TOUCH K100

by *Regency*
the first name in solid state

Owner's Manual

Safety Precautions

1. Be sure to read and follow all safety and operating instructions before operating your unit. You should also retain all instructions for future reference.

2. Adhere to any warnings or special instructions which may appear in the operating instructions or on the unit itself.

3. DO NOT operate the unit near water (e.g. near a sink, in a wet basement, or near a pool), and DO NOT expose the unit to rain as electrical shock or fire could result.

4. Place the unit where the ventilation openings are not obstructed. Warm locations such as near heating vents or radiators should be avoided.

5. The power cord should be routed so that it will not be walked on or pinched by items placed upon or against it. DO NOT run a power cord under carpeting. Connect the unit to a power source only of the type described in the operating instructions or as marked on the appliance.

6. The unit should be used only with a cart or stand that is recommended by the manufacturer and should be mounted to a wall or ceiling with manufacturer's advice.

7. If the unit is to be left unused for a long period of time, the power cord should be unplugged from the outlet.

8. DO NOT attempt to service the unit yourself beyond what is described in the operating instructions. All servicing should be referred to a qualified technician. Should one of the following occur, send the unit to a qualified technician:

    a). The unit shows a marked change in performance.

    b). Power cord has been damaged.

    c). The unit has been dropped or enclosure damaged.

    d). The unit has been exposed to rain.

9. The unit should be cleaned only as recommended by the manufacturer.

10. Care should be taken so that objects do not fall and liquids are not spilled into enclosure through openings.

11. If an outside antenna is used, be sure it is located away from power lines. The antenna should also be grounded to protect against voltage surges and built up static charges. Refer to Figure 1 below.
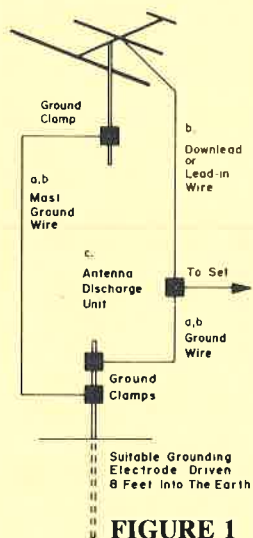
Example of antenna grounding as per National Electrical Code Instructions

ᵃUse No. 10 AWG copper-clad steel or bronze wire, or larger as ground wires for both mast and lead-in.

ᵇSecure lead-in wire from antenna to antenna discharge unit and mast ground wire to house with stand-off insulators, spaced from 4 feet (1.22 meters) to 6 feet (1.83 meters) apart.

ᶜMount antenna discharge unit as closely as possible to where lead-in enters house.

FIGURE 1

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Please record Serial Number and Date Purchased:

Serial No._____ Date Purchased _____

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.

MAINTENANCE

All servicing should be referred to a qualified electronic technician.
UNAUTHORIZED ADJUSTMENTS MAY DAMAGE THE EQUIPMENT, OR RESULT IN IMPROPER OPERATION.

OPERATION

The sections on Installation and Operation should be thoroughly read before operating the unit. Reading the instructions will result in maximum performance and enjoyment of your radio. In the event of difficulty, refer to the Detailed Function Descriptions and the Troubleshooting Guide on page 18.

DESCRIPTION

The Regency ACT-T-K100 is a programmable 10-channel, three band, FM monitor receiver. It is a double conversion superheterodyne used to receive the narrow band FM communications in the amateur, public safety, and business bands, 30-50 MHz, 144-174 MHz, and 440-512 MHz.

The need for crystals has been eliminated by the use of computer type circuits which permits the frequency of each channel to be entered by a keyboard numbered like the one used on a telephone.

Any combination of one to ten channels may be scanned.

Manual selection of channels is available to permit continuous monitoring of any one channel.

A search feature permits unknown frequencies to be located. Keyboard programming permits searching any segment of any one band, or an entire band if desired.

A variety of messages appear on the readout during programming and operation of the receiver.

The ACT-T-K100 may be operated from 117 VAC or 12 VDC.

Provisions are made for external antenna and external speaker.

ACT-T-K100 SPECIFICATIONS

Frequency Ranges:

VHF (Low Band)	30- 50 MHz
VHF (Amateur)	144-148 MHz
VHF (High Band)	148-174 MHz
UHF (Amateur)	440-450 MHz
UHF (Standard)	450-470 MHz
UHF (Extended)	470-512 MHz

Search Frequency Increments:

VHF	5 KHz
UHF	12.5 KHz

Sensitivity (12 DB Sinad; at tune-up)

LO VHF (30-50 MHz	0.25 uV
HI VHF (144-174 MHz)	0.45 uV
UHF (440-512 MHz)	0.45 uV

Sensitivity (12 DB Sinad; maximum)

LO VHF (30-33 MHz)	1.50 uV
LO VHF (33-48 MHz)	0.40 uV
LO VHF (48-50 MHz)	0.60 uV
HI VHF (144-146 MHz)	1.20 uV
HI VHF (146-158 MHz)	0.70 uV
HI VHF (158-170 MHz)	0.60 uV
HI VHF (170-174 MHz)	1.80 uV

UHF (440-450 MHz)	0.90 uV
UHF (450-495 MHz)	0.60 uV
UHF (495-512 MHz)	1.50 uV

Selectivity	±7.5 KHz @ 6 DB
	±18 KHz @ 50 DB

Spurious Rejection (except Primary Image) ... 50 DB

Modulation Acceptance ... ±7.5 KHz

I.F. Frequencies ... 1st IF: 10.745 MHz; crystal filter
2nd IF: 455 KHz; ceramic filter

Reference Oscillator
(Synthesizer) ... Crystal Controlled

Scanning Rate ... approx. 15 channels per second

Search Scanning Rate

VHF	approx. 16 seconds per megaHertz
UHF	approx. 6 seconds per megaHertz

Scan Delay

Normal	approx. 0.6 seconds
With Delay Option	approx. 2 seconds

Search Delay ... approx. 4 seconds

Audio Output ... 1 Watt @5%, or less, distortion;
2 Watts maximum

Speaker (Internal) ... 8 ohms; 3'' square

Power Requirements ... 110-130 VAC, 60 Hz; 18 Watts max.
11.5-15 VDC; 10 Watts max.

Memory Saver Battery (optional) ... 9 volt,
transistor radio type

Display (Frequency and Message Readout) ... 6-digit,
7-segment LED type

Semiconductors:

WEATHER BROADCASTS

The National Weather Service provides a continuous (24-hour) broadcast of local and area weather conditions. These weather messages are repeated until the next or up-dated report is issued. The Weather Service has broadcast facilities in many metropolitan areas of the country.

Three frequencies are utilized by the Weather Service. They are 162.550, 162.400 and 162.475 MHz. The first frequency listed is the principal one used throughout the country. The other two are used to reduce possible interference from the overlapping of signals of nearby cities or metropolitan areas.

If you are located within 25 to 30 miles of one of these cities, reception usually can be obtained with the telescopic antenna. Your local Regency Dealer can advise you about your specific antenna requirement.

NOTE: When set to automatic scan, the ACT-T-K100 will stop and remain on the Weather Channel (since it broadcasts continuously). Thus, this channel should only be activated when you desire to hear the current weather report.
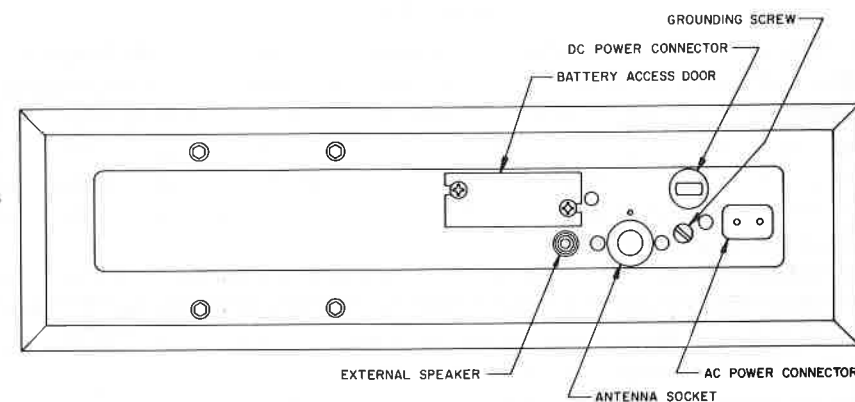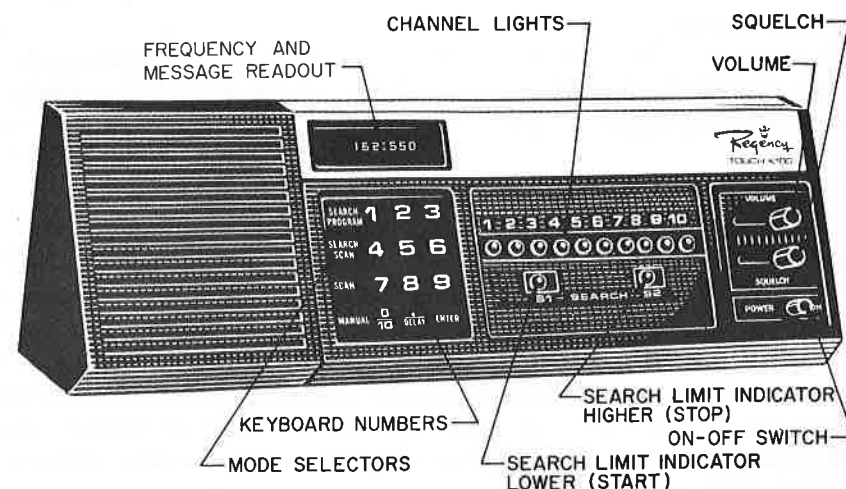
REAR PANEL
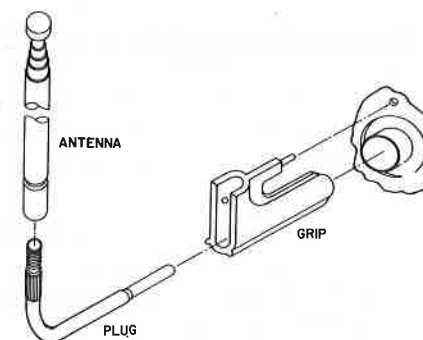
CONTROLS

ON/OFF Switch:

Pushing the ON/OFF Switch to the right applies power to the receiver. Power is applied to the memory circuits at all times when the power cord is plugged in. Turning the switch off will NOT cause loss of memory.

Volume:

Moving the Volume Control knob to the right will increase the sound from the internal speaker, or the external speaker if one is installed. Moving the control to the left reduces the volume.

Squelch:

The Squelch Control is used to remove the background noise between stations and to obtain proper scanning action. The control should be moved to the right until the scanner stops or noise is heard, and then to the left just enough to eliminate the noise and proper scan action is obtained.

BATTERY

A battery can be installed to prevent loss of channel frequency memory in the event of a power failure or the power cord is unplugged. The battery is not supplied with the receiver. A new battery should be purchased and installed at the time the receiver is purchased. The battery is a 9 volt battery of the same type used in transistor radios. An alkaline battery, or heavy duty battery, is recommended because of their longer life in this type of operation.

Batteries suitable for use in this receiver are widely available at electronic stores and other places that carry a line of batteries. Without a battery, power failure will cause "P. FAIL" to appear on the readout and ALL memories will be lost.

A partial list of available batteries is:

Alkaline Batteries	Heavy Duty Batteries
Eveready #522DB	Eveready 222
Mallory MN1604	Burgess 2MN6

The battery should be replaced approximately once a year in normal use. If numerous power failures have occurred, or if the channels lose memory after a power interruption, the battery should be replaced. The battery should be installed while the receiver is plugged in. When done in this manner, there will be no loss of memory while replacing the battery.

NOTE: The battery is not intended for long term memory storage. If the unit is going to be unplugged for an extended period of time, it is recommended that the battery be removed. Also it is recommended that a dead battery be removed or replaced as soon as possible.

BATTERY INSTALLATION

The access cover on the battery compartment is held with 2 screws. One of these screws must be removed and the other loosened to remove the cover.

Insert the battery part way into the compartment with the terminals out. Press the snap connector onto the battery. Push the battery into the compartment and replace the cover.

HOME INSTALLATION

The receiver requires very little ventilation, however, warm areas near radiators or heating vents should be avoided.

Refer to the illustration on page 5 and assemble the telescope antenna and adapter. Make sure the plug is firmly seated in the plastic grip. Insert the adapter into the external antenna socket with the antenna straight up.

Plug the AC cord into the AC connector on the rear of the receiver. Plug the opposite end into a 117 volt AC wall outlet.

Install the battery as outlined above. To conserve battery power, do not leave the receiver for any length of time without power applied.

If the receiver fails to operate properly, especially after a power failure, turn the unit off and then on again. Touch SCAN or MANUAL . If unit is still operating improperly, remove the battery and repeat the above steps.

MOBILE INSTALLATION

NOTE: Mobile reception of a police frequency by UNAUTHORIZED personnel is ILLEGAL in some areas. It is the responsibility of the person making the installation to determine that the user of this receiver is authorized or cleared through the local police department. Under no conditions can Regency Electronics, Inc., the manufacturer of this set, be held responsible for its unauthorized installation or use.

The ACT-T-K100 will operate from any 12 volt, negative ground electrical system. A DC power cord, Regency part number MA-17, will be required. The DC cord should be connected to the battery, not through ignition switch.

A battery should be installed in the receiver to reduce the possibility of memory loss during engine starting.

If the scanner fails to operate properly after engine starting, turn the radio off and then on to restore proper operation. The electrical system in the vehicle should be checked to determine the cause of the low voltage.

Temporary mobile operation is possible by using a DC power cord with lighter plug attachment, Regency part number MA-18. This cord will permit the unit to be operated while sitting on the seat. The tele-

scope antenna will usually be sufficient for this type of operation.

A coupling harness, Regency part number MA-5, is available to allow the AM auto antenna to be used with the ACT-T-K100.

INITIAL POWER TURN-ON

When power is first applied, "P. FAIL" will appear on the readout. Touch MANUAL to clear the processor and prepare the unit for programming. ALL channels will be pre-programmed with 40.745 MHz.

PROGRAMMING

The Switches on the touch keyboard panel are located under the number or letters. The switches are operated by applying light pressure with a finger directly on the number or letters. A slight "click" will be felt to indicate that the switch has operated.

The numbers on the panel are used for TWO things. The numbers represent CHANNEL NUMBERS when selecting channels. The numbers are used as FREQUENCY DIGITS when entering frequency. The tenth number is used as TEN for channel selection, it is used as a ZERO for frequency entry. The decimal point is shared with the delay function.

Any frequency (within the receiver's frequency limits) may be programmed into any channel.

The readout will indicate the frequency in the channel memory whenever the scanner is stopped in either Scan, Manual, or Search mode.

PROGRAMMING CHANNEL FREQUENCIES

Programming is done while in MANUAL mode.
Touch MANUAL .

The readout will indicate the frequency in the memory of the channel whose light is one. This frequency will be 40.745 if the channel has not been previously programmed. The channel will move one position to the right each time MANUAL is touched. Repeatedly touch MANUAL until the channel to be programmed is reached. See Note on page 9.

Touch the numbers of the frequency to be entered in order. Be sure to enter the decimal point at the proper place. When programming UHF frequencies, entry of the fourth number AFTER the decimal point is not necessary. The frequency displayed on the readout will turn off when the first number of the new frequency is entered. If a mistake is made during frequency entry, touch MANUAL and start over.

Touch ENTER . If "Error" appears on the readout, the frequency entered is invalid. Touch MANUAL and enter a correct frequency. The channel light will BLINK to indicate that the freqency has been entered into the display register but has not been entered into a chan-

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nel memory. Touch the keyboard number of the selected channel. The light will stop blinking and remain on to indicate that the frequency has been entered into the channel memory.

NOTE: Although not necessary, it is suggested that the scanner be stepped to the channel to be programmed. This will help reduce confusion until the operation of the unit becomes more familiar. Actually, the channel light that is on at the beginning of channel frequency programming does not matter. This same light will blink after ENTER is touched. When the keyboard number of the channel to be programmed is touched, the light will immediately jump to the selected channel.

Repeat this procedure for each channel to be programmed. When all desired channels are programmed, touch SCAN . If necessary, adjust the Squelch Control to obtain proper scan action. The channels that are not to be scanned may be turned off by touching the keyboard number of this channels. This is necessary to eliminate stations such as the Weather Bureau which broadcast continuously. The channels may be turned back on by touching the keyboard number again. Each channel will be turned on or off alternately. When a number is touched, either to remove or restore a channel, the scanner will jump to the channel then resume scanning. If all channels are turned off, the readout will show "no ch.".

The frequency in **any** channel memory may be put into **any** other channel memory.

Touch MANUAL .

Step the scanner to the channel containing the frequency to be put into another channel. The readout will show the frequency.

Touch ENTER . The channel light will blink. Touch the keyboard number of the channel the frequency is to be entered into. The channel light will jump to the selected channel and the frequency will be entered. The frequency will not be removed from the original channel. The same frequency will be in both channels.

SCAN DELAY SELECTION

When the receiver is in the SCAN mode, there are **two** scan delay times available. One of these is approximately 1/2 seconds, the other is approximately 2.0 seconds. When the 2 second delay is selected, a "d." will appear on the readout whenever the channels are being scanned. The scan delay is changed by touching DELAY . Each time DELAY is touched, the delay time will switch from one to the other.

PROGRAMMING SEARCH FREQUENCIES

Two frequencies ("START" and "STOP") are used in the Search mode. The rules for these frequencies are:

Both frequencies MUST be in the same band. The START frequency MUST be lower than the STOP frequency.

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Programming the Search frequencies has no effect on the frequencies that have been programmed into Channel 1 and 2 memories for SCAN and MANUAL functions.

The frequency that appears at the beginning of search program will be the frequency last programmed into the search memories. If the search feature has not been programmed previously, the frequency will read 40.745. Each time SEARCH PROGRAM is touched, the search limit lights will move back and forth between S1 and S2. The frequency indicated by the readout when S1 is lighted is the frequency in the START memory. The frequency displayed when S2 is lighted is the frequency in the STOP memory.

ENTER SEARCH "START" FREQUENCY

Touch SEARCH PROGRAM

If necessary, touch SEARCH PROGRAM again to light S1. See Note on page 11. Enter the START (lower) frequency by touching the keyboard numbers in the proper order. Be sure to enter the decimal point at the proper place. Touch ENTER. If "Error" appears on the readout, the START frequency is invalid or not within a band. Touch SEARCH PROGRAM as needed to light S1 and enter a correct frequency.

The light (S1) will blink to indicate that the frequency has been entered into the display register but has not been entered into the search START memory.

Touch keyboard number 1. The light will stop blinking and the readout will indicate the frequency.

ENTER SEARCH "STOP" FREQUENCY

Touch SEARCH PROGRAM. If necessary, touch SEARCH PROGRAM again to light S2. See Note on page 11. Enter STOP (higher) frequency by touching the numbers in the proper order. Be sure to enter the decimal point at the correct place. Touch ENTER. S2 should blink to indicate that the frequency has been entered into the display register but has not been entered into the Search memory.

Touch keyboard number 2. The light will stop blinking and the readout will indicate the frequency.

Although designated as the STOP limit, the Search Scan does not actually stop when the frequency is reached. It starts over again at the lower START frequency.

Touch SEARCH SCAN to start the Search. If the readout immediately displays the START frequency and noise is heard, move the Squelch Control to the left until the noise just disappears and touch SEARCH SCAN again.

If "Error" appears on the readout, the START and STOP frequencies are not in the same band, or the START frequency is higher than the STOP frequency. Touch SEARCH PROGRAM as needed to light S2 and enter a correct frequency.

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When an active channel is located, the Search will stop and the frequency will be displayed.

NOTE: During search limit programming, the light associated with the limit being programmed does not have to be lighted. If the other light is lighted, it will blink when ENTER is touched. When keyboard # 1 is touched to enter the START limit, or when keyboard # 2 is touched to enter the STOP limit, the light will jump to the correct light.

The search may be stepped manually if desired. Move the Squelch Control to the right until the search stops and noise is heard. With the Squelch Control in this position, the search will move one increment each time SEARCH SCAN is touched.

The frequency displayed while the Search Scan is **stopped** may be entered into **any** channel memory. To enter a search frequency into a channel memory, touch ENTER. One of the channel lights will blink, (it does not matter which channel light). Touch the keyboard number of the channel that is to receive the frequency entry. The light will jump to the selected channel and remain on steady. The frequency is entered into the channel memory and the unit is in MANUAL mode. To resume the search, touch SEARCH SCAN. The search will resume, starting with the display frequency.

SEARCH DELAY PROGRAMMING

A choice of two modes of search delay is provided. "No Delay" and "Delay". With No Delay, the Search Scan will remain on the active frequency **indefinitely** until SEARCH SCAN is touched to restart the search. In DELAY the Search will move on approximately FOUR seconds after the signal goes away. Initially, the delay feature is automatically programmed DELAY.

These two modes are selected by touching DELAY while the Search is scanning. Each time DELAY is touched, the delay will change from one to the other. The operation that has been selected will be indicated on the readout during the time DELAY is being held down. "DELAY" is indicated by a "d". "No Delay" is indicated by the readout showing "no d.".

OPERATION HINTS

Following the instructions presented thus far should result in a properly operating receiver, however there are, in addition to the specific instructions, some hints that may prove helpful and improve the overall operation.

1. Set the Squelch Control halfway between threshold (the point where the noise just disappears) and the full left position. This setting will reduce any tendency the receiver may have to re-

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spond to undesired frequencies. Some experimenting with the Squelch Control setting is recommended to obtain the best results in any particular location.

2. If a desired signal appears to be received at more than one frequency, select the frequency that results in clearest reception (voice not garbled, least noise, etc.). This effect is most likely to occur on very strong signals.

3. In the Search mode, limit the search range to one megaHertz or even less. This will increase the chance of catching an unknown station while it is transmitting. The transmissions are usually short.

4. Select the Start and Stop frequencies of the Search mode to avoid known birdies. This may be done by limiting the range to be searched to small segments just above or below the birdies. This will help to avoid the search being stopped by undesired frequencies.

FUNCTION DESCRIPTIONS

The DIGITAL READOUT displays the frequency stored in the channel memories whenever the scanner is stopped on a channel in either SCAN or MANUAL mode. The frequency is also displayed when the SEARCH SCAN stops on an active channel. In MANUAL mode, the readout is used while entering frequencies into the channel memories.

PROMPTING MESSAGES also appear on the readout at various times and places during programming and operation. These are used to determine what features have been programmed into the operation, and to indicate when an invalid operation has been attempted. See list on page 17.

"Error" will appear on the readout whenever an attempt is made to enter an invalid frequency into a channel memory, or into the START or STOP frequency of the SEARCH feature. The frequency is invalid when it does not fall within one of the bands covered by the receiver. See frequency range on page 2.

The memories will accept three numbers AFTER the decimal point.

Whenever the numbers AFTER the decimal point are invalid, the unit will automatically change them to the nearest valid frequency on Low band and High band. When programming UHF frequencies, the unit will change the invalid entry to a valid frequency determined by the first two numbers after the decimal point. Entry of the fourth number after the decimal point is not necessary on UHF. It may be keyed-in, but will never be displayed. The fourth decimal place is automatically entered, based on the first three numbers after the decimal point.

KEYBOARD NUMBERS are used, during frequency programming, to enter the desired frequency into the display register prior to channel entry or search entry. The numbers represent channel numbers when

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selecting the channel to receive the frequency entry.

The dual or combination number 0/10 is used as a ZERO for frequency entry and as a 10 for channel selection.

Keyboard NUMBERS are also used to turn channels on and off in Scan mode. Each time the keyboard |number| of a channel is touched, the channel will turn on and off alternately. When the scanner is stopped on a channel, touching the keyboard |number| of that channel will turn off the channel and the channel light will move to the next channel and resume scanning. The channel will be removed from the scan until its keyboard |number| is touched to restore the channel to scan.

MANUAL mode is used when programming frequencies into the channel memories. MANUAL is also used to select channels manually. Each time |MANUAL| is touched, the channel selected will move one channel to the right. The readout will indicate the frequency programmed into the channel memory.

|SCAN| is used to put the unit in SCAN mode. In SCAN mode, the channels are scanned in order and the scanner will stop on any channel that has a signal. All channels that have been turned off will be skipped.

|SEARCH PROGRAM| is used when entering START and STOP frequencies into the search feature. Each time |SEARCH PROGRAM| is touched, the search indicator lights switch from one to the other. The frequency readout will indicate the frequency programmed into the START (S1 lighted) and STOP (S2 lighted) limits.

|SEARCH SCAN| is used to start the search feature. The search will start at the lower (START) frequency and search towards the higher (stop) frequency. The frequency readout will continuously indicate the frequency the search is on. The search will stop when a frequency is found that has a signal. Very strong signals may cause the search to stop one increment before the correct frequency. If the received signal is noisey or distorted, touch |SEARCH SCAN| to move the search frequency to the center of the channel.

The frequency displayed while the SEARCH SCAN is stopped may be entered into any channel memory. To enter a search frequency into a channel memory, touch |ENTER| . One of the channel lights will blink, (it does not matter which channel light). Touch the keyboard number of the channel that is to receive the frequency entry. The light will jump to the selected channel and remain on steady. The frequency is entered into the channel memory and the unit is in MANUAL mode. To resume the search, touch |SEARCH SCAN| . The search will resume, starting with the displayed frequency.

After stopping on a frequency, the search will remain on the frequency indefinitely, or resume searching after approximately four seconds depending on whether or not the delay has been entered.

Search "DELAY" and "NO DELAY" are entered by touching

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DELAY while the search scan is searching. The delay changes back and fourth between "DELAY" and "NO DELAY" each time DELAY is touched. When "DELAY" is activated, the search will remain on a signal for approximately four seconds after the signal goes off before moving on. When "NO DELAY" is activatd, the search will remain on the channel indefinitely until SEARCH SCAN is touched to resume the search. "DELAY" is indicated on the readout by a "d." which appears while DELAY is held down. "NO DELAY" is indicated by the readout showing "no d." while DELAY is held down.

BIRDIES

Every complex receiver has frequencies that are difficult or impossible to receive. These frequencies are called "Birdies". The following is a partial list of the birdie frequencies that may occur in the ACT-T-K100.

LOW VHF (30-50 MHz)	HIGH VHF (continued)	STANDARD UHF (440-470 MHz)	EXTENDED UHF (470-512 MHz)
32.225	157.330	442.800	472.212
22.600	157.985	444.575	472.512
35.305	158.660	446.300	474.500
37.075	160.120	450.500	477.987
38.285	160.510	452.462	479.075
43.660	161.325	456.100	480.125
45.110	162.185	457.662	481.162
47.470	163.095	459.662	483.637
	163.570	461.475	486.325
HIGH VHF (144-174 MHz)	164.570	462.925	489.012
	165.090	464.475	496.262
144.820	167.735	465.300	499.762
147.375	167.975	467.475	501.525
147.735	168.380	468.187	505.125
149.695	169.955	469.475	501.137
149.815	171.400		501.837
150.805	171.715		
152.720	172.060		
154.615	173.750		

In addition, there are other frequencies that have difficulty because of interference from T.V. stations, other receivers, and sources of man-made noise. These frequencies vary from location to location and are therefore impossible to list. When this type of interference is encountered, the interference can sometimes be eliminated by moving the Squelch Control to the left (increase squelch action).

ACT-T-K100 OPERATION GUIDE

DESIRED ACTION	PRESS THE FOLLOWING KEYS AS INDICATED
Manual / Program Mode	
Select Channel	MANUAL
Program Channel	MANUAL – MANUAL (Repeatedly press MANUAL until desired channel is reached)
	DIGITS* ENTER CHAN#
Put one channel's frequency into another channel	MANUAL (step to channel containing the frequency) CHAN# of channel to receive frequency. ENTER
Scan Mode	SCAN
Deactivate (lockout) Channel	CHAN# Toggle Function (channel turns on and off alternately)
Activate (turn on) Channel	CHAN#
Activate Scan Delay (2 sec.)	DELAY • Toggle Function
Deactivate Scan Delay	DELAY
Search Program Mode	SEARCH PROGRAM (either S1 or S2 lights)
Program Search "START" (LO) Freq.	DIGITS* ENTER 1 (S1 lights)
Program Search "STOP" (HI) Freq.	DIGITS* ENTER 2 (S2 lights)
Verify Search Limit Frequencies	(Toggle Function; S1 and S2 alternately light)
Search Scan Mode	SEARCH SCAN
Move Search Off Active Frequency	SEARCH SCAN (also used to resume Search when Search Hold (no delay) is activated)
Manually Increment (Step) Search Scan	SEARCH SCAN (Squelch open; repeatedly press SEARCH SCAN for desired steps)
Activate Search Hold (no delay)	DELAY • Toggle Function
Activate Search Delay (4 sec.)	DELAY •
Move. Freq. From Search to Chan.	ENTER CHAN# (Must press ENTER while Search Scan is stopped)
Change Search's "START" or "STOP" freq.	SEARCH PROGRAM DIGITS* ENTER 1 or 2

NOTE: $\boxed{\frac{0}{10}}$ = 0 When keying in a frequency; = 10 when selecting channels

DIGITS* = Desired Frequency (up to 6 digits plus decimal point)

ACT-T-K100 PROMPTING MESSAGES

PROMPTING MESSAGE	EXPLANATION
Blinking Indicator	Frequency keyed-in has been ENTERED, but channel has not yet been selected.
P. FAIL	Initial Power ON or subsequent power failure (if battery NOT installed).
no ch.	Scan Mode - All Channels Deactivated.
Error	Program Mode - Invalid Frequency (out of band limits)
Poor F.	Manual or Scan Mode - Frequency out of receiver's range.
Error	Search Mode - End frequency lower than the Start frequency, or not in the same band.
d. (only while scanning)	Scan Mode - Scan delay selected.
d. (only while DELAY • is held down)	Search Mode - Search delay selected.
no *d.* (only while DELAY is held down)	Search Mode - Search Hold (no delay) selected.

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TROUBLESHOOTING GUIDE

NOTE: Please perform the simple checks indicated for improper operation before returning the unit for service.

SYMPTOM

- No channel lights, no sound
- Channel lights, no sound
- No reception (no stations heard)
- Weak or poor reception
- Does not scan
- Error appears on readout
- Poor F. appears on readout
- Memory loss after power failure
- P. FAIL appears on readout
- Search Scan stops on channels without stations
- Multiple channel lights on at same time

CHECK THE FOLLOWING ITEM:

- OFF/ON switch should be pushed to the right.
- Power Cord (AC or DC) connection; also see Power Requirements.
- DC Power Cord's Fuse - replace with 1.5 Amp fuse if blown.
- Volume Control Setting - should be at least 1/3 to the right.
- Squelch Control Setting - see page 6 for details.
- Antenna - should be fully extended.
- Stations too far away - External antenna may be needed.
- Incorrect channel frequencies.
- In MANUAL mode - touch SCAN.
- Channels locked-out - see page 17.
- Invalid frequency entry - see page 17.
- Frequency out of receiver's range.
- No battery installed or dead battery - see page 6.
- Initial power up - proceed with programming.
- Power interrupt, no or low battery - see page 6.
- Birdies - see page 15.
- Improper Reset - turn unit OFF then back ON and touch SCAN or MANUAL.

As a handy reference, record below all of those frequencies of interest that you do not wish to keep programmed into your TOUCH K100.

Frequency	Service or Allocation

National Frequencies

The following is a partial list of the common public service band frequencies as allocated by the FCC. You will not be able to pick up activity on every frequency listed here. Only those frequencies assigned to the services which are applicable to your area will be received. We advise you to compile your own frequency list for your monitoring area.

Abbreviations	
Automobile Emergency	Auto Emerg.
Business	Bus.
Bureau of Reclamation	Bur. Reclam.
Forestry-Conservation	For.-Cons.
Forest Products	For. Prod.
Government	Govt.
Highway Maintenance	Hwy.
Local Government	Local Govt.
Manufacturers	Manu.
Mobile Telephone	Mob. Tel.
Motion Picture	Mot. Pic.
National Weather Service	NWS
Petroleum Industry	Pet.
Power Utilities	Power
Railroad	RR
Relay Press	Rel. Press
Remote Broadcast	Remote Broad.
Special Emergency	Spec. Emerg.
Special Industrial	Spec. Ind.
Telephone Maintenance	Tel. Maint.
Weather	WX

Frequency — MHz	Service or Allocation
LOW VHF BAND 30-50 MHz	
30.00-30.56	Government
30.58-30.64	Special Industrial
30.66-31.24	Pet., For.-Cons., For. Prod., Bus.
31.26-31.98	Spec. Ind., For.-Cons.
32.00-33.00	Government
33.02-33.16	Spec. Ind., Hwy., Spec. Emerg., Bus.
33.18-33.38	Petroleum
33.42-33.98	Fire
34.00-35.00	Government
35.02-35.18	Business
35.22-35.66	Mobile Telephone, Paging
35.70-35.98	Special Industrial, Business
36.00-37.00	Government
37.02-37.42	Police, Local Government
37.44	Forest Products
37.46-37.86	Power
37.88-37.98	For. Prod., Hwy., Spec. Emerg.
38.00-39.00	Government
39.02-39.98	Police, Local Government
40.00-42.00	Government
42.02-42.94	Police
42.96-43.18	Special Industrial, Business
43.22-43.68	Mobile Telephone, Paging
43.70-44.60	Motor Carrier (Buses, Trucks)
44.62-45.06	Police, For.-Cons.
45.08-45.66	Police, Local Government
45.68-46.04	Police, Hwy., Spec. Emerg.
46.06-46.50	Fire
46.52-46.58	Local Government
46.60-47.00	Government
47.02-47.40	Highway Maintenance
47.42	Red Cross
47.44-47.68	Spec. Ind., Spec. Emerg.
47.70-48.54	Power
48.56-49.58	Pet., For. Prod., Spec. Ind.
49.60-50.00	Government
HIGH VHF BAND 144-174 MHz	
144.000-148.000	Amateur
148.150	Civil Air Patrol
148.200-150.800	Government
150.815-151.475	Bus., Auto Emerg., For.-Cons., Hwy.
151.490-151.595	Special Industrial
151.625-151.955	Business
152.000-152.255	Mobile Telephone
152.270-152.480	Business, Taxi
152.495-152.855	Mobile Telephone, Paging

Frequency — MHz	Service or Allocation
HIGH VHF BAND (Continued)	
152.870-153.035	Remote Broad., Spec. Ind., Mot. Pic.
153.050-153.380	Manu., Pet., For. Prod.
153.410-153.710	Power, Pet., For. Prod.
153.755-154.115	Fire, Local Government
154.130-154.445	Fire
154.450-154.625	Bus., Pet., Spec. Ind.
154.650-155.145	Police, Local Government
155.160-155.400	Police, Spec. Emergency
155.415-156.030	Police, Local Government
156.045-156.240	Police, Hwy. Maintenance
156.275-157.450	Marine
157.470-157.500	Auto Emergency
157.530-157.740	Business, Taxi
157.755-158.115	Mobile Telephone, Paging
158.130-158.460	Manu., Power, Pet., For. Prod.
158.475-158.715	Mobile Telephone
158.730-158.970	Police, Local Government
158.985-159.210	Police, Hwy. Maintenance
159.225-159.465	Forestry-Conservation
159.495-160.200	Motor Carriers (Buses, Trucks)
160.215-161.565	Railroad
161.600-161.625	Marine
161.640-161.760	Marine, Remote Broadcast
161.775-162.025	Marine
162.026-162.175	Bureau of Reclamation
162.400	NWS (WX-2)
162.475	NWS (WX-3)
162.550	NWS (WX-1)
163.125	Indian Affairs
163.175	Bureau of Reclamation
163.250	Special Emergency
163.275	National Weather Service
163.385-163.975	Military, Government
164.025-164.075	U.S. Coastal & Geodetic Survey
164.175-165.190	Bur. Reclam., Government
166.250	Fire
169.300	Federal Aviation Administration
169.425-169.525	Bus., Power, Pet., For. Prod., Spec. Ind., RR
170.150	Fire
170.200-170.220	U.S. Coastal & Geodetic Survey
170.225-170.325	Bus., Power, Pet., For. Prod., Spec. Ind., RR
170.425-170.475	Forestry-Conservation
170.575	Forestry-Conservation
171.025-171.125	Bus., Power, Pet., For. Prod., Spec. Ind., RR

Frequency — MHz	Service or Allocation
HIGH VHF BAND (Continued)	
171.475-171.575	Forestry-Conservation
171.825-171.925	Bus., Power, Pet., For. Prod., Spec. Ind., RR
172.225-172.275	Forestry-Conservation
172.375	Forestry-Conservation
172.775	National Parks
173.025	National Weather Service
173.075	U.S. Coastal & Geodetic Survey
173.200-173.400	Police, Power, Pet., For. Prod., Mot. Pic., Rel. Press, Spec. Ind., Manu., Bus., L. Govt.
STANDARD UHF BAND 440-470 MHz	
440.000-450.000	Amateur
450.050-450.950	Remote Broadcast
451.025-451.150	Power Utilities
451.175-451.750	Power, Pet., For. Prod., Manu., Tel. Maint.
451.775-452.025	Special Industrial
452.050-452.500	Power, Pet., For. Prod., Spec. Ind., Manu., Tel. Maint.
452.525-452.600	Auto Emergency
452.625-452.950	Power, Pet., For. Prod., Spec. Ind., Manu., Tel. Maint., Motor Carrier, R.R.
452.975-453.000	Relay Press
453.025-454.000	Power, Pet., For. Prod., Spec. Ind., Manu., Tel. Maint., Local Govt., Police, Fire, Hwy., For.-Cons.
454.025-454.650	Mobile Telephone
455.025-454.925	Remote Broadcast
456.025-456.150	Power Utilities

Frequency — MHz	Service or Allocation
STANDARD UHF BAND (Continued)	
456.175-456.700	Power, Pet., For. Prod., Manu., Tel. Maint.
456.725-457.025	Special Industrial
457.050-457.500	Power, Pet., For. Prod., Spec. Ind., Manu., Tel. Maint., Motor Carrier, RR. Taxi
457.525-457.600	Business
457.625-457.950	Power, Pet., For. Prod., Spec. Ind., Manu., Tel. Maint., Motor Carrier, RR
457.975-458.000	Relay Press
458.025-459.000	Power, Pet., For. Prod., Spec. Ind., Manu., Tel. Maint., Local Govt., Police, Fire, Hwy., For.-Cons., Spec. Emerg.
459.025-459.650	Mobile Telephone
460.025-460.625	Power, Pet., For. Prod., Spec. Ind., Manu., Tel. Maint., Police, Spec. Emerg.
460.650-462.175	Business
462.200-462.450	Manufacturers
462.475-462.525	Power, Pet., For. Prod., Manu., Tel. Maint.
462.750-462.925	Business
462.950-463.175	Police, Special Emergency
463.200-465.000	Business
465.025-465.625	Power, Pet., For. Prod., Spec. Ind., Manu., Tel. Maint., Police
465.650-467.175	Business
467.200-467.450	Manufacturers
467.475-467.525	Power, Pet., For. Prod., Manu., Tel. Maint.
467.750-467.925	Business
467.950-468.175	Police, Special Emergency
468.200-469.975	Business

EXTENDED UHF BAND 470-512 MHz

A number of the larger cities or metropolitan areas may utilize some of the lower UHF TV channels for land mobile radio services. UHF TV channels 14 through 20 are re-allocated in these cities as follows:

City/Area	Channel	Frequency Range
Boston	14, 16	470-476 MHz, 482-488 MHz
Chicago	14, 15	470-476 MHz, 476-482 MHz
Cleveland	14, 15	470-476 MHz, 476-482 MHz
Dallas/Fort Worth	16	482-488 MHz
Detroit	15, 16	476-482 MHz, 482-488 MHz
Houston	17	488-494 MHz
Los Angeles	14, 20	470-476 MHz, 506-512 MHz
Maryland	18	494-500 MHz
Miami	14	470-476 MHz
New York	14	470-476 MHz
Northeastern New Jersey	15	476-482 MHz
Oakland	17	488-494 MHz
Philadelphia	19, 20	500-506 MHz, 506-512 MHz
Pittsburgh	14, 18	470-476 MHz, 494-500 MHz
San Francisco	16	482-488 MHz
Washington, D.C.	17	488-494 MHz

Each 6 MHz segment (or channel) has the same allocation pattern as illustrated below for channel 14:

Frequency — MHz	Service or Allocation
470.0125-470.2875	Mobile Telephone
470.3125-471.1375	Public Safety
471.1625-471.2875	Reserve Pool A
471.3125-471.4125	Power, Telephone Maintenance
471.4375-471.6375	Special Industrial
471.6625-471.7875	Reserve Pool A
471.8125-472.3375	Business
472.3625-472.4375	Taxi
472.4625-472.7875	Motor Carrier, RR, Auto Emerg.
472.8125-472.9875	Pet., For. Prod., Manu.
473.0125-473.2875	Mobile Telephone
473.3125-473.1375	Public Safety
474.1625-474.2875	Reserve Pool A
474.3125-474.4125	Power, Telephone Maintenance
474.4375-474.6375	Special Industrial
474.6625-474.7875	Reserve Pool B
474.8125-475.3375	Business
475.3625-474.4375	Taxi
475.4625-475.7875	Motor Carrier, RR, Auto Emerg.
475.8125-475.9875	Pet., For. Prod., Manu.

Regency Scanners
Limited Warranty

1. The warranty applies to the original or subsequent owners of the product for a period of 1 year from the original purchase date.

2. We agree to repair or replace all parts showing defects in material or workmanship.

3. Warranty service will be provided free of charge if unit is delivered to us intact, transportation charges prepaid, within one year of the date of sale to the original purchaser.

4. The warranty does not apply to units subject to misuse, neglect, accidents, incorrect wiring not our own, improper installation, or units used in violation of the instructions furnished by us. Nor does the warranty apply to units: damaged by lightning, excess current, repaired or altered outside the factory, or units with altered or removed serial numbers.

5. To have your unit serviced under the warranty return it, freight prepaid with dated proof of purchase documents (sales receipt) to:
   Customer Service Department
   Regency Electronics, Inc.
   7707 Records St.
   Indianapolis, IN 46226
   Only factory personnel are authorized to perform warranty service.

6. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.