

# MAN-0076 high select feature addendum

## 1.1 Introduction

The product supplied, model M22-A-A-HS, has an additional feature called high select enabled in its firmware. This addendum serves to outline the differences between the standard Millennium II transmitter and the version with the high select feature, supplementing the Millennium II transmitter manual (MAN-0076).

The Net Safety dual channel Millennium II transmitter can be configured to allow each channel to share one current output. This feature is available for installations where the wiring to the control system is established and there is the desire to maintain the control system wiring when adding additional points of gas detection in the same zone.

## 1.2 Operation

### NOTICE

Current output readings and signal wiring must be done at Channel #1's 4-20 mA output terminals. Refer to MAN-0076 for wiring and connection to these terminals. Meter readings can also be taken at Channel #1's current meter test point on transmitter's faceplate.

### ⚠ WARNING

**Both sensors connected to the transmitter must be the same model and range and be of the toxic (ST3) series.**

**Both sensors must be installed within the same general area and their alarm points and ranges must be programmed for exactly the same values.**

**This feature is not for use with oxygen or combustible sensors.**

When the high select feature is enabled (refer to 1.3 on how to enable this feature), the current output on Channel #1 will serve as the output for both channels. The value on the current output on the transmitter is based upon the priority levels shown below. Priority level 1 has the highest priority, whereas priority level 2 as the lowest priority.

1. Set alarm levels (configured at the transmitter)
2. Calibration procedure
3. Fault condition
4. Gas levels below set alarm levels
5. Warm up period

To better understand the operation of the high select feature, use the example of two toxic sensors, each with a range of 100 ppm, connected to a Millennium II M22-A-A-HS transmitter. Both sensors have a programmed alarm set point of 10 ppm and sensor #1 is seeing 15 ppm. Sensor #2 is currently being calibrated. With this example, then the alarm condition from sensor #1 (5.6 mA) would take precedence over sensor #2's calibration procedure (3.3–3.6 mA).

Channel #2's 4-20 mA output will be disabled and no output will be provided on the corresponding terminals.

## 1.3 Enabling the high select feature

The following steps outline the procedure to enable the high select function on the Millennium II (M22-A-A-HS) transmitter. Refer to MAN-0076 for menu navigation procedures.

1. Press any key or use the attached magnet to activate the Reed switch to get the main menu prompt, "Enter main menu," on the display.
2. Press/select menu button 1/Reed switch 1 to select "yes".
3. Using either menu button 1/Reed switch 1 or menu button 2/Reed switch 2, scroll through the menu options until "Set up 4-20 Loop" is displayed.
4. Select "Set up 4-20 Loop" with menu button 3 or Reed switch 3 to enter the option. "High Select Disabled" will be displayed (factory default setting).
5. Press/select menu button 3/Reed switch 3 to change to "High Select Enabled". A single current output is now configured for the two channels.
6. Press/select menu button 2/Reed switch 2 to highlight "Exit", and then select it with menu button 3/Reed switch 3. Note that if no selection is made, the previous menu option is returned until the main menu is fully exited.
7. Use menu button 1/Reed switch 1 or menu button 2/Reed switch 2 to proceed to "Exit" and select with menu button 3/Reed switch 3 to fully exit the main menu.

Once this feature is enabled, confirm that the alarm set points and range for both channels are set at the exact same levels. Refer to MAN-0076 for more information.

## 1.4 Certifications

The M22-A-A-HS Millennium II transmitter has the following markings. Any certifications outlined in MAN-0076 are not available on this product.



Class I, Division 1 Groups BCD T5

## 1.5 Spare parts and accessories

Description	Part Number
Replacement transmitter board	TX-M22-A-HS

## [EmersonProcess.com/FlameGasDetection](http://EmersonProcess.com/FlameGasDetection)

### Americas

#### Emerson Process Management

6021 Innovation Blvd.  
Shakopee, MN 55379  
T +1 866 347 3427  
F +1 952 949 7001

[Safety.CSC@Emerson.com](mailto:Safety.CSC@Emerson.com)

### Europe

#### Emerson Process Management AG

Neuhofstrasse 19a P.O. Box 1046  
CH-6340 Baar  
Switzerland

T + 41 (0) 41 768 6111  
F + 41 (0) 41 768 6300

[Safety.CSC@Emerson.com](mailto:Safety.CSC@Emerson.com)

### Middle East & Africa

#### Emerson Process Management

Emerson FZE  
Jebel Ali Free Zone  
Dubai, UAE

P.O. Box 17033  
T + 971 4 811 8100  
F + 971 4 886 5465

[Safety.CSC@Emerson.com](mailto:Safety.CSC@Emerson.com)

### Asia Pacific

#### Emerson Process Management

1 Pandan Crescent  
Singapore 128461  
Singapore

T + 65 777 8211  
F + 65 777 0947

[Safety.CSC@Emerson.com](mailto:Safety.CSC@Emerson.com)



[AnalyticExpert.com](http://AnalyticExpert.com)



[Twitter.com/Rosemount\\_News](https://twitter.com/Rosemount_News)



[Facebook.com/Rosemount](https://facebook.com/Rosemount)



[Youtube.com/user/RosemountAnalytical](https://youtube.com/user/RosemountAnalytical)

© 2016 Emerson Process Management. All rights reserved.

The Emerson logo is a trademark and service mark of Emerson Electric Co. Net Safety is a trademark of Emerson Process Management. All other marks are the property of their respective owners.

The contents of this publication are presented for information purposes only, and while effort has been made to ensure their accuracy, they are not to be construed as warranties or guarantees, express or implied, regarding the products or services described herein or their use or applicability. All sales are governed by our terms and conditions, which are available on request. We reserve the right to modify or improve the designs or specifications of our products at any time without notice.

**NET SAFETY™**

