

Complete Expanded Data Handler (with options)

Western Data System 3650 Charles Street, Suite H Santa Clara, Calif. 95050

BULK RATE U.S. POSTAGE PAID Permit No. 3129 San Jose, CA. THE DATA HANDLER IS THE IDEAL MICROCOMPUTER TO VENTURE INTO THE WORLD OF COMPUTING. WHETHER YOU'RE A BEGINNER, OR A COMPUTER PROFESSIONAL, WE HAVE A SYSTEM TAILORED FOR YOU.

## FLEXIBILITY, SIMPLICITY OF OPERATION, AND LOW

**COST** have been the major reasons for the success of the Data Handler. After one afternoon of assembly time you can be writing and executing your own programs, or you may wish to use the ones in the software section of the owner's manual. The Data Handler is a complete microcomputer system on a single P.C. board combining the MOS Technology 6502 microprocessor with the latest state of the art technology. Superior design enables the Data Handler to operate at very high speeds as a stand alone microcomputer or a dedicated controller for even such high speed devices as disc peripherals. External TTY or terminals are not needed since the Data Handler contains 26 keyboard switches for full function hardware front panel control.

**IDEAL FOR COMPUTER HOBBYISTS** and anyone with an interest in computer programming for personal or professional reasons. The Data Handler is the lowest priced complete system available. It combines multi-functions with the ease of operation that makes it ideal for the beginning computer enthusiast. For practical applications the Data Handler can be programmed to control and monitor any eight devices simultaneously, everything from monitoring solar heating systems and lawn sprinklers to game playing and pouring cocktails at parties.

. 5524

# SPECIFICATIONS

# ELECTRICAL

- 6502 or 6502A MOS Technology Microprocessor
- Directly Addresses 65K Bytes of Memory, Contains 1K Bytes of Static RAM (2102's) on Board.
- I/O Address Control with Memory Control Lines
- Slow Down Circuitry for Slow Memories
- DMA (Direct Memory Access) Circuitry and DMA Acknowledge Control
- Dual Interrupt Lines One Maskable, One Non-Maskable.
- Dual Addressable I/O Ports One 8-Bit Parallel Input Port with Interrupt Strobe and One 8-Bit Parallel Output Port with Data Flag
- Single +5 volts @ 1.8 amps.
- Variable Speed Clock (Operating Speeds to 2 MHz).
- Altair/IMSAI Identical Tri-State Buss Drivers.
- Pin for Pin Buss Compatible with the 8800 Altair/IMSAI
- Directly Expandable with the Long List of Altair/IMSAI Peripherals.

# POWER SUPPLY

Simply connect a 5 volt @ 2 amp user provided power supply and you're on your way into the world of computer programming.

### **COMPONENTS**

The Complete Data Handler Components list consists of a

small number of resistors, capacitors, LED's and the following I.C.'s:

8 – 2102	2 – 7432
1 — 6502	4 — 7474
4 - 7400	2 - 74\$412
5 - 7402	13 — 74367
2 - 7404	1 — 9602
1 — 7408	1 — 74116
1 – 7410	4 — 74193
7 – 7430	

# FRONT PANEL CONTROL

The Data Handler features a full function hardware front panel with the following:

- LED Display for Run
- LED Display for Address Entry
- LED Display for Data Entry
- Separate LED Displays for Address and Data Control
- 16 Hexadecimal (O thru F) Switches for Address and Data Control
- 10 Control Switches
  - SC Single Cycle Operation
  - SI Single Instruction Operation
  - EX Memory Examine (Incremental)
  - DP Memory Deposit (Incremental)
  - HT System Halt
  - RN System Free Run
  - INT System Initialization
  - AD Address Entry
  - DA Data Entry
  - CL Mode Clear



### Complete Assembled Data Handler

# HERE'S WHAT YOU GET WITH YOUR COMPLETE DATA HANDLER KIT.

- Single 10-5/8" x 13-3/4" Industrial Grade P.C. Board.
- P.C. Board Slide-in Wooden Case.
- 26 Heavy Duty Keyboard Switches.
- A complete set of I/C's.
- One 6502 MOS Technology Microprocessor.
- LED's.
- Resistors, Capacitors, Sockets, and 500 ns Memory.
- EVERYTHING NEEDED TO BUILD THE COMPLETE DATA HANDLER.

# SUPPORTED BY AN EXTENSIVE 85 PAGE OWNER'S MANUAL.

All our kits and assembled Data Handlers are backed by a complete detailed, simple to understand Owner's Manual.

The manual consists of everything from theory of operation, complete assembly instructions, to a complete troubleshooting chart. There's even a software section.

UNBELIEVABLY PRICED ASSEMBLED OR UNASSEMBLED, COMPLETE UNIT OR OUR BARE BONES KIT, WHICHEVER IS YOUR PREFERENCE. THE DATA HANDLER IS NOW AVAILABLE THROUGH WESTERN DATA SYSTEMS OR THE COMPUTER STORE NEAREST YOU.

**DOES ALL THIS SOUND UNBELIEVABLE? BUY THE OWNER'S MANUAL FOR JUST \$5.00 AND WHEN YOU'RE READY TO PURCHASE A DATA HANDLER WE WILL REFUND YOUR \$5.00.** 

# WARRANTY AND DELIVERY

Western Data Systems products are fully warranted and shipped within 15 days after receipt of order.

# ORDER FORM BARE BONES KIT: \$79.95 Designed for the economist, this kit includes, the Data Handler P.C. Board, P.C.B. case, 26 keyboard switches, and complete 85 page owner's manual. COMPLETE KIT: \$179.95 Includes the Data Handler P.C. Board, P.C.B. case, 26 keyboard switches, the complete set of I/C's, one 6502 MOS Technology microprocessor, Sockets, LED's, Resistors, Capacitors, 500 ns Memory, and a complete 85 page owner's manual. ASSEMBLED DATA HANDLER: \$224.95

# (OPTIONS)

BLACK METAL CASE: \$18.95	A sturdy black anodized case made especially for the Data Handler. Slide tracks on both sides enable the P.C.B. to slide in place. A second track underneath is for the soon to be released Data Handler expansion board.
DUST COVER: \$13.89	This handy plexiglass dust cover looks great and completely covers the P.C.B. with a cut-out for switch access.
OWNER'S MANUAL: \$ 5.00	A complete detailed, simple to understand documentation of 85 pages. Purchase this and the \$5.00 will be refunded with the future purchase of a Data Handler.

# COMPLETE AND MAIL WITH YOUR CHECK OR MONEY ORDER TO:

Western Data Systems 3650 Charles Street, Suite H Santa Clara, California 95050

QUANTITY	ITEM	PRICE
	Bare Bones Kit	\$ 79.95
	Complete Kit	179.95
	Complete Assembled Unit	224.95
	Black Metal Case	18.95
	Dust Cover	13.89
	Owner's Manual	5.00
	California Residents add 6% Sales Tax	\$
	Total Amount Enclosed	`\$
Name		
Address		
City	State Zip	
Phone No		
Authorized Signature		