Stryker
SR-25MC

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. 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.

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Stryker SR-25MC Transceiver</td>
</tr>
<tr>
<td>1</td>
<td>Microphone</td>
</tr>
<tr>
<td>1</td>
<td>DC Power Cord with Inline Fuse</td>
</tr>
<tr>
<td>1</td>
<td>Mounting Bracket with Hardware</td>
</tr>
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</table>

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**

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**Microphone Jack Diagram**

- **Down**
- **PTT**
- **Connector**
- **UP**
- **Mic**
- **Microphone cable**
• LCD

**TX**
Indicates transmission

**AM**
AM mode selected

**FM**
FM mode selected

**AQC**
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

**OT**
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](image)

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.
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.
4. Long press microphone [UP] or [DN] to change the ASQ level more quickly.
5. Short press [SQ] or wait for 10 seconds to store and exit.

Note: The higher ASQ level selected, the stronger a signal needs to be to open the speaker and hear someone talking.
Mode Control (short press)
1. Short press $\text{A/F}$ key to switch between $\text{AM/FM}$ mode.
2. The LCD displays the selected mode.

Keypad Lock (long press)
1. Long press $\text{A/F}$ key for over 2 seconds to lock the keys, LCD displays $\text{0000}$.
2. Long press $\text{A/F}$ key for over 2 seconds again to unlock the keys, $\text{0000}$ disappears from LCD.

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

Emergency Channel (short press)
1. First press $\text{EMG}$ key to choose the first programmed emergency channel, LCD displays $\text{EMG}$.
2. Second press $\text{EMG}$ key to choose the second programmed emergency channel.
3. Third press $\text{EMG}$ key to return to last normal channel, $\text{EMG}$ disappears from 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 $\text{EMG}$ key, until LCD displays $\text{R}$, the frequency -5KHz function turned on.
2. Long press $\text{EMG}$ key again to turned off the frequency -5KHz function, $\text{R}$ disappears from LCD.

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

RF Gain Control (short press)
1. Short press $\text{RFG}$ key, LCD displays $\text{RFG}$, the RF Gain function turned on.
2. Short press $\text{RFG}$ key again to turned off the RF Gain function, $\text{RFG}$ 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 display 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.

Scan Function (short press)

1. Short press [SC] key to start scan function, SCAN flashes in the LCD.

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 menu and set different function.

Norms control

1. Hold [F] to power on radio, until LCD displays the 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 menu list.
3. Short press microphone [UP] or [DN] or [Ref] or [SC] to choose NO.17 function menu, LCD displays **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 [Ref] 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 [Ref] 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 menu list.
2. Short press microphone [UP] or [DN] or [Ref] or [SC] to choose NO.18 function menu or NO.19 function menu, LCD displays **EMG.1** EU.09 or **EMG.2** EU.19.
3. Short press [F] key, the band name blinks on LCD.
4. Short press microphone [UP] or [DN] or [Ref] 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.
7. Short press [F] key to validate the channel, and the mode blinks on LCD.
8. Short press microphone [UP] or [DN] or [Ref] or [SC] to choose the mode 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 menu list.
2. Short press microphone [UP] or [DN] or [Ref] or [SC] to choose NO.20 function menu, LCD displays **RESET ALL**.
3. Short press [F] key to enter menu selection, **ALL** flashes 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 [ **RG** ] 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 [ **RG** ] 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.

<table>
<thead>
<tr>
<th>NO.</th>
<th>LCD display</th>
<th>Function detail</th>
<th>Setting details</th>
</tr>
</thead>
</table>
| 1   | KEY.OP 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   | SOL.SET 08  | Squelch level control| **OFF**, 1~34  
Default: 8 |  |
| 5   | ASQ.SET 06  | Auto squelch level control| Level 1~9  
Default: 6 |  |
| 6   | SCATYPE 50  | Scan type setting| **SQ**: squelch scan  
**TI**: time scan  
Default: **SQ** |  |
| 7   | HICUT OFF   | HI-CUT setting  | **OFF**: turn off HI-CUT function  
**ON**: turn on HI-CUT function  
Default: **OFF** |  |
| 8   | TALKBACK OF | Talkback level control| **OFF**, 1~9  
Default: **OFF** |  |
| 9   | NBLANK OFF  | Noise blanker | **OFF**: turn off NBLANK function  
**ON**: turn on NBLANK function  
Default: **OFF** |  |
<table>
<thead>
<tr>
<th>NO.</th>
<th>LCD display</th>
<th>Function detail</th>
<th>Setting details</th>
</tr>
</thead>
</table>
| 10  | RF.AUTO ON  | Auto RF gain setting | OFF: 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  | RGB.DP 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 brightness | Level 1~6  
Default: 6 |
| 15  | TOT.SET 03 | Time out timer | OFF, 1~10Min  
Default: 3 |
| 16  | RU..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

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<tr>
<th><strong>GENERAL</strong></th>
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<tbody>
<tr>
<td>Modulation Mode</td>
<td>AM/FM</td>
</tr>
<tr>
<td>Frequency Range</td>
<td>28.000-29.695MHz</td>
</tr>
<tr>
<td>Frequency Tolerance</td>
<td>±5.0ppm</td>
</tr>
<tr>
<td>Input Voltage</td>
<td>12/24V</td>
</tr>
<tr>
<td>Dimensions(in mm)</td>
<td>124x101x36mm</td>
</tr>
<tr>
<td>Weight</td>
<td>428g</td>
</tr>
<tr>
<td>Operating Temperature Range</td>
<td>–20°C to +50°C</td>
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<table>
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<tr>
<th><strong>Current Drain</strong></th>
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<tbody>
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<td>Transmit</td>
<td>3A MAX</td>
</tr>
<tr>
<td>Receive</td>
<td>Squelched 0.3A</td>
</tr>
<tr>
<td>VOL Max</td>
<td>0.7A</td>
</tr>
<tr>
<td>Antenna Connector</td>
<td>UHF,SO-239</td>
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<tr>
<th><strong>TRANSMITTER</strong></th>
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<td>Power Output</td>
<td>4 Watts FM/AM</td>
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<tr>
<td>Transmission interference</td>
<td>inferior to 4nW</td>
</tr>
<tr>
<td>Frequency Response</td>
<td>300-3000Hz</td>
</tr>
<tr>
<td>Modulated signal distortion</td>
<td>inferior to 5%</td>
</tr>
<tr>
<td>Output Impedance</td>
<td>50 ohms</td>
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<td>Adjacent Channel Rejection</td>
<td>60dB</td>
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<td>IF Frequencies</td>
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<td>2nd 455KHz</td>
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<tr>
<td>Automatic Gain Control(AGC)</td>
<td>Less than 10dB change in audio</td>
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<tr>
<td>Squelch</td>
<td>less than 1uV</td>
</tr>
<tr>
<td>Audio Output Power</td>
<td>1Watts at 8Ω less than 10% distortion</td>
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<tr>
<td>Frequency Response</td>
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