HiTECH
SAFETY DISPLAYS

High Voltage Hazard Display
User Guide

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For Sales or Support call 780-428-4575 or visit www.HiTechSafetyDisplays.com

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High Voltage Hazard Display

The High Voltage Hazard Display is a portable, educational display that effectively demonstrates various (distribution voltage) safety hazards that potentially exist on residential, farm and commercial sites or wherever there are overhead and underground lines. It represents a new generation of high quality, advanced displays that are easy to setup and operate, are safe and provide the most realistic demonstrations ever seen.

Display Features:

- Large and highly visible display sets up on a standard 6ft. or 8ft. table
- Fast and easy setup by one person in just a few minutes
- Simple to use remote control keyfob
- Twelve demonstrations with animatronic, light and sound effects
- Realistic, patent pending electric arc simulations and arc flashes
- Safe with no high voltages. Operates from UL/CSA approved 12VDC adapter
- Patent pending Arc Simulating Hot Stick adds countless demonstrations
- Lightweight with each of the three sections weighing ~ 11lbs (5kg) each
- Includes heavy-duty shipping cases with wheels and retractable handles
- 100% Designed and manufactured in Canada

Display Specifications:

- Measurements - 75”L X 13”D X 13”H (190cm X 33cm X 33cm)
- Weight Per Section (3) - 11lbs (5kg)
- Electrical - 12VDC 2A AC Adapter (UL/CSA Approved)

Shipping Case Specifications (3 units):

- Type - custom heavy duty, foam lined with wheels and retractable handles
- Measurements - 30”L X 18”D X 15”H (76cm X 46cm X 38cm)
- Weight (including the display section) 40lbs (18kg) each

UNPACKING & SETUP

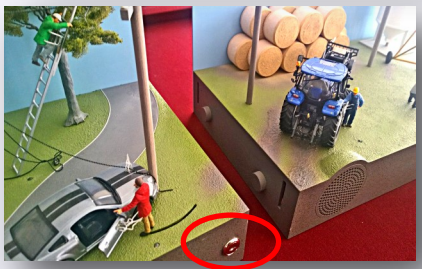
1. Wheel all three shipping cases to your chosen location. Ensure there is a 120VAC electrical outlet nearby.

TIP - Choose a location that is not prone to direct sunlight or high ambient light levels. This will help maximize the display's lighting effects.

2. With the wheels down, unlatch all four latches of each shipping case, then lift the tops upward and place them aside.

1. Remove each display section using the hand slots cut out of the foam. Place each display section on a level surface in the order shown.
   Important: Avoid the use of multiple tables. The surface must be continuous or the display may be damaged when latching the sections together.

2. Mate all three display sections together making sure there are no gaps. Next, latch all four latches in the front and back of the display sections using the key found in the middle shipping case.



Latch (1 of 4)

TIP - Choose a flat surface that measures at least 6ft. X 18in. Standard tables are:

- 6ft. X 2ft
- 6ft. X 18in.
- 8ft. X 2ft.

3. Pull out the two white network cables from the back of the network jacks. Ensure they are seated by noting a "click" when inserting. Adjust the volume control 1/4 turn clockwise. can be adjusted to suit the ambient noise conditions later.

Left Network Jack Volume Control Right Network Jack

Notice to Users

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. HiTech Safety Displays Ltd. has not approved any changes or modification to this device by the user. Any changes or modification could void the user's authority to operate the equipment.

This device complies with Industry Canada's license-exempt RSSs. Operation is subject to the following two conditions:
(1) This device may not cause interference; and
(2) This device must accept any interference, including interference that may cause undesired operation of the devices.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:
(1) l'appareil ne doit pas produire de brouillage;
(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en com promettre le fonctionnement.

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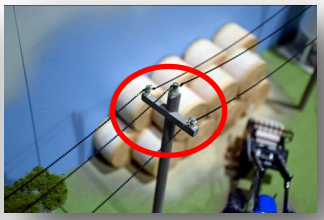
UNPACKING & SETUP (continued)

6. There are two sets of overhead lines that use magnets to keep the lines held in place during shipping. Detach each of the


Magnet


Magnet


Attach Lines


Attach Lines

lines from the base magnets and connect them to the magnets on the associated pole as shown.

7. Remove the AC Adapter, Keyfob and Hot Stick from the bottom of the middle case.

8. Plug the AC adapter's plug to the power jack located at the back of the display then plug the adapter into a wall outlet. The display is now ready to use.

Packing the Display

Tip - Remember to detach the adjoining overhead lines and park their ends on the associated magnets as per the pictures shown above in step 6.

⇒ Pack the display in the reverse order that it was setup and unpacked

⇒ Remember to first detach the overhead lines from the power poles and magnetically link then to the sections magnets as shown in step 6

⇒ Remember to unplug the two network cables in the back of the display and store them in their integrated compartments

Note: In each base is a picture that shows the correct display section to be stored and its orientation.

Quick Start

The display is easily controlled by the remote control keyfob located in the bottom of the middle shipping case. Use the keyfob to advance to the next left or right demonstration as denoted by the illuminated amber LED, then start the associated hazard demonstration.

⇒ Press the left keyfob button to advance to the next left demonstration

⇒ Press the right keyfob button to advance to the next right demonstration

⇒ Press the top keyfob button to start the demonstration

⇒ Press the bottom keyfob button to stop a demonstration before it times out

Note: Pressing either of the "Advance" buttons longer than one second will auto-repeat the advance function.

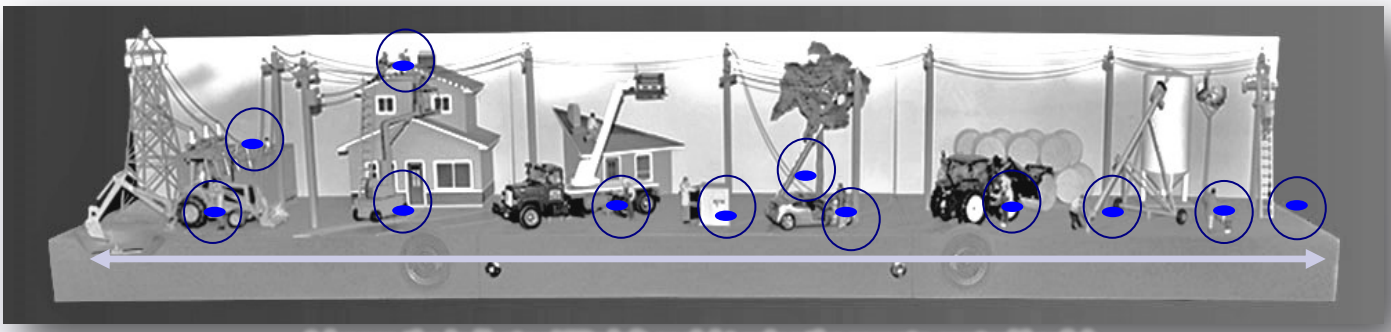
DETAILED INSTRUCTIONS

How the Display Works

The High Voltage Hazard Display features twelve realistic, fully automated demonstrations that use advanced motion, audio and lighting technologies to demonstrate various high voltage hazards. It is the first display of its type to realistically simulate high voltage electric arcs using safe, low voltage electronics and specialized optics. The display is powered by a UL/CSA approved 12VDC wall adapter. As a result, no high voltages are present on the display. The display is controlled easily with the hand held keyfob. Numerous other demonstration are available as a result of the Arc Generating Hot Stick which can make anything appear electrified.

Controlling the Display

The display is easily controlled by the remote control keyfob located in the bottom of the middle shipping case. Use the keyfob to advance to the next left or right demonstration as denoted by the illuminated amber LED, then start the associated hazard



Advance the indicator LEDs left or right using the remote control keyfob

demonstration.

⇒ Press the left keyfob button to advance to the next left demonstration
⇒ Press the right keyfob button to advance to the next right demonstration
⇒ Press the top keyfob button to start the demonstration
⇒ Press the bottom keyfob button to stop a demonstration before it times out automatically

Notes:

- Pressing either of the “Advance” buttons longer than one second will auto-repeat the advance function for rapid navigation to other demonstrations
- A beeping sound will be heard when advancing left or right and when a demonstration ends
- An indicator LED will begin to flash when a demonstration is started and will temporarily turn off while an arc effect is active during the demonstration
- Only the “End Demo” button of the keyfob remains active during a demonstration
- The center button of the keyfob starts an arc sound which can be used to demonstrate other potential hazards by touching the potential hazard while pressing the center button. In addition, it can be used to discourage children from touching the display if there are no barriers or stations in place
- The volume control is located on the back of the display

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Caution: Changes or modifications to the Hot Stick or High Voltage Hazard display, not expressly approved by HiTech Safety Displays Ltd. could void the user's authority to operate the equipment.

Demonstration Descriptions

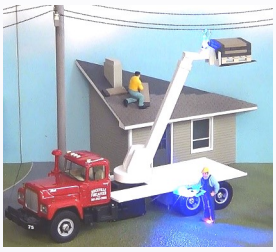
Below are pictures and brief descriptions of the twelve animatronic demonstrations. Numerous other demonstrations of potential hazards can be demonstrated using the Arc Generating Hot Stick. (Bottom)

A backhoe contacts an underground line

A child enters a substation to retrieve a kite and makes contact with a line

A man attaching seasonal lights on a roof makes contact with a line

A swing-lift makes contact with an overhead line

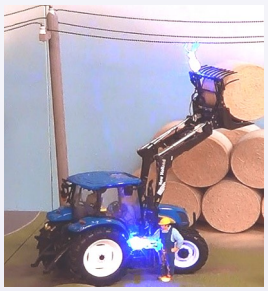


An operator moves a truck crane that contacts an overhead line

A serviceman inspects a transformer box and makes contact with a live conductor

A man climbs a tree to retrieve a ball and contacts an overhead line

A man makes contact with a car which has a live line on it after hitting a pole



A tractor lifting a hay bale makes contact with an overhead line

A man moves an auger that contacts an overhead line

A kite makes contact with an overhead line

A man climbing a ladder to rescue a cat, makes contact with an overhead line

Arc Generating Hot Stick (Patent Pending)

Add unlimited additional demonstrations with the Arc Generating Hot Stick. Touch anything you want to appear electrified with the end of the Hot Stick and press the hidden button in the handle at the same time. A simulated electric arc appears with synchronized arc sounds. Equipped with lithium ion batteries, the Hot Stick will last at least ten years before a new battery is required.