

# MICROLOG AIR-1

## SPECIFICATIONS

**INPUTS:** Receiver audio, in & out phono jacks for easy speaker connections. Hand key input allows code practice that reads your sending and drives the transmitter keying outputs.

**OUTPUTS TO TRANSCEIVER:** Positive and negative switching for CW & FSK keying, solid state or tube type transmitters, AFSK tones at microphone compatible levels, T/R(PTT) transmitter control.

**PRINTER OUTPUT:** Uses standard VIC printer for "Hard-Copy" of both receive and transmit data regardless of on-the-air mode. Also has hi voltage transistor switch on board for driving current-loop type printers.

**DISC & TAPE INTERFACE:** Uses standard VIC DISC & DATASET for recording off the air and making long "brag tapes." Another handy feature is the ability to save and re-load your "here-is" memories easily. Since this function is also compatible with your VIC disc drive, it's especially nice for quick start-up.

**VARIABLE MEMORY UTILIZATION:** A unique Microlog feature allows you to select the size of your text buffer and 8 "HERE-IS" messages from the available computer RAM. It automatically takes into account any memory expansion cartridges you've added. The unexpanded VIC has about 3000 characters for you to allocate. You could for example choose eight 300 character messages and a 600 character text buffer. If you don't tell it otherwise, the system will default to eight 100 character "HERE-IS" memories and a 2200 character text buffer. The expanded VIC will have different default memory sizes, depending on the amount of added memory. The programmable "HERE-IS" memories can be loaded or inserted into the text buffer for transmission at any time.

**TEXT BUFFER:** Allows you to type ahead while receiving. Text entered into the buffer is visible above the split-screen line for correction before sending.

**AUTO-START:** Inhibits the display of non-RTTY data.

**TUNING INDICATORS:** On screen visual tuning aid and audio (pitch) reference tone for RTTY and CW. (Audio is heard thru your tv or monitor's sound channel, just like any other VIC generated audio.)

**W R U (Who Are You?):** Automatically responds with your call sign when a user programmable sequence up to 15 characters is received.

**SEL-CALS:** Two 15 character user programmable sequences. Receipt of selcal #1 enables the printer, disc or tape. Receipt of #2 disables these outputs for unattended message store (mailbox).

**FULL SPEED OPERATION:** Transmit and receive Morse — 5 to 199 WPM, Baudot — 60, 66, 75, 100, 132 WPM, ASCII — 100 & 300 baud.

**MORSE SPEED TRACKING:** Automatic and speed lock modes, keyboard selectable.

**VIDEO DISPLAY:** Color keyed display makes optimum use of the computer's color capability. Uses standard VIC format of 23 lines of 22 characters.

**SPLIT-SCREEN:** Displays text buffer input above and receive/real-time transmit text below the split line.

**TOP LINE DISPLAY:** Constant display of Time, Mode, Speed/Code in use, and status indicators.

**TEST MESSAGES:** Quick brown fox and RYRY's in Baudot, U\*U\* in ASCII, and VVV in Morse.

**SPECIAL SYNC-LOCK MODE:** Allows improved ASCII operation and "Paced Output" in Baudot RTTY.

**T/R(PTT):** Fully automatic control of your XMTR via the Push-to Talk line in both RTTY and Morse.

**UN-SHIFT on SPACE:** Automatically shifts back to "LETTERS" upon receipt or transmission of a Baudot space. Keyboard command on/off.

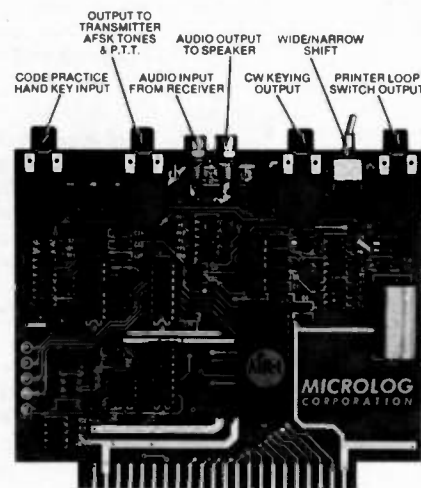
**SYNC:** Transmits "Blank Fill" in RTTY and BT in Morse when the text buffer is empty and unit is in transmit. Keyboard command on/off.

**OUTPUT MODES:** CHAR — outputs each character as typed. WORD — outputs full word when spacebar is typed. LINE — outputs full line when carriage return is typed. BUFFER — outputs full buffer, on command.

**REAL-TIME CLOCK:** Uses the VIC's internal clock for constant on screen display of time which can be inserted into text buffer on keyboard command.

**WORD WRAP AROUND:** Prevents splitting words at the end of a line. Works in receive as well as transmit.

**MORSE TONE DETECTOR:** Single tone, 800 Hz center frequency, with effective bandwidth of 300 Hz. Pitch reference regenerated audio tone for easy tuning.



**RTTY DEMODULATOR:** True dual tone computer enhanced demodulator circuit on standard 2125/2295 Hz tone pair compatible with HF RTTY and VHF FM operation. Switch selected wide and narrow shift.

**CODE PRACTICE:** Random five character code group generator sends at any speed you set via the keyboard. Hand key input for sending practice and manual morse transmission.

**CW ID & NORMAL ID:** Two independent 16 character memories for either 2 calls or one normal and one with auto-CW ID for RTTY.

**MECHANICAL:** Printed circuit board is G-10 epoxy, double sided with plated thru holes. Board is solder masked and silk-screened with parts locations for easy troubleshooting. Size is 5 3/4" wide by 4 1/2" deep by 3/4" high. Fits directly into VIC expansion port and is compatible with popular expander boards in use.

**NO EXTERNAL POWER REQUIRED:** Unit is completely powered by host computer, eliminating the need for outboard power supply. (Entire system; VIC, Microlog AIR-1, & video monitor can easily run from 12 VDC power for remote or emergency battery operation.)

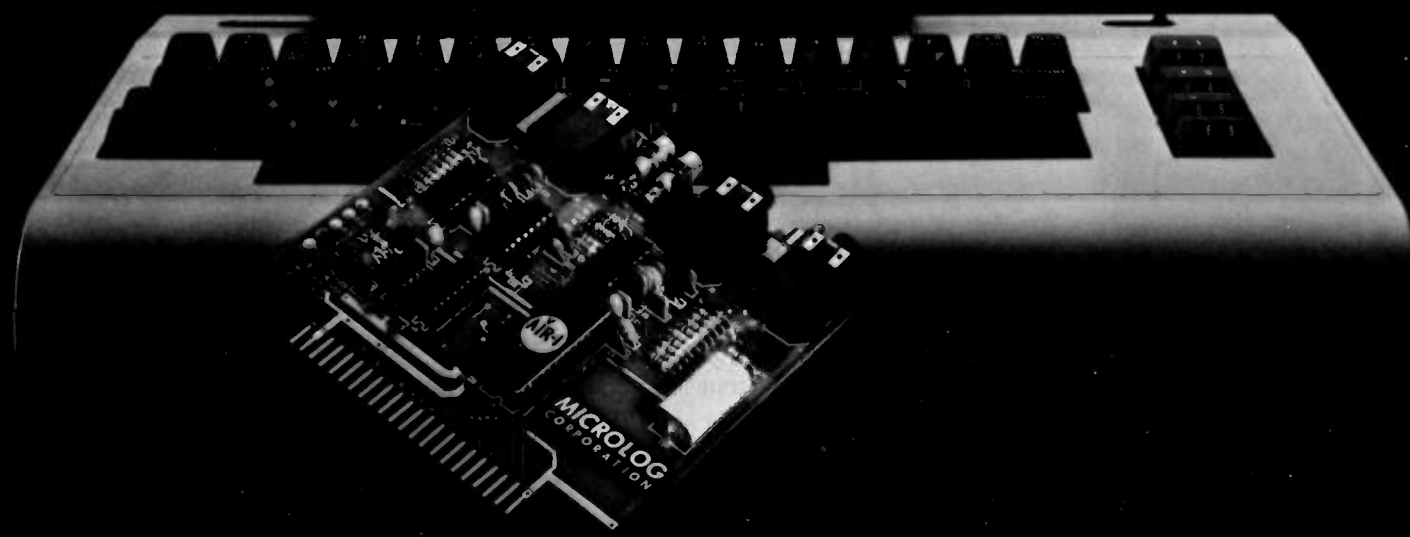
**CONNECTIONS:** All inputs/outputs are convenient 1/4" 3 circuit phone or RCA phono types. Mating plugs are all provided.

Note: VIC, VIC-20 and DATASET are trademarks of Commodore Electronics, Ltd.

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# MICROLOG AIR-1

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## Connect your computer to the air!

The "AIRWAVES" that is, thru the Microlog AIR-1, a single board terminal unit AND operating program that needs no external power supply or dangling extras to put your VIC-20 computer on CW & RTTY. And what a program! The famous Microlog CW decoding algorithms, superior computer enhanced RTTY detection, all the features that have made Microlog terminals the standard by which others are compared. Convenient plug-in jacks make connection to your radio a snap. On screen tuning indicator and audio reference tone make it easy to use. The simple, one board design makes it inexpensive. And Microlog know-how makes it best!

There's nothing left out with the AIR-1. Your VIC-20, America's most popular computer, can team-up with Microlog, America's most successful HAM terminal, to give you an unbeatable price and performance combination for RTTY & CW. If you've been waiting for the right system at the right price, or you've been disappointed with previous operating programs, your time is now. At \$199, the complete AIR-1 is your answer. Join the silent revolution in RTTY/CW and put your VIC-20 ON-THE-AIR! See it at your local dealer or give us a call at Microlog Corporation, 18713 Mooney Drive, Gaithersburg, Maryland. TEL (301) 258 8400. TELEX 908153.

Note: VIC-20 is a trademark of Commodore Electronics, Ltd.

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