

Electrical Installations Training Kit

Safe 24 VAC Low-Voltage Training System

Hands-on training for real-world electrical installation skills



Product Overview



The RUMROCK Electrical Installations Training Kit is a practical educational stand for electrical installation training using safe 24 VAC low voltage instead of 220 VAC. It is designed for schools, colleges, training centers and practical labs, providing a realistic and hands-on learning environment.



Key Features

- 24 VAC safer training environment for learners
- Uses off-the-shelf modular components
- Transparent conduits for visible wiring paths
- Realistic hands-on wiring practice
- Thermally powder-coated steel structure
- Laminated wood panels with high-quality finish
- Modular mounting positions for flexible configurations
- Supports lighting, bell, switching, protection and measurement exercises



Training Applications

- Single switch circuits
- Two-way switching
- Intermediate switching
- Bell circuits
- Staircase timer circuits
- Outlet wiring
- Lighting circuits
- Energy meter familiarity



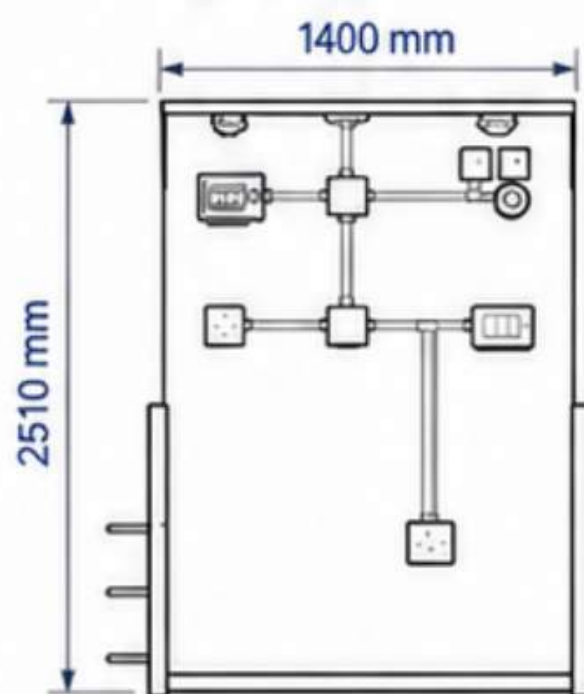
Stand Construction

- Thermally powder-coated steel stand
- Laminated wood panels
- Transparent wire conduits
- Modular boxes and device mounting positions

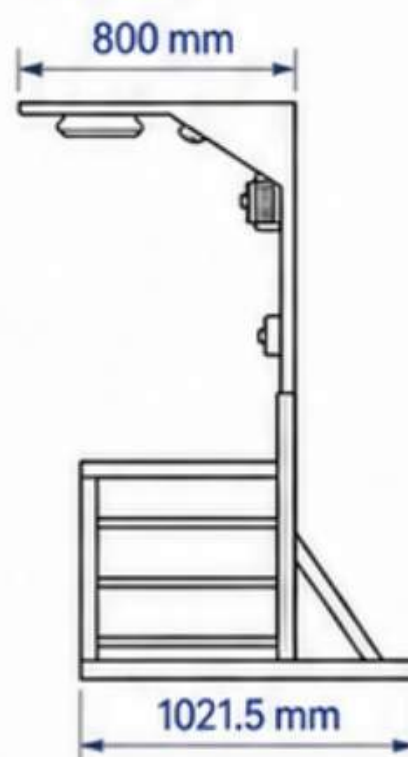


Dimensions

Front View



Side View



Modular Components (Examples)



3-Gang Switch



Switch Mechanism



Dimmer Module



Brass Bridge Links



3-Module Frame



2-Module Frame



Safe Training
24 VAC low-voltage
for a safer learning
environment



Hands-On Skills
Build confidence
through practical
work



Modular System
Flexible, expandable
and easy to configure



Future Ready
Prepare for real-world
skills and brighter
opportunities

Electrical Switches, Mechanisms, Faceplates & Frames

Standard modular components for hands-on electrical installation training

Single Switch



- Standard modular size
- Reliable and durable
- Ideal for training installations

Directional Switch (Two-Way Switch)



- Two-way switching
- Standard modular size
- Used in staircases and corridors

Intermediate Switch (Cross Switch)



- Intermediate switching
- Used between two two-way switches
- Standard modular size

Bell Push Switch



- Momentary (push-to-make)
- Bell symbol indication
- Standard modular size
- Ideal for training exercises

Switch Mechanism, 1 Module



- Standard 1-module mechanism
- Screw or plug-in terminals
- Used with faceplates and frames
- Ideal for hands-on practice

3-Gang Faceplate



- 3-gang modular faceplate
- Modern and realistic design
- Clean and durable finish
- Suitable for training installations

3-Module Support Frame



- 3-module mounting frame
- Industry standard design
- Durable and easy to install
- Used to mount modular mechanisms

2-Module Support Frame



- 2-module mounting frame
- Industry standard design
- Durable and easy to install
- Used to mount modular mechanisms

Brass Bridges / Junction Links



- Used to link and distribute supply
- Suitable for modular switches
- Durable brass construction
- Essential for practical wiring exercises

Switch Box + Cover



- Standard switch box with cover
- Used to house modular switches
- Clean and sturdy construction
- Ideal for training installations

Important Note



These are standard, off-the-shelf modular electrical components supplied as separate materials. They are mounted onto the training stand by learners during practical sessions and are not permanently built into the main unit.



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Power, Protection & Control Components

24 VAC supply, protection and signaling devices for safe training



Power Outlet



24 VAC power outlet for training circuits. Safe, low-voltage supply for practical exercises.



Single-Pole Circuit Breaker



Single-pole circuit breaker for overcurrent protection in 24 VAC training circuits.



Why 24 VAC?

- ✓ Safer low-voltage training environment
- ✓ Reduced electric-shock risk
- ✓ Easier supervision for learners
- ✓ Suitable for schools and training centers
- ✓ Real-world wiring practice using safer voltage



Double-Pole Circuit Breaker



Double-pole circuit breaker for overcurrent protection and isolation in 24 VAC circuits.



24 VAC Transformer with Enclosure



24 VAC safety isolating transformer in a durable enclosure for training installations.



Training Stand Example



*Real Components
Real Skills*



Staircase Timer 24 AC



Staircase timer for automatic lighting control. 24 VAC operation for safe training.



24 AC Bell



24 VAC bell for audible signaling in training circuits.



24 AC Lighting Lamp



24 VAC Lighting lamp for training installations.



Electricity Meter



Electricity meter for monitoring energy use in 24 VAC training circuits.



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Wiring Tools, Ferrules & Accessories

Essential tools and consumables for practical electrical installation training

*Learn
Install
Practice
Succeed*

24 V Test Screwdriver



- For checking 24 V circuits
- Clear insulated handle
- Built-in neon indicator
- Essential for safe testing in training environments

Wire Cutter



- Clean and precise cutting
- Suitable for training cables
- Comfortable grip handles
- Durable and reliable for repeated use

Combination Pliers



- Gripping, bending and cutting functions
- Versatile tool for installation practice
- Ergonomic non-slip handles
- Ideal for electrical training use

Ferrule Crimping Tool



- For crimping wire ferrules
- Ratchet mechanism for consistent crimps
- Suitable for various ferrule sizes
- Essential for high-quality terminations

Wire Ferrules (Assorted Colors)



- Assorted colors for clear identification
- High-quality copper with insulation sleeve
- Used for secure wire terminations
- Perfect for training and practice exercises

4 Color Wiring Set (30 m each)



- 4 colors: Red, Blue, Black, Yellow
- Each roll 30 m (training use)
- Flexible, easy to strip cable
- Ideal for installation and circuit wiring practice

Transparent Wire Conduits



- Clear view of internal wiring
- Various lengths and sizes
- Ideal for training and demonstration
- Helps learners understand cable routing and neat installation

Conduit Accessories



- Elbows, couplers, tees, clips and junction boxes
- Designed for use with transparent conduits
- Supports realistic wiring installation practice
- Durable and easy to assemble

Training Use



These tools and consumables are separate support materials used with the RUMROCK training stand. They enable learners to practice wiring, routing, termination and troubleshooting skills in a realistic and hands-on learning environment.

*Real Tools
Real Skills
Brighter
Futures*

Typical Uses

Ferrule Crimping



Crimp wire ferrules for secure terminations

Wire Routing



Route wires inside transparent conduits

Outlet Wiring



Practice outlet wiring connections

Switch Wiring



Practice switch wiring connections



Safe Training

Use the right tools for a safer learning environment



Hands-On Skills

Build confidence through practical work



Realistic Practice

Professional tools and consumables for authentic training



Future Ready

Develop skills for real-world electrical applications

Training Stand Structure & Mounting System

Thermally coated steel stand, laminated wood panels and modular mounting layout

*Learn
Install
Practice
Succeed*



Key Components & Materials



Thermally Powder-Coated Steel Stand

- Robust and durable structure
- Thermally powder-coated finish
- Stable and safe design
- Built for long-term use



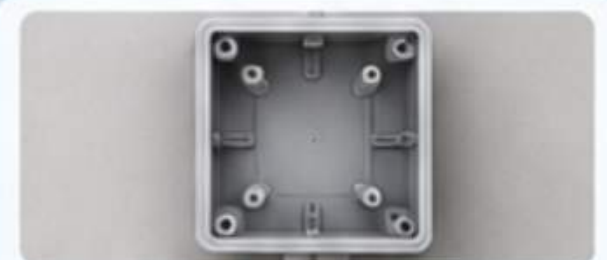
Laminated Wood Panels

- High-quality laminated finish
- Smooth and durable surface
- Ideal for repeated mounting
- Easy to clean and maintain



Transparent Conduits

- Clear view of cable routing
- Durable and impact resistant
- Realistic installation practice
- Used with standard fittings



Switch Boxes

- Modular and industry standard
- Multiple mounting positions
- Suitable for various devices
- Easy device replacement



Faceplates

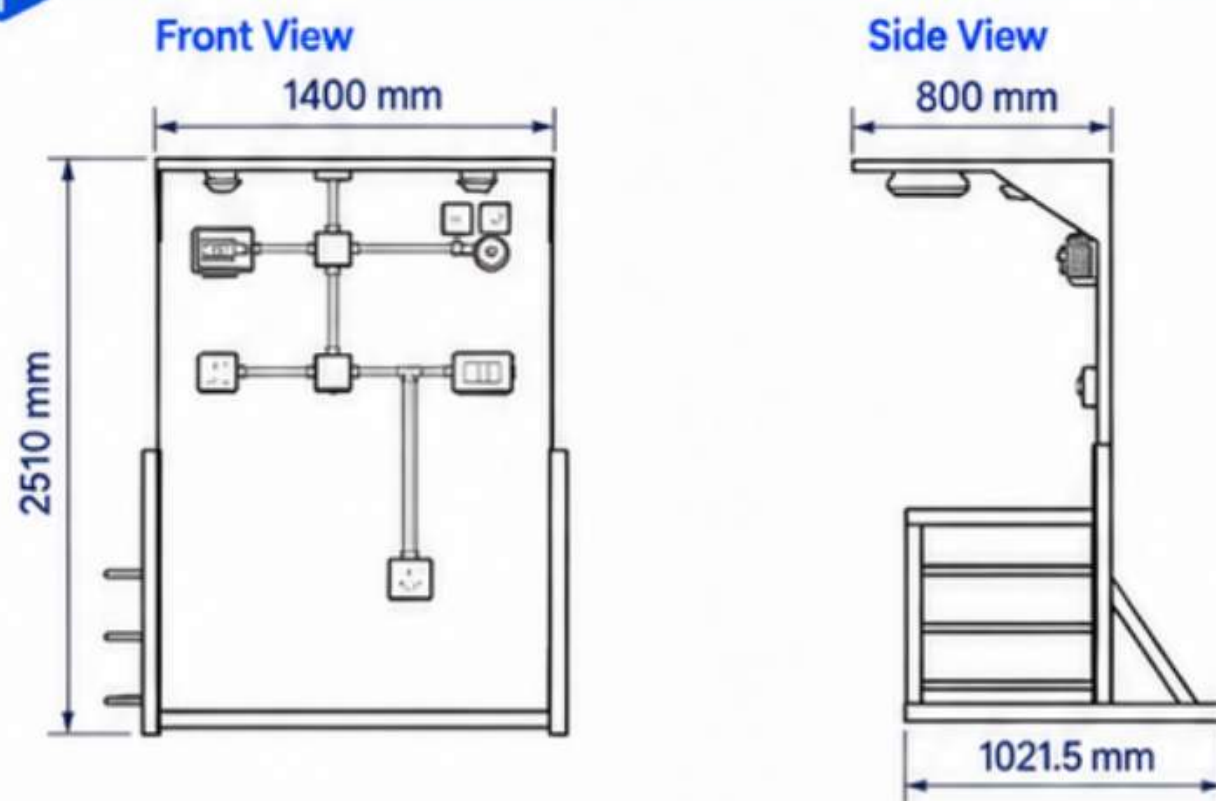
- Modern and realistic design
- Standard 1, 2 and 3-gang types
- Clean and durable finish
- Matches real-world installations



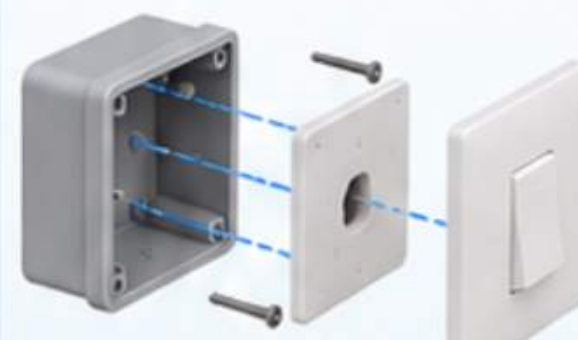
Support Frames

- Rigid steel support structure
- Provides stability and balance
- Integrated shelves (optional)
- Designed for training use

Dimensions



Mounting Concept



The electrical devices are supplied as separate materials and are mounted onto the stand for hands-on practice. This modular approach allows for easy replacement of components and flexible training layouts, enabling a variety of practical exercises and configurations.

Example Training Topics

- Single switch wiring
- Two-way switching
- Intermediate switching
- Bell circuits
- Lighting circuits
- Outlet installation
- Staircase timer
- Energy meter familiarity



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Training Safety in Electrical Installations

Why 24 VAC is preferred for education instead of 220 VAC mains voltage

Safety comes first. The RUMROCK training system uses 24 VAC to give learners a realistic and practical experience in electrical installations, while significantly reducing the risks associated with mains voltage.

*Learn
Install
Practice
Succeed*



Risks of Using 220 VAC in Training



Higher electric-shock risk

220 VAC can cause serious or fatal electric shock, even with brief contact.



Risk of involuntary muscle contraction

Mains voltage can cause involuntary muscle contraction, making it difficult to let go of live parts.



Burns and arc hazards

Contact with live components can cause severe burns and arc flash hazards.



Equipment damage risk

Student mistakes can easily damage equipment connected to 220 VAC, leading to higher replacement costs and potential hazards.



Increased danger for beginners

Learners with limited experience are more vulnerable to mistakes, making 220 VAC unsuitable for educational environments.



Advantages of Using 24 VAC for Training



Much lower electric-shock risk

24 VAC is considered a safer, low-voltage system, significantly reducing the risk of serious injury.



Safer hands-on practice

Learners can install, wire, test and troubleshoot with greater confidence.



Better suitability for schools and training centers

Ideal for colleges, training centers and practical labs where safety is a priority.



More confident experimentation

Students can explore, make mistakes and troubleshoot as part of the learning process without high risk.



Easier instructor supervision

Trainers can focus on teaching and guidance rather than managing high-voltage risks.



Compatible with realistic training devices

Works with realistic components such as switches, bell push switches, timers, lamps and meters, providing authentic installation skills in a safe environment.



Important Note

24 VAC is safer than 220 VAC, but it is not zero-risk. Proper insulation, good wiring practice, supervision by a qualified instructor, and disconnecting power before making any modifications are still essential. Always follow safe working procedures and local guidelines for electrical training.



Safe Training

24 VAC low-voltage for a safer learning environment



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