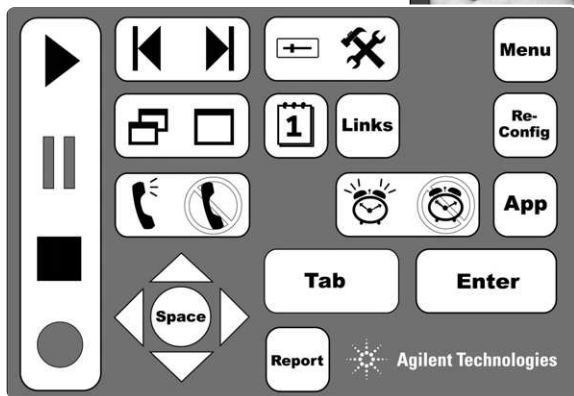


Agilent Technologies N3419A vehicle-mounted display system

Product Overview



**Improve *safety*, boost *efficiency*,
and enable *real-time troubleshooting*
while using these Agilent wireless
network optimization tools:**

CDMA, TDMA and GSM drive-test

CDMA, TDMA and GSM tech tool

CDMA over-air maintenance tool



Agilent Technologies

Innovating the HP Way

Benefits for Operations Technicians

Boost efficiency

Use the vehicle-mounted display system in conjunction with tech tool¹ software to:

- Find network impairments while driving between base stations.
- Identify irregular network behavior by using system knowledge.

Improve safety

The vehicle-mounted display system provides:

- A permanently mounted, bright display that puts key RF parameters in clear view. The display is easy to read, so vision remains on the road while driving.
- One-touch access to essential measurement functions. A custom keypad with application-specific keys minimizes time spent operating drive-test software while driving.

Fix network problems quickly

Key RF parameters are in clear view to:

- Examine network impairments as they happen. Then, take the additional step to immediately re-drive the trouble area and duplicate the impairment.
- Provide helpful information to optimization engineers so an impairment can be quickly fixed.



¹ Agilent's tech tool software displays key phone-based RF measurements for CDMA, TDMA or GSM networks.

Benefits for Optimization Engineers

Enable real-time troubleshooting

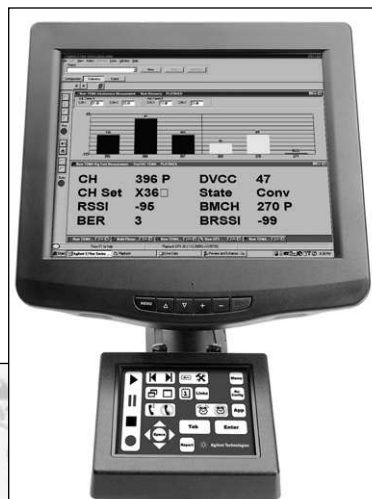
Key RF parameters are in clear view to:

- Examine network impairments as they happen. Then, take the additional step to immediately re-drive the trouble area and duplicate the impairment.
- Observe information such as time of day, vehicle traffic conditions, location and terrain to aid in solving network impairments.
- Perform real-time network monitoring while driving, which eliminates the need for a driver to accompany the engineer.

Improve safety

The vehicle-mounted display system provides:

- A permanently mounted, bright display that puts key RF parameters in clear view. The display is easy to read, so vision remains on the road while driving.
- One-touch access to essential measurement functions. A custom keypad with application-specific keys minimizes time spent operating drive-test software while driving.
- A sophisticated alarm capability that alerts the engineer to look at the display.



Product Description

The vehicle-mounted display system consists of three components. All three components are independent of wireless access technology. They work with Agilent's CDMA, TDMA and GSM wireless network optimization tools.

Bright display

- 12.1-inch diagonal, flat-panel, color LCD display with 800 x 600 resolution
- Size allows user to view multiple virtual front panels (VFPs) at the same time.
- Power cords are included for use with both 120 V ac from a power inverter or 12 V dc from a vehicle.
- Connects to laptop computer running Agilent's drive-test software.
- Large, bright display (much brighter than a typical laptop computer) for use in direct sunlight, with adjustable brightness for nighttime viewing.
- Mounted on top of pedestal.

Rugged, adjustable, pedestal mounting

- Pieces are included for the following configurations:
 - Transmission hump mounting (typical in sport utility vehicles).
 - Flat floor mounting (typical in minivans).
- Easily adjustable height and angle using quick-release lever. Both 13- and 18-inch lower poles are included to provide height versatility.
- Allows monitor to pivot out of the way for access to vehicle console controls.
- Designed to hold the monitor and the custom keypad.
- Rugged 7- and 11-gauge, black-steel construction
- Screwed permanently into vehicle floor. Installation can be done by most car stereo installation shops, and is not included with product.
- Adapters are available for certain vehicles that do not require holes in the vehicle floor. These are available directly from Gamber-Johnson² for the following vehicles:

Chevrolet S-10 Blazer, Suburban, Tahoe and C/K trucks

Dodge Durango

Ford Explorer, Expedition, Taurus, Ranger and F-Series trucks

GMC Jimmy, Yukon, Suburban



Allows monitor to pivot out of the way for access to vehicle console controls.



Flat floor mounting



Transmission hump mounting

² Availability depends on vehicle make, model, year and factory installed options. Adapters can be ordered directly from Gamber-Johnson. Call for price and availability: 1-800-456-6868, and visit their Web site at: www.gamberjohnson.com.

Product Description

Application-specific keypad

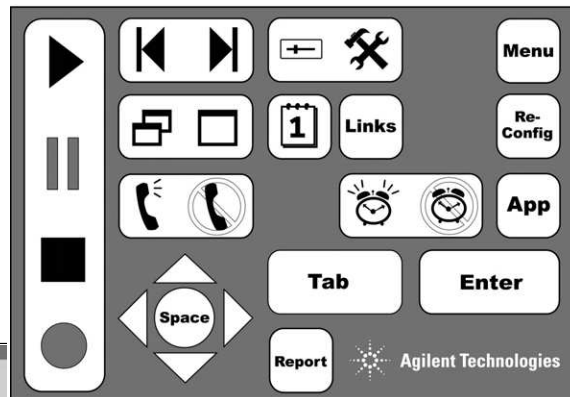
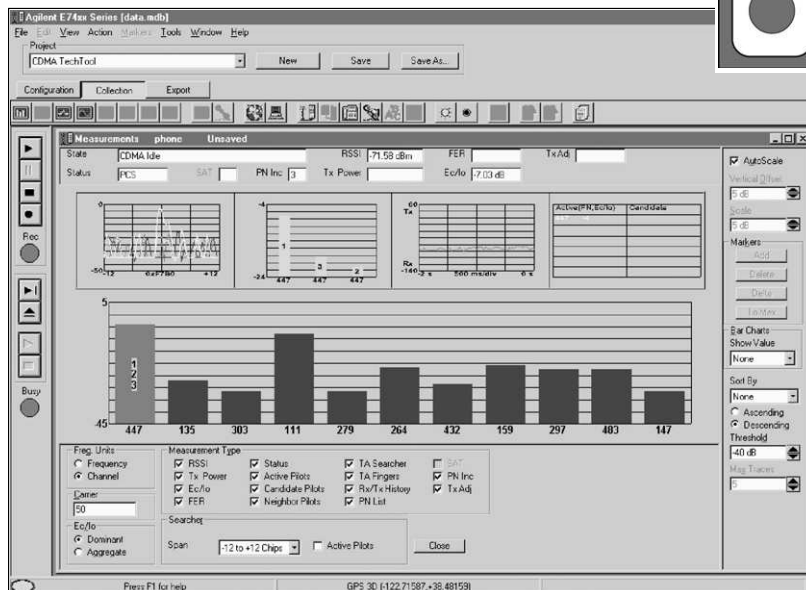
- No key memorization is required, since Agilent's drive-test software functions are clearly labeled on keypad.
- Uses flat-panel technology, rather than moving keys, which provide extremely long life and protection against dirt and moisture.
- Can be mounted on pedestal or armrest.
- Each button is assigned an important software function.
- Uses PS/2 port of a laptop computer.

The keypad is designed for a specific-use scenario. First, a project is setup in the drive-test software using a laptop keyboard with all alarms, virtual front panels (VFPs), and measurement and display controls defined. Once the project is defined, the keypad can be used to perform all essential functions during the drive including:

- “Freeze” and re-start measurements.
- Start and stop recording.
- Maximize, normalize and minimize measurement VFPs.
- Navigate between VFPs.
- Start and stop calls.
- Show or hide measurement and display controls.
- Show or hide toolbars.
- Add an auto-numbered note to the measurement data.
- Open and navigate the window menu in the drive-test software.
- Create a report.
- Perform a tools re-configure.
- Clear alarms and other dialog boxes.
- Move between open Windows® applications.
- Turn alarms on and off.
- Enable/disable links.

There will be occasions when the user needs to perform detailed analysis that requires the use of the laptop keyboard and pointing device, such as:

- Starting and ending the drive-test software application.
- Setting up the desired project.
- Selecting the desired project (can also be done using the auto-start software feature).
- Naming data sets.
- Changing display controls and measurement controls.
- Placing and moving markers.
- Setting up hardware measurement devices.
- Adding alarms.
- Analyzing phone messages.



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Configuration Options

Use the following table to determine what products are needed for your application.

Description	Solution Component			Operations Technicians		Optimization Engineers
	CDMA	TDMA	GSM	For identifying network RF impairments	For performing CDMA over-air base station maintenance measurements	For real-time troubleshooting of RF impairments
Vehicle-mounted display system	N3419A	N3419A	N3419A	X	X	X
Tech tool software	E7473A Option E60	E7474A Option E60	E7475A Option E60	X		
Tech tool software optional features	E7473A Option E6x	E7474A Option E6x	E7475A Option E6x	X		
Over-air maintenance software	E7490A Option 1xx				X	
Measuring receiver	E7490A Option 3xx				X	
Drive-test software	E7473A Option 1xx	E7474A Option 1xx	E7475A Option 1xx			X
Measuring receiver	E7473A Option 3xx	E7474A Option 3xx	E7475A Option 3xx			X
Phone cable	86154 Option 7xx	86154 Option 7xx		X	X	X
Phone	use off-the-shelf phone	use off-the-shelf phone	E7475A Option 5xx	X	X	X
Laptop PC	86154 Option 010	86154 Option 010	86154 Option 010	X	X	X
Drive-test accessories	86154 Option xxx	86154 Option xxx	86154 Option xxx	X	X	X

Technical Specifications

Bright display

- 12-inch LCD panel
- Adjustable brightness
- 262 K color
- Dot pitch 0.3 mm
- Dimensions 12.3 inches x 12.2 inches
- Universal power supply, ac 90-250 V allowed, 50/60 Hz
- 250 nit (cd/m²) brightness
- Standard VGA cable
- SVGA resolution 800 x 600
- ac power cord included
- dc power cord for use with 12 V cigarette lighter included

Rugged, adjustable pedestal mounting

- Vertical adjustability – two poles provided, one adjusts from 13 to 22 inches, the other from 18 to 27 inches
- Includes plate mounting for flat floor or transmission hump
- Angle adjustment 360 degrees
- Tilt adjustment 0-90 degrees

Application-specific keypad

- Uses standard PS/2 connector
- Cannot be used with a PS/2 to DB-9 serial adapter
- Dimensions 5 1/4 inches x 7 inches
- Uses 5 V dc supplied by PS/2 connector

Warranty information

- | | |
|---------------------------------------|-----------------------------|
| Bright display | Three-year limited warranty |
| Rugged, adjustable, pedestal mounting | Three-year limited warranty |
| Application-specific keypad | Three-year limited warranty |

Agilent Ordering Information

For Operations Technicians:

N3419A vehicle-mounted display system

Tech tool software:

CDMA

- **E7473A Option E60** phone control software, includes PCMCIA socket I/O card for connecting phone to laptop
- **E7473A Option E61** adds data logging and GPS control to E60
- **E7473A Option E62** adds alarms to E60
- **E7473A Option E63** adds messaging to E60
- **E7473A Option E64** add multiple phone capability to E60

TDMA

- **E7474A Option E60** phone control software, includes PCMCIA socket I/O card for connecting phone to laptop
- **E7474A Option E61** adds data logging and GPS control to E60
- **E7474A Option E62** adds alarms to E60
- **E7474A Option E63** adds messaging to E60
- **E7474A Option E64** add multiple phone capability to E60

For Optimization Engineers:

N3419A vehicle-mounted display system

For CDMA drive-test systems please refer to:

*E7473A CDMA Drive-Test System
Configuration Guide*.....5968-5553E

For TDMA drive-test systems please refer to:

*E7474A TDMA Drive-Test System
Configuration Guide*.....5968-5861E

For GSM drive-test systems please refer to:

*E7475A GSM Drive-Test System
Configuration Guide*.....5968-5563E

For CDMA over-air maintenance tool please refer to:

*E7490A CDMA Over-Air Maintenance Tool
Configuration Guide*5968-8696E

Agilent Technologies Literature

Configuration guides

<i>E7473A CDMA Drive-Test System Configuration Guide</i>	5968-5553E
<i>E7474A TDMA Drive-Test System Configuration Guide</i>	5968-5861E
<i>E7475A GSM Drive-Test System Configuration Guide</i>	5968-5563E
<i>E7490A CDMA Over-Air Maintenance Tool Configuration Guide</i>	5968-8696E

Technical specifications

<i>E7473A CDMA Drive-Test System Technical Specifications</i>	5968-5555E
<i>E7474A TDMA Drive-Test System Technical Specifications</i>	5968-5556E
<i>E7475A GSM Drive-Test System Technical Specifications</i>	5968-5564E
<i>E7490A CDMA Over-Air Maintenance Tool Technical Specifications</i>	5968-8687E

Product overviews

<i>E7480A CDMA Post Processing Software</i>	5968-1549E
<i>Indoor Wireless Measurement System</i>	5968-8691E

Application/product notes

<i>CDMA Drive-Test</i>	5968-5554E
<i>Spectrum And Power Measurements Using The Agilent CDMA, TDMA, And GSM Drive-Test System</i>	5968-8598E
<i>Optimizing Your CDMA Wireless Network Today And Tomorrow Using Drive-Test Solutions</i>	5968-9916E
<i>Optimizing Your TDMA Network Today And Tomorrow Using Drive-Testing To Identify Interference In IS-136 TDMA Wireless Networks</i>	5980-0219E
<i>Optimizing Your GSM Network Today And Tomorrow Using Drive-Testing To Troubleshoot Coverage, Interference, Handover Margin, And Neighbor Lists</i>	5980-0218E

For further information

For the latest news, product and support information, and application literature, visit our Web site at: www.agilent.com/find/drive_test

Agilent Technologies' Test and Measurement Support, Services, and Assistance

Agilent Technologies aims to maximize the value you receive, while minimizing your risk and problems. We strive to ensure that you get the test and measurement capabilities you paid for and obtain the support you need. Our extensive support resources and services can help you choose the right Agilent products for your applications and apply them successfully. Every instrument and system we sell has a global warranty. Support is available for at least five years beyond the production life of the product. Two concepts underlay Agilent's overall support policy: "Our Promise" and "Your Advantage."

Our Promise

Our Promise means your Agilent test and measurement equipment will meet its advertised performance and functionality. When you are choosing new equipment, we will help you with product information, including realistic performance specifications and practical recommendations from experienced test engineers. When you use Agilent equipment, we can verify that it works properly, help with product operation, and provide basic measurement assistance for the use of specified capabilities, at no extra cost upon request. Many self-help tools are available.

Your Advantage

Your Advantage means that Agilent offers a wide range of additional expert test and measurement services, which you can purchase according to your unique technical and business needs. Solve problems efficiently and gain a competitive edge by contracting with us for calibration, extra-cost upgrades, out-of-warranty repairs, and on-site education and training, as well as design, system integration, project management, and other professional services. Experienced Agilent engineers and technicians worldwide can help you maximize your productivity, optimize the return on investment of your Agilent instruments and systems, and obtain dependable measurement accuracy for the life of those products.

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