

# Computer Automation Technology, Inc.

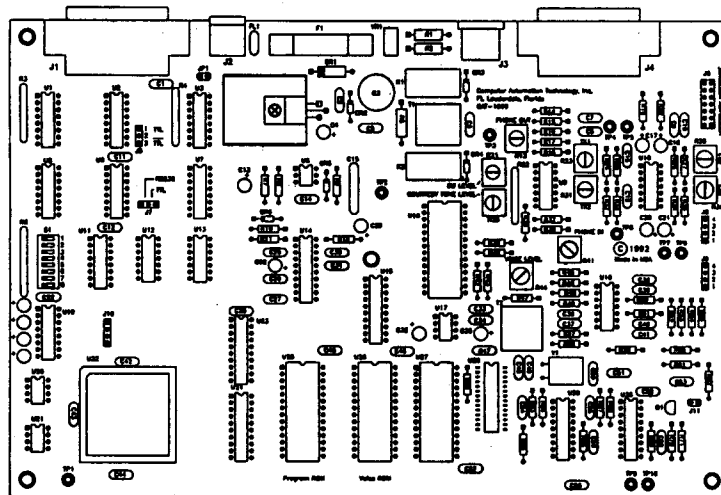
## CAT-1000 Repeater Controller

### CAT-1000 Repeater Controller

The CAT-1000 is packed with features normally reserved for controllers costing thousands of dollars more. Built on the foundation of the very successful CAT-500, this controller incorporates the features suggested by customers like you. Programming the CAT-1000 is a snap with carefully structured and uniform programming commands. The manual is easy to follow with numerous examples. The voice synthesizer interacts with you during each programming operation.

### Features Include:

- \* Voice Synthesizer
- \* Forty Voice Messages
- \* Digital Voice Clock
- \* Grandfather Clock
- \* Two CW Identifiers
- \* Programmable Courtesy Tones
- \* (64) Control Functions
- \* (60) Position Scheduler
- \* Full Feature Autopatch
- \* (300) User Speed Dials
- \* (10) Emergency Speed Dials
- \* Reverse Autopatch
- \* Last Number Redial
- \* Autopatch Cover Tone
- \* Autopatch Time Extender
- \* Phone Number Read Back
- \* Caller ID Suppression
- \* Phone Number Lock-Out
- \* Area Code Discrimination
- \* DTMF Repeater Access
- \* DTMF Command Generator
- \* Programmable Timers
- \* Link Preset Frequencies
- \* 300 baud on Board Modem
- \* Memory Saves
- \* Macro Strings



- \* DTMF Paging
- \* DTMF or Pulse Dialing
- \* DTMF Window
- \* Link Serial Tuning
- \* TS-440 HF Remote Base
- \* FT-767GX HF Remote Base
- \* RS-232 Interface
- \* Hardware Inputs
- \* DVR Controller
- \* DTMF Regenerator
- \* DTMF Pad Test
- \* DTMF Audio Muting
- \* Programmable Prefix Codes
- \* Link Auto Disconnect
- \* Two-Tone Paging
- \* TTL Computer Interface
- \* User Function Switches
- \* Doug Hall RBI-1 Interface

### Voice Synthesizer

A vocabulary list of 475 words carefully selected for amateur repeater operation is available to construct any of 40 different voice messages. Each message can be 31 words in length. Configure your repeater ID and announcements to suit your particular needs. Chimes, sound effects and salutations in a female voice are also included. The voice synthesizer fully interacts with you during control and programming operations.

### Digital Voice Clock

The voice will announce the time upon request, at the completion of an autopatch, during repeater IDs, or on the hour through the grandfather clock feature.

### DTMF Key-Pad Test

A DTMF key-pad test will read back the numbers decoded in a synthesized voice. This includes the words "STAR" and "POUND."

### Courtesy Tone

Memory space is provided for the storage of ten custom courtesy tones. Each tone can consist of up to three different tone frequencies of various lengths and separations.

### LiTZ Emergency Alert

LiTZ is a new system promoted by the ARRL to provide a means for a repeater user to request emergency assistance without being familiar with the operation of the repeater. If a repeater user transmits a DTMF [0] for three seconds, the CAT-1000 will alert the control operators.

### Autopatch

A full feature autopatch with storage for three hundred speed dial numbers highlights the CAT-1000. Each speed dial location accepts numbers of up to eleven digits and includes space for the users call letters. The same is also true for the ten Emergency speed dial locations. Regular calls are preceded by a phone number read-back. This feature can be suppressed by a mic key-click. Long distance protection is provided by a first number 0-1 check. A twenty position table stores telephone numbers or whole prefixes to be locked-out. Area code discrimination will permit access to certain area codes. Last number re-dial, hook flash, and autopatch time extender commands round out the features. In addition to the Reverse autopatch, full telephone control and programming provides extra security.

### Monitor By Telephone

This feature permits the control operator to call the repeater by telephone and monitor repeater activity. While in this mode, the transmitter can be turned on and off. This is useful when investigating intermodulation problems. The forced reverse autopatch command permits the control operator to join the QSO in progress.

### Digital Voice Recorder

An optional DVR, controlled by the CAT-1000 through the MF-1000 serial card, can be added to your repeater. Control of the DVR is fully integrated into the CAT-1000 control and command structure. The CAT-1000 will permit you to substitute any of the sixteen DVR tracks in place of the messages normally generated by the voice synthesizer. In fact, you can even intermix DVR tracks with voice messages.

### Scheduler

An advanced 60 position scheduler fully automates the operation of the repeater. Pre-schedule your repeater's operation to one minute accuracy. Program the hours, minutes, day of week, or day of month and month of year. The CAT-1000 will do the rest.

## Repeater Control Prefix

Twenty-five prefix numbers control repeater operation. Each prefix is programmable from one to seven digits depending on the security you require.

## Repeater Control Channels

The CAT-1000 has 64 remote control channels. Divided into groups of eight, according to their function, they can be manually controlled through the repeater, link or telephone.

### ZONE 1

Repeater Transmitter  
Repeater CTCSS  
DTMF Access  
CTCSS Override  
Turn on Delay  
DTMF Window  
DTMF Muting  
Control Operator CTCSS

### ZONE 3

Repeater ID#1 (Rest)  
Repeater ID#2 (Active)  
Squelch Tail Message #1  
Squelch Tail Message #2  
Dropout Message #1  
Dropout Message #2  
Time of Day  
Grandfather Clock

### ZONE 5

Autopatch Pulse Dial  
Reverse Autopatch  
Dial One First  
Phone Off Hook  
Ring Announcer  
Modem Auto Answer  
DTMF Generator  
DTMF Regenerator

### ZONE 7

Hardware Input #1  
Hardware Input #2  
Hardware Input #3  
Hardware Input #4  
Hardware Input #5  
Hardware Input #6  
Hardware Input #7  
Hardware Input #8

## CW ID

The CAT-1000 will switch to a CW ID when a user talks over the voice ID. You program the speed and tone frequency. If the repeater is at rest, the CAT-1000 will send ID #1. This ID should include information about your repeater or sponsoring organization. If the repeater is in use, ID#2 will be sent.

## Repeater Timers

A total of 18 timers control repeater operation. Each timer is user programmable to afford maximum flexibility to suit your requirements.

## User Function Switches

Eight switches control equipment at your repeater site. Controlled manually by DTMF commands, or by the scheduler, they can be made to turn OFF, ON or Momentarily change state, any time you choose.

## DTMF Regenerator

The CAT-1000 will mimic your DTMF input. In sophisticated repeater systems, it is often necessary to pass DTMF commands to distant repeaters within the linking system. The CAT-1000 will swallow your tones and then regenerate the tones free of noise and distortion. This will insure reliable control of your linking network.

## DTMF Command Generator

Store forty DTMF commands in the CAT-1000 memory. These commands can be sent manually or automatically by programming the scheduler.

### ZONE 2

RPTR Timeout  
Squelch Tail  
Scheduler Enable  
DTMF Pad Test  
LiTZ Emergency Alert  
Grandfather Clock Sleep  
Courtesy Beep  
Talk Over Voice

### ZONE 4

Autopatch Enable  
Autopatch Timeout  
Long Distance  
Emergency 911  
Speed Dial Enable  
Number Read Back  
Autopatch Radio Mute  
Autopatch Pre-Dial

### ZONE 6

Link Receive  
Link Transmit  
Link Repeat  
Link CTCSS  
Link Voice  
Link Auto Disconnect  
Computer Interface  
Ring Detector

### ZONE 8

User Function Output #1  
User Function Output #2  
User Function Output #3  
User Function Output #4  
User Function Output #5  
User Function Output #6  
User Function Output #7  
User function Output #8

## Hardware Inputs

Eight hardware inputs activated by a positive voltage from other equipment at the repeater site, causes the CAT-1000 to execute any repeater command. External repeater control or information about the repeater site will be instantly available.

## Repeater Programming

An extensive set of programming commands permits you to customize your repeater's operation. Protection is provided by a user programmable seven digit un-lock number. Once un-locked, use the programming commands to load voice messages, speed dial numbers, set the clock, change prefix codes and timer settings.

## Macro

By entering a macro number, the CAT-1000 will execute up to ten commands in a string. Store up to 40 macros in memory. One Macro can be used to call a second Macro. Customize the control functions to suit your particular needs.

## 300 Baud Modem

Program the CAT-1000 with your computer over the telephone line through the on board modem. Use any of the popular computer software programs for communication. Set the clock and timers, display and change control codes, and program the scheduler and speed dial numbers. Download the CAT-1000 memory and store on disk to be up loaded later. Following is a list of computer programming commands:

### Command Definition

area	Display and change AREA CODE numbers.
call	Display and change CW ID.
clock	Display and set the CLOCK.
code	Display and change CODE and PREFIX numbers.
ctss	Display and program CTCSS commands.
dial	Display and program SPEED DIAL numbers.
dtmf	Display and program DTMF commands.
extn	Extend modem connect time.
hdwr	Display and program HARDWARE input switch action.
link	Display and program LINK SERIAL TUNE frequencies.
lock	Display and program LOCK-OUT phone numbers.
macro	Display and program MACRO commands.
menu	Displays this MENU of computer terminal commands.
page	Display and program PAGING tones.
pass	Enter a new PASSWORD for modem communications.
quit	Exit the computer terminal mode.
schd	Display and program SCHEDULER activity.
stat	Display ACTIVITY counters.
talk	Display and program VOICE synthesizer messages.
test	Perform diagnostic TESTS on controller.
time	Display and change TIMER settings.
tone	Display and program COURTESY tone.
usfw	Display and program switches on MF-1000 card.
vers	Display current software VERSION and release date.
xfer	Xmodem file upload and download

## Active Memory Save

Configure the CAT-1000 to suit your special requirements. Save the current settings of the control channels, prefix codes, timers and the first twelve voice messages. Space is provided for eight memory saves. These memory saves can be later recalled with a DTMF command.

## HF Remote Base Interface

The CAT-1000 offers a serial port for HF transceiver control. By entering DTMF commands, the CAT-1000 will generate the ascii commands to control the TS-440 and FT-767GX transceivers. The CAT-1000 acts like a computer providing full control. The CAT-1000 will announce the status of the various transceiver functions. The CAT-1000 receives and sends serial information in both RS-232 and TTL format.

## DTMF Paging

Enter a DTMF page on the telephone line and the CAT-1000 will rebroadcast the DTMF page to alert a repeater user with a DTMF squelch equipped radio.

## Repeater Programming Commands

The following table describes the DTMF programming commands used to customize the CAT-1000 Repeater Controller operation. Protection is provided by a user-programmable seven digit un-lock number. Once un-locked, use the programming commands in the ENTRY column to load voice messages, speed dial numbers, set the clock or change prefix codes and timer settings.

ENTRY	DESCRIPTION
*10XX	READ SCHEDULER COMMAND
*11XX	PROGRAM SCHEDULER COMMAND
*12XX	ERASE SCHEDULER COMMAND
*13XX	READ MACRO
*14XX	PROGRAM MACRO
*15XX	ERASE MACRO
*16X	READ HARDWARE INPUT SWITCH
*17X	PROGRAM HARDWARE INPUT SWITCH
*18X	ERASE HARDWARE INPUT SWITCH
*190	INITIALIZE ACTIVE MEMORY
*19X	SAVE ACTIVE MEMORY
*20	SEND TIME OF DAY
*21	PROGRAM TIME OF DAY
*298	READ PULSE DIAL RATE
*299	PROGRAM PULSE DIAL RATE
*30XX	SEND VOICE SYNTHESIZER
*31XX	PROGRAM VOICE SYNTHESIZER
*32XX	ERASE VOICE SYNTHESIZER
*33	SEND CW ID
*34	PROGRAM CW ID
*35	ERASE CW ID
*36XX	READ DTMF GENERATOR
*37XX	PROGRAM DTMF GENERATOR
*38XX	ERASE DTMF GENERATOR
*40XX	READ LINK FREQUENCY
*41XX	PROGRAM LINK FREQUENCY
*42XX	ERASE LINK FREQUENCY
*43XX	READ SERIAL CARD #1 SWITCH COMMANDS
*44XX	PROGRAM SERIAL CARD #1 SWITCH COMMANDS
*45XX	ERASE SERIAL CARD #1 SWITCH COMMANDS
*46XX	READ SERIAL CARD #2 SWITCH COMMANDS
*47XX	PROGRAM SERIAL CARD #2 SWITCH COMMANDS
*48XX	ERASE SERIAL CARD #2 SWITCH COMMANDS
*49X	PROGRAM RS-232 OPERATION MODE
*501*	PROGRAM CONTROL OPERATOR PREFIX
*502*	PROGRAM MACRO PREFIX
*503*	PROGRAM MEMORY RECALL PREFIX
*504*	PROGRAM DTMF GENERATOR PREFIX
*505*	PROGRAM DTMF ACCESS PREFIX
*506*	PROGRAM DTMF PAD TEST PREFIX
*507*	PROGRAM TIME OF DAY REQUEST PREFIX
*508*	PROGRAM LINK CONTROL PREFIX
*509*	PROGRAM LINK FREQUENCY LOAD PREFIX
*510*	PROGRAM USER FUNCTION SWITCH PREFIX
*511*	PROGRAM SERIAL BOARD #1 SWITCH PREFIX
*512*	PROGRAM SERIAL BOARD #2 SWITCH PREFIX
*513*	PROGRAM AUTOPATCH ACCESS CODE
*514*	PROGRAM AUTOPATCH DISCONNECT PREFIX
*515*	PROGRAM USER SPEED DIAL (BLOCK 1) PREFIX
*516*	PROGRAM USER SPEED DIAL (BLOCK 2) PREFIX
*517*	PROGRAM USER SPEED DIAL (BLOCK 3) PREFIX
*518*	PROGRAM EMERGENCY SPEED DIAL PREFIX
*519*	PROGRAM VOICE PREFIX
*520*	PROGRAM DVR PREFIX

ENTRY	DESCRIPTION
*521*	PROGRAM PAGING TONE PREFIX
*522*	PROGRAM REVERSE AUTOPATCH PREFIX
*523*	PROGRAM HF REMOTE BASE PREFIX
*524*	PROGRAM MONITOR REPEATER BY PHONE CODE
*525*	PROGRAM DTMF PAGING PREFIX CODE
*601*	PROGRAM REPEATER TIME-OUT
*602*	PROGRAM REPEATER SLEEP TIME
*603*	PROGRAM REPEATER TURN ON DELAY TIME
*604*	PROGRAM COR DROP TO COURTESY BEEP TIME
*605*	PROGRAM COURTESY BEEP TO PTT DROP TIME
*606*	PROGRAM DTMF MUTE DELAY TIME
*607*	PROGRAM REPEATER ID TIME
*608*	PROGRAM SQUELCH TAIL MESSAGE TIME
*609*	PROGRAM DROP OUT MESSAGE TIME
*610*	PROGRAM VOICE DELAY TIMER
*611*	PROGRAM AUTOPATCH TIME
*612*	PROGRAM AUTOPATCH ACTIVITY TIME
*613*	PROGRAM DTMF PRE-WINDOW TIME
*614*	PROGRAM DTMF WINDOW TIME
*615*	PROGRAM PROGRAMMING MAX LENGTH TIME
*616*	PROGRAM AUDIO TEST TONE LENGTH
*617*	PROGRAM RING DETECTOR TIME
*618*	PROGRAM MODEM CONNECT TIME
*619*	RESERVED FOR FUTURE USE
*70XX	READ USER SPEED DIAL (BLOCK 1)
*71XX	PROGRAM USER SPEED DIAL (BLOCK 1)
*72XX	ERASE USER SPEED DIAL (BLOCK 1)
*73XX	READ USER SPEED DIAL (BLOCK 2)
*74XX	PROGRAM USER SPEED DIAL (BLOCK 2)
*75XX	ERASE USER SPEED DIAL (BLOCK 2)
*76XX	READ USER SPEED DIAL (BLOCK 3)
*77XX	PROGRAM USER SPEED DIAL (BLOCK 3)
*78XX	ERASE USER SPEED DIAL (BLOCK 3)
*80X	READ EMERGENCY SPEED DIAL
*81X	PROGRAM EMERGENCY SPEED DIAL
*82X	ERASE EMERGENCY SPEED DIAL
*83XX	READ LOCK-OUT PHONE NUMBER
*84XX	PROGRAM LOCK-OUT PHONE NUMBER
*85XX	ERASE LOCK-OUT PHONE NUMBER
*86XX	READ AREA CODE NUMBER
*87XX	PROGRAM AREA CODE NUMBER
*88XX	ERASE AREA CODE NUMBER
*89	PROGRAM PRE-DIAL NUMBER
*90	GENERATE 1000Hz TEST TONE
*91X	SEND COURTESY TONE
*92X	PROGRAM COURTESY TONE
*93X	ERASE COURTESY TONE
*94XX	PLAY DIGITAL VOICE RECORDER
*95XX	RECORD DIGITAL VOICE RECORDER
*96XX	SEND PAGING TONE
*97XX	PROGRAM PAGING TONE
*98XX	ERASE PAGING TONE
*0	MANUAL EXIT

## CAT-1000 Editor Program

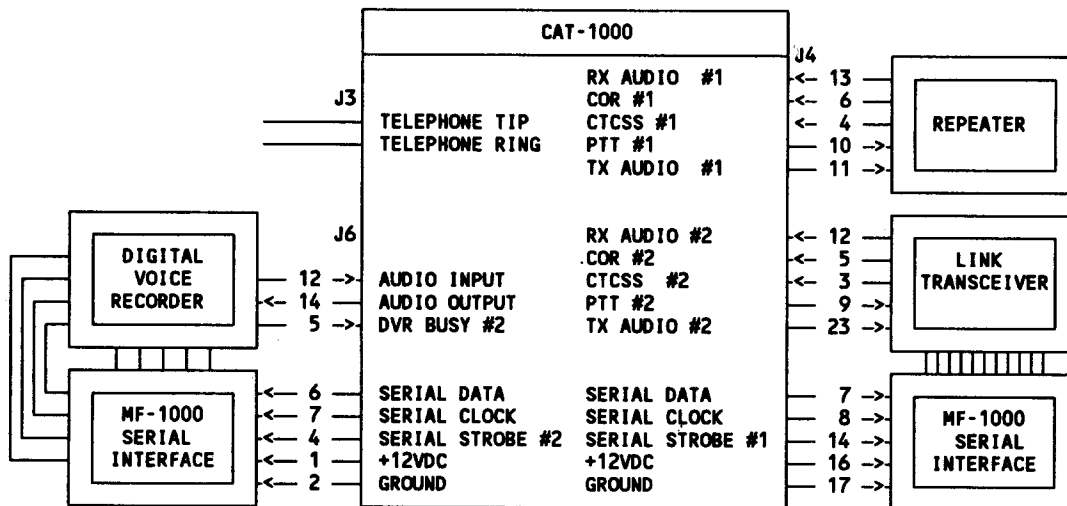
Edit the eight memory files off line without communicating directly with the repeater. The editor includes a print driver and will work with any "XT" or "AT" type computer. Once the files have been changed and saved to disk, they can be uploaded using X-MODEM protocol.

## Link Transceiver Control

The CAT-1000 will control a link transceiver. With the optional MF-1000 serial card, the CAT-1000 will accept commands on the repeater input to serial tune a link transceiver. You can also turn the link ON or OFF or enable just the link receiver. After a preselected period of inactivity the link will automatically disconnect.

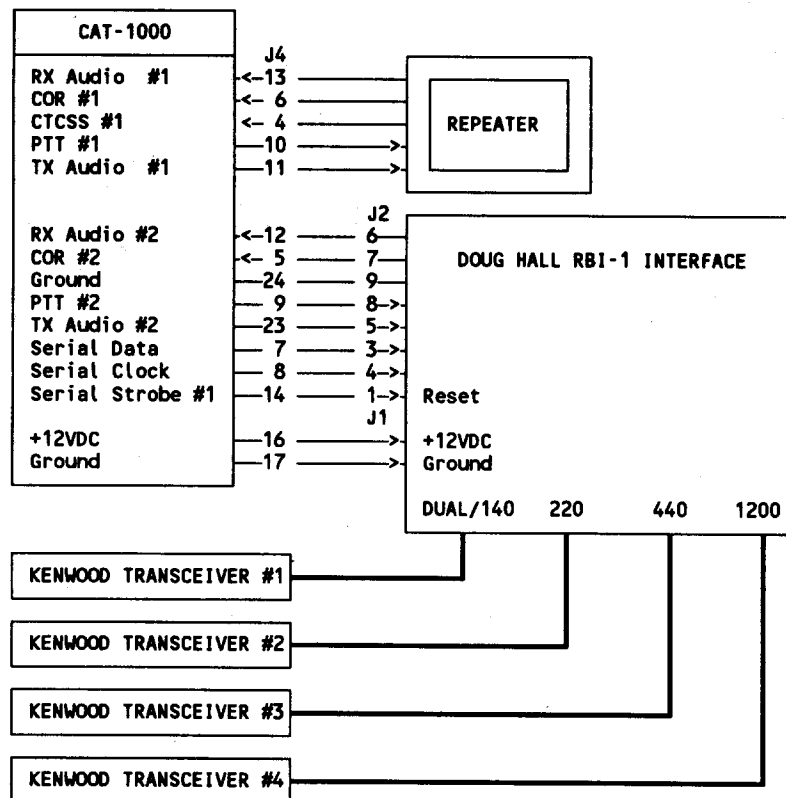
## MF-1000 Serial Interface Card

This card serves a dual function by tuning a link transceiver or controlling a digital voice recorder. Both BCD and Push Button tuning of a link transceiver is supported. In the DVR mode, the MF-1000 controls track selection and the Play, Record, and Reset functions. Eight expanded user function switches are also available. The CAT-1000 will support two serial cards. Its possible to have a serial tuned link transceiver and a DVR at the same time.



## Doug Hall RBI-1 Interface

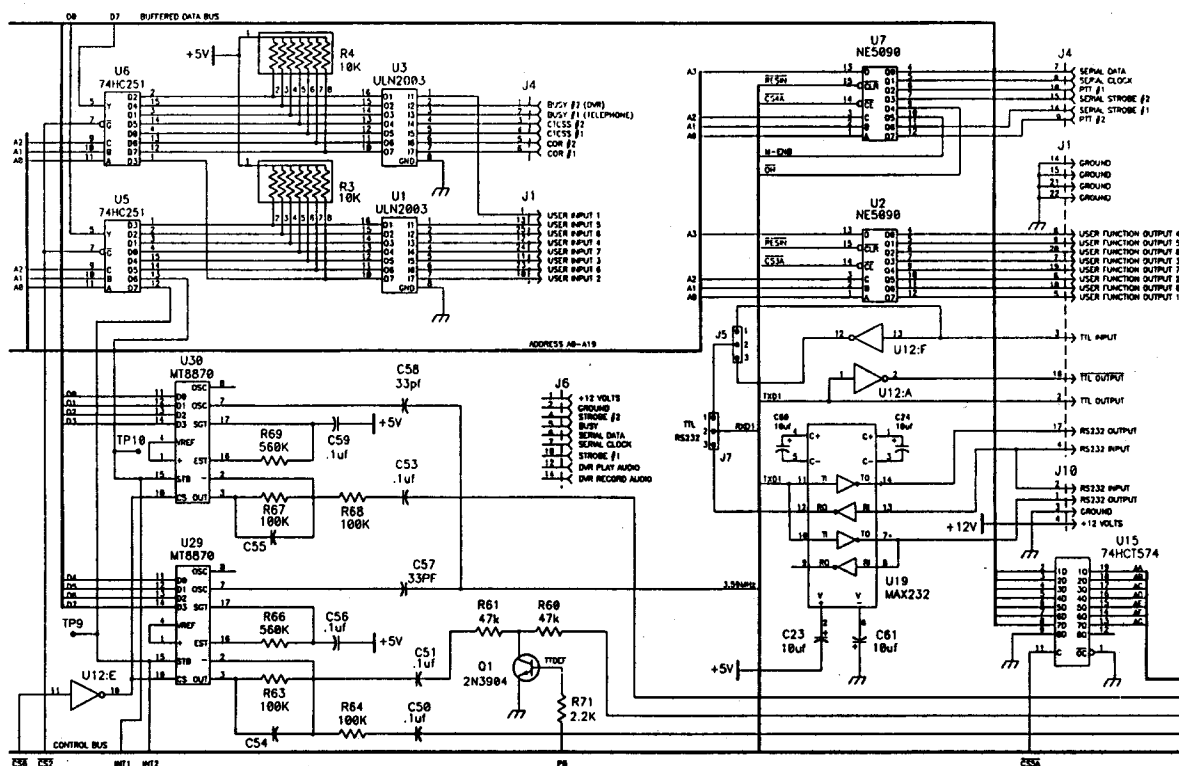
The RBI-1 receives serial data information from the CAT-1000 and converts it to the format required to control the Kenwood transceivers. All connections to the Kenwood transceivers are made through the microphone jack. In addition to band, frequency, offset and transmitter power, CTCSS tones can be selected remotely. The RBI-1 supports the following Kenwood Transceivers: TM-221, TM-231, TM-241, TM-321, TM-331, TM-421, TM-431, TM-441, TM-521, TM-531, TM-541, TM-621, TM-631, TM-701, TM-721, and TM-731.



# Voice Vocabulary Word List

Zero.....	Base.....	Failure.....	L.....	October.....	Security.....	Variable.....
One.....	Battery.....	Fahrenheit....	Land.....	Of.....	Select.....	Verify.....
Two.....	Below.....	Fast.....	Last.....	Off.....	Send.....	Version.....
Three.....	Between.....	February.....	Late.....	Ohms.....	Sent.....	Victor.....
Four.....	Bravo.....	Feet.....	Left.....	On.....	September....	Volts.....
Five.....	Break.....	File.....	Less than....	Open.....	Sequence.....	W.....
Six.....	Button.....	Filed.....	Let.....	Operation....	Service.....	Wait.....
Seven.....	By.....	Final.....	Level.....	Operator.....	Set.....	Warning.....
Eight.....	C.....	Fire.....	Light.....	Or.....	Severe.....	Watch.....
Nine.....	Calibrate....	Flag.....	Lima.....	Organization..	Short.....	Watts.....
Ten.....	Call.....	Fog.....	Line.....	Oscar.....	Showers.....	Way.....
Eleven.....	Calling.....	For.....	Link.....	Other.....	Shut.....	Weather.....
Twelve.....	Cancel.....	Foxhunt.....	List.....	Out.....	Side.....	Wednesday....
Thirteen.....	Cat.....	Foxtrot.....	Load.....	Over.....	Sierra.....	Week.....
Fourteen.....	Caution.....	Freezing.....	Lock.....	Overcast.....	Sleet.....	Weekday.....
Fifteen.....	Center.....	Frequency.....	Lockout.....	P.....	Slow.....	Welcome.....
Sixteen.....	Celsius.....	Friday.....	Long.....	P.M.....	Snow.....	Well Done....
Seventeen.....	Change.....	From.....	Look.....	Papa.....	South.....	West.....
Eighteen.....	Charlie.....	Front.....	Low.....	Pass.....	Speed.....	What.....
Nineteen.....	Check.....	Full.....	Lower.....	Patch.....	Squawk.....	Whiskey.....
Twenty.....	Circuit.....	G.....	M.....	Per.....	Star.....	Will.....
Thirty.....	Clear.....	Gear.....	Machine.....	Phone.....	Start.....	Wind.....
Forty.....	Clock.....	Get.....	Macro.....	Pico.....	Stop.....	Windows.....
Fifty.....	Closed.....	Go.....	Make.....	Plan.....	Storm.....	With.....
Sixty.....	Club.....	Golf.....	Malfunction...	Please.....	Sunday.....	Wrong.....
Seventy.....	Code.....	Good.....	Manual.....	Plus.....	Switch.....	X.....
Eighty.....	Come.....	Green.....	Many.....	Point.....	System.....	X-Ray.....
Ninety.....	Complete.....	Ground.....	March.....	Police.....	S (plural)....	Y.....
A.....	Completed.....	H.....	May.....	Position.....	T.....	Yankee.....
A.M.....	Computer.....	Hail.....	Mayday.....	Pound.....	Tango.....	Year.....
Abort.....	Condition.....	Half.....	Me.....	Power.....	Target.....	Yellow.....
About.....	Congratulations	Ham.....	Measure.....	Practice.....	Telephone.....	Yes.....
Above.....	Connect.....	Hamfest.....	Measured.....	Preset.....	Temperature...	Yesterday....
Acknowledge....	Contact.....	Have.....	Meeting.....	Press.....	Terminal.....	You.....
Action.....	Control.....	Hazardous....	Mega.....	Program.....	Test.....	Your.....
Adjust.....	Current.....	Heavy.....	Message.....	Pull.....	Than.....	Z.....
Advise.....	Cycle.....	Henry.....	Meter.....	Push.....	Thank-You....	Zed.....
Aerial.....	D.....	Hertz.....	Meters.....	Put.....	That.....	Zero.....
Affirmative....	Danger.....	High.....	Micro.....	Q.....	The(shortE)...	Zone.....
Again.....	Data.....	Hold.....	Mike.....	Quebec.....	The(longE)....	Zulu.....
Air.....	Date.....	Home.....	Miles.....	R.....	Then.....	Pause 1.....
Alert.....	Day.....	Hotel.....	Milli.....	Radio.....	This.....	Pause 2.....
All.....	Days.....	Hour.....	Million.....	Radios.....	This-is.....	Pause 3.....
Alpha.....	December....	Hours.....	Minus.....	Rain.....	Thousand.....	Pause 4.....
Alternate.....	Decrease....	Hundred.....	Minute.....	Raise.....	Thunderstorms..	<u>Sound Effects</u>
Altitude.....	Degree.....	I.....	Minutes.....	Range.....	Thursday.....	Chime 1.....
Amateur.....	Delay.....	Ice.....	Mobile.....	Rate.....	Time.....	Chime 2.....
Amps.....	Delta.....	Icing.....	Modified.....	Ready.....	Timer.....	Chime 3.....
An.....	Department...	Identify.....	Monday.....	Receive.....	Today.....	Gunshot.....
And.....	Direction....	Immediately...	Month.....	Receiver.....	Tomorrow.....	Laser.....
Answer.....	Do.....	In.....	More than....	Red.....	Tonight.....	Phaser.....
April.....	Down.....	Increase.....	Move.....	Release.....	Tornado.....	Tic.....
Are.....	Drizzle.....	India.....	Much.....	Remark.....	Tower.....	Toc.....
Area.....	Due.....	Information...	N.....	Remote.....	Traffic.....	Laughter.....
As.....	Dynamic.....	Ing(suffix)...	Near.....	Repair.....	Transmit.....	<u>Female</u>
Assistance.....	E.....	Inputs.....	Negative.....	Repeat.....	Transmitter...	Good Morning...
Association....	East.....	Intruder.....	Net.....	Repeater.....	Try.....	Good Aternoon..
At.....	Echo.....	Is.....	New.....	Reset.....	Tuesday.....	Good Evening...
Attempt.....	Ed (suffix)...	It.....	Next.....	Rig.....	Turn.....	<u>Time Variables</u>
Attention.....	Emergency.....	J.....	Night.....	Right.....	Type.....	Time of Day...
August.....	End.....	January.....	No.....	Road.....	U.....	Day of Week...
Automatic.....	Enter.....	Juliet.....	Normal.....	Roger.....	Uniform.....	Day and Month..
Autopatch.....	Equals.....	July.....	North.....	Romeo.....	Unit.....	Salutation....
Auxiliary.....	Error.....	June.....	Not.....	Route.....	Unlimited.....	<u>CW Identifier</u>
Avenue.....	Evacuation...	K.....	November.....	S.....	Until.....	CW ID Buffer #1
Average.....	Exit.....	Key.....	Now.....	Safe.....	Up.....	CW ID Buffer #2
B.....	Expect.....	Keypad.....	Number.....	Saturday.....	Use(noun).....	<u>DTMF Tones</u>
Back.....	F.....	Kilo.....	O.....	Scattered.....	Use(verb).....	DTMF Digit 0-D
Band.....	Fail.....	Knots.....	O'clock.....	Seconds.....	V.....	

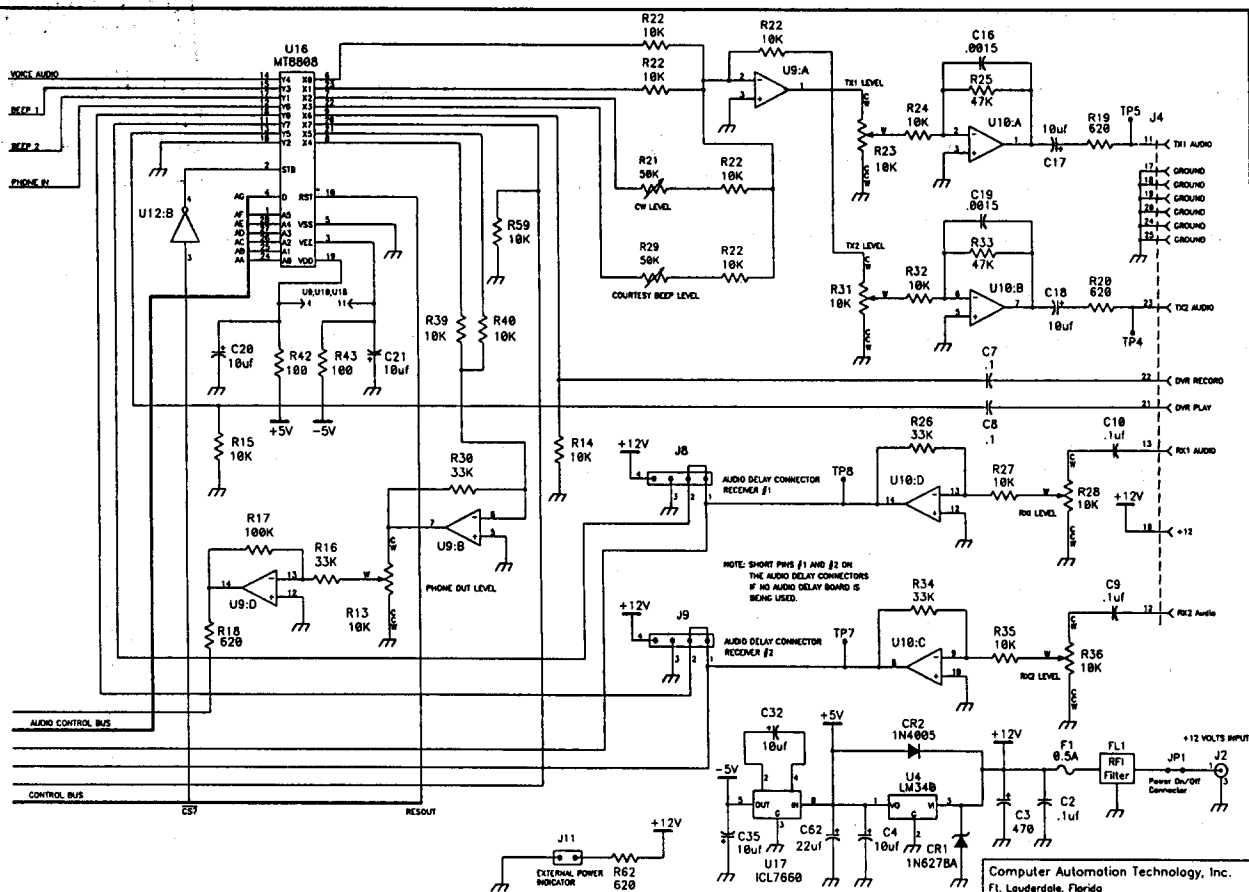




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Fl. Lauderdale, Florida

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**Computer Automation Technology, Inc.**  
Ft. Lauderdale, Florida

Title CAT-1000 Repeater Controller

Date: Aug 1, 1992	Number:	Sheet 4 of 4
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## Specifications

Microprocessor	TM80C188EB-8
Memory EPROM	1024K
Memory RAM	64K, (non volatile)
Voice Vocabulary	(425) Words
User Speed Dial	(300) Sixteen Digit Entry - Eleven Position ID
Emergency Speed Dial	(10) Sixteen Digit Entry - Eleven Position ID
Voice Messages	(40) Maximum Length (31) Words per Message
Digital Voice Recorder*	(16) Tracks with two minute total record time
Scheduler	(60) Commands with one minute resolution
Macro	(40) Macros with ten function per string
Memory Saves	(8) Control functions, codes, timers, voice messages
User Function Outputs	(8) Switch 40 volts at 200 ma.
Hardware Inputs	(8) 10K ohm input impedance
Call Letter ID #1	Buffer size Voice (31) CW (64)
Call Letter ID #2	Buffer size Voice (31) CW (32)
Control & Prefix Codes	Buffer size (7)
Voice Synthesizer	Texas Instruments TSP53C30 Linear Predictive Coded
DTMF Receiver	Mitel MT8870 (2)
Audio Input	Receiver (0.2 - 2VAC) adjustable 10K ohms
Audio Output	Transmitter (0 - 2VAC) adjustable 600 ohms
Logic Inputs	Low 0 to .8 volts High 2.4 to 15 volts
Logic Outputs	Open Collector Relay Driver 40 volts at 200 ma.
Operating Temperature	-15 to +55 degrees C
Power	9 to 15VDC at 150 mA
Size	7.0" X 10.5"
Clock Accuracy	+1 minute per month at +25 degrees C. In the absence of power, data and time will be maintained for five years.

## Ordering Information

**CAT-1000** Repeater Controller Board, Wired & Tested **\$679.00.**

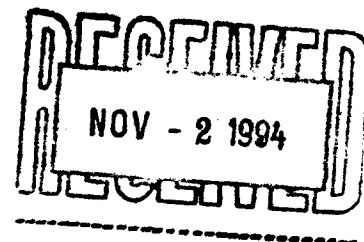
**M-1000** Detailed eighty page manual \$20.00.  
(Included with Purchase of CAT-1000)

**MF-1000** Serial Interface Card, Wired & Tested \$59.00.

**ED-1000** Editor Program, 5.25" DSDD Disk \$39.00

**SHIPPING** UPS Surface \$7.00 - UPS 2nd Day \$12.00 - UPS Next Day \$24.00 - C.O.D. \$5.00  
(Continental United States)

**WARRANTY** Computer Automation Technology warrants this product to the original purchaser to be free from defective materials and workmanship for a period of (1) year from the date of purchase when returned prepaid.



### Computer Automation Technology, Inc.

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