

Service Bulletin

MODEL(S)	MD23
PART NUMBER(S)	6420023-()
DESCRIPTION	FLEX Custom Function Display
TOPIC	Software Version 1.2.0
PURPOSE	Product and Performance Enhancements
RELEASE DATE	July 25, 2025

APPLICABILITY

This Service Bulletin is applicable to the MD23 FLEX Custom Function Display, part number series 6420023-() manufactured by Mid-Continent Instrument Co., Inc. (dba Mid-Continent Instruments and Avionics). These updates are to be performed **ONLY** by authorized personnel per the instructions listed in this Service Bulletin. Units with this software upgrade are available for sale from the manufacturer.

PURPOSE

The MD23 software version 1.2.0 represents improvements to product functionality and support of additional features.

EFFECTIVITY

MD23 FLEX units in the field can be updated to Software Version 1.2.0 but are not required to do so for continued airworthiness.

Mid-Continent Instruments and Avionics is recommending that all MD23 units in the field be updated to Software Version 1.2.0 in order to take advantage of added features, enhancements and resolutions that improve the function and performance of the product.

Note: An MD23 unit currently operating Software Version 1.0.1 or earlier must first be updated to Software Version 1.0.2 prior to installing Software Version 1.2.0.

Following the release date of the updated software, all MD23 units manufactured or serviced by Mid-Continent Instruments and Avionics shall be installed with Software Version 1.2.0 or later.

DESCRIPTION

The following list describes the added features, enhancements and resolutions incorporated in Software Version 1.2.0. Note that some features, enhancements and resolutions listed below only apply to the product hardware versions that support the feature referenced.

ENHANCEMENTS

1. Added support for customization of the attitude display
The attitude display can now be customized to enable vertical adjustment of the airplane position and/or enable manual caging by the user via the Custom Instrument Definition (CID) configuration file development process.
2. Added support for customization of the manual brightness adjustment method
The manual brightness adjustment can now be modified to be directly accessed by turning the Control Knob, rather than through the Options Menu, via the CID configuration file development process.
3. Improved analog sensing accuracy
When configured via CID, utilizing the Multi-I/O pins in differential mode provides improved analog accuracy.

RESOLUTIONS

1. Fixed SETTINGS INVALID message sometimes seen when installing a CID to a blank unit

ESTIMATED MANPOWER

Software can be updated on fielded units in approximately 10 minutes.

WEIGHT AND BALANCE

No change

ELECTRICAL LOAD DATA

No change

CERTIFICATION

This Service Bulletin represents a minor change to the previously approved Technical Standard Orders Authorization for the MD23 FLEX. Any changes to software have been completed in accordance with approved developmental and quality processes per the guidelines of RTCA document DO-178C.

OTHER PUBLICATIONS AFFECTED

Mid-Continent Instruments and Avionics Installation Manual and Operating Instructions, part number 9019161, Revision D or later, is updated with information associated with this Service Bulletin, as applicable.

ACCOMPLISHMENT INSTRUCTIONS

The updates are to be performed only by authorized personnel per the instructions as listed in this Service Bulletin. Units with this software upgrade are available for sale from the manufacturer.

All fielded units with previous software versions can be updated with Software Version 1.2.0.

The unit software can be updated by returning the unit to Mid-Continent Instruments and Avionics or by performing the instructions as listed in this section.

If returning the MD23 unit to Mid-Continent Instruments and Avionics:

Call Mid-Continent Instruments and Avionics sales department for a Return Material Authorization (RMA) at 316-630-0101.

Return address: Mid-Continent Instruments and Avionics
 9400 E. 34th Street N.
 Wichita, KS 67226

If performing this update in the field:

Follow the Instructions for Continued Airworthiness (ICA) for Software Updates as provided in Section 5.1 of the Mid-Continent Instruments and Avionics Installation Manual and Operating Instructions, part number 9019161.