

MULTIPLEXING AND ENERGY

TWO DAYS, THREE LEVELS

From the first word to configuring the boat: two days on site take a technician through three MUXEN levels, on a mock-up that behaves like a complete boat.

MUXEN training is built in levels, and each level adds one tool. A level is defined by its tool, not by how hard a task feels, and a technician is trained on a tool before touching it. The two days cover Discover, Basic and Medium in that order, and close with a quiz and use cases from your own boats.

AT A GLANCE

Duration	2 days on site, 09:00 – 17:30
Levels	Discover · Basic · Medium
Tools	The on-board screen · Raken
Hands-on	A MUXEN mock-up that replicates a complete boat
Entry requirement	An electrical technician working to the state of the art Wiring, crimping and wire sizing are not taught: trainees must already master them.

THE THREE LEVELS

01 DISCOVER

Why multiplexing, the network and its words, the boxes on board. **No tool**: the vocabulary every level above uses.

02 BASIC

The **on-board screen**: diagnose the bus, replace a module, pair a switch, bring the boat online.

03 MEDIUM

Raken, served by the Brain: eFuses, spare outputs, tanks, multiplexing rules, expanding the installation.

THE MOCK-UP

Every hands-on hour runs on a **MUXEN mock-up** built to replicate a full installation: a Brain and its screen, more than fifteen Bloc 8, SFSP switches, and the energy equipment a boat carries, an MPPT solar charger and an inverter among them. It behaves like a boat, so what is learnt on it is what is found aboard. Faults are planted on the mock-up rather than on a customer's boat: every trainee can break, find and repair without putting anything at risk.

THE TIMETABLE

THE TWO DAYS

DAY 1 — DISCOVER AND BASIC		DAY 2 — MEDIUM AND THE QUIZ	
09:00	WELCOME A word from the MUXEN president.		MEDIUM · RAKEN The configuration application, served by the Brain on the boat's network.
09:15	DISCOVER Why a boat is multiplexed. A quick overview of the MUXEN products.		MEDIUM · OUTPUTS eFuse trip values, response times, and setting up a spare output.
10:45	COFFEE BREAK		
11:00	BASIC · THE SCREEN A live value, a command or a setting: read the boat before measuring it.		MEDIUM · TANKS Calibrating a tank level from Raken.
11:30	BASIC · BUS DIAGNOSTIC Some faults planted on the mock-up: the network, who stopped answering, what tripped.		MEDIUM · MULTIPLEXING RULES The rules that decide what the boat does.
12:30	LUNCH BREAK		
13:30	BASIC · REPLACE A MODULE Swap a device and verify the configuration.		MEDIUM · EXPAND INSTALLATION Bringing a new Bloc or gateway onto the mock-up.
14:45	BASIC · SWITCHES AND PANEL Pair an SFSP from the screen to replace a broken one.		QUIZ Vocabulary, rules, and which tool does which job.
15:30	COFFEE BREAK		
15:45	BASIC · BOAT ONLINE The Wi-Fi hotspot, and the checks that prove support can reach the boat.		DEBRIEF Results, questions, and the certificates.
16:15	BASIC · FAULT-FINDING Real scenarios from symptom to cause, and when to stop and call.		USE CASES FROM YOUR BOATS Cases brought from the trainees' own boats, worked through together.
17:00	DAY 1 WRAP-UP Questions, and what tomorrow's tools change.		

THE QUIZ

The training closes on a short **quiz**: the words, the rules, and which tool does which job. The end of the day then belongs to the trainees: use cases from their own boats.