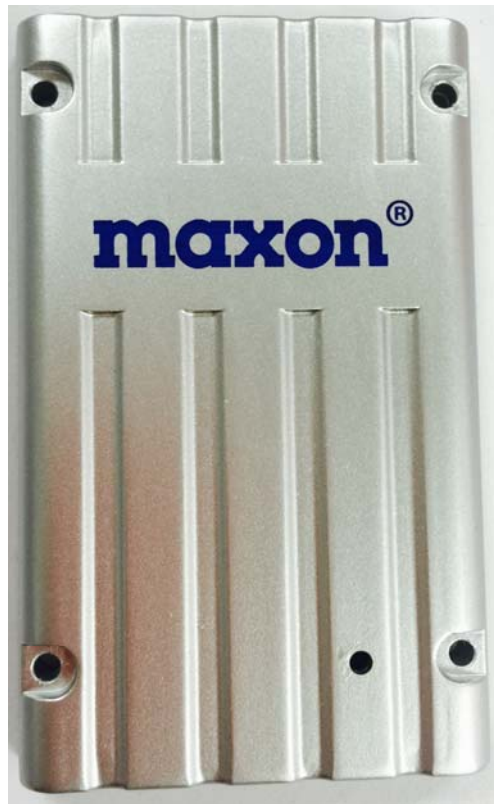






SD-270 Series Alignment Manual


ACC-270N Programming Software



REV. 1

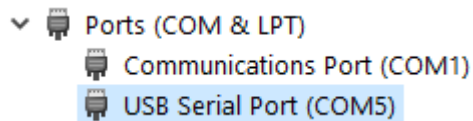
1-1 Program Installation

Insert the CD into the computer and run the  SD-270 Series Programmer Installer.exe by double clicking on the icon. Note: on some operating systems it may be necessary to run the program as Administrator. To do this right click on the Installer and select  Run as administrator. Follow the on-screen instructions to

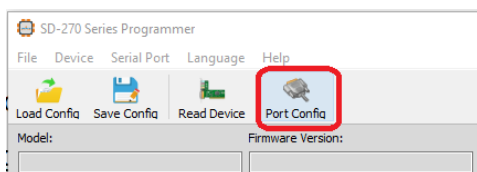
install the programmer. A shortcut icon will appear  on your desktop that can be cut and pasted into your programming software folder. Double-click the icon to run the program.

1-2 Selecting the Communication Port

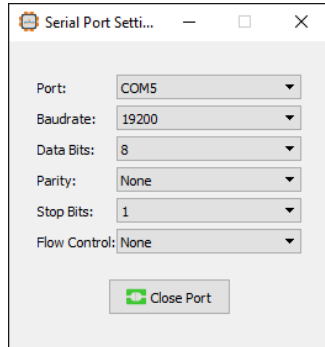
Plug the ACC-2016E programming cable into an available USB port. Go to the Device Manager on the computer and open Ports. In this example it is COM5.



On the programmer, open up the port by selecting the button shown.

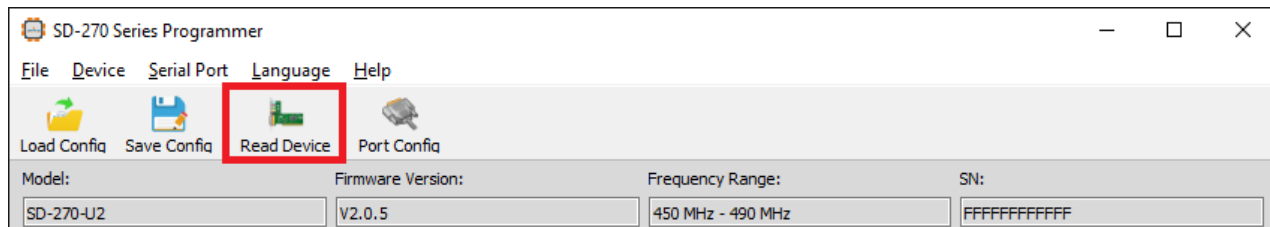


From the drop down menus select the correct port number (in this case it is COM5), the Baud Rate of 19,200, 8 Data Bits, no Parity, 1 Stop Bit and no Flow Control. Next click on 'Open Port'. The button will turn green indicating the port is open and ready. Use the "X" to close the window.

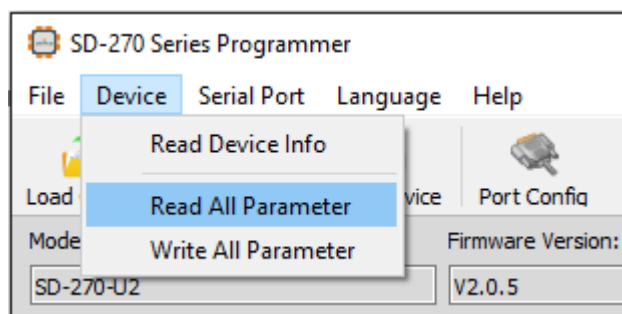


1-3 Reading device information

Connect the radio to the DB15 side of the programming cable. To read information about the radio click on Read Device. It displays the model, firmware version, frequency range and the serial number of the radio.



To read the entire contents of the radio such as the frequencies and options, go to Device then Read All Parameter.



Feature description

After reading all of the parameters, the following will be displayed.

SD-270 Series Programmer

File Device Serial Port Language Help

Load Config Save Config Read Device Port Config

Model: SD-270-U2 Firmware Version: V2.0.5 Frequency Range: 450 MHz - 490 MHz SN: FFFFFFFFFF

User Parameter SD-270 Adjustment

CH	RX(MHz)	TX(MHz)	Power(W)	Bandwidth	SQ Level	CTCSS/DCS	Scan
1	450.12500	450.12500	5	Narrow	L2	Disable	ON
2	470.12500	470.12500	5	Narrow	L2	Disable	ON
3	489.12500	489.12500	5	Narrow	L2	Disable	ON
4	450.12500	450.12500	1	Narrow	L2	Disable	ON
5	450.12500	450.12500	2	Narrow	L2	67.0Hz	ON
6	450.12500	450.12500	3	Narrow	L2	146.2Hz	ON
7	450.12500	450.12500	4	Narrow	L2	250.3Hz	ON
8	450.12500	450.12500	5	Narrow	L2	023	ON
9	000.00000	000.00000					
10	000.00000	000.00000					
11	000.00000	000.00000					
12	000.00000	000.00000					
13	000.00000	000.00000					
14	000.00000	000.00000					
15	000.00000	000.00000					
16	000.00000	000.00000					

Read Set

Channel Control Mode

☒ by DIP Switch Read

☐ by Program Set

Channel

☒ Save Change Read

Channel: 1 Set

Tx Protect

Tx Timeout: 27 s

Stop When Timeout: 1 s

Read Set

AUDIO_OUT Output

☐ Squarewave ☒ Sinewave

Read Set

Sidetone

☐ Enable ☒ Disable

Read Set

Volume

7 (0 - 9)

Read Set

Power Save Mode

☐ Enable ☒ Disable

Read Set

Power Saving Time

Sleep: 0 x20 ms

Standby: 0 x40 ms

Read Set

RSSI

dBuV Read

Channel Scan

Mode: Mode 3

Read Set

Others

Stop Virtual Serial Port

SD-270 v1.3 Tx: 782 Rx: 596

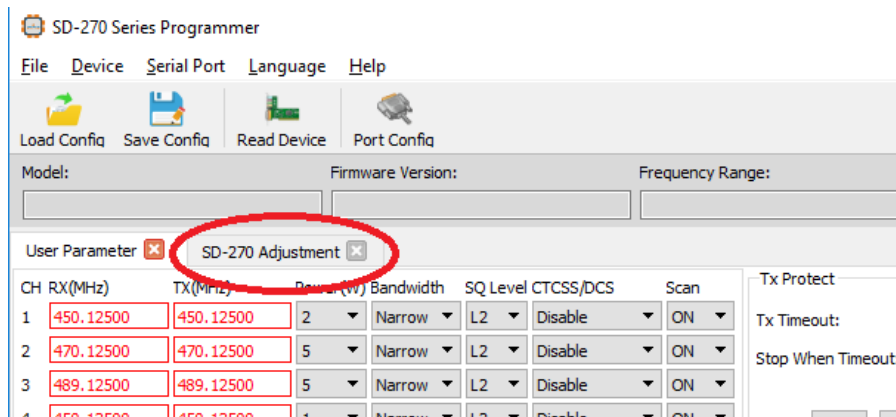
1-4 Opening the Alignment Section

****Dealers only!****

If you have already read the radio, leave the radio connected to the computer and also connect a BNC cable from the radio to a service monitor. The programmer is now live and some adjustments may cause the radio to go into transmit mode.

With the main screen open, press 'Caps Lock' on the keyboard of your computer. Next select 'F1' then type

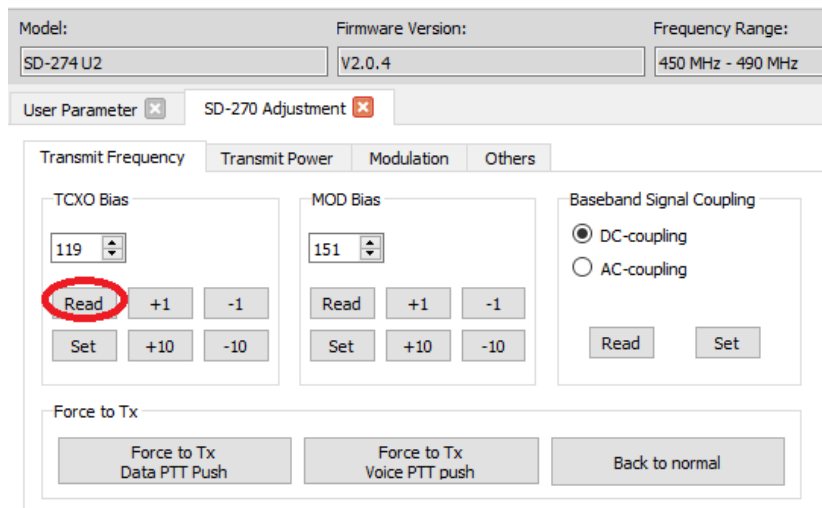
in 'sd270'. There will be a new tab on the programmer as shown.



Click on the SD-270 Adjustment tab to open the alignment section. There you will find 4 more tabs for Transmit frequency, transmit power, Modulation and Others.

In the sample below when the Read button is clicked on it automatically reads the alignment information of 119. It is recommended to write down the factory settings prior to making any adjustments.

TCXO Bias will align the TX frequency of the radio.



If either of the 2 buttons below are clicked on the radio will go into transmit mode and the frequency error can be read off of the service monitor.



The value of 119 can be incremented up or down to change the TX frequency. In order to measure a change the 'Set' button must be clicked on. For example if the Read value is 119 and the frequency error is -350Hz, then changing the value to 125 may bring the frequency error closer to 0. Some experimenting may be needed to reach the correct adjustment.

Adjust each setting as needed following the procedure shown above.