



AUDIO SOLUTIONS

SOLUTIONS FOR YOUR AUDIO NEEDS

BE HEARD™

Clear Sound.
Expert Support.



Family Owned
Since 1977
800-369-7768
GalaxyAudio.com

AUDIO SOLUTIONS

Introduction to CheckMate Series, JIBs, & CRICKET Continuity/Polarity Tester



**Series of problem solvers that make anyone's sound system better.
These tools provide the expert touch.**

The Audio Solutions product line offers many convenient, problem solving tools for the audio professional. Our popular line of CHECK MATE™ SPL meters are designed to meet the measurement requirements of most audible environments. The Jacks in the Box™ tools assist in splitting, combining, mixing, and cable testing. Look to one of our Audio Solutions to help solve the next audio challenge that arises.



The Galaxy Audio® complete line of CHECK MATE™ SPL (Sound Pressure Level) Meters is useful to musicians, sound contractors, venue managers, law enforcement, and anyone wanting to check and monitor the audio level in a specific environment. Our SPL meters provide accurate information for determining if a sound source is in violation of a safety standard, noise ordinance, or if hearing damage could occur. From the CM-80 to the CM-170 Galaxy Audio® offers a CHECK MATE™ SPL meter to fit anyone's needs. The newest in our CHECK MATE™ SPL meter line, is the low cost, compact sized, CM-80 with MAX/MIN hold function, automatic backlight display for dimly lit environments, and an auto power off feature. Looking for more features in your SPL meter? The high performance CM-170 has a range of useful features such as included software and USB cable for charging, data logging and clock with a capacity of storing up to 64,000 records, electronic calibration, and more.



The CRICKET® polarity/continuity test set is easy to use, and a "must have" for sound contractors, musicians, DJs, and any audio professional involved with live sound. Polarity, should it become reversed, can cause adverse issues within a sound system. If two sources are emitting the same electrical or acoustic tone (frequency), and one of those sources is in a state of inverted polarity, those tones, when combined at a given point, will cancel each other. This severely alters the sound of a system. The purpose of the CRICKET® is to test the polarity of a sound system each time it is used to insure it is working properly.

JACKS IN THE BOX

JIB/PA50 Amplifier, JIB/MM Multi Mixer, & JIB Power Supply



Jacks in the Box

JIB/MM Multi Mixer

JIB/MM

- +24V Phantom Power
- 7 Inputs / 4 Channels
- Headphone Output with Volume
- Multiple Outputs
- Metal Construction
- Portable - Powered by 2 "AA" Batteries
- High Gain / Wide Dynamic Range
- Dimensions: 7.2" x 4" x 2.1" (182.4 x 102.3 x 53 mm) (HxWxD)
- Weight: 36.33 oz (1,030 g)



The Multi Mixer (JIB/MM) is a cost effective and convenient solution for live sound, home recording, field recording, audio/video, and many other mixing applications. This unit features 4 inputs; Chan 1&2: XLR/1/4" combo with -20dB pad, Chan 3: stereo RCA and stereo 1/8" (3.5 mm), Chan 4: stereo RCA. Each channel has its own volume control.

The JIB/MM also features numerous outputs; XLR, 1/4", stereo RCA, and a stereo 1/8" (3.5 mm) headphone output with a volume control. The "Mic/Line switch" located between the XLR and 1/4" balanced mono outputs allows for selecting either a "Mic Level" balanced mono output or a "Line Level" balanced mono output.

Powered by 2 "AA" batteries, providing about 15 hours of battery life (Alkaline) or by an optional DC power supply (JIB/UA4.5-14), the JIB/MM will supply +24V phantom power to microphones.

The JIB/MM is great for:

- Adding inputs to an existing mixer by creating a sub-mix of two or more sources before sending the signals to the main mixer or powered speaker.
- Serving as a sophisticated cable adaptor that not only adapts the connector type but also provides the correct impedance with adjustable level control.
- Functioning as the main mixer for solo or duo acts as well as AV presentations.
- As a mixer for rehearsals when its impractical to set up the entire PA.
- Interfacing pro audio gear with consumer audio gear.
- Battery operation allows remote location use where AC power is unavailable.
- As an emergency backup mixer.

Also great for Use in House of Worship, Schools, and Bands.



JIB/UA4.5-14

Optional Universal Power Adaptor



- 4.5V DC, at 1A
- 4 mm barrel plug with center positive.
- Comes with 4 different AC plug adaptors.
- Accepts any input voltage from 100 to 240V AC, 50-60Hz

JIB/PA50 50 Watt Class D Amplifier



JIB/PA50

- Output 50 Watt (25 Watts RMS per channel)
- Three stereo inputs, two on RCA connectors and one on 3.5 mm stereo jack
- Balanced sub-line level input summed to both channels
- Stereo input can be controlled externally with 10k pot
- Energy-efficient amplifier
- Dimensions: 1.7" x 4.3" x 3" (43 x 109 x 76 mm) (HxWxD)
- Weight: 12.35 oz (350 g)

The JIB/PA50 is designed to meet the demands of educational, commercial, industrial, and pro audio installations. Its compact, lightweight design is ideal for a wide range of applications requiring noiseless amplification. The JIB/PA50 has a 50 Watt (2x25W) Energy-Star rated Class D amplifier, housed in a quarter rack design for convenient installation in tight spaces where conventional amplifiers cannot be used.

The three stereo inputs, microphone input, and separate line and mic gain adjustments allow for connecting the JIB/PA50 to a projector, wireless microphone receivers, and other sound sources quickly and easily. The Energy-Star amplifier automatically goes into standby mode if an input signal is not detected for 20 minutes, dropping power consumption to only 0.8W, saving energy and money, while extending the JIB/PA50 life span.

Great for classrooms, boardrooms, conference rooms, and small audio systems.

JACKS IN THE BOX

JIB/C & JIB/R Combines, & JIB/S & JIB/Y Splitters



Jacks in the Box

JIB/C Combines *Need More Inputs?*



- **JIB/C**
- Add an additional microphone to the Powered Hot Spot (or other powered monitor) when all inputs are in use.
- Permits phantom power to go to both microphones if available from the console.
- Two Male XLR Inputs
- One Female XLR Output
- Dimensions: 5" x 1.5" x 1.75" (127 x 63.5 x 44.5 mm)(HxWxD)
- Weight: 12 oz (340.2 g)

The JIB/C is designed for situations requiring one extra channel to plug a microphone into a mixer. Simply plug a microphone (wired mic or wireless mic receiver) into each input and connect the output of the JIB/C to the input of your mixer. Another great feature of the JIB/C is that it will also allow the phantom power (supplied from the mixing console) to go to both microphones.

Keep in mind, there is a 10dB loss to summing. It would be best to sum microphones in the same sound field such as combining two microphones suspended over a choir.

JIB/R Combines *Need More Inputs?*



- **JIB/R**
- Combines (sums) two stereo CD or tape players into one mono (XLR or 1/4") output.
- Frees mixer channels.
- Phantom block on the XLR prevents phantom power from reaching CD/tape players connected to the RCA jacks.
- Two Dual RCA Inputs
- One Female XLR Output, & One 1/4" Output
- Dimensions: 5" x 1.5" x 1.75" (127 x 63.5 x 44.5 mm)(HxWxD)
- Weight: 11.2 oz (317.5 g)

If an application arises, requiring the addition of a tape player and CD player into a smaller mixing console, the JIB/R will allow you to sum two stereo sources such as a Tape, CD, mini Disc, or MP3 player, and combine them into one mono XLR or 1/4" output. This allows one channel to be freed up for other important inputs. The JIB/R, also has a phantom block circuit which prevents phantom power going to the input sources.

JIB/S Splits *Need More Outputs?*



- **JIB/S**
- Splits a single monitor feed to up to four Powered Hot Spots (or other powered speakers).
- Splits a single headphone feed to multiple headphones.
- Balanced TRS inputs and outputs.
- One 1/4" Input
- Four 1/4" Outputs
- Dimensions: 5" x 1.5" x 1.75" (127 x 63.5 x 44.5 mm)(HxWxD)
- Weight: 11.2 oz (317.5 g)

The JIB/S allows you to split an audio signal to as many as four other sources. This is useful when up to four performers are listening to the same monitor mix. The JIB/S works great with powered speakers, amplifiers, or headphones. The JIB/S has balanced TRS inputs and outputs, for use with balanced, unbalanced, and stereo left/right signals.

JIB/Y Splits *Need More Outputs?*



- **JIB/Y**
- Splits a microphone or other audio signal to two different inputs, like a Powered Hot Spot (or other powered monitor) and a console.
- Phantom block circuitry prevents interference from two different phantom power sources.
- One Male XLR Input
- Two Female XLR Outputs
- Dimensions: 5" x 1.5" x 1.75" (127 x 63.5 x 44.5 mm)(HxWxD)
- Weight: 12 oz (340.2 g)

The JIB/Y allows you to split a microphone or other audio signal to two different inputs. One application is splitting your microphone, first to the monitor board or powered monitor on stage and second to the front of house board. This will split your signal, giving you control of your own stage mix without affecting the house volume. Phantom block circuitry prevents interference from two different phantom power sources.

JIB AND CRICKET

JIB/CT Cable Tester & CPTS Polarity/Continuity Tester



Jacks in the Box

JIB/CT Cable Tester

JIB/CT

- Ideal for Musicians, Contractors, and Live Sound
- Tests 6 Different Connector Types
- Internal Micro Processor Tests Cable 200 Times Per Second To Detect Intermittent Problems
- Easy to Read Pass/Fail Indicator
- Quick and Easy to Use
- Tests "Y" Cables
- Tests Adaptor Cables
- Auto Power Off
- Power Supplied by One 9V Battery
- Battery Life About 100 Hours (Alkaline)
- Dimensions: 5.91" x 3.23" x 2.17 (150 x 82 x 55 mm) (HxWxD)
- Weight: 11.2 oz (317.5 g)



Cable Tester (JIB/CT) is designed to test cables quickly and easily. The JIB/CT tests 6 different types of cables, XLR, 1/4", RCA, 1/8", Twist-Lock, and DIN (Midi). The JIB/CT features a specially designed microprocessor, which tests a cable 200 times per second. (A simple 'Pass/Fail' indicator lights up when you plug each side of the cable into the JIB/CT and select the number of conductors of the cable using the rotary switch.)

Great for Use in House of Worship, Schools, and Bands.

CRICKET

CPTS Polarity/Continuity Tester

CPTS

- Checks polarity and continuity
- 1/4" TRS and XLR input & output
- Tests speakers, mics, cables and wireless systems
- Tests mixers and signal processors for polarity inversions
- Internal speaker for testing mic polarity
- Internal mic for testing speakers
- High level output for testing 2,000' of cable
- Battery test on Receive module saves troubleshooting time
- Power supplied by one 9V battery in each unit (Alkaline only)
- Dimensions: 1.9" x 3.46" x 6.4" (48.26 x 88 x 162 mm) (HxWxD)
- Test Set Weight: 33.6 oz (952.5 g)



The CRICKET® polarity/continuity test set is easy to use, and a "must have" for sound contractors, musicians, DJs, and any audio professional involved with live sound. Polarity, should it become reversed, can cause adverse issues within a sound system. If two sources are emitting the same electrical or acoustic tone (frequency), and one of those sources is in a state of inverted polarity, those tones, when combined at a given point, will cancel each other. This severely alters the sound of a system. Polarity can be reversed while soldering cables, adding components to a sound system, reversing 'Banana' plugs, or replacing a component in a speaker cabinet improperly, to name a few instances. The purpose of the CRICKET® is to test the polarity of a sound system each time it is used to insure it is working properly.

Galaxy Audio's battery powered CRICKET® Polarity/Continuity Test Set makes it easy to determine whether every component in an audio system from patch bay to console to speakers is in or out of polarity. The CRICKET® tests balanced and unbalanced cables of up to 2,000 feet in length. It will drive a "snake" (even one with transformers), and indicate which of a microphone's XLR connector pins is hot. The CRICKET® can also plug directly into a speaker cabinet and drive the components. A glance at the CPTS's red and green LEDs can save hours of troubleshooting. No wonder it's an indispensable tool for sound system owners, operators, installers, and sound rental companies.

The CRICKET® Polarity Tester is a two-piece unit ('Send' & 'Receive'). The Send unit generates a 'pulse', which is sent through the speaker, cable, microphone, or the device being tested. The Receive unit interprets that pulse and indicates if that pulse is positive or negative. The bottom of each unit has a quick reference guide on how to understand the readings given. The CRICKET® Polarity Test Set is easy to use, necessary to own, and affordable. The CRICKET® is suggested for anybody working with sound systems.



CHECKMATE SPL

CM-80, CM-130, CM-140, CM-170 SPL Meters, & CM-C200 Calibrator



CheckMate Series SPL Meters

CM-80 SPL Meter CM-130 SPL Meter



- CM-80**
- Mini Size
 - Low Cost
 - MAX/MIN Hold Function
 - Freq. Range 31.5Hz - 8kHz
 - Freq. Weighting A
 - Automatic Backlight Display
 - Level Range Display
 - Range 30 - 130dB
 - Accuracy ± 1.5 dB
 - LCD Display
 - Resolution 0.1dB
 - Low Battery Indication
 - Auto Power Off
 - IEC 651 Type II, ANSI S1.4 Type II
 - Dimensions: 5.9" x 2.24" x 1" (149 x 57 x 26 mm) (HxWxD)
 - Weight: 5.08 oz (144 g)



- CM-130**
- Mini Size
 - Low Cost High Performance
 - MAX Function
 - Freq. Range 125Hz - 8kHz
 - Freq. Weighting A/C
 - Fast/Slow Time Weighting
 - Level Range Display
 - Range 40 - 130dB
 - Accuracy ± 2 dB
 - LCD Display
 - Resolution 0.5dB
 - Dimensions: 9.1" x 2.1" x 1.3" (232 x 54 x 34 mm) (HxWxD)
 - Weight: 6 oz (170 g)

CM-140 SPL Meter CM-170 SPL Meter



- CM-140**
- Mini Size
 - Low Cost High Performance
 - MAX/MIN Function
 - Freq. Range 31.5Hz - 8kHz
 - Freq. Weighting A/C
 - Fast/Slow Time Weighting
 - Level Range Display
 - AC Signal Output
 - Range 32 - 130dB
 - Accuracy ± 1.5 dB
 - LCD Display
 - Resolution 0.1dB
 - IEC 651 Type II, ANSI S1.4 Type II
 - Dimensions: 9.1" x 2.1" x 1.3" (232 x 54 x 34 mm) (HxWxD)
 - Weight: 6 oz (170 g)



- CM-170**
- Freq. Range 20Hz - 8kHz
 - Freq. Weighting A/C
 - Fast/Slow Time Weighting
 - Data Logging with Clock
 - USB Mini Interface
 - Includes Software and USB Cable
 - Range 30 - 130dB
 - Accuracy ± 1.4 dB
 - Electronic Calibration
 - Auto Power Off
 - IEC 61672-1 Type II, ANSI S1.4 Type II
 - Dimensions: 10.4" x 2.5" x 1.1" (264 x 63 x 29 mm) (HxWxD)
 - Weight: 8.64 oz (245 g)

CheckMate Series SPL Meter Calibrator

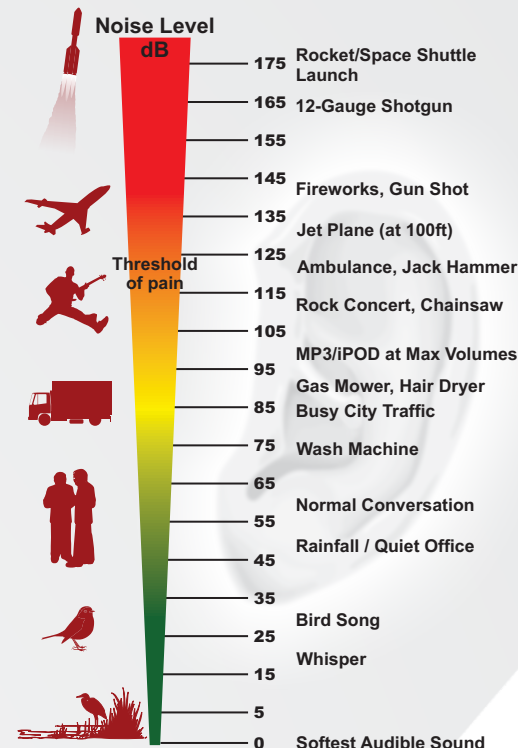
CM-C200 SPL Meter Calibrator



- CM-C200**
- Accurate and simple to use: ± 0.5 dB
 - Calibration levels of 94dB and 114dB at 1kHz
 - Fits 1", 1/2" and 1/4" diameter microphones
 - Low Battery Indication
 - Conforms to IEC 60942 2003 Class 2 and ANSI S1.40-1984
 - Dimensions: 4.62" x 2.47" x 1.72" (117.36 x 62.75 x 43.73 mm) (HxWxD)
 - Weight: 6.6 oz (186.4 g) (including battery)

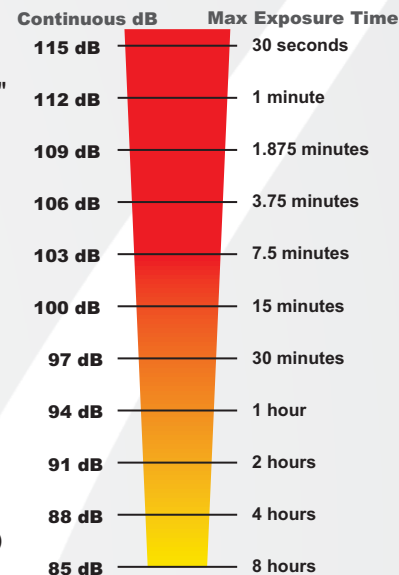
How Loud Is Too Loud?

Noise induced hearing damage is related to the duration and volume of exposure. Government research suggests the safe exposure limit is 85 decibels for eight hours a day.



Max Exposure Time at Continuous dB

The below chart explains how much noise plus the length of time one can be exposed to noise before probable damage to hearing will occur. Hearing damage will occur at the higher frequencies first then affect the mid and low frequencies.



Sources: www.dangerousdecibels.org
www.cdc.gov/healthyyouth/noise/index.htm