Zebra Scanners

DS457, DS5502, DS9208 and DS9308

Installation Guide

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verifone

Zebra Scanners DS457, DS9208 and DS9308 Installation Guide

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Revision History

Date	Description
June 9, 2017	Initial Release
June 12, 2017	Updated Installation section.
August 8, 2017	Added scanner codes for DS9208.
November 4, 2021	Added volume adjustment, troubleshooting chart, and a note with manufacturer website.
February 01, 2025	Brand changes, UI Changes and updated with content for DS457 and DS9308.
March 10, 2025	Updated with review comments
April 21, 2025	Updated with final review comments
August 20, 2025	Added DS5502 scanner

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Introduction

Scanner Models

The main difference between DS9208 and DS9308 is that 9308 has replaced the 9208. DS9308 is a newer model.

The DS457 is small enough to fit in the Havis SCO kit. DS5502 replaces DS457.

These instructions are only for the Zebra DS457, DS5502, DS9208, and DS9308 models.
Verifone Commander supports ANY manufacturers' serial and USB enabled models that can be configured for Verifone POS.
The configuration scan codes between manufactures are NOT interchangeable.
Customers, distributors, and vendors are directed to contact Verifone for adding support to those devices that are not currently supported.

DS9208

The DS9208 scanner is versatile in its ability to scan any 1D and 2D bar codes from printed labels to loyalty cards. The true point-and-shoot scanning allows users to quickly

assist customers. There is no need to align bar codes with this hands-free and hand-held flexible scanner.

DS9308

The DS9300 Series is the presentation scanner that fits anywhere, scans everything, and is built for all-day reliability, with a design that is built to handle everyday drops, bumps and spills to keep you up and running.

DS457

The DS457 Series delivers fast, high-volume hands-free scanning of virtually any barcode—including 1D, 2D, and direct part marks (DPM).

DS5502

The DS5502 delivers fast hands-free scanning that is ideal for both standalone and integrated kiosk applications. Fast swipe speeds, enhanced performance on mobile barcodes and a large omni-directional field of view give every user a better scanning experience. The DS5502 can capture data from driver's licenses, passports, checks and more.

Part Numbers

Scanner	Part Numbers	USB/Serial Support
DS9208	BCR414-208-01-A	Serial and USB
DS457	DS457SR	Serial and USB
DS9308	• 2356-9308-0000 • DS9308-SR00004ZCWW • DS9308-SR00004ZTWW • DS9308-SR00004ZZWW • DS9308-SR00004ZZY • DS9308-SR0000WZZWW	Serial and USB
DS5502	• DS5502 DL40004ZZNA • DS5502 LL4000WZZNA	USB

Before starting

Before starting, ensure that all necessary parts for the scanners are accounted for after taken out of the box.

Installation

To install Verifone scanners with the supplied cable, connect the cable to COM port 8 on the back of the POS for serial interface and to any USB interface for USB interface scanner.

Two scanners can be used on any given register using serial or USB interfaces. For serial Interface, COM port 8 is the default port, however COM port 1 can be used for the secondary scanner. The scanners may be moved from these default ports if necessary.

Configuration

Managed Modules in Configuration Client

Any USB port on the POS can be used to connect a USB Scanner device. After connecting a new scanner to the POS, restart the POS before configuring the scanner.

Recommendation is to have the scanner connected to the POS either during reboot or during an Auto-Upgrade process. If an existing scanner is being replaced or reconnected to the POS, the POS must be restarted. If a reconnected device was configured before, then no configuration steps described here are necessary. However, the system must be restarted.

Any combination of serial or USB scanner can be connected for primary and secondary scanner.

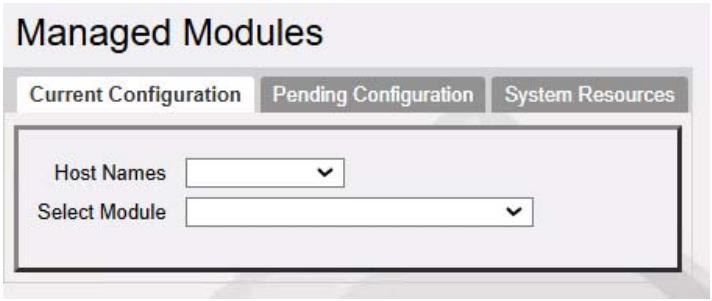
From Verifone Commander Release 56.01, a system restart is not required. All configured USB scanners will work as plug and play. Any future configuration changes requires a restart.

Scanner configuration and changes can only be made through **Configuration Client > Tools > Managed Modules**.

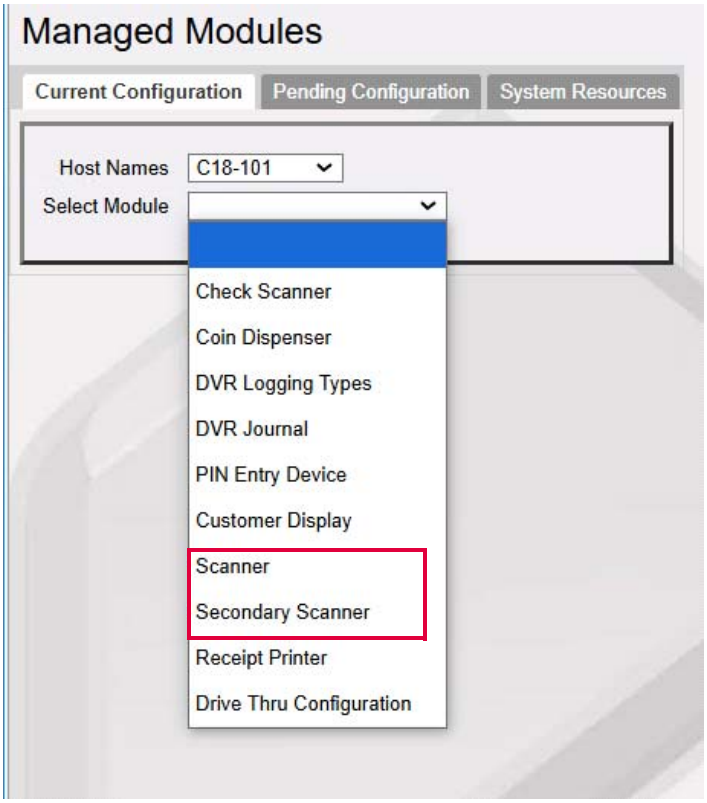
> *From Verifone Commander Release 56.00, scanner configuration changes from POS > Cashier Functions > Maintenance > Device Control and POS > Cashier Function > Maintenance > Device Configuration are no longer supported.*

Go to **Configuration Client > Tools > Managed Modules**:

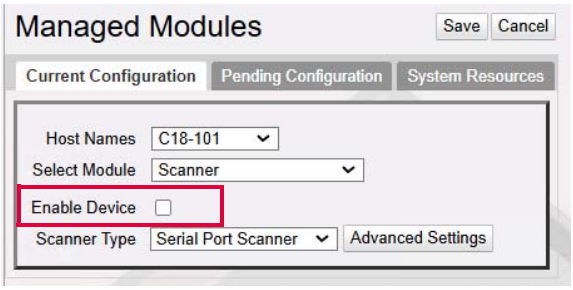
1. In Host Names, select the POS that the new/reconnected scanner is connected to.



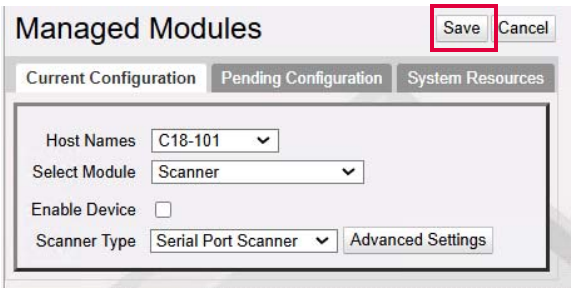
2. In Select Module, select "Scanner" or "Secondary Scanner"".



3. Deselect Enable Device.



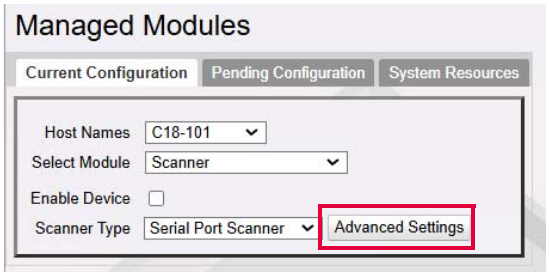
4. Click Save.



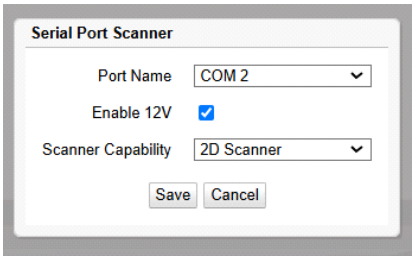
5. In Scanner Type, select the type of scanner connected to the POS. Select Serial Port Scanner for RS-232 scanners or USB Scanner for USB scanners.

Serial Port Scanner

1.) Select "Advanced Settings".



For **Serial Port Scanner** Advanced Settings, the following is displayed:



2.) Use Port Name to select the communication port to which the device is connected.

3.) Use "Enable 12V" if device needs to be powered by the POS.

4.) For Scanner Capability, select whether it is a "2D Scanner" or "Ruby Ready Scanner".

“Ruby Ready” or 1D Only Scanner Devices

- Baud Rate: 1200
- Databits: 8
- Stopbits: 1
- Parity: None
- Flowcontrol: The scanner waits for CTS to be asserted before transmitting data. If CTS is not asserted within 2 seconds, the scanner issues an error indication and discards the data. When the scanner sends the data, it asserts RTS during transmission.

2D Scanner Devices

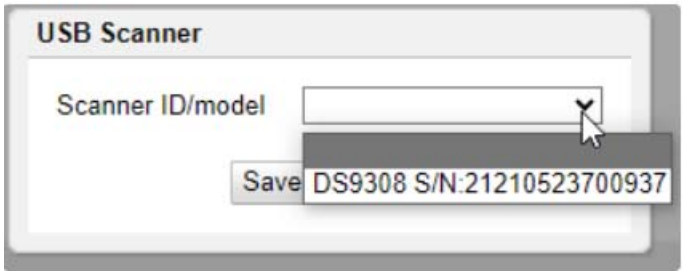
- Baud Rate: 9600
- Databits: 8
- Stopbits: 1
- Parity: None
- Flowcontrol: The scanner waits for CTS to be asserted before transmitting data. If CTS is not asserted within 2 seconds, the scanner issues an error indication and discards the data. When the scanner sends the data, it asserts RTS during transmission.

From Verifone Commander Release 54, the default scanner parameters configured are the 2D scanner communications parameters. All serial cable scanner devices, including 1D scanners, may be configured with the 2D parameters. This will eliminate having to configure the Verifone application for the 1D Ruby Ready scanner. This will not affect existing devices used by customers that upgrade to the newer application versions as the configuration of the device is propagated to the newer version.

5.) Click Save after making changes.

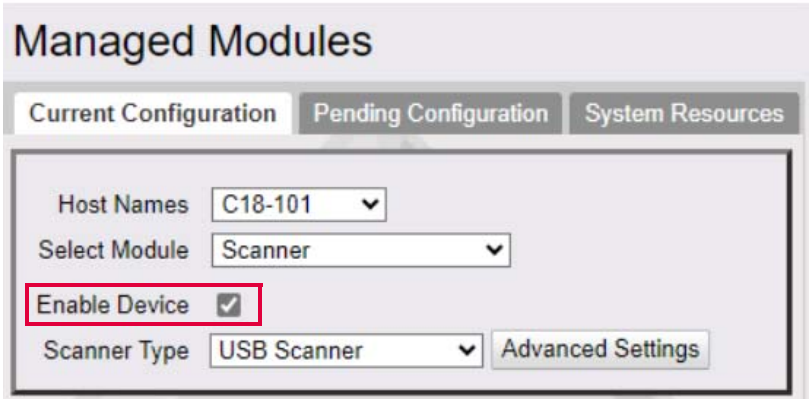
USB Scanner

For **USB Scanner** Advanced Settings, the following is displayed:



1.) Use the "ScannerID/model" drop down to select which USB scanner to use.
2.) Click Save after making changes.

6. After the above “Advanced Settings” are saved, the user is returned to the scanner module configuration display.
7. Select the “Enable Device” check box followed by the “Save” button.



Configure other scanners using the same procedure.

After all the scanner(s) have been configured and saved, the POS system must be restarted.

From Verifone Commander Release 56.01, a system restart is not required. All configured USB scanners will work as plug and play. Any future configuration changes requires a restart.

Configuration Codes for Zebra/Symbol Serial Port Scanners using RS232 Cables

The below configuration codes are only for Zebra/Symbol serial port scanners that use RS232 cable.

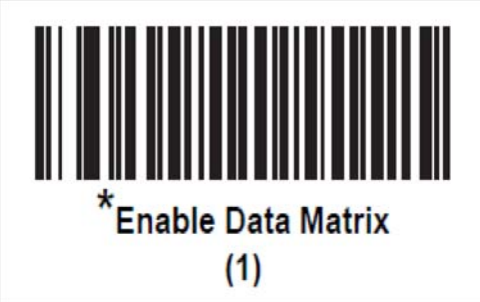
Configuring Serial Port Scanners

Scan the following codes so that the scanner can recognize all types of barcodes used in the convenience industry.

Data Matrix

A Data Matrix code is a two-dimensional barcode that enables the storage and retrieval of data in a compact grid.

Enable Data Matrix.



GS1 Data Matrix

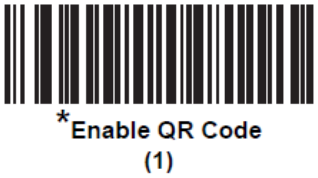
GS1 Data Matrix codes are two-dimensional barcodes, a subset of the ISO/IEC Data Matrix standard, that are used for encoding and storing large amounts of data in a compact format.

Enable GS1 Data Matrix

QR Code

A QR code, short for Quick Response code, is a two-dimensional barcode that stores information in a matrix of black and white squares. It's designed to be easily scanned by smartphones and other devices, providing quick access to digital content like URLs, text, or even small files.

Enable QR Code



GS1 QR

A GS1 QR code is a two-dimensional barcode that uses QR code technology while adhering to the GS1 standards for data structure.

To enable GS1 QR

Configuration Codes for Zebra/Symbol USB Port Scanners

Following are the titles of the configuration barcodes to be scanned by the USB port scanners.

Configuring the USB Port Scanners

Scan the following codes so that the scanner can recognize all types of barcodes used in the convenience industry.

Set Factory Defaults

Scan this bar code to restore the factory default values. This deletes any custom defaults set.

Set Factory Defaults

SNAPI

SNAPI stands for Symbol Native Application Programming Interface, and it's a software interface used for communicating with barcode scanners, particularly those from Zebra Technologies (formerly Symbol Technologies).

Symbol Native API (SNAPI) with Imaging Interface

GS1 Data Matrix

GS1 Data Matrix codes are two-dimensional barcodes, a subset of the ISO/IEC Data Matrix standard, that are used for encoding and storing large amounts of data in a compact format.

Enable GS1 Data Matrix

Enable GS1 Data Matrix
(1)

GS1 QR

A GS1 QR code is a two-dimensional barcode that uses QR code technology while adhering to the GS1 standards for data structure.

Enable GS1 QR

Enable GS1 QR
(1)

Transmit Code ID Character

A Code ID character identifies the code type of a scanned bar code. This is useful when the imager is decoding more than one code type. Select no Code ID character.

***None**
(0)

Volume Adjustment for All Scanners

To change the beeper volume, scan the Low Volume, Medium Volume, or High Volume bar codes.

Low Volume
(2)

Medium Volume
(1)

High Volume
(0)

Troubleshooting

Issue	Possible Cause	Possible Solution
Aiming Dot is not working.	Scanner has no power.	Make sure cable is connected to POS and to the Scanner.
	Incorrect cable used.	Make sure that the correct cable is being used.
	Scanner is disabled.	Check the configuration on the POS.
Aiming Dot is working but is not reading the bar code.	Bar code is unreadable.	Try another bar code of the same product.
	Aiming dot not centered on the bar code.	Center the aiming dot on the bar code.
Unable to hear the beep or is too low.	Volume is turned down.	Use the Volume Adjustment section to increase the beep volume.
USB scanner configured but scanner isn't working	The POS has not been rebooted after configuration.	Reboot the POS. Confirm the scan codes are properly configured to support USB connectivity.

Navigate to the manufacturer's website below for additional information and documentation.

https://www.zebra.com/us/en/support-downloads/scanners/general-purpose-scanners/ds9208.html

https://www.zebra.com/us/en/support-downloads/scanners/fixed-mount-scanners/ds457.html

https://www.zebra.com/us/en/support-downloads/scanners/general-purpose-scanners/ds9308.html

https://www.zebra.com/ap/en/products/scanners/fixed-mount-scanners/ds55-series/ds55.html