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# Keysight X-Series Signal Generators Instrument Security and Removable Memory Card Option 006 Upgrade Kit

Note: For the latest revision of this installation note, go to the following website:  
<http://www.keysight.com/find/mxg>

# Notices

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N5180-90066

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## Instrument Security and Removable Memory Card Option 006 Upgrade Kit

Products Affected: .....	N5171B/72B/73B/81B/82B/83B
Serial Numbers: .....	All
Options: .....	All
To Be Performed By: .....	(X) Keysight Technologies Service Center (X) Personnel Qualified by Keysight Technologies (X) Customer
Estimated Installation Time: .....	.5 hours
Estimated Verification Time: .....	N/A

### Introduction

This document provides detailed instructions for the installation of instrument security, Option 006, and associated memory card in an X-Series signal generator. Please be sure to read this entire document before attempting to put this secure digital (SD) memory card into use.

This upgrade kit requires firmware revision > B.01.80.

#### NOTE

This upgrade kit contains hardware and an option activation license. A PC or UNIX computer with LAN access is also required.

Installation includes completing the following major steps, in the order given.

1. Check signal generator operation.
2. Run the self tests.
3. Install the latest revision of firmware.
4. Redeem and install the Option 006 license.
5. Install removable memory card and cover.
6. Enable the memory card.

## Instrument Security and Removable Memory Card Option 006 Upgrade Kit

### Installation Kit Parts List

Item	Quantity	Description	Part Number
1	1	IC 8GB Flash Memory SMT	1819-1026
2	1	Bag Plastic (air cap)	9222-0993
3	1	Cover, SD Card	N5180-00027
4	1	Media Binder <sup>a</sup>	5010-7769
5	1	Installation Note	N5180-90066

a.The Entitlement Certificate (included in the binder) requires redemption and installation of the license key to enable Option 006 in the MXG option string.

### Tools Required

None

### Safety Considerations

#### CAUTION

Electrostatic discharge (ESD) can damage or destroy electronic components. All work on electronic assemblies should be performed at a static-safe workstation.

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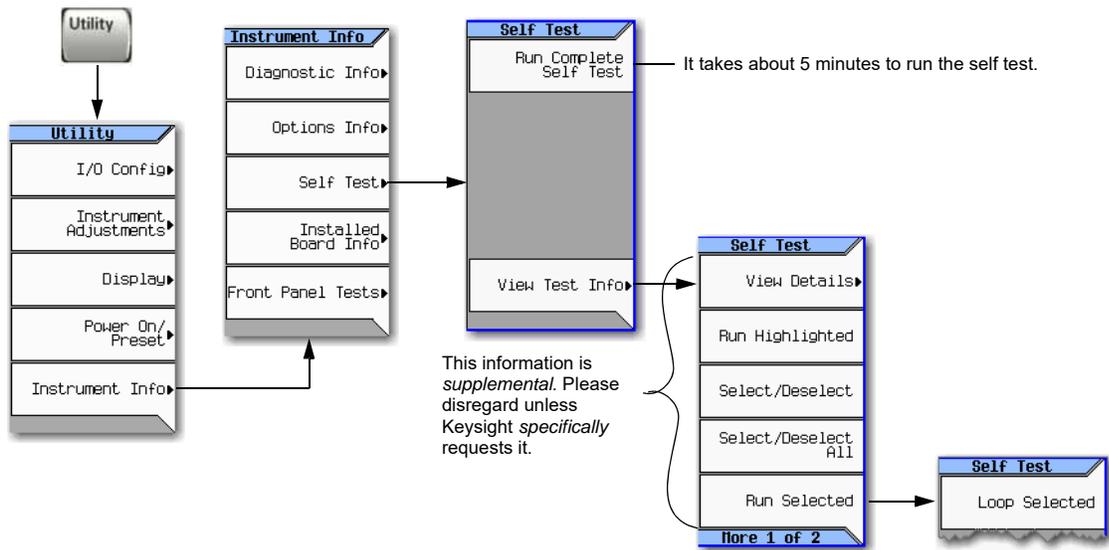
## Check Signal Generator Operation

Use the following procedure to confirm that the signal generator powers up and that the internal check does not identify any errors. The internal check evaluates the operation of the signal generator and returns an error message if it detects a problem. Self test will confirm that the signal generator is operating properly or isolate detected problems to a specific faulty assembly.

1. Turn on the signal generator and let it warm up for at least five minutes.
2. Check to see if the **ERR** annunciator is on. If it is on, proceed with the following steps:
  - a. Review the error message in the error queue. Press **Error**. The first error message in the error queue appears in the display text area. (Refer to the signal generator error messages document for information about each error message.)
  - b. Resolve all of the errors and then press **Clear Error Queue(s)**.

## Run the Self Tests

The self test is a series of internal tests of signal generator functions. Run the complete self tests when initially setting up a signal generator, after an assembly repair, or to verify signal generator performance. Also run self test prior to performing manual or automated Performance Verification tests. The self test will confirm the signal generator is operating properly or isolate problems to a specific faulty assembly.



## Install the Latest Revision of Firmware

Use the firmware DVD provided or go to the Keysight web, <http://www.keysight.com/find/mxg>, to obtain the most recent firmware revision. Follow the instructions provided with the firmware to install the latest firmware onto the X-Series signal generator.

Instrument Security and Removable Memory Card Option 006 Upgrade Kit

## Redeem and Install the Option 006 License

Redeem and install the Option 006 license key by following the instructions provided on the enclosed Entitlement Certificate.

## Install SD Memory Card

1. Place the signal generator flat with the rear panel facing you.
2. Locate the SD Card slot on the right side of the instrument, shown in Figure 1.

**Figure 1** SD Card Slot



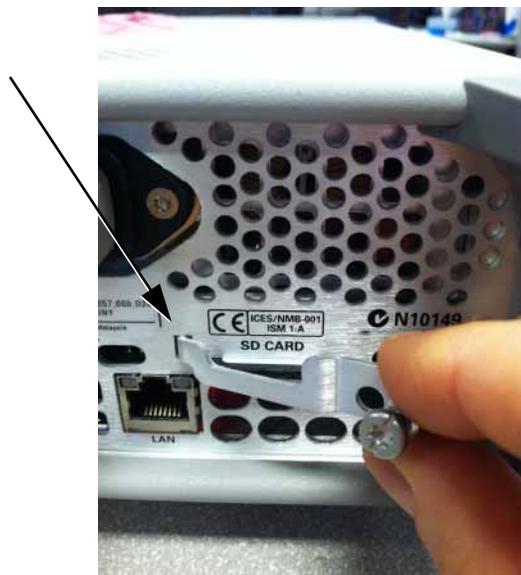
3. Insert the SD Card (face up) into the slot.

**Figure 2** Insert SD card



4. Insert the left side of SD Card cover into the slot as shown in Figure 3.

**Figure 3** Attach SD Card Cover



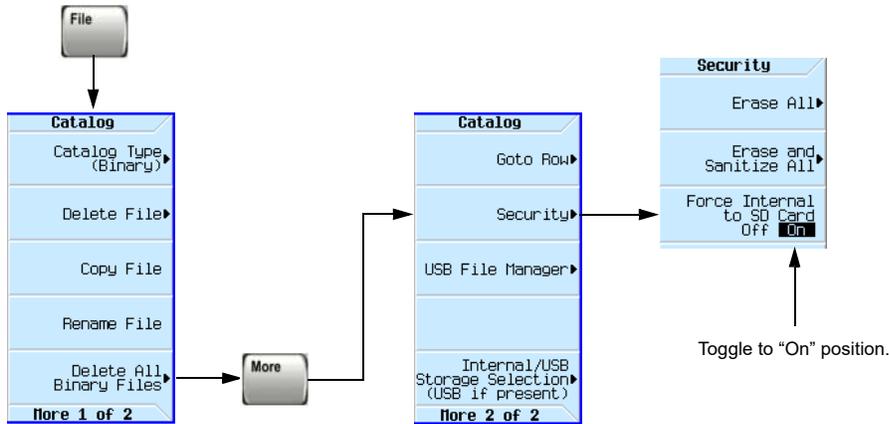
5. Hand tighten the screw on the SD Card cover to secure closure. See Figure 4.

**Figure 4** Secure SD Card Cover



## Enable the Memory Card

Use the following procedure if you want to store all user data to the SD card.



### CAUTION

Remove the SD card from the instrument prior to instrument sanitization.

Refer to the Security Features and Document of Volatility for Keysight Signal Generators (<http://www.keysight.com/find/mxg>) for instrument sanitization information.



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