ITEM NO. 12 020 240 - TP-LAB

TP-Lab Multimeter Diagnosis 4.0

Measuring actual faults—and validating the diagnosis. 18 reproducible fault patterns in 3 circuits. Generation 4.0 completes the learning path: identify, measuring, repair.



AT A GLANCE

FORM FACTOR
Console Housing · Also for DIN-A4 Mounting Frames

VOLTAGE
12.5 V DC · fixed power supply via TS15

LEARNING UNITS
18 Levels · 3 circuits · approx. 7 hours of instruction

HANDBOOK
160 Pages · Theory · Tasks · Solutions

E-LEARNING
Optional

LEVEL



In-depth 78 % **Specialist** 22 %

Why This Trainer?

01
Real faults—not simulated
Three program selector switches generate 18 reproducible fault conditions directly in the circuit—the student measures what is actually present.

02
One Method, Three Circuits
Lighting circuits, relay circuits, transistor circuits—the voltage drop method works everywhere, in every workshop.

03
Repair and Prove — New in 4.0
A diagnosis is only confirmed once function is restored. Thanks to the self-resetting fuse, the fault location can be safely bypassed—locate, measure, repair, verify.

04
Classroom-ready, by level
Each level includes a task sheet, step-by-step solution, repair log, and a clearly labeled skill.

Technical data

DIMENSIONS (W × D × H) **266 × 297 × 110 mm**	WEIGHT **about 1.5 kg**	POWER SUPPLY **12.5 V DC**
CURRENT DRAW **max. 3 A**	MEASURING SOCKETS **47 × 2 mm + 4 × 4 mm**	

CE UKCA RoHS EN

18 Tasks — Structured Learning Path

NO.	TASK	DIFFICULTY	TIME
1	Level 1: The Silent Lunge	★★☆☆	15 min
2	Level 2: Total Failure	★★☆☆	15 min
3	Level 3: The One-Sided Lunge	★★★☆	20 min
4	Level 4: The progressive resistance	★★★☆	25 min
5	Level 5: The Hidden Resistance	★★★☆	25 min
6	Level 6: The Hot Fuse	★★☆☆	20 min
7	Level 7: The Silent Click	★★★☆	20 min
8	Level 8: The Silent Relay	★★★☆	20 min
9	Level 9: The Lonely Lamp	★★★☆	20 min
10	Level 10: The Weak Relay	★★★☆	25 min
11	Level 11: Weak Control	★★★★	30 min
12	Level 12: The Corroded Supply Line	★★★★	30 min
13	Level 13: The constant glow	★★★☆	25 min
14	Level 14: The Blind Indicator Light	★★★☆	20 min
15	Level 15: The Dead Version	★★☆☆	15 min
16	Level 16: The Leaky Transistor	★★★★	30 min
17	Level 17: The half-conductor	★★★★	30 min
18	Level 18: The Corroded Supply Line	★★★☆	25 min

Components and Scope of Delivery

ONBOARD COMPONENTS

Console housing, table, or DIN-A4 mounting frame	
Seven-position program selector switch	3 ×
Toggle Switch for On/Off	3 ×
Automotive lamp sockets with 10 W (12 V) bulbs	3 ×
LED	3 ×
Relay	1 ×
Self-resetting fuse	1 ×
Measuring sockets	47 ×
Power Supply Connectors	4 ×

SCOPE OF DELIVERY

- TP-Lab multimeter Diagnosis 4.0 (12,020,240)
- Automotive Bulb, 12 V, 4 W, BA9s
- Test leads, 4 mm to 2 mm, 1 m, red and black
- Operating Manual, EU Declaration of Conformity

RECOMMENDED ACCESSORIES

Power Supply Unit TS15	**12 050 015**
Digital multimeter Fluke 175	**16 062 014**

Relation to the Curriculum

UK IMI · ST0033	**US** ASE Education Foundation	**CA** Red Seal RSOS	**AU** AUR30620 Cert III

Examples — in total the tasks are mapped to more than 90 curricula.