



Bill Acceptor
Installation Guide

Use of Materials Limitations

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◆ Appendix_ccTalk Information

1. Introduction

1-1. Overview

The L Series bill acceptor combines improved bill-sensing technology with lightweight and durable plastic construction. It also features fast software updating, automatic self-adjusting sensor system, and easy maintenance to increase acceptance rates and reduce bill jammed.

1-2. Features

- Fixed width/multi-width bill acceptable.
- Multinational currencies acceptable.
- New generation design of verification system.
- Anti-string technology.
- Auto-calibration.
- Lightweight and durable plastic construction.
- Speedy bill transaction.
- Selective interfaces.
- Multicolor illumination bezel design.
- Easy maintenance.
- Fast program update.

2. Specifications

General

Acceptance Rate 96% or greater

***Note: The Incomplete bills such as extremely dirty, wet, broken, or wrinkled ones are excluded!**

Bill Insertion Four way acceptable

Transaction Time Approx. 3 seconds to stack

Interface

L70(#)-P2/P5:

Pulse, RS232, ID003, MDB, CCNET.

L70(IGT)-P2/P5:

Pulse, RS232, IGT (ID022), ID003.

L77-P3/P6:

Pulse, GBA, RS232, ccTalk, MDB, Parallel, CCNET.

L83-P3/P6:

Pulse, GBA, RS232, ccTalk, MDB, Parallel, CCNET.

PL77:

Pulse, GBA, RS232, ccTalk, MDB, Parallel, CCNET.

L83#-P3/P6:

Pulse, GBA, RS232, CCNET, MDB.

L77#-P3/P6:

Pulse, GBA, RS232, CCNET, MDB.

***Note: For ccTalk information, please refer to Appendix.**



Installation: Indoor use only!!

Electrical

Power Source	L70#/ L77#/ L83#: 12V DC(10~16V DC) Others: 12V DC(10.8~13.2V DC)
Power Consumption	Standby : 0.3A, 3.6W Operation: 1.2A, 14.4W Maximum: 2 A, 24 W
Operation Environment	Operation Temperature: L70/ L77/ L83/ PL77: 0°C~55°C L70#/ L77#/ L83# : 0°C~65°C Storage Temperature: -20°C~70°C Humidity: 30%~85%RH (no condensation)

***Note: “#” indicates product specification upgrade.**

Mechanical

Outline Dimension	L70(#)-P2/P5: Refer to page. 6 L77(#)-P3/P6: Refer to page. 7 L83(#)-P3/P6: Refer to page. 8 PL77 : Refer to page. 10
Bill Box Capacity	L70(#)-P2: Approx. 200 bills L70(#)-P5: Approx. 500 bills L77(#)-P3: Approx. 300 bills L77(#)-P6: Approx. 600 bills L83(#)-P3: Approx. 300 bills L83(#)-P6: Approx. 600 bills PL77 : Reserved

Weight	L70(#) : Approx. 0.52kg L70(#)-P2: Approx. 1.25kg L70(#)-P5: Approx. 1.4 kg L77(#) : Approx. 0.8 kg L77(#)-P3: Approx. 1.46kg L77(#)-P6: Approx. 1.65kg L83(#) : Approx. 0.8 kg L83(#)-P3: Approx. 1.46kg L83(#)-P6: Approx. 1.65kg PL77 : Approx. 0.8 kg
Bill Accepted Width	L70(#)-P2/P5: (67mm)-59mm~67mm (71mm)-59mm~71mm L77(#)-P3/P6: 61mm~77mm L83(#)-P3/P6: 61mm~83mm PL77 : 61mm~77mm

3. Packing List

Main	Bill Acceptor
Accessory	Harness: Refer to 5-1 Bezel Sticker Screw Pack L Series Installation Guide L Series DIP Switch Setting Guide

4. Dimension

L70(#)

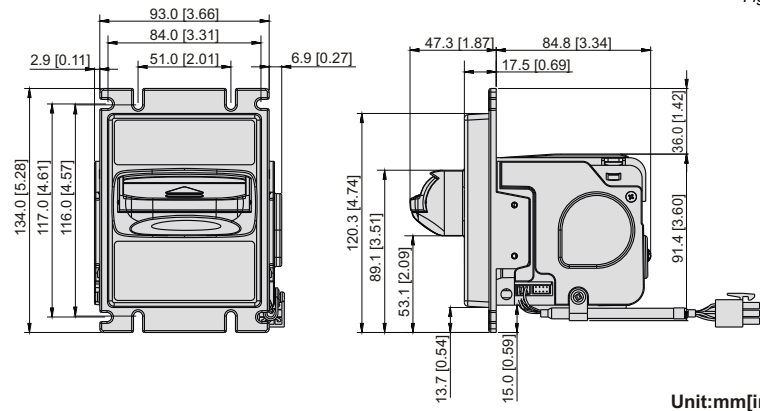


Figure 1.

L77(#)

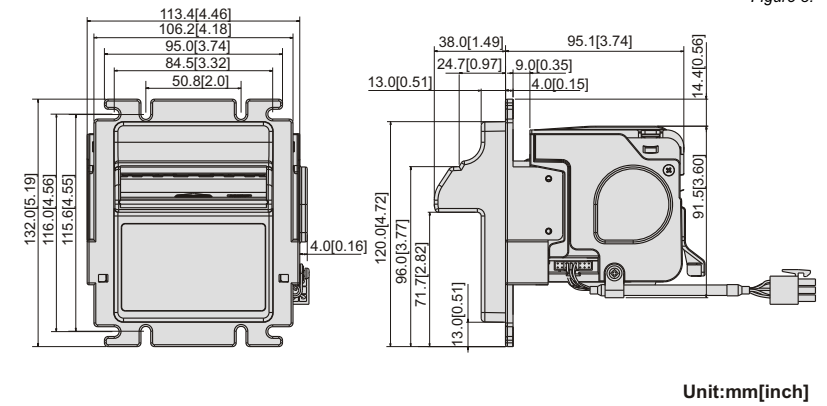


Figure 3.

L70(#)-P2/P5

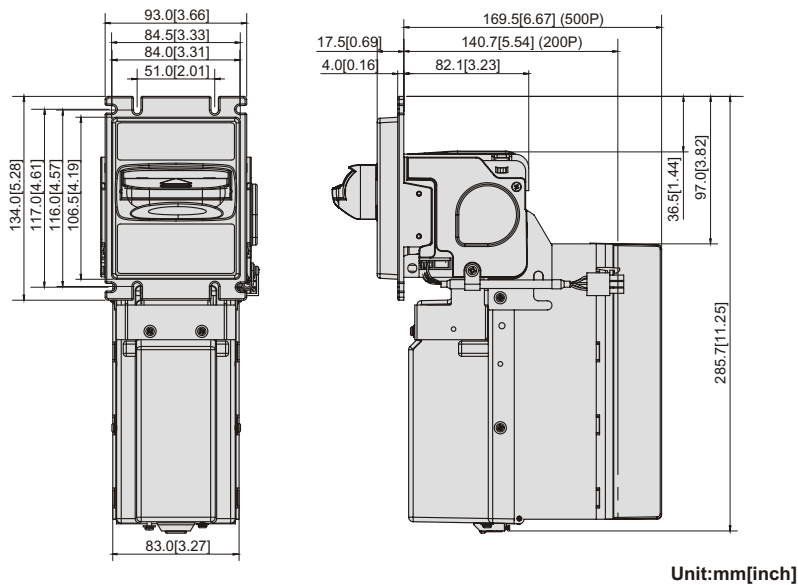


Figure 2.

L77(#)-P3/P6

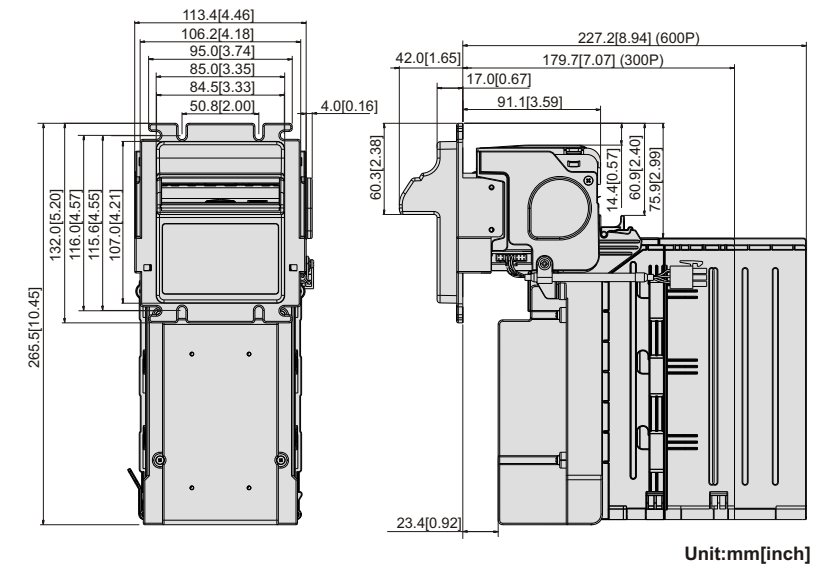


Figure 4.

L83(#) Down Stacker

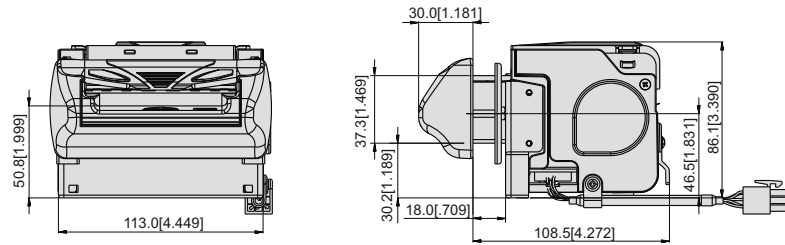


Figure 5.

Unit:mm[inch]

L83#)-P3/P6 Down Stacker

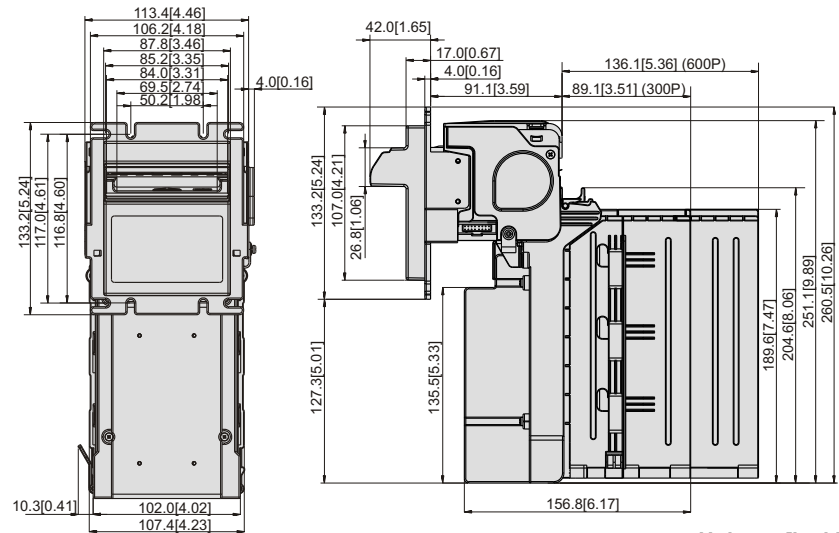


Figure 6.

Unit:mm[inch]

L83(#) Up Stacker

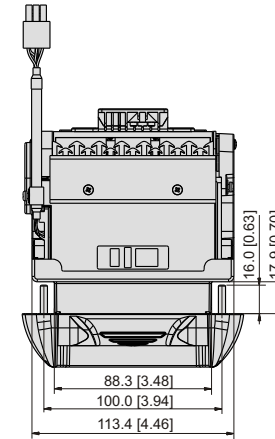
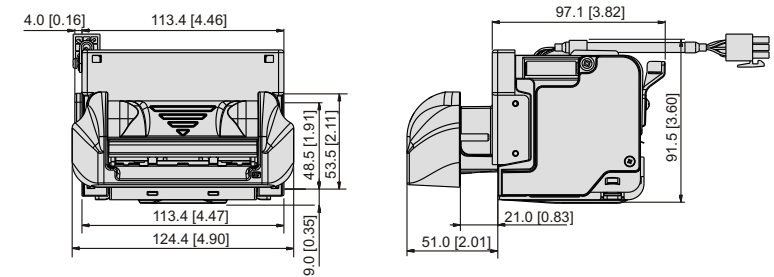


Figure 7.

Unit:mm[inch]



PL77

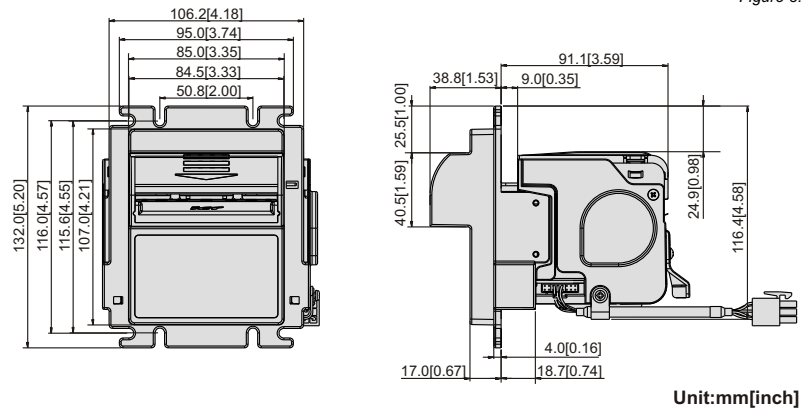


Figure 8.



To install the bill acceptor on your VMC, please be aware of the dimension as below:

[L] : Longer than the maximum length of accepted bills.

[L1] : Bill box capacity depth.

*** [L/2] has to be longer than 70mm to open upper base.**

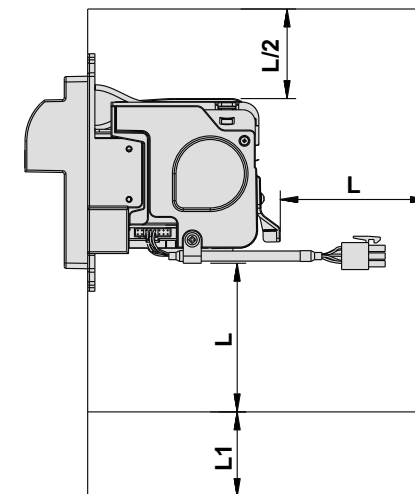


Figure 9.

5. Installation

5-1. Harness Application

Table 1.

Model	CPU Board	Interface	Used Voltage	Usage	Harnesses	Page
L70(#)-P2/P5	2PCBAA318FXX (3 in 1) ★6	Pulse	12V DC	Power & Data Comm. ★3	WEL-RL702	14
				Extension Wire	CU-R961-1	15
		ICT (RS232)	12V DC	Power & Data Comm.	WEL-RL703 ★1	16
		IGT	12V DC	Power & Data Comm.	WEL-RL701	17
				Extension Wire	WEL-R061	18
		ID003	12V DC	Power & Data Comm.	WEL-RL705	19
				Extension Wire	WEL-RID04	20
	2PCBAA318DXX (Non 3 in 1) ★6	Pulse	12V DC	Power & Data Comm.	WEL-R7U02	21
				Extension Wire	CU-R961-1	15
		ICT (RS232)	12V DC	Power	WEL-R7U02	21
				Extension Wire	CU-R961-1	15
				Data Comm.	WEL-R7U06 ★2	22
		CCNET	12V DC	Power	WEL-R7U02	21
				Extension Wire	CU-R961-1	15
		ID003	12V DC	Data Comm.	WEL-R7U06	22
				Power	WEL-R7U02	21
		MDB	34V DC ★4	Power	WEL-R7U02	21
				Extension Wire	CU-R961-1	15
				Data Comm.	WEL-R7U06	22
		MDB	34V DC ★4	Power & Data Comm. (BA↔Plug-in Board) ★5	WEL-RBG01	23
				Power & Data Comm.(35cm) (Plug-in Board↔VMC)	WEL-RBG08	24
				Power & Data Comm.(200cm) (Plug-in Board↔VMC)	WEL-RBG07	25

★1. Internal use only. "Non 3 in 1" CPU Board is recommended for RS232 interface.

★2. WEL-R7U06: TTL Level to ±12VDC Level for PC.

★3. Data Comm.=Data Communication.

★4. MDB 34VDC: VMC Provides +34VDC to MDB Plug-in Board to convert into +12VDC, and provides +12VDC to L series bill acceptors.

★5. Plug-in Board: (New) 5RBG-AA313NA0-XX, (Old) 5RBG-AA266NA0-XX

★6. "XX" varies from board version to version.

Table 2.

Model	CPU Board	Interface	Used Voltage	Usage	Harnesses	Page
L77-P3/P6 L83-P3/P6 PL77	2PCBAA324AXX ★6	Pulse	12V DC	Power & Data Comm. ★3	WEL-RL802	26
				Extension Wire	CU-R961-1	15
		ccTalk	12V DC	Power & Data Comm.	WEL-RL803	27
		GBA	12V DC	Power & Data Comm.	WEL-RL805	28
		ICT (RS232)	12V DC	Power	WEL-RL802	26
				Extension Wire	CU-R961-1	15
				Data Comm.	WEL-R7U06 ★2	22
				Power	WEL-RL802	26
		CCNET	12V DC	Extension Wire	CU-R961-1	15
				Data Comm.	WEL-R7U06	22
		MDB	34V DC	Power & Data Comm. (BA↔Plug-in Board)	WEL-RL812	29
				Power & Data Comm.(35cm) (Plug-in Board↔VMC)	WEL-RBG08	24
				Power & Data Comm.(200cm) (Plug-in Board↔VMC)	WEL-RBG07	25
		Parallel	12V DC	Power & Data Comm.	WEL-RL804	30
		Parallel J	12V DC	Power & Data Comm.	WEL-RL806	31
L77#-P3/P6 L83#-P3/P6	2PCBAA324AXX ★6	Pulse	12V DC	Power & Data Comm	WEL-RL802	26
				Extension Wire	CU-R961-1	15
		GBA	12V DC	Power & Data Comm	WEL-RL805	28
		ICT (RS232)	12V DC	Power	WEL-RL802	26
				Extension Wire	CU-R961-1	15
				Data Comm.	WEL-R7U06	22
		CCNET	12V DC	Power	WEL-RL802	26
				Extension Wire	CU-R961-1	15
		MDB	34V DC ★4	Data Comm.	WEL-R7U06	22
				Power & Data Comm. (BA↔Plug-in Board) ★5	WEL-RL812	29
				Power & Data Comm.(35cm) (Plug-in Board↔VMC)	WEL-RBG08	24
				Power & Data Comm.(200cm) (Plug-in Board↔VMC)	WEL-RBG07	25

★2. WEL-R7U06: TTL Level to ±12VDC Level for PC.

★3. Data Comm.=Data Communication.

★4. MDB 34VDC: VMC Provides +34VDC to MDB Plug-in Board to convert into +12VDC, and provides +12VDC to L series bill acceptors.

★5. Plug-in Board: (New) 5RBG-AA313NA0-XX, (Old) 5RBG-AA266NA0-XX

★6. "XX" varies from board version to version.

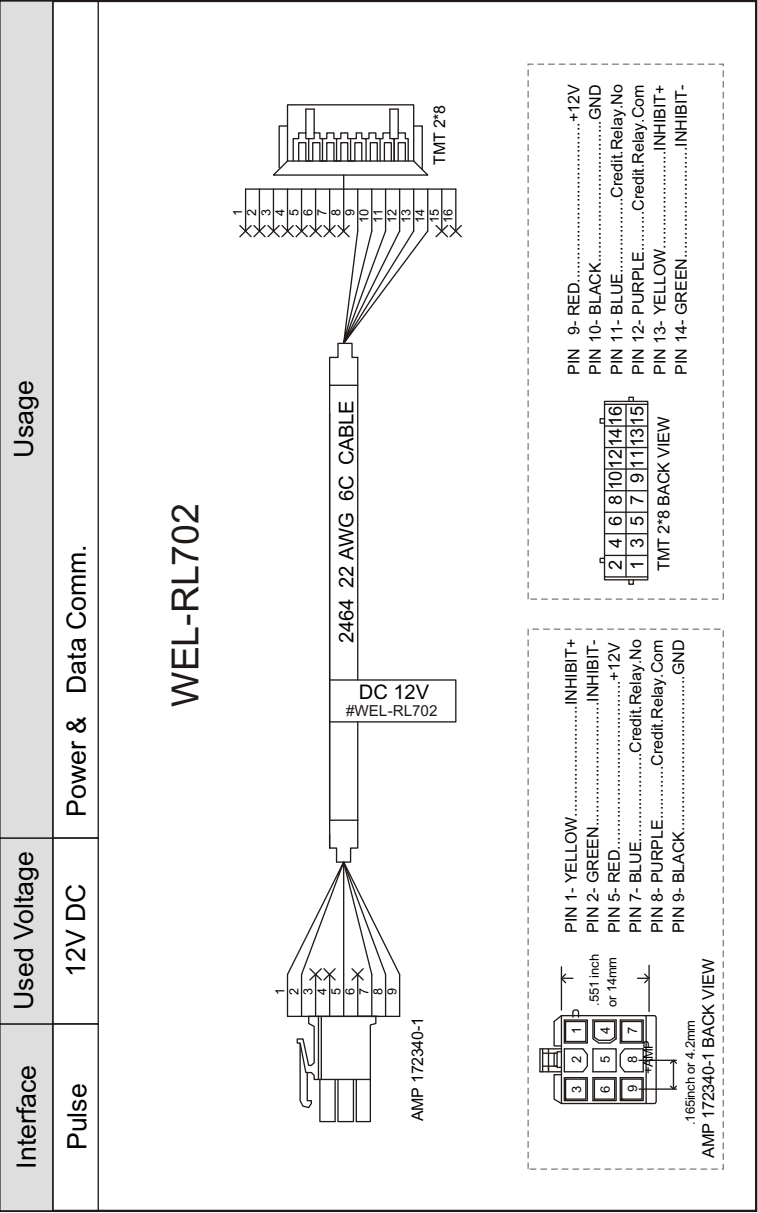


Figure 10.

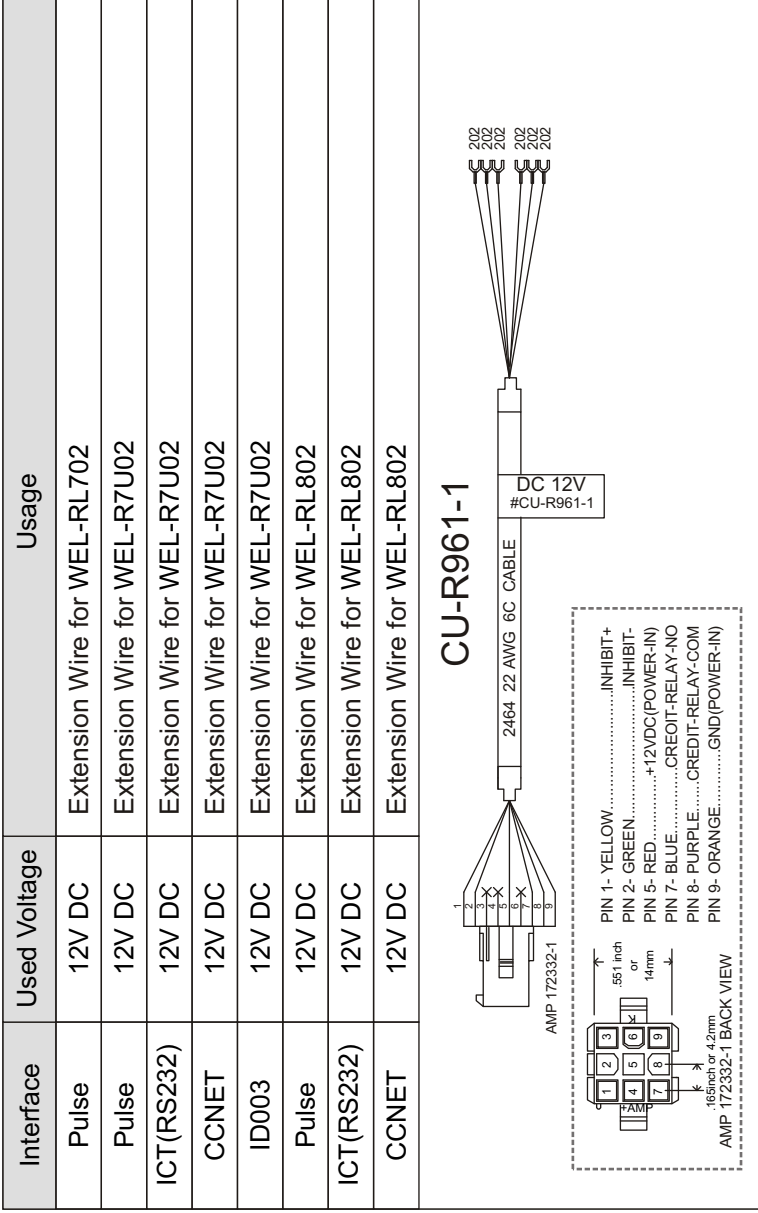


Figure 11.

Figure 12.

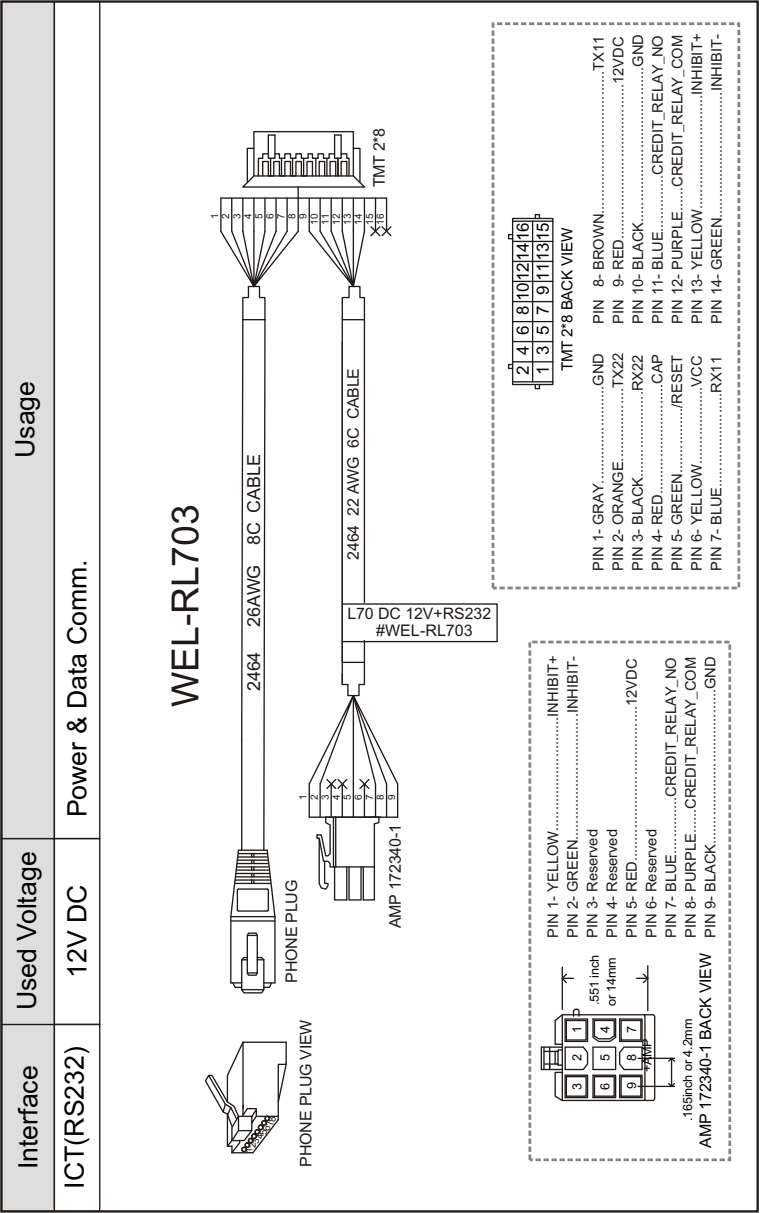


Figure 13.

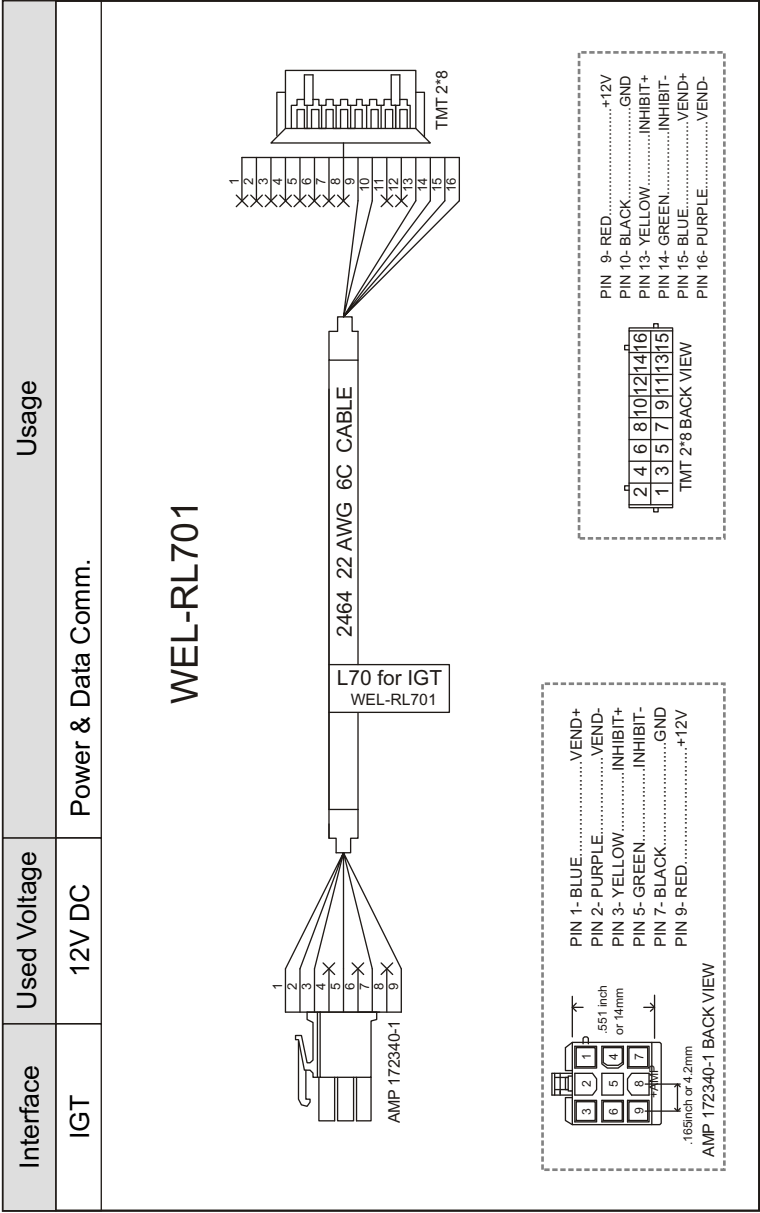


Figure 14.

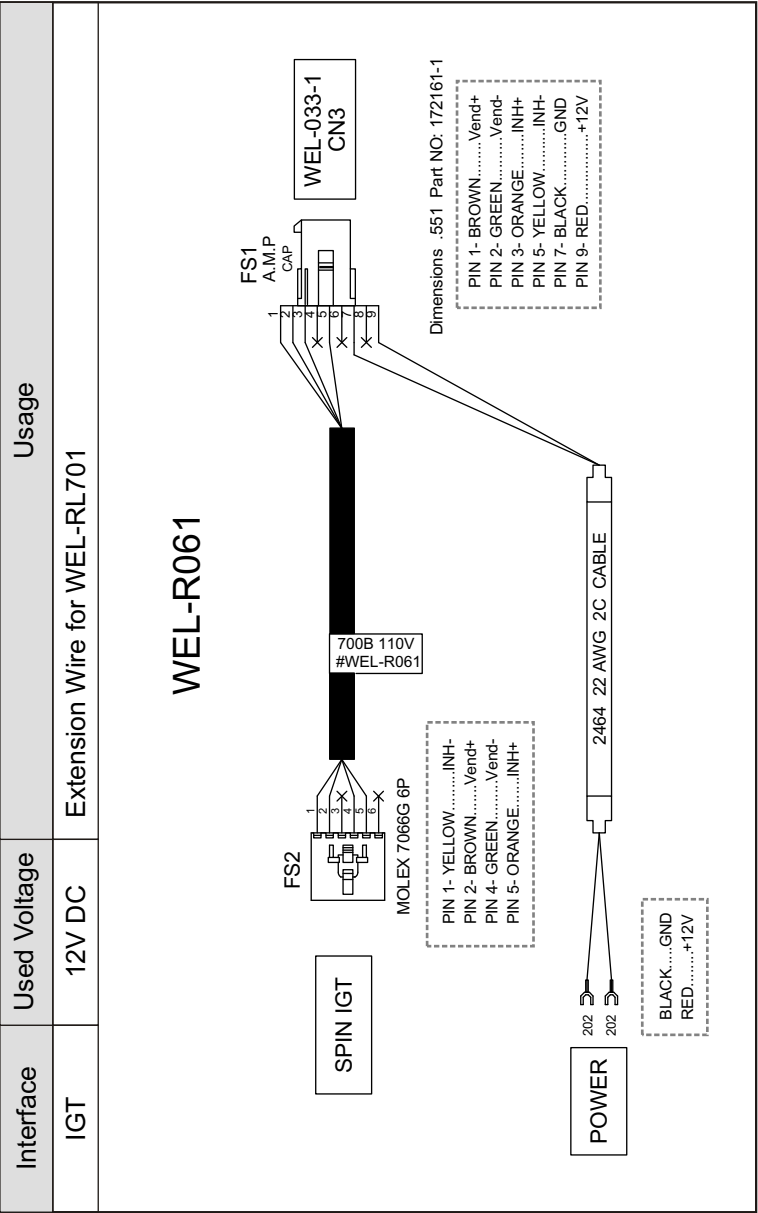
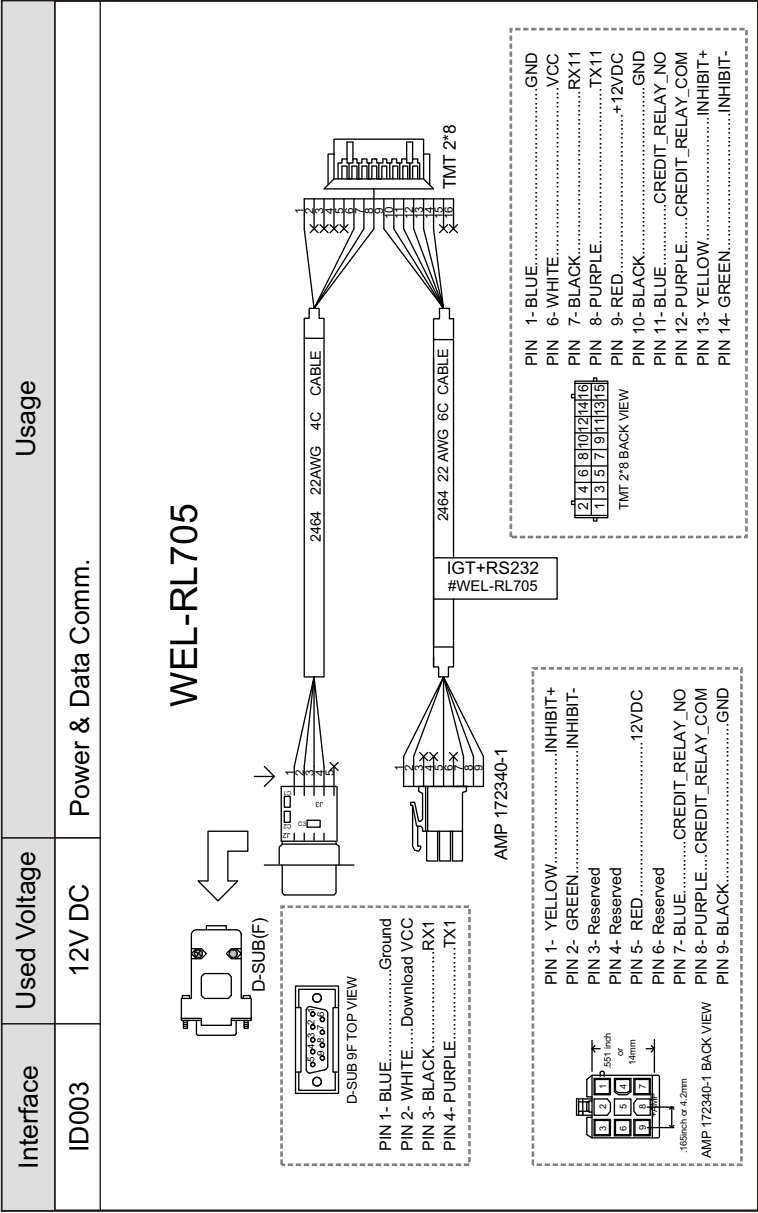


Figure 15.



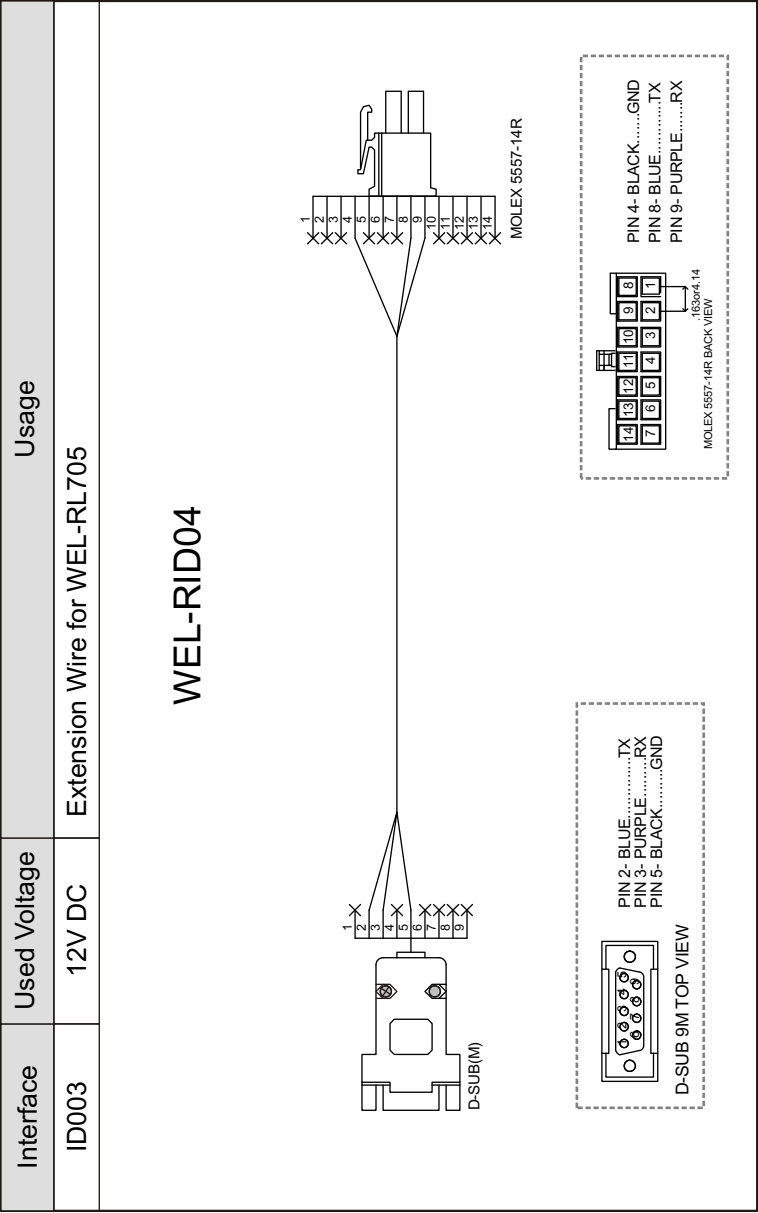


Figure 16.

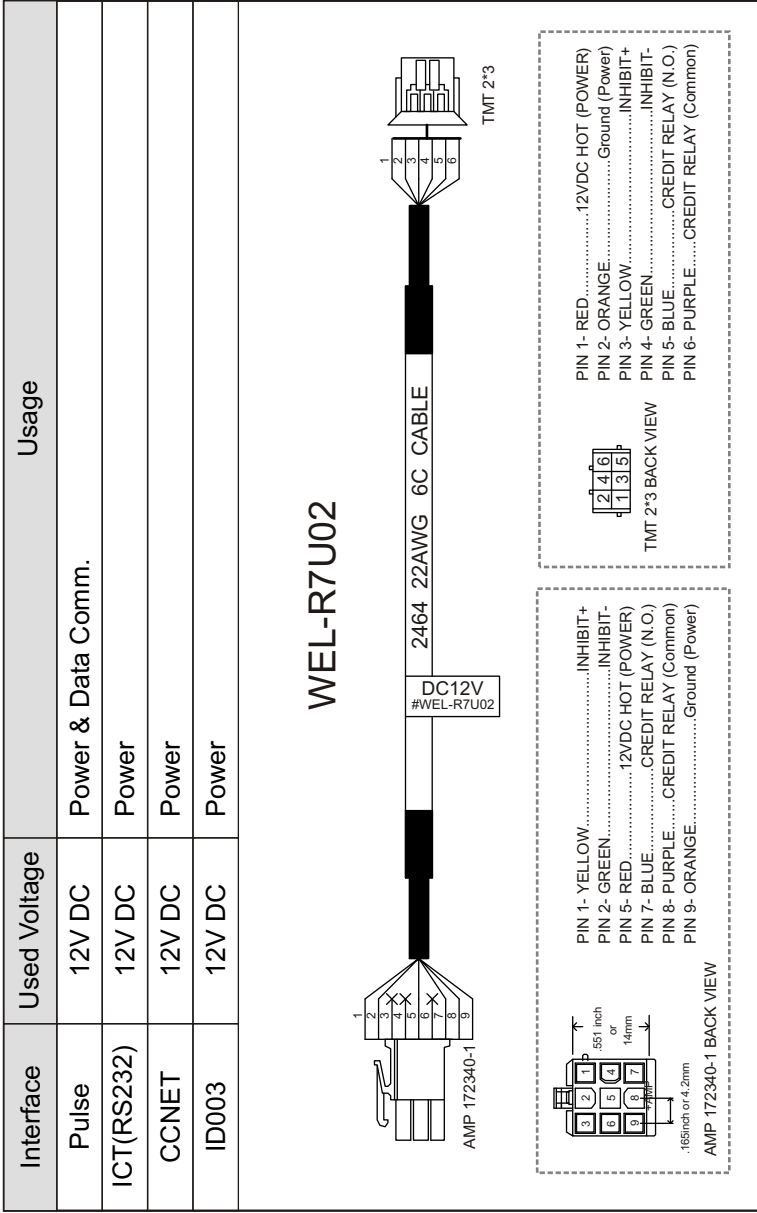


Figure 17.

Figure 18.

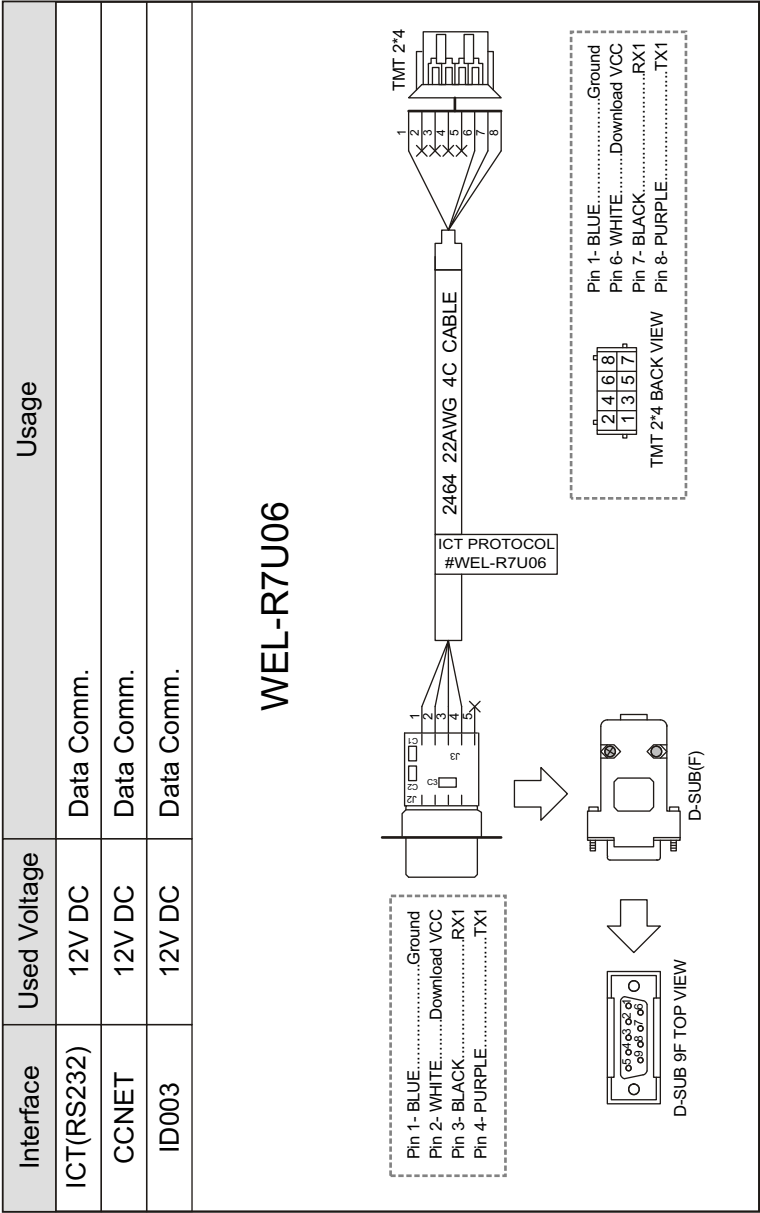


Figure 19.

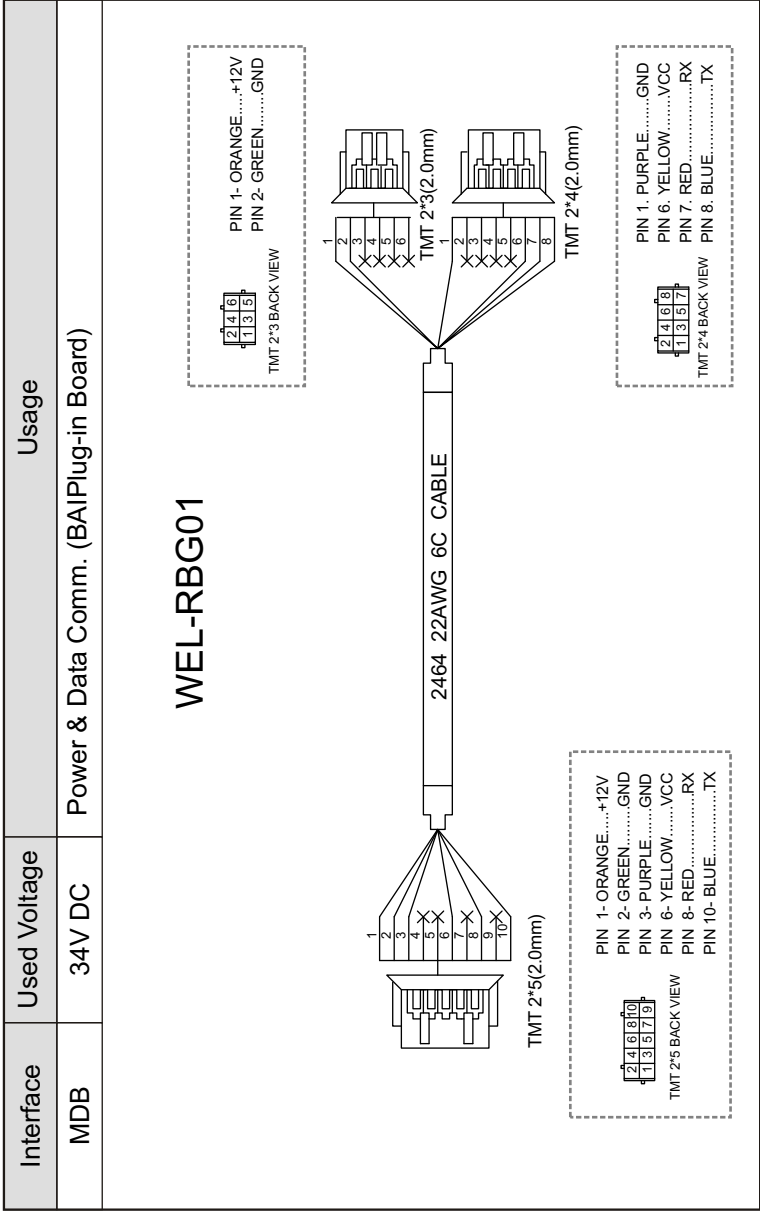


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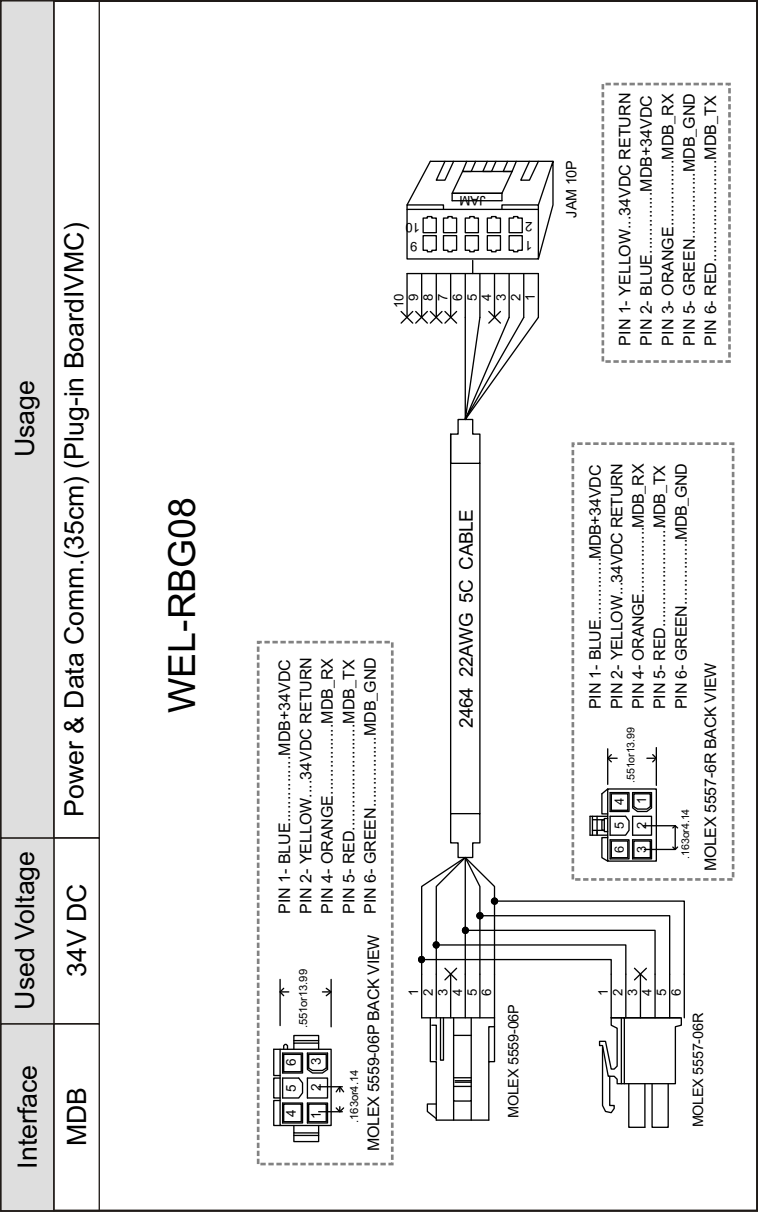
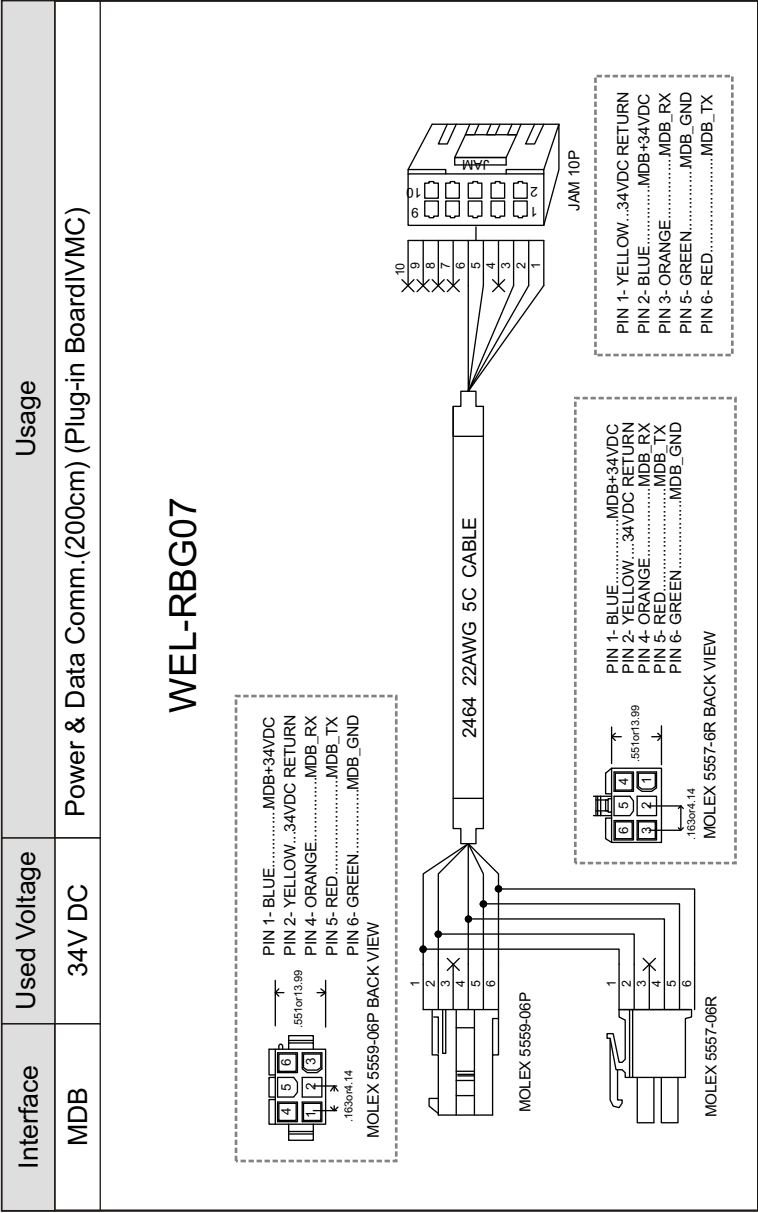


Figure 21.



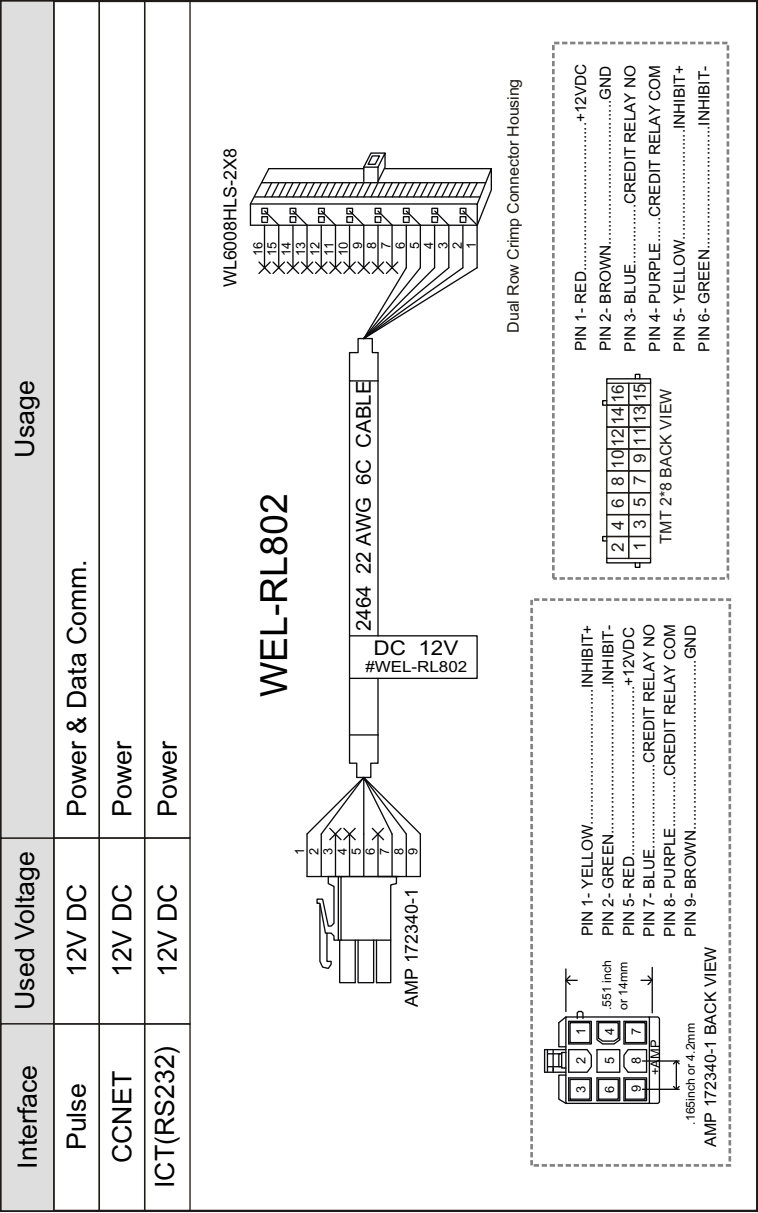


Figure 22.

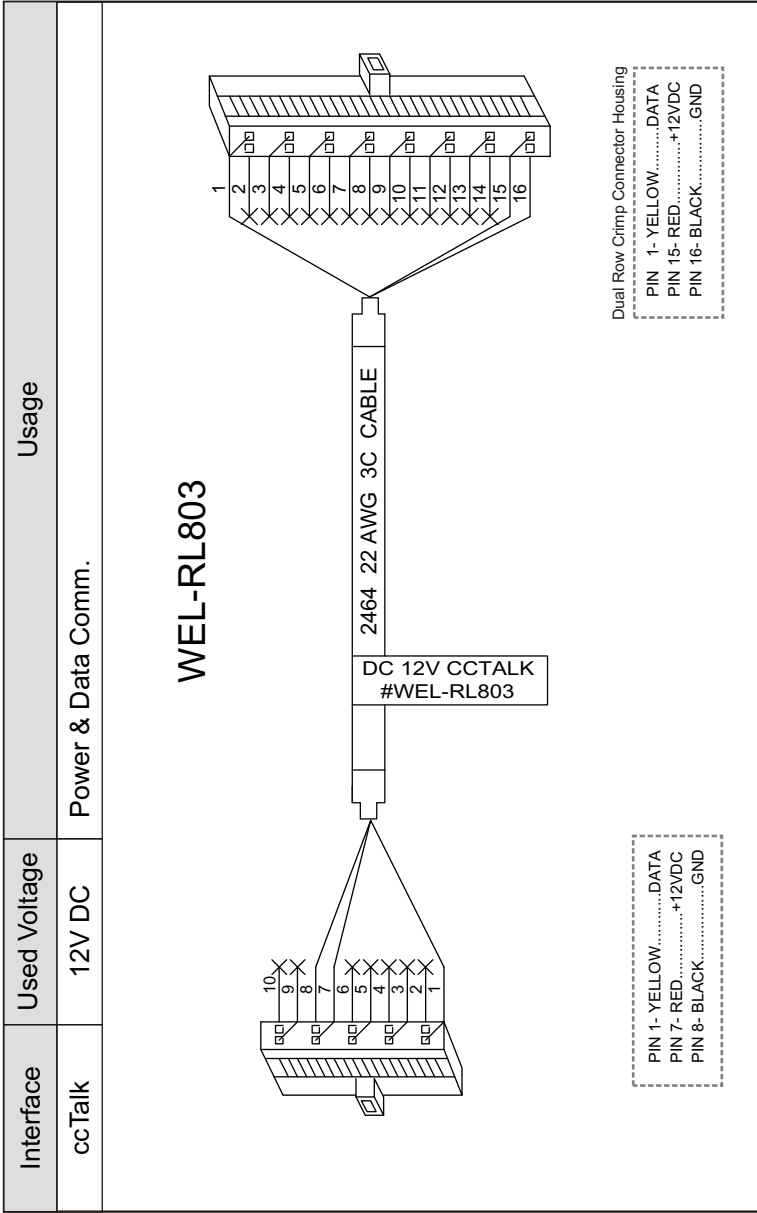


Figure 23.

Figure 24.

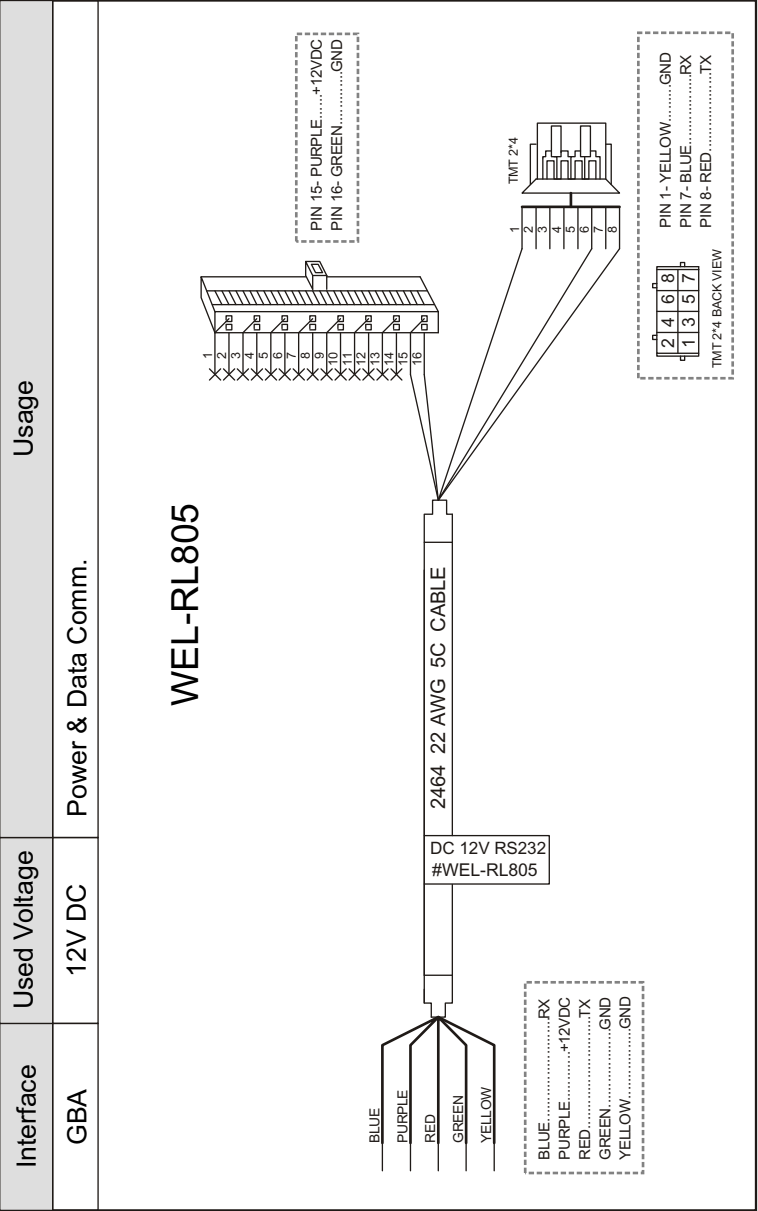


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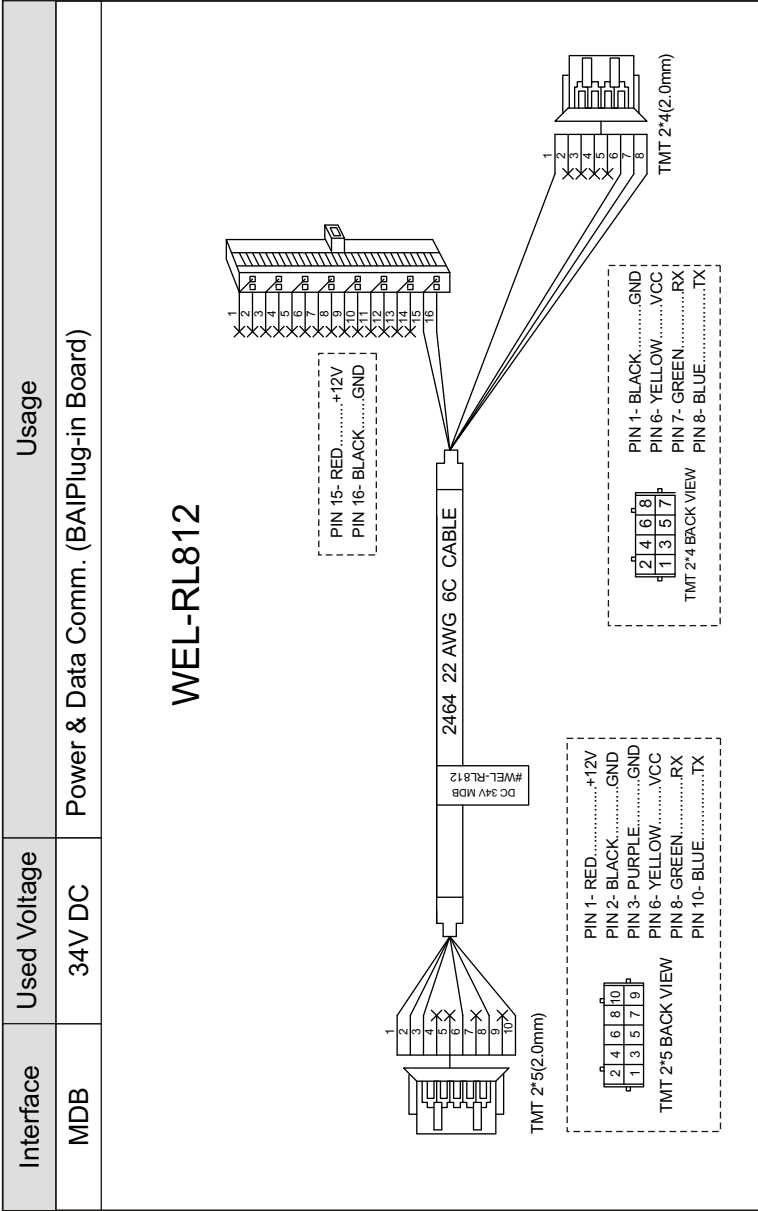


Figure 26.

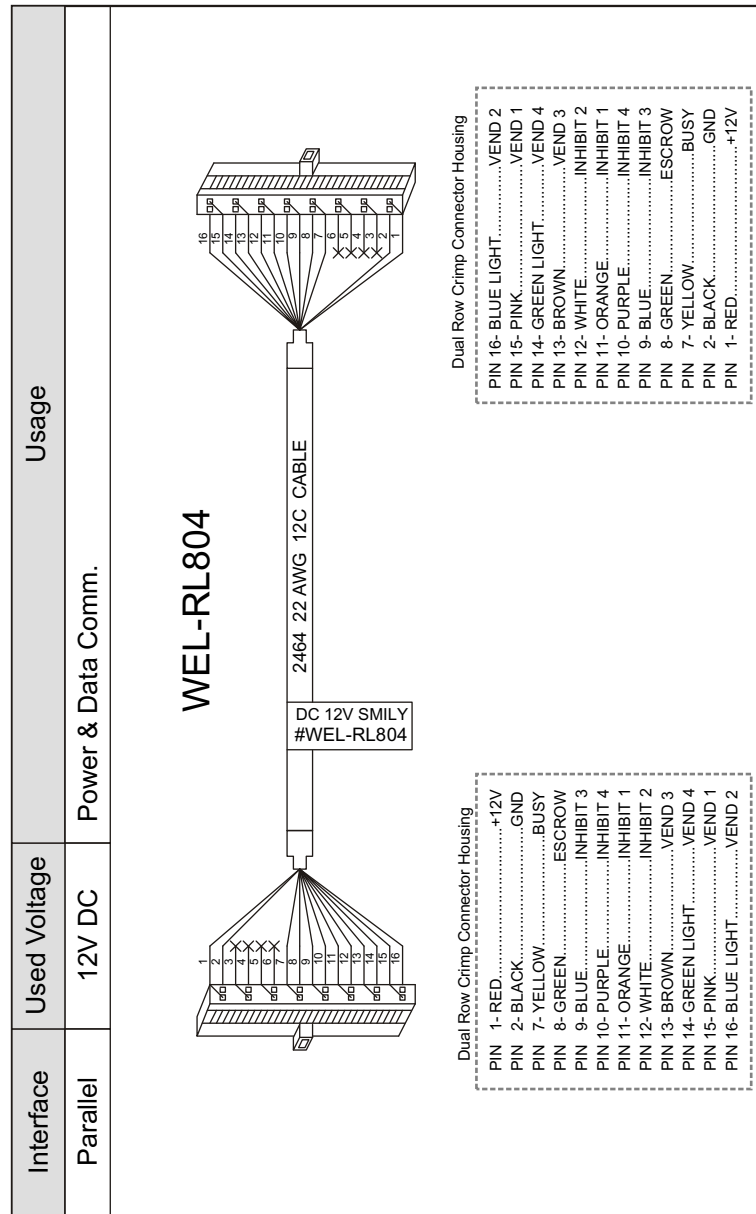
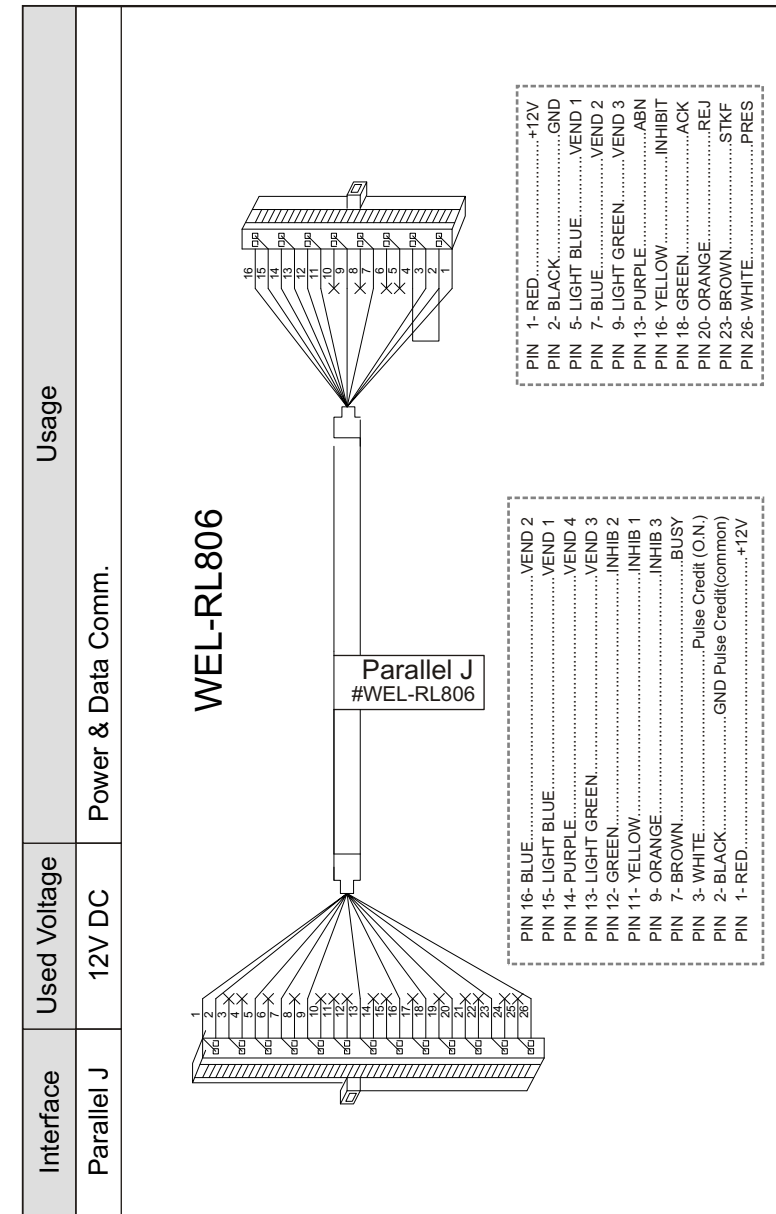


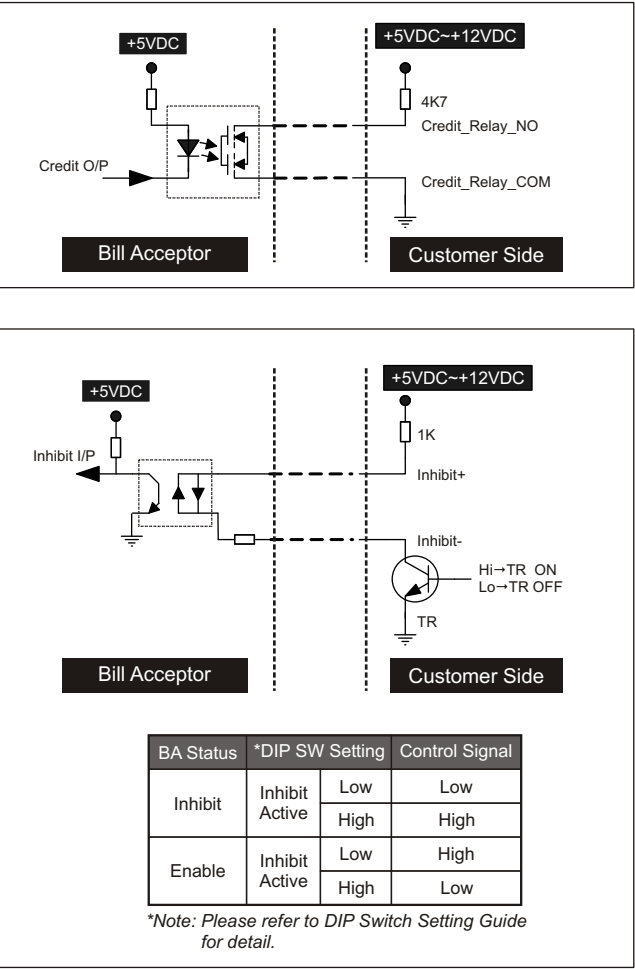
Figure 27.



5-1-1. I/O Circuit

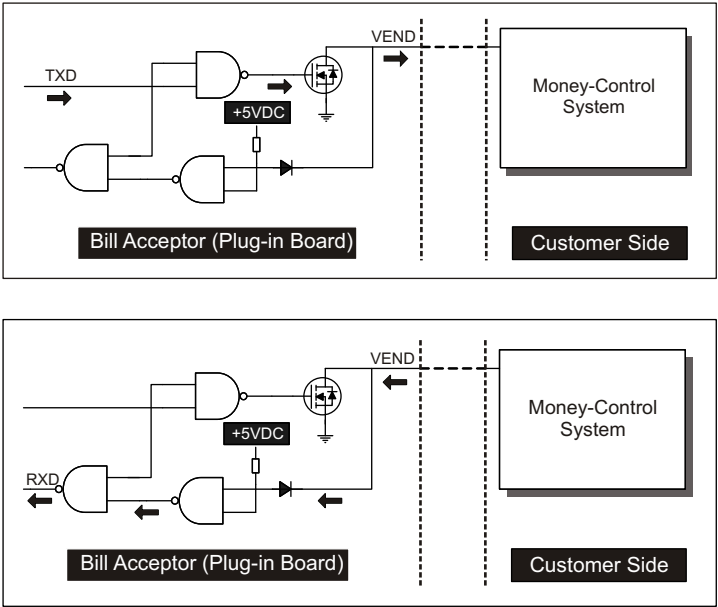
Pulse Interface.

Figure 28.



ccTalk Interface.

Figure 29.



GBA, ID003, and CCNET Interface.

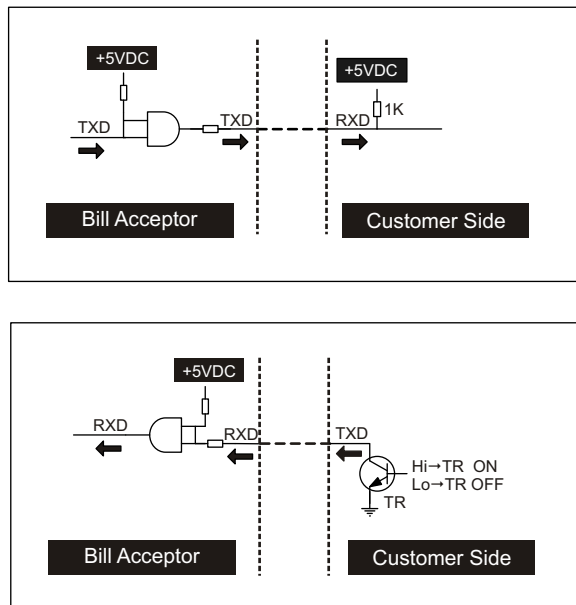
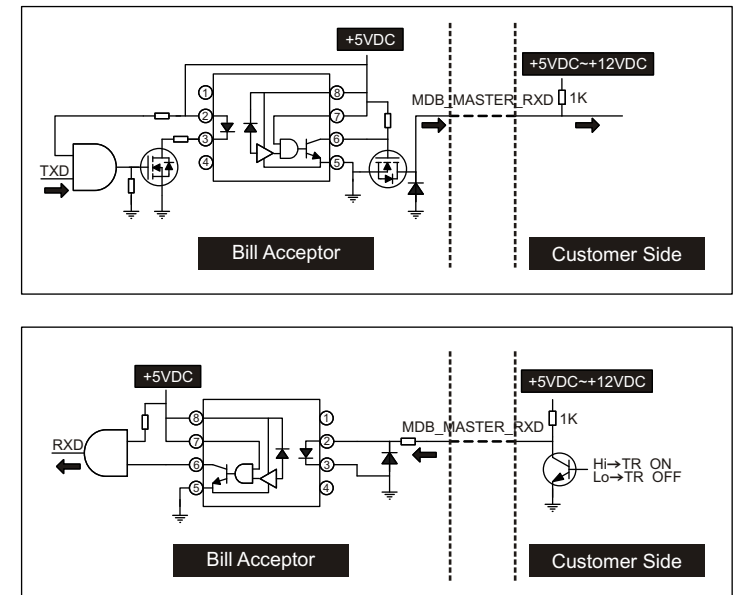


Figure 30.

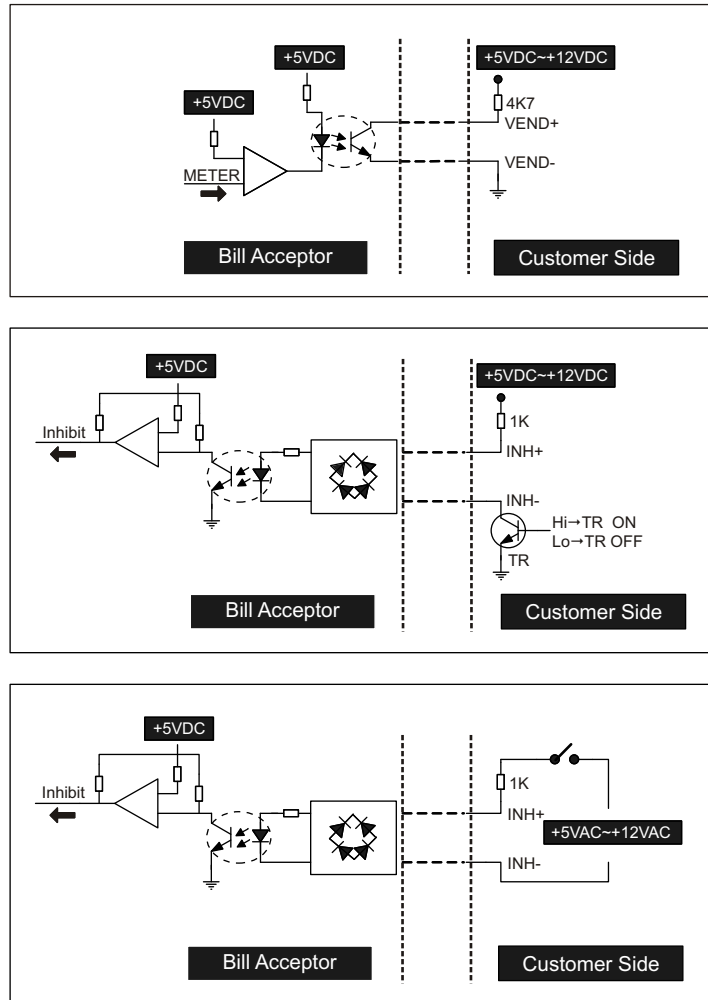
MDB Interface.

Figure 31.



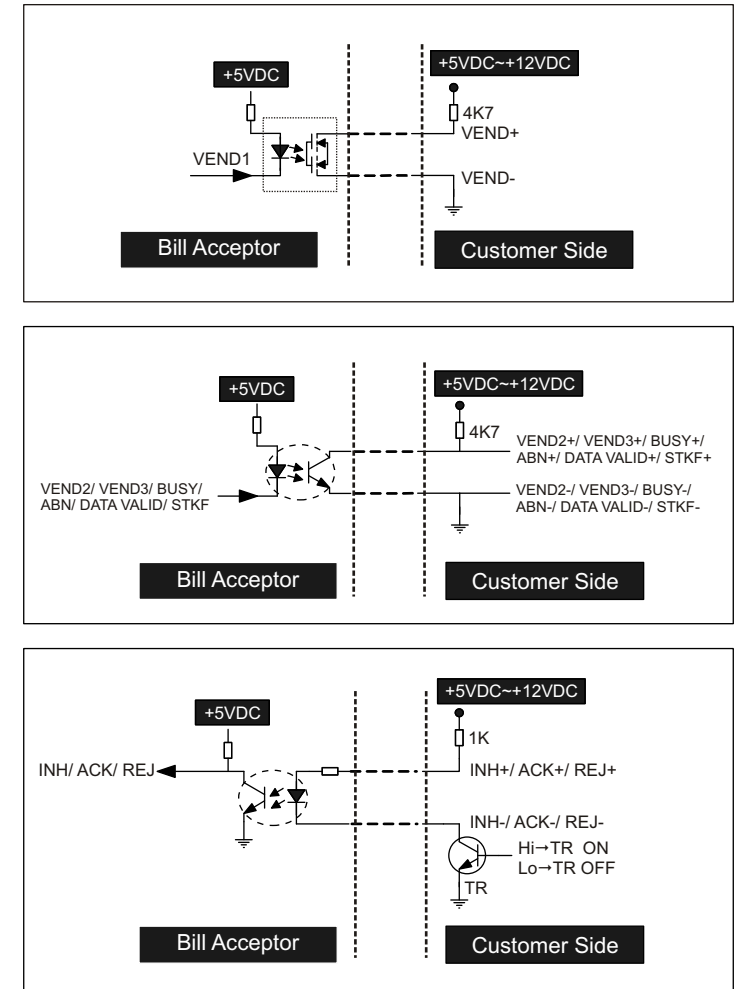
IGT Interface

Figure 32.



Parallel Interface

Figure 33.



5-2. DIP Switch Setting

There is one serial DIP switches which are set on the side of L series (as figure 34). According to different currencies which are used by users, DIP switch settings could be varied to fit users' needs. Besides, there's another serial DIP switches at the bottom of L series for interface setting (as figure 35).

Please refer to "L Series DIP Switch Setting Guide" in the package for more details.

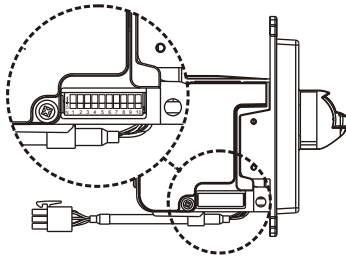


Figure 34.

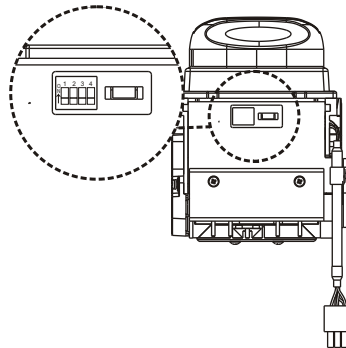


Figure 35.

5-3. Software Download and Upgrade

To download and upgrade the software to L Series, the programmer (FP-003 PLUS/FP-004) is needed. Please contact ICT to purchase (FP-003 PLUS/FP-004) and refer to (FP-003 PLUS/FP-004) user guide for software download and upgrade information.

◆ FP-003 PLUS

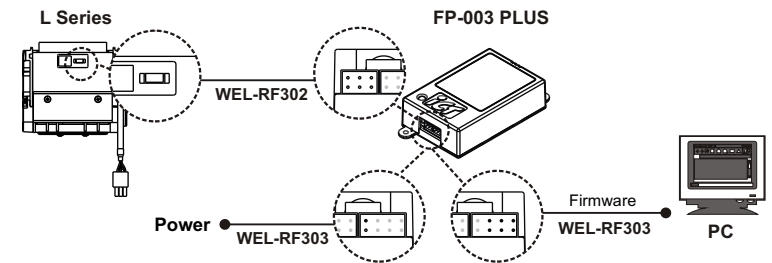


Figure 36.

Turn on Bill Acceptor after connecting.

◆ FP-004

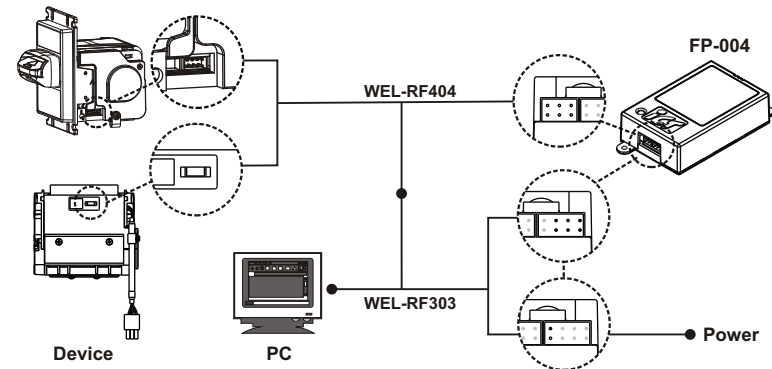


Figure 37.

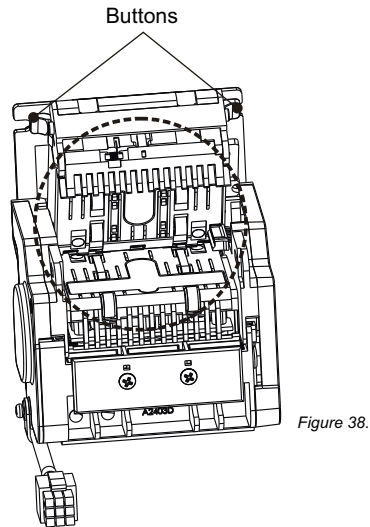
Turn on Bill Acceptor after connecting.

6. Maintenance

To make sure the bill acceptor always works smoothly, please clean the internal parts regularly.

To clean the internal parts:

- 1. Turn bill acceptor off.
- 2. Open LED assembly.
- 3. Use soft cloth or cotton swab to clean internal parts and bill path.





Maintenance Notice
(Any improper maintenance will result invalid warranty.)

Recommended	Mild, non-abrasive, soap water.
DO NOT USE	Organic solvent , Alcohol, Volatility liquid.

7. Troubleshooting

Bezel LED Errors

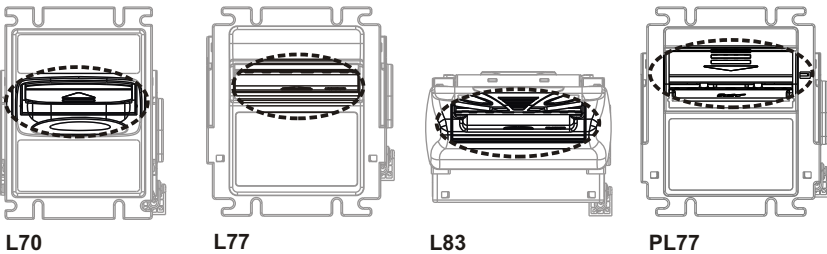


Table 3.

LED Flashes	Status	Corrective Actions
1	Bill jammed.	Open bill path unit and then remove the jammed bill.
2	Disable.	Inspect for right DIP switch setting.
3	Recognition sensor error.	Inspect for foreign objects on sensor or bill path and clean.
3+2	Hook sensor error.	Inspect for foreign objects on security hook and clean.
3+4	Fish sensor error.	Inspect for foreign objects on sensor or bill path and clean.
4	A stringing attempt has detected.	Inspect for foreign objects on sensor or bill path and clean.
5	Bill box has been removed (for modules with bill box only).	Replace the bill box.
6	Stacker error or bill box full (for modules with bill box only) .	Empty the bill box.
7	Motor error.	Inspect for foreign objects on bill path and clean.



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

◆ ccTalk Information

- Manufacturer ID: ICT
- Equipment Category ID: Bill Acceptor
- Product Code: L83
- Serial Number: According to last 8 digits of production serial number
(Default: 12345678).

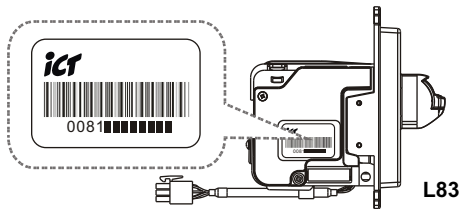


Figure 40.

- Software Revision: According to the software revision number.
Ex. L8DX06HAH10N241EU720

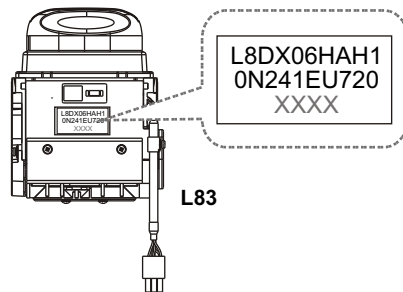


Figure 41.

- Encryption Mode Password: Default as 123456
(command changeable).

ict Taiwan

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