



Coupon Printer

GP-58 III

Installation Guide



Use of Materials Limitations

International Currency Technologies Corporation (ICT) all rights reserved.

All materials contained are the copyrighted property of ICT.

All trademarks, service marks, and trade names are proprietary to ICT.

ICT reserves the right at all times to disclose or to modify any information as ICT deems necessary to satisfy any applicable law, regulation, legal process or governmental request, or to edit, refuse to post or to remove any information or materials, in whole or in part, in ICT's sole discretion.

Contents

1. Introduction.....	2
2. Specifications.....	3
3. Dimension.....	5
3-1. Component Names.....	7
4. Hardware Setup	
4-1. Connection.....	8
4-2. DIP Switch Setup.....	9
4-3. Harness application	10
4-3-1. I/O Circuit.....	13
4-4. Setup Procedures.....	14
5. Download Firmware and Upgrade by USB	
5-1. Tool.....	21
5-2. Start Download Process.....	21
6. Software Setup.....	22
7. How to replace a new paper roll.....	24
8. Printer Head Guide.....	25
9. Troubleshooting.....	27

1. Introduction

The GP-58 Series has a built-in real time clock for the ticket time stamping. Its excellent reporting system provides daily and summary transaction reports. The GP-58 III stores up to 40,000 transaction records, and the reports can be deleted if no longer needed.

Both coupon and receipt are customizable. The downloadable design provides the flexibility to use the customized ticket formats and logos in an easy way. Using the GP-58 III software tools for specified interface, the designed format can be saved for later use.

Feature:

- ◆ Full / partial cut function
- ◆ User-friendly multiple interfaces
- ◆ Easy installation and low maintenance
- ◆ Fast printing speed
- ◆ Anti-jam / anti-drag technology
- ◆ 12V / 24V power consumption available
- ◆ Support small & large paper rolls (2 models)
- ◆ Large capacity Micro SD card included for volume data storage
- ◆ ESC/POS command support

2. Specifications

General

Power Source	12V DC (10.8~13.2 VDC) Min.140 mA~Max. 6A
	24V DC (21.6~26.4 VDC) Min.90 mA~Max. 3.5A
I/O Level	DC 0V~12V 5mA~130mA
Paper Width	56 ±0.5mm
Paper Roll Diameter	Small Paper Roll Outside Diameter : 65±0.5mm
	Large Paper Roll Outside Diameter : 130±0.5mm
Note: Packing deliver with small paper roll, large paper roll by option.	

Power Consumption	Standby : 12V/ 0.14A, 1.68W 24V/ 0.1A, 2.4W
	Operation : 12V/ 1.2A , 14.4W 24V/ 0.6A, 14.4W
	Maximum : 12V/ 6A, 72W 24V/ 3.5A, 84W

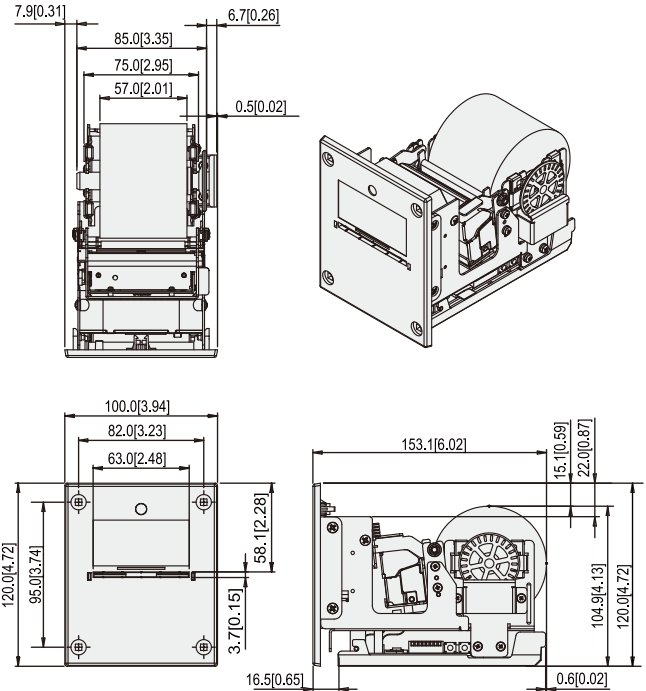
Installation	Indoor
---------------------	--------

Interface	RS232, USB, Pot of Gold, Pulse, Hopper, FOD, ESC/POS
------------------	--

3. Dimension

Small Paper Roll

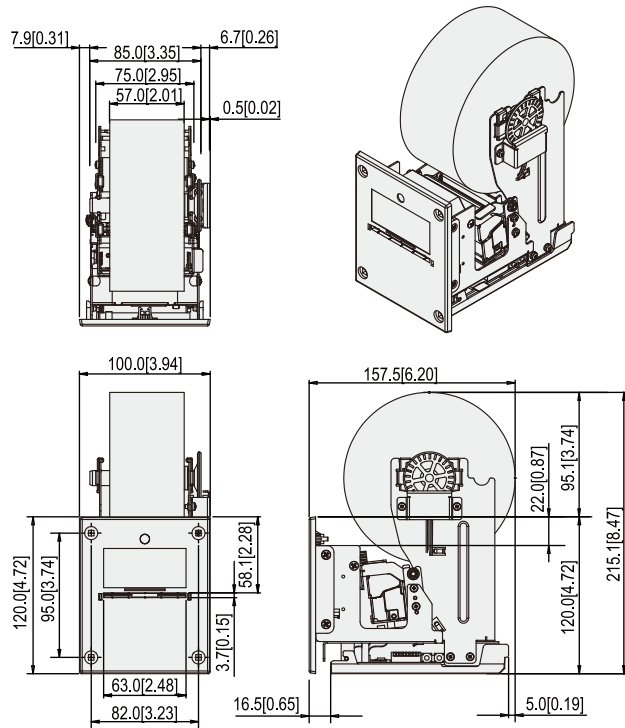
Weight	Small Paper Roll Approx. 750g Large Paper Roll Approx. 850g (without paper roll)
Operation Environment	Operation Temperature : -10°C~+50°C Storage Temperature : -20°C~+60°C Humidity : 30 %~85 %RH (no condensation)
Cutter	
Life Time	Max. 500,000/time
Time	Max. 1cut/2sec
Print head	
Life	50KM
Resolution	W8 dots/mm X H16 dots/mm
Speed	90mm/Sec



Unit:mm[inch]

3 FIG.01

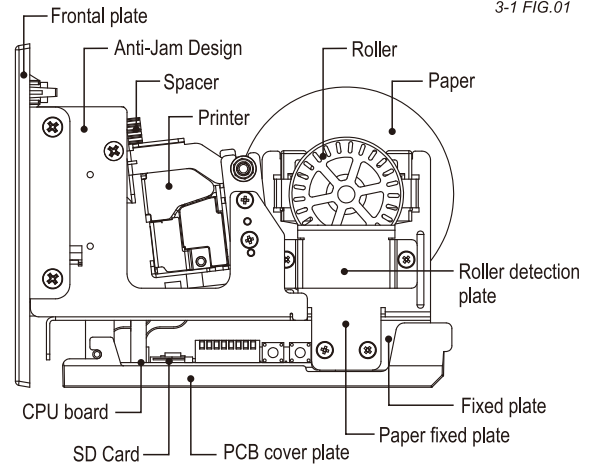
Large Paper Roll (Optional)



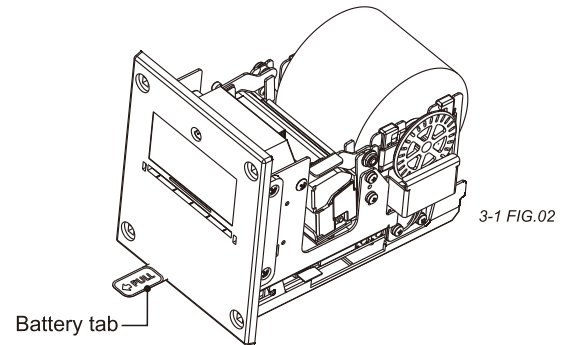
Unit:mm[inch]

3 FIG.02

3-1. Component Names



3-1 FIG.01

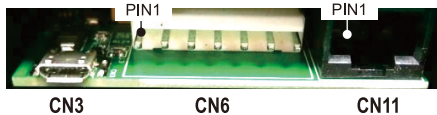


3-1 FIG.02

4. Hardware Setup

4-1. Connection

Please refer to the pictures and tables on the following pages for information about the function of each of the connector pins.



CN3 Micro USB PIN 1- VCC(+5DC) PIN 3- D+ PIN 5- GND
 PIN 2- D- PIN 4- ID

CN6 C/A & B/A

PIN 1- Red.....+12V/+24V DC
 PIN 2- Black.....GND
 PIN 3- Brown.....Coin in signal, Input, Open Collect
 PIN 4- Orange.....Note in signal, Input, Open Collect
 PIN 5- Yellow.....Payout Trigger, Input, Open Collect
 PIN 6- Green.....Ticket Out, Output, Open Collect
 PIN 7- Blue.....Error output, Output, Open Collect

CN11 Serial Interface

PIN 1- GND
 PIN 2- POG-TXD1, Output, RS232 Level
 PIN 3- POG-RXD1, Input, RS232 Level
 PIN 4- GND
 PIN 5- VCC (+5V DC)
 PIN 6- VCC (+5V DC)
 PIN 7- 232-TXD6, Output, RS232 Level
 PIN 8- 232-RXD6, Input, RS232 Level



Do not use RS232 and USB simultaneity.

4-2. DIP Switch Setup

4-2 Table.01

Function	Status	SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8
Operation mode	Operation	X	X	X	X	X	X	X	OFF
Interface mode	Status								
Pulse*	Print Daily Feed Paper: KEY1 Report: KEY2	OFF	OFF	OFF	OFF	OFF	OFF	OFF	
POG	POG print hold 1 sec	OFF	OFF	OFF	OFF				
	POG print hold 3 secs	ON	OFF	OFF	OFF				
	POG print hold 5 secs	OFF	ON	OFF	OFF				
	POG print hold 7 secs	ON	ON	OFF	OFF				
Hopper	Pulse Normal High Feed Paper: KEY1 Report: KEY2	OFF	OFF	OFF	OFF				
	Pulse Normal Low Feed Paper: KEY1 Report: KEY2	OFF	OFF	OFF	ON				
FOD	-	OFF	OFF	OFF	OFF	ON	ON	OFF	
ESC/POS	115200/ N/ 8/ 1	OFF	OFF						
	38400/ N/ 8/ 1	ON	OFF						
	19200/ N/ 8/ 1	OFF	ON						
	9600/ N/ 8/ 1	ON	ON						
Diagnostic	-	OFF	OFF	OFF	OFF	ON	ON	ON	

* Manufactory default setting in Pulse mode

** Reserve DIP SW3 with "OFF"

4-3. Harness application

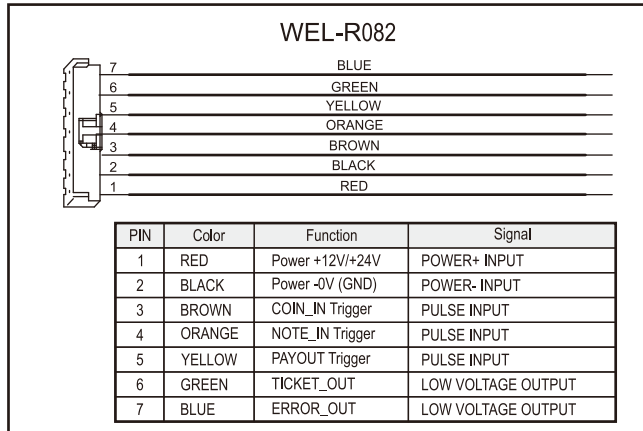
4-3 Table.01

Interface	Used Voltage	Usage	Harness
Power/ Pulse/ Hopper	12/24V DC	Power & *Data Comm.	WEL-R082
Pot of Gold	12/24V DC	*Data Comm.	WEL-RGP26
RS232	12/24V DC	*Data Comm.	WEL-RGP27
USB	12/24V DC	*Data Comm.	WEL-RGP28
USB	12/24V DC	**Download	WEL-RSCA303

*Data Comm.: Data communication

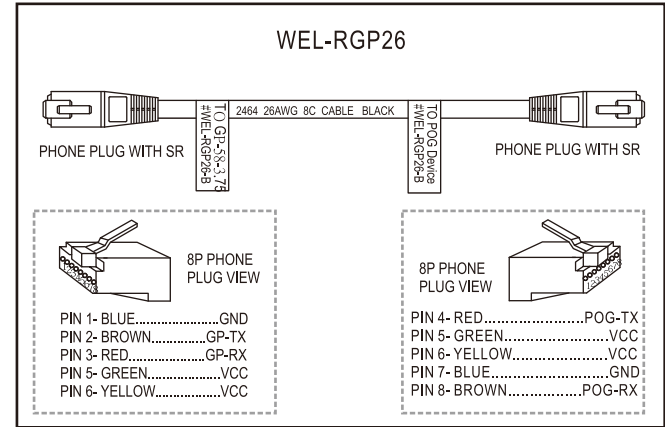
** Option, micro USB OTG cable

4-3 FIG.01

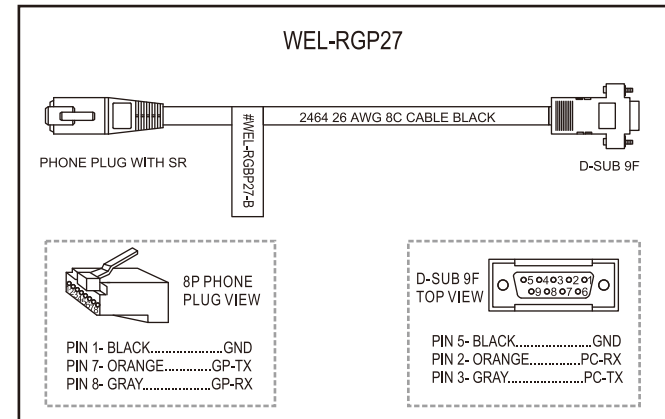


- **PIN3~PIN5 Normal Input Voltage: HI DC 5V~12V.**
Trigger Level Voltage: Low 0V (GND) Output Current Max. 5mA.
- **PIN6~PIN7 Normal Floating.**
Output Signal: Low 0V (GND) Input Current Max. 130mA.

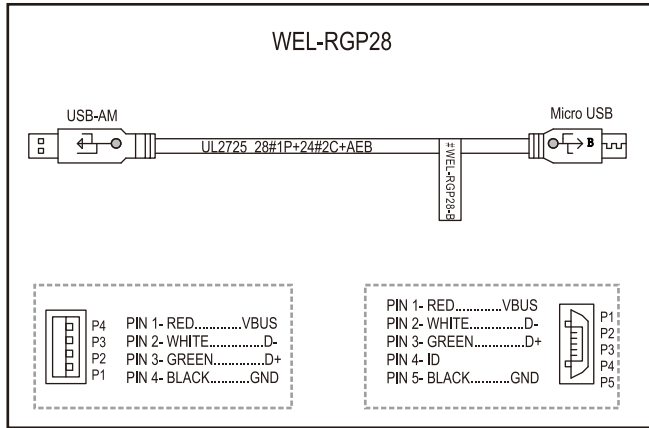
4-3 FIG.02



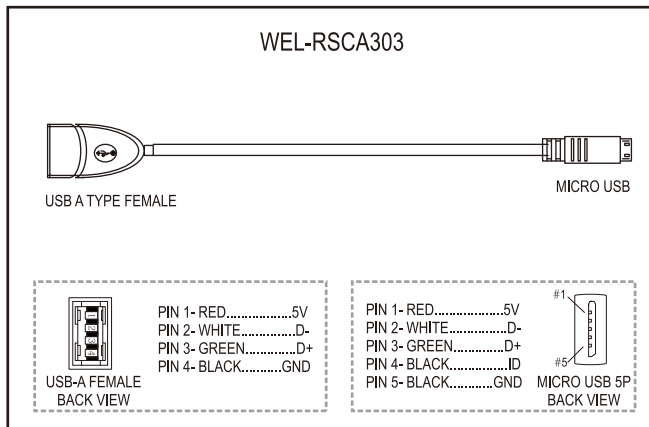
4-3 FIG.03



4-3 FIG.04

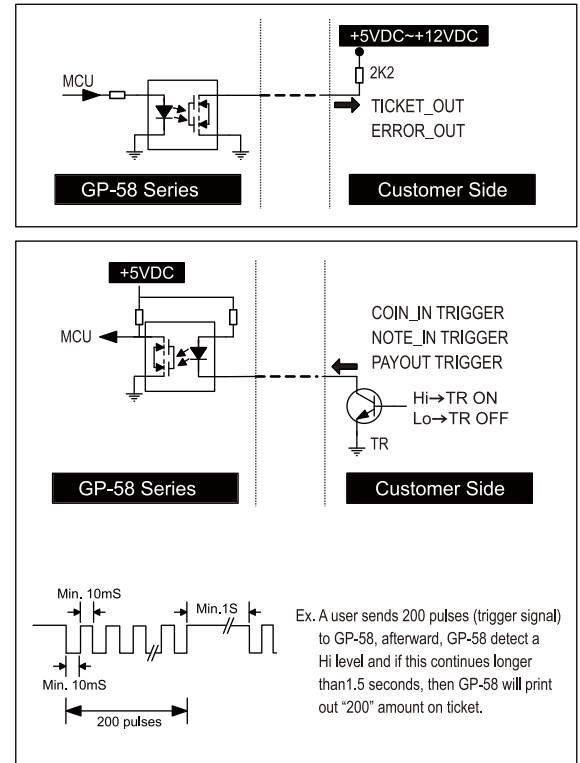


4-3 FIG.05



4-3-1. I/O Circuit

4-3-1 FIG.01



4-4. Setup Procedures

Pulse/ Hopper Setup:

Step 1.

Connect WEL-R082 to CN6 on PCB.

Step 2.

Install paper roll into paper roll container on machine, paper roll is required to be setup according to the same direction of raster. (Please refer to Chapter 6.)

Step 3.

Turn power on and install paper roll properly, the machine will automatically detect the paper (Approx. 2 seconds) and roll the paper into the printing module. If the installation of the paper roll is correct, the machine is ready for printing.

Working light on the machine's bezel will be on.

Step 4.

Enable battery setting.

Pull out the Battery tab for battery setting. (Page 7, 3-1 FIG.02)

Pot of Gold Setup:

Step 1.

Connect WEL-R082 to CN6 on PCB.

Step 2.

Install paper roll into paper roll container on machine, paper roll is required to be setup according to the same direction of raster. (Please refer to Chapter 6.)

Step 3.

Connect RJ45 to RJ45 WEL-RGP26 wire to VMC and CN11 on machine. (Please connect the wires as Page.11, 4-3 FIG.02)

Step 4.

Turn power on and install paper roll properly; the machine will automatically detect the paper (Approx. 2 seconds) and roll the paper into the printing module. If the installation of the paper roll is correct, the machine is ready for printing.

Working light on the machine's bezel will be on.

(Page 19, 4-4 FIG.02)

RS232 Setup:**Step 1.**

Connect WEL-R082 to CN6 on PCB.

Step 2.

Install paper roll into paper roll container on machine, paper roll is required to be setup according to the same direction of raster. (Please refer to Chapter 6.)

Step 3.

Connect WEL-RGP27 to PC COM port and CN11 on machine. (Please connect the wires as Page.11, 4-3 FIG.03)

Step 4.

Turn power on and install paper roll properly; the machine will automatically detect the paper (Approx. 2 seconds) and roll the paper into the printing module. If the installation of the paper roll is correct, the machine is ready for printing.

Working light on the machine's bezel will be on. (Page 20, 4-4 FIG.03)

USB Setup:**Step 1.**

Connect WEL-R082 to CN6 on PCB.

Step 2.

Install paper roll into paper roll container on machine, paper roll is required to be setup according to the same direction of raster. (Please refer to Chapter 6.)

Step 3.

Connect WEL-RGP28 to PC USB port and CN3 on machine. (Please connect the wires as Page.12, 4-3 FIG.04)

Step 4.

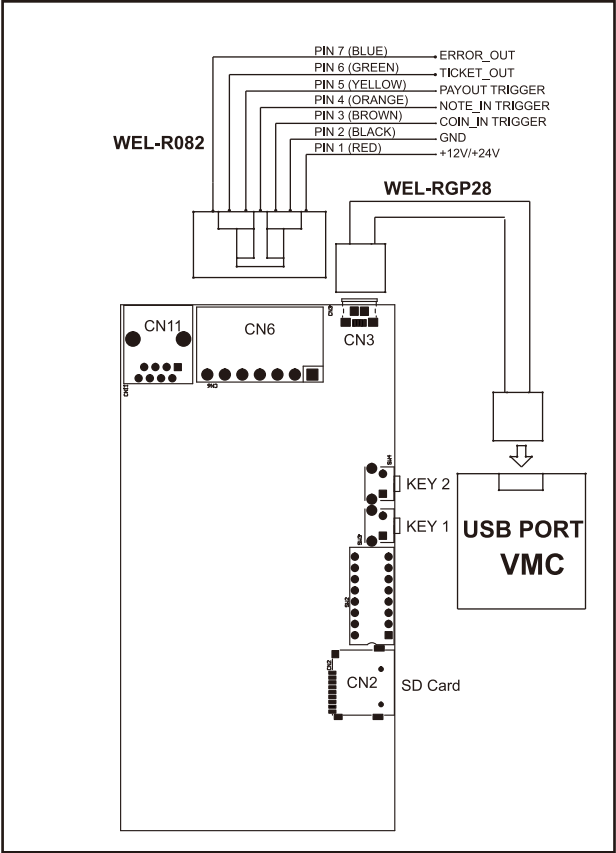
Turn power on and install paper roll properly; the machine will automatically detect the paper (Approx. 2 seconds) and roll the paper into the printing module. If the installation of the paper roll is correct, the machine is ready for printing.

Working light on the machine's bezel will be on. (Page 18, 4-4 FIG.01)

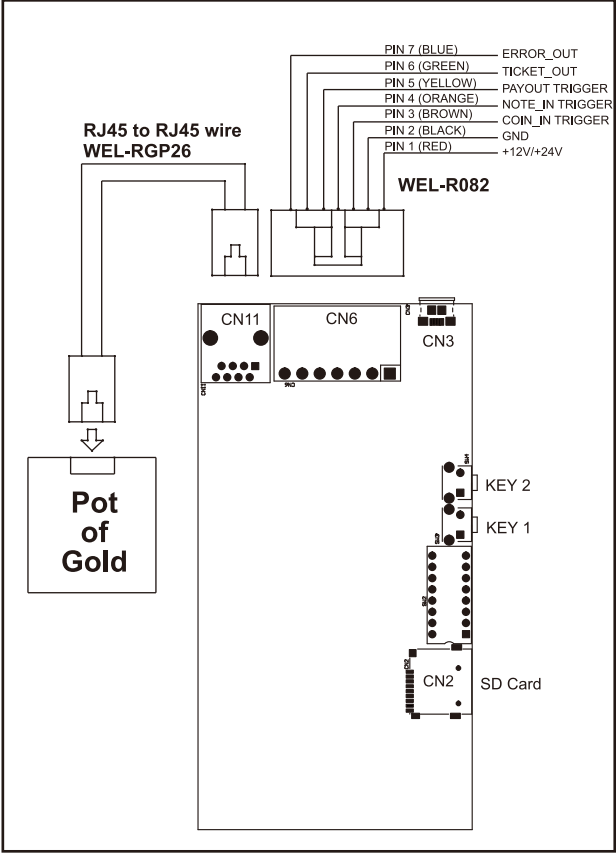
Step 5

Please refer to Page P22, 6. 1 for Printer driver setup.

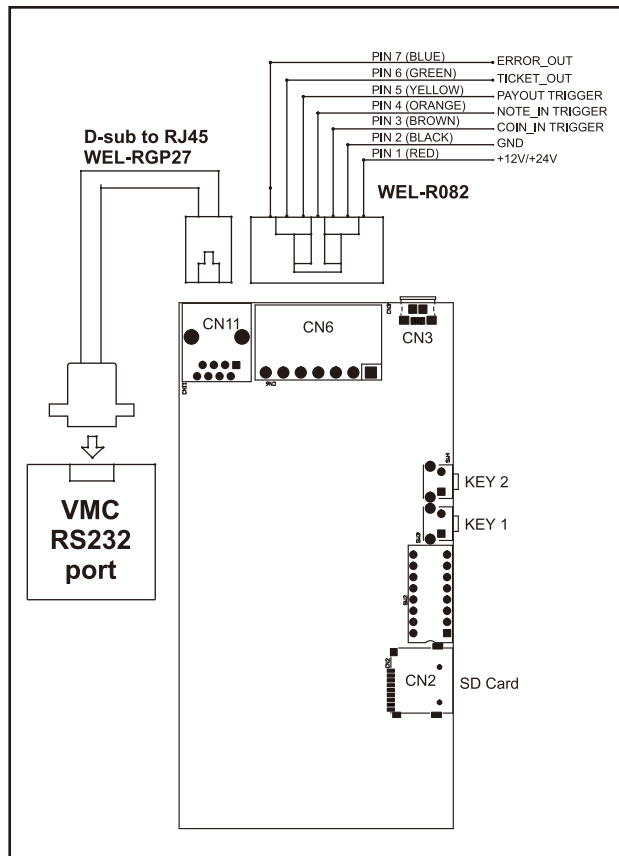
4-4 FIG.01



4-4 FIG.02



4-4 FIG.03



5. Download Firmware and Upgrade by USB

5-1. Tool

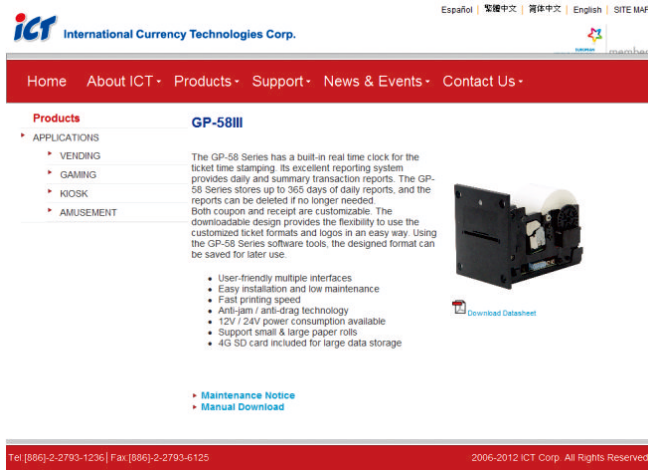
- PC
- USB 2.0 flash drive
- Printer
- Power cable(WEL-R082)
- Download cable(WEL-RSCA303)

5-2. Start Download Process

1. Connect USB Flash Drive to PC, Copy the software files (*.bin) into the USB Flash driver of "ecf" folder.
2. Connected the Micro USB download cable to Printer CN3, insert USB flash drive to the cable, then restart Printer the upgrade process may takes few minutes.
3. Once printer restart and upgrade succeed, please remove the Micro USB download cable and the USB flash driver.

6. Software Setup

Please visit ICT web site <http://www.ictgroup.com.tw/>
 ⇒ Products ⇒ Mini Thermal Printer ⇒ GP-58III ⇒
 Software Download.



1. Printer Driver.

Printer Driver included VCP driver and Windows driver.
 Before Setup Printer Driver , Please select appropriate
 Windows OS.
 Printer support: Windows XP, Windows 7, Windows 8,
 Windows 10.

2. ICT Tool

Setup All-In-One Tool.

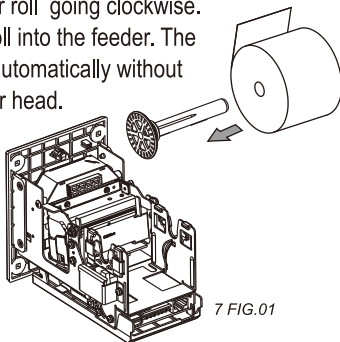
3. Date and Time Setup

- (1) Pull out the Battery tab to enable RTC battery.
 (Page 7, 3-1 FIG.02)
- (2) Install printer driver and All-In-One Tool, then open
 the All-In-One Tool for Date and Time setup.
 Please find ICT web site GP58-III for detail.

7. How to replace a new paper roll?

1. GP-58 III Small Paper Roller

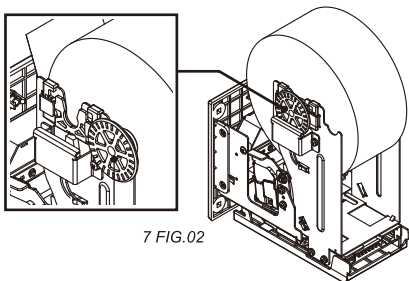
Insert a new paper roll going clockwise.
Insert the paper roll into the feeder. The paper will be fed automatically without opening the printer head.



7 FIG.01

2. GP-58 III Large Paper Roller

Insert a new paper roll going clockwise and place it in the back area temporary. After set the paper into the printer feeder then replace it to the original place.



7 FIG.02

8. Printer Head Guide

◆ When you need to reset the printer head please follow the steps below.

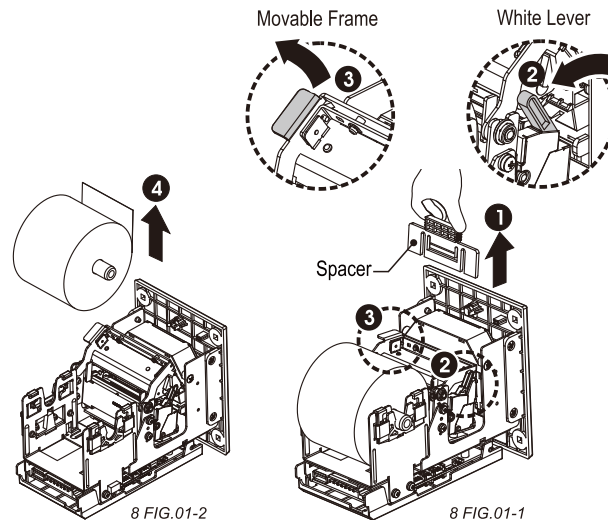
Unlock the Printer Head:

Step 1. Lift the spacer up.

Step 2. Pull back the white lever.

Step 3. Lift the movable frame.

Step 4. Remove the paper roll.



8 FIG.01-2

8 FIG.01-1

Lock the Printer Head:

Step 1. Place the printer paper in.

Step 2. Pull back the white lever FIRST.

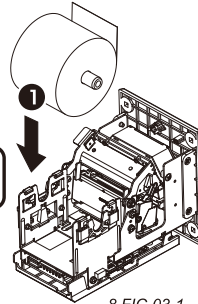


Must pull back the White Lever FIRST.

Step 3. Push down the movable frame

Step 4. Push back the movable frame.

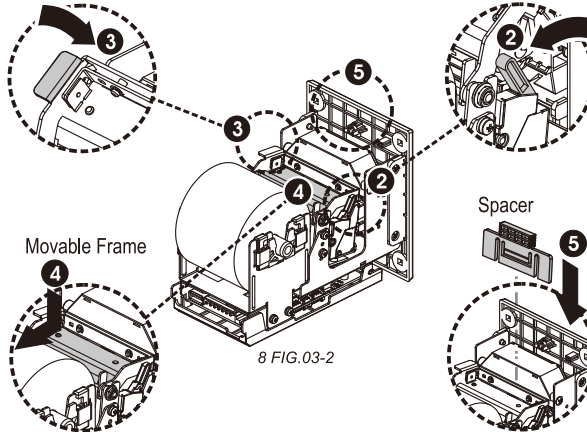
Step 5. Push back the spacer.



8 FIG.03-1

Movable Frame

White Lever



8 FIG.03-2



Be sure to push back the movable frame, or the Printer will not function.

9. Troubleshooting

9 TABLE.01

LED Indicator	Status	Solution
Red	Check Sum abnormal.	Contact technician.
Green	Standby.	
Red flash 1 time	1. Moveable frame not close. 2. Thermal head no paper.	1. To make sure moveable frame is closed 2. Re-feed paper.
Red flash 2 times	Cutter abnormal.	To make sure paper path jam-free.
Red flash 3 times	Out of paper or raster error.	Refill paper roll.
Red flash 4 times	Anti-jam abnormal.	To make sure paper path jam-free.
Red flash 5 times	SD card abnormal.	1. To make sure SD card inserted. 2. To make sure SD card format and specify the file exists.
Red flash 6 times	Printer head over heat.	
Orange light / green light will flash alternately (1 sec)	In testing mode.	1. DIP switch is set as not to enter the test mode, and restart device. 2. If the DIPSW is set into the non-test mode, please contact technician.
Orange	System booting	
Orange light Flash	Firmware upgrading or USB data operation.	
Green light Flash	Printing	
Red light highly flash	Low paper warning	



If the error can not be solved after corrective actions or it recurs, please contact ICT for technical support.



International Currency Technologies Corporation

No.28, Ln. 15, Sec. 6, Minquan E. Rd., Neihu Dist., Taipei City 114, Taiwan (R.O.C.)

sales@ictgroup.com.tw (For Sales) • rma@ictgroup.com.tw (For Customer Service)

Website: www.ictgroup.com.tw