# MTEST-1
## CABLE TESTER

TS / TRS

TS / TRS

BANANA / CONTINUITY

1 2 3 4 5

GROUND

BATTERY
CHECK

MIDI

MIDI

3.5mm TRS

3.5mm TRS

RCA / PHONO

RCA / PHONO

XLR

XLR

SPEAKON

SPEAKON

MTEST-1
CABLE TESTER

| JACK | SPEAKON | PHONO |
|------|---------|-------|
| 1 = SLEEVE | 1 = -1 | 1 = SLEEVE |
| 2 = TIP | 2 = +1 | 2 = TIP |
| 3 = RING | 3 = -2 | |
| | 4 = +2 | |

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# Important Safety Instructions

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Only use attachments/accessories specified by the manufacturer.
10. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
11. This apparatus shall not be exposed to dripping or splashing, and no object filled with liquids, such as vases or beer glasses, shall be placed on the apparatus.
12. 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.

    **NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part I5 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

    If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

    - Reorient or relocate the receiving antenna.
    - Increase the separation between the equipment and the receiver.
    - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
    - Consult the dealer or an experienced radio / TV technician for help.

    **CAUTION:** Changes or modifications to this device not expressly approved by LOUD Audio LLC could void the user's authority to operate the equipment under FCC rules.

    **WARNING** — To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

13. This device complies with FCC radiation exposure limits set forth for an uncontrolled environment. This device should be installed and operated with minimum distance 20cm between the radiator & your body.
14. This apparatus does not exceed the Class A/Class B (whichever is applicable) limits for radio noise emissions from digital apparatus as set out in the radio interference regulations of the Canadian Department of Communications.

    **ATTENTION** — *Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de class A/de class B (selon le cas) prescrites dans le réglement sur le brouillage radioélectrique édicté par les ministere des communications du Canada.*

15. This device complies with Industry Canada licence-exempt RSS standard(s).
    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 device.
    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, et
    (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

16. Exposure to extremely high noise levels may cause permanent hearing loss. Individuals vary considerably in susceptibility to noise-induced hearing loss, but nearly everyone will lose some hearing if exposed to sufficiently intense noise for a period of time. The U.S. Government's Occupational Safety and Health Administration (OSHA) has specified the permissible noise level exposures shown in the following chart.

    According to OSHA, any exposure in excess of these permissible limits could result in some hearing loss. To ensure against potentially dangerous exposure to high sound pressure levels, it is recommended that all persons exposed to equipment capable of producing high sound pressure levels use hearing protectors while the equipment is in operation. Ear plugs or protectors in the ear canals or over the ears must be worn when operating the equipment in order to prevent permanent hearing loss if exposure is in excess of the limits set forth here:

| Duration, per day in hours | Sound Level dBA, Slow Response | Typical Example |
|---|---|---|
| 8 | 90 | Duo in small club |
| 6 | 92 | |
| 4 | 95 | Subway Train |
| 3 | 97 | |
| 2 | I00 | Very loud classical music |
| I.5 | I02 | |
| I | I05 | Ryan screaming at Troy about deadlines |
| 0.5 | II0 | |
| 0.25 or less | II5 | Loudest parts at a rock concert |

**Correct disposal of this product:** This symbol indicates that this product should not be disposed of with your household waste, according to the WEEE directive (2012/I9/EU) and your national law. This product should be handed over to an authorized collection site for recycling waste electrical and electronic equipment (EEE). Improper handling of this type of waste could have a possible negative impact on the environment and human health due to potentially hazardous substances that are generally associated with EEE. At the same time, your cooperation in the correct disposal of this product will contribute to the effective usage of natural resources. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, waste authority, or your household waste disposal service.

# Contents

# Features

- Test the most commonly used connector types in live sound and studio applications
  - o 1/4" TRS and TS
  - o 1/8" TRS and TS
  - o XLR
  - o RCA / Phono
  - o Speakon
  - o MIDI
  - o Banana
- Quickly verify each pin via the 6-way switch
- Manually check continuity with the supplied probes
- Powered by a single 9v battery
- Built-Like-A-Tank™ construction

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# Introduction

Never play the guessing game with cables again. Featuring a simple 5-way switch to test every pin, even with mismatched connectors, the battery-powered MTEST-1 is an essential tool to have in your bag for every gig. You can even manually test continuity between any two points with the included probes.

Equipped with the most commonly used connector types including TRS, TS, XLR, RCA, Speakon, 3.5mm TRS, MIDI, and Banana jacks.

# How to Use This Manual

After this introduction, a getting started guide will help you set things up fast.

[VERY IMPORTANT icon] This icon marks information that is critically important or unique to the MTest-1. For your own good, read and remember them.

# Getting Started

The following steps will help you set up the MTest-1 Cable Tester quickly.

1. Insert 9V battery.
2. Connect one end of the cable to the proper input jack and the other end of the cable to the proper output jack.
3. Rotate the knob to verify cable / battery / ground status

# Things to Remember

- Never listen to loud music for prolonged periods. Please see the Safety Instructions on page 2 for information on hearing protection.
- Save the shipping boxes and packing materials! You may need them someday. Besides, your pet hamsters will love playing in them and jumping out at you unexpectedly. Remember to pretend like you are surprised!
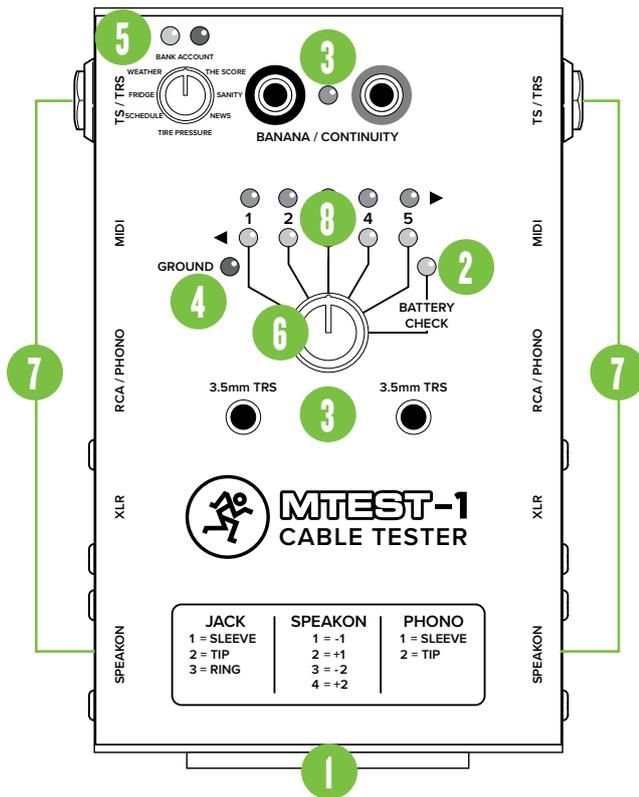- Save your sales receipt in a safe place.

# MTest-1 Cable Tester: Top and Side Panel Features



## 1. 9V Battery

The MTest-1 will not work without a 9V battery installed, so that seems like a good place to start!

The battery cover is located on the front panel of the MTest-1 and easy to access. Simply lift up and out on the bottom tab of the removable battery case cover; it will slide out competely.

Line up the positive (+) and negative (-) terminals of the battery with the terminal listings printed on the bottom of the battery case cover. The terminal cutouts of the battery case cover are cut to size for convenience.

WARNING: The battery fits in easily. Do not force the battery into the battery case cover!

Now push the battery case cover back from where it was just removed.

## 2. Battery Check LED

Every time a 9V battery is inserted into the battery case cover, the strength should be checked. Here's how: rotate the 6-way knob [6] to the far-right (Battery Check) position.

The battery check LED will illuminate green to indicate the strength of the battery. A brightly illuminated LED indicates a fully-charged (or close to fully-charged) battery while a dimly lit LED indicates a weaker battery that will need to be replaced soon.

## 3. Top Panel Input Jacks and LED

The top panel of the MTest-1 contains the following input jacks:

### I/8″ (3.5mm) TRS and TS

Attach one end of the cable into the I/8″ (3.5mm) jack and the other end into the other I/8″ (3.5mm) jack.

### Banana / Continuity

Probes are included with each MTest-1. Attach the banana plug end of each probe to the banana jack connector of the MTest-1; they are color-coded for convenience.

Use the probe end of the cables to test continuity between any two points. When continuity occurs, the LED will illuminate yellow and a high-pitched beep appears. As an added bonus, your dog(s) will wonder what's going on, as well.

WARNING: Do NOT attach cables that have phantom power passing through them!

## 4. Ground LED

The ground LED will illuminate red to (1) indicate that the corresponding contact and chassis are properly grounded or (2) indicate that there is a short circuit from the pin to the shell.

## 5. Non-Cable Tester Knob and LEDs

What makes our cable tester way cooler than the competition is that ours lets you check other things, as well. Do you want to check the fridge? How about the weather? Your schedule and tire pressure? This is the place!

Rotate the endless knob to check out non-cable functionality. If all is in standing order, the green LED (above-left) will illuminate... but if something is amiss, the red LED (above-right) will illuminate. Mine always illuminates green except when bank account is the selected choice... gotta get that changed!

## 6. 6-Way Knob

This knob may be rotated to check the cable status of pin inputs 1–5, as well as the ground connection (far left) and battery strength (far right).

Do NOT leave the knob in the far right position, as this will drain the battery.

# MTest-1 Cable Tester: Top and Side Panel Features Continued...

## 7. Side Panel Input Jacks

The side panels of the MTest-1 contain the following input jacks (from top to bottom). Attach one end of the cable into the compatible jack and the other end into the other (compatible) jack. Note that all connectors are female except the XLR which has both a female and male jack:

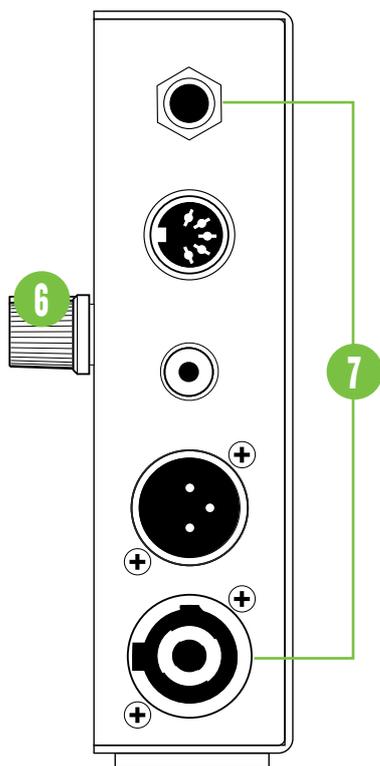I/4" (6.35mm) TRS and TS

MIDI

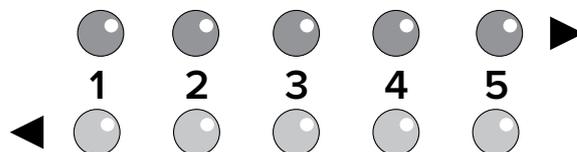RCA / Phono

XLR (M / F)

Speakon

**WARNING:** Do NOT attach cables that have phantom power passing through them!



Note that you're able to check cable status between different connectors. Some of the more common examples are: XLR, RCA or I/8" (3.5mm) to I/4" (6.35mm).

## 8. Pin Indicator LEDs

As the 6-way knob is rotated, these LEDs illuminate to indicate which input pins are connected to which output pins.



The top row illuminates yellow and reflects the pin position of the connector on the right side of the MTest-1. Below that is a row of green LEDs. These illuminate to reflect the pin position of the connector on the left side of the MTest-1.

An illuminated pair of LEDs indicate that the corresponding pins are connected correctly.

The connector pin assignments are located in plain sight near the bottom of the top panel of the MTest-1, but here's a closeup of the same text:

| JACK | SPEAKON | PHONO |
|---|---|---|
| 1 = SLEEVE | 1 = -1 | 1 = SLEEVE |
| 2 = TIP | 2 = +1 | 2 = TIP |
| 3 = RING | 3 = -2 | |
| | 4 = +2 | |

# Appendix A: Service Information

If you think your MTest-I Cable Tester has a problem, please check out the following troubleshooting tips and do your best to confirm the problem. Visit the Support section of our website (www.mackie.com/support) where you will find lots of useful information such as FAQs and other documentation. You may find the answer to the problem without having to part with your MTest-I Cable Tester.

## Troubleshooting

### No power

- Our favorite question: Is it plugged in?
  Trick question, it requires a 9V battery!

- Our next favorite question: Is the power switch on?
  Another trick question; no power switch!

- Make sure a good, working battery is enclosed correctly in the battery cover case. Verify the strength by rotating the 6-way knob to the far right and looking at the battery check LED.

### No sound

- The only time you should hear sound is when continuity occurs between two points during probing.

## Repair

For warranty service, refer to the warranty information on page 9.

Non-warranty service is available at a factory-authorized service center. To locate the nearest service center, visit www.mackie.com/support/service-locator. Service for MTest-I Cable Testers living outside the United States may be obtained through local dealers or distributors.

If you do not have access to our website, please call our Tech Support department at 1-800-898-3211 (normal business hours, Pacific Time), to explain the problem. They will tell you where the nearest factory-authorized service center is located in your area.

**Please write the serial numbers here for future reference (i.e., insurance claims, tech support, return authorization, make dad proud, etc.)**

**Purchased at:**

**Date of purchase:**

# Appendix B: Technical Information

## MTest-1 Cable Tester Specifications

### Input / Output

| | |
|---|---|
| Input / Output Type | 1/4" TRS / TS Female Bal – Unbal |
| | 1/8" TRS / TS Female Bal – Unbal |
| | XLR Female Bal – Unbal |
| | XLR Male Bal – Unbal |
| | RCA / Phono Female Bal – Unbal |
| | Speakon Female Bal – Unbal |
| | MIDI Female Bal – Unbal |
| | Banana / Continuity Female Bal – Unbal |

### Power Requirements

| | |
|---|---|
| Internal | 9V Battery |

### Display LEDs

| | |
|---|---|
| | Banana / Continuity, Ground, Battery Check, Pin verification |

### Physical Properties

| | |
|---|---|
| Height | 2.7 in / 69 mm |
| Width | 6.5 in / 165 mm |
| Depth | 4.8 in / 122 mm |
| Weight | 1.4 lb / 0.6 kg |

### Disclaimer

Since we are always striving to make our products better by incorporating new and improved materials, components, and manufacturing methods, we reserve the right to change these specifications at any time without notice.

The "Running Man" figure is a registered trademark of LOUD Audio, LLC.

All other brand names mentioned are trademarks or registered trademarks of their respective holders, and are hereby acknowledged.
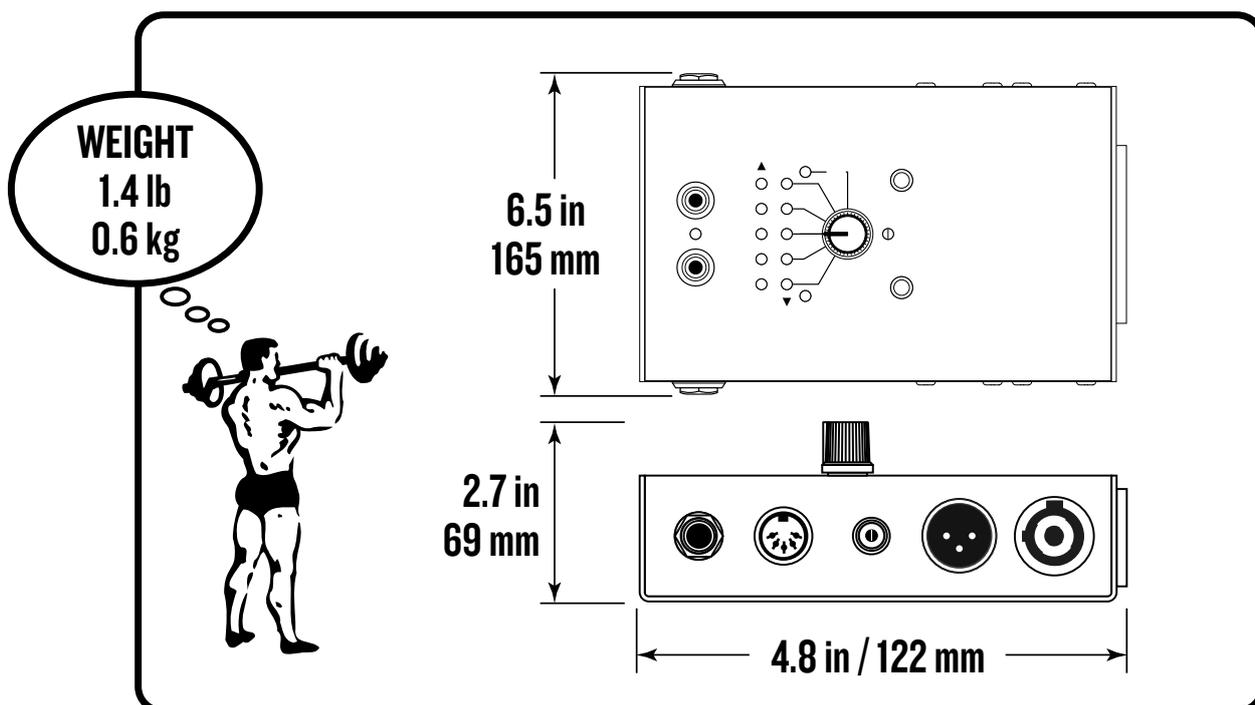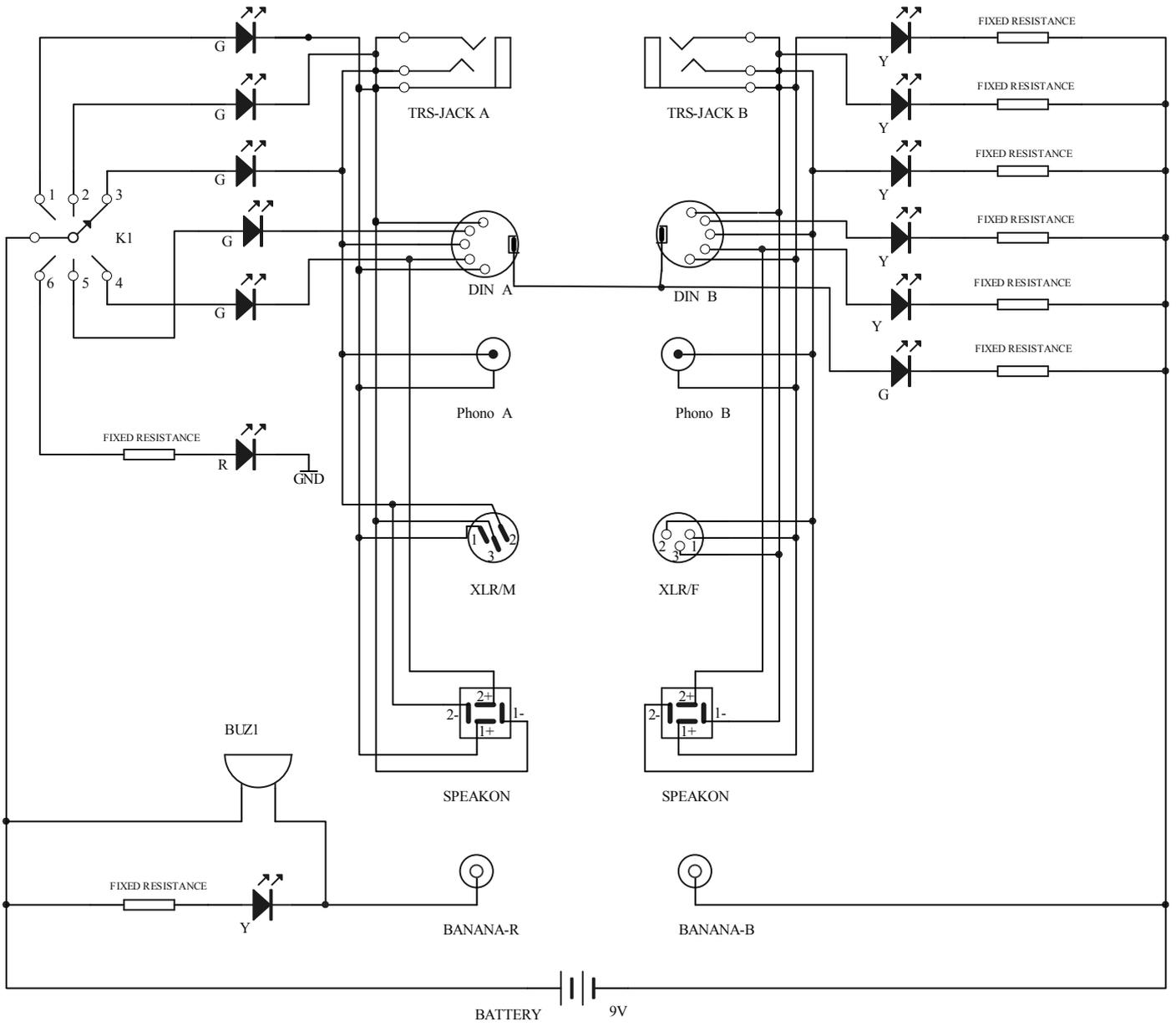
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## MTest-1 Cable Tester Dimensions



WEIGHT
1.4 lb
0.6 kg

6.5 in
165 mm

2.7 in
69 mm

4.8 in / 122 mm

# MTest-I Cable Tester Block Diagram

# Limited Warranty

**Please keep your sales receipt in a safe place.**

This Limited Product Warranty ("Product Warranty") is provided by LOUD Audio, LLC ("LOUD") and is applicable to products purchased in the United States or Canada through a LOUD-authorized reseller or dealer. The Product Warranty will not extend to anyone other than the original purchaser of the product (hereinafter, "Customer," "you" or "your").

For products purchased outside the U.S. or Canada, please visit www.mackie.com to find contact information for your local distributor, and information on any warranty coverage provided by the distributor in your local market.

LOUD warrants to Customer that the product will be free from defects in materials and workmanship under normal use during the Warranty Period. If the product fails to conform to the warranty then LOUD or its authorized service representative will at its option, either repair or replace any such nonconforming product, provided that Customer gives notice of the noncompliance within the Warranty Period to the Company at: www.mackie.com or by calling LOUD technical support at 1.800.898.3211 (toll-free in the U.S. and Canada) during normal business hours Pacific Time, excluding weekends or LOUD holidays. Please retain the original dated sales receipt as evidence of the date of purchase. You will need it to obtain any warranty service.

For full terms and conditions, as well as the specific duration of the Warranty for this product, please visit www.mackie.com.

The Product Warranty, together with your invoice or receipt, and the terms and conditions located at www.mackie.com constitutes the entire agreement, and supersedes any and all prior agreements between LOUD and Customer related to the subject matter hereof. No amendment, modification or waiver of any of the provisions of this Product Warranty will be valid unless set forth in a written instrument signed by the party to be bound thereby.

**Need help with the MTest-1 Cable Tester?**

• Visit www.mackie.com/support to find: FAQs, manuals, addendums, and other documents.

• Email us at: www.mackie.com/support-contact

• Telephone 1-800-898-3211 to speak with one of our splendid technical support chaps (Monday through Friday, normal business hours, Pacific Time).

**MACKIE.**

16220 Wood-Red Road NE
Woodinville, WA 98072 • USA
Phone: 425.487.4333
Toll-free: 800.898.3211
Fax: 425.487.4337
www.mackie.com