

# Alcatel 7390

(Ex 9900)

## Multiservice broadband wireless access solution

**Base Station - release 2.2b**

**Copolarized version**

**User Manual**





Status Released

Change Note

**Short Title** A7390 Terminal Station – release 2.2b

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For any additional information or if you have any questions concerning this equipment, please contact **the Technical Assistance Center**, (TAC) dedicated to your support whose coordinates have been given to you by the Alcatel Contract Manager or:

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You must specify the hardware and software configurations of each item concerned when getting in touch.

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# 1 Foreword

## 1.1 Structure of the manual

This manual is for users with a sound knowledge of how to operate and install **point-multipoint microwave systems** and how to use a **PC-based craft terminal** running the Windows operating system.

With it, you should quickly be able to operate the equipment. It is not intended to replace the training services that we can provide for your particular needs.

The manual is divided into seven sections followed by appendixes:

- Foreword
- Equipment overview
- Installation of the Base Station
- 7390LT Software overview
- Commissioning the Base Station (7390BS)
- Operation and maintenance
- Changes of configuration
- Appendixes

## 1.2 Using the manual

With this manual, you should be able to commission and operate the described equipment to a basic level.

You should always read this manual in conjunction with the attached "**Update**" document (if provided) so that you are aware of the latest equipment upgrades.

### Manual updates

This edition of the manual describes hardware and software releases whose revision indexes are greater than or equal to those given below:

#### Hardware revision: 01

In cases where an equipment upgrade affects the content of the manual, the relevant modification should be inserted in the "**Update**" document, with the same reference number, but with code type VE (instead of TQ).

When the number or extent of the changes justifies it, they should be incorporated in the body of the manual and the manual's revision index should be incremented. Revision bars will show the differences from the previous version.

**Note:** MS-DOS, MICROSOFT and WINDOWS are registered trademarks of Microsoft Corporation.

## 1.3 Safety instructions

### 1.3.1 General rules

The following general safety precautions must be observed by the installer and the operator. ALCATEL assumes no liability for the customer's failure to comply with these requirements.

- **Ground the equipment:** for Safety Class 1 equipment, always connect the earth conductor of the power cable to an appropriate earthing device.
- **DO NOT operate the product in an explosive atmosphere or in presence of flammable gases or fumes.**
- **For protection against fire:** replace the line fuse(s) only with fuse(s) of the same voltage and current rating and type.
- **Dangerous voltages:** users must not remove equipment covers or shields. The installation and maintenance procedures described in this manual are for use by service-trained personnel only.
- **Protection against short circuits:** the mains equipment should ensure protection against short circuits according to current domestic standards (residual current differential protection device recommended).
- Observe the standards in force for all activities carried out on the roofs.
- For any on-site intervention, observe the precautions against lightning.
- **DO NOT operate equipment which may be damaged: its level protection may be altered.**
- Whenever it is possible that the safety protection features built into this equipment have been impaired, ISOLATE FROM THE POWER SUPPLY and do not use the equipment until safe operation can be verified by service-trained personnel. If necessary, return the equipment to Alcatel After Sales for service and repair.
- **DO NOT open equipment.**
- Return the product to Alcatel Customer Service for servicing and repair.
- **Recommendation to installers and maintenance operators:** before carrying out any operations, check the equipotential bonding of the earthing devices to which our measurement equipment and instruments are connected. If necessary, during installation, ensure the equipotential bonding by electrical connection of these devices.

## 1.3.2 Symbols on products

### 1.3.2.1 Danger symbols

When subsystems and modules have warning labels, it is extremely important to follow their instructions.

These labels are designed to indicate dangerous situations; they may contain any standard symbol or any text considered necessary to protect users and employees.

The most frequent danger situations and symbols are:

#### Danger or general warning



Prompts the user to refer to the manual.

### Dangerous electrical voltages



Close to dangerous voltages (>42.4 V AC peak, 60 V DC; power level  $\geq 240$  VA) you will find this warning label. Maintenance personnel is exposed to dangerous electrical voltages when removing the cover.

#### 1.3.2.2 Earth symbols



Terminal for connecting the protective earth conductor in power supply wiring



Other earth terminal

#### 1.3.2.3 Other symbols



Indicates compliance with essential requirements of the applicable European directives.

I

### 1.3.3 Symbols used in the document

These symbols alert the reader of the possible risks. They indicate:

- the cause and type of danger,
- the possible consequences,
- the preventive action.

#### 1.3.3.1 Warning

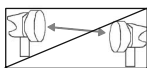


- protection of personnel,
- warning of a possible dangerous situation,
- danger of fatal or serious injury.

#### 1.3.3.2 Precautions



- protection of equipment,
- warning of a procedure, practice or condition that could be dangerous to equipment or its environment,
- danger of damage to the equipment or its environment,
- permanent loss of data possible.



- This symbol, introducing the description of a procedure, indicates that it will cause the link to be temporarily disconnected.

### 1.3.4 Declaration of conformity with European policies relating to EMC

#### DECLARATION OF CONFORMITY

We, **ALCATEL CIT**  
5 rue Noël Pons  
92734 Nanterre Cedex  
France

declare, under our sole responsibility, that the product

**Base Station ALCATEL 9900 BS**

- |                            |   |
|----------------------------|---|
| - Frequency ranges 9925 RB | : 24.5 - 26.5 GHz                                   |
| 9928 RB                    | : 27.5 - 29.5 GHz                                   |
| - 9900 DBS Interfaces      | : ATM Network<br>E1 (75 $\Omega$ and 120 $\Omega$ ) |
| - 9900 DBS Power Supply    | : 36 to 60 VDC                                      |

to which this declaration relates is in conformity with the following standard provided that it is installed, maintained in accordance with:

- the "state of the art",
- manufacturer's instructions,

and used under normal conditions :

EN 300 385 (1999) : EMC standard for digital fixed radio links and ancillary equipment with data rates at around 2Mbit/s and above. (limits : class B)

in accordance with the requirements of the following European Directive :

89/336/EEC (EMC European Directive) amended 92/31/EEC and 93/68/EEC

Notified Body ( No 0081 ) , hereafter mentioned, has assessed the EMC conformity and has established the EC type examination certificate No 47/17464 010 and and the attestations No 47/22199 010-2 and No 47/23634 010-1.

LCIE  
33, avenue du Général Leclerc  
92260 Fontenay-aux-Roses  
France

Nanterre, 16 August 2000

  
R. BARON  
Quality Department

**CERTIFICATE OF CONFORMITY**

We, **ALCATEL CIT**  
5 rue Noël Pons  
92734 Nanterre Cedex  
France

declare, under our sole responsibility, that the product

**Base Station ALCATEL 9900 BS**

- |                            |                                      |
|----------------------------|--------------------------------------|
| - Frequency ranges 9925 RB | : 24.5 - 26.5 GHz                    |
| 9928 RB                    | : 27.5 - 29.5 GHz                    |
| - 9900 DBS Interfaces      | : ATM Network<br>E1 (75 Ω and 120 Ω) |
| - 9900 DBS Power Supply    | : 36 to 60 VDC                       |

to which this certificate relates is in conformity with the following standard provided that it is installed, maintained in accordance with:

- the "state of the art",
- manufacturer's instructions,

and used under normal conditions :

EN 60950 (1992) A1/A2/A3/A4 : Safety of information technology equipment, including electrical business equipment

Nanterre, 16 August 2000

  
**R. BARON**  
Quality Department



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