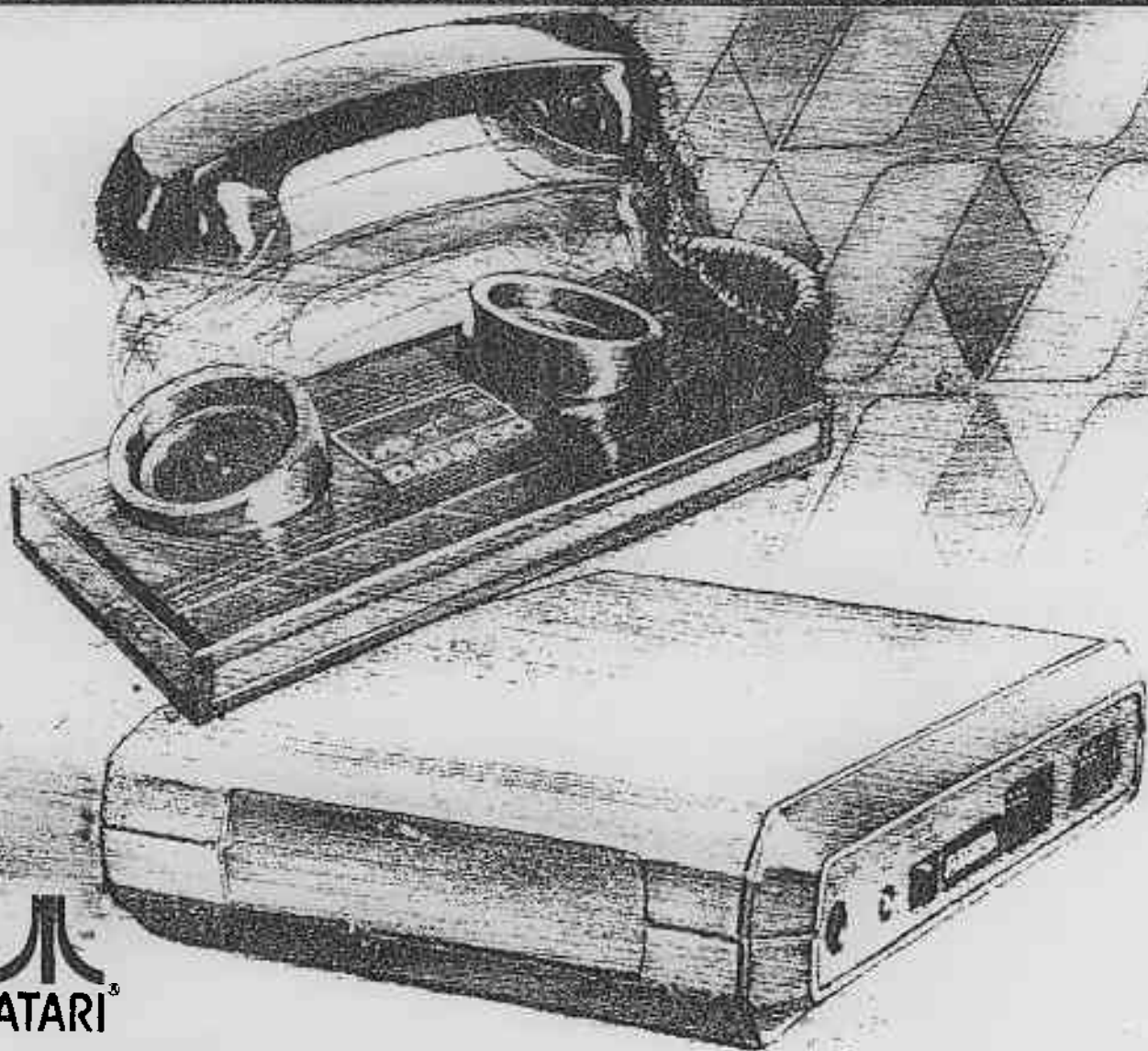


ATARI®

850™

INTERFACE MODULE
OPERATOR'S MANUAL




ATARI®

A Warner Communications Company

ATARI® 850
Interface Module
Owner's Manual

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Every effort has been made to ensure that this manual accurately documents the Disk Operating System of the ATARI Personal Computer Systems. However, due to the ongoing improvement and update of the computer software, ATARI, INC. cannot guarantee the accuracy of printed material after the date of publication, nor can ATARI accept responsibility for errors or omissions.

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INTRODUCTION

Unpacking

Verify that the container for your ATARI 850[tm] Interface Module contains the following items:

Interface Module
I/O Cable assembly (Data cord) No. CA01412
Power Adapter, No. CA014748

Save all packing material in case you have to ship the Interface Module or store it for an extended period.

ATARI 850[tm] Interface Module

The ATARI 850 Interface Module allows communication between your ATARI Personal Computer and RS-232-C peripherals. The ATARI 410[tm] Program Recorder, disk drive, ATARI 820[tm] Printer and devices plugged in to a controller jack function without the interface module.

The interface module connects between the computer console and the peripherals. The interface module has four serial ports and one parallel port, which is referred to as the Printer Port. The interface module contains a processor and memory and programmable ports. The programming of the interface module is controlled from the ATARI Personal Computer System.

ATARI 825[tm] Printer

The ATARI 825 Printer is an 80-column medium-speed Printer. It is much more versatile than the ATARI 820[tm] Printer. The 825 Printer requires an ATARI 850 Interface Module that is used in conjunction with it.

The 825 Printer connects to the Printer Port of the Interface Module.

ATARI 830[tm] Modem

The ATARI 830 Modem is a Bell 103-compatible modem that enables you to communicate over the switched telephone network with another terminal equipped with a similiar modem. The ATARI 830 Modem requires an ATARI 850 Interface Module that is used in conjunction with it.

The modem usually connects to port 1 of the interface module. The modem, under the control of the interface module, produces tones that are sent out as electrical signals over the telephone lines. Messages are received by the modem as tones that it decodes and sends to the interface module. The incoming/outgoing traffic is managed according to the programmed functions of the interface module. The technical specifications of the Modem are given in APPENDIX 13.

Contents of This Manual

The ATARI B50 Interface Module will be used with many different System configurations. Different configurations impose different demands on the user in what he has to know. The procedures are also different for different configurations. The general rules that must be observed in connecting and powering up are described and illustrated in Chapter 2.

Having connected your system and turned on the power, you then need to know how to program and use the ports to which you have connected your peripherals. The most complex technical material is in Chapter 3, which describes how to use the serial ports, and the supporting Appendices of Chapter 3.

The Appendices include user programs, code conversion tables, error codes, description of the RS-232-C communication standard and a technical description of the interface module. In addition, there are appendices that give the precise information necessary for configuring and using the serial ports.

How To Use This Manual

First determine the system configuration you are using. You may then use Table 1 of Chapter 2 to guide you in hooking up and powering your system.

If you are using the Interface Module with only the ATARI 825[tm] Printer, all the necessary operating information is given in the manual supplied with the printer. You do not need the other information in this manual.

If you are using the Interface Module with a parallel printer that is not the ATARI 825 printer, you will need to refer to APPENDIX 11 to understand the principles of operation of the Interface Module and timing constraints on the Printer Port and to APPENDIX 12 for pin connector information.

If you are using a serial port (with or without using the printer port as well), you may need to configure the serial port. One case where you will not need to configure the serial port is where you are using a cartridge that requires a particular configuration which is imposed by the system when the power is turned on. For example, the ATARI TeleLink [TM] I uses serial port 1 but does not permit you to change the configuration or the operation of the port.

If your system configuration will support different configurations of the serial ports, you should examine the default configuration (Chapter 3) to determine if the default settings are satisfactory and compatible with the specifications of your peripheral device. If the default configuration is satisfactory, you can proceed to use the serial ports with proper I/O commands. The commands in BASIC are described briefly in Chapter 3 and described more fully in the Appendices. In this case you will not have to refer to the rather complex coding required for configuring a port.

If you do have to configure a port, you should read the appropriate parts of Chapter 3 and then refer to the detailed information in Appendices 5 through 7. In case the material on configuring a port is confusing to you, you may find it helpful to read APPENDIX 1 (What is RS-232-C?) and/or APPENDIX 11 (Principles of Operation).

If you are familiar with the RS-232-C standard, you will probably be able to proceed through Chapter 3, consulting the Appendices referred to there as necessary. However, if you are not familiar with the RS-232-C standard, it will probably be most efficient to read APPENDIX 1 on RS-232-C before you attempt to read Chapter 3.

The commands for configuring a port are covered very briefly in Chapter 3; little more than the form of the commands is given. The

detailed technical descriptions necessary for a full understanding of all aspects of configuring a port are placed in the Appendices that parallel the subsections in Chapter 3. Therefore, you should read the port configuration parts of Chapter 3 to "see the big picture" and turn to the relevant Appendices for the detailed information necessary to write actual program segments.

The examples in APPENDIX 9 will show you how to control ports under the various conditions described in the examples. In addition, the examples should help you to understand how to configure and use a serial port if you run into problems with an application that is not very close to one of the examples itself.