3. INSTRUCTION MANUAL.

RadioShack, A Div. of Tandy Corp. FCC ID: AAO1901127 Exhibit #: 5A Cat. No. 19-1127. OWNER'S MANUAL Please read before operating this equipment. HTX-252 2 Meter Ham FM Mobile Transceiver RadioShack(R)

FEATURES.

Your RadioShack HTX-252 is a two-way 2 meter ham mobile transceiver for use in your ve hicle. Or you can connect a DC power supply and base station antenna to set up a base stati on in your home. You can also connect optional equipment to your transceiver, such as an ex ternal speaker.

Your transceiver also has these advanced features:

Digital Phase-Locked Loop (PLL) Frequency Synthesizer -- Provides the highly accurate and stable tuning.

Illuminated, Digital Display -- Clearly shows the frequency, functions and signal strength, Scan -- Searches for active channels,

Squelch Circuit -- compensates for signal fading and eliminates signal chopping.

External Speaker Jack -- Lets you connect your Transceiver to an external speaker.

Universal Mounting Bracket -- Lets you mount your transceiver securely in your vehicle or shelf in your home.

INNOVATIVE AND NEW FEATURES

The HTX-252 features some of the most advanced and reliable engineering available any where. Our design philosophy at HTX-252 is focused on developing innovative usable features, including the following :

- * The HTX-252 comes equipped with 38 CTCSS tone Encoding and Decoding unit. The CTCSS tone can be decoded for selective receiving.
- * 10 Memory channels
- * Programmed memory Scan, press over any empty memory channel. In the scan mode, the scan cycle will by-pass any unprogrammed channels.

CONTENTS

Installation ----

Attaching the Microphone Holder -----

Mounting the Transceiver -----

Connecting an Antenna -----

Connecting the Microphone -----

Connecting Optional Speaker ----

Using an External Speaker -----

Using Vehicle Battery Power -----

Using the Transceiver as a Base Station ----

Operation ----

Receiving Transmissions and Adjusting Squelch -----

RadioShack, A Div. of Tandy Corp. FCC ID: AAO1901127

Transmitting	
Basic Functions	
1. FUNCTION ACCESSED DIRECTLY	
2. FUNCTION ACCESSED WITH FUNC KEY	
A Quick Look at the Controls	
Front Panel	
OFF/VOLUME	•
SQUELCH	
REV	
VFO/T-SQ	
ML/MS	
TUNE	
LCD Display	\$
Microphone Socket	
Rear Panel	
Power Cable with Connector	
External Speaker Jack	
Antenna Connector	
Microphone	
PET	
FUNC/MHZ and Monitor	
CALL/STEP	
SCAN/PRI	
LOCK/SHIFT	
UP/DOWN	
LCD Display	
Using Special Controls	
Programming Function and Features	
T-SQ	And the second s
SCAN	
PRI	
KEY LOCK	
SHIFT/REPEATER OFFSET	
MEMORY OPERATION	
CHANNEL STEP	
OTHER FUNCTION and FEATURES	
Maintenance	
Troubleshooting	
Replacing the Fuse	RadioShack, A Div. of Tandy Corp. FCC ID: AAO1901127
Specifications	Exhibit #: _5C

INSTALLATION

ATTACIBNG THE MICROPHONE HOLDER

You can connect the microphone holder to either side of the transceiver or to another location in your vehicle.

To attached the holder to either side of the transceiver, horizontally or vertically, secure the

holder to the side using the supplied screws and lock washers.

figure 1

To attached the holder to another location in the vehicle, such as the dashboard, follow these steps.

- Using the holder as a template, mark the positions for the mounting screw holes at the desired location.
- At each marked position, drill a hole slightly smaller than the supplied mounting screws.Caution: Be careful not to drill into anything behind the mounting surface.
- Attach the holder at the mounting location using the supplied machine screws and lock washers.

MOUNTING THE TRANSCEIVER

The most common mounting location for this Transceiver is under a vehicle's dashboard. However, if you use the HTX-252 as a base station, you can place it on a desk, shelf, or table (see "Using the Transceiver as a Base Station").

If you are mounting the Transceiver in a vehicle, choose a location where:

- * you can easily reach the Transceiver.
- * Wires and cables are clear of the vehicle's pedals or other moving parts.
- * The Transceiver is not directly in front of heating vents.
- * All wires and cables can reach their connection points.

Caution: If you use the Transceiver in a vehicle, mount it securely to avoid damage to the Transceiver or vehicle or injury to anyone in the vehicle during sudden starts or stops.

Follow these steps to mount the Transceiver using the supplied hardware.

 Using the mounting bracket as a template, mark the positions for the screw holes on the mounting surface.

figure 2

- In each marked location, drill a hole slightly smaller than the supplied mounting screws.Caution: Be careful not to drill into objects behind the mounting surface.
- Using a Phillips screwdriver, attach the mounting bracket to the mounting surface with the supplied mounting screws and flat washers.

figure 3.

 Attach the Transceiver to the mounting bracket using the supplied rubber washers and mounting knobs.

figure 4

RadioShack, A Div. of Tandy Corp. FCC ID: AAO1901127

Exhibit #: 5.D

CONNECTING AN ANTENNA

There are many different types of Transceiver antennas for mobile Transceivers. Each antenna type has its own benefits, so choose the one that best meets your needs. Your local

Radioshack store sells a wide variety of antennas.

Note: If you are using this Transceiver as a base station, see "Using the Transceiver as a Base Station".

When you choose an antenna, keep in mind that for the best performance you should mount the antenna:

- As high as possible on the vehicle
- * As far as possible from sources of electrical noise
- * Vertically

Once you choose an antenna, follow its mounting instructions. Then route the cable to the transceiver and connect the cable to the ANT jack on the back of the transceiver.

figure 5

Cautions:

- Avoid routing the cable next to sharp edges or moving parts, which might damage the cable.
- Do not run the cable next to power cables or other radio antenna cables.
- * Do not run the cable through the engine compartment or other areas that produce extreme heat.

To achieve your radio's maximum range, the antenna's Standing Wave Ratio (SWR) must be adjusted. You can use an SWR meter (not supplied) to adjust the SWR for your antenna. Follow the instructions supplied with the SWR meter and antenna to adjust your antenna's SWR to the lowest possible value. SWR values of 2.0:1 are generally acceptable, with readings of 1.5:1 or lower being more desirable.

Note: Using your radio with an antenna adjusted to a high SWR value might eventually damage your radio.

CONNECTING THE MICROPHONE

1. Insert the plug into the microphone jack and rotate the mic plug screw clockwise on the front of the transceiver.

figure 6

RadioShack, A Div. of Tandy Corp. FCC ID: AAO1901127 Exhibit #: 56

Stide the microphone onto the microphone holder.

figure 7

Caution: To disconnect the microphone from the transceiver, rotate the mic plug screw counterclockwise. Then pull out the plug. Never pull on the microphone cable.

CONNECTING OPTIONAL SPEAKERS

You can connect an external speaker to your transceiver.

Note: Connecting an external speaker disconnects the transceiver's internal speaker.

USING AN EXTERNAL SPEAKER

The external speaker you use with the transceiver should have an impedance of 8 ohms and

be able to handle 3 to 10 watts of power, such as RadioShack Cat. No. 21-549. The speaker cable must have a 1/8-inch plug.

To connect the external speaker to the transceiver, insert the speaker cable's plug into the EXT jack on the back of the Transceiver

figure 8

USING VEHICLE BATTERY POWER

Follow these steps to connect the transceiver to vehicle battery power.

figure 9

- I. Connect the red wire (with an in-line fuse holder) on the back of the transceiver to a point in your vehicle's fuse block that has power only when the ignition is in the ACC (accessory) or ON position.
- Connect the black wire to a metal part of the vehicle's frame (chassis ground).
 Caution: Do not connect the black wire to a non-metallic (plastic) part, or to any part insulated from the vehicle's chassis by a non-metallic part.

USING THE TRANSCEIVER AS A BASE STATION

Although this transceiver is designed mainly for mobile use, you can also use it as a base station with an AC power source. For base station installation, you need these items.

* 12-volt DC power supply that can supply at least 7amps.

Caution: Most 12-volt DC power supplies plug into a standard AC outlet to produce DC power. Before connecting your Transceiver to a 12-volt DC power supply, read and follow the instructions included with the power supply.

- * Base station antenna
- Coaxial antenna cable and connectors

Note: Your local RadioShack store carries coaxial antenna cable and connector.

* External 8-ohm speaker.

Follow these steps to install the Transceiver as a base station.

figure 10

1. Mount the base station antenna as described in its owner's manual.

Warning: Use extreme caution when you install or remove a base station antenna. If the antenna starts to fall, let it go. It could contact overheard power lines. If the antenna touches a power line, contact with the antenna, mast, cable, or guy wires can cause electrocution and death. Call the power company to remove the antenna. DO NOT attempt to do so yourself.

- 2. Connect the antenna to the ANT jack on the back of the unit.
- Connect the transceiver's black power wire to the negative (-) terminal on the DC power supply.
- Connect the transceiver's red wire, with in-line fuse holders, to the positive (+) terminal
 on the DC power supply.
- 5. Connect the DC power supply to a standard AC autlet.



OPERATION

Before you use your Transceiver, you should know how to use it effectively and courteously.

RECEIVING TRANSMISSIONS AND ADJUSTING SQUELCH

1. Turn SQUELCH fully counterclockwise

figure 11

Turn on the transceiver by turning VOLUME clockwise, the display lights and the frequency appears.

figure 12

3. Rotate main Tuning knob to select a frequency.

figure 13

 To cut out background noise between transmissions, wait until there is no signal, then slowly turn SQUELCH clockwise until the background noise stops.

figure 14

Note: To receive very weak signals, turn SQUELCH counterclockwise. You hear noise between transmissions, but you also hear weak transmissions (those are not strong enough to break through a higher squelch setting).

- Adjust VOLUME to a comfortable listening level.
- 6. To turn off the unit, turn VOLUME counterclockwise until you hear it click.

TRANSMITTING

Note: We recommend you try receiving before you transmit.

- t. Follow Steps 1 5 in "Receiving Transmissions and Adjusting Squelch."
- To transmit, press the Talk button on the microphone. Hold the microphone 2-3 inches from your mouth and speak in a normal tone of voice. TX appears on the display along with a bar graph which shows the relative strength of your transmission.
- 3. If the LCD displays "E", the transmit frequency has exceeded the regal transmit range and the unit do not transmit. In such a case, the frequency must be changed to proper range for transmition.

figure 15

- When you finish transmitting, release the Talk button. TX and the signal strength bars clear from the display.
- 4. To turn off the unit, VOLUME counterclockwise until you hear it click.

BASIC FUNCTIONS

1. FUNCTION ACCESSED DIRECTLY

RadioShack, A Div. of Tandy Corp.

FCC ID: AAO1901127 Exhibit #: 56.... FUNC -- Acces 2nd function : MHZ course / Pri / Memory Enable / Shift / Channel Step / T-SQ / Power hi-low.

UP -- Used to step up frequency, memory channel, channel step and off-set value of shift,

DOWN -- Used to step down frequency, memory channel, channel step and off-set value of shift.

SCAN -- Channel scan.

VFO -- Frequency tuning mode.

MR -- Memory recall.

LOCK -- Key lock except PTT.

CALL -- Acess call channel.

REV -- Invert the TX and RX frequency.

FUNCTION ACCESSED WITH THE FUNC KEY.

"FUNC +" Means that press FUNC key at first and 2nd function key next.

FUNC + MHZ -- Used main tuning knob or up and down switch to change frequency in Mhz step.

PUNC + SCAN/PRI -- Dual channel watch

FUNC + ML/MS -- Memory save

FUNC + CALL/STEP -- Select channel step 5Khz. 10Khz, 12.5Khz, 15Khz, 20Khz, 25Khz

FUNC * PTT -- Toggle switch for Tx power high-low

- * NOTE: Turn power switch off for beep tone control, power switch on again while PTT key is pressed, then beep tone function turn on. To turn on beep tone again, repeat above once more.
- CAUTION: To reset radio, turn power switch off and power switch on again while FUNC key is pressed.

A QUICK LOOK AT THE CONTROLS FRONT PANEL

figure 16

- OFF/VOLUME -- turns the radio on/off and adjusts the volume.
- SQUELCH -- the squelch control knob is used to eliminate noise, when no signal is present. Normally this control is adjusted clockwise to the noise threshold level.
- 3. REV -- during shift operating is activated, this key invert the Tx and Rx frequency,
- 4. VFO/T-SQ -- VFO (Variable Frequency Oscillator) is frequency tuning mode. FUNC + VFO/T-SQ select the desired tone signaling mode. When the "T" indicator is illuminated in the display the transceiver will transmit the selected subaudible tone. When the "-SQ" indicator is illuminated, the transceiver will both transmit the subaudible tone and will closed squelch until the proper subaudible tone is received.
- 5. ML/MS

Memory recall and Memory Save mode.

6. TUNE

the main tuning dial knob rotated in either direction to select transmit/receive frequencies, memory channels, transmit frequency offset and sub auditable tones.

LCD_DISPLAY

indicates activated function and current frequency.

8 MICROPHONE SOCKET

RadioShack, A Div. of Tandy Corp. FCC ID: AAO1901127

used to inserted microphone plug.

REAR PANEL

figure 17

POWER CABLE WITH CONNECTOR

connect the supplied power cable to this connector,

10 EXTERNAL SPEAKER JACK

when an external speaker (80hm) is used, connect it to this jack.

11. ANTENNA CONNECTOR

used to connect the antenna to radio, use a PL259 antenna plug with the 50ohm impedance.

MICROPHONE

figure 18

- 1. PTT -- the unit transmits when push to talk is depressed.
- FUNC/MHZ AND MONITOR -- FUNC key is used to access secondary control functions and MHZ key. When this key is pressed for over 1 sec, MONITOR function open squelch to monitor weak signals.
- CALL/STEP "" access a programmed call frequency (memory channel "CALL"). FUNC + CALL/STEP select the desired frequency control step.
- SCAN/PRI -- access scanning mode (VFO scan, memory scan). FUNC + SCAN/PRI is PRI mode for dual watch.
- LOCK/SHIFT "- lock function on-off switch, FUNC + LOCK/SHIFT is SHIFT mode, select the repeater offset and direction (+ or ").
- 6. UP & DOWN -- frequency tuning, memory channel and frequency control step selections.

LCD DISPLAY

figure 19

- FUNC -- indicates secondary function access mode.
- T -- indicates CTCSS tone encoded for it, the selected tone will be transmitted for tone squelch.
- +SQ -- indicates that CTCSS tone decoder is activated for RX.
- 4. + & -- "+" : indicates upper side offset in duplex mode and "-" : indicates lower side offset.
- 5. LOW -- indicates low power transmission.
- PRI -- indicates dual watch mode.
- 145,00 -- display the selected transmit/receive frequencies, channel step, offset and subaudible tone frequency.
- ME -- indicates memory mode.
- 8 -- indicate selected memory channel and "E" (out of the legal transmit range).
- 10. BUSY -- indicates signal being received, and open squelch.

RadioShack, A Div. of Tandy Corp. FCC ID: AAO1901127

- S/RP LEVEL -- indicates relative received or transmitted signal strength (this is for reference purposes only and is not a true indicator of the units sensitivity or received signal strength).
- 12. TX -- indicates transmission.
- 13. "LOCK" -- indicates lock.
- 14. SCAN -- indicates scan mode.
- 15. 75, 50, 25 -- indicates channel frequency, last two digit...

USING SPECIAL CONTROL

PROGRAMMING FUNCTION AND FEATURES

A. VFO (Variable Frequency Oscillator) mode.

This mode is used to change frequency using the main tuning dial or UP/DOWN key.

B. MEMORY mode

Press the ML/MS key to select memory channel with main tuning dial or UP/DOWN key.

C. CALL mode.

From the VPO mode or the memory mode, call channel can be accessed by CALL key. "C" indicate the call channel, you can save your chosen frequency, shift, tone, etc. to the CALL channel with the same procedures used for memory save.

T-SQ

TONE FREQUENCY SELECTION (Subaudible Tone)

Press the FUNC key more than 1 second and then press VFO/T-SQ key. Rotate the main tuning knob control or press the UP/DOWN switches on the microphone until the desired tone frequency appears in the display. Press the VFO key to return to VFO mode.

ENCODE/DECODE TONES

figure 20

SCAN

This radio has 2 scanning model. Scan stops maximum of 5 seconds when signal is received and restart scanning.

A. VEO SCAN

This mode scan over the entire turning range of receiver.

- Select the VFO mode.
- 2. Press the SCAN/PRI key on the mic to start scanning.
- 3. To change scan direction, turn the main knob or UP/DOWN on the mic.
- 4. To stop scanning, press the PTT key or the scan key.

B. MEMORY SACN

This mode scan all programmed memory channels,

- Press the ML/MS key to select the memory mode.
- 2. Press the SCAN/PRI key on the mic to start scanning.
- 3. To change scan direction, turn the main tuning knob or UP/DOWN on the mic.
- 4. To stop scanning, press the PTT key or the scan key.

PRE (DUAL WATCH)

Press the FUNC key and then press the SCAN/PRI key to set priority. PRI will be lighted on the LCD. This mode monitor the primary channel for 5 seconds and then change to the secondary channel for 0.5 seconds. When signal is received at secondary channel, the receiving extend to 2 seconds. This feature allow the user monitoring secondary channel as

RadioShack, A Div. of Tandy Corp. FCC ID: AAO1901127

use two radio.

A. VFO Priority

This mode sets up VFO frequency as the primary channel. Select desired frequency for secondary channel and press FUNC + SCAN/PRI. Then select primary channel with main tuning kbob or UP/DOWN keys, wait for DW operating.

B. Memory Priority

This mode sets up your last selected Memory channel as the primary channel, VFO frequency becomes the secondary channel, Press FUNC * SCAN/PRI and ML/MS key. Then memory channel number will be blink and select desired memory channel number with main tuning knob or UP/DOWN key. Wait for DW.

C. CALL Priority

This mode sets up your programmed call channel as the primary channel.

The VFO frequency becomes the secondary channel. Press FUNC + SCAN/PRI and CALL key. Then "C" will be light and wait for DW.

KEY LOCK

The key lock function locks all key except PTT and LOCK, press PTT or LOCK to release keylock.

SHIFT/REPEATER OFFSET

To select the Shift direction (+ or -) and off-set for Repeater operation, press the FUNC key and then press the VFO/T-SQ key. "-" mark and the off-set value (in MHZ) will be displayed.

A. Changing off-set value

Turn the main tuning knob or use the UP/DOWN keys on the mic to change the off-set value, off-set can be set from 100Khz - 7,995Mhz.

B. Setting Shift Direction

FUNC + VFO/T-SQ key and REV key. "-" mark will be change to "+". Press the FUNC+VFO/T-SQ key again or the PTT key to return to VFO.

MEMORY OPERATION

Memory Procedure

- * set the desired frequency to memory writing, for example 145.10 Mhz.
- 1. Press the FUNC key

the LCD return to VFO frequency.

figure 22

2. Press the ML/MS key.

This is memory writing made

LCD change to 145.10 Mhz again and memory channel number will be lighted,

figure 23

 If the memory Channel number is blinking, the memory have no frequency data. Memory channel number can be changed by UP/DOWN key or main tuning knob.

At this time press the ML/MS key one more time, on the to store the frequency (145.10 Mhz).

figure 24

 Goes to the VPO mode. Repeat again above procedure, if you wanted memory the other frequency.

> RadioShack, A Div. of Tandy Corp. FCC ID: AAO1901127

Exhibit #: 5K



6. The memory channel capacity is 0 - 9 (10 station channels).

Call Channel Memory Procedure

- 1. Set the call channel frequency, for example 146.52 Mhz.
- 2. Press the FUNC key.
- Press ML/MS key.
- 4. select "c" (call indication) on the memory channel number with up or down switch or main tuning knob.
- 5. Press the ML/MS key one more time for memory save.

CHANNEL STEP

Your transceiver has six selectable channel steps for VFO (5K, 10K, 12.5K, 20K, 25K). The factory setting is 5Khz.

- Press the FUNC key, and then press STEP key. The display will show the current channel step setting.
- 2. Use the main tuning knob or UP/DOWN keys to select one of the six steps.
- 3. Push the VFO/T-SQ key or the PTT key to return to VFO. Channel step are displayed on the LCD as follow:

5Khz is shown as 5

10Khz is shown as 10

12.5Khz is shown as 12.5

I5Khz is shown as 15

20Khz is shown as 20

25Khz is shown as 25

Setting Transmit Power

Transmit power levels are high (no display) and low (LOW displayed).

High power is 25 watts and low power is 10 watts. To change the transmit power setting, press the FUNC + PTT key.

OTHER FUNCTIONS and FRATURES

1. Monitor function

Press and hold the FUNC key more than 0.5 seconds for monitor function and Squelch will be open to monitor weak signals. Release FUNC key for normal operation.

Beep

To disable the beep Tone, turn the unit off at first.

While holding the PTT key, turn the power switch ON again.

To enable the Beep Tone, repeat the above procedure.

Reset

To Reset the radio, turn the power off and turn on again while holding the FUNC key. All features and functions back to the original factory setting and clear all memory. Factory Setting

VFO: 146.52 Mhz CALL: 146.52 Mhz

Memory Channels : Empty

Shift: None Offset: 0.6 Mhz

Tone Encode/Decode : Disabled Tone Frequency : 88.5 hz

Channel Step : 5 Khz

Power : High Key Lock : Off

Been: On

RadioShack, A Div. of Tandy Corp.

FCC ID: AAO1901127 Exhibit #: 5 L

MAINTENANCE

Your Radioshack HTX-252 Transceiver is an example of superior design and craftsmanship. The following suggestions will help you care for your transceiver, so you can enjoy it for years.

Keep the Transceiver dry. If it does get wet, wipe it off immediately. Liquids can contain minerals that can corrode electronic circuits.

Handle the Transceiver gently and carefully. Dropping it can damage circuit boards and cases and can cause the Transceiver to work improperly.

Keep the Transceiver away from dust and dirt, which can cause premature wear of parts. Wipe the Transceiver with a damp cloth occasionally to keep it looking new. Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the Transceiver. Modifying or tampering with the Transceiver's internal components can cause a malfunction and might invalidate its warranty.

TROUBLESHOOTING

If at any time you suspect that your Transceiver is not working as it should, refer to the following chart to see if you can eliminate the problem. If the problem persists, take the Transceiver to your local Radioshack store for assistance.

Symptom -- Solution

Trouble with reception -- Too much squelch? Adjust as needed,

Radio not on operating frequency Tuning ? Switch to active Tuning.

Microphone connected ? Secure connections.

Antenna connected? Secure connections.

Trouble with transmission -- Transmission cable connected to antenna ? Secure antenna connector.

All connections free of corrosion? Clean and tighten.

Talk button fully pressed in ? Press completely.

Microphone connector loose ? Firmly press in jack

Radio dose not work at all -- Power connected ? Secure connections.

Microphone connected ? Secure connections.

Fuses need replacing ? See "Replacing the Fuses".

If these solutions do not solve the problem, do not attempt repairs or adjustment yourself. The Transceiver should be serviced only by a qualified radio technician. If you still have problems, take your Transceiver to a local Radioshack store for assistance.

REPLACING THE FUSES

If the HTX-252 stops operating, you might need to replace the red power wire's fuse with the supplied spare fuse.

Caution: Do not use a fuse with ratings other than those specified here. Doing so might damage your transceiver.

Follow these steps to replace your transceiver's fuse.

- 1. Make sure the power source and transceiver are both off.
- 2. Pull the latches apart on the fuse holder until it opens.

figure 25

 If the fuse is blown, replace it, use only a standard 1 1/4 x 1/4 inch fast-acting fuse with the proper rating. The fuse must be 10 amps.

Caution: The supplied fuse has the proper ratings. Make sure you replace a fuse only with another fuse of the same rating.

4. Reassemble the fuse holder by squeezing it together until it snaps shut.

RadioShack, A Div. of Tandy Corp. FCC ID: AAO1901127 Exhibit #: 5M

SPECIFICATIONS

GENERAL

Frequency Range ---- TX-142,000MHz to 149.885MHz, RX-136.000MHz to 173,995MHz

Proquency Control ---- Digital phase lock loop synthesizer

Operating Temperature Range ---- -4 F to +122 F

Power Requirements ---- 13.8V DC (12 - 16 VOLTS DC, negative or positive ground)

Antenna ---- 50-ohm(coaxial connector)

Microphone ---- Electric condenser type

Speaker ---- 8-ohm; 3watt

Dimensions ---- 5 3/25" x 2/5" x 5 1/2" (130mm x 35mm x 140mm)

Weight ---- 1.54lbs (0.7Kg)

Accessories ---- microphone hanger and mounting bracket

RECEIVER

Sensitivity for 10dB S/N ---- 0.25uP

Overload Audio Fidelity at 6 dB Down ---- 450Hz - 2100Hz

Adjacent Channel Selectivity ---- 60dB

IF Rejection ---- 70dB or better

Maximum Audio Output Power ---- 2.5watts at 8-ohm Dummy

Squelch Range ---- Adjustable from 0.5uV to 1mV

Battery Drain at no signal ---- 600mA

Battery Drain at Max. Output Power ---- 1.5A

TRANSMITTER

Max. Output Power ---- high: 25watts, low: 10watts

Spurious Emission ---- -65dB or better

Max frequency deviation ---- +/- 5KHz

Battery Drain: high: 5A, low: 3A

Specifications are typical, individual units might vary. Specifications are subject to change and improvement without notice.

RadioShack Limited warranty

This product is warranted by radioshack against manufacturing defects in material and workmanship under normal use for ninety (90) days from date of purchase from RadioShack company-owned stores and authorized RadioShack franchisees and dealers. EXCEPT AS PROVIDED HEREIN, RadioShack MAKES NO EXPRESS WARRANTIES AND ANY IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE DURATION OF THE WRITTEN LIMITED WARRANTIES CONTAINED HEREIN, EXCEPT AS PROCIDED HEREIN, RadioShack SHALL HAVE NO LIABILITY OR RESPONSIBILITY TO CUSTOMER OR ANY OTHER PERSON OR ENTITY WITH RESPECT TO ANY LIABILITY, LOSS DAMAGE CAUSED DIRECTLY OR INDIRECTLY BY USE OR PERFORMANCE OF THE PRODUCT OR ARISING OUT OF ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, EVEN IF RadioShack HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Some states do not allow the limitations on how long an implied warranty lasts or the exclusion of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

In the event of a product detect during the warranty period, take the product and the RadioShack sales receipt as proof of purchase date to any RadioShack store, RadioShack will, at its option, unless otherwise provided by law; (a) correct the defect by product repair without charge for parts and labor; (b) replace the product with one of the same or similar design; (c) refund the purchase price. All replaced parts and products, and products on which a refund is made, become the property of RadioShack. New or reconditioned parts and products may be used in the performance of warranty service. Repaired or replaced parts and

RadioShack, A Div. of Tandy Corp. FCC ID: AAO1901127

Exhibit #: 5N

products are warranted for the remainder of the original warranty period. You will be changed for repair or replacement of the product made after the expiration of the warranty period. This warranty dose not cover; (a) damage or failure caused by or attributable to acts of good, abuse, accident, misuse, improper or abnormal usage, failure to follow instructions, improper installation or maintenance, alteration, lightning or other incidence of excess voltage or current; (b) any repairs other than those provided by a RadioShack Authorized Service Family; (c) consumables such as fuses or batteries; (d) cosmetic damage; (e) transportation, shipping or insurance costs; or (f) costs of product removal, installation, set-up service adjustment or reinstallation.

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

RadioShack Customer Relations, 200 Taylor, 6th Floor, Fort Worth, TX76102 We Service What We Sell

RadioShack a division Tandy Corporation Fort Worth, Texas 76102 12A99 Printed in korea

RadioShack, A Div. of Tandy Corp.

FCC ID: AAO1901127 Exhibit#: 50-