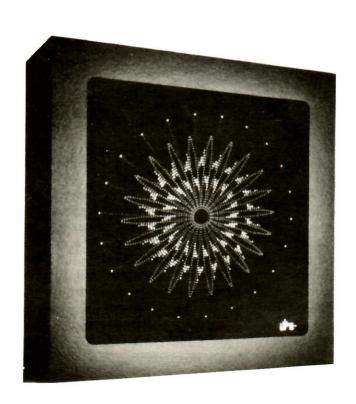


OWNER'S MANUAL

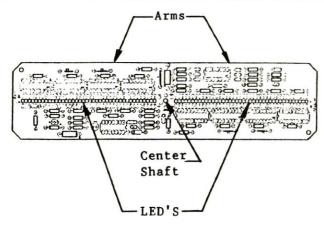


You're about to experience **The Lyte®** Audiovisualizer! In a short time, you'll add another dimension to your enjoyment of your favorite music—vision. Your unit produces relaxing, kaleidoscopelike images, created by sound. They're an exact, shimmering definition in light of what you hear—accurately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

HOW IT WORKS

An audiovisualizer is 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 arms on 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.

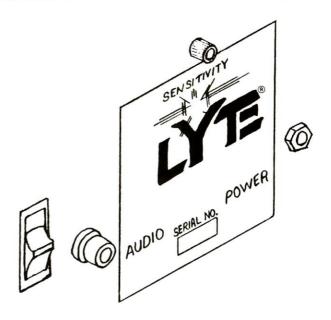
We need something more to make a visually pleasing pattern—motion.

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 its magic. 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 it works.

MEET YOUR AUDIOVISUALIZER

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.

HOOKING UP YOUR AUDIOVISUALIZER

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" adapator, 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. Thus, pattern sizes will 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 $\frac{1}{2}$ " 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 Up

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 on the power switch of your unit. Turn on your stereo and play some music. Use 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

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 YOUR AUDIOVISUALIZER

- 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 this device 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 it 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. In the event that your unit needs to be returned for servicing, please contact the customer service department at (319) 363-9451 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 the warranty page at the back of this booklet.

SPECIFICATIONS

Power Source:

Frequency Response: 20 Hz to 20 KHz

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

IMPORTANT WARNINGS, SAFEGUARDS AND SERVICE REQUIREMENTS

When using electrical devices, basic safety precautions should always be followed, including the following:

- 1. Please read all instructions contained in this owner's manual.
- 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.
- 3. Use ONLY the transformer/power cable supplied with your unit. Use no others!
- DO NOT move, drop or jar your unit while the arms are rotating. If you do, you could scratch or damage it.
- 5. Do not place your unit where it will be exposed to heat, cold, moisture, or dust.
- 6. 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
- 7. Do not attempt to make any internal adjustments to your unit. The device does not contain customer serviceable components. Opening the cabinet will void your warranty.
- 8. Unless it is securely fastened down, do not place on an uneven or sloped surface.
- To clean the cabinet of the device, unplug AC power cord, then use soft cloth dampened only with water. Clean the glass front with standard window cleaner.
- 10. This device is not water-tight. To protect against electrical hazards, do not put this device or its parts in water or other liquid.
- 11. Care should be taken so that objects do not fall and liquids do not spill into the device.
- 12. Close supervision is necessary when this device is used by or near children.
- 13. Unplug from outlet when not in use, before attaching or disconnecting components.
- 14. Do not operate this device with a damaged cord, a damaged plug, after it has malfunctioned, or after it has been dropped or damaged in any manner. Return the device to the factory for examination, repair, or electrical or mechanical adjustment.
- 15. The use of attachments not recommended or sold with this device may cause fire, electrical shock, or injury.
- 16. Do not use outdoors.
- 17. Route power cord to prevent it from being pinched, walked on, or melted by hot devices such as radiators or stoves. Do not let any of the cords associated with this device hang over the edge of a table or counter or touch hot surfaces.
- 18. Do not open pressurized (aerosol-type cans) near this device.
- 19. Do not open cans of flammable liquids such as lighter fluids near this device.
- 20. Do not operate in the presence of explosives and/or flammable fumes.
- 21. Do not expose this device to extreme temperatures such as found near a hot radiator or stove, or in a car parked in the summer sun.
- 22. Connect power cord only to AC power source as marked on the device.
- 23. Do not expose device to lighted candles, cigarettes, cigars, etc.
- 24. Unplug AC power cord from outlet when device is left unused for a long period of time.
- 25. The front of the cabinet is glass and it could shatter if struck by an object. If the glass is broken when purchased or breaks for any reason, do not use the device until the glass has been replaced by an authorized repairman at the factory.
- 26. Damage requiring service: This device should be serviced by qualified service personnel when:
 A. The power cord or the plug has been damaged; or
 - B. Objects have fallen, liquid has been spilled into or on the device; or
 - C. The device has been exposed to rain; or
 - D. The device does not appear to operate normally or exhibits a marked change in performance; or
 - E. The device has been dropped, the cabinet damaged, or the glass front has been cracked or is broken.

If any of the above occur or if the device needs repair for any other reason, call the customer service department at (319) 363-9451 for a return material authorization number (RMA#) and instructions.

LIMITED WARRANTY

90-Day LIMITED WARRANTY: OTD, Inc., warrants this product to be free of manufacturing defects for a 90-day period after the original date of consumer purchase or receipt as a gift. This warranty does not include damage to the product resulting from accident, misuse, improper installation or operation, or unauthorized repair or alteration. If the product should become defective within the warranty period, we will elect to repair or replace it free of charge at our option, including free return transportation, provided it is delivered prepaid to OTD at the address below with the original dated bill of sale or sales slip and the Return Material Authorization Number (RMA#). Parts and/or replacement product supplied under this warranty may be new or rebuilt at OTD's option. For answers to any question regarding warranty/service and to obtain your RMA#, call The OTD Customer Service Department at (319) 363-9451.

THE CUSTOMER'S SOLE REMEDY SHALL BE SUCH REPAIR OR REPLACEMENT AS IS EXPRESSLY PROVIDED ABOVE, AND OTD SHALL IN NO EVENT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THIS PRODUCT FOR ANY PURPOSE WHATSOEVER. Some States do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

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