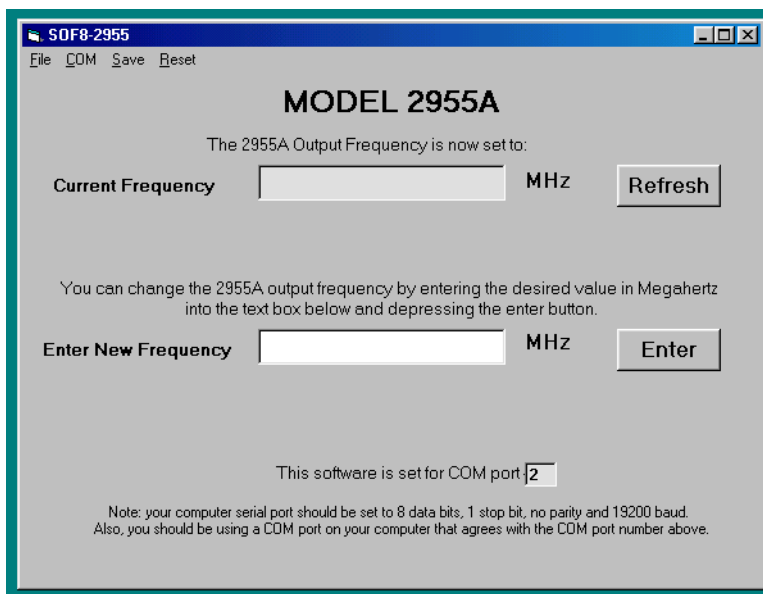


# INSTRUCTION MANUAL

## SOF8-2955

### Synthesizer Control Software



The SOF8-2955 software makes it convenient to program the Synthesized Output Frequency on the Model 2955A Rubidium Standard using a computer running Microsoft Windows 95 or later operating system.

#### Installation

To install the SOF8-2955 software, insert the SOF8 CD into your computer, navigate to the “SOF8-2955 Install Files” folder and double click on the Setup icon inside the folder. This will launch the installation wizard. The installation wizard will put a selection labeled NOVATECH and then SOF8-2955 into your computer’s Start/Programs menu. You then launch the SOF8-2955 software by going to Start/Programs and selecting NOVATECH and then SOF8-2955.

#### Operation

**COM Port Setup:** Set your computer serial port to 8 data bits, 1 stop bit, no parity and 19200 baud. The COM port number connected to your serial cable must be entered into the dialog box that appears the first time you launch the SOF8-2955 program. It can be changed later using the “COM/Change COM port number” menu selection.

Read 2955A Synthesized Output Frequency Setting: You can read the Synthesized Output Frequency by clicking on the Refresh button. This causes your computer to query the 2955A and display the synthesized output frequency setting currently in RAM memory in the text box labeled “Current Frequency”.

Change 2955A Synthesized Output Frequency Setting: You can change the Synthesized Output Frequency by entering a number representing the desired frequency setting in Megahertz into the text box labeled ”Enter New Frequency”. This can be any number between 0.0001 for a 100 Hz setting and 30 for a 30 MHz setting. The resolution can be as small as 1 microhertz. For example, the number 29.123456123456 is a valid setting for 29.123456123456 MHz.

Save setting to EEPROM: When the 2955A first powers up, it loads the frequency stored in internal EEPROM memory into RAM memory. If you change the frequency setting it changes the value stored in RAM but not the value stored in EEPROM. You can change the value stored in EEPROM to the current value in RAM by using the “Save/Save Settings to EEPROM” menu selection.

Rebooting the Synthesizer: You can reset the Synthesized Output Frequency to the last value saved to EEPROM by using the “Reset/Reboot Synthesizer” menu selection. This has the same effect on the Synthesizer as recycling power but it does not affect the Rubidium Standard or the other frequency outputs.

Clear to Factory Defaults: You can restore the value set into EEPROM memory at the factory by using the “Reset/Clear to Factory Default Settings” menu selection.

Disable Refresh Message. When you click on the Refresh button, a dialog box appears to advise you that the SOF8-2955 program is going to read the 2955A RAM memory and display the value in memory in the text box labeled Current Frequency . You can prevent this dialog box from appearing by using the “Reset/Disable Refresh Message” menu selection. The Refresh button will still perform the same function but no dialog box will appear to advise you of this fact.