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Newton Messaging Card: Description (7/93)

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Security: Everyone

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TOPIC -----

This article describes the Newton Messaging Card.

DISCUSSION -----

The Newton Messaging Card allows Newton to work like a pager. It connects to existing wide-area paging systems, allowing numeric and text messages to be received. With the Messaging Card, Newton can receive information such as meeting confirmations, news and other services.

The Messaging Card is a PCMCIA type II card, like Newton's RAM storage cards.

Hardware -----

The Messaging Card measures 0.2" x 2.2" x 3.4" (5 x 55 86 mm) with a 0.6" x 2.2" a 1.1" (15 x 55 x 28 mm) extension. It fits just over the top of Newton, and slides into the PCMCIA slot.

The card has 128 KB of static RAM (SRAM) storage space.

The Messaging Card is a single-frequency receiver in the 929-932 MHz frequency band and features a built-in antenna.

The card is compatible with all standard POCSAG protocols including both 7-bit and 8-bit messaging formats and will be available with 512, 1200, or 2400 baud code speeds.

The card comes with a AAA battery which will supply power for more than 21 days. The internal backup battery protects data when the main battery is low or being replaced. The backup battery should be replaced once a year. When the main battery is low, the user receives audio and visual notice to replace it.

The card has an On/Off switch, a transducer, and a multicolor status indicator. A flashing green LED indicates unread messages, and a flashing red LED indicates a low battery. An audible alert indicates that radio-frequency (RF) information has been received or a low-battery condition has been detected. The card will also alert you when you are out of paging range.

You can set the kind of audible alert you want the card to give you upon receiving messages.

Software

The Messaging Card supports 512, 1200, and 2400 baud POCSAG signaling. The card can detect as many as four POCSAG addresses. Each address is capable of responding to four functions, and each function has a total of 32 subaddresses. There are 16 combinations of addresses and functions, each referred to as a source. Since each source has 32 subaddresses, the Messaging Card will respond to a total of 512 individual subaddresses.

The information supplied after the address can be either tone-only, 4-bit numeric, or 7-bit or 8-bit data. The card will also support OTA programming so the paging service provider can enable and disable the card's functions.

You can program different Messaging Cards with the same address and functions and thereby accomplish group call and subgroup call to send identical messages to each Newton with a Message card with that address.

Persistence is a new feature that defines how long a message can stay in the Message Card's memory. You can define a message's priority (persistence) and it will not be overwritten until all lower persistence messages have been erased.

There is no imposed restriction on the length or number of messages. The limit is defined by the available RAM.

A real-time clock can provide time-stamped messages.

Article Change History -
15 November 1993 - Corrected typographical errors

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