

# Zebra Aurora Focus™ MV/FIS Configuration Utility

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## Description

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Zebra Aurora Focus™ is a host-side application which allows for the configuration Zebra FS10, xS20, xS40 and xS70 devices.

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## Device Compatibility

Zebra Aurora Focus™ can be used to program Zebra MV/FIS devices through these programming modes:

- USB connected cable
- M12 Ethernet

Supported Devices	Supported Device FW
FS40, VS40, FS70, VS70	CAAESS00-003-R25
FS10, FS20, VS20	CAAFFS00-003-R25

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## Release Notes

This document summarizes the following software release:

Software Version Number	Release Date
V6.2.70000	February 2024

## V6.2.70000

### RELEASE DATE: FEBRUARY 2024

- Support for Liquid Lens focal distance using millimeters or inches.
- 2D Configuration barcode support to perform Autotune (Focus only)
- ZETI Command support to perform Autotune (Focus only)

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## Known Issues

- OCR performance is sometimes impacted when the ROI (Region of Interest) is close to one or more of the characters.
  - **Resolution:** Increase ROI slightly.
- When using custom Output Formatting and enabling different interfaces (i.e., TCP and Serial), and dragging the result field tag, it will sometimes appear in the other interface's output formatting.
  - **Resolution:** Click on the tag instead of dragging it.
- When connected to Aurora through USB, after long durations, rarely the device may no longer be seen.
  - **Resolution:** Unplug and re-plug the USB cable.
- Using "index" for the filename suffix when saving images to the device is currently not supported.
  - **Resolution:** Used 'DateTime' suffix
- When Tune and TRIG buttons are disabled, re-enabling after reboot is not supported.
  - **Resolution:** Reboot the device for the changes to take effect.
- If Factory Resetting the device on a USB connection, or where NTP is not available, the device real time clock may be reset.
  - **Resolution:** Open up the WebHMI screen and navigate to the license page to sync the time with the browser host or set the time manually.
- When saving images over FTP using a hostname, delays in transfer sometimes occur and the image is not transferred.
  - **Resolution:** Use IP address of FTP server instead.
- When using the Object Plus tools, it will sometimes fail due to the contrast value.
  - **Resolution:** Adjust contrast value until it succeeds, and the result is satisfactory.
- Rarely, OCR performance can be impacted depending on the character set being inspected.
  - **Resolution:** Adjustment of the size of the ROI can sometimes improve performance
- Some ZETI commands will not work with the command's shortened format.
  - **Resolution:** Use the extended version of the ZETI command
- When configuring a leader/follower barcode setup, the serial port can sometimes conflict with a job on the device.
  - **Resolution:** Disable the Serial port in Aurora Focus.
- Flaw detection tools must click 'Undo' twice to perform the undo operation.

- **Resolution:** Click undo twice
- In some cases, using many image-banks causes slight delays in processing.
  - **Resolution:** If possible, reduce number of image banks
- Device will sometimes not be discoverable in Aurora Focus when starting firmware update in HMI until after update is complete and device reboots.
  - **Resolution:** Wait until firmware update completes.
- Firmware updates will fail if memory consumption is already exceedingly high.
  - **Resolution:** Reboot the device before performing firmware update.
- Uninstalling the InstallShield does not always remove all registry entries.
  - **Resolution:** regedit and manually delete Aurora Focus folder under Computer\HKEY\_LOCAL\_MACHINE\SOFTWARE\Zebra

## Release Notes (Previous Releases)

### V6.1.70000

#### RELEASE DATE: SEPTEMBER 2023

- Performance and Enhancements
  - Datacode Tool Improvements and Optimizations
  - Quantized Deep Learning OCR
  - FTP/SFTP folder storage suffix options
  - FTP/SFTP option to disable JSON results file
- ADF Output Enhancements
  - Support for Function Keys: F1-12
  - Support for Modifier Keys CTRL and ALT
- Option to Disable Tune and Trigger hardware buttons
- ZETI Interface improvements
- Backup and Restore feature improvements
- Miscellaneous Bug Fixes

### V6.0.22000

#### RELEASE DATE: JULY 2023

- 2D Configuration Barcode Generation and Deployment
- Advanced Filtering and Formatting of Decode Data
- Multi-device management (Up to 5 devices at a time)

- Firmware Update
- Backup/Restore
- Device Log Download
- Zebra Connectivity Gateway for Leader/Followers scanner configuration
- ZETI Command Interface Additional Command Support
- Aurora Focus UX Improvements
  - Improvements to Custom Formatting
  - Improved Localization
- Performance and Enhancements
  - Decode performance improvements.
  - Enhanced Session Based Triggering with Image Save
  - Additional Localization Enhancements

## V5.0.13000

### RELEASE DATE: FEBRUARY 2023

- Technology Previews
  - Aurora Focus and HMI Language Support – Simplified Chinese, Korean, German, French and Spanish
  - Expanded ZETI Interface Commands
- Tools
  - Deep Learning Based OCR for Fixed Industrial Scanners
    - Fully Released – Activated via Licenses
- Performance
  - Improvements to deployed job run consistency including Barcode tool timeout, decoding, and trigger timing consistency.
  - Level Trigger Enhancements
  - Triggered Image Buffering
- UX Improvements
  - Backup/Restore/Firmware Upgrade in Aurora Focus
- Device Configuration 1D Parameter Barcode Setup

## V4.0.22000

### RELEASE DATE: DECEMBER 2022

- Added Measure Object Tool

- Added Flaw Detection Edge and Intensity Tools
- Added Object Locate Counting
- Added Image Filters: Gradient, Gradient Horizontal, Vertical and Full
- MV Output Formatting on Supported Interfaces (Global or Interface Specific)
- Added Find and Replace to Barcode Decode Tool
- Improved 1D/2D Barcode Decode Performance
- Setting Barcode Match String via TCP or Serial input
- Added Image Download Capability via HMI
- Enhanced Session Based Triggering for Level, Continuous and Presentation Triggers w/Exit Criteria/Aggregation
- Technology Preview: Device Backup/Restore Functionality
- Performance and Stability Enhancements

## V3.1.40000

### RELEASE DATE: AUGUST 2022

- Added Reset on Trigger for Do Not Read Same Barcode
- Spanish HID Keyboard support
- Performance and Stability Enhancements

## V3.0.10000

### RELEASE DATE: JUNE 2022

- Added Edge Counting
- Added Deep-Learning Based OCR Tool (*in Beta*)
- Added Circle Find Tool
- Added Circle Diameter Measurement Tool
- Added a Circle ROI Type
- Added Open and Close Filters
- Added Erode Filter
- Added RS-232 Input Trigger
- Additional 2D Barcode Performance Improvements
- Added ADF to include Pass/Fail Data Types
- Added ADF to include Barcode Quality Metrics Data
- Performance and Stability Enhancements

## V2.0.8000

**RELEASE DATE: APRIL 2022**

- Performance and Stability Enhancements

## V2.0.7000

**RELEASE DATE: MARCH 2022**

- Performance and Stability Enhancements
- 1D Barcode Quality Metrics
- Added Object Locate Plus
- Added Blob Tools
- Added Binarize Filter/Tool
- Added Dilate Filter/Tool
- ImagePerfect(+) fixes & improvements
- Added Scale Calibration for Distance tool
- Added Advanced Pass/Fail Configuration (AND/OR logic for Job results)
- HID Keyboard Expansion – added French and German KB
- Added support for Codabar symbology
- Added Encoding type (Text/Base64) for ADF Full String data type and added option to show non-printable characters as hex values
- For xS10/20, added external illumination support
- Added “File Path” option when using (S)FTP to Save images
- Added Ability to Open a Local Job (created with emulator) On a Real Connected Camera

## V1.200.2001

**RELEASE DATE: DECEMBER 2021**

- Performance and Stability Enhancements
- Support for 5MP xS40 and xS70 models
- ImagePerfect(+) for FS models
- Option to output Barcode Location Co-ordinates
- Option to not read last n number of barcodes
- Device can be a TCP/IP Client
- Configurable RS-232 settings

- Ability to configure GPIO Trigger delay
- Support for Fast Hardware Trigger (2.3 MP models only)
- Ability to set GPIOs to static high or low
- Added Job controls to clone, rename and delete jobs
- Support for Conditional Regular expressions for Barcode String Match
- Barcode String Match Regular expression support for ManyCode
- Backwards compatibility of Job files
- Decode and MV statistics in Aurora Focus and HMI stored and queried from device

## V1.148.0001

### RELEASE DATE: OCTOBER 2021

- Performance Enhancements
- Stability Improvements
- Implementation of licensing error messages in Web HMI
- Fixed issue of Job pausing on refresh of Web HMI
- Fixed issue of crash when clicking on "Communications" tab
- Fixed inability to "View" active Jobs from Job menu when Job utilizes a trigger that is automatic in nature.
- Fixed issue of slow decode rate when "Fast 1D/2D" license is enabled
- Added Configurable TCP/IP – results port and trigger string can be configured
- Support for GPIO > Hardware trigger (normal speed)
- Allow setting a job as Startup / Power up job
- Emulators now have license level
- Supports a total of 21 emulators
- ZJOB backwards compatibility and auto conversion of old job files (Windows only)
- Seamless (live) tool changes when Upgrade licenses are applied

## V1.134.0001 – Initial Product Release

### RELEASE DATE: JULY 2021

- Bug Fixes
- Stability Improvements

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## Components

SW Component	Version
InstallShield	6.2.70000
Aurora Focus™	6.2.7
BSP (xS40/70)	CAAESS00-003-R25
BSP (FS10/xS20)	CAAFFS00-003-R25
Aurora Focus™ HMI	2.4.2
Connectivity Gateway	1.1.15

The components are installed in the following folders:

Component	Location
Application	Program Files\Zebra Technologies\Zebra Aurora
Job/Configuration Files	Users\Public\Documents\ZebraAurora\Mode\Type\Jobs
Saved Images	Users\Public\Documents\ZebraAurora\Captures\xSxxxxxx Camera

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## Minimum PC Requirements

Component	Location
CPU	Intel or AMD 64-bit processor
Random Access Memory Files	4 GB   Recommended: 8GB
GPU	GTX 1030, Intel UHD 620 or equivalent
Graphics Memory	2GB   Recommended: 4GB
Disk Space	4GB free disk space
Monitor Resolution	1280 x 800   Recommended: 1920 x 1080
Operating System	Windows 10
Internet Connection	Required for software activation

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## Installation

**Aurora Focus™ can be launched from the Windows 10 Start button.**

- Start / All Programs / Zebra Scanner / Zebra Aurora Focus