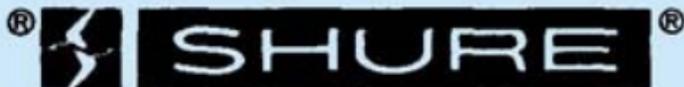




era III
begins



*anything II could do
III can do better!*



V-15 Type III and V-15 III-G

The Shure V-15 Type III clearly defines the outer limits of the state of the art in phono cartridge design.

It is a worthy successor to the world-acclaimed V-15 Type II Improved, and is designed to function in a milieu where rapidly multiplying developments in recording techniques and rapid advances in playback equipment are making ever-increasing demands on the capabilities of the phono cartridge. The V-15 Type III was developed to satisfy the "critical ear" of the audiophile of the Seventies.

This booklet was prepared to tell you the complete story of its development. A few minutes spent with it will enhance your enjoyment of this remarkable new cartridge.

the seven year search

The V-15 Type III is the result of seven years of extensive laboratory development in which revolutionary, computer-produced data were drawn upon to establish new performance parameters and chart new directions in design.

New core structure. New stylus assembly.

Among the most notable design achievements of the Type III are an entirely new *laminated* magnetic core structure, and an ingenious new stylus assembly with a 25% reduction of effective stylus mass.

The net result of our engineers' labors are these: (1) higher trackability than ever at low tracking forces ($\frac{3}{4}$ to $1\frac{1}{4}$ grams); (2) an astonishingly flat frequency response with no noticeable emphasis or de-emphasis at any frequency; and (3) a significantly extended dynamic range, beyond even that of our V-15 Type II Improved. And all this without loss in output level!

Since Shure engineers have long known that *isolated* improvements in individual design parameters do not necessarily produce significant changes in total cartridge performance, all improvements were brought into perfect equilibrium with each other, so that each performance factor enhanced every other performance factor.

The result of this unique balance is a total audio effect greater than the sum of its individual performance characteristics. To science, this phenomenon is known as a synergistic reaction; ergo, we call the V-15 Type III the Synergistic Cartridge.

Four-channel compatibility

The same performance parameters that apply to conventional stereo—*especially trackability*—also apply to four-channel matrix systems. Because mistracking is one of the most noticeable types of distortion in four-channel playback, the V-15 Type III, with its outstanding trackability, is a superb performer in all four-channel matrix systems.

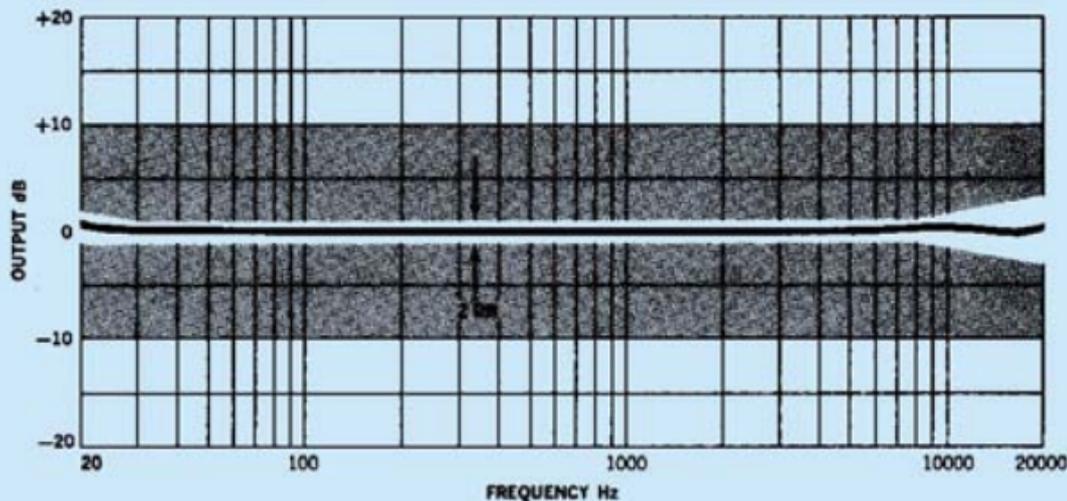
the sound of the V-15 Type III

The sound of the Type III, paradoxically, is due in no small part to an absence of a sound of its own. Its sound is so neutral and coloration-free that your finest recordings can be reproduced precisely as they were recorded, without emphasis or de-emphasis. In no way does it interpose itself upon the music. It transmits only the signals it finds in the record grooves, adding nothing, subtracting nothing. The resultant sound is neither "sweet," nor "bright," nor "brilliant" . . . *it is the sound of the recording itself!*

A Hearable Difference!

Exhaustive listening tests utilizing a truly eclectic selection of recordings and playback equipment have demonstrated conclusively that the V-15 Type III makes a distinct, clearly audible difference in the sound of modern recordings. In extended listening, the uncolored neutral timbre and tonality of the Type III results in a remarkable listening experience in which complex melodic lines from every conceivable kind of music—from baroque to rock—utilizing a wide variety of recording techniques are delineated with a startling and hitherto unheard clarity.

The V-15 Type III re-creates your recordings with clarity and truth.



A graphic representation of the audible spectrum, which illustrates the uniformly flat response you will achieve with your V-15 Type III cartridge. Under the Shure Quality Control Program, every Type III cartridge, whether it is purchased now or next year, in Chicago, London, Hong Kong, or Sydney, *must* produce a flat response curve that fits within the extraordinarily narrow limits of the Type III response "output envelope" (the unshaded area above). The curve shown was made by a typical Type III, mounted in an SME tone arm, and tracking the STR100 test record, response corrected for 6 dB/octave recorded characteristic below 500 Hz.

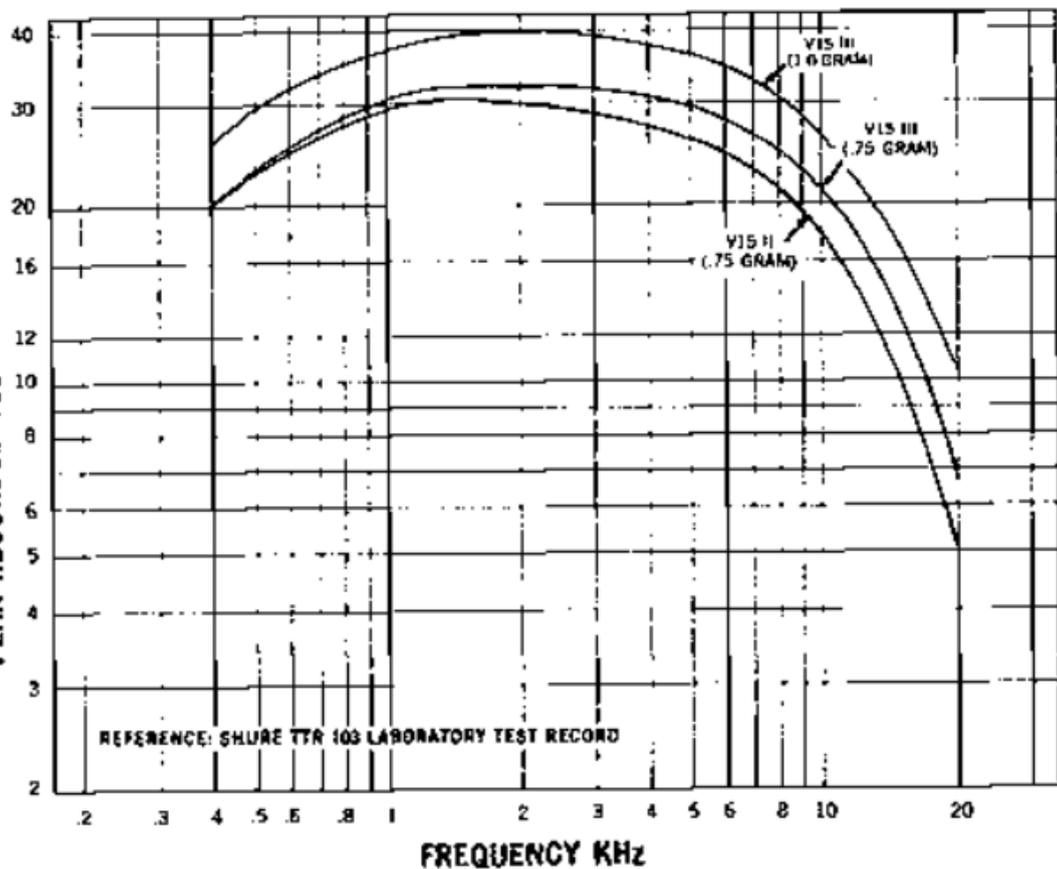
a new standard of trackability

The chart at the right shows the unmistakable superiority of the V-15 Type III in the single most important measure of overall cartridge performance: trackability.

In a top quality tone arm, the Type III effortlessly tracks the highest modulated levels we have found in testing hundreds of difficult-to-track, modern recordings.

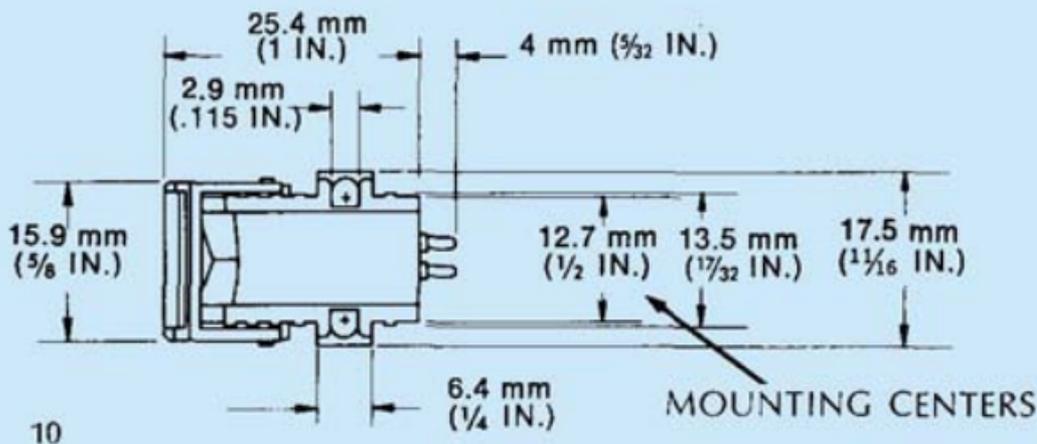
The Type III enables you to use ultra-light tracking forces that will significantly increase the life of your recordings and stylus tip. Further, it will enable you to use the most advanced light-tracking tone arms and precision turntables available, and to use the newer, even more sophisticated turntables and arms now under development.

PEAK RECORDED VELOCITY cm/SEC

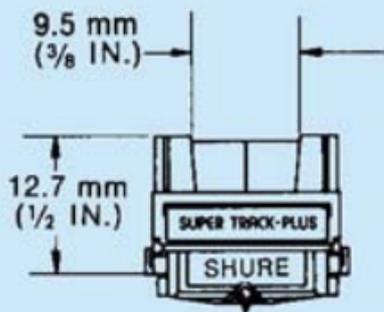


Shure V-15 Type III dimensional drawing

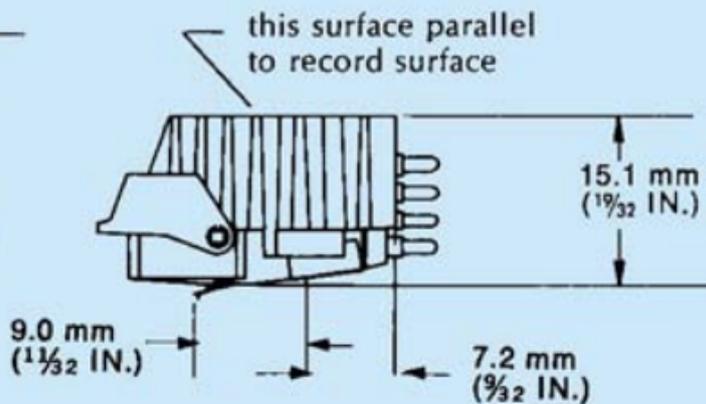
TOP VIEW



FRONT VIEW



SIDE VIEW OPTIMUM PLAYING POSITION



MOUNTING

The V-15 Type III Dynetic® Cartridge has 12.7 mm (standard ½ in.) mounting centers. Hardware is supplied with each cartridge for mounting purposes.

1. Remove stylus guard and stylus (see Stylus Replacement).
2. Connect leads to cartridge (see Connections).
3. Lay cartridge in shell and align mounting holes on sides of cartridge with holes or threads in shell. Follow turntable manufacturer's instructions to mount cartridge in tone arm or plug-in shell.
4. Reinsert stylus (see Stylus Replacement).

In some tone arms and plug-in shells, the cartridge sits so deeply that the stylus cannot be conveniently replaced. For these applications, spacers are provided to insure adequate clearance for stylus removal.

For optimum vertical tracking angle, the cartridge should be mounted so the top of the mounting block is parallel to the record playing surface. (See page 11)

To mount the V-15 Type III (mounting hardware supplied) in the Shure-SME Precision Pickup Arm or other pickup arms, refer to the paragraphs on Cartridge Installation and Balancing in the Instruction Manual supplied with the pickup arm.

OPERATION

The recommended stylus forces for optimum results are listed under "Specifications." Forces greater than the indicated "Maximum" should not be used.

The V-15 Type III Cartridge should be installed only in arms especially designed for low tracking forces and having low friction at all bearing surfaces, such as the Shure SME arm. Although the V-15 Type III cartridge will track records at $\frac{3}{4}$ gram, it may be necessary, when used in certain phono arms, to increase the tracking force for optimum results.

The V-15 Type III Cartridges play monophonic LP as well as stereo records.

The V-15 Type III Stylus incorporates a new retractile design that prevents audible record-scratch or stylus damage when excessive force is applied to the stylus.

NOTE: For playing 78 rpm records the Model VN78E [13 x 63 microns (.0005 x .0025 in.)] Biradial (Elliptical) Diamond Stylus is available. The 78 rpm *biradial* stylus is an industry "first." It was developed to *significantly* reduce pinch effect and tracing distortion.

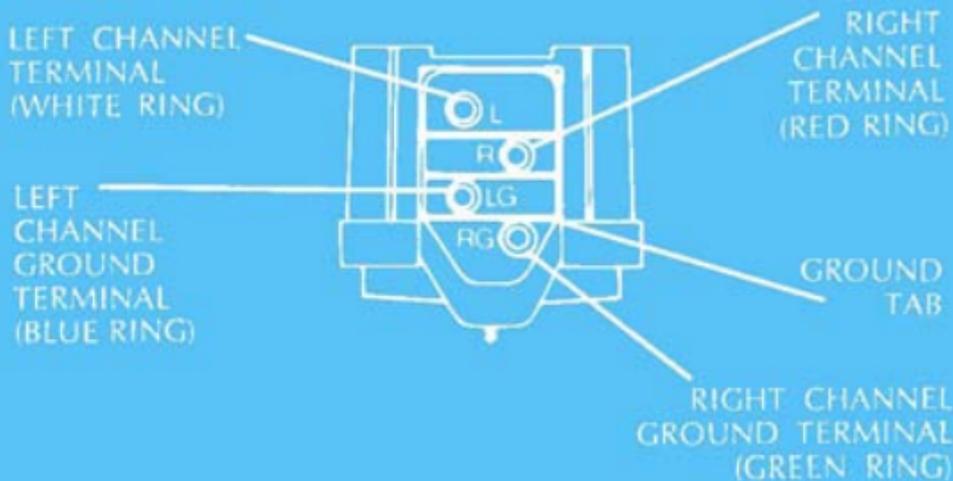
CONNECTIONS

CAUTION: Do not solder terminal leads or terminal jacks to cartridge terminals. If cartridge shell leads do not have terminal jacks, solder jacks provided to existing colored wire leads, and slip the jacks over the cartridge terminals. Soldering should not be done while jacks are on cartridge terminals.

The Shure V-15 Type III Cartridge utilizes a 4-terminal arrangement for connections having a separate ground terminal for each channel. (See illustration).

For Stereo reproduction terminal "R" and its ground terminal "RG" represent the right channel (outside groove wall). Terminal "L" and its ground terminal "LG" represent the left channel (inside groove wall).

4-Lead Stereo Connection: To use a 4-lead arrangement, connect the "hot" lead of the right channel to terminal "R" and the shield or ground lead of the right channel to terminal "RG." Connect the "hot" lead of the left channel to terminal "L" and the shield or ground lead of the left channel to "LG." To prevent "ground loops" and hum, no common ground connection should be used at the cartridge terminals. In many tone arms, the wiring is color coded to match the color coded rings on the cartridge terminal pins.



3-Lead Stereo Connection: When a 3-lead stereo input system is used, the common lead should be connected to both of the ground terminals at the cartridge. This connection should be made before connecting the regular terminal jacks to the cartridge. No other common ground connection should exist.

NOTE: Some installations may require the cartridge shield to be electrically isolated from the "RG" terminal. This can be achieved by removal of the ground tab. The tab may be straightened and reinserted to provide an independent cartridge shield ground, if required.

MONOPHONIC CONNECTION

Set function switch on amplifier to "Mono" or "A" + "B."

FREE STYLUS BOOKLET

For more information about Shure styli, send for the authoritative booklet "Small World of the Stylus." Ask for booklet AL 402. See Back Cover for address.

SPECIAL NOTE

To maintain the original performance standards of your cartridge, be certain that any replacement stylus you buy bears the following certification on the package: "This Stereo Dynetic® stylus is precision manufactured by Shure Brothers Inc." **AVOID INFERIOR IMITATIONS. THEY WILL SERIOUSLY DEGRADE THE PERFORMANCE OF YOUR CARTRIDGE. ALL GENUINE "DYNETIC®" STYLI ARE MANUFACTURED BY SHURE BROTHERS INC. LOOK FOR THE NAME SHURE ON THE STYLUS GRIP.**

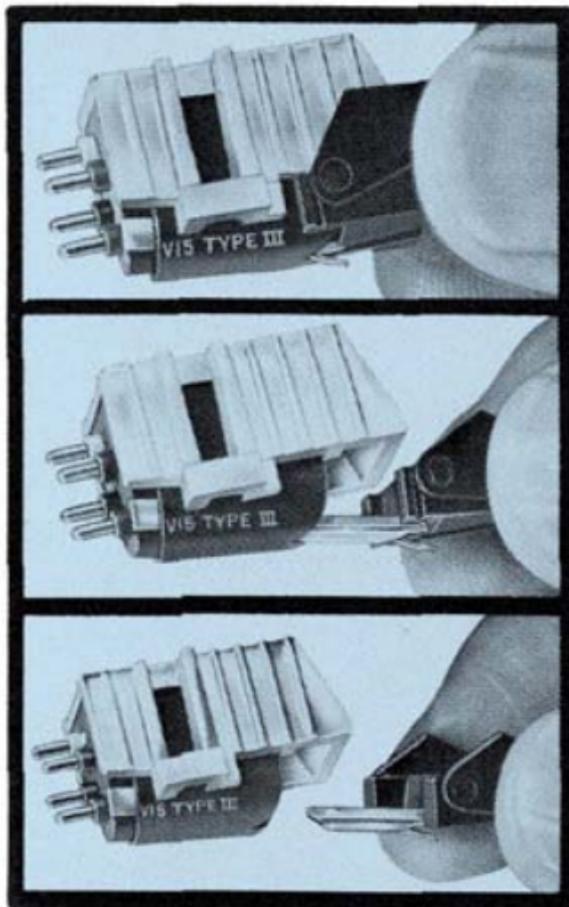
The stylus assembly, when installed in the cartridge, is practically immune to damage during careful, normal usage. Extra care should be taken to avoid bending or distorting the stylus assembly when it is installed, removed, and/or cleaned.

STYLUS REPLACEMENT

Stylus replacement is very simple and fast. To replace—grasp stylus grip between thumb and forefinger. Gently withdraw stylus by pulling forward out of cartridge. Grasp grip of replacement stylus between thumb and forefinger and insert into stylus socket. Press stylus into socket until the molded housing of the stylus touches the cartridge case. To prevent damage to the stylus tip or shank, care must be taken not to allow the finger to slip off the stylus grip.

NOTE:

Stylus guard is shown in “up” position for clarity; guard should be in “down” position when replacing stylus.



RECOMMENDED STYLUS CLEANING: Use the supplied brush, dipped in alcohol or an alcohol-distilled water solution. Commercial cleaning solutions may cause stylus damage or corrosion. The alcohol will remove any sludge deposit coating the stylus tip. Always brush stylus from back to front; never brush or wipe stylus from front to back or side to side.

TO PRESERVE STYLUS LIFE:

1. Follow turntable or tonearm instructions when adjusting antiskating force in the suspension system of the tonearm.
2. Do not handle the tonearm while it is in operation since this may cause the arm to sweep across the record.
3. If it is necessary to manually place the tonearm in the record groove while turntable is rotating, release it as the stylus engages the record groove.
4. Correct improper set-down adjustment or malfunction of the turntable changing mechanism to prevent the stylus from striking the edge of the turntable or record. Do not stack more records than turntable manufacturer recommends.
5. Take care to properly insert the stylus into the cartridge assembly and the cartridge and shell assembly into the tone arm receptacle.
6. Use proper vertical tracking force setting for each cartridge.
7. Do not use badly warped, cracked or imperfect records.
8. When dusting the turntable protect the stylus with the stylus guard.

V-15 Type III and V-15 III-G

Typical Trackability (cm/sec peak recorded velocity at 1 gram in Shure-SME Tone Arm). Reference: Shure TTR 103 Laboratory Test Record.

400 Hz—26 cm/sec

5000 Hz—35 cm/sec

1000 Hz—38 cm/sec

10,000 Hz—26 cm/sec

Frequency Response (using Optimum Load): 10 to 25,000 Hz

Output Voltage: 3.5 mV per channel at 1000 Hz, 5 cm/sec peak recorded velocity. Output from each channel within 2 dB

Channel Separation: Minimum 25 dB at 1000 Hz
Minimum 15 dB at 10,000 Hz

Tracking Force Range: $\frac{3}{4}$ to $1\frac{1}{4}$ grams

Optimum Load: 47,000 ohms resistance in parallel with 400 to 500 picofarads total capacitance per channel. Load resistance can be up to 70,000 ohms with almost no audible change in frequency response. Total capacitance includes both the tone arm wiring and amplifier input circuit. (Most amplifiers and tone arms meet this requirement.)

Inductance: 500 millihenries

Specifications

D.C. Resistance: 1350 ohms

Output Terminals: 4 terminals

V-15 Type III Styli

Available:

VN35E Biradial (Elliptical) Stylus, (as supplied in V-15 Type III Cartridge), Diamond Tip
18 microns (.0007 inch) frontal radius
5 microns (.0002 inch) side contact radii
25 microns (.001 inch) between record contact points

VN3-G Spherical Stylus (as supplied in V-15 III-G Cartridge), Diamond Tip
15 microns (.0006 inch) radius

VN78E Biradial (Elliptical) Stylus, Diamond Tip for monophonic 78 rpm records
Tracking Force Range: 1½ to 3 grams
63 microns (.0025 inch) frontal radius
13 microns (.0005 inch) side contact radii
89 microns (.0035 inch) between record contact points

Mounting: 12.7 mm (standard ½ in.) mounting centers

Net Weight: 6 grams

FULL ONE-YEAR WARRANTY

Shure Brothers Incorporated ("Shure"), 222 Hartrey Avenue, Evanston, Illinois 60204, warrants to the owner of this product that it will be free, in normal use, of any defects in workmanship and materials for a period of one year from date of purchase. You should retain proof of date of purchase. Shure is not liable for any consequential damages. If this Shure product has any defects as described above, carefully repack the unit and return it prepaid to:

*Shure Brothers Incorporated
Attention: Service Department
1501 West Shure Drive
Arlington Heights, Illinois 60004*

If you are not in the United States, return the unit to your dealer or Authorized Service Center for repair. The unit will be repaired or replaced and returned to you promptly, and if it cannot be repaired or replaced, you may elect to receive a refund. This warranty does not include stylus wear.

PATENT NOTICE: Cartridge and stylus manufactured under one or more of the following U. S. Patents 3,055,988, 3,077,521, 3,077,522, and 3,463,889.

**QUALITY ASSURANCE CERTIFICATE
SHURE V-15 TYPE III STEREO DYNETIC®
HIGH FIDELITY CARTRIDGES**

The V-15 Type III Stereo Dynetic® Cartridge has been manufactured under the Shure Master Quality Control Program. This program embraces stringent safeguards and standards to assure you that your V-15 Type III is in perfect operating condition.

Shure quality control not only covers incoming parts and the finished products, but intermediate sub-assemblies as well. For example: every individual cartridge and every Stylus-Magnet Assembly is tested and microscopically examined. Each finished cartridge is again tested electrically, mechanically and acoustically against quality and tolerance specifications seldom achieved in the High Fidelity Industry.



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