



# **Guide to Documentation**

**C33513.85--H0**

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## Summary of changes

Document	Date	Comment
C33513005SE_00	10 Mar 1999	
C33513005SE_A0	11 Jun 1999	RRIC indoor unit added
C33513005SE_B0	28 Oct 1999	
DN99600221 Issue 2-0 en	14 Jan 2000	Updated, new document numbering scheme adopted
DN99600221 Issue 5-0 en	07 Jul 2000	Updated
DN99600221 Issue 6-0	31 May 2001	Mention of NOLS added
DN99600221 Issue 7-0 en	30 Apr 2002	FIU 19E and FIU 19RJ added, FC RRI removed, Nokia web addresses added
DN99600221 Issue 8-0 en	30 Jan 2003	Sales item codes updated, references to paper documentation removed, FIU 19RJ removed.



# 1

## About this document

This document describes the contents of *Nokia FlexiHopper Microwave Radio with FIU 19/FIU 19E/RRIC User Manual*:

- a navigation aid for the documents included in the user manual
- a short description of the documents included in the user manual
- product codes of the Nokia FlexiHopper documents and documents of related products
- instructions for ordering the documents
- a description of typographic conventions.

### Readership

This manual is for the application planning, installation and commissioning personnel of the Nokia FlexiHopper radios. The reader is assumed to have the basic knowledge of microwave transmission systems.

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### Note

FlexiHopper documentation is available in electronic form both on CD-ROM and at Nokia Online Services (NOLS) at <http://www.online.nokia.com>. See Chapter 3 for further information.

Further information on FlexiHopper can also be found at <http://www.nokia.com>.

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# 2

## User manual contents

This chapter helps you to find the documents that help you in accomplishing your tasks. The navigation aid in Table 1 lists the documents, which are then described briefly in the order they appear in the manual.

Table 1. Navigation aid

Task	Documents
Finding your way through the manual	Guide to Documentation Glossary
Familiarising with the product	Product Description
Planning the application	Product Description
Installing the microwave radio	Installation Overview Indoor Unit Installation Outdoor Unit Installation
Commissioning	Commissioning and Maintenance Outdoor Unit Installation
Maintaining and upgrading	Indoor Unit Installation Outdoor Unit Installation Commissioning and Maintenance

### Installation Overview

- overall work order
- instructions for earthing and grounding.

### FIU 19 (E) Indoor Unit Installation

- instructions for installing FIU 19 (E)
- instructions for installing plug-in units
- instructions for connecting cables.

**RRIC Indoor Unit Installation**

- instructions for installing RRIC
- instructions for connecting cables.

**Nokia FlexiHopper Outdoor Unit Installation**

- instructions for installing the outdoor unit (OU) and the antenna
- instructions for connecting cables
- instructions for aligning the antenna.

**Commissioning and Maintenance**

- instructions for using Nokia Hopper Manager
- instructions for commissioning procedure
- maintenance principles
- fault codes and fault messages
- instructions for troubleshooting
- instructions for upgrading.

**Product Description**

- information needed for, for example, application and installation planning: examples of network and site applications, network management tools, mechanical structure of units, power supply, and technical specifications.

**Glossary**

- technical abbreviations used in the manual
- key terms.

# 3

## Ordering documents

### Electronic documents

Nokia Online Services (NOLS) is a web-based service concept offered by Nokia to its customers. NOLS provides online access to Nokia product and system information, including manuals and technical descriptions. These information design products can be accessed as soon as they have been released. Thus, the most up-to-date documentation is always available. NOLS usage requires only a web browser, a fast Internet connection, and a PC.

### Ordering documents

The following tables contain the titles of the documents and the product codes that are needed when ordering them.

To order the documents, contact your Nokia sales representative.

Table 2. Product codes for Nokia FlexiHopper documents

Nokia FlexiHopper documents	Product code
Nokia FlexiHopper Microwave Radio with FIU 19/FIU 19E/RRIC User Manual	C33513.85
Nokia FlexiHopper Microwave Radio Product Overview	C33513.86
Nokia FlexiHopper Microwave Radio with FXC RRI User Manual	C33513.22
Nokia FlexiHopper OU Quick Reference Guide	C33513.23
FIU 19 Indoor Unit Quick Reference Guide	C33513.24
FIU 19E Indoor Unit Quick Reference Guide	C34231.24
RRIC Indoor Unit Quick Reference Guide	C33513.25

Table 3. Product codes for RRIC-related documents

RRIC-related documents	Product code
Nokia Intratalk User Manual	465694A
Nokia Citytalk User Manual	465695A
TRUA Operating Manual	C33315.20
TruMan User's Manual	P31711.01

Table 4. Product codes for other related documents

Other related documents	Product code
GCS R4.0 User's Manual	C33596.20
Route Planning Guide for Digital Radio Links	C33363.21
Route Design for Radio Links above 17 GHz	C33360.20
Nokia MetroHopper Radio with FIU 19/FIU 19E/RRIC User Manual	C33512.85
Nokia MetroHopper Radio with FXC RRI User Manual	C33512.87
Nokia FlexiHopper and MetroHopper with IFUE User Manual	C33857.89
Nokia AXC User Manual	C33857.20
Installing DMR Radios to Base Station Sites	C33511.20

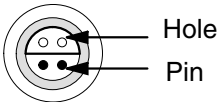
Instructions on how to start using Nokia Hopper Manager are given in the *Commissioning and Maintenance* document of the Nokia FlexiHopper and Nokia MetroHopper user manuals and in the comprehensive online Help of the manager software.

The *Product Overview* describes the basic features and applications of the product. It presents general information about the product and also describes features that will be available in the future.

The *Quick Reference Guide* is a short installation instruction for the product. The outdoor unit and the indoor units have separate quick reference guides, which are included also in the product package.

# 4

## Typographic conventions



In the connector pinout diagrams, a black circle is used to symbolise a pin and a white circle to symbolise a hole.

Icons and different fonts are used to emphasise special elements of a document. The icons are located in the left side of the text.

Table 5. Icons

Convention	Description
	Warnings alert the reader to dangers which may cause loss of life, physical injury, or ill health.
	Cautions are used to indicate possible damage to equipment but not danger to personnel.
<b>Note</b>	Notes are used to call attention to a certain piece of information.
	Used to indicate the beginning of a task sequence.

### Note

When a feature is valid for both FIU 19 indoor unit product variants, it is either marked with a notation FIU 19 (E) or the IUs are mentioned separately.

The following table presents the special fonts used in *Nokia FlexiHopper Microwave Radio with FIU 19/FIU 19E/RRIC User Manual*:

Table 6. Fonts

Convention	Meaning
<i>Italic font</i>	Indicates a word or phrase that is emphasised, or a reference to the title of a document, example: See document <i>Commissioning and Maintenance</i> .
<b>Bold font</b>	Indicates the title of a window, or an option, command, field or group, or anything that you must type exactly as it appears, examples: <b>Help</b> → <b>Index</b> means: on the <b>Help</b> menu, click <b>Index</b> . <b>A:\install</b> means: type A:\install.
ALL CAPITALS	Indicate a directory or file name, example: INSTALL.EXE
SMALL CAPITALS	Indicate the keys of the terminal keyboard, example: CTRL