

USER'S GUIDE

Table of Contents

1. Overview	1
2. Installation	2
3. Verifying that Plugin is installed/enabled	2
4. Reading Techniques	3
5. Imaging	3
6. Appendix 1. Quick Reference Chart.....	4
7. Appendix 2. Localization: “Cyrillic – Russian” Set-up.	5

1. Overview

IcEveryCode™ DPM Decoder (Plugin) is a software program based on Data Matrix decoding library, developed by 2D Technology Group specifically for DPM (Direct Part Marking), including Dot Peen, applications.

This Guide provides information about using the 2DTG's **icEveryCode™** DPM Decoder/Plugin for **Honeywell Xenon 1900/1902, Vuquest3310g, N5600 scan engine and Granit 1910i/1911i** area images, integrated by means of **TotalFreedom™** Plugin Software Development Kit.

Since the operational procedures for these platforms are identical, the description is combined into one manual and all devices (jointly or separately) may be referenced further in the text as an **Imager**. The references to the **Honeywell Xenon 1900/1902 User's Guide** shall mean that there are similar references to the **Vuquest™ 3310g Area-Imaging Scanner User's Guide**, etc. and they are not mentioned only for conciseness.

The DPM Decoder is installed as an add-on feature specifically for DPM applications though it can be used for “reading” regular Data Matrix symbols as well, of course. It can be temporarily turned OFF if necessary as it is described below.

Since it's the add-on feature, most of the recommendations and settings, described in the “**Xenon™ 1900/1902 User's Guide**”, etc. are fully applied. Specific features related to the Plugin and Decoder operation are described in this Guide.

IcEveryCode™ DPM Multi-Platform Plugin

This Guide deals only with EZConfig-scanning utility versions 4.0 and onward. These versions have been updated to be browser-based and improved to provide both an intuitive interface and enhanced efficiency.

Previous release of this Guide (for EZConfig-scanning utility versions 3.5.9 and lower) is available in the Attachment section of the [DPM Plugin page](#).

2. Installation

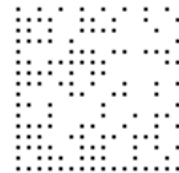
If Plugin is purchased together with the Area Imager, it comes as pre-installed add-on software. No further installation is required for its operation.

If it is purchased without the Imager, on-site installation is required. It's an easy procedure that takes only few minutes. The procedure is described in the "Plugin Installation Instructions" and "Quick Start Guide" located on the product page: <http://www.2dtg.com/content/dpm-plugin-honeywell-handheld>.

In any event it is recommended (required in the second case) to install "EZConfig Scanning" Utility, which simplifies scanner configuration by incorporating an easy-to-use graphical user interface (GUI) that saves time and increases productivity. It is particularly useful in programming functions, that can be performed on a Honeywell scanning device connected to a PC COM port, and viewing captured images.

3. Verifying that Plugin is installed/enabled

If, at any time, you need to make sure the plugin is enabled (without checking plugin status in the EZConfig utility) try to read Data Matrix symbols below. If you can decode these symbols – plugin is installed and running correctly.



Operational Plugin:			Trial/Demo Plugin:		
2D Technology Group	Test1	Data Matrix xxx	2D Technol*****	Tes**	Data Mat*****

4. Reading Techniques

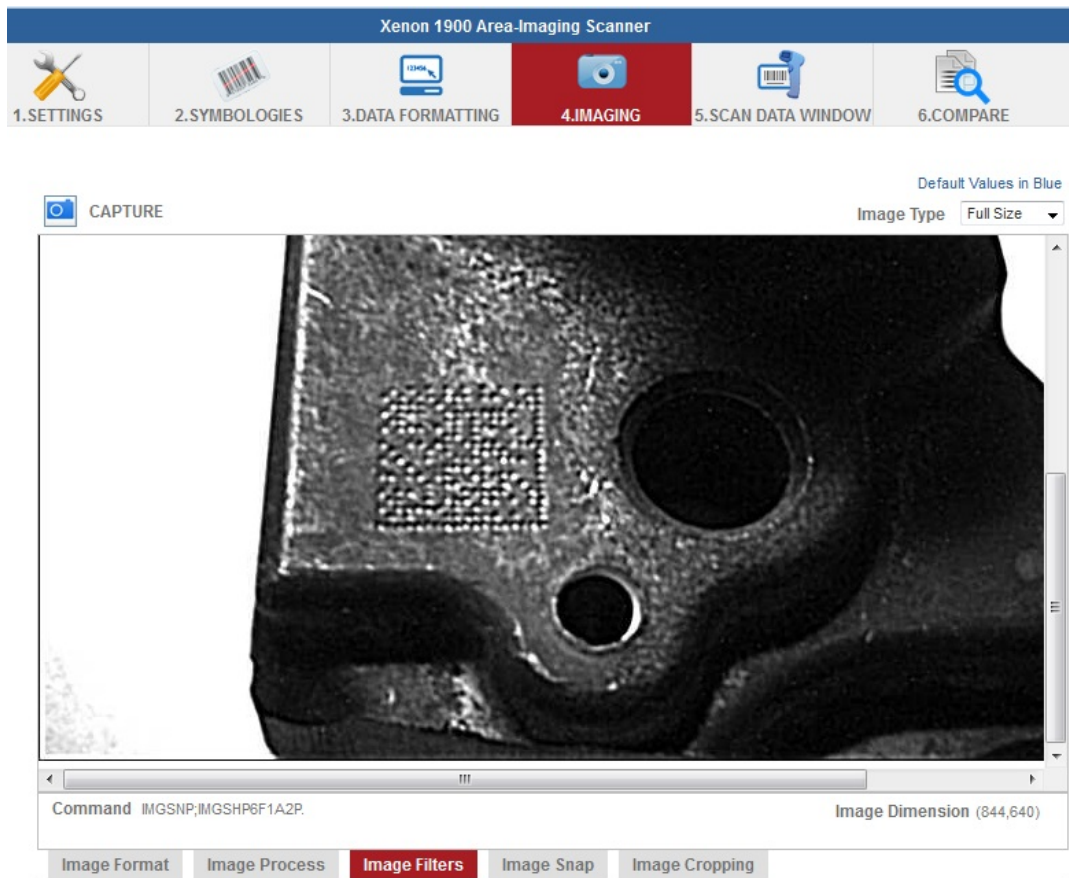
Follow the general guideline described in the Reading Techniques section of the “**Xenon™ 1900/1902 User’s Guide**” (p. 1-8), “**Vuquest™ 3310g Area-Imaging Scanner User’s Guide**”, etc.

For DPM marks - hold the Imager such that its front surface is tilted to the mark surface, and the mark is centered. Depending upon the type of the mark the tilt may vary within a 30-50 degree range (Xenon1900/1902, Granit 1910i/1911i) or 10-20 degree (Vuquest3310g).

Reading Distance depends on imager model – HD, SR or ER. For DPM reading HD model is normally the best choice. The distance is ranging from 0.5 to 6 inches for most samples (average ~ 3.5 inch), approximately. So, the optimal distance for most readings would be ~ 2-4 inches. Depending upon the mark and lighting conditions maximum distance might be as great as ~ 8 inches.

5. Imaging

Imaging is particularly useful for DPM decoding if the scanner is connected to **EZConfig Scanning**. It allows you to control visually the quality of the captured image by changing reading distance, angle, and lighting (See **Image Capture Settings** article of the **EZConfig** on-line Help for more detail).



IcEveryCode™ DPM Multi-Platform Plugin

6. Appendix 1. Quick Reference Chart.

This Appendix provides a list of the useful commands/command codes related to Plugin operation.

Disable System Data Matrix Decoder



IDMENA0.

Enable System Data Matrix Decoder



IDMENA1.

Disable System Decoder (ALL)



ALLENA0.

Enable System Decoder (ALL)



ALLENA1.

Enable Plugin



990009C72PLG1.**

Disable Plugin*



990009C72PLG0.**

USB – Keyboard (HID Mode)



TRMUSB124.

USB Serial Emulation



TRMUSB130.

* Temporally switches Plugin “OFF” (if scanner is power-cycled or reseted, the default Plugin state (“ON”) will be restored).

** For Xenon 1902 – if using Command Center of the **EZConfig Scanning** instead of command codes - the syntax of the commands should be as follows:

:*:990009C72PLG1. and **:*:990009C72PLG0.**

7. Appendix 2. Localization: “Cyrillic – Russian” Set-up.

Default factory settings allow only for English alphanumeric characters to be decoded when reading Data Matrix symbols.

- I. To enable Imager to read “Cyrillic – Russian” characters you should do the following:
1. Remove Plugin and restore factory default settings following the instructions in Section 6.2 and/or 8.3 of the “[Plugin Installation Instructions](#)”.
 2. Scan the AZTEC set-up barcode located in the upper-right corner of the next page.

This will enable Cyrillic configuration and switch imager into the USB-Keyboard (HID) Mode.

- II. To verify that all settings are correct:
3. Open any MS Office application, WordPad, Notepad, etc. (make sure that cursor is in the opened window).
 4. Switch keyboard to Cyrillic configuration.
 5. Read Data Matrix symbol on the next page - the decode output should coincide with the text below:


```
!!77!!!3!1!557.64!3!0!186434!!ПЕТРОВСКАЯ, д.3, ВАЛДАЙ!ЯКОБЕЦ МАРИНА  
ВЛАДИМИРОВНА!!!!!!!!!!!!106000!!!ОАО ОТП  
Банк!!0970!044525311!47422810500005000001!30101810000000000311!ОПЕРУ МГТУ Банка  
России!408178104001078897930005!!!!0
```

Important:

1. “Cyrillic – Russian” configuration Set-Up should be done prior to installing Plugin.
2. Keyboard in the receiving window should be switched to Cyrillic configuration.
3. EZConfig does not supports Cyrillic configuration, so this option can be used only in HID Mode.

- III. Re-Install plugin following “[Plugin Installation Instructions](#)”.


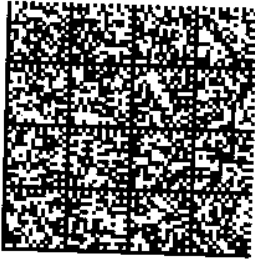
SET-UP for Cyrillic - Russian

Basic Cyrillic - Russian Configuration	SET-UP BARCODE
<p> DEFAULT TERMID124 KBDCTY67 KBDALT1 IDMDCP11 AZTDCP11 QRCDP07 PDFDCP11 VSUFCR KBDTMD1 </p> <p>NOTE: It's often required to have the NumLock key on the keyboard ON!</p>	 <p>Cyrillic - Russian Set-Up</p>

To distinguish between various Russian keyboards, best look in which row the '/' (forward slash) is located.

- Upper row - keyboard type is 68 typewriter.
- Second row - keyboard type is 67 (Windows XP).
- Third row - keyboard type is 26.



In the above Set-up the most commonly used keyboard type 67 is used, which can be altered by scanning the applicable keyboard after the set-up code has been scanned. (refer to product User Guide for details)

AZTEC encoded in Cyrillic (Code Page 1251)	Data Matrix encoded in Cyrillic (Code Page 1251)
	

OUTPUT
<p>AZTEC: !!77!!!3!1!1709.00!3!0!1400!2!!ул.Свободная д.5 корп.1 кв.54 г.Люберцы!Иванов Иван Иванович!!!!!!106000!!!ООО «ХКФ Банк»!0093!044585216!4742281031000000059!30101810400000000216!»Банк Москвы!»!135800241950034110310548!!!!0</p> <p>DATA MATRIX: !!77!!!3!1!557.64!3!0!186434!!ПЕТРОВСКАЯ, д.3, ВАЛДАЙ!ЯКОБЕЦ МАРИНА ВЛАДИМИРОВНА!!!!!!106000!!!ОАО ОТП Банк!!0970!044525311!47422810500005000001!30101810000000000311!ОПЕРУ МГТУ Банка России!408178104001078897930005!!!!0</p>

This is an entry from the Honeywell Scanning & Mobility Knowledge base. As part of our ongoing effort to improve and enhance the quality of the solutions, we ask you to inform us if you feel that we can improve on the content of this solution.

Support Portal: www.hsmsupportportal.com - Web form: www.hsmcontactsupport.com
 Knowledge Base: www.hsmknowledgebase.com - Phone: www.honeywellaidc.com/locations

PDF417 encoded in Cyrillic (Code Page 1251)	QR-Code encoded in Cyrillic (Code Page UTF-8)
	 <p data-bbox="844 472 1445 556">Although in theory QR codes could be encoded in CP 1251 as well, we do see QR for Russia usually be encoded in UTF-8</p>

OUTPUT
<p data-bbox="170 661 267 682">PDF417:</p> <p data-bbox="170 693 1445 787">AWSпециальные предложения для клиентов старшего возраста представляет Почта России на II Международном Форуме-выставке «50 ПЛЮС. Все плюсы зрелого возраста», который открылся 12 декабря в Экспоцентре.</p>
<p data-bbox="170 861 284 882">QR-Code:</p> <p data-bbox="170 892 300 913">Кириллица</p>

This is an entry from the Honeywell Scanning & Mobility Knowledge base. As part of our ongoing effort to improve and enhance the quality of the solutions, we ask you to inform us if you feel that we can improve on the content of this solution.

Support Portal: www.hsmsupportportal.com - Web form: www.hsmcontactsupport.com
Knowledge Base: www.hsmknowledgebase.com - Phone: www.honeywellaidc.com/locations