

AccessionIndex: TCD-SCSS-V.20191101.001

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Accession By: Jimmy Malone

Object name: Casio PB-110 Owner's Manual

Vintage: 1983

Synopsis: Owner's manual for handheld BASIC personal computer.

Description:

The Casio PB-110 (see elsewhere in this catalog) is a handheld personal computer that executes the BASIC programming language, introduced in 1983. It is similar to its precursor, the PB-100, but with a MEMO / DATA BANK functions as well as the PB-100's features.

This item is the Owner's Manual. See elsewhere in this catalog for the Data Bank Manual.

Many thanks to Jimmy Malone for donating this item.

The homepage for this catalog is at: <https://www.scss.tcd.ie/SCSSTreasuresCatalog/>
Click '*Accession Index*' (1st column listed) for related folder, or '*About*' for further guidance.
Some of the items below are more properly part of the other categories of this catalog, but are listed here for convenience.

Accession Index	Object with Identification
TCD-SCSS-V.20191101.001	Casio PB-110 Owner's Manual. Owner's manual for handheld BASIC personal computer. 1983
TCD-SCSS-T.20191101.001	Casio PB-110 Personal Computer. Handheld BASIC personal computer. 1983.
TCD-SCSS-V.20191101.002	Casio PB-110 Data Bank Reference Manual. Data Bank manual for handheld BASIC personal computer. 1983.

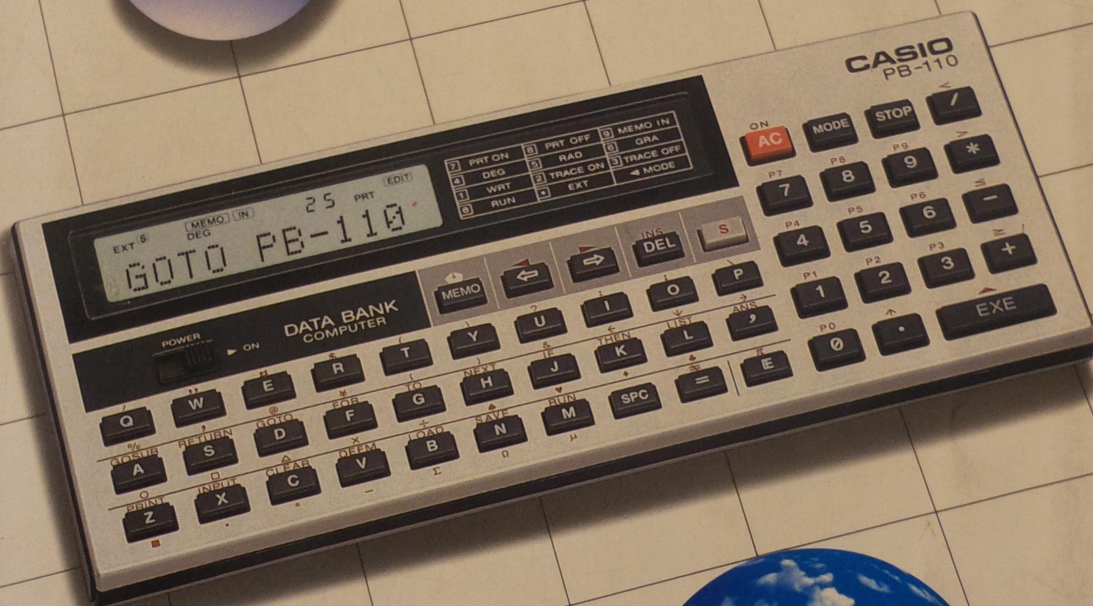
References:

1. LedUdu, *Casio PB-110*, see:
<http://casio.ledudu.com/pockets.asp?type=4&lg=eng>
Last browsed to on 1-Nov-2019.
2. Pocket Free, *The Casio PB-110 computer*, see:
http://pocket.free.fr/html/casio/pb-110_e.html
Last browsed to on 1-Nov -2019.

Personal Computer

PB-110

OWNER'S MANUAL



CASIO®

Figure 1: Casio PB-110 Owner's Manual front cover



Figure 2: Casio PB-110 Owner's Manual rear cover

Personal Computer

PB-110

CASIO®

Figure 3: Casio PB-110 Owner's Manual title page

INTRODUCTION

This manual provides an explanation of the computer so that BASIC program beginners as well as users, who have a complete knowledge of BASIC and intend to fully utilize it, can easily understand and utilize the computer immediately.

Users who are new to BASIC programming should read this manual from Chapter 1 in order to master programming. Especially in Chapter 3, the explanation of program preparation and commands should be carefully read. A program flow explanation is provided in Chapter 3. See Chapter 4 "Command Reference" for the command formats and detailed explanation.

Users who have a knowledge of BASIC should utilize the computer while reading Chapter 4 "Command Reference" after mastering the basic operations explained in Chapters 1 and 2.

Users who intend to use programs immediately by entering them can utilize the programs in Chapter 5 "Program Library".

Figure 4: Casio PB-110 Owner's Manual introduction page

PRIOR TO OPERATION

This computer was delivered to you through CASIO's strict testing process, high level electronics technology, and strict quality control. To ensure a long life for your computer, please observe the following precautions.

■ Utilization precautions

- Since this computer consists of precision electronic parts, do not disassemble it. Also do not apply an impact to it by throwing or dropping it, or do not expose it to rapid temperature changes. In addition, do not store it in a place with high temperatures or high humidity, or in a dusty place. When the computer is utilized in low temperatures, sometimes the display response is slow or does not operate. When normal temperature conditions are restored, however, the computer operation will become normal.
- Special care should be taken not to damage the computer by bending. For example, do not carry it in your hip pocket.
- Please do not connect units other than the FA-3 and FP-12S to the connector portion.
- Since "—" is displayed during calculation in which key operation is invalid except for certain keys, always confirm the display before pressing a key.
- Although the display sometimes becomes faint while buzzer is sounding, it is not a malfunction. However, if the display becomes very faint, replace the batteries with new ones as soon as possible.
- Every two years, replace the batteries with new ones even if the computer is not utilized. Do not leave exhausted batteries inside it because trouble may occur due to battery leakage.
- Always keep the cap for the connector portion when only the computer is used.
- If strong static electricity is applied to the computer, sometimes the memory content is changed, or key operation cannot be performed. If this occurs, remove the batteries, then replace them again.

Figure 5: Casio PB-110 Owner's Manual preface page 1

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- Always connect optional equipments after turning the computer power off.
 - To clean the computer, do not use volatile liquids such as benzine or thinner, but wipe it with a soft dry cloth, or a cloth dampened with a neutral detergent solution.
 - Do not turn the power off during program execution or operation.
 - Since the computer is made up of precision electronic parts, avoid giving a strong shock while a program is being executed; otherwise the program execution may be stopped or the memory contents may be changed.
 - When a malfunction occurs, contact the store where the computer was purchased or a nearby dealer.
 - Before seeking service, please read this manual again, check the power supply, check the program for logic errors, etc.

Figure 6: Casio PB-110 Owner's Manual preface page 2

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