

Service Bulletin

MODEL(S)	MD23
PART NUMBER(S)	6420023-()
DESCRIPTION	FLEX Custom Function Display
TOPIC	Software Update Version 1.0.1
PURPOSE	Product and Performance Enhancements
RELEASE DATE	February 10, 2021

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 as listed in this Service Bulletin. Units with this software upgrade are available for sale from the manufacturer.

PURPOSE

The MD23 software version 1.0.1 represents improvements to product functionality and support of the additional features.

EFFECTIVITY: RECOMMENDED

MD23 FLEX units in the field can be updated to Software Version 1.0.1, 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 1.0.1 in order to take advantage of added features, enhancements and resolutions that improve the function and performance of the product.

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 1.0.1 or later.

DESCRIPTION

The following list describes the added enhancements and resolutions incorporated in Software Version 1.0.1.

ENHANCEMENTS

1. Added accessibility of new data structures that are available to the CID
2. Increased size limitation of the CID and supporting data structures
3. Synchronized timer resources to be accurate with the Real Time Clock
4. Increased flight menu timeout to 10 seconds
5. Improved timing consistency for analog sensor updates

RESOLUTIONS

1. Dampening filter for analog inputs updated to allow variable values
2. Resolved knob behavior to only control actively displayed element; either main display or menu operation, not both
3. Properly detect a momentary button press differently from a button hold
4. Correctly receive certain ARINC 429 Discrete and BCD labels
5. Initialize settings from non-volatile storage even if the CID is invalid

ESTIMATED MANPOWER

Software can be downloaded and 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 9119161, Revision A or later, is updated with information associated with this Service Bulletin, as applicable.

ACCOMPLISHMENT INSTRUCTIONS

The action required by this Service Bulletin can be accomplished 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:

1. Contact Mid-Continent Instruments and Avionics for the software download
2. Copy the approved software update file to the root directory of a standard FAT32 formatted USB flash drive. The file name should not be changed from the provided filename.
3. Follow the instructions as listed in Section 5 of the Install Manual.