TMS, DMS and CMS Usage Guide for Falcon BMS 4.38.1

Carlos “Metal” Nader

Version 0.2.4.0+20260111 | Progress: Chapters 2/7 | Tables Chapter 5 | January 2026

Contents

1 Introduction **2**
1.1 Development timeline and status . . . 2
1.2 Scope and purpose . . . 2
1.3 Version, authorship and AI assistance . . . 2
1.4 Sources and references . . . 2
1.5 Document structure and how to read it . . . 2
1.5.1 Part A: Foundational Sections . . . 2
1.5.2 Part B: Switch-Specific Sections . . . 2
1.5.3 Part C: Training and Visual Reference . . . 2
1.5.4 Part D: Appendices . . . 2

2 HOTAS fundamentals **2**
2.1 Sensor of Interest (SOI) and display logic . . . 2
2.2 Short vs long presses and timing . . . 2
2.3 Master modes and context-sensitive behaviour . . . 2
2.4 Overview of TMS, DMS and CMS . . . 2

3 TMS – Target Management Switch **2**
3.1 Concept and general behaviour . . . 2
3.2 TMS and Situational Awareness displays . . . 2
3.3 TMS in Air-to-Air . . . 2
3.4 TMS in Air-to-Ground . . . 2
3.5 TMS in weapon employment . . . 2
3.6 TMS – Block / variant notes . . . 2

4 DMS – Display Management Switch **2**
4.1 Concept and Sensor of Interest (SOI) . . . 2
4.2 DMS in MFDS format selection and SWAP . . . 2
4.3 DMS in sensor and weapon context . . . 2
4.4 DMS – Block and variant notes . . . 2

5 CMS – Countermeasures Management Switch **2**
5.1 Concept and Interaction with CMDS / ECM / RWR . . . 2
5.1.1 Concept . . . 2
5.1.2 Interaction with CMDS / ECM . . . 2
5.2 CMS Switch Actuation . . . 2
5.2.1 CMS Actuation with CMDS . . . 2
5.2.2 CMS Actuation with ECM . . . 2
5.2.3 CMS Consent and Constraints . . . 2
5.2.4 Important Operational Notes . . . 2
5.3 CMS Block and Variant Notes . . . 2
5.3.1 ECM Configurations present in BMS . . . 2

6 Training references and practical flows **2**
6.1 How to use this guide with BMS training missions . . . 2
6.2 Recommended progression . . . 2
6.3 Example flows for typical missions . . . 2

7 HOTAS visual reference **3**
7.1 F-16 HOTAS overview . . . 3
7.2 TMS diagrams . . . 3
7.3 DMS diagrams . . . 3
7.4 CMS diagrams . . . 3

A Block / variant overview **3**
A.1 F-16CM Block 50/52 . . . 3
A.2 F-16C/D Block 40/42 . . . 3
A.3 F-16AM/BM MLU . . . 3
A.4 F-16I Sufa and Israeli variants . . . 3
A.5 Other export variants . . . 3

B Tables index **3**
B.1 TMS tables . . . 3
B.2 DMS tables . . . 3
B.3 CMS tables . . . 3

1 Introduction

1.1 Development timeline and status

1.2 Scope and purpose

1.3 Version, authorship and AI assistance

1.4 Sources and references

1.5 Document structure and how to read it

1.5.1 Part A: Foundational Sections

1.5.2 Part B: Switch-Specific Sections

1.5.3 Part C: Training and Visual Reference

1.5.4 Part D: Appendices

2 HOTAS fundamentals

2.1 Sensor of Interest (SOI) and display logic

2.2 Short vs long presses and timing

2.3 Master modes and context-sensitive behaviour

2.4 Overview of TMS, DMS and CMS

3 TMS – Target Management Switch

3.1 Concept and general behaviour

3.2 TMS and Situational Awareness displays

3.3 TMS in Air-to-Air

3.4 TMS in Air-to-Ground

3.5 TMS in weapon employment

3.6 TMS – Block / variant notes

4 DMS – Display Management Switch

4.1 Concept and Sensor of Interest (SOI)

4.2 DMS in MFDS format selection and SWAP

4.3 DMS in sensor and weapon context

4.4 DMS – Block and variant notes

5 CMS – Countermeasures Management Switch

5.1 Concept and Interaction with CMDS / ECM / RWR

5.1.1 Concept

5.1.2 Interaction with CMDS / ECM

7 HOTAS visual reference

7.1 F-16 HOTAS overview

7.2 TMS diagrams

7.3 DMS diagrams

7.4 CMS diagrams

A Block / variant overview

A.1 F-16CM Block 50/52

A.2 F-16C/D Block 40/42

A.3 F-16AM/BM MLU

A.4 F-16I Sufa and Israeli variants

A.5 Other export variants

B Tables index

B.1 TMS tables

B.2 DMS tables

B.3 CMS tables