TMS, DMS and CMS Usage Guide for Falcon BMS 4.38.1

Carlos "Metal" Nader

Version 0.1.0+20260105
Progress: Chapters 1/7 | Tables 0%
January 2026

Contents

Chapter 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 Chapters (2–3)

1.5.2 Part B: Switch-Specific Chapters (3–5)

Table structure

How to find information

1.5.3 Part C: Training and Visual Reference (Chapters 6–7)

1.5.4 Part D: Appendices

Chapter 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

Chapter 3

CMS – Countermeasures Management Switch

3.1 Concept and interaction with CMDS / ECM

3.2 CMS switch actions (all modes)

3.3 CMS – Block / variant notes

Chapter 4

TMS – Target Management Switch

4.1 Concept and general behaviour

4.2 TMS in Air-to-Air

4.2.1 FCR CRM (RWS / ULS / VSR)

4.2.2 SAM / DT-SAM

4.2.3 TWS

4.2.4 STT

4.2.5 ACM (30x20, 10x60, BORE, SLEW)

4.2.6 IFF interrogations (SCAN / LOS)

4.3 TMS in Air-to-Ground – sensors and SPI

4.3.1 FCR A-G (GM / GMT / SEA / AGR)

4.3.2 TGP A-G

4.3.3 HUD / HMCS (SPI, Snowplow, CZ, VIP/VRP cues)

4.3.4 Markpoints and steerpoint management

4.4 TMS in A-G weapon employment

4.4.1 Unguided bombs and rockets (CCIP / CCRP / DTOS)

4.4.2 EO weapons – Maverick (VIS / PRE / BORE)

4.4.3 IAMs (JDAM / JSOW / WCMD / SPICE / others)

4.4.4 LGBs and laser employment

4.4.5 Anti-radiation (HARM POS / HAS / HAD)

4.4.6 Naval weapons (Harpoon, others)

4.5 TMS – Block / variant notes

Chapter 5

DMS – Display Management Switch

5.1 Concept and SOI control

5.2 DMS in Air-to-Air

5.2.1 MFD format cycling and SWAP

5.2.2 HUD / HMCS SOI behaviour

5.3 DMS in Air-to-Ground

5.3.1 Sensor handoff and SOI choreography

5.3.2 Special cases (IAM, HARM, Harpoon)

5.4 DMS – Block / variant notes

Chapter 6

Training references and practical flows

6.1 How to use this guide with BMS training missions

6.2 Recommended progression

6.3 Example flows for typical missions

6.4 Checklist: what to practice next

Chapter 7

HOTAS visual reference

7.1 F-16 HOTAS overview

7.2 TMS diagrams

7.3 DMS diagrams

7.4 CMS diagrams

Appendix 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

Appendix B

Tables index

B.1 TMS tables

B.2 DMS tables

B.3 CMS tables