

V-Scan

(VP5002)

V-scan User Guide

Author	:	Frank Knol
Last modification	:	A.Schreurs
Date	:	19/01/2007 10:59:00
File name	:	V-Scan User Guide.doc

Table of Contents:

Paragraphs :	Page :
1 Version control	3
2 Introduction	4
2.1 References	4
3 V-Scan description	5
3.1 Screen & buttons	5
3.1.1 Screen description	5
3.1.2 Button description	5
3.2 Start up	5
3.2.1 Power up the V-Scan	5
3.2.2 Start scanning	5
3.3 Basic menu structure	5
3.3.1 Scan Only	5
3.3.2 Groups	6
3.3.3 Templates	6
3.3.3.1 Compose templates menu	6
3.3.4 Settings	7
3.3.4.1 Scan settings	7
3.3.4.2 System settings	7
3.3.5 Record Display	7
3.3.5.1 Changing a tag number of a record	7
3.3.5.2 Searching a record	7
3.3.5.3 Scrolling through records	7
4 PC application description	8
4.1 Installing the PC application	8
4.2 Starting the PC application	8
5 Scenario description	9
5.1 Scenario 1: Scanning tags	9
5.2 Scenario 2: Scanning tags from database on PC	9

Figures and Tables:

Tables :	Page :
Table 1: Modification overview	3
Table 2: V-Scan types	6
Table 3: User types	7

Figures :	Page :
Figure 1: V-Scan screen	5

1 Version control

<i>Edition</i>	<i>Date</i>	<i>Description</i>	<i>Author</i>
0.1	18/07/2006	Initial revision	F. Knol
0.2	28/07/2006	Added description for the PC application	F. Knol
0.3	07/11/2006	Updated to the latest modifications of the V-scan software	A.Schreurs
0.4	18/01/2007	Updated to the latest modifications of the V-scan software	A.Schreurs

Table 1: Modification overview

2 Introduction

This document will briefly describe the V-Scan. It provides descriptions of the screen, buttons and menus. Also, a few scenarios are given on how to use the V-Scan.

2.1 References

This device complies with Part 15 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 received, including interference that may cause undesired operations.

3 V-Scan description

3.1 Screen & buttons

3.1.1 Screen description



Figure 1: V-Scan screen

The top line is the header, displaying the name of the current screen and a battery icon (not displayed in the picture). The bottom line is the footer, displaying the status of the back button (on the left, disabled in the picture) and the ok button (on the right, enabled in the picture) The center of the screen displays the menu or record data.

3.1.2 Button description

- Scan button: Switch on the V-Scan (long-press) and start scanning.
- Ok button: Select/Accept. The bottom line of the display shows what the current action is of the ok button. The right navigation icon indicates whether the Ok button is enabled or not. In some menus, the ok button can be long-pressed to activate a sub-menu.
- Back button: Back/Decline. The left navigation icon indicates whether the back button is enabled or not. When the back button is long-pressed, the V-Scan will return to the main screen. If the main screen is displayed, the V-Scan will switch off.
- Up/Down buttons: With these buttons can the selection within a menu be altered.
- Numeric (0..9): Editing of a numeric value.

3.2 Start up

3.2.1 Power up the V-Scan

To switch the V-Scan on, press the scan button. Depending on the “start at last screen” setting the last screen before automatic power down will be displayed, or the main screen.

3.2.2 Start scanning

To start scanning, press the Scan key. Scanning will continue for:

- as long as the scan key is pressed until no tag has scanned.
- some time after release of the scan key (can be adjusted, see settings below), until no tag has scanned.

When a tag is scanned, a record will be created (and displayed) based on the current active template (see templates below). In the active template is described which information is stored for each record. Also, when a record is created, the record will be assigned to the current active group (or group 0 when no group is active).

3.3 Basic menu structure

When in the main screen the ok button is pressed, the main menu will display. In this menu, the following options can be chosen:

- Scan only: Scanning of tags only, without storing any data
- Groups: Management of groups (adding, deleting, renaming and viewing of groups)
- Templates: Management of groups (adding, deleting, viewing of templates)
- Settings: Enter the settings menu

3.3.1 Scan Only

Scanning of tags, without storing data of the tag scanned. Here the last four scanned tag numbers are displayed

3.3.2 Groups

In the groups menu, all created groups are displayed. When ok is pressed on a selected group, the first record of that group is displayed

When a numeric key is pressed, the group number can be adjusted (which will also change all records within the group). When in this menu the ok button is long-pressed, the group options are displayed:

- Add group Add a new group
- Delete group Delete the current selected group. This will also delete all the records in this group
- Set active Set the current selected group as active. All the new scanned tags will be assigned to this group
- Change group nr Changes the group nr and all of the records within this group
- Delete all Deletes all groups currently in the V-Scan. This will also delete all of the records

3.3.3 Templates

In the templates menu, all created templates are displayed. When the ok button is pressed, the columns that will be used when creating a record are displayed.

When in this menu the ok button is long-pressed, the template options are displayed:

- Add template: Enter the compose template menu (see below)
- Delete template: Delete template. Can only be done when this is not the active template. When this is the active template, delete can only be done when there are no records
- Set Active: Set the current selected template as active. Can only be done when there are no records in the database
- Delete all Deletes all of the templates in the V-Scan. Also all groups and records will be deleted.

3.3.3.1 Compose templates menu

When creating a template, the user can choose out of two types of data:

- V-Scan types: All of the data types within this group are filled in by the V-Scan at the moment a record is created (for example: record number, scan date, tag number) VScan types can only appear once in the list.
- User types: These are generic types which can be filled in and edited by the user (for example: numeric values, boolean values, text)

The order in which the types are added, is also the order in which the data will appear in the record. The first selected type will appear in the header of the screen. Some of the items are mandatory, but when these aren't added by the user, the V-Scan will add them (at the end).

Name	Displayed as	Description
Record number	Record nr	The unique number of the record within the entire database
Record number per group	Recnr group	The unique number of the record within the group
Scan date	Scan date	The last date on which the tag was scanned ¹
Scan time	Scan time	The last time in which the tag was scanned ¹
Tag number	Tag nr	Scanned tag number
Classic activity info	Classic act.	Classic activity information value (1..16368) ¹
2 Hours information	2h info	Period Indicator ¹
2 Hours activity value (1..14)	Act1..Act14	2 Hours activity value (already multiplied with the multiplier value) ¹

Table 2: V-Scan types

Name	Displayed as	Description
Group number	Group nr	The number of the group this record is in
Numeric	Numericx ²	General numeric value (0..65535)
Boolean	Booleanx	General boolean value (true/false)
Date	Datex ²	Date value (user editable)
Time	Timex ²	Time value (user editable)

¹ When a tag is scanned which already exists in the database on the V-Scan, this field will be updated to the latest values

² The x is replaced with a sequence number (for example: Numeric1, Numeric2, etc)

Float	Floatx ²	General float value (10 characters)
String5	String5x ²	General text value (5 characters)
String10	String10x ²	General text value (10 characters)
String20	String20x ²	General text value (20 characters)

Table 3: User types

3.3.4 Settings

In the settings menu, the scan settings and system settings can be adjusted. Also the status of the memory (how many records are currently stored and can still be stored) and the battery can be displayed here.

3.3.4.1 Scan settings

- Language: Select the language of the menus
- Auto create: Auto create a new record or ask the user for confirmation
- Save screen: Store the displayed screen when switching off the V-Scan. The next time the V-Scan is switched on, this screen is displayed
- Scan time: The time the V-Scan keeps scanning for tags after the scan button is released

3.3.4.2 System settings

- Bluetooth: Select if Bluetooth is switched on
- Sound on: Select whether sound is enabled/disabled when scanning tags
- Date: Set the system date
- Time: Set the system time
- Contrast: Set the contrast level of the display.
- Date format: Select how to display the date (European or American date format)

3.3.5 Record Display

The record data is displayed as one field per line. On the left side of the line is the description of the field, and on the right side the current value for this field. When the selected field is a user type, the user can edit the value (except when the user type is a textual type, because the V-Scan does not have a way to enter text). When entering floating point numbers, the up-key can be used for setting the minus sign (when no characters are entered yet) and the decimal symbol.

3.3.5.1 Changing a tag number of a record

A tag number cannot be changed by entering a new value with the numeric keys (as this is a V-Scan type, see compose template). In order to change the tag number of a record, search or scroll to the record of which the tag number must be changed, and press the scan key. When the scanned tag is a new tag number, the V-Scan will ask if the current tag number must be overwritten. This will only be the case if the “Auto Create” setting is switched off (otherwise a new record is created instead of overwriting the current).

3.3.5.2 Searching a record

The first field of a record (the type added first when the template was composed) can be used to search a record. To search, select the header of the screen by long-pressing the up key when a record is displayed. Now the value to search on can be entered with the numeric keys. When a record is found with the entered value, this record will be displayed.

3.3.5.3 Scrolling through records

To scroll through the records, select the header of the screen by long-pressing the up key when a record is displayed. The ok and back buttons can be used to scroll forward/backward through the records. The navigation icons in the footer of the screen will indicate this also.

4 PC application description

4.1 Installing the PC application

Run Setup.exe from the installation cd. Make sure that the V-Scan is not connected before running the installation. Follow the steps of the installation wizard

4.2 Starting the PC application

Before starting the application, make sure that the V-Scan is connected to the PC (in case of USB) and that the V-Scan is switched on.

To start the PC application, choose "V-Scan Application" from the desktop, start menu or application folder. The application will detect and connect to the V-Scan automatically.

When the application is started, the connection status is checked, and icons are displayed.

5 Scenario description

5.1 Scenario 1: Scanning tags

Power-up the V-Scan by press the scan key. In order to scan tags, a template has to be created and selected. Creating a template can be done by going to the templates menu and long-press the ok button. The template options menu will appear, and choose add template. The compose template menu will appear, where the types can be selected which will be the fields of a record. The first selected type will be the header of the record when displayed, and will always be visible (whereas the rest of the fields can scroll off the screen). When all types needed are added, return to the templates menu using the back button. When leaving the compose templates menu, the template can be saved and set to active (when the template is not set to active, this can be done by selecting a template and long-pressing the ok button and select "set active").

Optionally, the records can be assigned to a group while scanning. To do so, create and select a group. To create a group, go to the groups menu and long-press the ok button. The group options menu will appear, select "add group" here. The group is created with a default number, to change this number the numeric keys can be used. The first group created will be set to active. To change this go to the group options menu and select set active.

Now the V-Scan is ready to scan tags. Press the scan key to start scanning. When a tag is scanned, a record will be created and displayed.

5.2 Scenario 2: Scanning tags from database on PC

This scenario explains how to update a database stored on the pc using the V-Scan. Pre-condition is that the database is available as an excel file.

Connect the V-Scan to the PC (in case of USB) and power-up the V-Scan. Start the PC application through selecting "VScan application" in the start menu, on the desktop or in the application folder. The application will detect and connect to the V-Scan at start-up. Select the excel file and upload the records to the V-Scan.

Now the V-Scan can be disconnected from the application and used for scanning. When a tag is scanned the record with that tag number is searched in the database. When record is found all information will be displayed for the scanned tag (otherwise a new record is created). The values can be adapted by the user.

When scanning has finished, reconnect the V-Scan to the application as before, and get the data from the V-Scan. The same database is displayed with the changed data. To store the data, choose a file before transferring the data.