XZONE

research for innovation

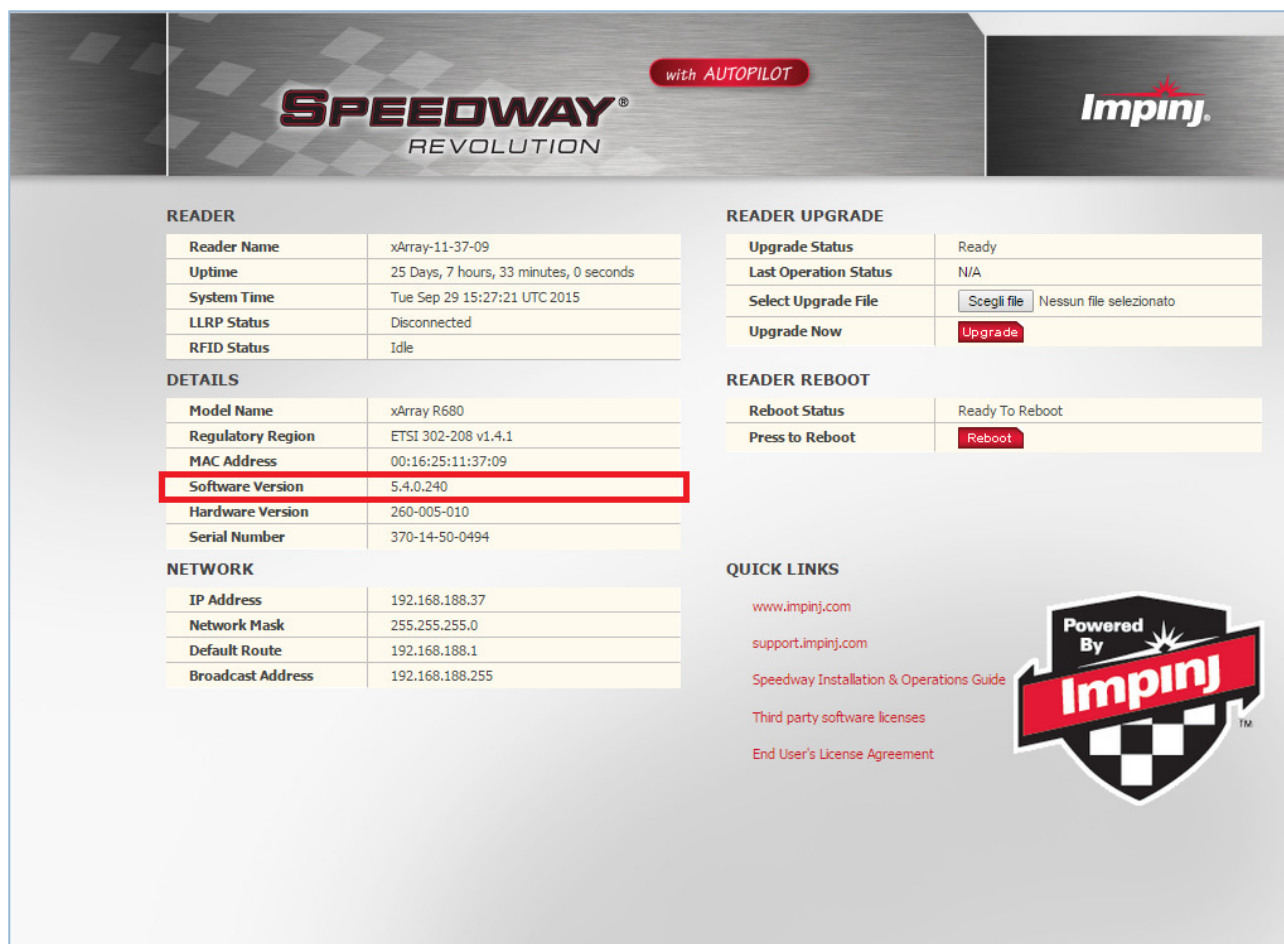| 2015	R4I

User Manual

xZone

ONLY WHAT YOU NEED

INTRODUCTION

This manual provides an overview of the full functionality of xZone, and all informations necessary to understand how it works and set it up correctly.

INSTALLATION

x Zone does not need to be installed, is provided on board the miniPC, with the software license required to operate.

N.B. *The software works with firmware version 5.4 of the reader Impinj xArray.*

FIGURE 1: READER WEB INTERFACE

To check the firmware version of the reader just open a browser and enter IP address of the reader in the address bar (if you do not know the address you want to use a
program ip scanning , such as "Advanced IP Scanner "); default credentials are Username: root , Password: Impinj.

In the event that the firmware version is not the one indicated, obtain the necessary file and select the "Choose File" on the top right of the page, choose the file "xxx.upg" from the screen that will open and confirm by clicking " Upgrade" . The reader at this point will load the file into memory and to complete the installation must click " Reboot" when prompted by the reader itself .

The reader will reboot and the firmware will be installed.

CONFIGURATION

xZone has a single web interface to command the reader to acquire readings.
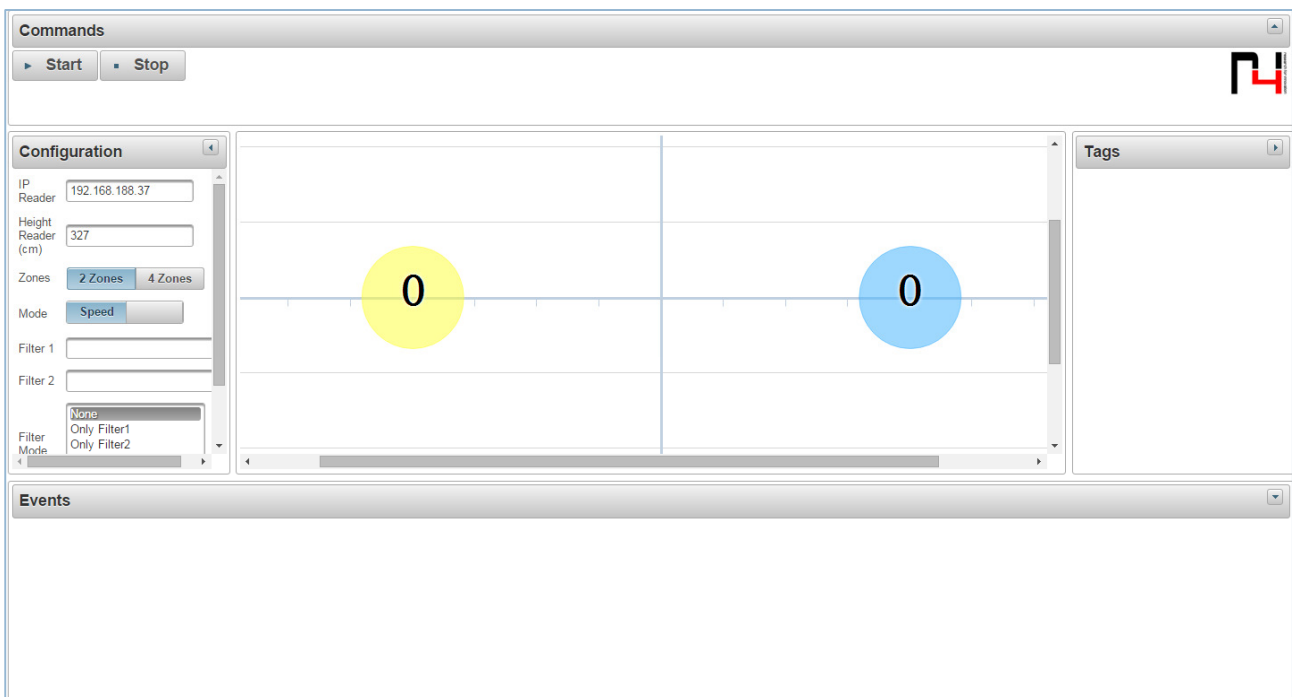
Below the screen that appears:

FIGURE 2: XZONE WEB INTERFACE

By default, the *Configuration*, *Tags* and *Events* components are hidden while *Commands* is visible.

Analyze the specific components of the web interface.

COMMANDS

The *Start* and *Stop* buttons control the xArray respectively for the start of the readings and the suspension thereof.

Once the reader started, the zones will be populated with the number of tags read.

CONFIGURATION

In Configuration section, it is possible to set the *IP address* of the reader and the *height* at which is positioned: these two information are basic for the correct functioning of the application.

As indicated by the name itself, the system is based on the grouping of tags in clearly defined areas.

The number of zones that can be used is fixed and can vary only between 2 and 4.
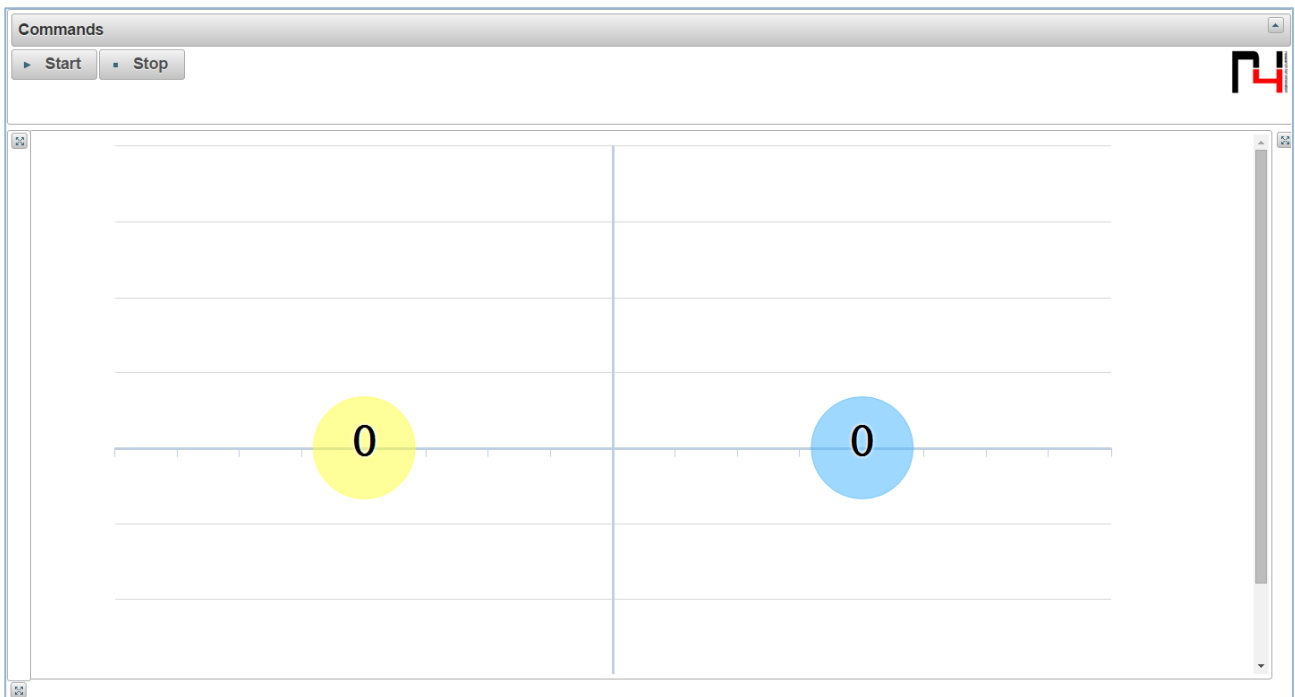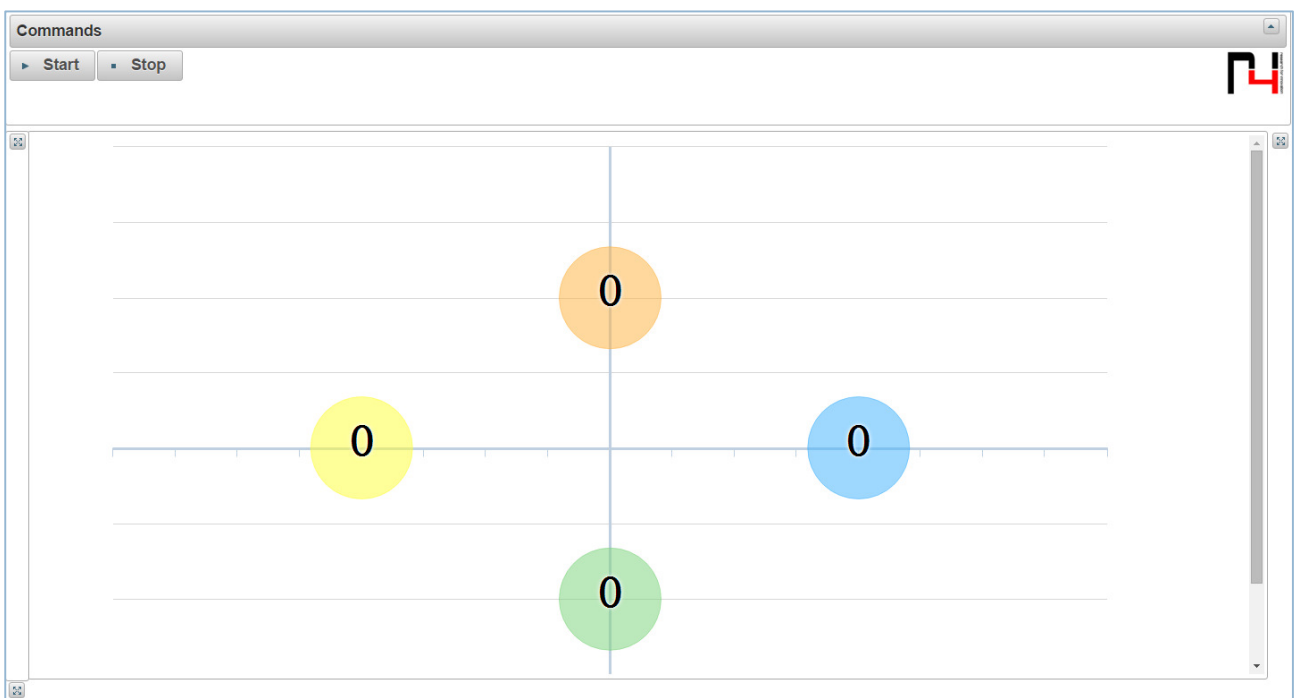
FIGURE 3: 2 ZONES

FIGURE 4: 4 ZONES

As for the mode in which the application needs to operate, you can choose whether you want greater accuracy (Accuracy) of the identification tags or if you want to favor speed (Speed) and get the result as soon as possible positioning tags compared to selected areas.

You can also define filters on EPC tags, in particular, you can define two, and decide how these two filters should work:

- None;
- OnlyFilter1;
- OnlyFilter2;
- Filter1AndFilter2;
- Filter1OrFilter2.

After defining the settings, update the configuration of the reader using the *Submit* button.

FIGURE 5: CONFIGURATOR

TAGS

This section lists the EPC tags read as on the selected zone.

To select the area you just make a click on the corresponding ball.

EVENTS

Similarly to what happens in TAGS, in this section we lists events detected during read cycles. The generated events are:

- The tag has been read;
- The tag has moved from x area to y area.