

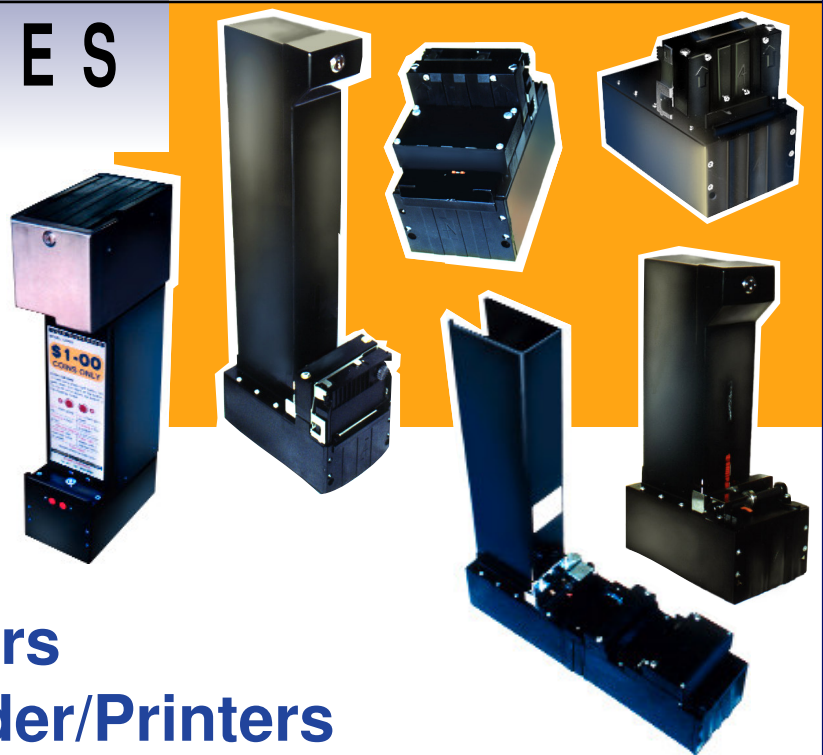


ABBERFIELD

INDUSTRIES

PTY LTD ABN 61 000 112 569

TICKET & COIN EQUIPMENT MODULES



Dispensers
Dispenser/Printers
Dispenser/Encoder/Printers
Printers
Encoder Printers

Modular Technology
*Interchangeable physically,
electrically & in software*

ABBERFIELD INDUSTRIES PTY LTD

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TICKET/CARD DISPENSER SPECIFICATION

MODEL TD40

OPERATION

- Dispensed cards or tickets under internal or external control.
- Incorporates optical sold out detectors and ticket dispensed confirmation detectors.
- Intelligent operation, retries to dispense if first unsuccessful.

TICKET STOCK

- Pre-cut flat stock, ISO (credit card) size.
- Adjustable gauge roller accepts different thicknesses, typically 0.18mm to 1mm, others possible.
- Capacity of standard chute 1250 tickets of 0.23mm card.
- Operates on paper, plastic paper laminated or plastic tickets.
- Operates down to the last ticket.
- Ticket top weight not needed.
- Tickets secured by locked chute cover. Open chute model available.
- Tickets are front loaded but rear loaded versions are available.

CONCEPT

- Plug in "black box" with no exposed wires or mechanics.
- Networked units require 12 volt supply and 2 data lines.
- Supply voltage unregulated 12V D.C.
- Connects via self aligning gold plated contacts - plug in the module - not the wiring.

COMMUNICATIONS

- High speed multimaster serial bus.
- Interface modules for RS232, RS485 and Parallel printer port available on request.
- Simple switch dispense mode.



**Short
Dispenser**



**Long
Dispenser**

PHYSICAL

- Standard physical size allows interchanging with other ticketing modules.
- Dimpled locating feet positions the dispenser in support frame.
- Provided with integral security screws to optionally attach dispenser to a purpose built chassis bracket.
- Security screw heads and drivers to various configuration.

Height: 430mm

Depth: 157mm

Width: 94mm

Weight: 2.6kg

Note: Height dependant on chute design.

TICKET/CARD DISPENSER SPECIFICATION

MODEL TD41

OPERATION

- Dispensed cards or tickets from continuous feed source
- Optical stock detection
- Optical ticket parking sensor
- Manual tearing of perforated ticket
- Dispenser mechanism optical dress facia

TICKET STOCK

- Continuous feed from roller or fan fold stock
- Width normally 54mm (credit card width)
- Can be up to 60mm wide
- Length to customers request

CONCEPT

- Motor driven with card / ticket sold out sensor and parking sensor
- Driven by external control

ELECTRICAL

- Motor 12V DC
- Infrared optics

PHYSICAL

Height: 160mm Weight: 0.7kg
 Width: 90mm
 Depth: 35mm (without ticket /card guide)
 145mm (with ticket /card guide)

OPTIONAL DRESS FACIA

Height: 175mm Depth: 40mm
 Width: 130mm

TICKET / CARD DISPENSER PRINTER SPECIFICATION

MODEL TDP40

OPERATION

- Dispenses cards or tickets under internal or external control and prints text or graphics on tickets issued.
- Incorporates optical sold out detectors and ticket dispensed confirmation detectors.
- Intelligent operation, retries to dispense if first unsuccessful.

TICKET STOCK

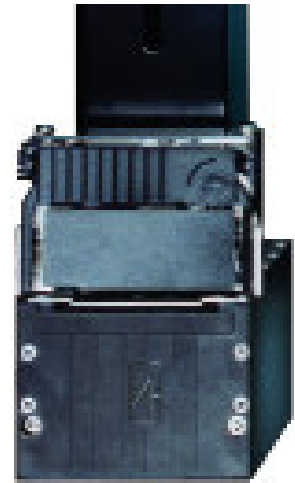
- Pre-cut flat stock, ISO (credit card) size.
- Adjustable gauge roller accepts different thicknesses, typically 0.18mm to 1mm, others possible.
- Capacity of standard chute 1250 tickets of 0.23mm card.
- Operates on paper, plastic paper laminated or plastic tickets.
- Operates down to the last ticket.
- Ticket top weight not needed.
- Tickets secured by locked chute cover. Open chute model available.
- Tickets are front loaded but rear loaded versions are available.

CONCEPT

- Plug in "black box" with no exposed wires or mechanics.
- Networked units require 12 volt supply and 2 data lines.
- Supply voltage unregulated 12V D.C.
- Connects via self aligning gold plated contacts - plug in the module - not the wiring.

COMMUNICATION

- High speed multi master serial bus allows text or graphics printing and status details.
- Interface modules for RS232, RS485 and
- Parallel printer port



- available on request.
- Simple switch dispense mode.
- Pre-programmed "canned" ticket print message option.

PRINTER

- Epson model M186 dot matrix with continuous ribbon cartridge.
- Printer controller is an Abberfield proprietary and allows for variable text or graphics printing.

PHYSICAL

- Standard physical size allows interchanging with other ticketing modules.
- Dimpled locating feet positions the dispenser in support frame.
- Provided with integral security screws to optionally attach dispenser to a purpose built chassis bracket.
- Security screw heads and drivers to various configuration.

Height: 430mm

Depth: 157mm

Width: 94mm

Weight: 2.6kg

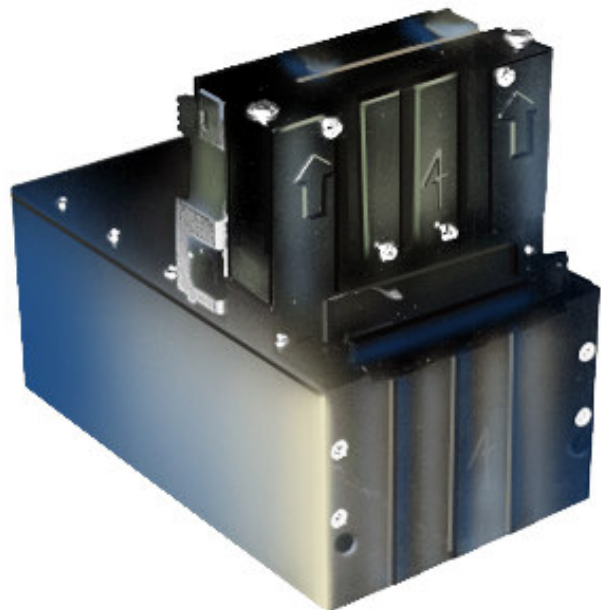
Note: Height dependant on chute design.

TICKET / CARD PRINTER SPECIFICATION

MODEL TP40

OPERATION

Tickets inserted will be drawn in, printed on and returned.



TICKET STOCK

- Pre-cut flat stock card ISO (credit card size).
- Different thicknesses, accepted 0.18mm to 1mm, others possible.
- Operates on paper, plastic paper laminated or plastic tickets.

CONCEPT

- Plug in "black box" with no exposed wires or mechanics.
- Networked units require 12 volt supply and 2 data lines.
- Supply voltage unregulated 12V D.C.
- Connects via self aligning gold plated contacts - plug in the module - not the wiring.

COMMUNICATIONS

- High speed multimaster serial bus.
- Interface modules for RS232, RS485 and Parallel printer port available on request.

PRINTER

- Epson model M186 dot matrix with continuous ribbon cartridge.
- Printer controller is an Abberfield proprietary and allows for variable text or graphics printing.

PHYSICAL

- Standard physical size allows interchanging with other ticketing modules.
- Dimpled locating feet positions the dispenser in support frame.
- Provided with integral security screws to optionally attach dispenser to a purpose built chassis bracket.
- Security screw heads and drivers to various configuration.

Height: 130mm
Width: 94mm

Depth: 157mm
Weight : 1kg

TICKET / CARD ENCODER SPECIFICATION

MODEL TE40

OPERATION

- Motorised magnetic card reader.
- Accepts tickets, reads, re-encodes, verifies and returns card to operator.
- Optional ticket capture mode.

TICKET STOCK

- ISO (credit card).
- Accepts different thicknesses from 0.18 to 1mm.
- Operates on paper, plastic paper laminated or plastic tickets.

CONCEPT

- Plug in "black box" with no exposed wires or mechanics.
- Networked units require 12 volt supply and 2 data lines.
- Supply voltage unregulated 12V D.C.
- Connects via self aligning gold plated contacts - plug in the module - not the wiring.

COMMUNICATION

- High speed multimaster serial bus.
- Interface modules for RS232, RS485 and Parallel printer port available on request.

CARD ENCODER

- Fitted with multiple reading heads may allow card insertion in any orientation.
- Centre stripe or ISO stripe cards accepted.



- Standard hardware accepts high coercivity or low coercivity cards.
- Normal heads allow for 1,000,000 operations. Ceramic coated heads have a greater than 5,000,000 operations life.

PHYSICAL

- Standard physical size allows interchanging with other ticketing modules.
- Dimpled locating feet positions the dispenser in support frame.
- Provided with integral security screws to optionally attach dispenser to a purpose built chassis bracket.
- Security screw heads and drivers to various configuration.

Height: 130mm
Width: 94mm

Depth: 157mm
Weight : 1.2kg

TICKET/CARD DISPENSER ENCODER

PRINTER SPECIFICATION

MODEL TDEP40

OPERATION

- Dispenses blank magnetic cards and encodes details at time of issue.
- Optional printing text or graphics.

TICKET STOCK

- Pre-cut flat stock, ISO (credit card) size.
- Adjustable gauge roller accepts different thicknesses, typically 0.18mm to 0.3mm, others possible.
- Capacity of standard chute 1250 tickets of 0.23mm card.
- Operates on paper, plastic paper laminated or plastic tickets.
- Operates down to the last ticket.
- Ticket top weight not needed.
- Tickets secured by locked chute cover. Open chute model available.
- Tickets are front loaded but rear loaded versions are available.

CONCEPT

- Plug in "black box" with no exposed wires or mechanics.
- Networked units require 12 volt supply and 2 data lines.
- Supply voltage unregulated 12V D.C.
- Connects via self aligning gold plated contacts - plug in the module - not the wiring.

COMMUNICATION

- High speed multimaster serial bus allows text or graphics printing and status details.
- Interface modules for RS232, RS485 and Parallel printer port available on request. Simple switch dispense mode.
- Pre-programmed "canned" ticket print message mode.



CARD ENCODER

- Fitted with multiple reading heads can allow card feeding in any orientation.
- Standard hardware accepts high coercivity (magnetic density) or low coercivity cards.
- Centre stripe or ISO stripe cards accepted.
- Normal heads are guaranteed for 1,000,000 operations. Ceramic coated heads have a 5,000,000 operations life.

PRINTER

- Epson model M186 dot matrix with continuous ribbon cartridge.
- Printer controller is an Abberfield proprietary & allows for variable text or graphics printing.

PHYSICAL

- Standard physical size allows interchanging with other ticketing modules.
- Dimpled locating feet positions the dispenser in support frame.
- Provided with integral security screws to optionally attach dispenser to a purpose built chassis bracket.
- Security screw heads and drivers to various configuration.

Height: 430mm
Width: 94mm

Depth: 314mm
Weight: 3.4kg

COIN DISPENSER SPECIFICATION

MODEL CD40S

MODEL CD40L

OPERATION

- Dispenses coins under internal or external control.
- Incorporates optical "sold out" detectors and coin dispensed confirmation detectors.
- Intelligent operation, retries to dispense at if first unsuccessful.
- Low power consumption.
- Locked coin storage.

COIN CAPACITY

- Capacity of CD40S chute 1 litre.
- Capacity of CD40L chute 2 litre.

CONCEPT

- Plug in "black box" with no exposed wires or mechanics.
- Networked units require 12 volt supply and 2 data lines.
- Supply voltage unregulated 12V D.C.
- Connects via self aligning gold plated contacts - plug in the module - not the wiring.

COMMUNICATION

- High speed multimaster serial bus.
- Parallel printer port available on request and interface modules for RS232, RS485.
- Simple switch dispense mode.



PHYSICAL

- Standard physical size allows interchanging with other 40 series revenue handling modules.
- Dimpled locating feet positions the dispenser in support frame.
- Provided with integral screws to optionally attach dispenser to a purpose built chassis bracket. Screws can be standard or fitted with security heads.

CD40S

Height: 400mm
Width: 94mm

Depth: 166mm
Weight: 3.5 kg

CD40L

Height: 520mm
Width: 94mm

Depth: 166mm
Weight: 4.5kg

POWER SUPPLY SPECIFICATION

MODEL PSM40-1

OPERATION

- Accepts 240V A.C.
- Outputs 12V regulated D.C.
- Intelligent operation communicates status condition of machine modules, via red, amber and green LED's for each module.
- Incorporates a battery for continuous supply of 12V D.C. in case of power failure.
- Includes battery charging and discharge control.

CONCEPT

- Plug in "black box" with no exposed circuitry.
- Mains connected by IEC mains plug incorporating mains fusing.
- 12 Volts D.C. delivered via rugged self aligning gold plated contact plug in the module - not the wiring.
- Power supply short circuit protected.

COMMUNICATION

- High speed multimaster serial bus allows proprietary communications.
- Could be delivered for PS232, RS485 and Parallel printer port.

PHYSICAL

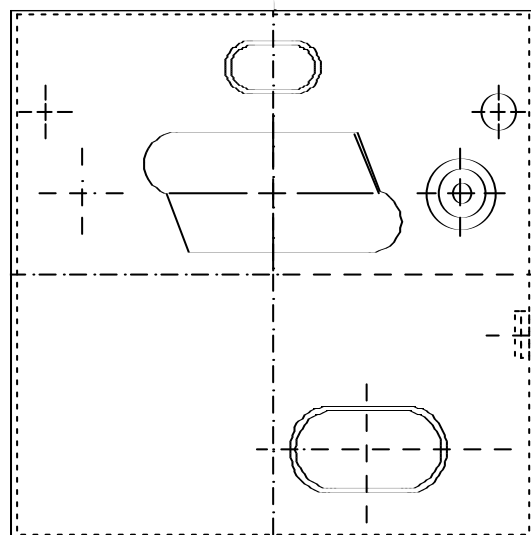
- Standard physical size allows interchanging with other modules.
- Provided with integral security screws to optionally attach to a purpose built chassis bracket.

Height: 94mm
Width: 94mm

Depth: 157mm
Weight: 2.5kg



Power Supply front



Power Supply back

POWER SUPPLY SPECIFICATION

MODEL PSM40-2

OPERATION

- Accepts 240V A.C.
- Outputs 12V regulated D.C.
- Includes a memory control board.
- Includes key pad and display.
- Incorporates 2 x relay outputs.
- Incorporates 2 x opto coupler outputs.

CONCEPT

- Plug in "black box" with no exposed circuitry.
- Mains connected by IEC mains plug incorporating mains fusing.
- 12 Volts D.C. delivered via rugged self aligning gold plated contact plug in the module - not the wiring.
- Power supply short circuit protected.
- Allows high level software to be downloaded to control other devices.
- Provides memory of transactions.

COMMUNICATION

- High speed multimaster serial bus allows proprietary communications.
- Could be delivered for PS232, RS485 and Parallel printer port.

PHYSICAL

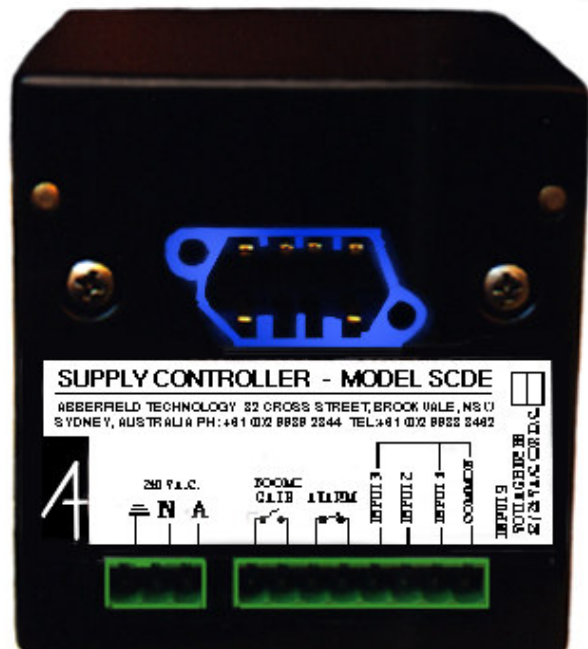
- Standard physical size allows interchanging with other modules.
- Provided with integral security screws to optionally attach to a purpose built chassis bracket.

Height: 94mm
Width: 94mm

Depth: 157mm
Weight: 3kg



Power Supply front



Power Supply back

UNIVERSAL COIN HOPPERS

MODEL CH101

MODEL CH102

DESCRIPTION

- A universal coin hopper to dispense a range of coin sizes.
- Operation can be under a variety of protocols.
- Verification of correct hopper insertion is provided, preventing incorrect issuing of coins.
- The hopper normally mounts on a moulded rail, sliding longitudinally and automatically engaging electrical connections, via self aligning plug and socket with heavy duty gold plated contacts.
- Hoppers may be exchanged for service or audit purposes without access to coins.
- Designed to eliminate damage during stacking or handling.
- Coins can be inserted into the hopper at any time but not removed manually, without use of a key.

SPECIFICATION

- Normal operation 12V DC
- Will operate to 24V DC

COIN SIZES

- Minimum thickness 1.1mm
- Minimum diameter 19mm
- Maximum thickness 4mm
- Maximum diameter 33mm

COIN LOADING

- Unlocked lid, to bulk load coins.

PROTOCOLS

Protocol 1.

- A maintained "hopper run" signal operates the dispense motor.
- Each coin dispensed generates a pulse.
- When the required pulses are received the external control circuit disconnects the run signal.



Protocol 2.

- Pulses are provided to represent the number of coins to be dispensed. The hopper issues confirming pulses for each coin dispensed.

Protocol 3.

- An input pulse is provided to start the coin hopper and coins will be issued to equal a preset number.

Protocol 4.

- The hopper is placed under the control of an external keypad.

HOPPER IDENTIFICATION

Hopper can "dock" on a chaise mounted module rail. The rail and hopper base have provision for physical "decoding" screws, to prevent docking unless slid into the correct position.

PHYSICAL

Model CH101

Height: 335mm	Width: 90mm
Depth: 315mm	Weight - Empty: 5.2kg

Model CH102

Height: 335mm	Width: 160mm
Depth: 315mm	Weight - Empty: 6kg

ABBERFIELD PRODUCTS

OTHER MODULES



■ Note validator



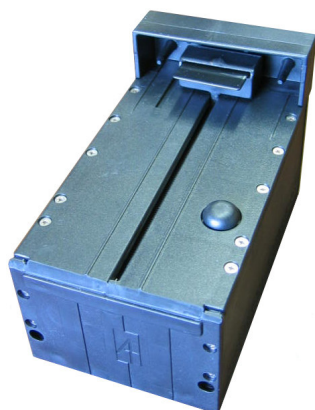
■ Coin dispensers



■ Cash box data transfer



■ Coin validators



■ Packet dispensers



ABBERFIELD PRODUCTS

USING MODULAR TECHNOLOGY

AUTOMATIC FARE COLLECTION



CAR PARK CONTROL EQUIPMENT

Abberfield produce ticket dispensing machines for transportation and car park applications. A wide range of models and security levels are available.

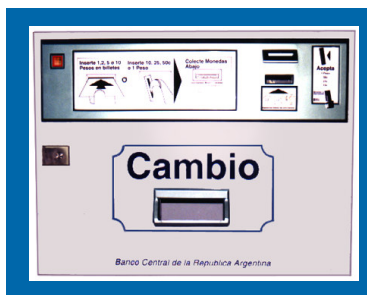


ABBERFIELD PRODUCTS

USING MODULAR TECHNOLOGY

CHANGE GIVING EQUIPMENT

Change Giving Machines are finding increasing acceptance. They are particularly useful in libraries, allowing use of coin photocopiers without constant staff interruption, as well as in conjunction with Abberfield machines for such applications as ticketing, token or product dispensing.



STAMP VENDING EQUIPMENT



Abberfield Industries have developed a modular system for vending stamp booklets. The system allows configuring machines to suit customer's particular requirements.

