

BR-08-40SS Note Recycler

Technical Manual



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1. Overview

BR-08-40SS note recycler is a compact and flexible core unit capable of single-note recognition, deposit, and recycling-based dispensing. It offers high reliability, ease of use, and ease of maintenance. By recycling received banknotes for change dispensing, it reduces idle cash within automated machines, cuts down the time spent on replenishment, counting, and cashbox replacement, and minimizes risks of cash exposure and statistical losses. At the same time, it saves downtime for settlement and cash transport, thereby improving overall operational efficiency.

Main application scenarios:

Ideal for customer automatic payment terminal; self-checkout machine; automatic payment and change devices for parking lot, retail store, gas station, bar; automatic ticketing vending machine; gaming machines; cash automation machine at point-of-sale positions; self-service kiosk and vending machine.

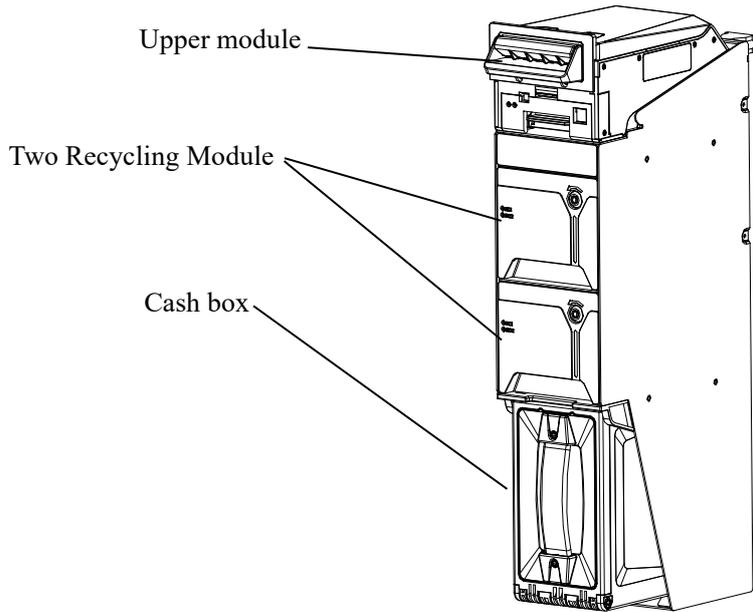
2. Model and meaning

BA-08-40SS: Note recycler, equipped with 2 recycling modules.

3. Size

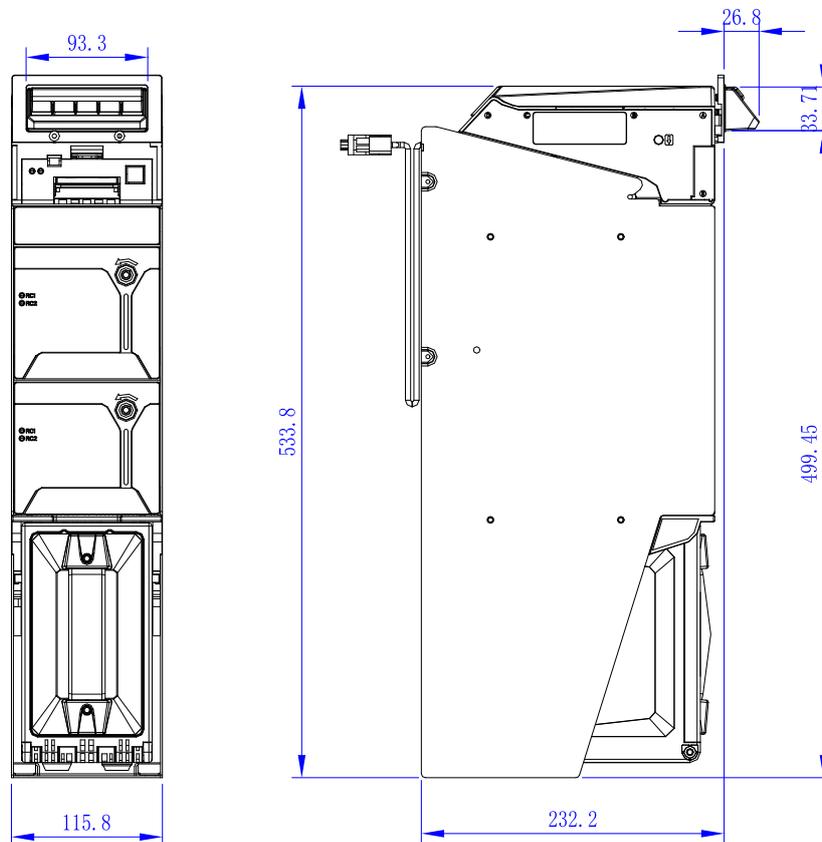
3.1 Module composition

BR-08-40SS banknote recycling mechanism consists of an upper module, two recycling modules, and a cash box, as shown in the following figure:



3.2 Dimensions

Dimensions of BR-08-40SS note recycler: 232.2mm long x 115.8mm wide x 533.8mm high (unit: mm)



4. Features

- Single-note insertion with four-way orientation, enabling fast deposits
- Proven banknote recognition and anti-counterfeiting technology
- Compact and secure multi-currency banknote acceptance and recognition system
- Supports recycling of up to four different denominations
- Drum-type banknote recycling technology for stable and reliable performance
- Easy maintenance with a flip-open channel design for convenient routine servicing and troubleshooting

5. Features of each module

Upper Module:

- Universal entry indicator lights for user convenience
- Supports dispensing change with up to 15 banknotes
- Fast banknote acceptance with an average processing time of approximately 2.5s/note
- Banknote alignment mechanism ensures smooth note feeding
- Banknote inlet designed to prevent coin insertion; ergonomic banknote insertion design
- Industrial-grade electronic components for reliable operation under extreme temperatures and high humidity
- Triple anti-counterfeiting technology with up to 100,000 recognition scan points
- Multi-spectral full-image scanning (CIS technology) combined with multi-channel magnetic signal detection for high-security banknote authentication

Recycling Module:

- Supports recycling of up to 4 different denominations with a total capacity of up to 140 notes, with full monitoring of banknote storage status;
- **Denomination configuration** can be set via software according to application needs;
- One recycling module can be configured as a escrow for note return;
- Reliable drum-type recycling technology enables a more compact product design;
- Intelligent sorting of received notes ensures that unsuitable notes for change are excluded from recycling, reducing jam rates and improving user satisfaction;

Cashbox:

- Made of engineering plastic for durability and light weight, equipped with a high-security anti-theft lock;
- Removable independent cashbox with no electrical connections, ensuring high reliability;

6. Technical parameters

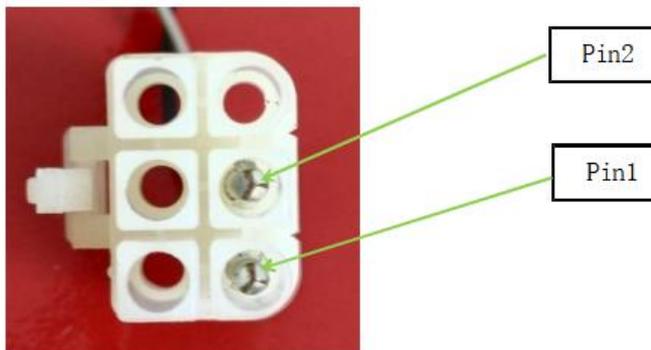
Item		Performance / Technical Specifications
Banknote Insertion	Insertion Method	Single-note, vertical insertion
	Orientation	No restriction
Recognition	Supported Currencies	Up to 100 different denominations (single or multiple countries)
	Material	Paper, polymer (plastic substrate)
	Genuine Note Acceptance Rate	≥99%
	Banknote Size	Length: 120–168 mm; Width: 60–85 mm
Detection Methods	Optical	Full-image CIS sensor
	Magnetic	Multi-channel magnetic sensors
Speed Recognition	Acceptance Speed	Approx. 2.5 seconds/note
	Dispensing Speed	Approx. 1.5 notes/second
Capacity	Recycling Drums	4
	Recycling Drum Capacity	Total 140 notes (35 notes per drum)
	Deposit Cashbox	1000 notes ± 50 notes
	Maximum Notes Dispense/Transaction	Up to 15 notes
MCBF (under standard conditions)		300,000 notes
Environment	Operating Temperature	0°C – 50°C
	Storage Temperature	-20°C – 60°C
	Humidity	20%RH – 90%RH (non-condensing)
Upgrade	Upgrade Method	Supports online firmware/software updates
Weight	Entire Unit	10 kg
	Cashbox	1.2 kg

Electromagnetic compatibility(EMC)	Comply with relevant national standards GB/T 17626
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7. Electrical technical parameters

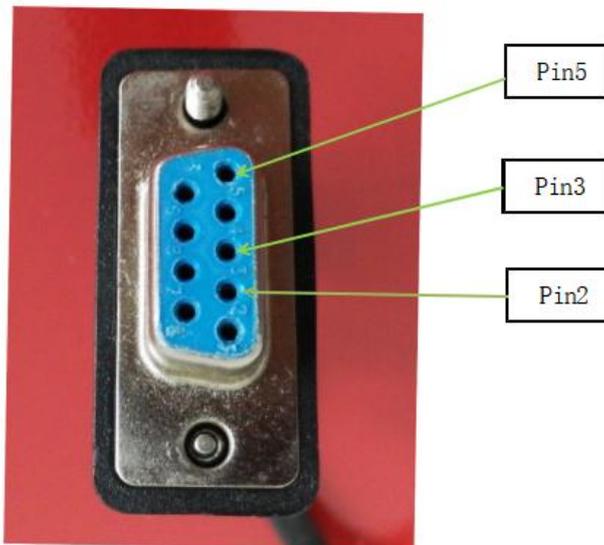
Item	Specifications
Power interface	24V±10% +5A
USB port	USB2.0 Device Type A plug (spare)
UART serial port	RS232: three-wire (RXD, TXD, GND) Baud rate: 19200 bps Inspection method: No verification Communication parameters: Data bits: 8 bits, Start bit: 1 bit, Stop bit: 1 bit

Power interface:



管脚号	电气特性
Pin1	+24V
Pin2	GND

UART serial port:



管脚号	电气特性
Pin2	RXD
Pin3	TXD
Pin5	GND