ScanNprint Silver

for the

Paxar Pathfinder Ultra 6039

User Manual

Contents

Introduction

This is the User guide for the In-House Computing ScanNprint Silver application for the Paxar Ultra 6039 barcode scanner and printer.

In this document you will find details of how to configure the ScanNprint application to meet the needs of your barcode scanning and label printing application.

The ScanNprint application is a user configurable application which means that you need to set up the application to use your own data, and to print the labels that you need.

The Paxar Ultra uses Paxar's MCPLII label format language, and the ScanNprint application gives you full control of the device via the MPCL language. This document does not attempt to describe PCPL – refer to Paxar's "Packet Reference Manual".

You will find descriptions of the ScanNprint application configuration, and details of the required Lookup file format, and output Log file format here.

Configuration of the application means that it is suitable for a wide variety of "Scanning and Labelling" requirements.

The user-configurable aspects of the application are:

- Barcode symbologies
- PLU fields and size
- Printer Supply sizes
- Printed Label Formats
- Functionality

By providing a user controlled configuration mechanism the application allows for a wide variety of input Code files, or PLU files to be handled. The configuration options allow for three independent fields from the input file to be used in Printed formats, and the specification, usage and printing of this information is fully controlled by the user.

Functionality:

- Single print, or reprint on trigger
- Use of PLU price and Description fields, if configured
- Optional logging of scanned codes

Applications and Uses:

- Item Labelling
- Shelf Edge Labelling
- Price Mark-down

The application is supplied as a single installable Win CE CAB file.

Future versions

The ScanNprint Silver application is the simplest member of a family of products design to fulfil a ranged of scanning and printing requirements. Future versions will include:

- Printing of more than a single label format, under user control
- Price check functionality permits comparison against user entered prices with enhanced logging.
- Handling of "wider" PLU files with enhanced product details and/or more details printed labels.
- Support for RF transfer of PLU and Log files

Demonstration version

The demonstration version of the ScanNprint Silver application is internally configured to only accept the EAN8 format barcode symbology. The specification of other symbologies on the application configuration file are ignored. The EAN8 symbology must be explicitly declared in the Configuration file.

The demonstration version is clearly marked on the Startup screen and the About screen.

Using the ScanNprint Application

Assuming that the ScanNprint application has been installed on your Paxar 6039¹, double click the icon on the Device's desktop.

This is the ScanNprint Icon



Your will see the Application Startup screen displayed, as shown below.

While that application initialises, the "Please Wait" message will be shown, and the initialisation details will be displayed as the 'status' message.

When initialisation is compete, the button will display "Continue".

Click the "Continue" button and the main application screen – Scan Barcode – will be displayed.



At the main Scan Barcode screen where the user scans or optionally keys the barcode.

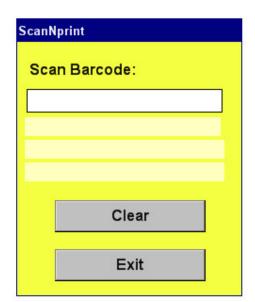
The application will search the loaded PLU files for the entered code and will print a label based on the loaded format and batch definitions.

Codes not found on file are reported as 'invalid', and if enabled, all scans are recorded in the Log text file.

The Clear key is used to easily erase an which has been entry keyed in error.

When a scanned code is found on file, the details for the found record, as described by the application's configuration file (see later) are shown on screen below the entered code.

The application will then print the defined label.



¹ See the "Installing the Application" section in the manual, if necessary

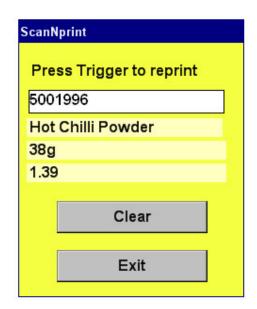
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If the Trigger-Repeat mode is enabled, after the Label has been printed, the application gives the option to print a further label².

In Trigger-repeat mode, the application waits for a further Trigger press in order to print another label. This functionality is in addition to any printing commands provided in the Format and batch file (On demand printing, or multiple quantities)

The Clear button cancels trigger-repeat and returns the screen above, ready for another code entry.

Clicking Exit will close the application.



Additional functionality can be reached by pressing the F10 key (Function then zero) at the Scan Barcode prompt.

This screen shows the logged data which has been collected (if enabled) and also provides easy access to the printer Feed and Calibrate functions³.



² This is in addition to any label count specified in the print batch file.

³ See the Paxar Ultra 6039 manual for details of the Feed and Calibrate printer functions.

Configuring the Application

The ScanNprint application uses the following four input files. They must be loaded into the device's "My Documents" folder (via ActiveSync – see later).

The Application Configuration file ScanNprint_cfg.txt

This file contains two sets of information. Firstly, the enabled and disabled functional aspects of the application, and secondly, the definition of the Lookup file fields that

will be used on the printed labels.

The Printer Format file ScanNprint_fmt.txt

The MPCL format file that defines the printed label that

will be output by the application

The Printer Batch file ScanNprint_bat.txt

The modified MPCL format batch file that will provide the

print field data for the print engine.

The Lookup file plu.txt

The Lookup file containing your data. Although referred to

as a "PLU" (Price Look Up file) there is no requirement

for the file to contain price information.

The only constraints on this file are a maximum record length of 128 characters, fixed record length, and sorted on

the "code" field.

The Application Configuration File

The ScanNprint accepts the following configuration parameters, which are entered in the Application Configuration file ScanNprint_cfg.txt.

Although they may be entered in any order, they are conceptually defined in three groups, namely, Application Control, Scanning Symbologies and PLU definition.

The Parameters are not case sensitive. The Parameter values are generally "ON" to enable and "OFF" to disable.

Application Control

Padding

Title Provides a text string that is used as the title for the Main

Scan Barcode screen.

e.g. TITLE = My Company

Logging If set to "ON", the application will record all the valid

entered codes in the file ScanNprint_log.txt in the device's My Documents folder. Each record in the file is time stamped, and if the file is removed from the device, it

will be recreated by the application if necessary.

Errorstyle Determines if Error dialogues are used and if they require

manual acknowledgement, or will close after 5 second.

SOUND No dialogue is displayed, but a sound is

issued.

MESSAGE The Error Message is displayed, and the

Dialogue closes after 5 seconds

ACK The Error Message is displayed and the user

must press <Enter> or click the OK button

to close the dialogue.

TriggerReprint If Enabled, after each label Print, the user is invited to

reprint a further label by pulling the Ultra's trigger.

If this option is used, the Clear button bust be used to

remove the 'current' code prior to entry of a new code.

Causes ScanNprint Silver to automatically 'pad' short

scanned or keyed codes to the PLUCode Length (See PLU

Definition below. Padding may be either:

LEFT, ZERO '0' (Zeroes) are inserted before the code

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LEFT, SPACE Spaces are added before the code

RIGHT, ZERO Zeroes are added after the code

RIGHT, SPACE Spaces are added after the code

For the purposes of searching the PLU file, ScanNprint Silver considers 'spaces' to be of a lower value than numerals. i.e. the code "12345" right/space padded to 8 characters, should be placed before the code "12345678" in the PLU file.

Normally, the "LEFT, ZERO" option would be used for numeric codes, and the "RIGHT, SPACE" option would be used for alphanumeric codes.

Scanning Symbologies

The following barcode Symbologies are recognised by the ScanNprint Silver application. All Symbologies are enabled with **"ON"** and disabled with **"OFF"**.

EAN8
EAN13
UPCA
CODE128
CODE39
EAN128

The default for all symbologies of "OFF".

PLU Definition

PLUField1

The PLU definition parameters define the precise location of the entered Code and optional fields within the PLU file. All field offset begin at character 1 within the PLU file. The field may conceptually overlap, but must not exceed the maximum record length of 128 characters.

PLUCode

Offset, Length

Character Offset and length of the code field searched for within the PLU fie. Note the PLU file must be sorted on ascending order of the code field.

Offset, Length

Character Offset and length of Field 1 extracted from the

PLU fie.

Not used if length is zero

PLUField2 Offset, Length

Character Offset and length of Field 2 extracted from the

PLU fie.

Not used if length is zero

PLUField3 Offset, Length

Character Offset and length of Field 3 extracted from the

PLU fie.

Not used if length is zero

Example use

When the ScanNprint Silver application find the entered Code in the PLU file, it extracts the defined fields from the 'current' record in the PLU file.

The extracted fields, together with the code are then substituted into the ScanNprint_bat.txt batch file which is then passed to the printer for printing.

The layout and usage of the code and field in the printed label is entirely under user control

For example,

This simple example ScanNprint configuration file specifies that EAN13 barcodes may be scanned (only) and that character positions 1 to 13 inclusive represent the code with the user's PLU file.

EAN13 = ON
PLUCode = 1,13

PLUField1 = 14,22

Furthermore, it defines a 22 character field that starts in character position 14.

The MPCL Format Configuration file defines 101 mm by 50 mm label with a single EAN13 barcode field and a 22 character text field.

ScanNprint_fmt.txt:

ScanNprint_cfg.txt:

```
{F,1,A,F,M,1010,500,"Fmt1"|
B,1,13,F,900,100,7,4,200,1,L,3|
T,2,22,V,500,100,0,50,50,45,B,L,0,3,0|
}
```

The modified MPCL Batch Configuration file links the code and field extracted from the PLU to the MPLC fields define in the format file. ScanNprint_bat.txt:

```
2,$FIELD1$ |
```

This trivial PLU file contains the two fields defined above.

Note, for the purposes of this document, the '~' character denotes spaces in the plu file.

Plu.txt:

4006381109086Fineliner pens~~~~~~ 4006381333627Stabilo Marker~~~~~ 4006381134910Swing Cool Highlighter

Appendix 1 – Data Transfer

The Four Data files used by the application – The PLU file, the Application Configuration file and the Printer Format and Batch files are transferred between a Host PC and the Paxar Ultra using Microsoft's ActiveSync (v4.1 or later should be used)

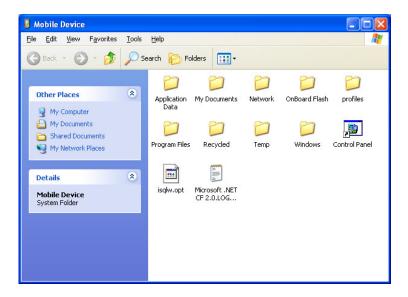
The Datafiles should be copied into the "My Documents" folder of the Ultra.

Additionally, the Log file created by ScanNprint may be copied from the "My Documents" folder. (If the Log file is completely removed, it will re-created if necessary by the application)

Provided ActiveSync has been installed correctly, connecting the Pathfinder Ultra to a host PC will cause Active Sync to activate:



Clicking the Explore button will open a windows showing the contents of "Mobile Device" (Analogous to "My Computer")



The screen shot above shows the "My Documents" folder where the data files will be stored. The application and it's associated support files will be found in a sub-folder of the "Program Files" folder, assuming the default options were selected when the application was installed.

On the Tools / Options / Sync Option menu of the Main ActiveSync window there is an option to enable the automatic synchronisation of the Ultra's clock and the PC clock. Also ensure that the Ultra's time zone is set correctly (Start button / Settings / Control Panel / Date & Time / Time zone)

Appendix 2 – Installation and Registration

Installation

The application is supplied as a single installable Win CE Cab file for use on the Paxar Ultra 6039.

Connect the Paxar Ultra to your host PC using ActiveSync⁴. Use ActiveSync 4.1 or higher.

Copy the Cab file to the device. The device desktop would be a convenient location.

On the device, double click the copied cab file and when asked, accept the default answers to the installation prompts. The cab file will automatically be removed.

For ease of use, navigate to the "My Device \ Program files \ ScanNprintSilver" folder, select the ScanNprint application, then use the "File" menu "Send To \ Desktop as Shortcut" command to place a shortcut on the device desktop. The Shortcut may be renamed on the desktop to improve readability if desired.

Should you wish to remove the application from the devoice, use the Control panel – remove program option.

Compact Framework

For older devices that do not have Microsoft's .NET Compact Framework v2.0 installed, you will also need to repeat the installation process with the CE.NET CF.20 Cab file (NETCFv2.wce5.armv4i.CAB - this file may be freely downloaded from Microsoft's Download Centre)

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⁴ Refer to your Paxar Ultra documentation to achieve this.

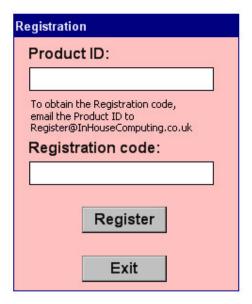
Product Registration

After installation, on first use, the ScanNprintSilver application will show a product registration screen, as shown below

When shown, this screen will have a seven character Product ID in the Product ID text box. (This will vary for each installation).

Follow the on-screen instructions and email the displayed product ID in it entirety to Register@InHouseComputing.co.uk and once purchase details have been confirmed, a Registration Code will be returned by email. This code should be entered into the Registration code text box, and the Register button clicked. Assuming that the Registration code is valid, the application will continue, and this screen will not be displayed again.

Clicking the Exit button will cause the application to terminate without attempting to register then product.



Document History

Version	Date	Comments
v1.00	17/02/07	Original document created.
v1.01	12/03/07	Added Registration Appendix
v1.02	12/04/07	Added Padding configuration option