TICKET
VENDING
MACHINE
Model
NTD500

# INSTALLATION & OPERATION INSTRUCTIONS



May 2003

# TICKET VENDING MACHINE

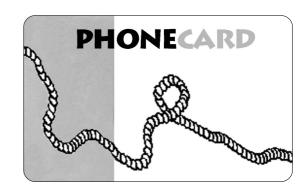
# **Model NTD500**

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## **DESCRIPTION**

- The equipment allows for dispensing of up to four card types at up to four programmable prices, on insertion of notes.
- The dispensers issue credit card size tickets, of 0.6mm thickness.
   Different thicknesses of tickets can be issued by adjusting the dispenser "gauge roller", although this involves some engineering



understanding. Therefore use only with 0.6mm cards, unless unavailable. To change to other card thicknesses refer to the Technical Manual, or contact the service agents, (address follows).

- Equipment is 230 / 240V operated, reducing to safe 12 Volt throughout the working modules of the note validator and ticket dispensers.
- Equipment can be mounted upon a wall, upon a bench or upon a plinth.
- Cable entry can be through the side, rear or bottom, plus a preferred method of plugging directly into a power point over which the cabinet is mounted.
- Each of the parts are modular, allowing easy service and permitting continued operation of the remaining ticket dispensers, if one or more are out of stock or out of service.
- The note validator can be calibrated for different world currencies (factory setting). The currency is shown on the label attached to the validator.
- For Service to equipment contact: -

Abberfield Industries Pty Ltd

32 Cross Street, Brookvale, Sydney 2100 New South Wales, Australia

Tel: (02) 9939 2844 Fax: (02) 9938 3462

Email: contact@abberfield.com.au

Any module needing service can be returned, freight paid.

*Note*: The machine on power up briefly displays a number. This refers to the operating software and should be quoted relating to service difficulties.

# CONSTRUCTION

# **Outer Cabinet**



**Ticket Dispensers** 



These slide into place and automatically plug into a cradle.

**Inner Frame** 



**Note Validator** 

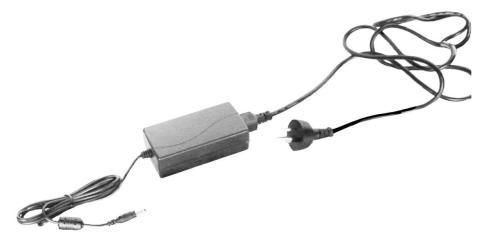


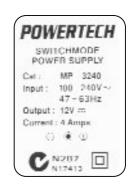
This plugs into a cradle and the front portion is held by two screws.

Construction continued....

# **Power Supply**

Mounted under the Inner frame





Power supply label

Universal input 110 Volts to 240 Volts, 50 - 60 cycles.

## **Control Module & Fascia**

Incorporates push buttons and the control electronics, bolts to the cabinet by nuts and screws from inside.

## Lead

Connects control modules to back panel.



# **INSTALLATION**

The equipment is supplied ready to use, if operated from a standard power point.

To access the mounting holes: -

- Remove the ticket dispensers (lift front and pull forward).
- 2. Undo the screws to the top of the Inner Frame.
- 3. Lift out the inner frame, but take care as it is connected by cables to the cabinet.
- 4. Unplug the two leads going to the Inner Frame circuit board.
- 5. Access is now made to the wall or bench mounting holes.
- 6. Use the frame as a template to mark the mounting holes. Then remove and drill the wall or bench.

Note: If the installation is in a **very** secure area, it may be sufficient to mount the equipment to a wall by the top two bolt holes only. These can be accessed without removing the Inner Frame.

If the double insulation of the mains wiring is in any way put at risk, through alteration to the equipment, it is mandatory that the cabinet is earthed. A screw for this purpose is positioned under the Inner Frame.

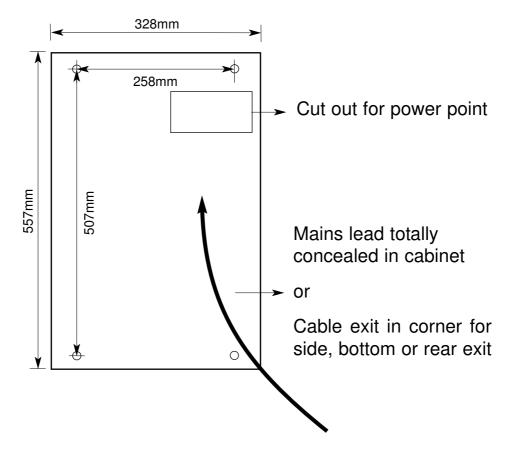
Also under the inner frame is a terminal block for use in a permanently wired application. If the fixed incoming mains wiring is through the existing cable entry hole it may be acceptable to relocate the power supply elsewhere, sitting loose under the inner frame. In this case the plastic cable clamp provided may be useful to secure the mains wiring.

Take care when re-assembling the Inner Frame to tuck all wires into the free space provided. Make sure none are caught under the Inner feet or on top of the power supply, or this will lift the inner module and the ticket being dispensed may not line up with the fascia.

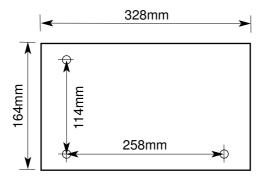
Remount the equipment taking care to ensure no masonry or dust or other dirt is left behind.

Installation continued....

# Rear Mounting



# **Bench Mounting**



Installation continued....

#### FITTING CARD DISPLAYS

Corresponding to each push button is a display window. Into that window can be fitted a panel depicting the product being vended.

Undo the four screws inside the cabinet front door, corresponding to the four outside corners of the fascia moulding. This leaves the fascia and control electronics held in place by the centrally positioned M4 nuts.

Held in this way it is possible to **gently** bend the top and bottom sections of the fascia forward, **just** enough to slide the panels into place. It is recommended that the backing card or label is held at the edges with sticky tape. This ensures that it will not move once installed. Then replace the four corner screws.

#### FITTING OPTIONAL DISPLAY

This advertising frame bolts to the cabinet back plate and the cover fits over the point of attachment.

#### FITTING OPTIONAL PEDESTAL

- 1. Bolt the ground plate to the floor securely.
- 2. Fit over the Pedestal casting and column.
- 3. Securely bolt down the ground plate tie bolt.
- 4. Use the bolts supplied to secure the cabinet as if bench mounting.

Note: It is possible to run the mains cables down the pedestal and exit at floor level, through a cut out in the rear of the casting. In this application it is necessary to earth the cabinet and the pedestal stand by cutting and terminating mains cable inside the cabinet. An earth connection is provided for this purpose.

# **OPERATION**

#### DOOR OPEN ALARM

The equipment is fitted with an alarm to activate if the door is opened. As soon as the door opens press the **Reset** button to turn the alarm off. Closing the door automatically resets the alarm. Using the set up routine (accessed through the Audit function) the alarm function can be disabled. Enter through the Audit function as detailed above.

#### PROGRAMMING TICKET PRICE

As received the machine will most likely be pre-programmed to \$5, \$10, \$20, \$50 vend prices. They can be re-programmed as follows: -

Pressing the **Function** button the display shows

Prog

Then press the **Enter** button.

The display shows a running message

to Prog CArd Put notE In thEn Pu5h Any butt

This enables the note validator and notes (\$5,\$10, \$20 or \$50) are inserted. The display will accumulate value until the price for a card is reached.

Then press the button corresponding to that card.

The display will say 'done' and the value will reset. Then repeat the process for each of the other cards.

This sets the price for each vend.

To return to the operating mode press the **Function** button again.

The display will show

Rudt

Operation continued....

Press the **Function** button again and the display shows

tE5t

Press the **Function** button again and the display shows

OPer

Press Enter.

## **OPERATION**

If the machine is sold out or inoperative the display will show a running message

Out OF OrdEr

To operate the machine a product selection must be made, ie. press any button.

If that dispenser is empty of cards the display will flash

**FILL Sold** 

If there is stock the validator will be enabled, notes can be inserted and the card will be dispensed.

#### **TEST**

To enter the Test Function slowly press the **Function** button three times. The display will show

Prog

followed by

Audt

and then

tE5t

Then press the **Enter** button.

The display shows

To TESt PuSh Any butt

A ticket from the corresponding dispenser will then be issued.

Operation continued....

#### LOADING CARDS

Cards should be flat and free of burred edges, sticky tape or any other obstructions to ensure free dispensing. To load, insert a small quantity of cards through the chute opening at an angle and twist to lay flat on dispenser bed - continue the process until the desired quantity is in place and then fit the moulded card weight on top. This weight should not be needed, but it will

help the dispenser to operate when only a few cards remain in the chute, or when cards are damaged or of low quality. Should the quality of the card be less than ideal, it will help if the cards are "fanned" before loading, to break free any burred edges that may catch one card to the other. If loading a chute that is empty it is recommended that a single card is inserted first and then *gently* fingered forwards. Then the remaining cards can be inserted. This process ensures that cards are presented to the gauge roller in the manner that will occur during normal operation.

Cards should be loaded with the artwork side up as this presents better to the Customer when vended. It also ensures that the optical reflective "cards sold out sensors" view the white underside of the card. The dispensers will work if the cards are upside down but the correct orientation is recommended.

## **AUDIT FUNCTION**

In the Audit mode there are two counters, resettable and non-resettable. These count the dollar value and the numbers of each ticket sold.

In the Audit mode of operation it is also possible to check the vend prices set for each dispenser.

Pressing the Function button shows

Prog

Press again shows

Audt

Then press the Enter button. The display shows a running message

PreE55 EntEr button to 5croll through OPtion5

Operation continued....

Press Enter again shows

to SEE CArdS Sold PrESS SELECT button

Press Enter again shows

to SEE totAL CArdS Sold PrESS SELEcT button

Press Enter again shows

PuSH I For CASH or 2 For totAL CASH CollectEd

This will show the amount since the machine was last reset (which could be done each time the cash box is emptied) and also the amount since the machine was first installed.

Press Enter again shows

to SEE Prog [Fird Pu5h butt

This will show the "vend" price for each card type.

# **Selecting Alarm**

After reaching the setting to show each ticket dispenser vend price (last one detailed above), then press **Enter** and the display shows

to turn bEEP On Pu5h I to turn bEEP OFF Pu5h 2

After selection press **Function** and until **Oper** then press **Enter**. This brings the machine back to the operating mode.

# Selecting Attraction 'Blip'

Following on from the alarm setting press Enter and the display shows

to turn bEEP On Pu5h l to turn bEEP OFF Pu5h 2

#### **SERVICE**

#### **CLEARING A JAMMED NOTE**

Press the clip on the front of the validator up and pull forward the lower tongue section forward. This will pull out giving access to the note. After removal slide the lower section back into place and ensure the clip has latched properly.

#### **CLEANING TICKET DISPENSER**

The dispenser uses two optical sensors, one to detect out of stock and one to confirm that a ticket has been dispensed. Cleaning is recommended each year or more frequently, (depending on use), or if ever the equipment malfunctions.

Using a dusting brush or a cotton bud gently clean the underside of the front sensor reflector, just near the top roller.

Brush out the front and rear sensor holes in the base plate.

Alternatively, blow hard into these two sensor areas to remove any dust.

It may be found easier to clean the sensors if the dispenser is removed from the machine first and of course the tickets must be removed to access the "sold out" sensor.

## **FAULT FINDING**

The display will show messages to help in diagnosing fault conditions.

If ever the equipment fails to operate correctly and the cause is not obvious, turn off the power, wait approximately 10 seconds and then turn the power on again. When the power is re-applied the machine will automatically start up in the Operations (ready to use) mode.