Stryker
SR-25MC

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10-Meter Amateur Radio

Full Featured Ultra Compact AM & FM
20 + watts PEP, 7 Color Display & Rugged Quality

USER'S MANUAL

INTRODUCTION

Congratulations on your purchase of a Stryker 10 meter mobile amateur transceiver .Your Stryker is designed to provide years of enjoyment and trouble-free service. There are many features and functions designed into this transceiver. To ensure that your investment is enjoyed to its fullest

LIMITED WARRANTY

Stryker Amateur Radio warrants this product to be free of defects for a period of one (1) year from the original date of purchase. You must activate your warranty by completing the included form or online at www.strykerradios.com/register. aspx This warranty is non-transferable. This limited warranty is subject to repair or replacement of defective components only. This warranty is void if the radio has been tampered with or misused. If your Stryker Radios needs repair any time during the (1) year warranty period please visit our website www.StrykerRadios.com to obtain an RA number or call 910-221-1086 between the hours of 10 a.m. to 5 p.m. Eastern standard time. If you do need service after your warranty has expired you can still send your radio to us for repair. Our rates are very reasonable and you can rest assured that your radio will be fixed correctly.

IMPORTANT: RETAIN YOUR SALES RECEIPT

You will need to include a copy of your original sales receipt along with your radio when sending it in for warranty repair.

■ INSTALLATION

1. Contents

Unpack and inspect your Stryker SR-25MC for missing or damaged Components.

Quantity	Description
1	Stryker SR-25MC Transceiver
1	Microphone
1	DC Power Cord with Inline Fuse
1	Mounting Bracket with Hardware

Location

Plan the location of the transceiver and microphone brackets before starting the installation. Select a location that is convenient for operation and does not interfere with the driver or passengers in the vehicle. In automobiles, the transceiver is usually mounted below the dash panel, with the microphone bracket beside it.

Mounting

Your mobile radio is supplied with a universal mounting bracket. When mounting the bracket and radio to your car, make sure it is mechanically strong. Also provide a good electrical connection to the chassis of the vehicle. Proceed as follows to mount the transceiver:

Mount the Transceiver

After you have determined the most convenient location in your vehicle, hold the mobile radio with the mounting bracket in the exact location desired. If nothing will Interfere with mounting it in the desired position, remove the thumbscrews and use the mounting bracket as a template to mark the holes for the mounting screws. Before drilling the holes, make sure nothing behind the surface will be damaged or interfere with the installation.

Electrical Connections

The Stryker SR25 is designed to work on any 13.8 volt DC, negative ground electrical source. The condition of a vehicle's electrical system can have a profound affect on the performance of the radio. A low battery, worn generator/alternator, or poor voltage regulator will seriously impair the performance of the transceiver. Any of the above conditions

could result in a high level of receiver noise generation or a Substantial loss of the transmitter's RF output. Make sure that all these components on your vehicle's electrical system are in good condition prior to installing the transceiver.

1. Before making any electrical connections make sure the radio turned off.
2. Connect the positive (+) red wire of the DC power cord to a positive 13.8-volt source at the vehicle fuse block. If connecting to the fuse block, it is recommended that a switched power source be used so that the power to the Transceiver is disconnected when the vehicle is off. This eliminates the possibility the transceiver draining the vehicle's battery.
3. Connect the negative (-) black wire to a metal part of the vehicle's frame, or chassis ground. Make sure that this is a good ground connection.

Antenna Connections

The Stryker SR-25 has a jack in the rear for a standard PL-259 antenna plug. If you are looking for the most range for your transmission, use a vertically polarized, quarter-wave length antenna. If antenna height is a problem, you may use a shorter, loaded-type whip antenna although you can expect some loss of transmission range. Your antenna should always be adjusted for the lowest possible SWR (1.5 or less.) To adjust your antenna for best performance, you can take advantage of your radio's built in SWR meter. Failure to properly adjust your antenna(s) will diminish your operational range and could result in damage to your radio. Damage that results from operating with high SWRs is not covered under your factory warranty!

Tuning the Antenna for Optimum SWR

Because such a wide variety of base and mobile antennas are available, this section will concern itself only with the usual types of mobile adjustable antennas.

Antenna length is directly related to signal frequency. Therefore, it must be tuned to resonate optimally throughout the frequency range of the transceiver.

Lower frequencies require a longer antenna than higher frequencies. Due to the various methods of adjusting antennas for proper SWR, we have chosen what we think is the optimum method:

A. Antennas with adjustable screws (setscrews).

1. Start with the antenna extended and tighten the setscrew lightly enough so that the antenna can be lightly tapped with your finger for easy adjustment.
2. Set your Stryker radio to your desired operating frequency or the center of the range of frequencies you plan to use. Press the PTT (Press-To-Talk) switch, and tap the antenna (making it shorter). The SWR meter will show a lower reading each time the antenna is tapped. By continuing to shorten the antenna, you will notice the SWR reading will reach a low point and then start rising again.
   This means that you have passed the optimum point for the middle frequency.
3. Extend the antenna a short distance and again follow the procedure above.
4. When the lowest point has been reached, switch to the lowest frequency you plan to operate on and then to the highest and compare SWR readings. They should be almost equal.

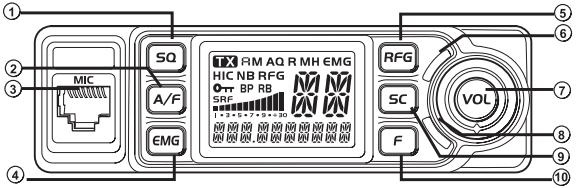
B. Antennas that must be cut to proper length.

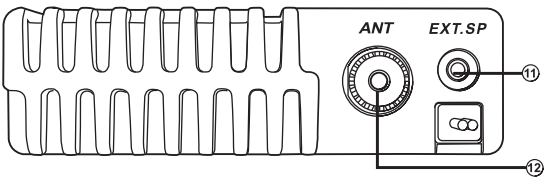
1. Follow the procedure as in A above, but adjust the length by cutting in 1⁄8" increments until a good match is obtained.
2. Be very careful not to cut too much off the antenna at one time. Once it is cut, it can no longer be lengthened.
3. The whip is easily cut by filing a notch all the way around, then breaking the piece off with pliers.

NOTE:

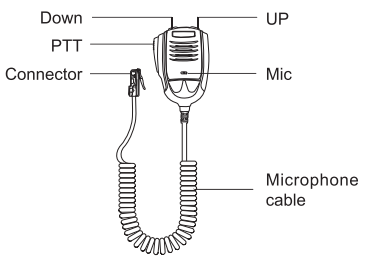
The proper setting is achieved when the SWR is 1.5 or below and when it has the same reading for the low and high frequencies in the range you plan to use.

■ KNOW ABOUT THIS RADIO

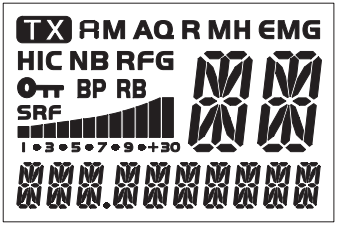




1	Squelch control, SQ, ASQ switch key
2	Mode/Keypad lock
3	Microphone Jack
4	Emergency channel
5	RF Gain control/RF GAIN level setting
6	TX indicator
7	Power On/Off Volume control
8	RX indicator
9	Scan
10	Functions
11	External speaker Jack
12	Antenna Jack



■ LCD



TX	Indicates transmission
AM	AM mode selected
FM	FM mode selected
AQ	Automatic Squelch Control activated
R	Reduce 5KHz from HF model Frequency band
M	Medium power selected from HF model or HAM model
H	High power selected from HF model or HAM model
EMG	The emergency preset channel activated (9 or 19 by default)
HIC	HI-CUT filter activated
NB	NB filter activated
RFG	RF GAIN function activated
	Indicates that front panel keys are locked except PTT pedal
BP	Beep function activated
RB	ROGER BEEP function activated
SRF	Bargraph shows the reception S and emission RF level
	Indicates selected channel
	Indicates frequency, selected band, menus and values of menu

■ HOW TO USE THIS RADIO

Power On/Off the radio

1. Turn VOL switch clockwise to power on the radio, the LCD displays the band and then displays channel number.
2. Turn VOL switch anti-clockwise, until hear Ka Ta, the radio is powered off.

Volume Control

Turn clockwise to increase volume, anti–clockwise to decrease volume.

Channel Control

1. Short press microphone [**UP**] or [**DN**] to change working channel.
2. Long press microphone [**UP**] or [**DN**] will change working channel more quickly.

SQ

Squelch level Control (short press)

1. Short press SQ, until LCD displays SQL.SET 00, 00 stands for SQ level, the bigger value stands for high squelch level.
2. Short press microphone [**UP**] or [**DN**] to change SQ level.
3. Long press microphone [**UP**] or [**DN**] can fast change SQ level.
4. Short press SQ or wait for 10 seconds to store and exit.

Note: The higher SQ level selected, the stronger a signal needs to be to open the speaker and hear someone talking.

ASQ Control (long press)

1. Long press SQ key, until LCD displays " **AQ** ", the ASQ function is turned on.
2. Short press SQ, until LCD displays ASQ.SET 06, 06 stands for ASQ level, the bigger value stands for high squelch level.
3. Short press microphone [**UP**] or [**DN**] to change ASQ level.
4. Long press microphone [**UP**] or [**DN**] ro change the ASQ level more quickly.
5. Short press SQ or wait for 10 seconds to store and exit.
6. Long press SQ key again to turn on SQL function.

Note: The higher ASQ level selected, the stronger a signal needs to be to open the speaker and hear someone talking.

A/F

Mode Control (short press)

1. Short press A/F key to switch between AM / FM mode.
2. The LCD displays the selected mode.

Keypad Lock (long press)

1. Long press A/F key for over 2 seconds to lock the keys, LCD displays OTT.
2. Long press A/F key for over 2 seconds again to unlock the keys, OTT disappears form LCD.

Note: In lock Mode all keys except PTT is valid.

EMG

Emergency Channel (short press)

1. First press EMG key to choose the first programmed emergency channel, LCD displays EMG .
2. Second press EMG key to choose the second programmed emergency channel.
3. Third press EMG key to return to last normal channel, EMG disappears form LCD.

Note: The default emergency channel are channel 9 and channel 19.
See menus Emergency Channel Set page XX for the emergency channel configuration.

-5KHz Control (long press)

1. Long press EMG key, until LCD displays **R** , the frequency -5KHz function turned on.
2. Long press EMG key again to turned off the frequency -5KHz function, **R** disappears from LCD.

Note: This function is valid only when the radio is in HF mode.

RFG

RF Gain Control (short press)

1. Short press RFG key, LCD displays **RFG** , the RF Gain function turned on.
2. Short press RFG key again to turned off the RF Gain function, **RFG** disappears from LCD.

Note: When the RF Gain function is off, the radio will automatically check whether the AUTO RFG function is on. If the AUTO RFG function is on, the radio will automatically change the RFG function.

RF Gain Setting (long press)

1. When the RF Gain function is on,long press [RFG] key enter the RF Gain function setting,LCD diaplay RF.GAIN 40, 40 stands for current RF Gain level.
2. Short press microphone [**UP**] or [**DN**] to change RF Gain level.
3. Long press microphone [**UP**] or [**DN**] to change RF Gain level more quickly.
4. Short press [F] or wait for 10 seconds to store and exit.

Note: If RF Gain level is 6 means the attenuation is 6dBm. This means the higher the RF Gain level is, the less you will receive.

[SC]

Scan Function (short press)

1. Short press [SC] key to start scan function, SC PRI falshes in the LCD.
2. Short press microphone [**UP**] or [**DN**] to change scan direction during scan.
3. Short press [SC] or [**PTT**] key to exit scan function.

[F]

Frequency Band Control (short press)

1. Short press [F] key to switch the frequency band.

Note: This function is valid only when the radio work in HF model or HAM model.

Functions (long press)

1. Long press [F] key to enter in memu and set different function.

Norms control

1. Hold [F] to power on radio, until LCD displays the norms.
2. Short press microphone [**UP**] or [**DN**] to choose wanted norms.
3. Power off and power on again.

Install external speaker

Choose a 8Ω external speaker with 3.5mm mono connector.

Band Name Setting

1. Choose a band to be modified.
2. Long press [F] key to enter mune list.
3. Short press microphone [**UP**] or [**DN**] or [RFG] or [SC] to choose NO.17 function memu, LCD displays BN NAME EU, EU stands for current band name.
4. Short press [F] key,the first digit blinks on LCD.
5. Short press microphone [**UP**] or [**DN**] or [RFG] or [SC] to choose the character of the first digit.
6. Short press [F] key to validate the first digit. The second digit blinks on LCD.
7. Short press microphone [**UP**] or [**DN**] or [RFG] or [SC] to choose the character of the second digit.
8. Short press [F] key to validate the second digit and exit setting.
9. Long press [F] key or wait 20 seconds to store exit MENU.

Emergency Channel Setting

1. Long press [F] key to enter mune list.
2. Short press microphone [**UP**] or [**DN**] or [RFG] or [SC] to choose NO.18 function memu or NO.19 function memu,LCD displays EMG.1 EUc09 or EMG.2 EUc 19.
3. Short press [F] key,the band name blinks on LCD.
4. Short press microphone [**UP**] or [**DN**] or [RFG] or [SC] to choose the frequency band.

Note：This frequency band selection is valid only when the radio work in HF model or HAM model.

5. Short press [F] key to validate the frequency band,and the channel blinks on LCD.
6. Short press microphone [**UP**] or [**DN**] or [RFG] or [SC] to choose the channel.
7. Short press [F] key to validate the channel,and the mode blinks on LCD.
8. Short press microphone [**UP**] or [**DN**] or [RFG] or [SC] to choose the mdoe AM or FM.
9. Short press [F] key to validate the mode and exit setting.

Resume Factory Default

1. Long press [F] key to enter mune list.
2. Short press microphone [**UP**] or [**DN**] or [RFG] or [SC] to choose NO.20 function memu,LCD displays RESET ALL.
3. Short press [F] key to enter menu selection, ALL falshes in the LCD.
4. Long press [F] key until LCD only displays "RESET ALL".

Menu Operations

1. Long press [F] key to enter menu list.
2. Short press microphone [**UP**] or [**DN**] or [RFG] or [SC] to choose menu to be set.
3. Short press [F] key to enter function setting parameter of the chosen function. the parameter blinks on LCD.
4. Short press microphone [**UP**] or [**DN**] or [RFG] or [SC] to choose wanted setting.
5. Short press [F] key to validate the mode and exit setting.
6. Long press [F] key or wait 20 seconds to store exit MENU.

NO.	LCD display	Function detail	Setting details
1	KEY.BP ON	Beep sound	ON: Turn on beep sound OFF: Turn off beep sound Default: ON
2	MIC.GAIN 06	MIC GAIN control	Level 1~10 Default: 6
3	RF.POW LOW	RF power setting	LOW: low power MID: middle power HI: high power Default: LOW **Note：This function is valid only when the radio work in HF model or HAM model.**
4	SQL.SET 08	Squelch level control	OFF, 1~34 Default: 8
5	ASQ.SET 06	Auto squelch level control	Level 1~9 Default: 6
6	SCA.TYPE SQ	Scan type setting	SQ: squelch scan TI: time scan Default: SQ
7	HI.CUT OFF	HI-CUT setting	OFF: turn off HI-CUT function ON: turn on HI-CUT function Default: OFF
8	TAL.BACK OF	Talkback level control	OF, 1~9 Default: OF
9	NBL.ANK OFF	Noise blanker	OFF: turn off NBLANK function ON: turn on NBLANK function Default: OFF

NO.	LCD display	Function detail	Setting details
10	RF.AUTO ON	Auto RF gain setting	OF: turn off AUTO RF GAIN function ON: turn on AUTO RF GAIN function Default: ON
11	RF.GAIN 48	RF gain level control	Level 3、6、9~48 Default: 3
12	RDG.BP OFF	RB sound setting	OFF, 1-5 OFF: Turn off RB sound function. Default: OFF
13	COLOR RE	Backlight color setting	RE: Red GR: Green BL: Blue CY: Cyan YE: Yellow PU: Purple WH: White Default: RE
14	BRIGHT 06	Backlight brighless	Level 1~6 Default: 6
15	TOT.SET 03	Time out timer	OFF, 1~10Min Default: 3
16	RX-5K OFF	-5KHz function setting	OFF: turn off function ON: turn on HI-CUT function Default: OFF **Note：This function is valid only when the radio work in HF model.**

■ SPECIFICATION

GENERAL		
Modulation Mode		AM/FM
Frequency Range		28.000-29.695MHz
Frequency Tolerance		±5.0ppm
Input Voltage		12/24V
Dimensions(in mm)		124x101x36mm
Weight		428g
Operating Temperature Range		−20℃ to +50℃
Current Drain	Transmit	3A MAX
	Receive	Squelched 0.3A
	VOL Max	0.7A
Antenna Connector		UHF,SO-239

TRANSMITTER	
Power Output	4 Watts FM/AM
Transmission interference	inferior to 4nW
Frequency Response	300-3000Hz
Modulated signal distortion	inferior to 5%
Output Impedance	50 ohms

RECEIVER	
Sensitivity	Less than 1uV for 10dB(S+N)/N
Image Rejection	70dB
Adjacent Channel Rejection	60dB
IF Frequencies	1st 10.695MHz
	2nd 455KHz
Automatic Gain Control(AGC)	Less than 10dB change in audio
	Output for inputs from 10 to 50000uV
Squelch	less than 1uV
Audio Output Power	1Watts at 8Ω less than 10% distortion
Frequency Response	300-3000Hz

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