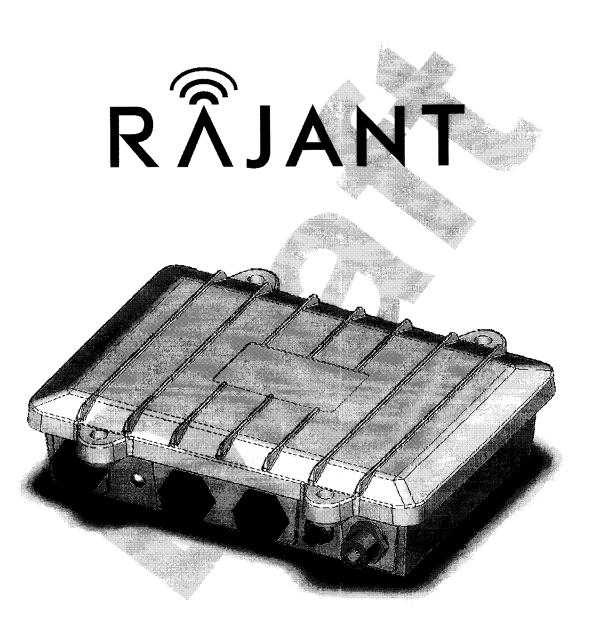
Version 1.00 April 8, 2008

# BreadCrumb<sup>®</sup> LX User Guide



Note: This device has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the device is operated in a commercial environment. This device generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with this instruction manual, may cause harmful interference to radio communications. Operation of this device in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense.

This Class A digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

CAUTION: Changes or modifications not expressly approved by Rajant Corporation could void the user's authority to operate the device.

Operation of this device in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at own expense.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.



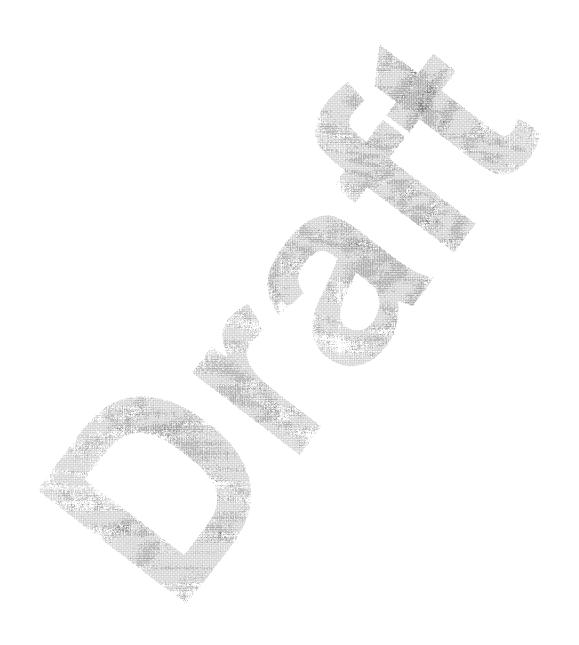
This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

#### © 2008 Rajant

You may use the software provided with the Products only on personal computers owned by the purchasing individual or entity, and may not use, load, or run any such software on any network or in any type of service bureau, time-sharing operation, or non-purchasing individual or entity's equipment.

## **Table of Contents**

Contents	Page
1.0 INTRODUCTION	5
1.1 DESCRIPTION OF BREADCRUMB LX	ERROR! BOOKMARK NOT DEFINED.
1.1.1 TOP PANEL FEATURES	Error! Bookmark not defined.
1.2 NETWORK FEATURES	ERROR! BOOKMARK NOT DEFINED.
1.3 ANTENNA FEATURES	error! Bookmark not defined.
1.4 POWER FEATURES	ERROR! BOOKMARK NOT DEFINED.
1.5 CABLE CONNECTOR PIN INFORMATION	
1.5.1 P101 15-PIN CONNECTOR ETH0, COM B, USB	
1.5.2 P102 4-PIN POWER CONNECTOR	
15.3 18-PIN CONNECTOR COM A, ETH1, CHARGER STATU	JS Error! Bookmark not defined.
2.0 USING BCADMIN <sup>™</sup>	
3.5 DEPLOYMENT CONFIGURATIONS	ERROR! BOOKMARK NOT DEFINED.
3.5.1 DEPLOYMENT CONFIGURATION – COVERAGE AREA	
3.5.2 DEPLOYMENT CONFIGURATION – REACH AREA	Error! Bookmark not defined.
3.6 DEPLOYMENT GUIDELINES AND METHODOLOGY	ERROR! BOOKMARK NOT DEFINED.
3.6.1 DEPLOYMENT GUIDELINES	Error! Bookmark not defined.
3.6.2 DEPLOYMENT METHODOLOGY	
3.6.3 STATUS LED	
4.0 BREADCRUMB SOFTWARE MAINTENANCE	
4.1 BREADCRUMB FIRMWARE	
4.1.1 INTRODUCTION	
4.1.2 UPGRADING THE FIRMWARE	
4.2 BCADMIN MAINTENANCE	
4.2.1 UPGRADING OR INSTALLING THE BCADMIN SOFTV	
4.3 PORT FORWARDING	ERROR! BOOKMARK NOT DEFINED.
4.3.1 SETTINGS	Error: Bookmark not defined.
5.0 TROUBLESHOOTING	
5.1 BREADCRUMB WIRELESS NETWORK	
5.1.1 SPORADIC NETWORK CONNECTIVITY	
5.1.2 BREADCRUMB DEVICE CANNOT CONNECT TO BCV	
5.1.3 BCADMIN ISSUES	
APPENDIX A	- ERROR! BOOKMARK NOT DEFINED.
List of Figures	
Figure	Page
FIGURE 1. LEFT SIDE PANEL OF LX PROTOTYPE	FDDOD! ROOVMADIZ NOT REFINED
FIGURE 2. RIGHT SIDE PANEL OF LX PROTOTYPE	
FIGURE 22. DEPLOYMENT CONFIGURATION - COVERAGE AREA	
FIGURE 23. DEPLOYMENT CONFIGURATION - REACH AREA	
FIGURE 24. BCADMIN SOFTWARE INSTALLATION FILE	
FIGURE 25. BCADMIN INSTALLATION SCREEN #1 – WELCOME TO THE B	
BOOKMARK NOT DEFINED.	
FIGURE 26. BCADMIN INSTALLATION SCREEN #2 – LICENSE AGREEMEN	TERROR! BOOKMARK NOT DEFINED.
FIGURE 27. BCADMIN INSTALLATION SCREEN #3 – SELECT DESTINATIO	
DEFINED.	
FIGURE 28. BCADMIN INSTALLATION SCREEN #4 – SELECT START MEN	U FOLDER ERROR! BOOKMARK NOT
DEFINED.	



Version 1.00

# 1.0 PREFACE

## 1.1 PURPOSE AND SCOPE

This manual refers to the BreadCrumb LX model.

This manual provides information and guidance to all personnel who are involved with and use Rajant Corporation's BreadCrumb<sup>®</sup> Wireless Network devices ("BreadCrumb<sup>®</sup> devices").

This manual begins with an introduction to the BreadCrumb Wireless Network (BCWN) and a brief overview of the various BreadCrumb device models available. This is followed by a guide to BCAdmin<sup>TM</sup>, the management application used to configure BreadCrumb devices before or during a deployment. Finally, common deployment scenarios are described and concise step-by-step instructions for each scenario are provided.

### 1.2 USER INFORMATION

The user of this manual is encouraged to submit comments and recommended changes to improve this manual. Please send any comments or changes to support@rajant.com. Be sure to include the version number of the manual you are using and please provide the page numbers related to your comments wherever possible.

