

UXOR Test Cable Assembly

Model Number: THRSLTCA1001

Overview

The UXOR Test Cable Assembly is a pre-terminated harness set that links the **Main Controller**, **VDP**, **PDB**, and external **modems/ECU** for bench and vehicle trials. It consolidates power, comms, and camera I/O into labeled, plug-and-play branches to cut setup time and reduce connection errors.

Proven in the **UXOR project supplied to the Indian Air Force (IAF)**.

Technical Specifications

Parameter	Specification
Assembly scope	Multi-branch harness set interconnecting MC, VDP, PDB, ECU, and comms modems
Primary connectors (per drawing)	MC: C3 (62IN-56T-20-41P), C4 (62IN-56T-16-26P), C1 (62IN-56T-10-6S) · VDP: C2 (62IN-56T-10-6S), BLH-5 (62IN-56T-24-61S) · PDB: C5 & C6 (62IN-56T-14-19P)
External connectors	DB-9 Female (Comm Data Modem), Emergency Modem leads, ECU (HD10-4RR-9-1939), 2-pin & 3-pin Molex females, T-branches to BLH-3/4
Supported signals	Power rails (+24 V, +12 V), Grounds, RS-232 Tx/Rx, selection lines, CAN (where applicable), video/control paths via sub-cables
Cable build	Shielded PTFE looms, strain-relieved transitions, labeled heat-shrink markers
Environment	IP65; -20 °C to +55 °C

Start → End Mapping (functional, per diagram)

A. Controller ↔ PDB

- **MC C5 (62IN-56T-14-19P) ↔ PDB C5 (62IN-56T-14-19P)**
Carries +12 V, GND, and serial Tx/Rx for PDB services.
- **MC C6 (62IN-56T-18-32P) ↔ BLH-4 (62IN-56T-20-41S)** sub-loom
Breakout supporting sensor branches (vibration/range/nozzle) and wrist-camera video via dedicated TNC lead (in its own datasheet).

B. Controller ↔ VDPU

- **MC C3 (62IN-56T-20-41P) ↔ VDPU BLH-5 (62IN-56T-24-61S)** trunk
Distributes +24 V/+12 V rails, GND, and control pairs (TX1/RX1, TX4/RX4) for camera/PTU network (see camera harness datasheet THRSLTCA1141).
- **MC C4 (62IN-56T-16-26P) ↔ BLH-3 (62IN-56T-24-61S)** with 2-pin & 3-pin Molex tails
Feeds auxiliary power/IO to vehicle peripherals.
- **MC C1 (62IN-56T-10-6S) ↔ VDPU C2 (62IN-56T-10-6S)**
Serial/selection and reference grounds for VDPU services.

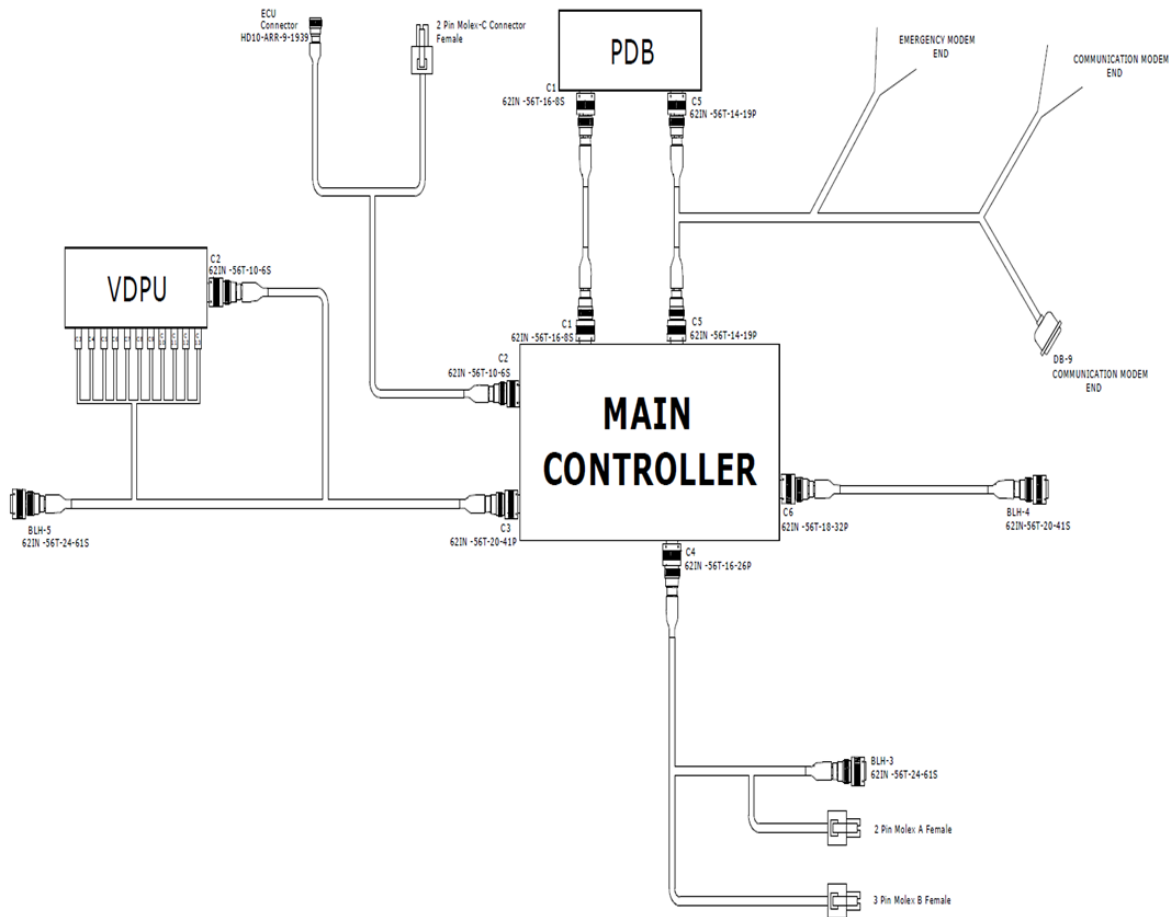
C. Controller ↔ Modems

- Branch to **DB-9 Female** (Comm Data Modem): RS-232 TX/RX/GND straight-through.
- Branch to **Emergency Modem**: dedicated digital outputs per modem spec (isolated as shown).

D. Controller ↔ ECU

- **ECU connector (HD10-4RR-9-1939)** tail for quick integration of engine/vehicle signals.

Pin-by-pin for each sub-cable is provided in the individual cable datasheets (C5-VXM, C6-VMM, VDPU C2, camera harness, etc.). The assembly sheet focuses on topology and routing so techs can wire the bench quickly.



Key Features

- One labeled assembly to bring **MC, VDPUs, PDB, ECU, and modems** online in minutes.
- Rugged MIL-grade circulars, strain-relieved T-junctions, and shield continuity.
- Compatible with the full camera harness (THRSLTCA1141) and modem/test leads.
- Reduces error risk with connector naming that mirrors controller silkscreen.

Applications

- UXOR bench bring-up and vehicle integration.
- Factory end-of-line tests and field diagnostics.
- Rapid swap-in during subsystem trials.

Note

Need a kit version? I can bundle this assembly with the related sub-cables (C5-VXM, C6-VMM, VDPU C2, VDPU C14, camera harness) into a single part number and one-page checklist for dispatch.