

The **Pocket Watch B** is a real time clock module manufactured by Solutions Cubed. The Pocket Watch has a simple serial interface that makes it easy to add this accurate timebase to the BASIC Stamp®. This module supports multiple baud rates and multiple alarm types to trigger external circuitry at designated times.

Features of the Pocket Watch:

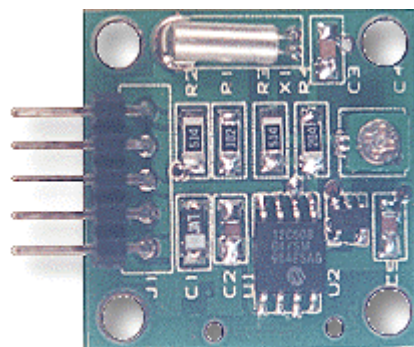
- Maintains seconds, minutes, hours, days, months and years;
- Leap year compensation;
- Year 2000 compliant;
- 2400, 4800 and 9600 baud rates supported;
- Four types of user configurable alarms;
- Externally accessible precision timebase;
- 5-pin SIP package
- Small size (1.2" W x 1.0" H x 0.25" D).

Pocket Watch B Commands:

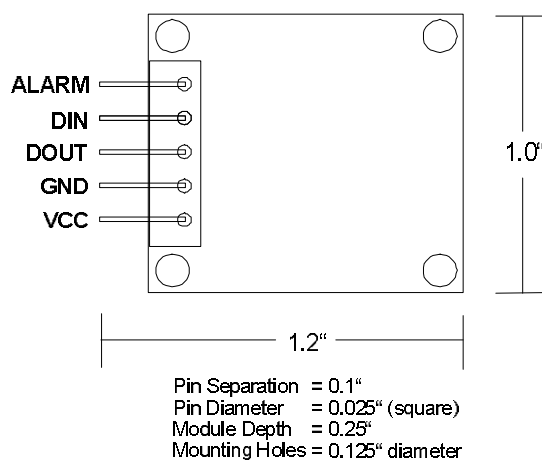
Command	Value	Description
SET TIME	00h	Sets time
SET ALARM	01h	Set alarm time
READ TIME	02h	Read current time
READ ALARM	03h	Read current alarm time
ALARM ON	04h	Turn alarm on
ALARM OFF	05h	Turn alarm off
SET TIME-Ext	10h	Sets time including high year
SET ALRM-Ext	11h	Sets alarm time incl. high year
READ TIME-Ext	12h	Reads cur. time incl. high year
READ ALRM-Ext	13h	Reads alarm time incl. high year
ALARM ON-Ext	14h	Turns on special alarm
ALARM OFF-Ext	15h	Turns off special alarm
SET 1 SHOT ALARM	16h	Set duration of single shot alarm (1 to 65536 sec)
SET SHORT ASTABLE ALRM	17h	Sets duration of short astable alarm (1 to 256 sec/min)
SET LONG ASTABLE ALRM	18h	Sets duration of long astable alarm (1 to 256 min/hours)
READ ALARM SETTINGS	19h	Reads the current normal and special alarm settings

Alarm Modes:

- Standard: Sets alarm pin high at specified time.
 One Shot: Sets alarm pin high at specified time for a specified duration (1-65536 sec).
 Short Astable: Toggle alarm pin at a specified time for specified high/low durations (1-256 sec).
 Long Astable: Toggle alarm pin at a specified time for specified high/low durations (1-65535 sec).



Pin Configuration and Mechanical Specs:



- ALARM Alarm output pin, active high, current limited.
 DIN Data input from master
 DOUT Data output to master
 GND Common Ground
 VCC +2.5 to +5.5 Vdc

The Pocket Watch package includes:

- Pocket Watch module;
- Printed documentation with sample BASIC Stamp I and BASIC Stamp II code.

The Pocket Watch's small size and connection scheme allows the device to be inserted directly into circuit boards for production runs, or into breadboards for easy prototyping.

BASIC Stamp is a registered trademark of Parallax, Inc.