# CR-2020 SERIES CASH DRAWER USER'S MANUAL



Rev. A0

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This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions manual, may cause interference to radio communications. It has been tested and found to comply with limits for a Class A digital device pursuant to subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures to correct the interference.

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P/N: 19230901010 Part 1

# **CAUTION**

Before start to place and use the CR-2020 series cash drawer, please notice that to leave at least 10mm spare space in the back of cash drawer in order to make sure the cover open smoothly.



10 mm **→** 

# **BRIEF INTRODUCTION**

#### INTRODUCTION

This specification defines the CR-2020 series of Posiflex products. This product series is a flip-top type cash drawer. This series provides Aluminum alloy die cast base and wear proof stainless steel top surface with zero externally accessible screw.

#### **FEATURES**

- Flip-top design
- Rugged design with no screw to be accessed from outside
- Contemporary style
- Advanced electronics that extends the **MTBF** (Mean Time Between Failure)
- Three-position lock for maximum cash security
- Check slot for non-cash or large-bill transaction without opening drawer
- 6 fixed bill compartments
- 8 coin compartments. Partially adjustable in size and number by use of coin compartment separator
- Provided with various interface selection including direct (printer) drive, dedicated RS232, USB
- Optional additional removable tray. Also optional tray cover with lock
- WEPOS certified
- 2 color choices: Ivory and Black

# MODEL NUMBER & INFERFACE

<b>Model Number</b>	Interface	<b>Security Code</b>	Power / Source		
CR-2020	Printer drive	N. A.	12/24 V Pulse /		
		IN. A.	Printer		
CR-2024	Dedicated RS232 serial	N. A.	12VAC / Adaptor		
CR-2025	USB	USB PID	12VAC / Adaptor		

### **CARTON CONTENTS**

- 1. Cash drawer pre-assembled.
- 2. User's manual.
- 3. Separators of coin compartment: 5 pcs.
- 4. Key 2pcs: There is a key serial No. sticker on the cash drawer bottom plate. If user lost the key he/she can order the key according to this number.
- 5. Signal Cable depend on model
  - a). For CR-2020: The standard signal cable is 21863018010 which has a 8 pin plug at one end to connect to the cash drawer and a 6 pin plug at the other end to connect to the POS system/printer. This cable serves for most popularly used POS equipment such as all Posiflex POS terminals, all Posiflex POS printers, most Epson POS printers, most Star POS printers and all other compatibles. The user may cut the 6 pin end and assemble this free end according to his POS printer specification if the POS printer used utilizes different connection. The cable connection on the wires is as below:

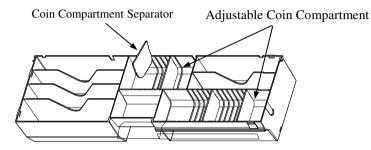
Wire color	RJ45	Function
Red	Pin 1	Drawer open sense
Blue	Pin 2	Drawer open sense return
Green	Pin 7	+ 24V to solenoid
Yellow	Pin 8	Drawer kick pulse

- b). For CR-2024: Serial signal cable (RS232 conversion cable 21863259900/21863159900).
- c). For CR-2025: USB cable (USB Cable 21863250800/ 21863150800)
- 6. Power Source depend on model
  - a). For CR-2020: not applicable
  - b). For CR-2024: Power adapter 12VAC 1.5A
  - c). For CR-2025: Power adapter 12VAC 1.5A

# **INSTALLATION**

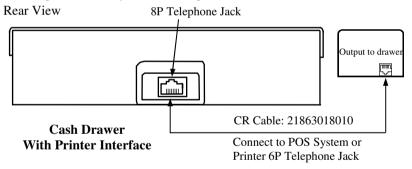
# Coin compartment adjust:

The coin compartment separator can be removed from and inserted till click into the grooves in adjustable coin compartment zones for appropriate compartment size.



#### CR-2020:

1). Connect the 8 pin plug of CR cable to cash drawer and the 6 pin plug to CR port of **POS** system or POS printer as shown below:



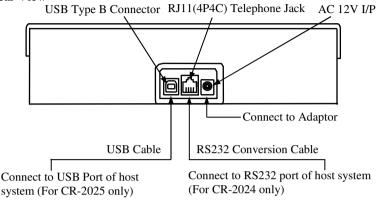
2). Turn the keylock to standby position.

### CR-2024:

- 1). Connect the 4 pin RJ11 plug of RS232 conversion cable to the RJ 11 jack at the rear side of CR-2024 and connect the DB 9 pin connector to RS232 port of host (PC or POS) system as shown in drawing below.
- Check the specification of power adaptor on its nameplate. Insert the
  power adaptor into the correct power outlet. Insert the output plug to
  the power jack at rear side of CR-2024 to supply power for drawer
  kickout.

- 3). Turn the keylock to standby position.
- 4). Set the communication protocol of the RS232 port in host system to use baud rate of either 9600 bps or 19200 bps.

#### Rear View



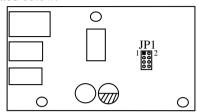
# Cash Drawer With RS232 & USB Interface

#### CR-2025:

- 1). The drawer number (PID) is default to be 7. Refer to the guidance for "Jumper Setting Change" below if the PID has to be changed.
- Connect USB type B connector (more or less square one) of USB cable to the USB connector at rear side of CR-2025 and the type A connector end to USB port of host (PC or POS) system as shown in drawing above.
- Check the specification of power adaptor on its nameplate. Insert the
  power adaptor into the correct power outlet. Insert the output plug to
  the power jack at rear side of CR-2025 to supply power for drawer
  kickout.
- 4). Turn the keylock to standby position.
- 5). Install the USB utility driver from Posiflex Product Information CD with Posiflex POS system or visit our web sites <a href="http://www.posiflex.com">http://www.posiflex.com</a> or <a href="http://www.posiflexusa.com">http://www.posiflexusa.com</a> for latest updates.

# **Jumper Setting Change:**

1). Use key to open the cash drawer. Take out the removable tray and you can find a control board in the bottom. The lay out of the control board is illustrated below.



2). USB PID select: jumpers over pins 3-4, 5-6 or 7-8 define a drawer number for the cash drawer as in below table so that this cash drawer is going to respond accordingly in USB communication. Please note that within each system there should never be any 2 USB interface cash drawers carrying the same drawer number.

JP1 pins	0	1	2	3	4	5	6	7
3-4	Short	Short	Short	Short	Open	Open	Open	Open
5-6	Short	Short	Open	Open	Short	Short	Open	Open
7-8	Short	Open	Short	Open	Short	Open	Short	Open

# **UPOS** and **WEPOS** driver application:

Please first find in Posiflex Product Information CDROM or download from Posiflex web sites for UPOS driver setup. In this application CR-2024 responds to Open Drawer command only; CR-2020/2024 are compliant to UPOS version 1.7 and CR-2025 is compliant to UPOS version 1.8 and is also WEPOS certified.

# **SPECIFICATIONS**

**MECHANICAL:** Dimensions:

481.5 (W) x 174.9 (D) x 101.5 (H) mm

19.0" (W) x 6.9" (D) x 4.0" (H)

Removable tray with a lock-on cover (option)

#### **ELECTRICAL:**

#### Power Source

Solenoid Drive (for CR-2020)

Pulse Amplitude 12 to 24 VDC Pulse Width 100 to 250 msec 10% max

Pulse Duty Cycle

Max. Current Consumption 0.75A @ 12 VDC / 1A @ 24 VDC

AC Adaptor (for CR-2024/2025)

Input Voltage 120 VAC ± 10 % / 240 VAC ± 10 %

@50 -60 Hz

Output Voltage 12 VAC at 1.5 A

#### Interface

Direct Drive: CR-2020

Serial (RS232C)

CR-2024

Baud rate 9600: 19200

Parity none Data Bits Stop Bits USB (1.1): CR-2025

# **Security Code**

CR-2025 USB PID

#### **Drawer Open Sense**

CR-2020 Drawer open sense circuit shorts when drawer open Pin 9 in DB9 connector goes high when drawer open CR-2024

CR-2025 Through USB driver

# **KEYLOCK OPERATION**



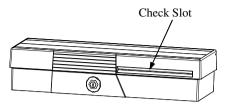
Lock ( $\bigcap$ ): Physically lock the drawer.

Open ( $\bigcap$ ): Open the drawer by the key.

Standby ( ): Automatically open the drawer by POS printer or POS system or interface

signal control

# **STRUCTURE**



# Inside CR-2020/2024/2025

