Technical Bulletin 171

GE MDS X710 Licensed Radio
Preferred Settings and Cable Modifications

Totalflow Technical Bulletin
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1 Introduction

GEMDS and ABB have been working together to determine the preferred software settings and hardware changes for improved system reliability and operations of the system, specifically to either eliminate or reduce the likelihood of unintentional data transmissions (commonly called chirping transmissions). We have identified some causes that can be corrected by changing software settings and hardware changes in the radio and Totalflow connected device.

The following communication cables are effected by these corrections:

- 2015026-004
- 2015026-005
- 2015026-010

ABB Totalflow will include the following preferred settings in all GEMDS/ABB user drawings for future reference.

2 Recommended Changes

2.1 X710 Model A

2.1.1 X710 Model A Hardware Changes

1) Remove Request to Send (RTS) wire from the Totalflow connected device. RTS is not required on "A" radios and could be a source for spurious unintended transmissions (chirping).

2) Tie the RTS wire back and tape so that it doesn’t make electrical contact with any other electrical wiring or ground source.

2.1.2 X710 Model A Software Changes

1) DATAKEY = ON, set to on so that the radio will key on data without the need for RTS from the Totalflow device.

2) PTT delay = 30 milliseconds (defaults to 0), change to 30 to eliminate the spurious unintended transmissions (fast chirping) in the 5-25 milliseconds range.

2.2 X710 Model B

2.2.1 X710 Model B Software Changes

3) PTT delay = 30 milliseconds (defaults to 0), change to 30 to eliminate the spurious unintended transmissions (fast chirping) range in duration from 5-25 milliseconds

4) NOTE: Request to Send (RTS) must be utilized on all “B” radios for proper operations.
3 Conclusion

Changes listed above are alterations to default settings and should be made to improve the reliability of your GEMDS/Totalflow radio system.

This bulletin is specifically targeted toward reducing or eliminating spurious unintended transmissions (commonly called chirping) that can cause system reliability issues. ABB and GEMDS continue to work together to potentially find and resolve other chirping sources.