

S E R V I C E N O T E

SUPERSEDES: 70900A-14L

70900A Local Oscillator**Serial Numbers:** 0000A00000/9999A99999**List of firmware compatibility and history****Duplicate Service Notes:** 70900B-01H**Compatibility**

The 70900A/B Local Oscillator is the master control module for many different spectrum analyzer systems. These systems have compatibility requirements for the firmware, hardware, and software. These are indicated below.

The latest local oscillator firmware will not work in the Mem plus controller board. These boards were only used in the 70900A. The part numbers of the boards are 70900-60078, 70900-60081, and 70900-60111. The type of controller board can also be found under the Extended State softkey. If after the letters CPU it reads "68020" and after the letters FPU it says "Present" then the new firmware will work with the controller board.

To upgrade the firmware order the 70861A. This kit includes a ROM/RAM board along with the latest documentation. If the controller board needs upgraded, order the 70860A. This kit includes a controller board, ROM/RAM board and the latest documentation.

Continued

DATE: January 1997

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:

INFORMAT ON ONLY

AUTHOR:

RDS

ENTITY:

5340

ADDITIONAL INFORMATION:



70900A Firmware History

70900A Firmware Version 850320 (Initial Release)

70900A Serial Numbers 2429A00101 / 2429A00265

(Controller/ROM/RAM board, part number 70900-60078)

Modules Supported

70205A Graphics Display

70206A System Graphics Display

70310A Precision Frequency Reference

70902A IF Section (Res BW 10 Hz to 300 KHz)

70903A IF Section (RES BW 100 KHz to 3 MHz)

70905A RF Section (50 KHz to 22 GHz)

70905B RF Section (50 KHz to 22 GHz)

70906A RF Section (50 KHz to 26.5 GHz)

70906B RF Section (50 KHz to 26.5 GHz)

70900A Firmware Version 850730

70900A Serial Numbers 2534A00266 / 2544A00547

(ROMs only, part number 70900-60093)

(Controller/ROM/RAM board, part number 70900-60078)

Additional Modules Supported

No additional modules.

System Diagnostics

Part number 5010-1507 (3-1/2 inch disk)

Part number 5010-1508 (5-1/4 inch disk)

System Operation Verification

Part number 70900-10037, Rev. B.03.01 (3-1/2 inch disk)

Part number 70900-10038, Rev. B.03.01 (5-1/4 inch disk)

70900A Firmware Version 860203

70900A Serial Numbers 2606A00548 / 2629A01183

(ROMs only, part number 70900-60086)

(Controller/ROM/RAM board, part number 70900-60078)

Additional Modules Supported

70300A Tracking Generator

70907A External Mixer Interface Module

System Diagnostics

Part number 5010-1507 (3-1/2 inch disk)

Part number 5010-1508 (5-1/4 inch disk)

System Operation Verification

Part number 70900-10037, Rev. B.03.01 (3-1/2 inch disk)

Part number 70900-10038, Rev. B.03.01 (5-1/4 inch disk)

70900A Firmware Version 861015 (MEM Plus Hardware)

70900A Serial Numbers 2642A01184 / 2646A01429

(ROM/RAM plug-in board, part number 70900-60083)

(Controller board MEM +, part number 70900-60081)

Additional Modules Supported

70590A H69 MATE Test Module Adapter

70600A Preselector (50 KHz to 22 GHz)

70601A Preselector (50 KHz to 26.5 GHz)

System Diagnostics

Part number 70900-10050 (3-1/2 inch disk)

System Operation Verification

Part number 70900-10051, Rev. C.01.00 (3-1/2 inch disk)

70900A Firmware Version 870501

70900A Serial Numbers 2717A01430 / 2812A01885

(ROM/RAM plug-in board, part number 70900-60109)

(Controller board MEM +, part number 70900-60111)

Additional Modules Supported

70700A Digitizer

70908A Preselected RF Section (100 Hz to 22 GHz)

System Diagnostics

part number 70900-10050 (3-1/2 inch disk)

System Operation Verification

part number 70900-10051, Rev. C.01.00 (3-1/2 inch disk)

70900A Firmware Version 880314

70900A Serial Numbers 2817A01886 / 2833A02083

(ROM/RAM plug-in board, part number 70900-60114)

(Controller board MEM +, part number 70900-60111)

Additional Modules Supported

70620A Preamplifier

System Diagnostics

part number 70900-10050 (3-1/2 inch disk)

System Operation Verification

part number 70900-10051, Rev. C.01.00 (3-1/2 inch disk)

70900A Firmware Version 880901

70900A Serial Numbers 2841A02084 / 3019A02763

(ROM/RAM plug-in board, part number 70900-60126)

(Controller board MEM +, part number 70900-60111)

Additional Modules Supported

70301A Tracking Generator (2.7 GHz to 18 GHz)

System Diagnostics

Part number 70900-10050 (3-1/2 inch disk)

System Operation Verification

Part number 70900-10051, Rev. C.01.00 (3-1/2 inch disk)

70900A/B Firmware Version 890606

70900A Serial Numbers above prefix 3019A

70900B Serial Numbers 2923A00101 / 2923A00389

(ROM/RAM board, part number 70900-60130)

(Controller board, part number 70900-60082)

Additional Modules Supported

70900B Local Oscillator

System Diagnostics

part number 70900-10050 (3-1/2 inch disk)

System Operation Verification

part number 70900-10051, Rev. C.01.00 (3-1/2 inch disk)

70900A/B Firmware Version 891102

70900A Serial Numbers above prefix 3019A

70900B Serial Numbers 3001A00390 / 3002A00557

(ROM/RAM board, part number 70900-60148)

(Controller board MEM ++, part number 70900-60143)

Additional Modules Supported

None

System Diagnostics

Part number 70900-10050 (3-1/2 inch disk)

System Operation Verification

Part number 70900-10051, Rev. C.01.00 (3-1/2 inch disk)

70900A/B Firmware Version 900314

70900A Serial Numbers above prefix 3019A

70900B Serial Numbers 3022A00558 / 3022A00707

(ROM/RAM board, part number 70900-60156)

(Controller board, part number 70900-60143)

Additional Modules Supported

70621A Preamplifier (100 KHz to 2.9 GHz)

70620B Preamplifier (1 GHz to 26.5 GHz)

70907B External Mixer Interface Module

System Diagnostics

part number 70900-10050 (3- 1/2 inch disk)

System Operation Verification

part number 70900-10051, Rev. C.01.00 (3-1/2 inch disk)

70900A/B Firmware Version 901008

70900A Serial Numbers above prefix 3019A

70900B Serial Numbers 3041A00708 / 3127A01115

(ROM/RAM board 256 Kilobyte RAM, part number 70900-60160)

(ROM/RAM board 1 Megabyte RAM, part number 70900-60159)

(Controller board, part number 70900-60143)

Additional Modules Supported

None

Additional Systems Supported

71150C/71250C GSM systems

System Diagnostics

Part number 70900-10050 (3-1/2 inch disk)

System Operation Verification

Part number 70900-10051, Rev. C.01.00 (3-1/2 inch disk)

70900A/B Firmware Version 910802

70900A Serial Numbers above prefix 3019A

70900B Serial Numbers 3135A01116 / 3135A01183

(ROM/RAM Assembly, 256 Kilobyte RAM, part number 70900-60171)

(ROM/RAM Assembly, 1 Megabyte RAM, part number 70900-60172)

(Controller board, part number 70900-60143)

Additional Modules Supported

70810B Lightwave Section

Systems Diagnostics

Part number 70900-10053 (3-1/2 inch disk)

System Operation Verification

Part number 70900-10052, Rev. C.02.00 (3-1/2 inch disk)

70900A/B Firmware Version 911021

70900A Serial Numbers above prefix 3019A

70900B Serial Numbers 3144A01184 / 3222A01427

(ROM/RAM Assembly, 256 Kilobyte RAM, part number 70900-60176)

(ROM/RAM Assembly, 1 Megabyte RAM, part number 70900-60177)

(Controller board, part number 70900-60143)

Additional Modules Supported

70909A RF Section (100 Hz to 26.5 GHz)

70910A RF Section (100 Hz to 26.5 GHz)

Additional Systems Supported

71209A Microwave Spectrum Analyzer (100 Hz to 26.5 GHz)

System Diagnostics

Part number 70900-10053, Rev. C.02.00 (3-1/2 inch disk)

System Operation Verification

Part number 70900-10052, Rev. C.02.00 (3-1/2 inch disk)

70900A/B Firmware Version (VV.UU.FF) B.04.03 920527

70900A Serial Numbers above prefix 3019A

70900B Serial Numbers 3224A01428 / 3224A01469

(ROM/RAM Assembly, 256 Kilobyte RAM, part number 70900-60195)

(ROM/RAM Assembly, 1 Megabyte RAM, part number 70900-60196)

(Controller board, part number 70900-60143)

Additional Modules Supported

Supports the new 70900B (A7) Fractional Frequency Synthesizer

Additional Systems Supported

None

System Diagnostics

Part number 70900-10053, Rev. C.02.00

System Operation Verification

Part number 70900-10052, Rev. C.02.00

70900A/B Firmware Version (VV.UU.FF) B.04.04 920724

70900A Serial Numbers above 3019A

70900B Serial Numbers 3232A01470 / 3345A01967

(ROM/RAM Assembly, 256 Kilobyte RAM, part number 70900-60199)

(ROM/RAM Assembly, 1 Megabyte RAM, part number 70900-60200)

(Controller board, part number 70900-60143)

Additional Modules Supported

None

Additional Systems Supported

None, system error corrected

System Diagnostics

Part number 70900-10056, Rev. D.01.00

System Operation Verification

Part number 70900-10055, Rev. D.01.00

11990A System Performance Test Software Rev. D.01.00

Firmware Version (VV.UU. FF) B.05.00 940120

70900A Serial Numbers above prefix 3019A

*Note: Must have a MEM ++ controller board.

70900B Serial Numbers 3414A01968 to present

(ROM/RAM Assembly 256 Kilobyte RAM, part number 70900-60203)

(ROM/RAM Assembly 1 Megabyte RAM, part number 70900-60204)

(Controller board, part number 70900-60143)

Additional Modules Supported

70911A IF module

Additional Systems Supported

71910A Receiver System

System Diagnostics

Part number 70900-10056, Rev D.01.00

System Operation Verification

Part number 70900-10055, Rev D.01.00

11990A System Performance Test Software Rev. D.01.00

Firmware Version (VV.UU.FF) B.06.03 960418

70900A Serial Numbers above prefix 3019A

*Note: Must have a MEM ++ controller board.

70900B Serial Numbers 3634A02742 to present

(RAM/ROM Assembly 256 Kilobyte RAM, part number 70900-60209)

(RAM/ROM Assembly 1 Megabyte RAM, part number 70900-60210)

(Controller board, part number 70900-60213)

Additional Modules Supported

None

Additional Systems Supported

None, system error corrected

System Diagnostics

Part number 70900-10056, Rev. D.01.00

System Operation Verification

Part number 70900-10055, Rev. D.01.00

11990A System Performance Test Software Rev. D.01.00

Option 001 User Interface	11990-10077
Option 100 71100/71150	11990-10078
Option 200 71200/71201	11990-10079
Option 209 71209	11990-10081
Option 210 71210/71250	11990-10080
Option 300 71300	11990-10082
Option 033 70300/70301	11990-10083