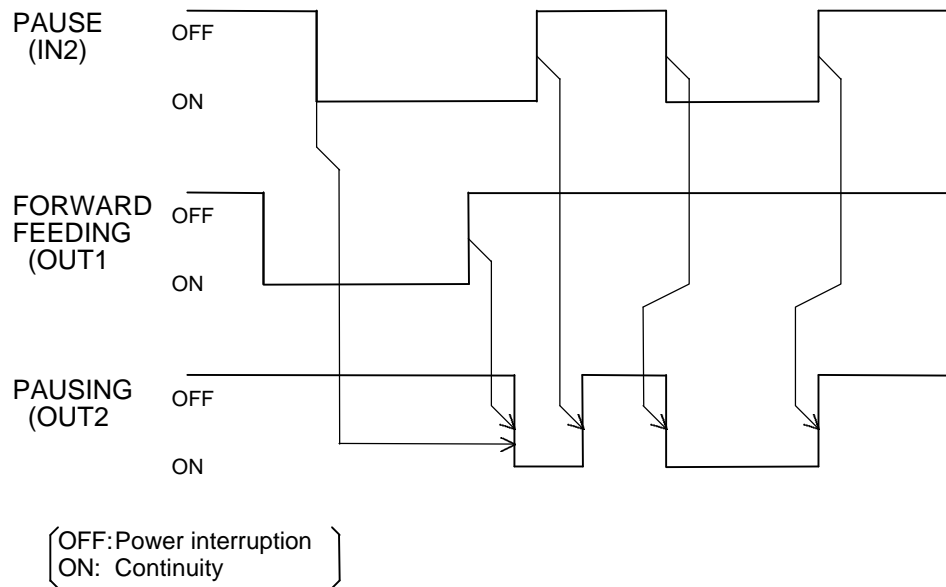
OUT2

PAUSING

This output signal is to indicate the printer is in a pause state.

While the printer is in a pause state, the signal is on. The PAUSING signal is output for a pausing state induced by either the printer key or PAUSE signal.

Also, when the head, the cover, or the pinch roller cover is opened while the printer is in an idling state, the PAUSING signal is turned on.



If the PAUSE signal is input during issuing or feeding, the PAUSING signal is not output until the issuing or feeding is completed.

If the PAUSE signal is input when the printer is in an error state, it is ignored.

OUT3

ERROR

This output signal is to indicate an error occurs, stopping the printer.

The signal is turned on while the printer is in an error state.

When any of the following errors occur, the ERROR signal is turned on.

- Paper jam
- Paper end
- Ribbon end
- Ribbon error
- Cutter error
- Head open error
- Cover open error
- Paper set error
- Head temperature abnormal (overheating)
- Head broken dots error
- Communication error (command error, hardware error)

When the error state is cleared, the ERROR signal is turned off.

However, the printer is not restored unless the power is turned off then on when an error cannot be cleared by the RESTART key.

OUT6

POWER ON

This output signal is to indicate the printer power is on.
While the printer power is on, the signal is on.
While the printer power is on, the POWER ON signal remains on no matter what state the printer is in.



{ OFF: Power interruption }
{ ON: Continuity }

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