INVENTION DISCLOSURE

Title: CouponMaster™ Web-Enabled Coupon Delivery, Storage, and Redemption System

Inventor: Roger Goodcash
Director of Product Development
CouponMaster, LLC

Date: January 26, 2007

Summary:

Coupons are big business. Every year retailers, distributors, and manufacturers release literally billions of dollars worth of coupons. They don't do so out of the goodness of their hearts, but in an attempt to influence the buying behavior of the public in order to drive revenue. For instance, one situation in which coupons are often used is when the cost-per-unit decreases with volume so that the coupon issuer can make a greater total profit in spite of the decrease in margin due to the increase in volume of units sold. However, in a typical couponed incentive, only a few percent of the coupons are ever redeemed. Consequently, coupon issuers are always on the lookout for ways to increase their redemption rate.

Additionally, there is a sunk cost associated with any couponed incentive. These sunk costs typically include market research, printing, delivery, and redemption. If the sunk costs are high and the coupon redemption rate is low, then the couponed incentive may not serve to increase profitability. Consequently, any system that can reduce the sunk costs and/or increase the coupon redemption rate is very valuable to coupon issuers.

We have developed the CouponMaster™ system which allows users to visit our continuously updated web presence, search for coupons, and then store the coupons on a hand-held USB device (the CouponMaster™). When the user gets to the store, the user can scroll through the menu of coupons on the CouponMaster™, choose a desired coupon, and then cause a bar code associated with the coupon to display on a LCD

screen. The LCD screen can be read by most bar-code readers currently in use, but in case there is an issue, the CouponMaster™ also includes an auxiliary label printer to print out coupon bar codes on demand.

1.0   Web Presence

The final conceptualization of our web presence is still currently under development, but the concepts below will be present when we are fully functional. A draft drawing of the main screen of the website is included. In general, revenue is generated using a combined ebay/google model. That is, entities posting coupons pay a base fee for any coupon listed on the site. The fee increases based on the number of downloads of the coupon. The poster can also pay an additional fee to make their coupon a "featured coupon".

In addition, the site includes a "search coupons" button that is linked to a search engine and posters can purchase "hits" in the search engine based on a monthly auction. For instance, let's say that I want my coupon to be the first coupon returned when someone searches for "diapers". At the start of each month, I will bid in an auction to be associated with the search term "diapers" for the next month. If I win, my coupon will be the first coupon returned when someone searches for "diapers" for the next month. We call our revenue model a combined ebay/google method because the auction part is ebay and the "buying search terms" part is google.

We are also working on an auction based on zip code or state so that posters can purchase the rights to be displayed first based on the zip code of the person doing the searching. This model basically breaks the overall search term auction discussed above into a bunch of mini-auctions for each zip code, state, or municipal area.

1.1   Coupon Data Load

Entities that are offering coupons can visit our site (www.couponmaster.com) and can navigate to "Post Coupons" to enter the Coupon Offerer Section.

Secure Login

The Coupon Offerer Section includes a secure login that will be pre-approved and authorized by CouponMaster™ personnel. That is, CouponMaster™ personnel verify any Offerer before the Offerer is allowed to post coupons on the web site.

Posting Interface

Once the Offerer has been verified, the Offerer is free to post coupons and may do so using our convenient interface. The interface requests at least the following: coupon value (dollar/percentage), associated product, brand, expiration date, geographic restriction, restrictions on usage, and the bar code expressed as a text/numeric, not a graphic.

The Offerer also has the opportunity to upload a picture of the coupon or merchandise to be displayed with the listing as well as accompanying text. Basically, the Offerer's listing is extremely flexible and customizable within our constraints of size.

The Offerer can also select whether the coupon should be a feature coupon.

Coupon Monitoring

Once the Offerer has uploaded a coupon, the site automatically keeps track of the number of times the coupon has been downloaded, as well as non-personally identifiable statistical information associated with the coupon. For example, the Offerer can see who is downloading the coupons based on zip code, ISP location. If the coupon was downloaded by someone who is a registered user of the site, then the demographic information associated with the user can also be displayed. That is, the Offerer could then see demographic information like the gender and age of the downloaded as well as how active the downloader has been. For example, does this downloader download 1 coupon per day? 5 coupons per day? Does the downloader access the site daily? weekly?

Our intent with the coupon monitoring section is to provide the Offerer with all the demographic information possible so that the Offerer can better target their Offerings. We are not sure at this time whether we will be offering the Coupon Monitoring section for free or as a subscription service. Our impression right now is to provide basic data like the number of downloads for free, but then charge for further demographics as a subscription service. We may also have multiple levels of subscription service with different fees.

Also, we will use this section to pitch our services to the Offerer with regard to consulting to help them target their Offering, as well as achieving synergy between our site and their other offerings. Basically, we want to use our site as a lever for them to let us manage their entire coupon offering for a fee, both through our site and in print.

Search Term Auction

The Offerer also has access to the search term auction. The search term auction will take place on the last day of the month and will start at noon and end at 5 pm Central time. Any search term can be nominated by any Offerer as a term that the Offerer would like for the next month. All of the search terms will then be listed in the auction section and will be searchable alphabetically, by product area, and by current owner (if any).

When any term is identified by an Offerer, the term will be listed with a standard base price (such as $25, for example). If no one else bids, then the Offerer pays the $25 (all payments due by 10pm that day and must be submitted electronically) and identifies the coupon to be displayed first when the search term is entered starting at 12:01 am the first day of the month.

However, let's assume that Offerer #2 wants the rights to a search term that Offerer #1 is either currently using or has identified as a new term. In this case, Offerer #2 would enter a new bid in the search term auction, just like bidding for goods on ebay. Offerer #1 can then make a new offer and try to outbid Offerer #2, or other Offerers may also make bids. Whoever wins, they pay us the final auction price.

1.2   Coupon Data Search

Our coupon searching proceeds a little differently depending on whether the searcher is a registered or unregistered user.

Open Access To Unregistered Users

Users visiting the site are not required to log in. (It has been demonstrated that requiring users to log in can lead to a decrease in usage in some situations.) Thus, any user can come and visit the site and search for coupons. Also, any user can download coupons. However, the data and file structure for our downloaded coupons will not be useful unless the downloader is downloading to a CouponMaster™. But, if someone

owns a CouponMaster™, but just doesn't want to register at the site, that's OK and then can download all the coupons that they want.

When a user clicks on "search coupons", a screen will display that will prompt a user to log in or to enter their zip code. If the user logs in, then see below for the explanation. However, if the user enters the zip code, then we will track the user using both cookies and the user's IP address. That is, every IP address of a person downloading a coupon will be stored and then associated with the zip code that they enter. Whenever the computer using the IP address returns to the site and downloads another coupon, their activity will be stored based on their IP address. While the user is interacting with the site during any one session, we will be using cookies to track the user and enable the searching. Also, because we have the IP address associated with a zip code, we can display the user's activity as demographic information for use in the "Coupon Monitoring" section

After the user enters their zip code, a new screen will display that asks the user to input a search term. If the search term is on the auction list, then the first result displayed will be the coupon identified by the winner of the auction. If the search term is not on the auction list, then the search will simply display whatever entry the search engine determines is the best match first, and then display the related coupons in order of relevance

If the user desires, then user can then scroll through the list of coupons and then select a coupon. When the user selects a coupon, a new screen displays the coupon and all of the restrictions entered by the poster. The user is then given the option of downloading the coupon. The list of coupons can also be sorted by manufacturer and type of good/service.

Access By Registered Users

When a user comes to the site for the first time, they will have the option of setting up an account. We will ask for their demographic information like age, gender, location, product preferences, buying habits, etc and then create an account for them. One they have an account, then can log in and perform searches through their account. The searching will proceed similarly to the unregistered user, but the registered user doesn't have to enter their zip code (we already know it) or other info. Also, when the

registered user searches and downloads coupons, we will update our records to show what coupons they have downloaded and make the information available in the coupon monitoring section.

Also, if the registered users click on "my account" they will be able to track what coupons they have previously downloaded, and keep a watch list of coupons to download. Also, they can link directly to other coupons offered by the same Offerer or other similar coupons that are available now. We will also provide any updates or notifications to the registered users through their accounts.

Also, registered users gain access to a set of tools to help them display and manage the coupons on their CouponMaster™. That is, under "my account", the user can display a listing of all coupons currently on the CouponMaster™, and can sort them based on manufacturere, age, type of good, etc. The user can also remove coupons or reorder the list of coupons as desired. The user can also perform diagnostics on their CouponMaster™ and download any software updates.

Because the unregistered user is not provided with these tools, it is anticipated that the unregistered CouponMaster™ will soon fill up with coupons and the unregistered user will not be able to manage their coupons. Consequently, this will serve as an inducement for the user to become registered which will provide us with a better demographic window into their behavior that we can then sell for more money under the "Coupon Offering" section.

1.3 Downloads

If we want to update the software in the CouponMaster™ or provide any other support, then we will provide it under the downloads section. We can also send a notice to the accounts of the registered users when there is a software update and display a notice on the site.

1.4 Advertising

We are also anticipating selling advertising on the right side of the screen on the main screen and search screens. We intend to offer the advertising space as a daily auction with a base price set by us. For example, we would auction the three add

windows on the main screen to the next business day with the auction opening at noon and closing at 5pm. The advertising auction would be open to all posters as well as other pre-approved bidders so that entities can buy ad space even if they are not posting coupons. We might start the auction with a base price of $2000 for the top ad window, for example, and then let the potential advertisers bid up from there.

2.0 The CouponMaster™ ("CM") Device

Coupons from our site are downloaded to the CM device which the user can then take with them when they go to the store in order to display and redeem the coupon.

USB connection to PC

The CM device offers easy connection to the PC through the ubiquitous USB port. When the CM is plugged into the USB port, the CM draws power to charge an internal rechargeable battery. The battery is used to provide power to the LCD display and printer when the CM is used at the store.

Memory

Also, the coupons downloaded from the site are stored on a memory inside the CM. Because our data format for storing the coupons is so small, we will probably go with the smallest and cheapest flash memory we can find, which is now at the 16MB increment.

CPU

The CM device includes a CPU to manage transfer and storage of data and to control the LCD screen and printer. The user provides input to the CPU using a trackwheel similar to that used on the BleckBerry

LCD screen

We are in the process of deciding whether to stay with standard (black/white) LCD for cost reasons or to go with a color LCD for improved appearance.

Printer

The printer is a removable module that plugs into the base of the CM (we may make the printer a standard component). We are working with Brother and developing a compact printer similar to that offered by their PT-80 label printer (I have enclosed a brochure). Of course, we will just be printing bar codes that will be selected using the

trackwheel, so we won't need the keyboard input, etc. Also, we will be printing on plain paper, not labels. Basically, we have developed a very compact printer that prints out small strips of paper with the bar codes on them. The strips are1/4 inch in height.

To use the CM, the user first presses the trackwheel. As you know, the trackwheel rotates around a center axis and can also be pressed downward like a mouse button. Pressing the trackwheel brings the CM back from sleep mode and a list of the coupons on the CM is displayed much like a listing of a phone list of phone numbers is displayed on a standard cell phone. The user can then use the trackwheel to scroll down to the desired coupon and select the coupon by pressing the trackwheel which brings up another menu that identifies the coupon and provides the user with the options of display barcode, print, and exit. Selecting exit just brings the user back to the main screen.

Selecting display causes the bar code associated with the coupon to be displayed on the LCD screen. The bar code stays displayed on the LCD screen until the trackwheel is pressed again, or the CM returns to sleep mode. If the user presses the trackwheel again, then the user is returned to the main screen.

Selecting print causes the bar code associated with the coupon to be printed by the printer. Once the bar code has been printed, the user is returned to the main screen. If the printer is not plugged into the CM, then the print option is not shown to the user.

Power Management

The rechargeable battery in the CM has limited power, so a good power discipline must be in place. First, the main screen shows a power indicator so that the user will know how much power is remaining. Also, the CM enters a sleep mode that consumes very little power if it is not used for 30 seconds. That is, 30 seconds after the last trackwheel press, the CM enters sleep mode.

I have provided top and side views of the CM, a block diagram of the internal workings of the CM, and a sample LCD display.

3.0 How the CouponMaster™ Stores Barcodes

Coupons are indexed on the CM by manufacturer and each coupon includes the following information: manufacturer, coupon description, product description, and barcode. All of these pieces of information are downloaded from the site and were originally established on the site by the Offerer. Although the Offerer can make descriptions of almost any length on the site, the manufacturer, coupon description, and product description stored on the CM must be less than 15 characters in length. Special fields entitled "CM manufacturer display", "CM coupon description display", and "CM product description display" with the pre-set character limit are established by the Offerer during posting.

4.0 Integration With BlackBerry

We have also been looking into integrating our website with the BlackBerry. The BB has the display and storage that we need, but doesn't have the USB connection, or printer. We are working on a simplified version of our site that would allow a BB to browse the website and then wirelessly download desired coupons to the BB for display on the BB's LCD screen. The user could even download the coupons while waiting in line. In this case, the BB user could download a program from the downloads section of our website that would act like the CM to manage and display the coupons. We have also thought of using the BB's Bluetooth communication system to wirelessly communicate with a printer accessory, but haven't gotten far.

5.0 Other Patented Coupon Systems

The CEO passed on your recommendation to search the PTO's website, so I did. I found the two patents that are attached: US 2006/0080173 A1 and US 6,568599 B2. Both of these patents are for coupon systems and they look pretty close to what we came up with. However, the CEO says that you are the best patent attorney around and that you will be able to find a way to get us our patent without infringing on these other two patents.
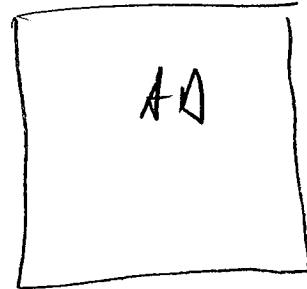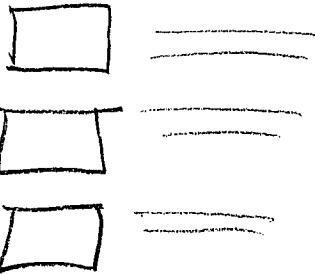
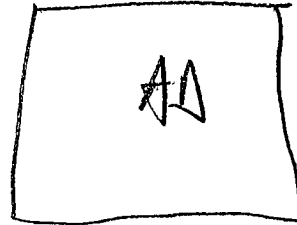# WELCOME TO COUPON MASTER ™

NEW COUPONS

FEATURED COUPONS

AD

AD

ATTACHABLE PRINTER MODULE

TOP

TRACK WHEEL

LCD SCREEN

USB CONNECT

SIDE

PRINTER MODULE CONNECTOR

PRINTER DATA MODULE

PRINTER OUTPUT

TRACK WHEEL

USB

BATTERY

CPU

TRACK WHEEL

MEMORY

LCD SCREEN

PRINTER

PAPER
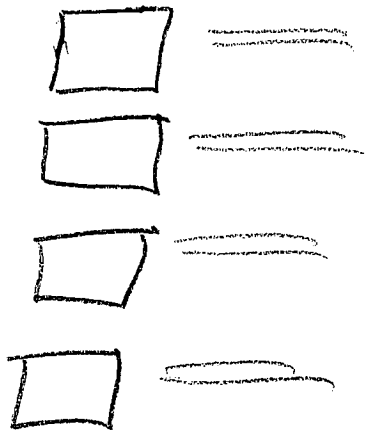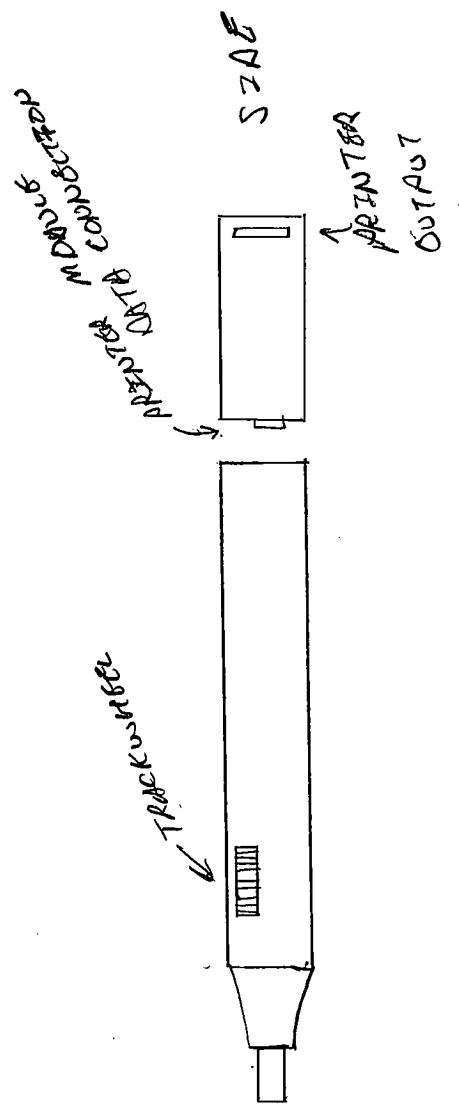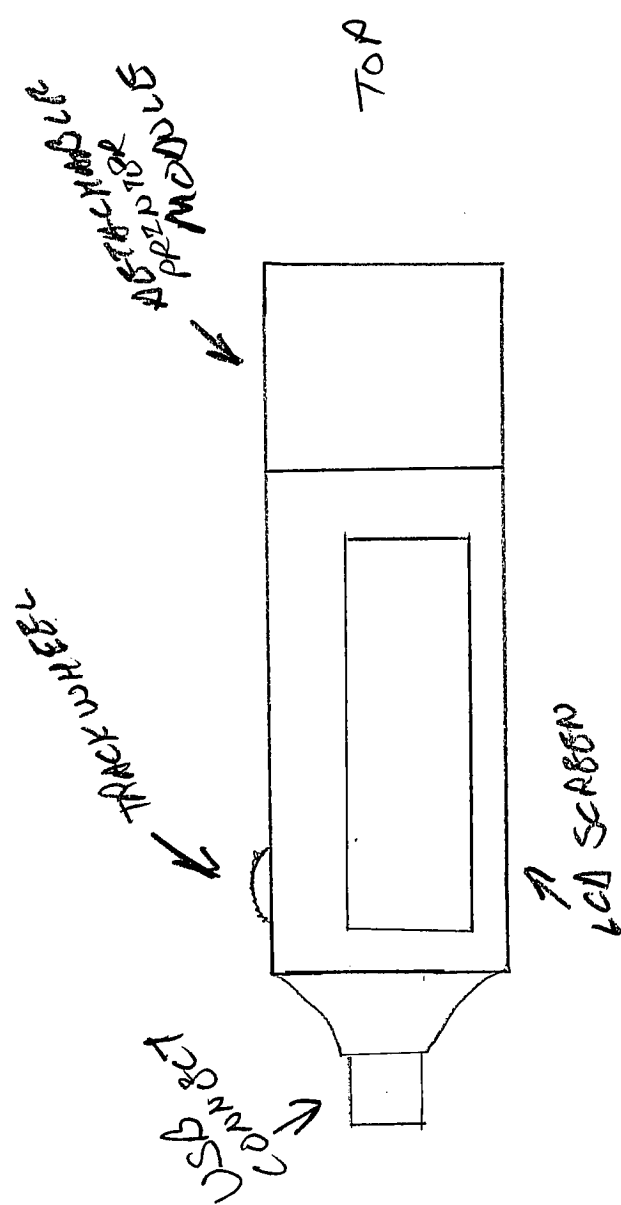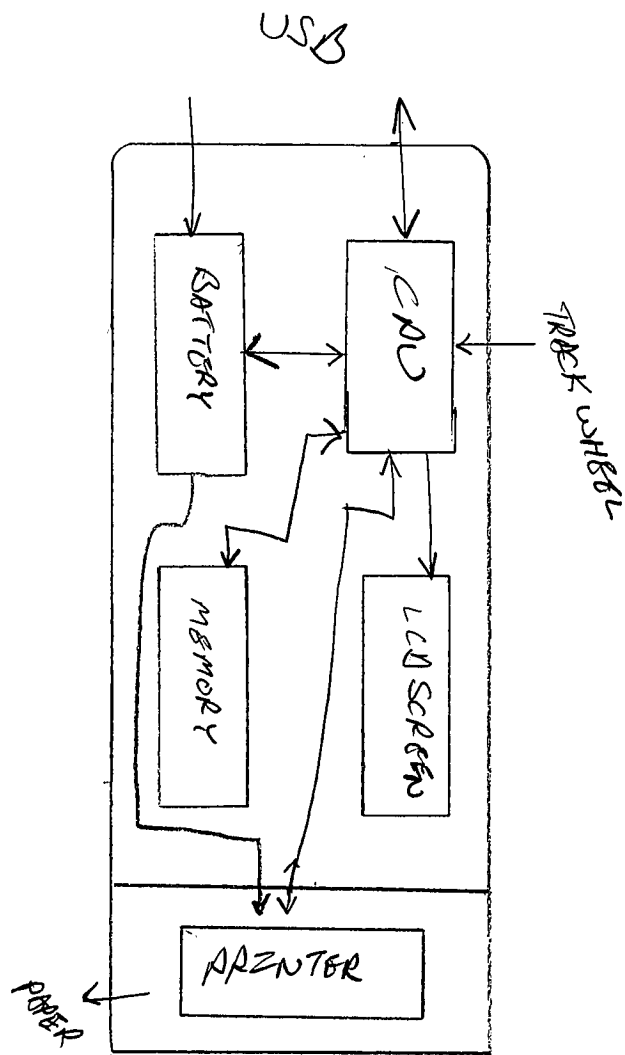
ALPO
[PURINA]
ZAGNUT

PURINA   [DISPLAY]
$0.15.OFF   PRINT
12 OZ. CAN   EXIT

brother. At your side.
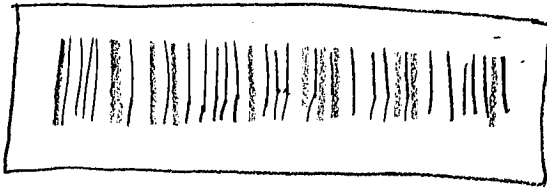
USA

Select Category. ▼

| About Brother USA | Home | Site Map | Search | Go Global |

P-touch Electronic Labeling Systems

- What's New? >>
- What's a P-touch? >>
- Select a Model >>
- Tapes & Accessories >>
- Applications >>
- Customer Support >>
- Product Registration >>
- FAQs >>
- Manuals/Brochures >>
- Downloads >>

brother mall

USA >> P-touch Electronic Labeling System >> P-touch Advisor

P-touch Labeler **Product Detail**

powered by ADVIZIA

PT-80

View Product Advisor] Compare Matches]

Electronic Labeling System

◄ 6 of 25 matches ►

Printer Friendly Version

[About][Specs][Tapes and Accessories][Where to Buy]

The PT-80 is a handheld all in one affordable, feature packed "Personal Labeler". The PT-80 will easily print labels in 6 type sizes, 9 type styles and 1 font for all different labeling needs-all you have to do is type in your text and print. At the touch of a button, you can also add the time and date to your label, with a choice of 8 different formats!

With the PT-80, you can print (non-laminated labels) in 3/8" & 1/2" wide. The PT-80 comes with 1/2" Black on White "M" starter tape and User Manual.

The PT-80 also gives the option of selecting from 71 symbols to display creativity on the label, and includes 5 auto formats and 5 framing options. Along with its easy-to-view, 12-character LCD display and easy-to-use typewriter style keyboard, it features raised keys for more accurate input. It also prints 1 to 2 lines of crisp text, and can add text framing and underlining.

- ▪ Perfect for Home, Home Office, Small Office, Kids, Crafts, School

- ▪ Time & Date function, perfect for labeling perishable food, financial records, smoke alarm batteries, spice racks

✉ Have a question? Ask the Product Manager or call 877-4PTOUCH

NEW!
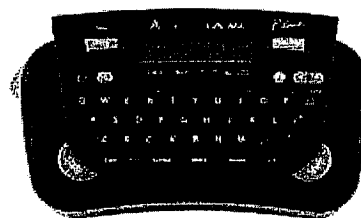
Estimated Street Price: $29.99

Where to Buy
- ● **Online Resellers**
- ● Retail Stores
- ● Mail Order

MODEL PT-80

Affordable, feature-packed
Personal
Labeler

- 12-character LCD Display

- 9 Type Styles and 6 Type Sizes

- 5 Auto Formats and 5 Framing Options

- Prints up to 2 lines

- 71 Symbols

UNIQUE FEATURE
Time & Date Labels
At the touch of a button
Great for Food Storage!

David's Medical Records 05/19/06

02/20/06 Home Expenses

ESSAY COPIES

TAX FORMS

Pasta Sauce 09/26/06 8:30PM

1 4" SCREWS

brother

P-touch® ELECTRONIC LABELING SYSTEM

"M" TAPE

Personal
Labeler

MODEL PT-80

Quality Features

- Easy to View, 12-Character LCD Display
- Prints 1 to 2 lines of Crisp Text
- Handheld Portable Design
- Typewriter Style Keyboard
- Add Time & Date to your label, at the touch of a button
- 9 Type Styles and 6 Type Sizes
- 5 Auto Formats and 5 Framing Options
- Select up to 71 Symbols
- Uses "M" Tape (non-laminated), 2 Label Widths (3/8" & 1/2")*

*Additional purchase required

"M" Tapes Available*

	3/8" (9 mm)	1/2" (12 mm)
BLACK ON WHITE		✓
BLACK ON GOLD	✓	✓
BLACK ON SILVER	✓	✓
BLACK ON GREEN	✓	✓
BLACK ON BLUE	✓	✓
BLACK ON PINK	✓	✓
RED ON WHITE		✓
BLUE ON WHITE		✓
BLACK ON YELLOW		✓

*Additional purchase required

Product Specifications

- Unit Dimensions: 6"(w) x 4.125"(d) x 2.325"(h)
- Unit Weight: 0.6 lbs. (without tape & batteries)
- Operates on 4 "AAA" Alkaline Batteries (not included)
- UPC Code: 012502615125

9 Type Styles

VERTICAL

NORMAL OUTLINE
BOLD SHADOW
ITALIC
ITALIC/OUTLINE
ITALIC/BOLD
ITALIC/SHADOW

6 Type Sizes

Aa 9 point   Aa 9 point condensed   Aa 9 point extended

Aa 17 point   Aa 17 point condensed   Aa 17 point extended

INCLUDES:
- 1/2" Black on White "M" Starter Tape
- User's Guide
- One Year Limited Warranty and Replacement Service

Scannable Barcode

0 12502 61512 5

brother. *At your side*

www.brother.com

FOR MORE INFORMATION
**please visit our Web site at www.brother.com
or call 1-877-4PTOUCH (1-877-478-6824).**

CATPT80