

#### SUPPLEMENTAL DATA TO THE

## OPERATION & MAINTENANCE MANUAL RADSTAR SYSTEM MODELS PD-4, PDE-4 AND PDX-4

**FOR THE PDE-5 and PDX-5** 



Date: Feb 1 2006 Dwg: 201313S

16701 West Bernardo Drive San Diego, CA 92127



### PDE5 FCC NOTICE INFORMATION TO USER

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for Class A Digital Device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures.

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device falls below the power requirements for Specific Absorption Rate (SAR) testing and may be worn within 2cm of the body.



#### PDX-5 FCC NOTICE

#### **OUR9XSTREAM**

#### INFORMATION TO USER

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for Class B Digital Device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures.

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**WARNING**: The **PDX-5** is approved only for mobile and base station transmitting devices, separation distances of (i) 20 centimeters or more for antennas with gains < 6 dBi or (ii) 2 meters or more for antennas with gains = 6 dBi should be maintained between the antenna of this device and nearby persons during operation. To ensure compliance, operation at distances closer than this is not recommended



# RadStar<sup>TM</sup> Radio Transmission Dosimetry System PDE-5 and PDX-5

#### **PREFACE**

Since many of the PDE-4 and PDX-4 systems are still in use today and the basic operation of the system does not change after upgrading to PDE-5 and PDX-5, this supplement is not intended to replace the RadStar<sup>TM</sup> manual. This supplement highlights areas where the PDE-5 and PDX-5 differ from the PDE-4 and PDX-4.

#### 1.0 Introduction

The new MaxStream modem was integrated into the system in a manner that allowed continued operation with existing software which makes the change nearly transparent to the operators and users. The PDE-4 is upgraded by replacing the PROXIM RF Modem with a MaxStream RF Modem and adding a code translation PWA. The translation PWA converts the original software / firmware codes into codes understood by the new MaxStream RF Modem. The PDX-4 Base Station can not be upgraded and is replaced with a completely new PDX-5 Base Station that incorporates the new MaxStream RF Modem and the code translation PWA. Additionally a USB port was added for ease of use with more modern computers. PDE/X-4 units will not communicate with a PDE/X-5; therefore the new upgrade is not backwards compatible with existing units. It is backwards compatible with the existing operating software including Barletts software.

#### 2.0 Functional Changes

The following data highlights functional differences between the PROXIM and MaxStream RF Modems.

	PROXIM	MAXSTREAM	Notes
Technical			
Specifications			
Indoor/Urban Range	800'	1500'	
RF Output Power	300 mW	150 mW	
Battery Life for PDE			Assuming a 625 mAh
@ 10 second interval	8 hours	16.9 hours (by calculation)	battery and 37 mA draw
Weight (PDE)	396g (14oz)	347g (12.24oz)	



#### 3.0 System Setup Changes

The following data highlights setup differences between the PROXIM and MaxStream RF Modems.

NONE

#### 4.0 Software Interface Changes

The following table highlights operating software differences between the PROXIM and MaxStream RF Modems.

	PROXIM	MAXSTREAM	Notes
Operating Instructions			
Adjusting Settings (PDX)	Open Terminal, Press White button	Open Terminal program, Press Reset Button, Type "+++"	
Interface (PDX)	Serial	Serial or USB	USB can be enabled or disabled in Terminal menu

#### **5.0 Hardware Changes**

The upgraded PDE-5 has been re-certified to be compliant with Part 15 of the FCC rules. Certification testing indicated that electrical noise suppression components are required on each probe cable. The noise suppression components must be installed on all external probe cables as shown in the following figure and must remain in place at all times.



**Noise Suppression Components**