ICT

Bill Acceptor

L SERIES

Installation Guide

International Currency Technologies Corp.

Use of Materials Limitations

Contents

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

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

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#:
Pulse, RS232, RS232 A0, ccNet(compatible), MDB, ccTalk.

L70:
Pulse, RS232, RS232 A0, Parallel A1 .

L70F, L77F:
Pulse, RS232, RS232 A0, ccNet(compatible), MDB, ccTalk, Pulse(Out of service).

L83:
Pulse, RS232, RS232 A0, ccNet(compatible), MDB, ccTalk, RS232 A1, Parallel, Pulse(Out of service), Parallel A4.

L83#:
Pulse, RS232, RS232 A0, ccNet(compatible), MDB, ccTalk, RS232 A1, Pulse(Out of service)

L70T, L77T:
Pulse, RS232, RS232 A0, ccNet(compatible), MDB, ccTalk, Pulse(Out of service) , V2.2.

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

Electrical

Power Source

L70#, L70F, L77F, L83#, L70T, L77T:
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: 2A, 24W

Operation Environment

Operation Temperature:
L70, L83: 0°C~50°C
L70F, L77F, L70T, L77T: 0°C~60°C
L70#, L83#: 0°C~65°C
Storage Temperature: -20°C~70°C
Humidity: 30%~85%RH(no condensation)

Mechanical

Outline Dimension

L70#-P2/P5, L70F-P2/P5 :
N Type Bezel Refer to page. 6
O Type Bezel Refer to page. 7
L77F-P2/P5: I Bezel Refer to page. 8
L83-P3/P6, L83#-P3/P6:
E Type Bezel Refer to page. 9
F Type Bezel Refer to page.10
Y Type Bezel Refer to page.11
L70T-P5, L77T-P5:
Without metal bracket Refer to page.12
With metal bracket Refer to page.13

Bill Box Capacity

L70#-P2, L70F-P2: Approx.200 bills
L70#-P5, L70F-P5: Approx.500 bills
L77F-P2: Approx.150 bills
L77F-P5: Approx.500 bills
L83-P3, L83#-P3: Approx.300 bills
L83-P6, L83#-P6: Approx.600 bills
L70T-P5, L77T-P5: Approx.500 bills

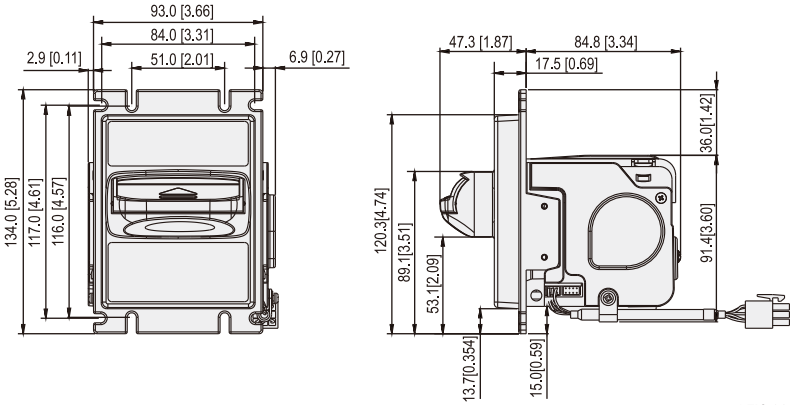
Weight	**L70#, L70F**: Approx.0.52kg **L70#-P2, L70F-P2**: Approx.1.25kg **L70#-P5, L70F-P5**: Approx.1.4kg **L77F**: Approx.0.44kg **L77F-P2**: Approx.1.35kg **L77F-P5**: Approx.1.42kg **L83, L83#**: Approx.0.8kg **L83-P3, L83#-P3**: Approx.1.46kg **L83-P6, L83#-P6**: Approx.1.65kg **L70T-P5, L77T-P5**: (Without metal bracket) Approx.1.42kg (With metal bracket) Approx.7kg
Bill Accepted Width	**L70#-P2/P5, L70F-P2/P5:** (67mm) 59mm~67mm (71mm) 59mm~71mm **L77F-P2/P5**: 72mm~77mm **L83-P3/P6, L83#-P3/P6**: 61mm~83mm 61mm~79mm(Y Type Bezel) **L70T-P5**: 65mm~70mm **L77T-P5**: 72mm~77mm
Installation	**Indoor**

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

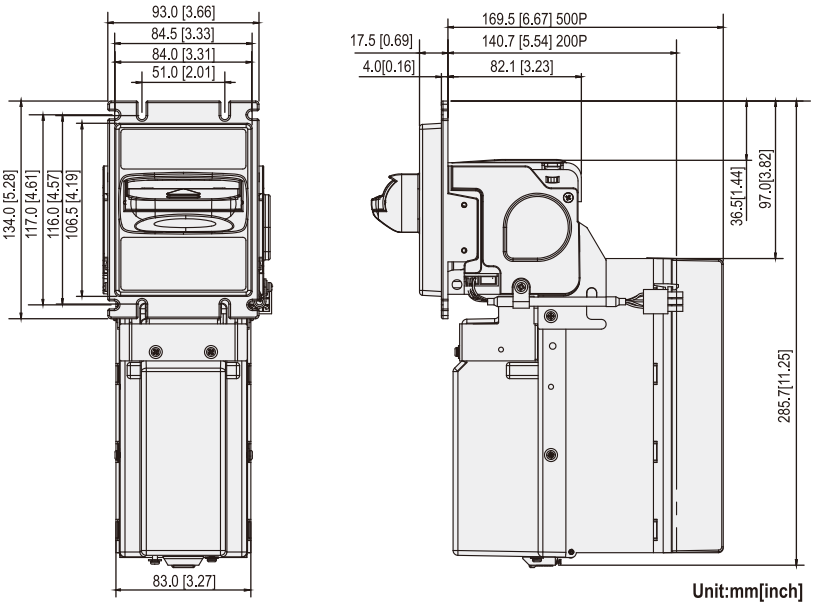
4. Dimension

L70 N Type Bezel: A Bezel(67mm) and B Bezel(71mm)



4 FIG.01

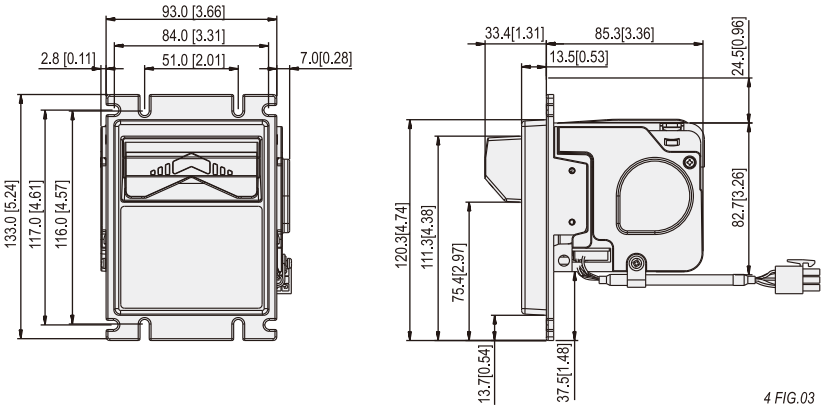
L70-P2/P5 N Type Bezel: A Bezel(67mm) and B Bezel(71mm)



Unit:mm[inch]

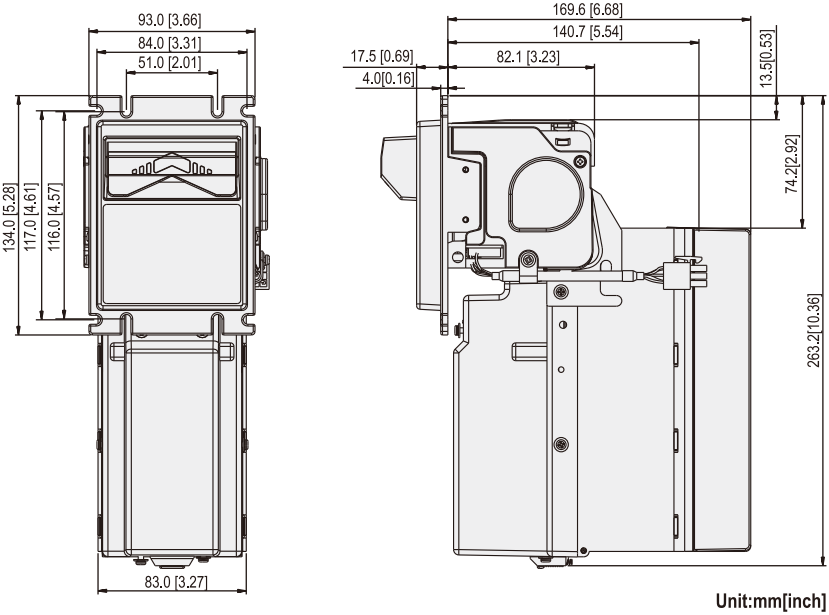
4 FIG.02

L70 O Type Bezel (71mm)



4 FIG.03

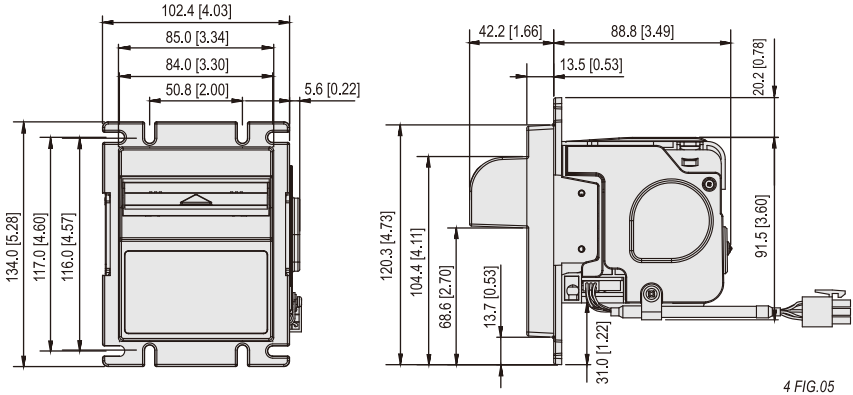
L70-P2/P5 O Type Bezel (71mm)



Unit:mm[inch]

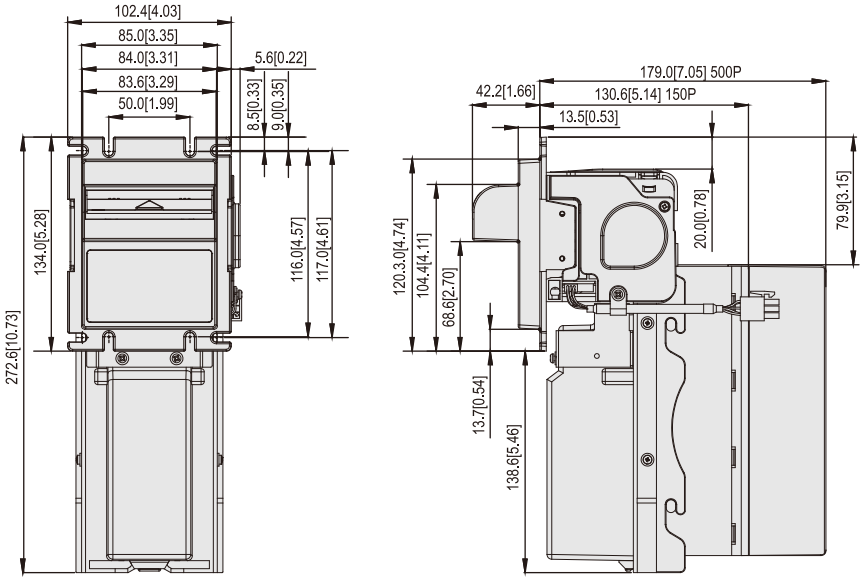
4 FIG.04

L77F I Bezel (78mm)



4 FIG.05

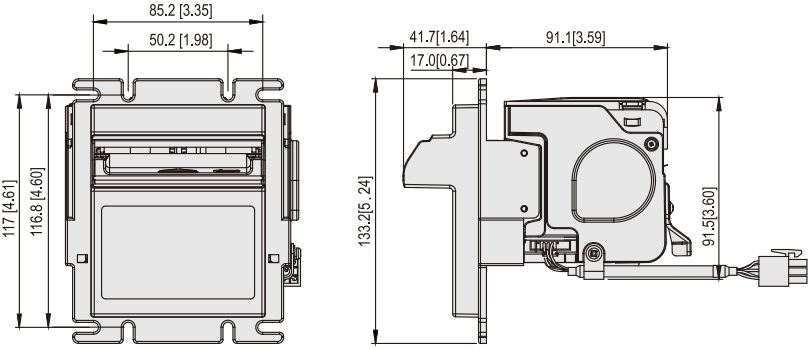
L77F-P2/P5 I Bezel (78mm)



Unit:mm[inch]

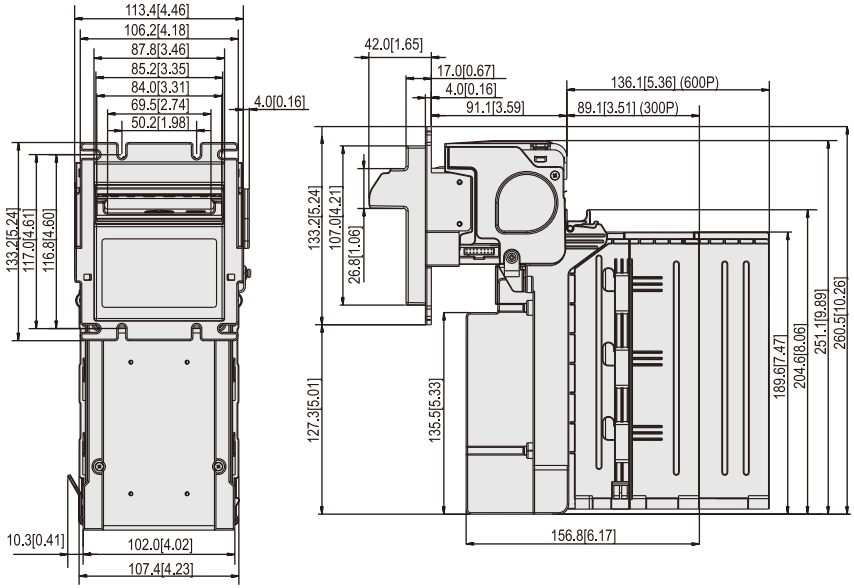
4 FIG.06

L83 E Type Bezel (83mm)



4 FIG.07

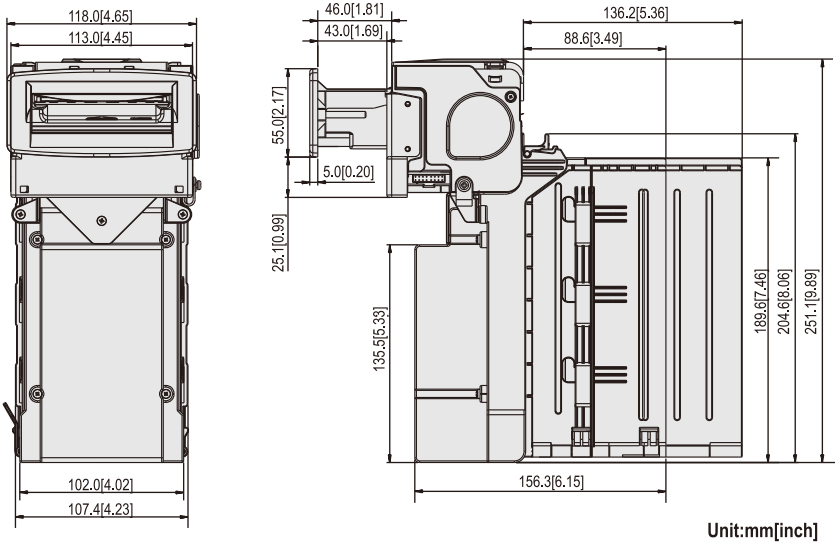
L83-P3/P6 Down Stacker E Type Bezel (83mm)



Unit:mm[inch]

4 FIG.08

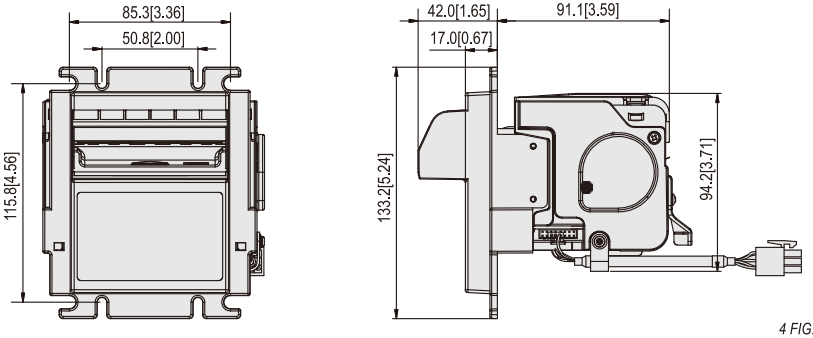
L83-P3/P6 Down Stacker F Type Bezel (83mm)



Unit:mm[inch]

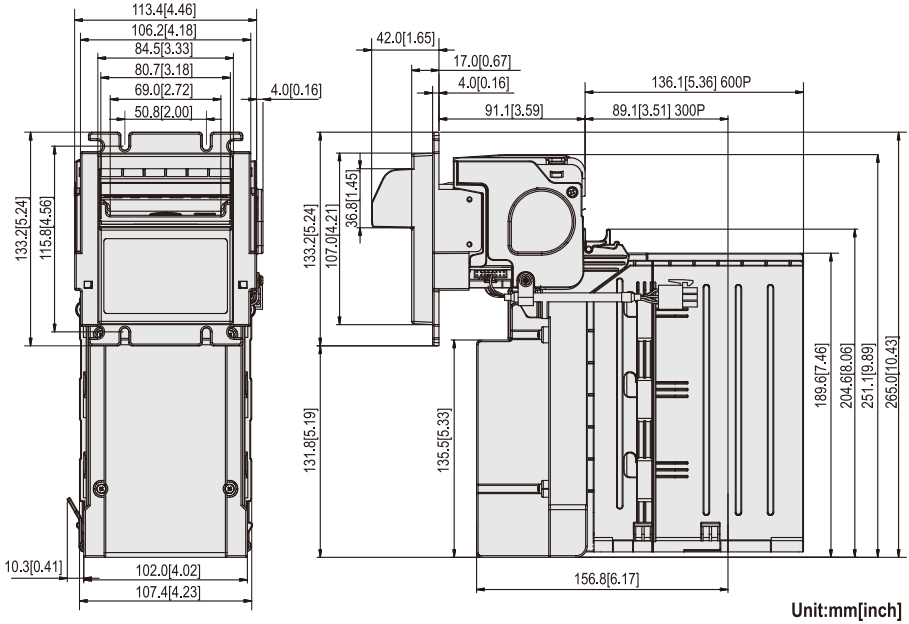
4 FIG.09

L83 Y Type Bezel (79mm)



4 FIG.10

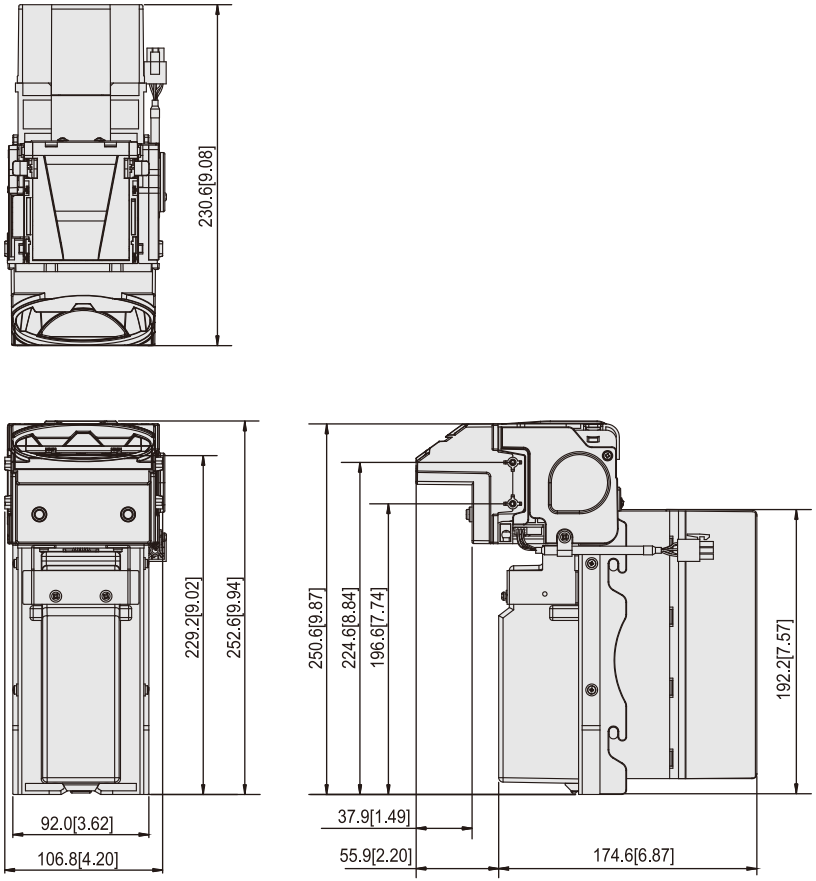
L83-P3/P6 Down Stacker Y Type Bezel (79mm)



Unit:mm[inch]

4 FIG.11

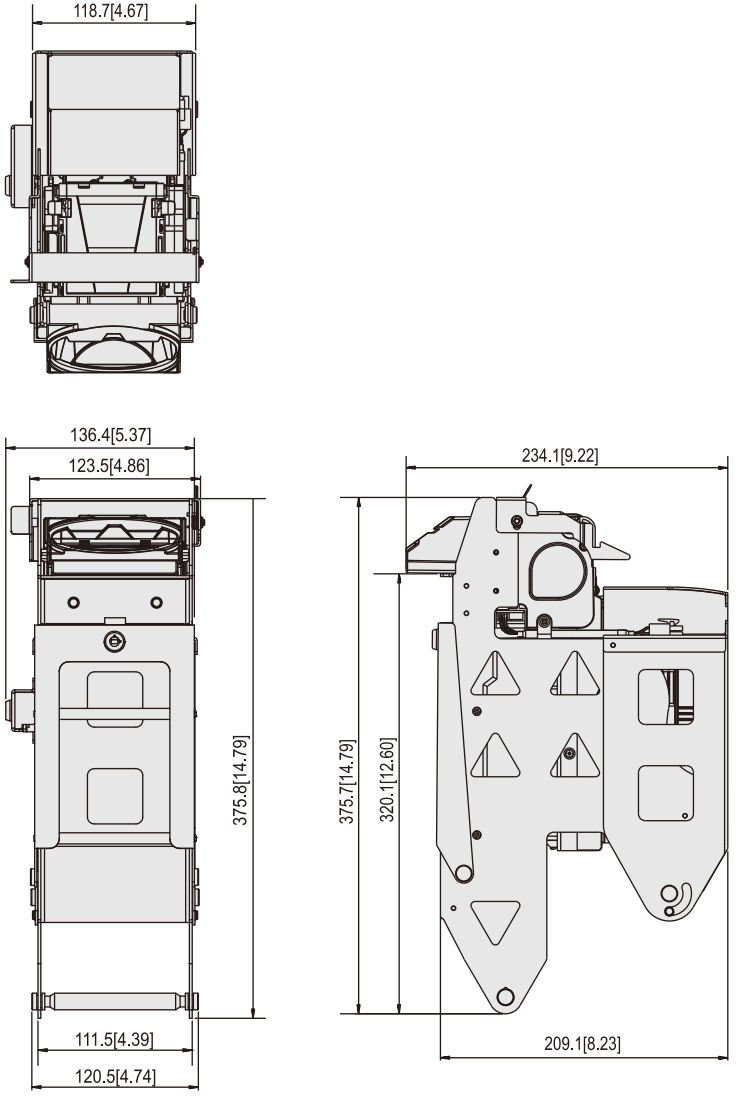
L70T-P5, L77T-P5 <Without metal bracket>



Unit:mm[inch]

4 FIG.12

L70T-P5, L77T-P5 <With metal bracket>



Unit:mm[inch]

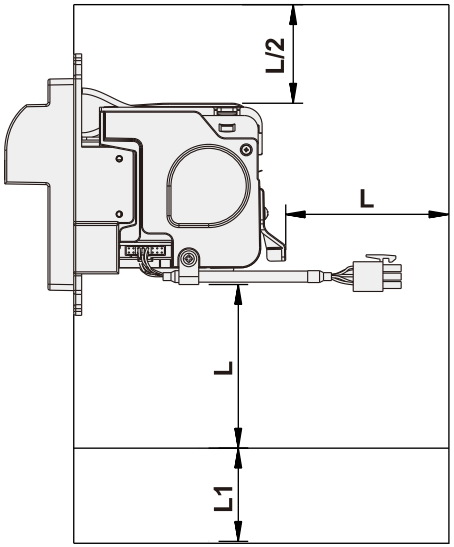
4 FIG.13

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.



4 FIG.14

5. Installation

5-1. Harness Application

5-1 TABLE 01

Model	Interface	Used Voltage	Usage	Harnesses	Page
L70	Pulse	12V DC	Power & *Data Comm. ★3	WEL-RL702	20
			Extension Wire	CU-R961-1	19
	ICT(RS232)	12V DC	Power & *Data Comm.	WEL-RL703 ★1	21
	Parallel A1	12V DC	Power & *Data Comm.	WEL-RL701	20
			Extension Wire	WEL-R061	23
	RS232 A0	12V DC	Power & *Data Comm.	WEL-RL705-1 or 2-BA-RL705	22
			Extension Wire	WEL-RID04	23
	ccTalk	12V DC	Power & *Data Comm. (BA↔Plug-in Board)	5RBA-RAB248MX	
L70# L70F L77F	Pulse	12V DC	Power & *Data Comm.	WEL-R7U02	24
			Extension Wire	CU-R961-1	19
	ICT (RS232)	12V DC	Power & *Data Comm.	WEL-R7U02	24
			Extension Wire	CU-R961-1	19
			*Data Comm.	WEL-R7U06-2 ★2 or 2-BA-R7U06	25
	ccNet compatible	12V DC	Power & *Data Comm.	WEL-R7U02	24
			Extension Wire	CU-R961-1	19
			*Data Comm.	WEL-R7U06-2 ★2 or 2-BA-R7U06	25
	RS232 A0	12V DC	Power & *Data Comm.	WEL-R7U02	24
			Extension Wire	CU-R961-1	19
			*Data Comm.	WEL-R7U06-2 ★2 or 2-BA-R7U06	25
	MDB	★4 34V DC	Power & *Data Comm. (BA↔Plug-in Board) ★5	WEL-RBG01	26
			Power & *Data Comm.(35cm) (Plug-in Board↔VMC)	WEL-RBG08	27
			Power & *Data Comm.(200cm) (Plug-in Board↔VMC)	WEL-RBG07	26

★1. Maintenance use only.

★2. WEL-R7U06-2 : 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. MDB Box : 5RBG-AA313NA0 For L70#, L70F, L77F, L70T, L77T, 5RBG-AA313NAA For L83, L83#.

5-1 TABLE 02

Model	Interface	Used Voltage	Usage	Harnesses	Page
L70#	ccTalk	12V DC	Power & *Data Comm. ★3 (BA↔Plug-in Board)	5RBA-RAA248MX	
	ccTalk	12V DC	Power	WEL-R7U02	24
			*Data Comm.	3-BA-RL70#RS232-B	27
	Pulse	110V AC	Power & *Data Comm. (BA↔Plug-in Board)	5RBA-RAA315-L	29
					30
L70F L77F	Pulse (Out of service)	12V DC	Power & *Data Comm.	WEL-RL826	36
			Extension Wire	CU-R961-1	19
	ccTalk	12V DC	Power & *Data Comm.	WEL-RL77F01	28
L83	Pulse	12V DC	Power & *Data Comm.	WEL-RL802	31
			Extension Wire	CU-R961-1	19
	ccTalk	12V DC	Power & *Data Comm.	WEL-RL803	32
				IDC-RA10400	38
				CNT-R7025	38
				WEL-RL824	34
	RS232 A1	12V DC	Power & *Data Comm.	WEL-RL805	33
	ICT (RS232)	12V DC	Power	WEL-RL802	31
			Extension Wire	CU-R961-1	19
			*Data Comm.	WEL-R7U06-2 ★2 or 2-BA-R7U06	25
	ccNet compatible	12V DC	Power	WEL-RL802	31
			Extension Wire	CU-R961-1	19
			*Data Comm.	WEL-R7U06-2 ★2 or 2-BA-R7U06	25
	MDB	34V DC ★4	Power & *Data Comm.★5 (BA↔Plug-in Board)	WEL-RL812	34
			Power & *Data Comm.(35cm) (Plug-in Board↔VMC)	WEL-RBG08	27
			Power & *Data Comm.(200cm) (Plug-in Board↔VMC)	WEL-RBG07	26
	RS232 A0	12V DC	Power	WEL-RL802	31
			Extension Wire	CU-R961-1	19
			*Data Comm.	WEL-R7U06-2 ★2 or 2-BA-R7U06	25

★2. WEL-R7U06-2 : 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. MDB Box : 5RBG-AA313NA0 For L70#, L70F, L77F, L70T, L77T, 5RBG-AA313NAA For L83, L83#.

5-1 TABLE 03

Model	Interface	Used Voltage	Usage	Harnesses	Page
L83	Parallel	12V DC	Power & *Data Comm. ★3	WEL-RL804	32
	Parallel A4		Power & *Data Comm.	WEL-RL806	33
	Pulse(Out of service)		Power & *Data Comm.	WEL-RL825	35
			Extension Wire	CU-R961-1	19
L83#	Pulse	12V DC	Power & *Data Comm.	WEL-RL802	31
			Extension Wire	CU-R961-1	19
	ccTalk	12V DC	Power & *Data Comm.	WEL-RL803	32
				IDC-RA10400	38
				CNT-R7025	38
				WEL-RL824	34
	RS232 A1	12V DC	Power & *Data Comm	WEL-RL805	33
	ICT (RS232)	12V DC	Power	WEL-RL802	31
			Extension Wire	CU-R961-1	19
			*Data Comm.	WEL-R7U06-2 ★2 or 2-BA-R7U06	25
	ccNet compatible	12V DC	Power	WEL-RL802	31
			Extension Wire	CU-R961-1	19
			*Data Comm.	WEL-R7U06-2 ★2 or 2-BA-R7U06	25
	MDB	34V DC ★4	Power & *Data Comm. ★5 (BA↔Plug-in Board)	WEL-RL812	34
			Power & *Data Comm.(35cm) (Plug-in Board↔VMC)	WEL-RBG08	27
			Power & *Data Comm.(200cm) (Plug-in Board↔VMC)	WEL-RBG07	26
	RS232 A0	12V DC	Power	WEL-RL802	31
			Extension Wire	CU-R961-1	19
			*Data Comm.	WEL-R7U06-2 ★2 or 2-BA-R7U06	25
	Pulse(Out of service)	12V DC	Power & *Data Comm.	WEL-RL825	35
			Extension Wire	CU-R961-1	19

★2. WEL-R7U06-2 : 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. MDB Box : 5RBG-AA313NA0 For L70#, L70F, L77F, L70T, L77T, 5RBG-AA313NAA For L83, L83#.

5-1 TABLE 04

Model	Interface	Used Voltage	Usage	Harnesses	Page
L70T L77T	Pulse	12V DC	Power & *Data Comm. ★3	WEL-R7U02	24
			Extension Wire	CU-R961-1	19
	ICT (RS232)	12V DC	Power & *Data Comm.	WEL-R7U02	24
			Extension Wire	CU-R961-1	19
			*Data Comm.	WEL-R7U06-2 ★2 or 2-BA-R7U06	25
	ccNet compatible	12V DC	Power & *Data Comm.	WEL-R7U02	24
			Extension Wire	CU-R961-1	19
			*Data Comm.	WEL-R7U06-2 ★2 or 2-BA-R7U06	25
	MDB	★4 34V DC	Power & *Data Comm. (BA↔Plug-in Board) ★5	WEL-RBG01	26
			Power & *Data Comm.(35cm) (Plug-in Board↔VMC)	WEL-RBG08	27
			Power & *Data Comm.(200cm) (Plug-in Board↔VMC)	WEL-RBG07	26
	Pulse (Out of service)	12V DC	Power & *Data Comm.	WEL-RL826	36
			Extension Wire	CU-R961-1	19
	RS232 A0	24V DC	Power & *Data Comm.	3BA-RAA318-NX-0X	37
	V2.2				37
	ccTalk	12V DC	Power & *Data Comm.	WEL-RL77F01	28

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

★3. Data Comm. : Data Communication.

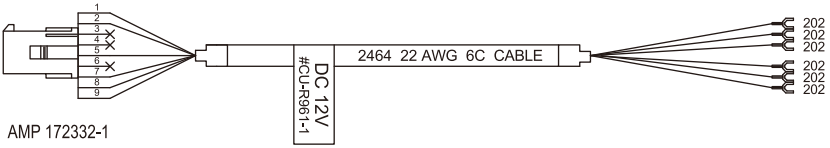
★4. MDB 34VDC : VMC Provides +34VDC to MDB Plug-in Board to convert into +12VDC, and provides +12VDC to L series bill acceptors.

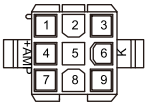
★5. MDB Box : 5RBG-AA313NA0 For L70#, L70F, L77F, L70T, L77T, 5RBG-AA313NAA For L83, L83#.

5-1 FIG. 01

Interface	Used Voltage	Usage
Pulse	12V DC	Extension Wire for WEL-RL702
Pulse	12V DC	Extension Wire for WEL-R7U02
ICT(RS232)	12V DC	
ccNet compatible	12V DC	
RS232 A0	12V DC	
Pulse	12V DC	Extension Wire for WEL-RL802
ICT(RS232)	12V DC	
ccNet compatible	12V DC	
Pulse(Out of service)	12V DC	Extension Wire for WEL-RL825
Pulse(Out of service)	12V DC	Extension Wire for WEL-RL826

CU-R961-1



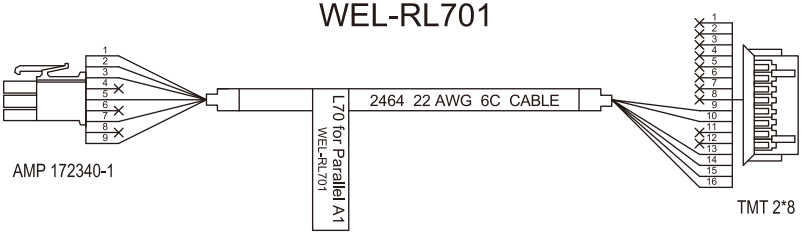


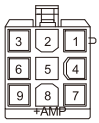
PIN 1- YELLOW.....INHIBIT+
PIN 2- GREEN.....INHIBIT-
PIN 5- RED.....+12VDC(POWER-IN)
PIN 7- BLUE.....CREOIT-RELAY-NO
PIN 8- PURPLE.....CREDIT-RELAY-COM
PIN 9- ORANGE.....GND(POWER-IN)

5-1 FIG.02

Interface	Used Voltage	Usage
Parallel A1	12V DC	Power & *Data Comm.

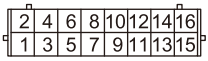
WEL-RL701





AMP 172340-1
BACK VIEW

PIN 1- BLUE.....VEND+
PIN 2- PURPLE.....VEND-
PIN 3- YELLOW.....INHIBIT+
PIN 5- GREEN.....INHIBIT-
PIN 7- BLACK.....GND
PIN 9- RED.....+12V



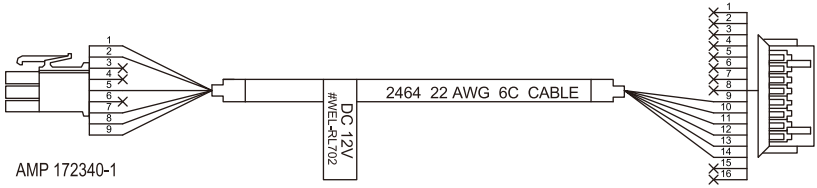
TMT 2*8
BACK VIEW

PIN 9- RED.....+12V
PIN 10- BLACK.....GND
PIN 13- YELLOW.....INHIBIT+
PIN 14- GREEN.....INHIBIT-
PIN 15- BLUE.....VEND+
PIN 16- PURPLE.....VEND-

5-1 FIG.03

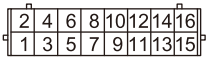
Interface	Used Voltage	Usage
Pulse	12V DC	Power & *Data Comm.

WEL-RL702



AMP 172340-1
BACK VIEW

PIN 1- YELLOW.....INHIBIT+
PIN 2- GREEN.....INHIBIT-
PIN 5- RED.....+12V
PIN 7- BLUE.....Credit.Relay.No
PIN 8- PURPLE.....Credit.Relay.Com
PIN 9- BLACK.....GND



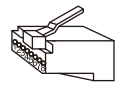
TMT 2*8
BACK VIEW

PIN 9- RED.....+12V
PIN 10- BLACK.....GND
PIN 11- BLUE.....Credit.Relay.No
PIN 12- PURPLE.....Credit.Relay.Com
PIN 13- YELLOW.....INHIBIT+
PIN 14- GREEN.....INHIBIT-

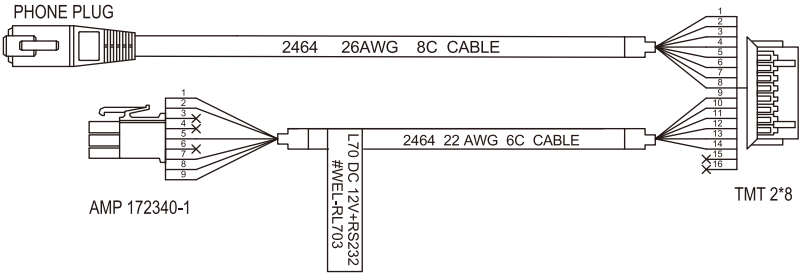
5-1 FIG.04

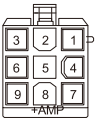
Interface	Used Voltage	Usage
ICT(RS232)	12V DC	Power & *Data Comm.

WEL-RL703



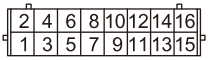
PHONE PLUG
VIEW





AMP 172340-1 BACK VIEW

PIN 1- YELLOW.....INHIBIT+
PIN 2- GREEN.....INHIBIT-
PIN 3- RESERVED
PIN 4- RESERVED
PIN 5- RED.....12VDC
PIN 6- RESERVED
PIN 7- BLUE.....CREDIT_RELAY_NO
PIN 8- PURPLE.....CREDIT_RELAY_COM
PIN 9- BLACK.....GND



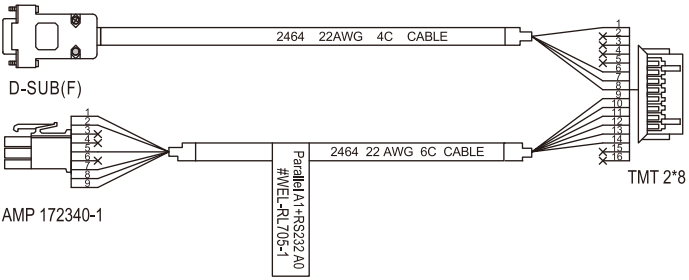
TMT 2*8 BACK VIEW

PIN 1- GRAY.....GND
PIN 2- ORANGE.....TX22
PIN 3- BLACK.....RX22
PIN 4- RED.....CAP
PIN 5- GREEN...../RESET
PIN 6- YELLOW.....VCC
PIN 7- BLUE.....RX11
PIN 8- BROWN.....TX11
PIN 9- RED.....12VDC
PIN 10- BLACK.....GND
PIN 11- BLUE.....CREDIT_RELAY_NO
PIN 12- PURPLE.....CREDIT_RELAY_COM
PIN 13- YELLOW.....INHIBIT+
PIN 14- GREEN.....INHIBIT-

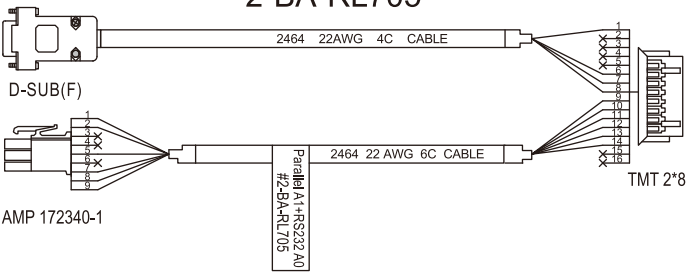
5-1 FIG.05

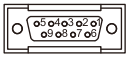
Interface	Used Voltage	Usage
RS232 A0	12V DC	Power & *Data Comm.

WEL-RL705-1



2-BA-RL705



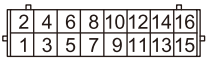


D-SUB 9F TOP VIEW

PIN 1- BLUE.....Ground
PIN 2- WHITE.....Download VCC
PIN 3- BLACK.....RX1
PIN 4- PURPLE.....TX1

AMP 172340-1
BACK VIEW

PIN 1- YELLOW.....INHIBIT+
PIN 2- GREEN.....INHIBIT-
PIN 3- RESERVED
PIN 4- RESERVED
PIN 5- RED.....12VDC
PIN 6- Reserved
PIN 7- BLUE.....CREDIT_RELAY_NO
PIN 8- PURPLE.....CREDIT_RELAY_COM
PIN 9- BLACK.....GND

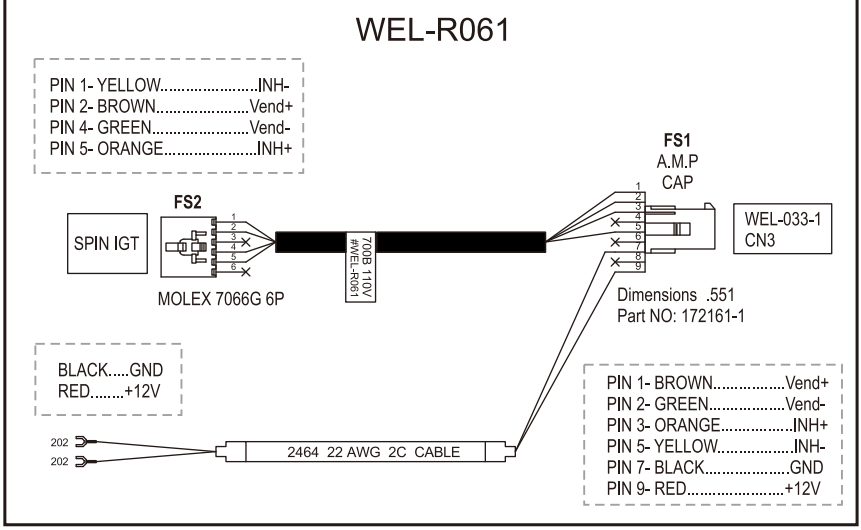


TMT 2*8 BACK VIEW

PIN 1- BLUE.....GND
PIN 6- WHITE.....VCC
PIN 7- BLACK.....RX11
PIN 8- PURPLE.....TX11
PIN 9- RED.....+12VDC
PIN 10- BLACK.....GND
PIN 11- BLUE.....CREDIT_RELAY_NO
PIN 12- PURPLE.....CREDIT_RELAY_COM
PIN 13- YELLOW.....INHIBIT+
PIN 14- GREEN.....INHIBIT-

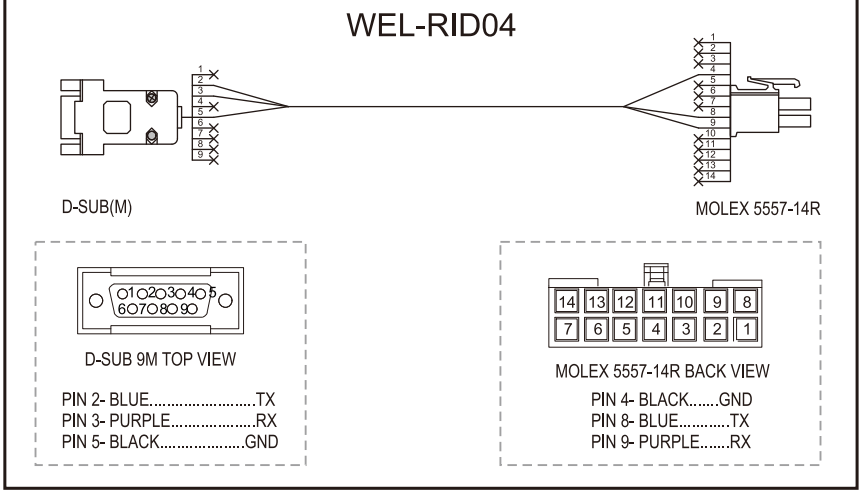
5-1 FIG.06

Interface	Used Voltage	Usage
Parallel A1	12V DC	Extension Wire for WEL-RL701



5-1 FIG.07

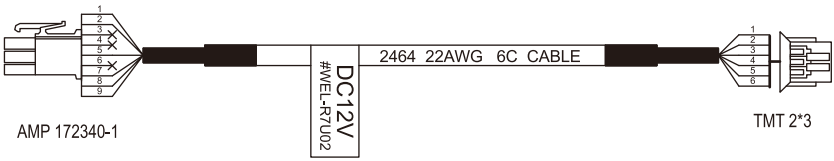
Interface	Used Voltage	Usage
RS232 A0	12V DC	Extension Wire for WEL-RL705-1 or 2-BA-RL705



5-1 FIG.08

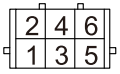
Interface	Used Voltage	Usage
Pulse	12V DC	Power & *Data Comm.
ICT(RS232)	12V DC	Power
ccNet compatible	12V DC	Power
RS232 A0	12V DC	Power
ccTalk	12V DC	Power

WEL-R7U02



AMP 172340-1 BACK VIEW

PIN 1- YELLOW.....INHIBIT+
PIN 2- GREEN.....INHIBIT-
PIN 5- RED.....12VDC HOT (POWER)
PIN 7- BLUE.....CREDIT RELAY (N.O.)
PIN 8- PURPLE.....CREDIT RELAY (Common)
PIN 9- ORANGE.....Ground (Power)



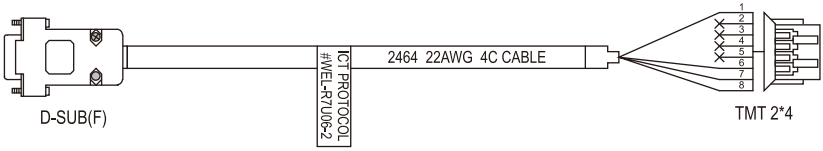
TMT 2*3 BACK VIEW

PIN 1- RED.....12VDC HOT (POWER)
PIN 2- ORANGE.....Ground (Power)
PIN 3- YELLOW.....INHIBIT+
PIN 4- GREEN.....INHIBIT-
PIN 5- BLUE.....CREDIT RELAY (N.O.)
PIN 6- PURPLE.....CREDIT RELAY (Common)

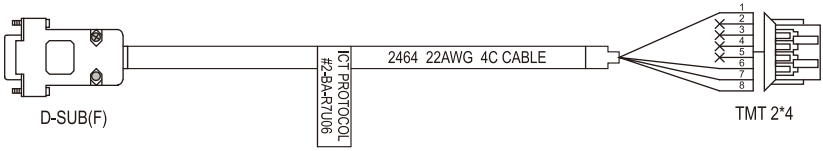
5-1 FIG.09

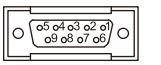
Interface	Used Voltage	Usage
ICT(RS232)	12V DC	*Data Comm.
ccNet compatible	12V DC	*Data Comm.
RS232 A0	12V DC	*Data Comm.

WEL-R7U06-2



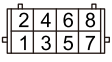
2-BA-R7U06





D-SUB 9F TOP VIEW

PIN 2- TXD
PIN 3- RXD
PIN 5- GND



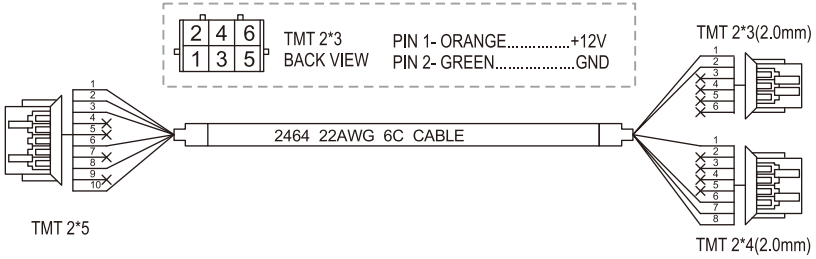
TMT 2*4
BACK VIEW

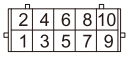
PIN 1- BLUE.....Ground
PIN 6- WHITE.....Download VCC
PIN 7- BLACK.....RX1
PIN 8- PURPLE.....TX1

5-1 FIG.10

Interface	Used Voltage	Usage
MDB	34V DC	Power & *Data Comm. (BA↔Plug-in Board)

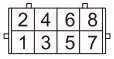
WEL-RBG01





TMT 2*5 BACK VIEW

PIN 1- ORANGE.....+12V
PIN 2- GREEN.....GND
PIN 3- PURPLE.....GND
PIN 6- YELLOW.....VCC
PIN 8- RED.....RX
PIN 10- BLUE.....TX



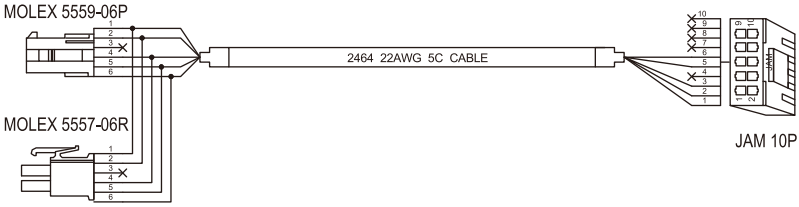
TMT 2*4
BACK VIEW

PIN 1- PURPLE.....GND
PIN 6- YELLOW.....VCC
PIN 7- RED.....RX
PIN 8- BLUE.....TX

5-1 FIG.11

Interface	Used Voltage	Usage
MDB	34V DC	Power & *Data Comm.(200cm) (MDB Box)

WEL-RBG07



MOLEX 5559-06P BACK VIEW

MOLEX 5557-06R BACK VIEW

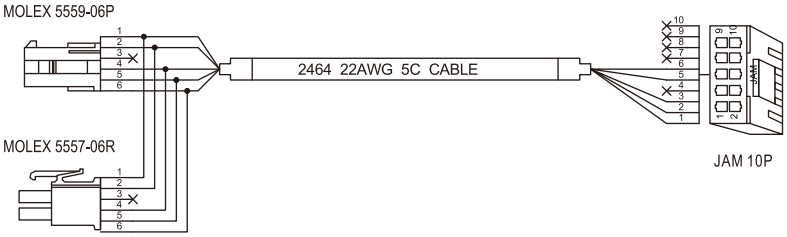
PIN 1- BLUE.....MDB+34VDC
PIN 2- YELLOW.....34VDC RETURN
PIN 4- ORANGE.....MDB_RX
PIN 5- RED.....MDB_TX
PIN 6- GREEN.....MDB_GND

PIN 1- YELLOW.....34VDC RETURN
PIN 2- BLUE.....MDB+34VDC
PIN 3- ORANGE.....MDB_RX
PIN 5- GREEN.....MDB_GND
PIN 6- RED.....MDB_TX

5-1 FIG.12

Interface	Used Voltage	Usage
MDB	34V DC	Power & *Data Comm.(35cm) (Plug-in Board↔VMC)

WEL-RBG08



MOLEX 5559-06P BACK VIEW

MOLEX 5557-6R BACK VIEW

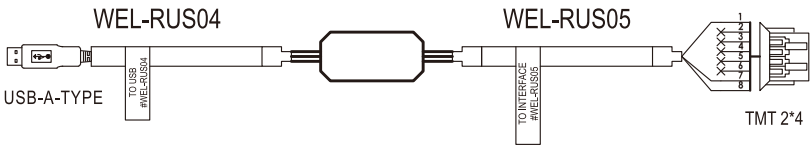
PIN 1- BLUE.....MDB+34VDC
PIN 2- YELLOW.....34VDC RETURN
PIN 4- ORANGE.....MDB_RX
PIN 5- RED.....MDB_TX
PIN 6- GREEN.....MDB_GND

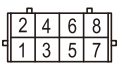
PIN 1- YELLOW.....34VDC RETURN
PIN 2- BLUE.....MDB+34VDC
PIN 3- ORANGE.....MDB_RX
PIN 5- GREEN.....MDB_GND
PIN 6- RED.....MDB_TX

5-1 FIG.13

Interface	Used Voltage	Usage
ccTalk	12V DC	*Data Comm.

3-BA-RL70#RS232-B





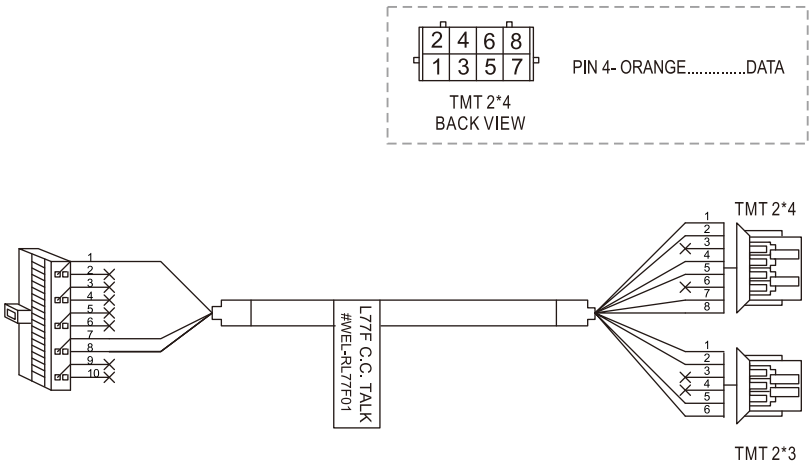
TMT 2*4 BACK VIEW

PIN 1- BLACK.....GND
PIN 7- RED.....RX11
PIN 8- YELLOW.....TX11

5-1 FIG.14

Interface	Used Voltage	Usage
ccTalk	12V DC	Power & *Data Comm.

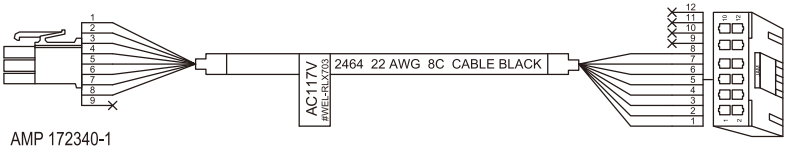
WEL-RL77F01



5-1 FIG.15

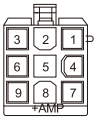
Interface	Used Voltage	Usage
Pulse	117V AC	Power & *Data Comm.

WEL-RLX703



AMP 172340-1

JS091-12F



AMP 172340-1 BACK VIEW

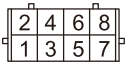
PIN 1- YELLOW.....NEUTRAL_INHIBIT
PIN 2- RED.....NEUTRAL_ENABLE
PIN 3- BROWN.....HOT_ENABLE
PIN 4- BLACK.....115VAC_HOT
PIN 5- GREEN.....EARTH_GROUND
PIN 6- WHITE.....115VAC_NEUTRAL
PIN 7- BLUE.....CREDIT_RELAY_NO
PIN 8- PURPLE.....CREDIT_RELAY_COM

PIN 1- WHITE.....115VAC_NEUTRAL
PIN 2- BLACK.....115VAC_HOT
PIN 3- BROWN.....HOT_ENABLE
PIN 4- GREEN.....EARTH_GROUND
PIN 5- YELLOW.....NEUTRAL_INHIBIT
PIN 6- RED.....NEUTRAL_ENABLE
PIN 7- BLUE.....CREDIT_RELAY_NO
PIN 8- PURPLE.....CREDIT_RELAY_COM

5-1 FIG.16

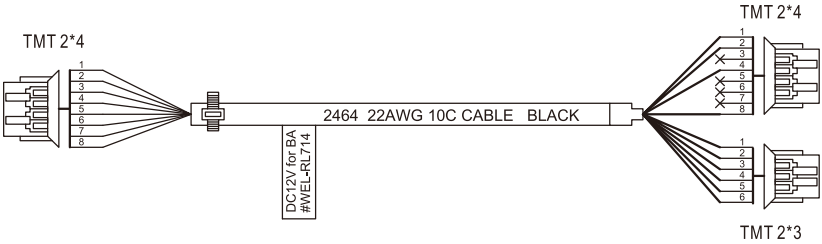
Interface	Used Voltage	Usage
Pulse	12V DC	Power & *Data Comm.

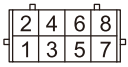
WEL-RL714



TMT 2*4
BACK VIEW

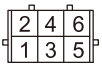
PIN 1- RED.....DC+12V
PIN 2- BLACK.....GND
PIN 3- YELLOW.....CREDIT_RELAY_NO
PIN 4- WHITE.....MDB_MASTER_TXD(ENABLE)
PIN 5- PURPLE.....RESERVE
PIN 6- GREEN.....INHIBIT+
PIN 7- BLUE.....INHIBIT-
PIN 8- BROWN.....CREDIT_RELAY_COM





TMT 2*4
BACK VIEW

PIN 1- GRAY.....RESERVE
PIN 2- ORANGE.....RESERVE
PIN 4- WHITE.....MDB_MASTER_TXD(ENABLE)
PIN 8- PURPLE.....RESERVE



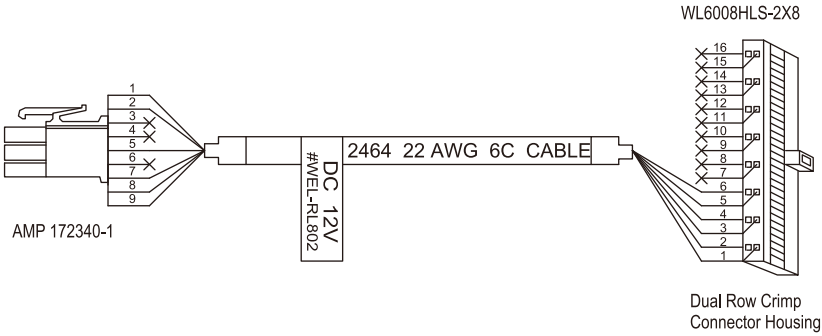
TMT 2*3
BACK VIEW

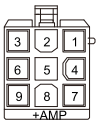
PIN 1- RED.....+12V
PIN 2- BLACK.....GND
PIN 3- GREEN.....INHIBIT+
PIN 4- BLUE.....INHIBIT-
PIN 5- YELLOW.....CREDIT_RELAY_NO
PIN 6- BROWN.....CREDIT_RELAY_COM

5-1 FIG.17

Interface	Used Voltage	Usage
Pulse	12V DC	Power & *Data Comm.
ccNet compatible	12V DC	Power
ICT(RS232)	12V DC	Power

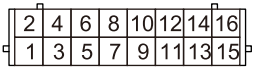
WEL-RL802





AMP 172340-1 BACK VIEW

PIN 1- YELLOW.....INHIBIT+
PIN 2- GREEN.....INHIBIT-
PIN 5- RED.....+12VDC
PIN 7- BLUE.....CREDIT RELAY NO
PIN 8- PURPLE.....CREDIT RELAY COM
PIN 9- BROWN.....GND



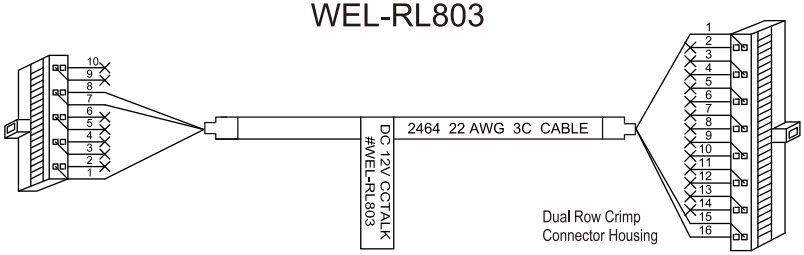
TMT 2*8 BACK VIEW

PIN 1- RED.....+12VDC
PIN 2- BROWN.....GND
PIN 3- BLUE.....CREDIT RELAY NO
PIN 4- PURPLE.....CREDIT RELAY COM
PIN 5- YELLOW.....INHIBIT+
PIN 6- GREEN.....INHIBIT-

5-1 FIG.18

Interface	Used Voltage	Usage
ccTalk	12V DC	Power & *Data Comm.

WEL-RL803



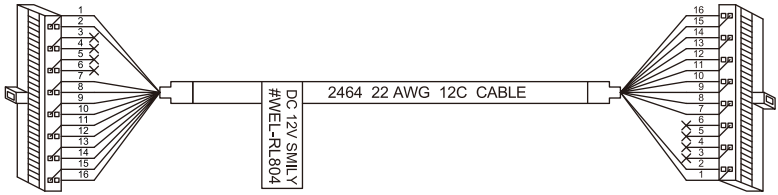
PIN 1- YELLOW.....DATA
PIN 7- RED.....+12VDC
PIN 8- BLACK.....GND

PIN 1- YELLOW.....DATA
PIN 15- RED.....+12VDC
PIN 16- BLACK.....GND

5-1 FIG.19

Interface	Used Voltage	Usage
Parallel	12V DC	Power & *Data Comm.

WEL-RL804



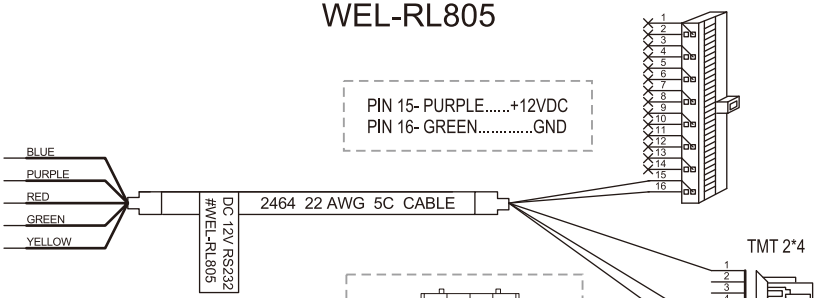
PIN 1- RED.....+12V
PIN 2- BLACK.....GND
PIN 7- YELLOW.....BUSY
PIN 8- GREEN.....ESCROW
PIN 9- BLUE.....INHIBIT 3
PIN 10- PURPLE.....INHIBIT 4
PIN 11- ORANGE.....INHIBIT 1
PIN 12- WHITE.....INHIBIT 2
PIN 13- BROWN.....VEND 3
PIN 14- GREEN LIGHT.....VEND 4
PIN 15- PINK.....VEND 1
PIN 16- BLUE LIGHT.....VEND 2

PIN 16- BLUE LIGHT.....VEND 2
PIN 15- PINK.....VEND 1
PIN 14- GREEN LIGHT.....VEND 4
PIN 13- BROWN.....VEND 3
PIN 12- WHITE.....INHIBIT 2
PIN 11- ORANGE.....INHIBIT 1
PIN 10- PURPLE.....INHIBIT 4
PIN 9- BLUE.....INHIBIT 3
PIN 8- GREEN.....ESCROW
PIN 7- YELLOW.....BUSY
PIN 2- BLACK.....GND
PIN 1- RED.....+12V

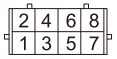
5-1 FIG.20

Interface	Used Voltage	Usage
RS232 A1	12V DC	Power & *Data Comm.

WEL-RL805



BLUE.....RX
PURPLE.....+12VDC
RED.....TX
GREEN.....GND
YELLOW.....GND



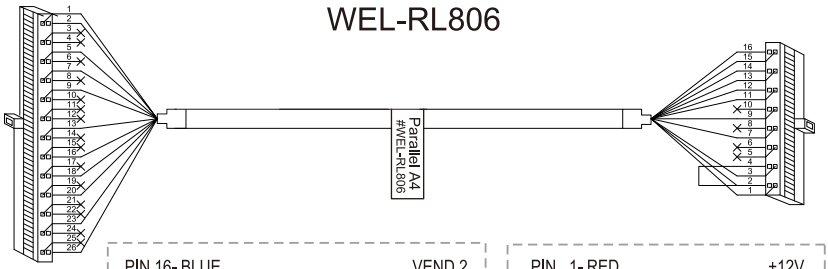
TMT 2*4 BACK VIEW

PIN 1- YELLOW.....GND
PIN 7- BLUE.....RX
PIN 8- RED.....TX

5-1 FIG.21

Interface	Used Voltage	Usage
Parallel A4	12V DC	Power & *Data Comm.

WEL-RL806



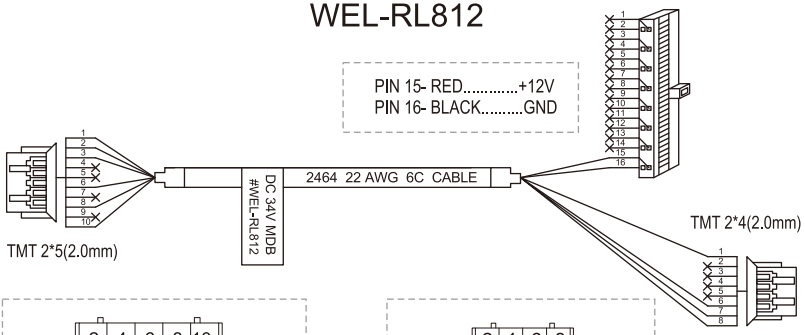
PIN 16- BLUE.....VEND 2
PIN 15- LIGHT BLUE.....VEND 1
PIN 14- PURPLE.....VEND 4
PIN 13- LIGHT GREEN.....VEND 3
PIN 12- GREEN.....INHIB 2
PIN 11- YELLOW.....INHIB 1
PIN 9- ORANGE.....INHIB 3
PIN 7- BROWN.....BUSY
PIN 3- WHITE.....Pulse Credit (O.N.)
PIN 2- BLACK.....GND Pulse Credit(common)
PIN 1- RED.....+12V

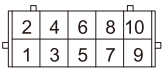
PIN 1- RED.....+12V
PIN 2- BLACK.....GND
PIN 5- LIGHT BLUE.....VEND 1
PIN 7- BLUE.....VEND 2
PIN 9- LIGHT GREEN.....VEND 3
PIN 13- PURPLE.....ABN
PIN 16- YELLOW.....INHIBIT
PIN 18- GREEN.....ACK
PIN 20- ORANGE.....REJ
PIN 23- BROWN.....STKF
PIN 26- WHITE.....PRES

5-1 FIG.22

Interface	Used Voltage	Usage
MDB	34V DC	Power & *Data Comm. (BA↔Plug-in Board)

WEL-RL812





TMT 2*5 BACK VIEW

PIN 1- RED.....+12V
PIN 2- BLACK.....GND
PIN 3- PURPLE.....GND
PIN 6- YELLOW.....VCC
PIN 8- GREEN.....RX
PIN 10- BLUE.....TX

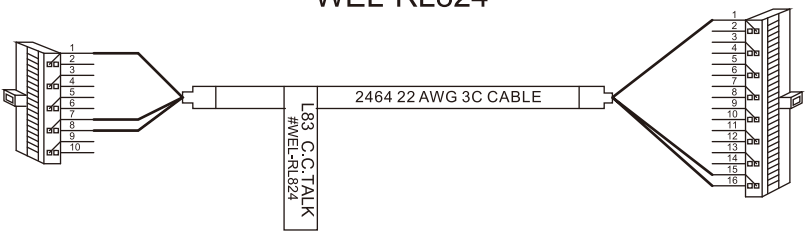
TMT 2*4 BACK VIEW

PIN 1- BLACK.....GND
PIN 6- YELLOW.....VCC
PIN 7- GREEN.....RX
PIN 8- BLUE.....TX

5-1 FIG.23

Interface	Used Voltage	Usage
ccTalk	12V DC	Power & *Data Comm.

WEL-RL824



PIN 1- YELLOW.....DATA
PIN 7- RED.....+12VDC
PIN 8- BLACK.....GND

PIN 1- YELLOW.....DATA
PIN 15- RED.....+12VDC
PIN 16- BLACK.....GND

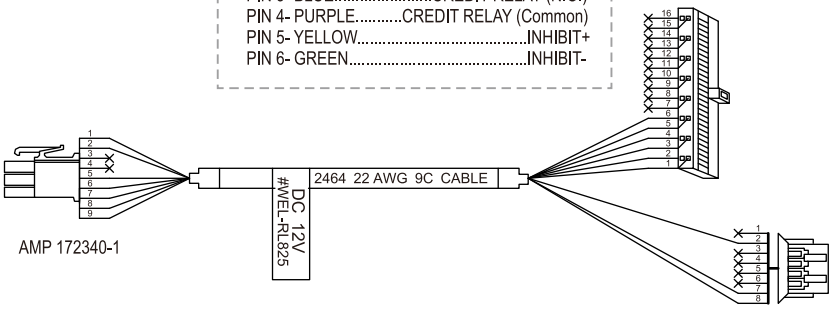
5-1 FIG.24

Interface	Used Voltage	Usage
Pulse(Out of service)	12V DC	Power & *Data Comm.

WEL-RL825

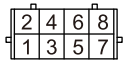
PIN 1- RED.....12VDC HOT (POWER)
PIN 2- BROWN.....Ground (Power)
PIN 3- BLUE.....CREDIT RELAY (N.O.)
PIN 4- PURPLE.....CREDIT RELAY (Common)
PIN 5- YELLOW.....INHIBIT+
PIN 6- GREEN.....INHIBIT-

Dual Row Crimp
Connector Housing



AMP 172340-1 BACK VIEW

PIN 1- YELLOW.....INHIBIT+
PIN 2- GREEN.....INHIBIT-
PIN 5- RED.....12VDC HOT (POWER)
PIN 6- ORANGE.....OUT OF SERVICE
PIN 7- BLUE.....CREDIT RELAY (N.O.)
PIN 8- PURPLE.....CREDIT RELAY (Common)
PIN 9- BROWN.....Ground (Power)



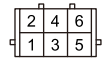
TMT 2*4 BACK VIEW

PIN 2- BLACK.....Reserved
PIN 7- WHITE.....Reserved
PIN 8- ORANGE.....OUT OF SERVICE

5-1 FIG.25

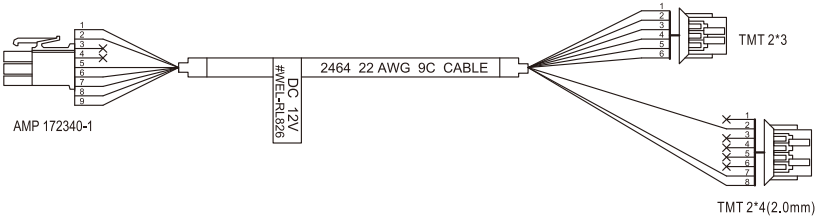
Interface	Used Voltage	Usage
Pulse(Out of service)	12V DC	Power & *Data Comm.

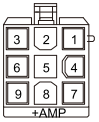
WEL-RL826



TMT 2*3 BACK VIEW

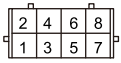
PIN 1- RED.....12VDC HOT (POWER)
PIN 2- BROWN.....Ground (Power)
PIN 3- YELLOW.....INHIBIT+
PIN 4- GREEN.....INHIBIT-
PIN 5- BLUE.....CREDIT RELAY (N.O.)
PIN 6- PURPLE.....CREDIT RELAY (Common)





AMP 172340-1
BACK VIEW

PIN 1- YELLOW.....INHIBIT+
PIN 2- GREEN.....INHIBIT-
PIN 5- RED.....12VDC HOT (POWER)
PIN 6- ORANGE.....OUT OF SERVICE
PIN 7- BLUE.....CREDIT RELAY (N.O.)
PIN 8- PURPLE.....CREDIT RELAY (Common)
PIN 9- BROWN.....Ground (Power)



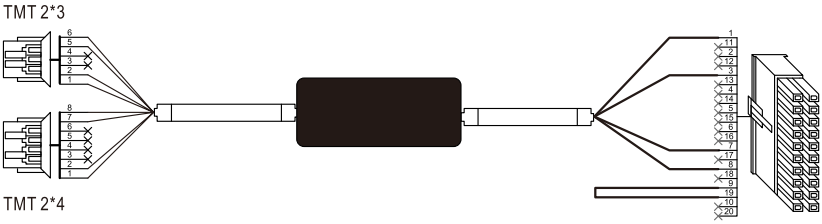
TMT 2*4 BACK VIEW

PIN 2- BLACK.....Reserved
PIN 7- WHITE.....Reserved
PIN 8- ORANGE.....OUT OF SERVICE

5-1 FIG.26

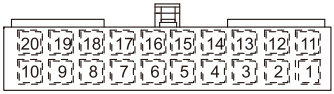
Interface	Used Voltage	Usage
RS232 A0	24V DC	Power & *Data Comm.
V2.2	24V DC	Power & *Data Comm.

3BA-RAA318-NX-0X



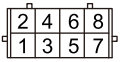
TMT 2*3 BACK VIEW

PIN 1- RED.....+12V
PIN 2- BLACK.....GND
PIN 5- GREEN.....Reserved
PIN 6- WHITE.....Reserved



BACK VIEW

PIN 1- RED.....VIN
PIN 3- BLUE.....RXD
PIN 7- BROWN.....TXD
PIN 8- BLACK.....GND
PIN 9 & 19- YELLOW.....Short circuit



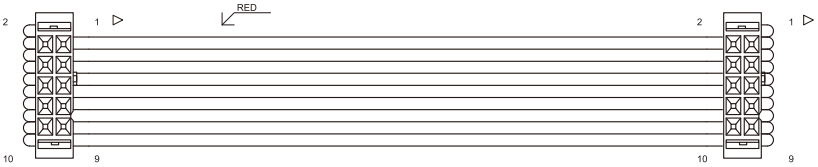
TMT 2*4 BACK VIEW

PIN 1- BLUE.....Reserved
PIN 2- PURPLE.....Reserved
PIN 7- BROWN.....RX11
PIN 8- YELLOW.....RX11

5-1 FIG. 27

Interface	Used Voltage	Usage
ccTalk	12V DC	Extension Wire for WEL-RL803

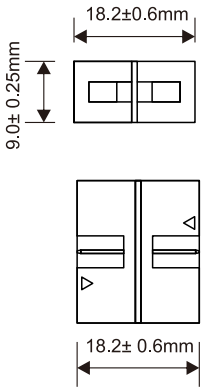
IDC-RA10400



IDC SOCKET 3131-10P(2.54mm)

IDC SOCKET 3131-10P(2.54mm)

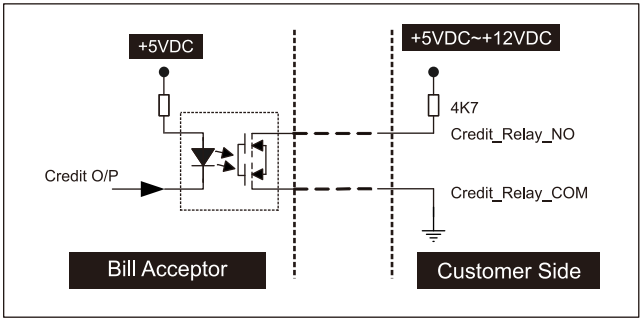
CNT-R7025

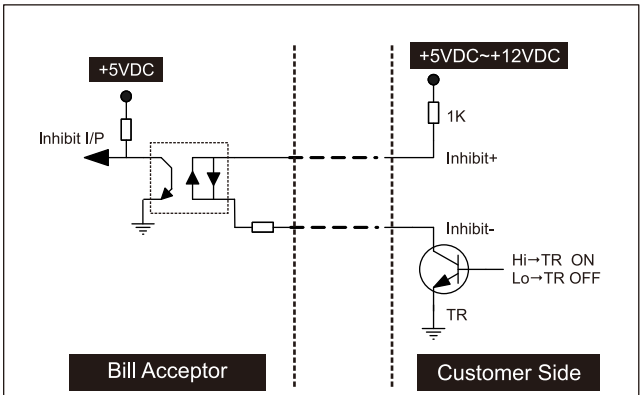


5-1-1. I/O Circuit

Pulse Interface.

5-1-1 FIG. 01



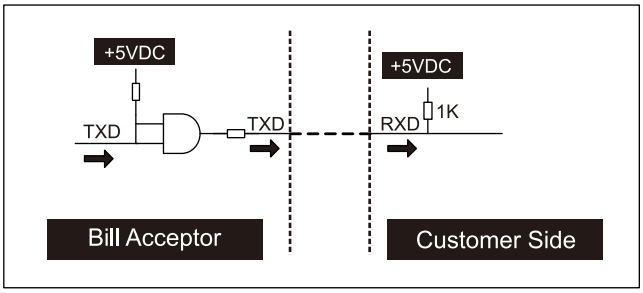


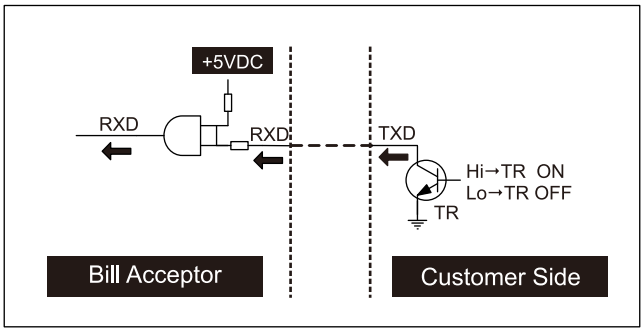
BA Status	*DIP SW Setting		Control Signal
Inhibit	Inhibit Active	Low	Low
		High	High
Enable	Inhibit Active	Low	High
		High	Low

**Note: Please refer to DIP Switch Setting Guide for detail.*

RS232, RS232 A0, RS232 A1, ccNet compatible Interface.

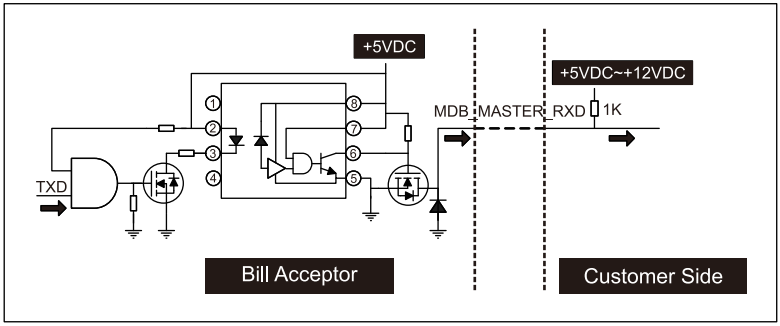
5-1-1 FIG. 02

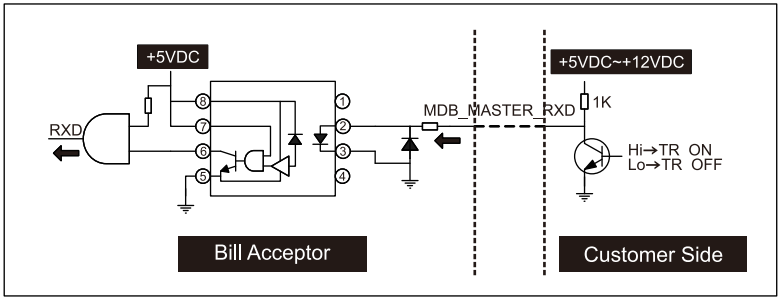




MDB Interface.

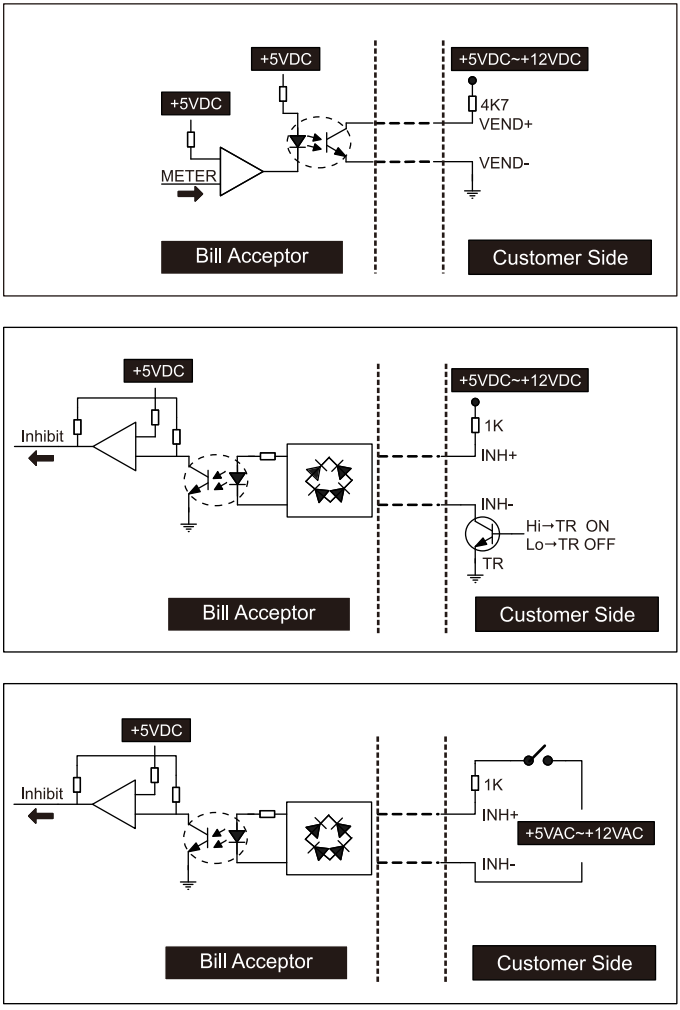
5-1-1 FIG. 03





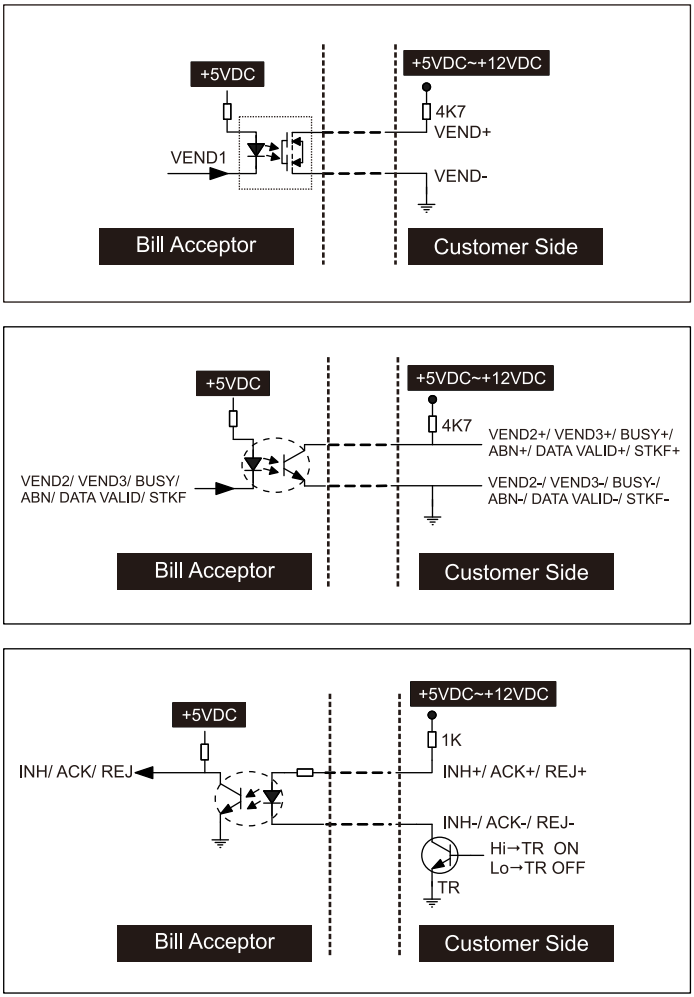
Parallel A1 Interface.

5-1-1 FIG. 04



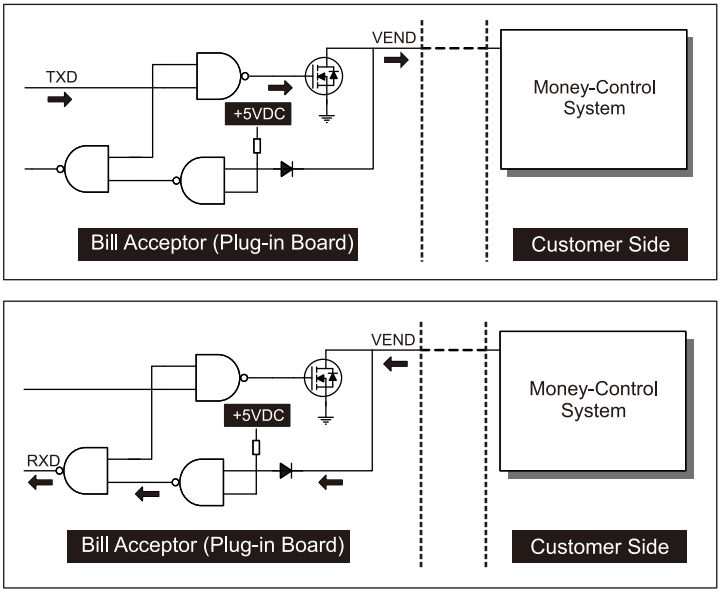
Parallel Interface.

5-1-1 FIG. 05



ccTalk Interface.

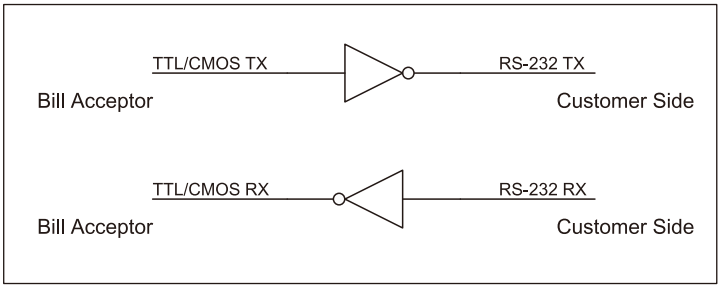
5-1-1 FIG. 06



L70T-P5, L77T-P5:

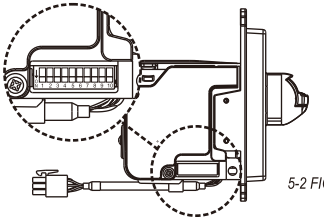
RS232 A0 & V2.2 Interface.

5-1-1 FIG. 07

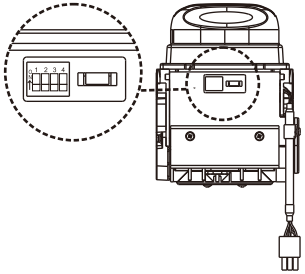


5-2. DIP Switch Setting

There is one serial DIP switches which are set on the side of L Series*(as FIG.01).* 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 FIG.02).*
Please refer to " L Series DIP Switch Setting Guide " in the package for more details.



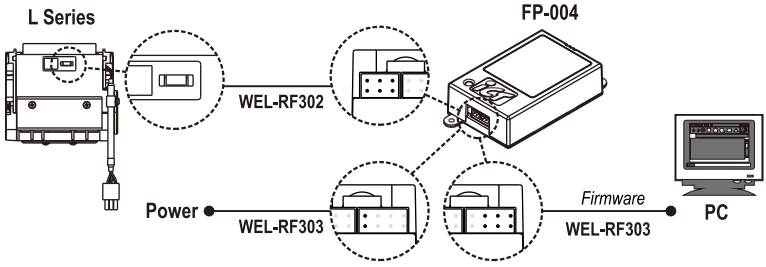
5-2 FIG. 01



5-2 FIG. 02

5-3. Software Download and Upgrade

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



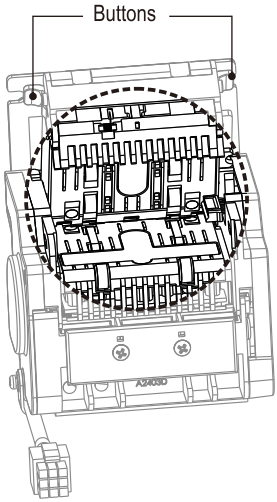
Turn on Bill Acceptor after connecting.

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. Press buttons to open LED assembly.
3. Use soft cloth or cotton swab to clean internal parts and bill path.



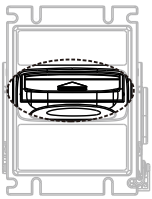
6 FIG. 01

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

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

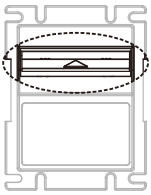
7. Troubleshooting

Bezel LED Errors



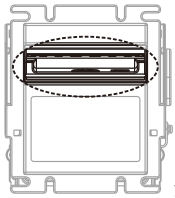
7 FIG. 01

L70#



7 FIG. 02

L77F



7 FIG. 03

L83

7 TABLE 01

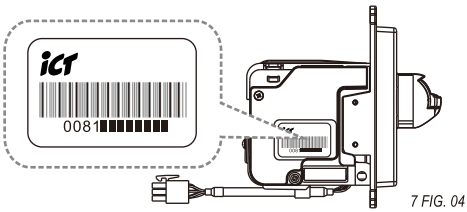
LED Flashes		Status	Corrective Actions
Red	Green		
	1	White Card Calibration	Please calibrate with ICT white calibration card.
1		Bill jammed.	Open bill path unit and then remove the jammed bill.
2		Disable.	Inspect the right DIP switch setting.
3		Recognition sensor module error.	Inspect the foreign objects on sensor or bill path and clean.
3+2		Hook sensor error.	Inspect the foreign objects on security hook and clean.
3+4		Fish sensor error	Inspect the foreign objects on sensor or bill path and clean.
4		A stringing attempt has detected.	Inspect the foreign objects on sensor or bill path and clean.
5		Bill box has been removed. (L83 with bill box only)	Replace the bill box.
6		Stacker error or stacker full. (for modules with bill box only).	Empty the bill box.
7		Motor error.	Inspect the 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/ L77F/ L70F/ L70T/ L77T
- Serial Number: According to last 8 digits of production serial number.

Default: 12345678

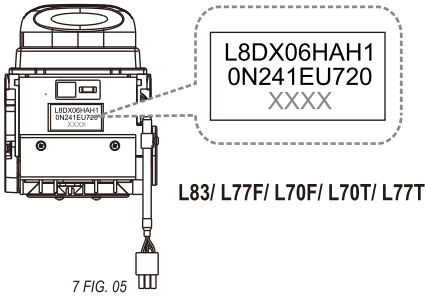


7 FIG. 04

L83/ L77F/ L70F/ L70T/ L77T

- Software Revision: According to the software revision number.

Ex. L8DX06HAH10N241EU720



L83/ L77F/ L70F/ L70T/ L77T

7 FIG. 05

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

Please contact ICT for more information.

ICT Taiwan

International Currency Technologies Corporation

No.28, Ln. 15, Sec. 6, Minquan E. Rd., Neihu Dist., Taipei City 114, Taiwan

sales@ictgroup.com.tw (For Sales)

fae@ictgroup.com.tw (For Customer Service)

Website: www.ictgroup.com.tw

V. 32.0 Part Number: H49085-R