BENCH BRIEFS

April 1973

What's a dB and dBm?

Need Assistance with Trace Recording?

New To-3 Insulator

A "Not-So-New" Troubleshooting Technique

Metric Multiplier Prefixes

More on FET Checker

Ungrounded Chassis are Dangerous

dBm to Voltage Conversion

Recommended Reading

May-June 1973

Technical Manuals

dB and dBm Without Logs Listing of HP offices

July-August 1973

Quart Crystal Oscillators

Geneva Standards Lab - Periodic Calibration & Standards Labs

New PC Board Marking Symbol

Resistor Cube Problems - A Short Quiz

Sept-Oct 1973

Calibration of an Oscillator

Safety Tips

Resistor Cube Quiz Solution

Video Tape Listing

Nov-Dec 1973

AC Analog Voltmeters

Replacement Part Cross Reference

Soldering Iron Tip Saver/Edsel Murphy

Plotter Have the Jitters?

A Clean Head Helps

Jan-Feb 1974

Clues to Help Determine the HP Part Number of a Replacement Part

Pulse Generator Waveform Error?

Racing Quiz

Magnetic Tape Discontinued Serivce Tip: Is this normal?

The origin of -114 dBm

High Frequency Overland Protection

Service Note Index

Mar-April 1974

Troubleshooting Logically

Electronic Equipment Catalog for Technical Education

Test Card Available for Model 3489A Data Punch

Listing of Application Notes

Mar-April 1974 (Continued) Field Update Kit - 8660A/8660B Signal Generators

Racing Quiz Solution Service Note Index

5300A Modules Modification Mini calculator Repairs Readers Opinion Survey

May-June 1974

RFI, Its Detection & Delimination

8705A Signal Multiplexer More on Half-Splitting Service Note Index

34740A/3480 A/B A21C18 Repairs

7402A Oscillographic Recorder - Speed Reduction Option Installation

July-August 1974

Oscilloscope Probes & Measurement Techniques

Readers Corner New Video Tapes Line Fuse Size

8690B Frequency Response

419A - Potential Shock Hazard

8690 Service Tips Listing of HP Offices

Sept-Oct 1974

All About Diodes

Attention 260A Q Meter Owners

Readers Corner Service Note Index

Logic Quiz

Nov-Dec 1974

Troubleshooting Transistorzied Circuits Faster

Logic Quiz Solution

C.S.C. - Mail Order Program

Spectrum Analyzer Use

CATV - Performance Verification Video Tape - Amplitude Modulation

Readers Corner Service Note Index

Jan-Feb 1975

All About Power Supplies

Service Note Index Readers Corner



How to Remove ICs 8660 A/B System Manual Readers Corner Service Note Index Baseball Quiz

May-June 1975

Digital vs. Analog MTBF - What Does It Mean Baseball Quiz Solution Service Note Index Readers Corner

July-August 1975

Digital Logic 606A/B Spurious Sideboards 355 E/F Attenuator Drive Voltage Recommendation 1220/1221A Oscilloscope Service Hints Listing of HP Offices Service Note Index 8640 A/B Output Level Accuracy

Sept-Dec 1975

Listing of Training Seminars Replacement Part Cross Reference Service Note Index Readers Corner

JAN-APR 1976

Logic Symbols
Electrolytic Capacitor Damage By Solvents
3580A/3581A/C Spectrum Analyzer Handle Modification
8558B Spectrum Analyzer Transistor Part No. Changes
Pozidriv vs. Phillips
3480A/B-8A Digital Voltmeter
1740A Oscilloscope
Video Playback Equipment from HP
Cleaning Solenoid Contacts
Converting HP and Federal Stock Nos.
Special Notice for Users of HP-1B Products
Past and Future Seminars
Safety Related Service Notes
Automatic Microwave Power Measurements

May-July 1976

Logic Symbols

Spectrum Analyzers Santa Rosa, California 8-23/27-76

Signal Generators Palo Alto, CA 8/30-9/3/76

8640A/B Signal Generator Reverse Power Protection Use Your Spectrum Analyzer for Noise Measurements

Safety Related Service Notes

Microwave Catalog

Replacement Part Cross Reference

July-August 1976

Logic Symbols

Cleaning PC Boards

Thermal Jacket Aids Some PC Board Tests National Conference of Standards Labs

CRT Displays in Medical Systems

X-Y Recorders

Attention 1700 Series Oscilloscope Users

Instrumentation Tape Recorders

Customer Service Seminars training calendar Shock Hazard Considerations

September-December

1976

Logic Symbols

3490A Multimeter Users

435A Power Meter Range Dial Conversions Cleaning and Lubricating Rotary Switches

Troubleshooting Procedure for 626xxJ Series 200-600W DC Power Supplies

Jan-Feb 1977

Logic Symbols Summary Glossary of IC Terms

Customer Service Seminars and calendar

3330A/B Synthesizer Owners

March-April 1977

New Concept in Digital Troubleshooting

3476A/B Multimeter Owners Customer Service Seminars

Digital Troubleshooting Techniques

May-August 1977

Fractional N Simplifies Frequency Synthesis

Countries and Their Voltage HP Videotape Training Program

Fast L-C Measurements

1700 Series Oscilloscopes--Focus Problems

DC Regulated Power Supplies

Service Manual for 8660 Signal generator Logic Tester has Unambiguous Display

Direct Reading Ohmmeter Needs No Calibration

Instrumentation Tape Recorder Owners

Think Metric

List of Microprocessor Buzz Words

Sept-October 1977

Analog Circuit Testing
Troubleshooting the 8505A Network Analyzer

X-Y Displays Microwave Literature

1743A Oscilloscope Owners

November-Dec 1977

Maintenance Assurance Programs of HP-1B Programs Solid State Marker Generator List of HP offices 6940A6941A Multiprogrammer Owners TTL Logic Quiz

BENCH BRIEFS - 1972-79

SEP/OCT 1979 "Exploring The Capacitor"

"Safety Related Service Notes"

"New Service-Oriented Videotapes From HP"

"Service Notes"

"Group Delay"

"A Quick Guide To Batteries"

MAY/JUL 1979 "Spare Parts Kit"

"Integrated Circuit Cross Reference"

"Service Notes"
"Readers Corner"

"Switching Power Supplies"

"Training Calendar"

NOV, 1978/APR 1979 "Transistor/Diode Cross Reference"

"Service Notes"

"Phase-Locked Loops"

"New Application Notes"

"Blue Tag Repair"

"Mini Glossary For Strip Chart Recorders"

"Recorders, Plotters And Their Ink Supplies"

"Logic Symbology Within HP" "Safety-Related Service Notes"

"(New Internal Fuse), Attention Instrumentation

Tape Recorder Owners"

"1979 Application Note Index"

"Service Notes"

"Readers Corner"

"Instrument Service"

"(What's Available, And How To Get 11)"

"Customer Service Seminar Training Calendar"

"Service Notes"

"Safety Service Notes"

"HP-IB Verification Programs"

JAN/APR 1978

MAY/OCT 1978

BENCH BRIEFS - 1980-84

JAN/FEB 1980	"How Accurate is Your ac/Measurement?" "Need A Part?" (USA Customers Only) "Customer Service Seminar Training Calendar/1980" "Service Notes" "Safety Service Notes"
MAR/APR 1980	"Basic Techniques Of Waveform Measurement Using An Oscilloscope" "Oscilloscope Amplifier Considerations" "HP 3455A Digital Voltmeter" "Service Notes" "Attention HP 5420A Owners" "Safety Service Notes"
MAY/JUN 1980	"Basic Techniques Of Waveform Measurement Using An Oscilloscope - Part 2" "The 50-Ohm Input Versus The "High Impedance" Input" "Customer Service Seminar" "Service Notes" "Safety Service Notes" "U.S. Seminar Information Form"
JÜL/AÜG 1980	"Basic Transistor Troubleshooting Revisited" "More On Testing Tunnel Diodes" "HP-IB Verification Programs" "Service Notes" "Safety Service Notes" "Readers Corner"
SEP/NOV 1980	"Bench Testing A "Bus" Instrument" "Service Notes" "Customer Service Training Calendar/1981" "Readers Corner"
JAN/FEB 1981	"Basic Resistor Technology" "Carbon File in Profile" "A Description Of Resistor Characteristics" "Contact Resistance Variation" "Instrument Group Svc Training for Customers" "Service Notes"
MAR/MAY 1981	"All About CRT's" "Integrated Circuit Cross Reference" "Service Notes"

"Readers Corner"

"Logical Troubleshooting"
"Transistor/Diode Cross Reference"

JUN/AUG 1981 **JAN/FEB** 1982 MAR/APR 1982 **MAY/JUN 1982** JUL/OCT 1982 **NOV/DEC 1982 JAN/FEB 1983**

MAR/MAY 198:3

"Service Notes"

"New HP 1304A Display Power Supply"

"Functional Analyzing/"
"Battery Cross-Reference"
"1982 Customer Training Calerdar"
"Service Notes"

"New Interface Lets HP-47 And HP-85
Personal Computers Control Instruments
And New Peripherals"
"New HP Interface Called HP-IL"
"Customer Training Calendar Corrections"
"Service Notes"
"Safety Service Notes"

"Testing For An Intermittent Meter"
"Part Number Cross-references And
Discontinued HP Model Numbers With
Recommended Replacements"
"Service Notes"
"Safety Service Notes"

"Printed Circuit Board Rework, Repair,
And Cleaning"
"Basic Principles Of Soldering"
"Service Notes"

"Random HV Fuse Blowing In HP 1740A, 1742A And 1743A 100 MHz Oscilloscopes" (Troubleshooting Tip)
"More On Printed Circuit Board Rework, Repair And Cleaning"
"HP-IB Verification Programs"
"Service Notes"

"Improving Bandwidth And Risettme
In HP 174X Oscilloscopes"
"More On Printed Circuit Board
Rework, Repair And Cleaning"
"Conformal Coatings"
"Service Notes"
"Customer Service Training Calendar/1983"
"Readers Corner"

"Static Zap Makes Scrap"
"New HP 3497A Manuals"
"New Service Notes Provide Aid in Troubleshooting And Service"
"On-Site Service Kits For HP 3455A And HP 3456A Digital Voltrrieters"
"HP 5180A Waveform Recorder Modifications To Improve Performance"
"Simplify Calibration On Your Digital"

JUL/AUG 1983

JAN/FEB 1984

MAR/APR 1984

MAY/JUN 1984

JUL/SEP 1984

Voltage Source"
"Readers Corner"
"Service Notes"

"Learn The Practical Aspects Of Transistors, Digital Troubleshooting, And Microprocessor Fundamentals" (HP Video Tapes for Technical Training) "Recommended Reading" "Service Notes" "Safety Service Notes"

"Preregulation To Reduce Power Dissipation"
(Troubleshooting Basics/dc Power Supplies)
"Got A Scratch That Needs Repairing?"
"Service Notes"
"Safety Service Notes"
"Customer Service Training Calendar/1984"

"More On Regulated Linear Power Supplies"
(Troubleshooting Basics/dc Power Supplies)
"Service Notes"
"Safety Service Notes"
"Service Tips (Potential Handle Breakage)
Don't Inadvertently Drop Your HP 180
Series Oscilloscope"

"Failures Come And Go With A Flick
Of A Switch!"
(Troubleshooting Training Tool)
"IC Replacement Part Cross Reference"
"Service Notes"
"Safety Service Notes"

3421 A Owners!

"Readers Corner"

"A Study On Cleaning Connector Fingers
On Printed Circuit Boards"
"Quick And Easy Amphenol Connector
Replacement"
"Transistors/Diodes Replacement Part
Cross Reference"
"Service Notes"
"Safety Service Notes"

BENCH BRIEFS

JAN/FEB 1985

HEWLETT-PACKARD IS GOING METRIC
HP Instrument Training
1985 Customer Service Training
Calendar
Test and Verification Programs
Safety-Related Service Notes

MAR/MAY 1984

ANALOG TO-DIGITAL CONVERSION A Refresher on Removing ICs

JUN/AUG 1985

LEARN THE BASIC OF DIGITAL
MICROWAVE COMMUNICATIONS
Hewlett-Packard Offers
Millimeter Wave Recalibration
Safety-Related Service Notes
(HP 182 and 1200 Series Oscilloscopes)
Using Fiber Optics to Transmit a
Frequency Standard
More on Metric Fasteners for Cabinet
Accessories

JAN/FEB 1986

MIL-STD-45662 CALIBRATIONS
A Short Troubleshooting Quiz
Using Fiber Optics to Transmit a
Frequency Standard--More Information
1986 Customer Service Training Calendar
(Learn Service Skills Through In-Depth
Technical Instructions)
Safety-Related Service Notes

MAR/APIR 1986

BATTERY CHARGING WITH A HEWLETT-PACKARD POWER SUPPLY Finding Short Circuits on Printed Circuit Boards Announcing HP Ten-Year Minimum Support: (A Further Definition of Lasting Value) HP Support is Full Range as Well as Long Term

MAY/JUIN 1986

THE BASICS OF SWITCHING REGULATORS
Improvements in Programmable Step
Attenuators Lead to Longer Life Ratings
HELI-COIL Repair Kits for Stripped
Threads in Cabinet Frames
Should You Clean Solder Flux from HighImpedance Printed Circuit Boards?
Safety-Related Service Notes
Hewlett-Packard Offers ATS/1000
Service Training

BENCH BRIEFS

JUL/OCT 1986

THE BASICS OF SWITCHING REGULATORS . . . CONT'D New Adjustment Procedure Improves HP 8684A/B/D Reliability DTS-70 Service Training at Lexico The Bootstrap Circuit Taking the Mystery Out of Probe Selection Recommended Reading (Calibration Services at the U.S. National Bureau of Standards) (Coaxial Systems) (Fiber Optics Handbook) Test and Verification Programs Complete Repair Kits for HELI-COIL Repair of Stripped Threads

JAN/MAR 1987

HP 5335A UNIVERSAL FREQUENCY COUNTER
ANOMALIES AND WORKAROUNDS
Change is Contemplated in U.S. Unit
of Voltage
Coaxial/Waveguide Measurement
Accessories Catalog Now Available
Life Support for Your Home Computer
Hardware Service Training, Investing
in Self-Support
1987 CUSTOMER SERVICE TRAINING CALENDAR
Learn Service Skills Through In-Depth
Technical Instruction
Safety-Related Service Notes

BENCH BRIEFS

2ND QUARTER 1987	The Rotary Pulse Generator. Hardware Service Training, Investing in Self-Support
3RD QUARTER 1987	A Few Fundamentals About Semiconductors. Transistor/Diode Cross Reference. Reader's Comment - Rotary Pulse Generator.
4TH QUARTER 1987	Digital-to-Analog (DAC) Conversion. Reader's Comment - Rotary Pulse Generator. Integrated Circuit Cross Reference.
1ST QUARTER 1988	Using Copper Tape to Fabricate RF Breadboard Circuits. Attention HP 8671/72 & 73 Generator Owners.
2ND QUARTER 1988	The Values for the Volt & Ohm are Changing. 1988 Application Note Index Is Now Available.
1ST QUARTER 1989	How To Build a Stripline Filter. Important Notice About Service Notes.
2ND QUARTER 1989	Fiber-Optic Troubleshooting. Safety Precautions When Working Around Fiber Optics.
1ST QUARTER 1990	The 1990 Changes in National Reference Standa Attention HP 8757C/E Network Analyzer Owners. HP 5371A Service Kit Provides Everything You Need to Service and Learn the HP 5371A Freq. & Time Interval Analyzer. Recommended Reading - New Instrument Support Literature Explains HP's On-Site Instrument Service Programs. Updated Customer Service Center Guide is Now Available. Reader's Comment - Fabricating Breadboard Circuits with Copper Tape. HP Service Notes Have Changes. Summary of Service Note Payment Conditions.
2ND QUARTER 1990	Operational Amplifier Basics. The Logistics Data Book 1990. What is Traceability and How Does It Relate t Calibration Uncertainty? HP Direct. Service Tip - Extend the Life of Your CRT.