Operating Guide

REGENCY

100 Channel Mobile/Base Scanner
R1600

Regency®
Uniden Corporation of America

Introduction

Welcome to the exciting world of mobile radio scanners. State-of-the-art engineering and microelectronics provide programmable operation and dependability. The keyboard has been divided into two parts: PROGRAM, which allows you to command any frequency (UHF/VHF) on all 100 channels; and OPERATION, which controls Scan, Lockout, Priority, Delay, Hold, the Service Scan features, as well as the programmable search functions. An LCD display provides frequency and operation information. The case is designed to withstand the mobile environment, and is built of high impact ABS plastic and metal. Please read this guide thoroughly before attempting to operate the unit.

Warning

Regency does **not** represent this unit to be **waterproofed**. To reduce the risk of fire, electrical shock or damage,do not expose this unit to rain or moisture.

Unpacking

Carefully remove all items from the shipping carton. If there is any visible damage or an item appears to be missing, **do not return the unit to the place of purchase**. Please call the Regency Customer Service Center for information or instructions on any problem you may have: (317) 842-2483 8am-5pm EST, Monday-Friday.

The following items are included with your R 1600:

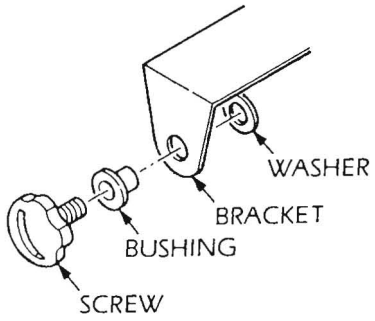
* Regency Scanner
* Direct Wire Power Cord
* AC Adapter
* Mobile Bracket & Hardware
* Telescopic Antenna
* Operating Guide including Registration Card (cut out, fill in and return)
* Motorola Type RF Co-axial Connector

Please keep the shipping carton and packing materials. This carton serves as an excellent method to transport the scanner

Installation

Mobile Installation

Plan the location of the radio bracket before starting the installation. Select a location that is convenient for operation and does not interfere with the driver or passenger in the vehicle. The bracket should be securely fastened to a solid surface using the self tapping screws provided. Mount the scanner to the bracket with the thumb screws and adjust the angle of the radio.



Mobile Antenna

In the mobile application the Regency R 1600 will require an external vehicle antenna. Use a mobile antenna designed for multi-band coverage. For maximum effectiveness, the external antenna should be fed with low loss 50 ohm coaxial such as RG58 foam. Remember, you have purchased the finest mobile scanner available, so don't compromise its performance with an inferior antenna. We recommend using the (optional) Regency BC-AT1 mobile antenna for best results.
Ideally, the antenna should be mounted directly in the center of the vehicle's roof. The radiation and reception pattern of a vehicular antenna always conforms to the ground plane (metal shape) located below the antenna. A roof mounted antenna provides virtually an omnidirectional pattern. If the antenna was mounted on the left rear fender, the best reception would occur from the right front fender of the vehicle, with greatly reduced reception from the left rear. Avoid mounting the antenna on a front fender, as ignition noise can limit reception.

Connecting the Power

The R 1600 is designed to be used in any vehicle which has a 13.8-volt DC negative-ground electrical system. If you cannot determine the polarity of your vehicle, consult your vehicle dealer for information.

Note: The use of this radio in a motor vehicle may be regulated or require a permit in certain states or certain cities.

The R 1600 should be connected directly to the fuse block or battery of your car. Connect the power cord to the back of the radio in the jack marked "DC 13.8V".

Desktop Installation

The R 1600 has a unique design feature that allows the unit to be used as an in-home scanner. The fold-out foot sets the unit at a proper angle for desk or table-top use. Simply swing the foot out until it locks in its upright position.

Note: Please be sure that the foot is folded out completely in order to avoid accidental damage to the unit.

Telescopic Antenna

The R 1600 includes a telescopic antenna for use in desktop installations. Insert the antenna into the opening on the rear apron of the radio, and fully extend it. Under normal conditions this antenna should provide excellent reception. However, factors such as location within your home, and proximity to electrical appliances may determine reception quality. For weak signal reception or electrically noisy locations, an external antenna may be helpful.

AC Adapter

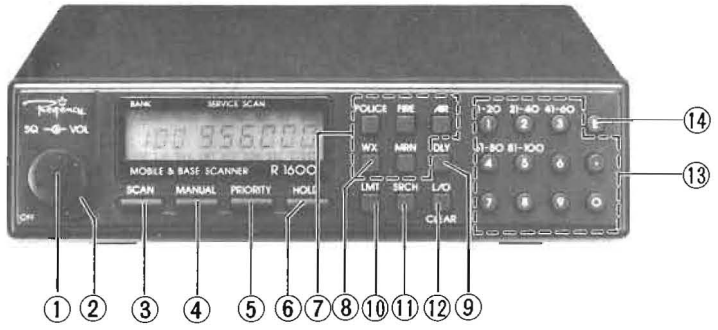
The R 1600 can be powered by the AC Adapter included with the scanner which converts standard household current to 13.8V DC. Plug the small connector of the AC Adapter into the jack in the back of the radio marked DC 13.8V. Plug the other end into any standard 120 V AC household outlet.

Note: Please be sure to use only model AD-580U AC Adapter, as higher voltage, or reverse polarity may damage your unit.

Memory Backup

Frequencies maintained in the R 1600 memory are protected from loss in the event of electrical power interruption by lithium battery. This battery should be replaced every 10 years.

Controls and Functions



1. **On/Off, Volume** - Turns the unit on or off. and controls the audio output level.

2. **Squelch** - Eliminates the annoying "rushing" sound that is present between transmissions when no signal is being received. Proper adjustment of this control keeps the receiver quiet and allows scanning until a signal is received.

3. **Scan** - Press to start scanning all frequencies programmed into memory that are not locked out.

4. **Manual** - Press to stop scanning. Press again to manually step to the next channel. Press the channel number and then press the manual key to go directly to that channel.

5. **Priority** - The priority key samples channel 1 every two seconds regardless of other operational settings.

6. **Hold** - Press to stop and hold the search function on the current frequency. Press again to manually step up to the preceding frequency.

7. **Service Scan** - Press any of the 5 service scan keys to instantly search Police, Fire/ Emergency, Aircraft, Marine bands, or Weather Search.

8. **Weather Search** - The WX key searches all seven NOAA weather frequencies until it locks on the one in your area.

9. **Delay** - The delay key provides a 2 second delay on any channel to receive a reply transmission on the same frequency before resuming search or scan. Delay is retained in memory.

10. **Limit** - Enter the low and high limits of the search range. Press to manually step the search frequency down.

11. **Search** - Press to search for new active frequencies within preset ranges of any band.

12. **Lockout/Clear** - Press to lockout the reception of frequencies on selected channels during scanning. Lockout is retained in memory. Press again to deselect lockout. Pressing the lockout for 2.5 seconds will clear all the locked out frequencies.

The lockout function will also work in all Service Scan modes except WX and Aircraft. The lockout function will not work in regular band search mode.

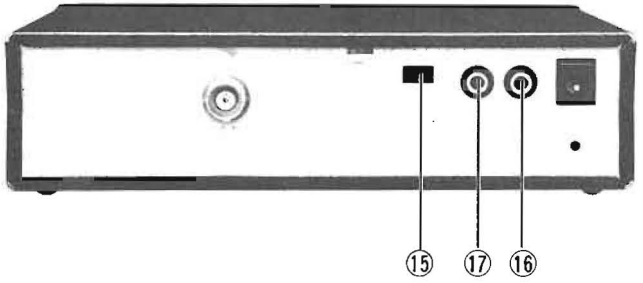
13. **Numeric Keypad** - ("0-9" and ".") Used to program all frequencies into memory and for direct channel access. During the scan mode these keys are utilized to select or deselect any of the 5 memory banks.

14. **Enter** - The "E" key is used to enter frequencies into the scanning memory.

15. **Memory Lock** - This unique feature is used to lock the keypad to prevent accidental entries and is located on the back panel.

16. **External Speaker** - The external speaker jack allows you to use an alternate speaker in case of a high noise environment. Use model ESP 25 external speaker for best results.

17. **Tape Out** - This jack allows you to connect to any standard tape recorder in order to record transmissions.



Operation

The R 1600 has 100 memory channels, each of which can be programmed to store one frequency. The channels are divided into 5-20 channel banks, useful for storing similar frequencies in order to maintain faster scanning cycles. When scan is pressed, each of the programmed frequencies within a selected bank will be sampled for a transmission (locked channels will be skipped) at the rate of about 15 channels per second. If an active frequency is found the unit will stop and monitor that frequency until there is no longer any activity. A two second delay can be added to each channel and will allow the unit to monitor the frequency for a return or continued transmission. If, after two seconds, the frequency remains inactive, the scanning cycle will resume.

When the unit is first turned on, each channel will contain "000.000". When new frequencies are programmed, the old will be erased. If an invalid frequency is entered, "Error" will be displayed and the old frequency will return. "E Loc" will also be displayed if memory lock is on.

To operate the scanner make sure that the power is correctly connected to the unit. Turn the volume control on and adjust the desired level. Adjust the squelch by turning the knob fully clockwise until a rushing sound is heard. Turn the knob back until the receiver is silent. After the channels have been programmed, operation is simple. Press the scan key to scan all the channels, press the manual key to stop the scanning, and manually step through the channels.

Note: The unit must be in the scan mode to select or deselect a channel bank.

LCD Display

The R 1600 has a backlit display which shows the current channel and frequency as well as other operational modes. When the unit is scanning, the channel number will rapidly advance while the frequency display will go blank. When the scanner is stopped the current channel and frequency will again be displayed.

When frequencies are programmed the display will show the digits as they are entered. The display will also show "PRI" when the priority mode is on, "L/O" whenever a channel appears that has been locked out, and "DLY" whenever a channel has been programmed for delay. In the upper left hand corner of the display the numbers 1-5 will be present. These are the bank indicator numbers. These are selected or deselected during the scan sequence by the use of the numeric pad. During the service scan sequence the word "POLICE" will be displayed if that service has been selected. Similarly "FIRE/EMG" for fire and emergency, "AIR" for aircraft, "WX" for weather, and "MRE" for marine band service scans will be displayed when selected.

Programming

To program a frequency into a channel, press the digits of that frequency including the decimal point and then press the enter key. If an invalid frequency is entered, the display will show "Error". To change a frequency enter the new one and the old one will be erased.

To program 162.550 into channel 2:

Press 2 MANUAL

Press 1 6 2 . 5 5 0 E

To program 471.2375 into channel 7:

Press 7 MANUAL

Press 4 7 1 . 2 3 7 5 E

To search from 150 to 160 MHz

Press 1 5 0 LMT

Press 1 6 0 LMT

Press SRCH

Your R 1600 will then begin searching the frequencies from 150 to 160 MHz. If you encounter a frequency of interest, you can press the HOLD key to stop. If the scanner has already resumed searching, press HOLD and then use the HOLD and LIMIT keys to step the frequency up or down (HOLD to step up, LIMIT to step down).

You can also program the channels directly from the search function. To do this, first go to the channel number you wish to use, and then begin the search function as described above. When you encounter a frequency that you wish to save, press HOLD to stop, and then press E (enter) to save the frequency. If you wish to repeat the procedure for another channel, go to that channel and resume searching.

To select or deselect a channel bank

When a bank number at the top of the display is visible, it means that the numbered bank is currently selected. When it is not visible , it means that the bank is deselected. While the unit is scanning, pressing the appropriate number key will select or deselect the desired bank.

Features

The following is a brief description of the operational features of the R 1600.

Manual Channel Selection - To manually select a channel press the manual key repeatedly until the desired channel number appears in the display.

or

Press the channel number you wish to access, then press the manual key. The scanner will automatically advance to the desired channel regardless of the bank status.

Lockout - Select the channel to be skipped. Press the lockout key. The lockout indicator will appear in the display whenever that channel also appears. To take lockout off press the lockout key on that channel. The lockout key also functions to eliminate any locket out channels within a certain bank. Simply press the lockout key for about 2.5 seconds to "Clear" the entire bank.

Priority - When it is important to keep track of the activity on one frequency while listening to others, the priority function should be used. Program the important frequency into channel one. Press the priority key to activate the priority function. Every 2 seconds the unit will check channel one for activity (the priority indicator will appear in the display). If a transmission is found the unit will monitor that channel. If no signal is found, the unit will return to the previous channel and function. Press the priority key again to turn off the priority function. When priority is on, the audio may be periodically interrupted.

Search - Use the search mode to look for new active frequencies within the bands of your scanner.
Enter the lower limit frequency on the keypad and press the limit key;

Enter the higher limit frequency and press the limit key again.

These two frequencies set the range that the unit will search. Press the search key to start searching. If an active frequency is found the scanner will stop to monitor the signal. Press the hold key to hold the search on this frequency. Press the hold key again to step up to the next frequency or press the limit key to step down to the previous frequency. When the signal stops the unit will continue searching. Press the manual key to leave the search mode.

Service Scan - This unique feature is a simple way to find new active frequencies when you are travelling or anytime you don't know exact frequency bandwidths. Simply select the particular service you wish to search. The hold and limit keys can be used the same way as in the scan mode, allowing you to step down or up the service scan band manually. Lockout can also be used except Aircraft and Weather.

Helpful Hints

The R 1600 is a high quality electronic radio receiver. The following hints should help you understand and enjoy your unit.

1. Make sure the unit is turned off before disconnecting the power. You may want to record the programmed frequencies before power is interrupted in case memory is lost.

2. If memory is lost, simply reprogram each channel. Memory loss will be indicated by unfamiliar frequencies or "000.000" in each channel.

3. If strong interference or electrical noise is received, you may need to relocate your scanner. A higher elevation such as the second floor may provide better reception.

4. Whenever the keypad is used it is important to press firmly on the center of each key.

5. Do not use the scanner in high moisture environment such as the kitchen or the bathroom.

6. Clean the outside of the cabinet with a mild detergent. Do not use abrasive cleansers or solvents. Be careful not to rub LCD window area.

7. There are no user serviceable parts inside with the exception of the memory backup battery. Do not attempt any repairs.

Trouble Shooting

If your R 1600 is not performing up to your expectations, try the steps listed below. If you cannot get satisfactory results please call the Regency Customer Service Center for assistance: (317) 842-2483 8am - 5pm EST, Monday-Friday.

TROUBLE	CHECK
1.Scanner is not working properly.	A. Check the power connections. B. Check the volume and squelch. C. Make sure programming is correct.
2. Signal is weak or distorted.	A. Check antenna connection. B. Check proper frequencies. C. Make sure frequency is active.
3. Improper reception.	A. Check proper frequencies. B. Reposition radio. C. Check antenna connection.
4. Scan won't stop.	A. Check squelch adjustment. B. Check proper frequencies. C. Check antenna connection. D. Check lockout.
5. Incomplete reception.	A. Fringe area of reception. B. Check squelch adjustment.
6. Unit won't program.	A. Check memory lock switch.
7. Priority won't work.	A. Check squelch adjustment. B. Improper frequency in Channel 1.

Helpful Hints

Optional Accessories

The following accessories are available for your R 1600 at your local Regency Dealer or from the Regency Customer Service Center: (317)842-2483 8am-5pm EST, Monday-Friday.

BC 002 CTCSS Tone Band - An internal Tone Board allows squelch to be broken only when a CTCSS Tone is received. The BC 002 is easy to install and must be used with the BC 003 Switch Assembly.

BC 003 Switch Assembly Board - The Switch Assembly Board provides two switches to activate the BC 002 and some future option. It installs inside the case, under the flip stand and must be with the BC 002.

BC 004 RF Receiver Pre Amp Box - An external Pre Amp Box option is available to boost weak signals and held improve reception in fringe areas. The BC 004 plugs into the antenna jack and uses the units power supply.

PS-001 Vehicle Power Cord - This power cord is designed for use with the R 1600 in a vehicle. This heavy duty cord comes complete with a cigarette lighter connector and fuse.

AD-580U Replacement AC Adapter

Telescoping Antenna - Replacement antenna for the R 1600

ESP 25 External Speaker - Heavy duty speaker with impact resistant ABS housing for high power external audio.

Frequency Directory - You can get much more out of your scanner with one of the Frequency Directories. Tens of thousands of verified frequencies for police, fire, emergency, aircraft, railroad, and many other services. When you turn to your local area you will find new active frequencies full of exciting action. There is a directory for the eastern states and western states, and a local frequency listing.

Eastern USA including all areas in the eastern time zone.

Western USA including central time zone and west.

Local listing of active frequencies in your area only.

Frequency Allocations

Because of the short-range nature of VHF and UHF FM communications, frequencies allocated to services in one geographical location will not be heard more than 25-50 miles distance (an exception is "skip" when signals bounce back to earth from the ionosphere). For this reason a separate frequency directory must be compiled for each local monitoring area.

Most standard frequency separations and classifications are regulated in the United States by the FCC. Block allocations and even some discrete frequencies covered by your scanner are shown below. These frequencies are not necessarily active in your area. Regency provides an eastern or western regional directory and a local listing of active frequencies. See the Optional Accessories section for more information.

Abbreviations

The following is a list of abbreviations used to identify the organizations in the frequency allocations.

Amateur Radio	Ham
Automobile Emergency	Auto Emer.
Aviation	Aero
Broadcast Remote	BC. R
Bureau of Reclamation	Bur. Recl.
Business Radio	Bus.
Department of Agriculture and Forestry	Agr. & For.
Fire Department	F.D.
Forest Products	For. Prod.
Forestry Conservation	Fors. Cons.
Government	Govt.
Highway Maintenance	Hwy.
Indian Affairs	
Land Transportation	Land Tr.
Local Government	L. Govt.
Manufacturers	Mfg.
Military	MIL
Mobile Telephone	Mob. Tel.
Motion Picture	Mot. P.
National Parks	Nat. Pk.
Petroleum	Pet.
Police	P.D.
Power Utilities	Power
Radio Paging	Page
Railroad	R.R.
Red Cross	
State Police	St. P.D.
Special Emergency	Sp. Emer.
Special Industrial	Sp Ind.
Taxicab Radio	Taxi
U.S. Coastal and Geodetic Survey	U.S.C.G.S.
U.S. Weather Bureau	U.S.W.B.

29 - 54 MHz BAND

29.00 - 29.70	10 Ham
29.70 - 29.80	For. Prod.
29.80 - 30.00	Aero
30.01 - 30.56	Govt.
30.56 - 30.62	Sp. Ind.
30.66 - 31.24	Ind. (Pet., Fors. Cons. Bus., For. Prod.)
31.26 - 31.98	Sp. Ind., Fors. Cons.
32.00 - 33.00	Govt.
33.02 - 33.16	Hwy., Sp. Emer., Bus.
33.18 - 33.38	Pet.
33.42 - 33.98	F.D.
34.00 - 35.00	Govt.
35.02 - 35.18	Bus.
35.22 - 35.66	Mob. Tel. & Page
35.70 - 35.73	Bus.
35.74 - 35.98	Sp. Ind. & Bus
36.00 - 37.00	Govt.
37.02 - 37.44	F.D. P.D. & L. Govt.
37.45 - 37.86	Power
37.90 - 37.98	Hwy. & Sp. Emer.
38.00 - 39.00	Govt.
39.02 - 39.98	P.D., L. Govt.
40.00 - 42.00	Govt.
42.02 - 42.94	St. P.D.
42.96 - 43.18	Sp. Ind. & Bus.
43.22 - 43.68	Mob. Tel. Page
43.70 - 44.60	Trucks., Bus.
44.62 - 45.06	St. P.D., Fors. Cons.
45.08 - 45.66	P.D.
45.68 - 46.04	P.D. Hwy., Sp. Emer.
46.06 - 46.50	F.D.
46.52 - 46.58	P.D., L. Govt.
46.60 - 47.00	Govt.
47.02 - 47.40	St. Hwy.
47.42	Red Cross
47.44 - 47.68	Sp. Ind. Sp. Emer.
47.70 - 48.54	Power
48.56 - 49.58	L. Govt., Pet.
49.60 - 50.00	Govt.
50.00 - 54.00	Ham

118 - 174 MHz BAND

118.000 - 135.975	Aero
136.00 - 144.00	Govt.
146.000 - 148.000	Ham
148.010	MARS
148.150	CAP
148.155 - 148.250	MIL
148.290 - 150.750	USN
150.815 - 150.995	Bus.
151.010 - 151.130	Hwy
151.145 - 151.475	Fors. Cons.
151.505 - 151.595	Sp. Ind.
151.625 - 151.955	Bus.
151.985 - 152.240	Mob. Tel. (RCC)
152.270 - 152.450	Taxi
152.480 - 152.840	Mob. Tel. & Page
152.870 - 153.020	Sp. Ind. Mot. P.
153.050 - 153.440	Pet., For. Prod.
153.470 - 153.710	Power
153.740 - 154.115	F.D. L. Govt.
154.130 - 154.445	F.D.
154.450 - 154.600	Sp. Ind., Pet., Bus.
154.655 - 155.145	P.D., L. Govt., ST. P.D.
155.160 - 155.400	Sp. Emer., P.D.
156.045 - 156.240	L. Govt., Hwy., P.D.
156.275 - 157.425	Marine
157.456 - 157.500	Auto Emer.
157.530 - 157.710	Taxi
157.740 - 158.100	Mob. Tel. & Page
158.130 - 158.460	Power, For. Prod., Pet.
158.490 - 158.700	Mob. Tel. (RCC)
158.730 - 158.970	P.D., L. Govt.
158.985 - 159.210	P.D. Hwy.
159.225 - 159.465	Fors. Cons.
159.510 - 160.200	Trucks
160.215 - 161.565	R.R.
161.600 - 162.000	Marine
162.026 - 162.175	Bur. Recl.
162.400	U.S.W.B.
162.475	U.S.W.B.
162.550	U.S.W.B.
163.125	Indian Affairs
163.175	Bur. Recl.
163.275	U.S.W.B.
163.388 - 163.538	MIL
163.825 - 163.975	Govt.
164.025 - 164.075	U.S.C.G.S.
164.175 - 165.188	Bur. Recl., Nat. Pk. Govt., Agr. & For.
169.300	F.A.A.
169.450 - 169.725	Nat. Pk., Ind., Data
170.150	F.D., BC. R.
170.200 - 170.220	U.S.C.G.S.
170.225 - 170.325	Ind., Land Tr.
170.425 - 170.575	Fors. Cons.
170.975 - 171.250	Govt., Sp. Ind. & Land Tr.
171.388 - 172.725	Bur. Recl., Fors. Cons., Ind. Dept. Ag. & For., Govt.
172.775	Nat. Pk.
173.025	U.S.W.B.
173.075	U.S.C.G.S.
173.204 - 173.375	Press Relay, Mot. P., Pet., Bus. Recl.

406 - 512 MHz BAND

406.000 - 420.000	Govt.
420.000 - 450.000	Ham
450.050 - 450.950	Remote Br.
451.000 - 451.150	Util.
451.175 - 451.750	For. Prod., Pet., Power., Tel. Maint.
451.775 - 451.975	Spec. Ind.
452.000 - 452.500	Taxi, Motor Carrier & R.R.
452.525 - 452.600	Auto Club
452.625 - 452.975	BC. R., Motor Carrier & R.R.
453.000 - 453.975	L. Govt., P.D. & F.D.
454.000 - 454.975	Mob. Tel. & Page
455.000 - 455.975	Remote Br.
456.000 - 458.975.	P.D., F.D., Ind., Land. Tr.
459.000 - 459.975	Mob. Tel., Page, & Domestic Public
460.000 - 460.625	P.D., F.D.
460.650 - 462.175	Bus.
462.000 - 462.450	Taxi.
462.550 - 462.725	C.B.
462.750 - 462.975	Bus.
463.000 - 463.175	Medical
463.200 - 464.975	Bus.
465.000 - 467.500	P.D., F.D., Sp. Ind. & Land.Tr.
467.5375 - 467.7375	C.B.
467.7375 - 469.925	Pub. Safety. Ind., & Land Tr.

In some large metropolitan areas, 1 or 2 channels of the "TV Band" (470 MHz to 512 MHz) are used for communication purposes. Each TV station (channels 14 through 20) utilizes 6 MHz:

470 - 476	T.V.	Channel 14
476 - 482	T.V.	Channel 15
482 - 488	T.V.	Channel 16
488 - 494	T.V.	Channel 17
494 - 500	T.V.	Channel 18
500 - 506	T.V.	Channel 19
506 - 512	T.V.	Channel 20

Where these frequencies are assigned for communication purposes, in lieu of a TV station, the 6 MHz segment is allocated as shown here for channel 14 (470 - 476 MHz).

470.0125 - 470.2875..... Domestic Public, (Base, Mob.)
470.3125 - 471.1375..... Public Safety
471.1625 - 471.2875..... Reserve Pool A
471.3125 - 471.4125..... Pwr., Tel. Maint.
471.4375 - 471.6375..... P.D., Spec. Ind.
471.6625 - 471.7875..... Reserve Pool B
471.8125 - 472.3375..... Bus.
472.3625 - 472.4375..... Taxi
472.4675 - 472.7875..... R.R., Motor Carrier, Auto Emer.
472.8125 - 472.9875... Pet., For. Prod., Mfg.
473.0125 - 473.2875..... Domestic Public
473.3125 - 474.1375..... Public Safety
474.1625 - 474.2875..... Reserve Pool A
474.3125 - 474.4125..... Power., Tel. Maint.
474.4375 - 474.6375..... Spec. Ind. (Mobile)
474.6625 - 474.7875..... Reserve Pool B
474.8125 - 475.3375..... Bus.
475.3625 - 475.4375..... Taxi
475.4625 - 475.4875..... R.R., Motor Carrier, Auto Emer.
475.8125 - 475.9875... Pet., For. Prod., Mfg.

The same allocation pattern is repeated for each of the TV channels 14 through 20. For example, if channel 17 is assigned for communications in your area, "Taxi" would be 490.3625 to 490.4375 and 493.3625 to 493.4375 (corresponding to 472.3625 to 472.4375 and 475.3625 to 475.4375 above). Note that in the example, we added three TV channels (18 MHz to the channel 14 frequencies).

806 - 956 MHz BAND

806.000 - 816.000..... Domestic Public (Mobile)
816.000 - 821.000..... Mobile Trunking
825.000 - 845.000..... Cellular Telephone (Mobile)
851.000 - 861.000..... Domestic Public (Base)
861.000 - 866.000..... Base Trunking
870.000 - 890.000..... Cellular Telephone (Base)
902.000 - 928.000..... Industrical Scientific

CTCSS TONE FREQUENCIES

67.0	91.5	118.8	156.7	210.7
71.9	94.8	123.0	162.2	218.1
74.4	97.4	127.3	167.9	225.7
77.0	100.0	131.8	173.8	233.6
79.7	103.5	136.5	179.9	241.8
82.5	107.2	141.3	186.2	250.3
85.4	110.9	146.2	192.8	
88.5	114.8	151.4	203.5	

Specifications

Band Coverage:	12 Bands	
Frequency Range:		
	10 Meter "Ham"	29.0-29.7 MHz
	Low Band	29.7-50.0 MHz
	6 Meter "Ham"	50.0-54.0 MHz
	Aircraft	118-136 MHz
	Military Land Mobile	136-144 MHz
	2 Meter "Ham"	144-148 MHz
	High Band	148-174 MHz
	Federal Government	406-420 MHz
	70cm "Ham"	420-450 MHz
	UHF Band	450-470 MHz
	"T" Band	470-512 MHz
	"800 Band	806-956 MHz
Channels:	100 Channels (5-20 channel banks)	
Scan Speed:	15 channels per second	
Display:	Illuminated Liquid Crystal	
Power Requirement:	13.8V DC (vehicle battery or AC Adapter)	
Memory Back-up Battery:	Lithium Battery	
Sensitivity:	29-54 & 136-174 MHz = 0.4 microvolts (nominal)	
	118-136 MHz = 0.8 microvolts (60%AM) (12dB SINAD)	
	406-512 MHz = 0.5 microvolts	
	806-956 MHz = 1.0 microvolts	
Selectivity:	—55dB @ ± 25 KHz	
Audio Output (Nominal):	2.5 Watts at 10% T.H.D.	
Antenna:	telescopic antenna included	
Connectors:	antenna, external speaker, DC power and tape out	
Size:	$6\ ^{5}/_{16}$"W x $1\ ^{5}/_{8}$"H x $7\ ^{3}/_{8}$"D	
Weight:	1 lb. 3 oz.	

Certified in accordance with FCC rules and regulations part 15 as of date of manufacture.

Specifications are typical and subject to change without notice.

Birdies

All radios are subject to receiving undesired signals. If the R 1600 stops during scan mode and no sound is heard, it may be receiving a "Birdie". Birdies are internally generated signals inherent in the electronics of the receiver. Press the Scan key to continue scanning.

One Year Limited Warranty

WARRANTOR: Regency, a division of UNIDEN Corporation of America ("Regency")

ELEMENTS OF WARRANTY: Regency warrants, for the duration of this warranty, Regency Scanners (hereinafter referred to as the Product) to be free from defects in materials and craftsmanship with only the limitations or exclusions set out below.

WARRANTY DURATION: This warranty shall terminate and be of no further effect one (1) year after the date of the original purchase of the Product or at the time the Product is (A) damaged or not maintained as reasonable or necessary, (B) modified, (C) improperly installed, (D) repaired by someone other than warrantor for a defect or malfunction covered by this warranty, (E) used in a manner or purpose for which the Product was not intended, or (F) sold by the original purchaser.

STATEMENT OF REMEDY. In the event that the Product does not conform to this warranty at any time while this warranty is effective, warrantor shall repair the defect and return it to you without charge for parts, service, or any other cost incurred by warrantor or its representatives in connection with the performance of this warranty. THIS WARRANTY DOES NOT COVER OR PROVIDE FOR THE REIMBURSEMENT OF PAYMENT OF INCIDENTAL OR CONSEQUENTIAL DAMAGES. Some states do not allow this exclusion or limitation of incidental or consequential damages so the above limitation or exclusion may not apply to you.

PROCEDURE FOR OBTAINING PERFORMANCE OF WARRANTY: In the event that the Product does not conform to this warranty, the Product should be shipped or delivered, freight prepaid, to warrantor at Regency Customer Service Center, 9340 Castlegate Dr., Indianapolis, IN 46256 with evidence of original purchase.

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

This warranty is void outside the United States of America.

CUT

Regency R 1600 Product Registration Card

Thank you for choosing a Regency Personal Communications Product. You have chosen one of the most sophisticated, technologically advanced electronic products available. Please fill out the requested information on this card so that we can better understand our customers and their needs. With this information we can plan new products, advertising, and guide our customer service programs. Thanks for your help.

1. ☐ **Mr.** **2.** ☐ **Mrs.** **3.** ☐ **Ms.** **4.** ☐ **Miss**

5. First Name **6. Initial** **7. Last Name**

8. Street **9. Apt. No.**

10. City **11. State** **12. Zip**

13. Date of Purchase: Mo Day Yr

14. Serial No.

15. Is this the first scanner you have purchased or received as a gift?
YES ☐ NO ☐

16. If NO, please specify brand and model number purchased.
A. _____
B. _____
C. _____

17. Where did you purchase the product?
- ☐ Department Store
- ☐ Discount Store
- ☐ Catalog Showroom
- ☐ Electronics Specialty Store
- ☐ Local Electronics Dealer
- ☐ Mail Order
- ☐ Gift
- ☐ Truck Stop

18. How did you become aware of this product?
- ☐ TV Advertisement
- ☐ Magazine Advertisment
- ☐ Newspaper Advertisement
- ☐ Store Display
- ☐ Friend's Recommendation
- ☐ Salesperson's Recommendation
- ☐ Previous Use

19. Please check two of the factors that most influenced your purchase of this product.
- ☐ Style or Appearance
- ☐ Price
- ☐ Uniden Reputation
- ☐ Warranty
- ☐ Previous Use
- ☐ Features
- ☐ Quality

20. Please check your age category
- ☐ Under 20
- ☐ 20-25
- ☐ 26-30
- ☐ 31-35
- ☐ 36-40
- ☐ 41-45
- ☐ 46-50
- ☐ 51-55
- ☐ 56-60
- ☐ 61-65
- ☐ 66 & Over

21. Occupation
- ☐ Homemaker
- ☐ Teacher/Educator
- ☐ Professional Driver
- ☐ Executive/Administrator
- ☐ Civil Servant
- ☐ Sales/Marketing
- ☐ Clerical
- ☐ Farmer/Agriculture
- ☐ Military
- ☐ Technical/Professional
- ☐ Business/Professional
- ☐ Craftsworker
- ☐ Machine Operator/Laborer
- ☐ Retired
- ☐ Student

22. Please check your approximate family income.
- ☐ Under $10,000
- ☐ $10,000-19,999
- ☐ $20,000-29,999
- ☐ $30,000-39,999
- ☐ $40,000-49,999
- ☐ $50,000-59,999
- ☐ $60,000 & Over

CUT

PLACE
FIRST CLASS
STAMP
HERE

Regency®
Uniden Corporation of America

4700 Amon Carter Boulevard
Fort Worth, Texas 76155

ATTN: MARKET RESEARCH DEPARTMENT

Please do not send any products or service related correspondence to this address

Please fold here

CUT

23. What types of credit cards do you use?

- ☐ American Express, Diners Club, Carte Blanche
- ☐ Bank Card (Master Card, Visa, etc.)
- ☐ Gasoline Card. Name _____
- ☐ Department Store Card
- ☐ None of the above

24. What type of car(s) do you drive?

- ☐ Compact
- ☐ Mid Size
- ☐ Sports
- ☐ Full Size
- ☐ Station Wagon
- ☐ Van
- ☐ Recreation Vehicle
- ☐ Specialty
- ☐ Motor Cycle
- ☐ Pick Up

25. What magazine(s) do you read?

- ☐ Road & Track
- ☐ Car & Driver
- ☐ Motor Trend
- ☐ Auto Week
- ☐ American Trucker
- ☐ Road King
- ☐ Playboy
- ☐ Sports Illustrated
- ☐ Penthouse
- ☐ Time
- ☐ Newsweek
- ☐ Popular Science
- ☐ Popular Mechanics
- ☐ Consumer Reports
- ☐ People

Thank you for taking the time to complete this questionnaire. If you have any other comments or suggestions please write to

UNIDEN CORPORATION OF AMERICA
Product Development Dept.
4700 Amon Carter Boulevard
Fort Worth, Texas 76155

UBRE01110RZ

©1989 Uniden Corporation of America

Printed in The Philippines

INSTRUCTIONS: Fill out both sides of card. Cut out on dashed line.
Fold on dotted line. Fold over flap and seal with glue or paste.
Affix postage and mail.

Please fold here

INSTALLATION INSTRUCTIONS

for BC590XLT Optional CTCSS Decoder Tone Board, and RF Amplifier

Introduction

The installation of the CTCSS decoder tone board and the RF Amplifier is a simple procedure requiring a medium sized philips head screw driver.

The installation takes place in three parts.

1. Switch board installation — The switch board is used to control both the CTCSS and RF Amplifier options.
2. RF Amplifier Installation — The RF Amplifier Board connects to the main PC board.
3. CTCSS Decoder Tone Board — The CTCSS Tone Board connected to the main PC board, is screwed into place, and the wiring is connected.

Switch PC Board Installation

1. Remove the bottom case by removing the 4 screws on either side of the chassis. Be careful not to disconnect the speaker wiring.
2. From the inside of the bottom case, push the blind plate out and remove. (See Figure 1)

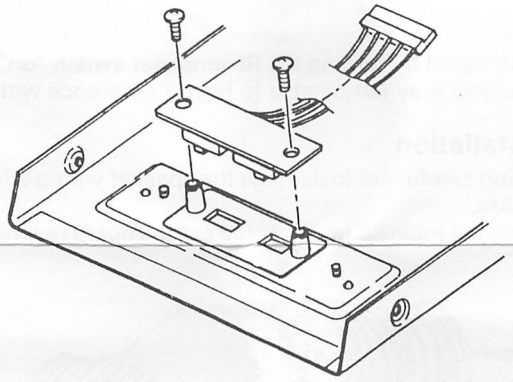


Figure 1

3. Install the Switch PC Board with the screws provided making sure that the board is in the correct orientation. The board has a guide hole to prevent reverse installation.
4. Connect the Switch Board wiring to the main PC Board in the position indicated in Figure 4 marked with the wiring colors to insure correct connection. Be careful not to reverse the connection.
5. Stick the new plate into position in the area under the fold out foot. (See Figure 2)

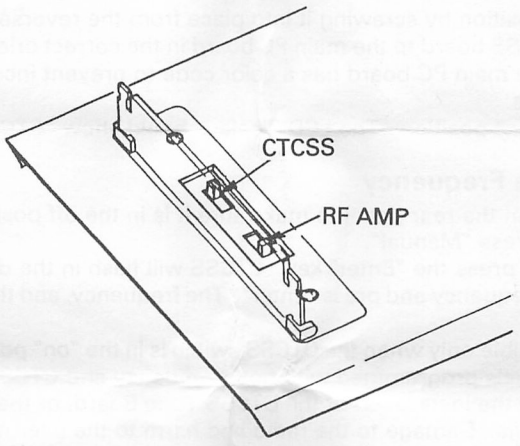


Figure 2

RF Amplifier Installation (for BC760XLT Use BC004 RF Box AMP)

1. Insert RF Amplifier Board into place on the main PC board. (See Figure 4)
2. Replace bottom cover.

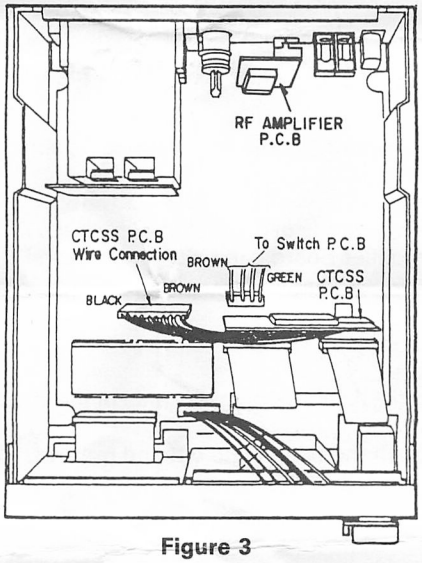


Figure 3

Testing the RF Amplifier

Test the RF amplifier with a known weak signal by turning the RF amplifier switch "on".
Note: Please test with a weak signal, as you may not be able to hear a difference with a strong signal.

CTCSS Decoder Tone Board Installation

1. Remove the top and bottom case, being careful not to damage the speaker wiring which is connected to the bottom case.
2. Remove the screw on the CTCSS board.
3. Insert the CTCSS board into position on the main PC board, being careful not to reverse the connection or damage the connecting pins. (See Figures 3 and 4)

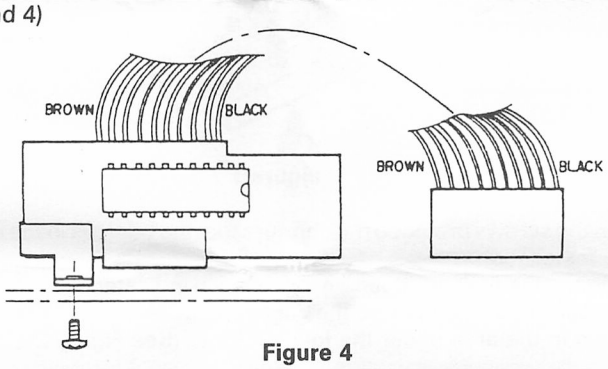


Figure 4

4. Secure the CTCSS board into position by screwing it into place from the reverse side of the main PC board.
5. Connect the wiring from the CTCSS board to the main PC board in the correct orientation, being careful not to reverse the connector or bend the pins. The main PC board has a color code to prevent incorrect connection.
6. Replace the top and bottom case.
7. Turn the CTCSS switch to the "on" position. The LCD display should show "CTCSS".

Programming a CTCSS Tone Frequency

1. Check the memory lock switch on the rear panel to make sure it is in the off position.
2. Enter the desired channel and press "Manual".
3. Enter the desired frequency and press the "Enter" key. CTCSS will flash in the display.
4. Enter the desired CTCSS Tone Frequency and press "Enter". The frequency, and the CTCSS tone frequency will flash alternately in the display.

Note: *CTCSS programming is possible only when the CTCSS switch is in the "on" position. When the radio is in CTCSS mode, the unit will scan only channels programmed with both frequency and CTCSS tone.*

CAUTION: Do not attempt to test the installation of the CTCSS Tone Board, or the RF Amplifier Board with the covers removed from the chassis. Damage to the radio and harm to the user may result.

Note: Refer to the owner's guide, frequency allocation listings for a complete list of the available CTCSS tone frequencies.

©1988 Uniden Corporation of America.
UBUD421648Z(SK)