**Lyngsoe
Systems**

User's Guide

Programmer
UP23

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REVISIONS

Revision no.	Date	Author	Changed pages	Description of change
1	18-12-2008	SCO	-	Document Created.

Warning:

Lyngsoe Systems Ltd will not be held liable for any direct, indirect, or consequential damages incurred from any UP23 device that has been modified without the explicit consent of the manufacturer.

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

FCC Class B Device:

This device complies with Part15 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 that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a 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, uses 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

1 INTRODUCTION

UP23 was developed to have a single device capable of programming different types of Lyngsoe System's RFID tags. The device is USB enabled, which provides both device power and the data connection to the PC. It is meant to be used in conjunction with a graphical user interface (GUI) application running on a Windows PC.

2 CONTENTS

Your UP23 kit contains the following items:
- UP23 Device
- USB Cable (Standard Type A-B)
- Tag Communicator Software Disc
- Tag Communicator Manual
- This User Guide

3 DIAGRAMS

3.1 UP23 Front

3.2 UP23 Connectors

The USB port on the device must be connected to a USB host PC with the proper driver and software for normal operation. Please see the "Tag Communicator Manual" for instructions on installing the driver and software.

4 TYPES OF TAGS

The Programmer UP23 is able to program various families of tags regardless of their mechanical form factor (letter tag, container tag, DVD tag, etc).

There are two types of tags currently in the field which can be programmed with UP23:
  Letter Tags – Used in an envelope for tracking through the mail system (PT, LT)
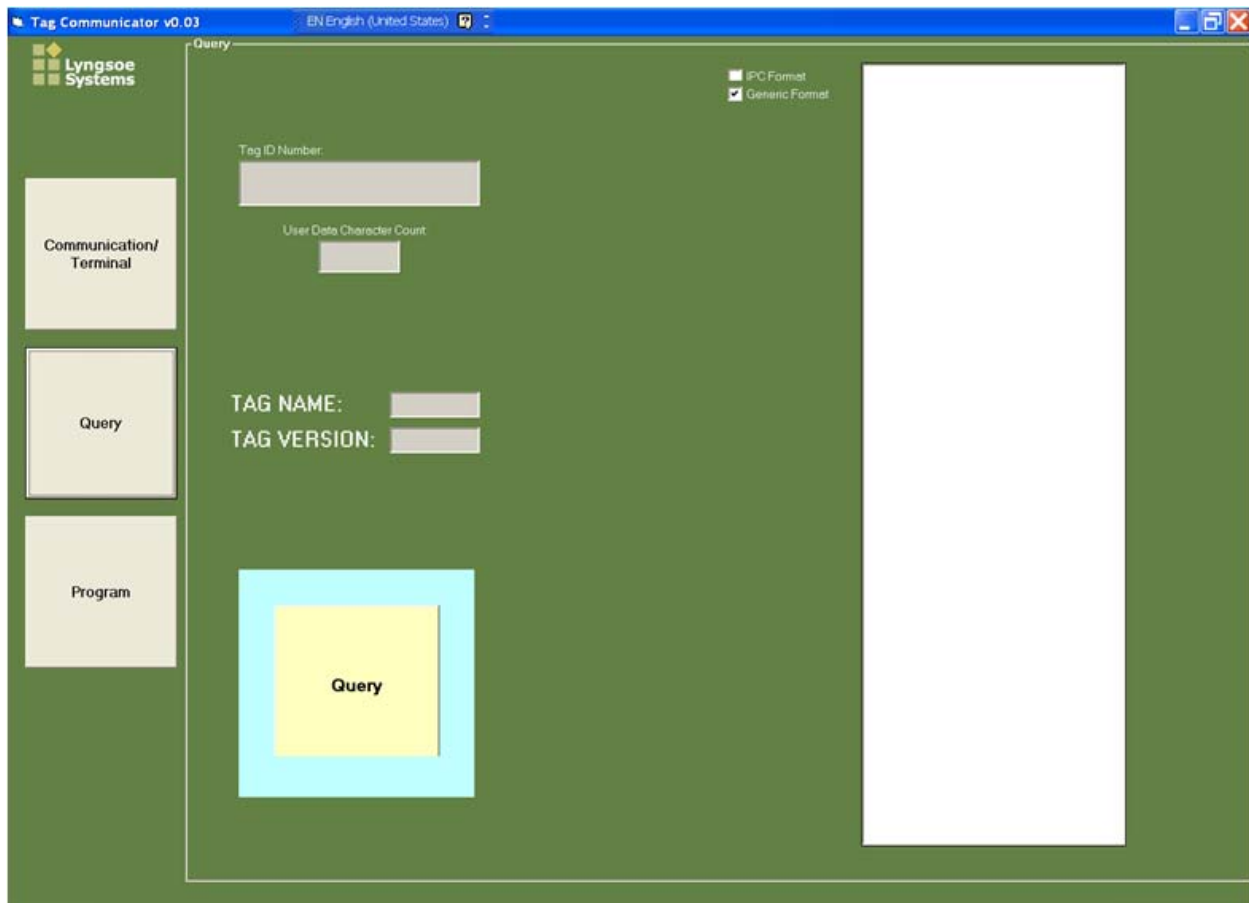 Asset Tags – Fixed to an asset, person or other item for tracking (CT, ID, MT)

UP23 also has the capability to support future tag models.

5 DEVICE FUNCTIONALITY

5.1 Reading Tag Parameters

To retrieve the stored parameters in a tag follow these steps:
  1- Place the tag on top of UP23 in the correct orientation*
  2- Open the Tag Communicator software making sure the UP23 is properly connected to the PC
  3- Set the correct communication parameters for the COM port on the opening screen
  4- Click the Query button on the left menu
  5- Click the Query button on the Query screen
  6- The read parameters will be displayed

5.2 Programming Tag Parameters

To Program a tag using a pre-defined parameter set, follow these steps:
- 1-   Place the tag on top of UP23 in the correct orientation*
- 2-   Open the Tag Communicator software making sure the UP23 is properly connected to the PC
- 3-   Click the Program button on the left menu
- 4-   Select the Model of the tag you wish to program
- 5-   All parameters for that model tag should now be displayed
- 6-   Select the programming options (default values, application values, custom values)
- 7-   Enter the Tag ID number
- 8-   Click "Start Programming All" to program the tag

*Please refer to the Tag Communicator Software documentation for complete details on how to use this software in conjunction with the UP23 Programmer.