

58503B
GPS Time and Frequency
Reference Receiver
Option 001 Front Panel Display
Installation Kit

Installation Note

This note will assist you in upgrading your 58503B to include the Option 001 Front Panel Display/Keypad. The instructions below will guide you through the steps necessary to install and verify operation of this option.

For assistance, contact:

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Warning Symbols Used In This Book



Instruction manual symbol; the product will be marked with this symbol when it is necessary for the user to refer to the instruction manual.



Indicates hazardous voltages.



Indicates earth (ground) terminal.



or



Indicates terminal is connected to chassis when such connection is not apparent.



Indicates Alternating current.



Indicates Direct current

INSTALLATION NOTE

58503B GPS TIME AND FREQUENCY REFERENCE RECEIVER

OPTION 001 FRONT PANEL DISPLAY INSTALLATION KIT

P/N 58503-67002

INSTRUMENT SERIAL NUMBERS

0000A00000 through 9999A99999
KR00000000 THROUGH KR99999999

INTRODUCTION

This note will assist you in upgrading your 58503B to include the Option 001 Front Panel Display/Keypad. The instructions below will guide you through the steps necessary to install and verify operation of this option.

A copy of the "Getting Started" guide is necessary to perform this upgrade. One copy is included with each 58503B shipped. If you do not have a copy, some of the steps will not be clear. Please retrieve your copy at this time. If you cannot locate one, contact Symmetricom to obtain another copy. The Part Number is 58503-90012.

This procedure also assumes that the 58503B is working properly prior to making the changes. Be sure to verify that it will correctly power up and lock to GPS satellites before proceeding.

KIT CONTENTS

<u>Qty</u>	<u>Description</u>	<u>Part Number</u>
1	58503B Option 001 Front Panel Assy	58503-60220
1	Installation Note	58503-90024

TOOLS REQUIRED

TORX® T-10 Driver
TORX® T-15 Driver
1/4 inch Flat Blade Screwdriver
Wire Cutter

PROCEDURE

1. Remove all power and connections to the 58503B.
2. Position the carrying (plastic) handle so that it is perpendicular with respect to the cover, facing upward.
3. Carefully spread the handle at the pivot points, and it will release from its mounting

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holes.

4. The front foot/trim frame is soft rubber and can now be removed by prying it off with your fingers.
5. Loosen two TORX® T-15 screws at the right and left edges of the rear panel to remove the rear foot/trim assembly.
6. Remove the TORX® T-15 screw at the bottom rear center of the cover, and slide the cover off toward the rear.
7. Remove the two TORX® T-15 screws, one on each side, that are recessed in the plastic shell of the front bezel. They are located between the handle pivot holes and the front of the unit.
8. Identify two metal extrusions, visible within openings in the plastic, immediately above and below the screw just removed. There will be two more on the other side of the unit as well. These extrusions hold the front bezel in place by engaging the openings in the plastic.
9. Insert a flat-blade screwdriver between the plastic bezel and the underlying chassis, immediately near one of the metal extrusions. Carefully pry slightly and pull the bezel away so that the extrusion no longer completely engages the bezel.
10. Repeat this for the other extrusion on the same side of the unit. This will allow this side of the bezel to be pulled free of the metal extrusions. The other side of the bezel will fall free without using the screwdriver.
11. Disconnect the ribbon cable connecting the front panel to the main board.
12. If there is a ground wire connecting the existing front panel PC board to a threaded stud near the power supply, cut this wire close to the stud. This wire is no longer required.

CAUTION: *There is more than one ground wire attached to this stud. Only clip the wire that leads to the front panel.*

NOTE: The Option 001 Front Panel Display does not need a ground wire; no re-attachment will be necessary.

13. Reverse the steps above to connect and install the Option 001 front panel assembly, cover, rear bezel, trim, and handle.

NOTE: Be sure to firmly seat the ribbon cable so that it snaps into the locking ears.

FINAL CHECK-OUT

This is a simple procedure to ensure that the 58503B Option 001 upgrade has been successfully performed. You will have about 2 seconds after applying power to perform step 2 below. If necessary, you can remove and re-connect power to re-initiate the startup

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sequence described in step 2 below.

1. Connect an antenna to the 58503B. Refer to the Getting Started Guide for assistance.
2. Connect power.
3. While the letters "HP" are moving from right to left, (about 2 seconds) press first the "SAT" key and then the "TIME" key to enter the Test/Demo mode.
4. The words "VFD DSP TEST" will momentarily appear.
5. The display should then show a test pattern that sequentially illuminates all 15 segments of all digits and punctuation marks in the display.
6. When the segment illumination sequence is complete, the words "DEMO MODE" should then appear.
7. Press each key one at a time. Each keypress should:
 - a. Illuminate the LED corresponding to that key, and
 - b. Display a simulated response to the function.

NOTE:

1. The "CLEAR ALARM" ("SHIFT", "ALT") function will not give a response in this mode, it will exit the test.
2. The values displayed are not related to the 58503B under test. They are displayed for demonstration only.

8. To exit the diagnostic, press the "SHIFT" key and then press the "ALT" key.
9. The 58503B power-up sequence should then continue. No further tests are necessary.
10. If the indications above do not appear, be sure to verify the following before contacting Symmetricom:
 - a. Re-check the correct connection to antenna and power, as described in the "Getting Started Guide".
 - b. If necessary, remove the cover and verify that the ribbon cable connection is correct and secure.

FURTHER ASSISTANCE

Contact Symmetricom for assistance if the above steps do not resolve the problem. It may be necessary to ship the entire 58503B to Symmetricom to verify the source of the problem.