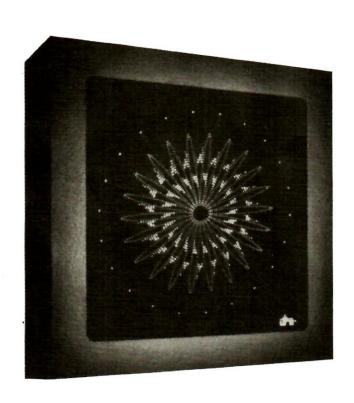


# **OWNER'S MANUAL**

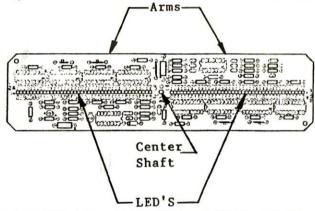


You're about to experience *The Lyte™*, an audiovisualizer! In a short time, you'll add another dimension to your enjoyment of your favorite music—vision. Your unit produces relaxing, kaleidoscope-like images, created by sound. They're an exact, shimmering definition in light of what you hear—accurately and instantly reproduced, tone for tone. It's a whole new way to look at music—in fact, it's the only way!

# **HOW THE LYTE™ WORKS**

We call  $The \ Lyte^{\text{IM}}$  an "audiovisualizer"—a device which transforms audio signals into fascinating visual patterns. How does your unit work? With electronics, motion and your own persistence of vision.

Let's start with the electronics. If you look into the window of your unit, you'll see two arms connected to a center shaft, like this:



Each arm has 40 light emitting diodes (LED's) on it. The red LED's represent the low audio frequencies, and the amber LED's represent the mid-range frequencies.

Let's say we're putting a pure, low-frequency tone into your unit—what happens? If the arm or your unit were stationary, you would see a red light moving back and forth across one of the arms. The effect is like the movement of the lights on a movie marquee. If you raised the pitch of the tone, the red light would move faster; lowering the tone slows the movement of the light. If you raised the volume of the tone, the light would move back and forth to either end of the arm; lowering the volume reduces the distance the light travels.

So far we've described the effects of a pure tone. But what happens when we use real music, which is comprised of literally thousands of pure tones at different volumes? The thousands of corresponding back and forth movements become a hopeless blur.

We need something more to make a visually pleasing pattern—motion.

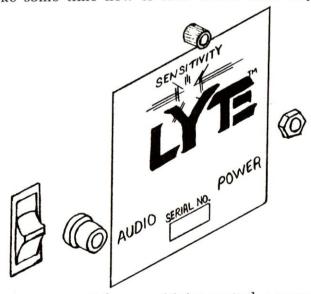
The arms on your unit spin at approximately 1000 RPM, making about 16 complete revolutions each second. Our hopeless blur of lights now becomes a series of points of light as the arms whiz along their circular path. But points of light don't become visual patterns all by themselves. They need **your** help.

Your own persistence of vision completes the magic of *The Lyte*<sup>TM</sup>. Persistence of vision is what makes movies and television move; without it, they would be nothing more than a rapid succession of still pictures. In the same way, persistence of vision transforms the hopeless blur of the LED's and the motion of the arms into something spectacular—a gorgeous, constantly changing display of geometric patterns.

And that is how The Lyte™ works.

# MEET THE LYTE™

Your unit is an amazingly simple piece of equipment for what it does. Take some time now to look at the back of your unit:



You'll see a power switch, a sensitivity control, a power jack and an audio jack. The power switch is used to turn your unit on and off. The sensitivity control is used to adjust the size of the patterns made by your unit. The power jack connects your unit with a 110-volt outlet via the transformer/power cable supplied. An audio connecting cable, also provided, connects to a host of different audio sources.

## **PRECAUTIONS**

We want you to swear by your unit, and not at it, so please be sure to observe the following precautions:

- 1. NEVER—BUT NEVER—USE YOUR UNIT WHEN YOUR ATTENTION SHOULD BE ELSEWHERE! If you need to concentrate, or if you're operating any kind of machine, turn your unit off! THIS IS IMPORTANT! Use your unit ONLY for relaxation and enjoyment—not as something to accompany other activities.
- 2. Use ONLY the transformer/power cable supplied with your unit. Use no others!
- 3. DO NOT move, drop or jar your unit while the arms are rotating. If you do, you could scratch or damage it.
- 4. Do not place your unit where it will be exposed to excessive heat, cold, moisture, or dust.
- 5. If for some reason your unit doesn't work as it should, follow the troubleshooting procedures in this manual. Don't assume that it is faulty before using the troubleshooting procedures.
- 6. Do not make any internal adjustments to your unit—there's nothing in there to adjust. Opening *The Lyte™* will void your warranty.
- 7. Unless it is securely fastened down, do not place on an uneven or sloped surface.
- 8. Clean the case of your unit using a soft, slightly damp cloth. Clean the glass with standard window cleaner.

## HOOKING UP THE LYTE™

Your audiovisualizer works with any audio device that has either a speaker jack or a tape out/line out jack. We'll describe the methods for connecting your unit to the most commonly-used audio source—your home stereo.

## Which Channel Should I Hook Up To?

It's up to you. Either channel, right or left, will work beautifully. If you simply can't make up your mind, get another unit—then you'll have one to hook up to both channels. Actually, getting a second unit is a great idea, because the effect makes the displays on the two look like they're dancing with each other.

### 1. Connecting To The Stereo

#### The best way

Find an unused RCA-type audio output jack on the back of your receiver or amplifier, and plug in the audio connecting cable supplied with your unit. Stereo manufacturers have various names for this kind of output jack, such as "audio out," "line out," "auxiliary out," and "record out." Consult the owner's manual for your stereo for the name used to describe this output.

#### The next-best way

If all the audio output jacks on your stereo are being used, it's a good idea to visit an electronics store and buy an RCA-type "Y" adaptor with one male and two female connectors on it.

Locate one of the above-mentioned audio jacks on the back of your stereo. Disconnect the cable leading into it, plug in the "Y" adaptor, and re-connect the cable into the adaptor. The audio connecting cable with your unit then plugs into the empty connector on your adaptor. Once your unit is connected in this manner, you may set the sensitivity control of your Lyte once and pattern sizes will then remain consistent in size, regardless of stereo volume.

#### The next-next-best way

If all else fails, you can make the connection to your stereo at one of the speakers. First, cut off the connector on one end of the audio connecting cable included with your unit, and strip off ½" of the insulation. You will note that the audio cable is comprised of two wires, one of which has a white stripe on the insulation, while the other has solid black insulation.

Connect the wire with the white striped insulation to the red connector on the speaker. Connect the wire with the solid black insulation to the black connector on the speaker. For speakers with no color coding, the red connector is called "positive," "hot" or "+"; the black connector is called "negative," "ground" or "-."

**Note:** Adjusting the volume control on your stereo will alter the pattern size on your unit when it is connected to the stereo in this manner.

#### 2. Connecting To The Lyte™

Plug the audio connecting cable into the audio jack on the back of your unit. Plug the transformer end of the power cable into a 110-volt outlet, and plug the other end into the power jack on your unit.

#### 3. Initial Adjustment

Turn the power switch of your unit on. Turn on your stereo and play some music. Using the sensitivity control on the back to adjust the pattern size until it's the most pleasing to you. Now, sit back and enjoy!

### TROUBLESHOOTING THE LYTE™

If you have a problem, always check these troubleshooting procedures first. They will help you to solve the most common problems encountered.

#### Music Is Playing, Arms Are Spinning, LED's Do Not Light:

- Adjust the sensitivity control on the back of your unit.
- Double check audio connections to see that they are firmly made.
- Make sure that the audio jack on the stereo is actually an output, and not an input. Refer to your stereo owner's manual.

#### Music Is Playing, Arms Do Not Spin, LED's Do Not Light:

- Double check the connections made by the transformer/power cable to the outlet and to the back of your unit.
- Make sure that there is power to the outlet. This can be done by plugging a lamp or a small appliance into the outlet and turning it on.
- Make sure power switch is turned on.
- Did you forget to pay your electric bill?

There are no user-serviceable parts either on or in your unit; simply put, if you open up the case, you void the warranty. If any malfunctions occur other than those described above, you will have to return your unit to the factory for servicing.

## TIPS ON ENJOYING THE LYTE™

- 1. Your audiovisualizer performs best with a high-quality audio source. While almost any audio source will work, turntables with clean, scratch-free records, compact disc players and tape decks with good recordings work the best.
- 2. Your unit creates the cleanest visual patterns using either the left or right channel of your stereo. Monaural audio sources create "busier" patterns.
- 3. If you can, get a second Lyte. Not only will you be able to hear the audio separation of your stereo, you'll be able to see it!
- 4. Your unit is meant to be watched from a place where you can relax. This means that you may have to put it someplace where the unit's audio connecting cable is not long enough to reach the stereo. If so, make an investment in an RCA-type audio extension cable. It's worth it.
- 5. Many stereos have a switched outlet on the back of the receiver or amplifier, which is activated only when the stereo is turned on. If you connect your unit to the switched outlet, it will come on when your stereo does.

- 6. The mechanical components of *The Lyte™* require a small amount of break-in when new, just like a fine automobile. It will be at peak performance after 50-100 hours of use. So it's best to leave *The Lyte™* on continuously for the first couple of days to get it broken in quickly.
- 7. BE SURE TO FILL OUT YOUR WARRANTY CARD. DO IT NOW! We want you to be completely satisfied with your unit, and if something covered under the warranty goes wrong, we want to make it right. But we can't if you don't send in your warranty card. In the event that your unit needs returned, please contact the customer service department at (319) 393-9962 for a return material authorization number (RMA #). Please reference this number on the outside of the shipping carton. Send unit freight pre-paid, in original packing carton or equivalent, with proof-of-purchase, to the address on warranty page.

#### THE LYTE™ SPECIFICATIONS

**Power Source:** 

Wall Unit Transformer
Input: 120V AC 60 Hz 16 W
Output: 12V DC 800 mA

**Power Consumption:** 

Start Up — 700 mÅ Continuous — 500 mA

Frequency Response:

20 Hz to 20 KHz

Weight:

Approx. 6.5 Lbs.

**Dimensions:** 

11.5"x11.5"x3.5"

#### LIMITED WARRANTY

90-Day LIMITED WARRANTY: This warranty is limited based on amount of consideration paid. Your audiovisualizer is warranted against any defect in workmanship or material for a period of 90 days from the date of purchase, subject to the following conditions:

- The attached warranty card is completed and returned within ten (10) days from the date of purchase.
- 2. The installation procedures outlined in the manual have been followed.

If covered by this warranty, Clyde Industries America will repair or replace the unit, at their sole discretion, free of charge when the product is returned at the customer's expense to Clyde Industries America. This warranty is void in cases of damage in transit, negligence, fire, flood, lightning, or other acts of God. No other warranty is expressed or implied herein. This warranty does not cover carton, marred cabinets, or customer-owned accessories used in connection with the product or consequential damage due to a defect in the product.



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A Member of the Clyde Group of Companies

# CLYDE INDUSTRIES AMERICA, INC. Electronics Division

5255 Rockwell Drive, N.E. Cedar Rapids, Iowa 52402 Phone 319-393-9962 Telex 439039

# THE LYTE™

#### WARRANTY REGISTRATION

System Model	Serial Number	
Date of Purchase	Dealer	
Owner's Name		
Address		
City	_ State	Zip
Phone		