



**CDMA2000 1xRTT
IP Radio Access Network (IP-RAN)**

**OneRAN Series
Installation & Maintenance Manual**

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Revision History

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0.3	8/17/2004	CMO	Revised for MET compliance, Labeling
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Revision Numbering Key

0.x	Work in Progress
1.0	Initial Document Approval
1.x	Revisions Following Initial Document Approval
2.0	Revisions Approval

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1 INTRODUCTION

1.1 Proprietary Information Notice

THIS DOCUMENT IS THE PROPERTY OF AIRWALK COMMUNICATIONS, INC. THE RECIPIENT MAY USE IT ONLY FOR THE PURPOSE FOR WHICH IT WAS TRANSMITTED AND WILL BE RETURNED UPON REQUEST OR WHEN NO LONGER NEEDED BY RECIPIENT. IT MAY NOT BE COPIED OR COMMUNICATED WITHOUT THE WRITTEN CONSENT OF AIRWALK COMMUNICATIONS, INC.

1.2 Purpose of Document

The purpose of this document is to define the Installation, Maintenance and Safety Compliance of AirWalk Communication's, Inc. unique CDMA Radio Access Network (RAN) system, referred to herein as the OneRAN product. The OneRAN product was formerly known as the AW-96 product.

The AirWalk OneRAN is a market ready, standards compliant, high channel capacity, cost effective, modular and expandable wireless radio access network system. Designed specifically for CDMA2000 networks, the Base Station Transceiver (BTS) and Base Station Controller (BSC) are integrated into a single compact platform.

The target market and applications are in-building areas, corporations, corporate campuses, enterprises, university campuses, large industrial plants, stadiums, airports, shopping malls, blind spots, hot spots, rural areas, neighborhoods, and highways.

1.3 Scope

The scope of this document covers the description, environmental specifications, equipment location, cabling, system installation and maintenance of the AirWalk RAN. Specific models covered are identified in the section entitled "Model Information".

This document does not cover AirWalk PilotStation products (pilot beacons) or AirWalk MiniCell products.

1.4 Order of Precedence

This System Installation Manual will take precedence over any previous AirWalk System Installation Manual or Document.

1.5 Terminology

See the section entitled: Appendix A - Acronyms

1.6 Applicable Documents

The following documents are applicable to the extent specified in this System Installation Manual.

1.6.1 AirWalk Documents

- IP- Base Station (BS) System Description.
- IP- Base Station (BS) CPIB Block Diagram.
- IP- Base Station (BS) GPSR Block Diagram.
- IP- Base Station (BS) PCPM Block Diagram.
- IP- Base Station (BS) XCVB Block Diagram.

1.6.2 Telecom Standards

- TIA/EIA/IS-2000 Series Revision: C - Introduction to CDMA2000 Spread Spectrum Systems, 05/00/02
- Personal Station – Base Station Compatibility Requirements for 1.8 to 2.0 GHz CDMA PCS.
- TIA/EIA-664 - Wireless Features Description, 12/00/00
- TIA/EIA Interim Standard 95 Revision A - Mobile Station –Base Station Compatibility Standard for Dual-Mode Wideband Spread Spectrum Cellular Systems, May 1995
- TIA/EIA-95-B - Mobile Station-Base Station Compatibility Standard for Dual-Mode Spread Spectrum Systems, October 31, 1998
- MSC to BS Interface Inter-Operability Specification (IOS) IOS-4.2
- IMT-2000 Specification, (indoor wireless propagation)

1.6.3 Other Documents

None Identified

2 OneRAN Safety And Compliance Information

2.1 Statement Of Intent

The AirWalk OneRAN Series RAN is intended for use in a CDMA cellular infrastructure radio access network. The responsible body shall be made aware that, if the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

2.2 Safety Precautions



1) Power Sources

Use only power sources that are within the specified limits as designated on the equipment labels. Use of power sources outside the specified limits is hazardous and may cause personal injury or property damage.

2) Equipment Location

Equipment should be located indoors or in a suitable protected environment such as an equipment enclosure. Use of unprotected equipment outdoors is hazardous and may cause personal injury or property damage.

3) Grounding And Electrical Connections

Electrical connections including equipment grounding should be made in accordance with the National Electric Code and any local regulations. Improper electrical connections are hazardous and may cause personal injury or property damage. Consult a licensed electrical installer if in doubt.

DC powered units MUST be externally fused for proper protection.

4) Hazardous Voltages

Equipment may contain hazardous voltages. Only qualified service personnel should open the equipment for adjustments, repairs or replacements.

5) Replacement Parts

Damaged parts and protective devices such as fuses should only be replaced by components approved or recommended by AirWalk Communications. Replacement fuses must be of the same rating and type as the original for continued protection.

2.3 Maintenance Information

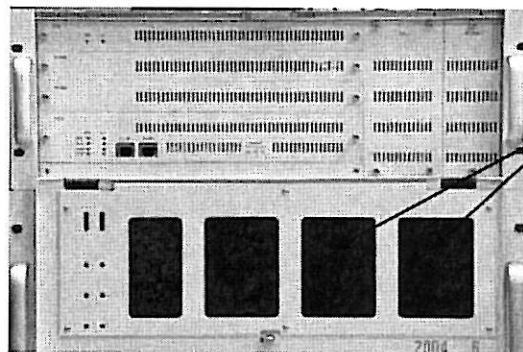
2.3.1 Cleaning

The AirWalk OneRAN units are protected by a high performance paint which does not require normal maintenance. If paintwork is soiled, it can be cleaned using a damp cloth after AC power has been disconnected. Do not use liquids or spray cleaning substances on the unit since property damage or personal injury may result.

2.3.2 Filter Maintenance

The OneRAN Main Unit is equipped with a washable air filter located in a front mounted drop down door.

This filter should be checked annually for dirt build-up and cleaned if required. Note more frequent inspections may be needed in dusty environments.

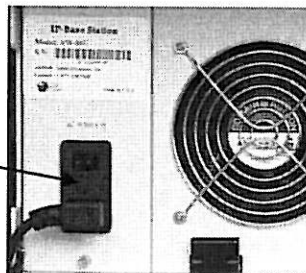


Air Filter Located In
Drop Down Front Door

2.3.3 Fuse Replacement (AC Powered Units Only)

AC powered versions of the OneRAN Main Unit contains a 250 V 5A fuse located behind the AC connector cap as shown in the diagram. Replace the fuse with the same type and ratings.

Removable
Fuse Cap



2.3.4 Other Maintenance

Any other required maintenance must be performed by suitable trained service personnel. Do not open covers or attempt to repair unit if not suitably trained.