

Installation Note

# Keysight FieldFox Option Upgrade Installation Instructions

This manual provides documentation for the following models:

N991xA/B, N992xA, N993xA/B, N995xA/B, and N996xA/B

# Notices

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### CAUTION

A **CAUTION** notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in damage to the product or loss of important data. Do not proceed beyond a CAUTION notice until the indicated conditions are fully understood and met.

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## FieldFox Option Upgrade Installation Instructions

### NOTE

If you are already familiar with this option upgrade installation proceed, proceed to [“Quick Reference for Option Upgrade Installation” on page 3.](#)

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## What you will find in this Option Upgrade Installation

Quick Reference for Option Upgrade Installation [page 3](#)

Overview [page 4](#)

Step 1 – Locate the Option Entitlement Certificate(s) [page 7](#)

Step 2 – Enter the Option Entitlement Certificate(s) (OECs) at the KSM Web site. [page 8](#)

Step 3 – Redeem Licenses for Specific FieldFox Instruments at KSM Web Site. [page 11](#)

Step 4 – Install License File(s) on FieldFox Instrument(s) [page 13](#)

Contacting Keysight Technologies [page 14](#)

## Quick Reference for Option Upgrade Installation

This section is for customers who are familiar with the option upgrade installation process. Below is an outline of the steps required to add an option.

– [“Step 1 – Locate the Option Entitlement Certificate\(s\)” on page 7](#)

Overview: Locate the Option Entitlement Certificate(s) for the upgrade options you have purchased. Keysight may have sent the certificate(s) via email, or you may have been given paper copies where you purchased the FieldFox.

– [“Step 2 – Enter the Option Entitlement Certificate\(s\) \(OECs\) at the KSM Web site.” on page 8](#)

Overview: You use the online KSM web application to enter OECs in your KSM User Profile.

– [“Step 3 – Redeem Licenses for Specific FieldFox Instruments at KSM Web Site.” on page 11](#)

Overview: During this step, you assign your purchased option upgrade(s) to specific FieldFox serial number(s). The instructions for this step assume you are continuing at the KSM web site immediately following Step 2.

– [“Step 4 – Install License File\(s\) on FieldFox Instrument\(s\)” on page 13](#)

## Overview

This document provides instructions for owners of FieldFox instruments who want to install the option upgrades they've purchased. All option upgrades are software only, so no additional hardware is required.

FieldFox instruments include the following model numbers:				
N9912A	N9923A	N9933B	N9950A/B	N9960A/B
N9913A/B	N9923AN	N9934B	N9951A/B	N9961A/B
N9914A/B	N9925A	N9935A/B	N9952A/B	N9962A/B
N9915A/B	N9926A	N9936A/B	N9953B	N9963B
N9916A/B	N9927A	N9937A/B		
N9917A/B	N9928A	N9938A/B		
N9918A/B				

### NOTE

These instructions are not for downloading firmware upgrades. To download firmware, go to the following Web site:  
<http://www.keysight.com/find/fieldfoxsupport>  
 Locate the table column titled "Firmware," and click on the Current Firmware link.

Here are a few terms you need to be familiar with before using the instructions:

- KSM (Keysight Software Manager): A Keysight Web application that allows customers to redeem (request) their Option Entitlement Certificate for a license file (\*.lic), and access their online account. First time users must create a User Profile. Returning users simply provide a login and password. KSM is located on the Web at:  
<http://www.keysight.com/find/softwaremanager>
- Host ID: The serial number of a FieldFox instrument. The serial number is on the back of the instrument under the integrated kickstand.
- License: A permit from Keysight, in the form of a license file (\*.lic), that allows customers to activate an option upgrade. A single license file may contain licenses for many FieldFox instruments.
- OEC (Option Entitlement Certificate): A certificate that contains the Order Number and the Certificate Number a customer must submit in KSM to get a license. It also contains a list of each option upgrade purchased, its description, and the quantity purchased. One OEC can contain option upgrades for many FieldFox instruments.
- Option Upgrade: Additional features for FieldFox instruments, offered as "options," that can be purchased as upgrades, after the initial purchase of the instrument.
- Redeem: To receive a license from Keysight (via email) in exchange for providing OEC information in KSM.

- User Profile: Customer contact information in KSM. When a User Profile is created, the customer creates a login and password to use for easily accessing KSM in the future.

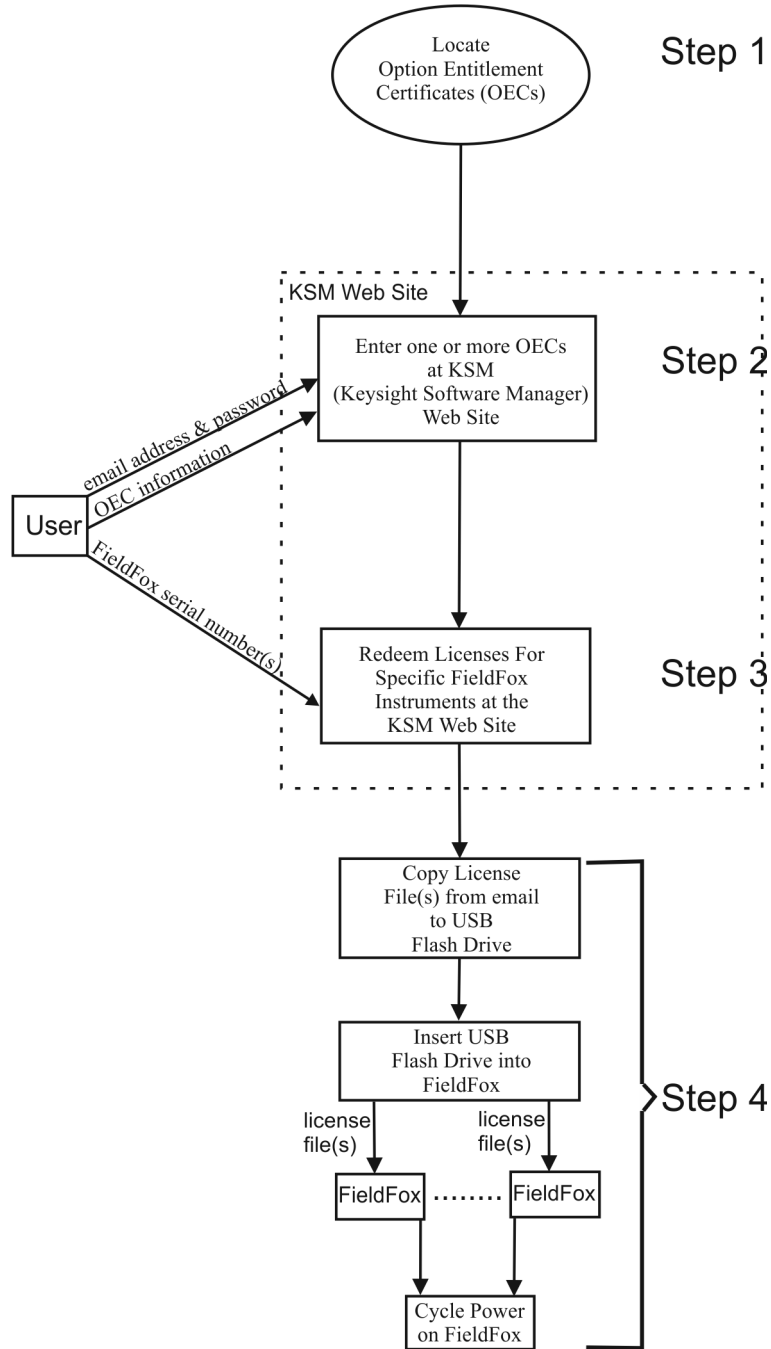
**NOTE**

KSM may display screens that are different than those described in Step 2 and Step 3 of this document. If this happens, follow the instructions provided on the KSM screens.

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Figure 1

An overview of the four step process described in these instructions is shown below.



## Step 1 – Locate the Option Entitlement Certificate(s)

Locate the Option Entitlement Certificate(s) for the upgrade options you have purchased. Keysight may have sent the certificate(s) via email, or you may have been given paper copies where you purchased the FieldFox.

If you already have located the Option Entitlement Certificate(s), go to Step 2 on **page 8**.

If you have not already purchased a FieldFox option upgrade(s), use the instructions in the following list.

- Decide which option upgrade(s) you want. To view the option upgrades, go to the following Web site: <http://www.keysight.com/find/fieldfoxsupport>

Locate the table column titled “Option Tables and Upgrades,” and click on the appropriate link for your analyzer model.

- Verify the desired option upgrade(s) you want is not already installed on the FieldFox. To do so, press these keys on the FieldFox:

- System (7)
- System Configuration
- Options
- Show Options

- Verify that your FieldFox has features that are compatible with the option upgrade you want. To do this, go to the following Web site: <http://www.keysight.com/find/fieldfoxsupport>

Locate the table column titled “Option Tables and Upgrades,” and click on the appropriate link for your analyzer model. On the next Web site, locate the table column titled “Product Number” and find the option upgrade you want. Next, locate the table columns titled “Additional Requirements” and “Incompatible With” for the information needed.

- Purchase the desired FieldFox option upgrade. For assistance, see “Contacting Keysight Technologies” at the end of this document. Following your purchase, Keysight will promptly send the OEC to your email address. A paper copy of the OEC may also be provided.
- Locate the Option Entitlement Certificate(s) for your purchases before proceeding to Step 2 on **page 8**.

Step 2 – Enter the Option Entitlement Certificate(s) (OECs) at the KSM Web site.

## Step 2 – Enter the Option Entitlement Certificate(s) (OECs) at the KSM Web site.

Overview: During this step, you use the online KSM web application to enter OECs in your KSM User Profile.

### NOTE

There are two sets of instructions for Step 2 - one set is for a new KSM user who must create a User Profile, and a second set for a returning KSM user who must enter a login and password previously created.

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Instructions for a new KSM user:

- Go to the following Web site: <http://www.keysight.com/find/softwaremanager>
- **Screen 1**

Click Register. The registration process creates a User Profile, and requires entry of the order number and certificate number found on an OEC.
- **Screen 2**
  - Enter an email address and password. Use an email address where Keysight can send you license files (\*.lic).
  - Click the check box to accept the Terms of Use.
  - Click Continue.
- **Screen 3**
  - Enter the Order Number and Certificate Number found on one OEC. You can cut and paste these numbers from a PDF copy of the OEC you may have received via email.
  - Click Continue.
- **Screen 4**
  - This screen displays information from the OEC you just specified in the previous instructions. The “Quantity Purchased” column shows the quantity of a particular option upgrade you purchased. The “Quantity Remaining” column shows the quantity of licenses for a particular option upgrade that remain to be redeemed. Verify that this information is correct.
  - Click Complete Registration.
- **Screen 5**
  - This screen displays the question “Do you want to get your licenses now?”
    - Select Yes if you have no more OECs to enter.
      - Click OK.
      - Continue to Step 3 on [page 11](#).
    - Select No, I will get them later if you have more OECs to enter.



Step 2 – Enter the Option Entitlement Certificate(s) (OECs) at the KSM Web site.

—Click OK.

—Continue to screen 6 below.

– **Screen 6**

- This screen indicates an active “Licenses” tab (next to the inactive “Subscriptions” tab). It also displays a “Get more licenses .....” link.
- Click the Get more licenses... link.

– **Screen 7**

- This screen displays information from the OEC you just specified in the previous instructions. The “Quantity Available” column shows the quantity of licenses for a particular option upgrade that are available to be redeemed. The screen also displays the question “Do you want to add another certificate to your profile?”

—Select Yes if you have more OECs to enter.

—Click Continue.

—Follow the instructions on the screen to add another OEC to your profile. Verify the “Quantity Available” numbers for each OEC.

—Click Add to My Profile

—You will return to Screen 7. When you have no more OECs to enter, select No.

—Select No if you have no more OECs to enter.

—Click Continue.

—Proceed to Step 3 on **page 11**.

**Instructions for a Returning KSM user:**

- Go to the following Web site: <http://www.keysight.com/find/softwaremanager>

– **Screen 1**

- Enter the email address and password you used previously when you created your User Profile.
- Click Login.

– **Screen 2**

- This screen indicates an active “Licenses” tab (next to the inactive “Subscriptions” tab). It also displays a “Get more licenses .....” link and a list of licenses previously redeemed from OECs already in your profile.
- Click the Get more licenses... link.

– **Multiple screens**

- The remaining screens for Step 2 allow you to enter additional OECs. The screen will vary depending on the status of OECs entered previously. Follow the displayed instructions.

Step 2 – Enter the Option Entitlement Certificate(s) (OECs) at the KSM Web site.

- A screen that displays the question “Do you want to add another certificate to your profile?” will eventually be displayed.
  - Select Yes if you have more OECs to enter.
    - Click Continue and follow instructions on subsequent screens.
  - Select No if you have no more OECs to enter.
    - Click Continue and proceed to **“Step 3 – Redeem Licenses for Specific FieldFox Instruments at KSM Web Site.”** on page 11.

## Step 3 – Redeem Licenses for Specific FieldFox Instruments at KSM Web Site.

Overview: During this step, you assign your purchased option upgrade(s) to specific FieldFox serial number(s). The instructions for this step assume you are continuing at the KSM web site immediately following Step 2.

### NOTE

The instructions for Step 3 assume that OECs for licenses to be redeemed have already been entered in your KSM User Profile. If this has not been done, go to Step 2 on [page 8](#).

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### NOTE

If you have previously completed Step 2 and have logged off the KSM Web site, begin with “Instructions for Returning KSM Users” in Step 2 on [page 11](#).

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### NOTE

Step 3 creates a single \*.lic file. If you are redeeming licenses for multiple serial numbers and you require a separate file for each serial number, repeat Step 3 for each serial number.

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### NOTE

The currently displayed screen in KSM (Screen 1 below) will have the “Assign Licenses” block highlighted (just below “Get Licenses,” near the top of the screen).

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#### – Screen 1

- Click the down arrow in the box displaying “Select Host”.
- From the drop-down menu, select a Host ID (serial number of the FieldFox) if the desired serial number is listed, otherwise select “Add a new host...”
- Enter the new serial number if needed. The serial number is on the back of the instrument under the integrated kickstand.
- Select the check box of the license(s) to assign to the FieldFox serial number you just selected.
- Click Assign Licenses. The assigned licenses are listed at the bottom of the screen.
- Repeat the previous Screen 1 instructions above as needed to select licenses for additional FieldFox serial numbers.
- Verify that the list of assigned licenses at the bottom of the screen is correct.
- Click Continue.

#### – Screen 2

- This screen will be omitted if there are no more licenses to assign.

### Step 3 – Redeem Licenses for Specific FieldFox Instruments at KSM Web Site.

- This screen displays the question, “Do you want to assign more licenses to hosts now?” at the bottom of the screen, select No, I will assign these later.
- Click Continue.
- **Screen 3**
  - Review the requested licenses and email address. The email address may be modified.
  - Click Request Licenses. A license file is created and sent to you via email.
- **Screen 4**
  - This screen will display “Your request for licenses was successfully submitted.”
  - Click OK.
- **Screen 5**
  - Click Logout in the top right corner of the screen to continue to Step 4
    - or –
  - Click
    - Get More Licenses... to repeat Step 3 and generate another license file.

## Step 4 – Install License File(s) on FieldFox Instrument(s)

**NOTE**

**For this step, you will need a USB flash drive formatted in FAT32.**

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- Locate the email(s) from Keysight which contain license file attachments. These emails are a result of Step 3 on [page 11](#).
- Copy the license file(s) from the email(s) to the root directory of the USB flash drive. More than one license file may be copied to the USB flash drive.

**NOTE**

**A single license file may contain licenses for more than one instrument..**

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- Insert the USB flash drive into the FieldFox, then press:
  - System (7)
  - System Configuration
  - Options
  - Install Options

The instrument reads the license file(s) from the USB flash drive, validates the file(s), and installs the option(s). Generally, warnings or error messages may be ignored.

**NOTE**

**Attempting to re-install a license file that is already installed may generate a “Corrupt Media” error message. Ignore this message.**

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- Disconnect the USB flash drive from the FieldFox.
- Cycle power on the instrument to activate the newly installed option upgrade(s). (Hold the power button down for more than four seconds to completely power down the instrument.)
- View the installed option upgrade(s). To do so, press these keys on the FieldFox:
  - System (7)
  - System Configuration
  - Options
  - Show Options
- After successful installation of all upgrades, it may be necessary to perform an annual calibration to ensure the instrument meets its specified performance. To learn if this is required, go to the following Web site: <http://www.keysight.com/find/fieldfoxsupport>

## Contacting Keysight Technologies

Locate the table column titled “Option Tables and Upgrades,” and click on the appropriate link for your analyzer model. On the next Web site, locate the table column titled “Adjustments Required” for the information needed

## Contacting Keysight Technologies

To purchase option upgrades, or to discuss a problem with the upgrade process, contact Keysight Technologies for assistance. Send details via email to [ctd-soco\\_support@keysight.com](mailto:ctd-soco_support@keysight.com), or contact your local Keysight Technologies representative – see <http://www.keysight.com/find/assist>.





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