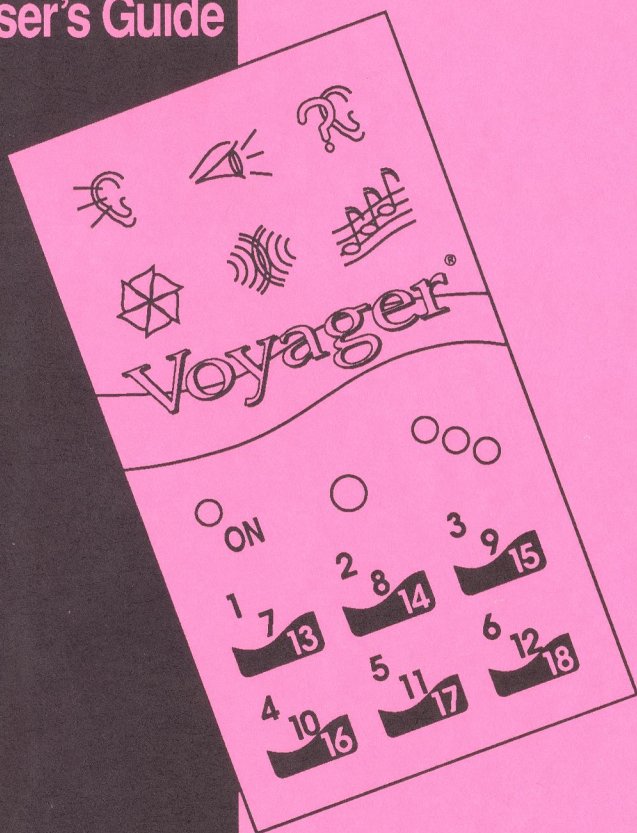


User's Guide



Voyager[®]

Mental
Fitness
Computer

Voyager Sessions

RED LIGHT INDICATOR

NO.	LENGTH (MINUTES)	NAME	EFFECT
1	20	<i>Sleep Time</i>	Quiet the mind and body
2	30	<i>Theta One</i>	Mental focus for study time
3	30	<i>Hemitone One</i>	Stress relief
4	30	<i>Tranquility</i>	Steady light, calming
5	40	<i>Hemitone 2</i>	Ideal for visualization
6	40	<i>Deep Relax</i>	Suitable for learning languages

YELLOW LIGHT INDICATOR

NO.	LENGTH (MINUTES)	NAME	EFFECT
7	10	<i>Cat Nap</i>	Quick refresher
8	25	<i>Visions</i>	Promotes internal imagery
9	30	<i>Relax</i>	Light relaxation
10	30	<i>Hemitone 3</i>	Gentle meditation
11	30	<i>Inner Focus</i>	Cruise inner space
12	60	<i>Mind Magic 1</i>	Great for jet lag

GREEN LIGHT INDICATOR

NO.	LENGTH (MINUTES)	NAME	EFFECT
13	15	<i>Sports</i>	Mental focus and relaxation
14	15	<i>Energize</i>	Fast pick-me-up
15	30	<i>Mind Magic 2</i>	Stimulates creativity
16	45	<i>Mind Magic 3</i>	Revitalize after a long day
17	20	<i>4th of July</i>	Fantastic color patterns
18	20	<i>Nova Express</i>	Great fun and entertainment

Because you are all unique individuals you may experience different effects than those listed above.

Try all sessions and see what works best for you.

About This Manual

The purpose of this manual is to explain how this technology works, and how to achieve maximum performance from your Voyager system. It is organized to help you find the information you need as quickly and conveniently as possible.

Please take a few minutes to read this manual before using your Voyager.

Your Voyager outfit should include the following items:

- Base Unit
- Special Glasses ("LiteFrames")
- Headphones
- Stereo Adapter Cable
- Instructions and Warranty Registration.
- External Power Supply
- Quick Reference Sticker (may be placed on back of Voyager unit—be sure not to cover battery access)

NOTE: The Voyager is used with your eyes closed.

What is Light/Sound Technology?

This section will familiarize you with the technology you will be using.

What Are Brainwaves?

The study of "brainwaves" has played a vital role in the understanding of how the brain and mind function. Discovered in the 1920s by German researcher Hans Berger, these tiny electrical signals mirror the shifting patterns of mental activity. They are measured by attaching special sensors, called electrodes, to the scalp; these pick up brainwave activity which is then measured by an instrument called an electroencephalograph, or EEG.

Beta Associated with normal, waking consciousness; attention directed towards the external environment. You are most likely in the "beta state" as you read this. Beta waves oscillate between approximately 14 to 30 times per second (Hz).

Alpha Relaxed, not thinking of anything in particular, sometimes a pleasurable feeling of "floating." Often dominant in certain kinds of meditation. Alpha waves have for the past 20 years been associated with calm, lucid mental states (the "alpha state"). They are often detected during dream sleep. Alpha waves oscillate between 9 and 13 times per second.

Theta Found in states of deep relaxation, Theta activity is also associated with bursts of creative insight, twilight ("sleep") learning, and vivid mental imagery. Also found in some forms of meditation. Theta waves oscillate between 4 and 8 times per second.

Delta This slowest of brainwave activity is found during deep, dreamless sleep, and sometimes in very experienced meditators. Delta waves oscillate between 1 and 3 hz.

Brainwave Entrainment

In the 1940s, researcher Gray Walter discovered that brainwave activity tends to fall into lockstep with flickering light, particularly in the Alpha and Theta range. This effect has become known as "photic driving." A more familiar example of this phenomenon would be the tendency to slip into a relaxed or dream-like state while gazing into a fire... the flicker rate of which happens to average in the Alpha range.

More recently, sound has been shown to produce similar results, particularly pulsed sound and "binaural beats." This last effect, which we call HemiTone, results when one ear hears a pure tone of a slightly differing pitch than the other ear. The brain then actually synthesizes the difference between the two, which is known as a "binaural beat." The portions of the brain associated with hearing then fall into step with this pleasant, gently pulsing rhythm. The combination of pulsed light and binaural beat frequencies can be a particularly effective tool for relaxation and preparation for meditation.

Collectively, this assortment of light and sound techniques produce brainwave entrainment.

Using the Voyager

What Can it be Used For?

There are a variety of useful and beneficial applications for your Voyager system. These include:

- ◆ Assistance in reaching states of deep relaxation quickly. For example, use your Voyager while unwinding after a day's work, to refresh yourself prior to meetings, and during your lunch break.
- ◆ Safe, effective, drug-free assistance in falling asleep.
- ◆ Creative visualization. Use the complex, shifting visual images you see during a session as stimulus to your creative

imagination. Bursts of creative insight also can occur spontaneously while in the Theta state; use the Voyager as an aid to brainstorming.

- ◆ Assistance in learning. Deep relaxation is an integral part of the "superlearning" method, and the Theta state is necessary for "twilight learning" (sleep learning) to take place. You can use the Voyager in combination with cassette lessons in foreign language instruction, guided imagery, and a very large range of other cassette programs.
- ◆ Assistance in visualizing and developing new goals. These can include psychological goals, such as increasing motivational levels, and physical goals, such as increasing concentration and the other performance factors necessary to sports achievement.

How Often Can I Use It?

We suggest that the Voyager be used at least three times per week, and can be used on a daily basis. It provides completely natural forms of stimulation. Multiple sessions per day can cause increased drowsiness in some users.

Does It Effect Everyone the Same Way?

No. Anyone can deliberately resist the soothing effects of pulsed light and sound if they choose to do so. Using the system for only a few minutes will generally prove ineffective.

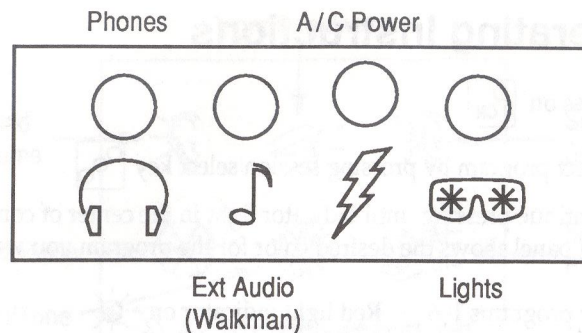


Figure A – Connectors


Power Source


To power your Voyager, you can connect it to a 9-volt alkaline battery, power supply, or both. When the power supply is connected, the battery is disconnected internally, prolonging battery life. A 9-volt alkaline battery should provide seven or more hours of use—enough for fifteen to twenty sessions. To access the battery compartment, slide the protective cover towards the bottom of the case. When attaching or removing a battery, avoid pulling on the battery cable.

External Connections

There are four connectors on your Voyager (figure A): headphones, audio input, power, and LiteFrames. You can connect your favorite audio source, such as a cassette or CD player, to the system by plugging in one end of a stereo adapter cable into the audio input of the Voyager and the other into the audio output or headphone jack of your audio source.


Operating Instructions

1 Press on 

2 Select program by pressing session select key .

Continue pressing until indicator light in the center of control panel shows the desired color for the program you want.

For programs 1-6 Red light indicator on 


For programs 7-12 Yellow light indicator on 

For programs 13-18 Green light indicator on 

3 Select and press the desired session number 

You are now in **PREVIEW MODE**. The lights should be blinking slowly at the lowest intensity.

Quick Start

Bypass Preview Mode by pressing the desired program number  a second time. This will put you into the factory preset program. Your session will begin with lights set at the lowest intensity.

If you do not choose to implement the quick start, you will have pressed your desired program number only once, keeping you in preview mode.

NOTE Quick Start is an excellent option for first-time users.

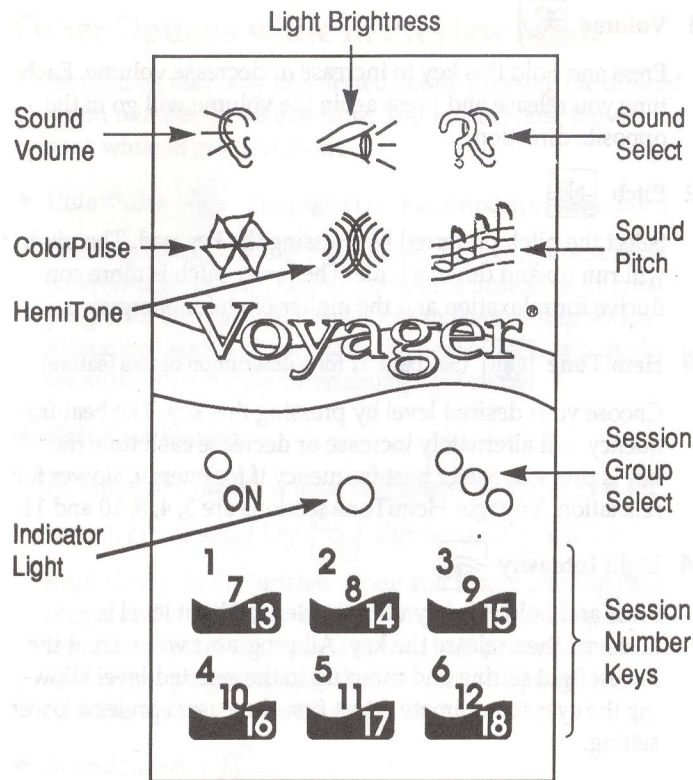






Figure B – Keyboard

Preview Mode

In **PREVIEW MODE** you may set the volume , pitch , HemiTone , and light intensity .

NOTE The light intensity is set at the lowest setting when you enter preview mode.

1 Volume

Press and hold this key to increase or decrease volume. Each time you release and press again the volume will go in the opposite direction.

2 Pitch

Select the pitch preferred by pressing the key pad. The pitch will run up and down a scale. The lower pitch is more conducive for relaxation and the higher pitch for energizing.

3 HemiTone (See page 11 for a description of this feature)

Choose your desired level by pressing this key. The beat frequency will alternately increase or decrease each time the key is pressed. Faster beat frequency if for energy, slower for relaxation. Voyager HemiTone sessions are 3, 4, 5, 10 and 11.

4 Light Intensity

Press and hold this key until the desired light level is achieved, then release the key. All programs will start at the lowest light setting and ramp up to the selected level allowing the eyes to acclimate. Most first-time users prefer a lower setting.

- 5 To begin the session, put on your earphones and glasses (with eyes closed during session), get into a comfortable, reclined position and press any numbered key to begin the session. You are now into your selected program and out of preview mode.

NOTE You will have pressed the desired program number **once** to move into the PREVIEW MODE. You will have then pressed any session number key to move out of preview mode and into your selected session.


Other Options while in Preview Mode

These options may only be selected before pressing the desired program number the second time. You must choose these options while in preview mode.

◆ ColorPulse (See page 11 for a description of this feature)

Pressing this key causes the Voyager light brightness to be controlled by the external sound source instead of internal programs. For example, the lights can flash in step with a relaxation/heartbeat tape or to the beat of rock, jazz or classical music for a purely entertaining light show.

◆ Half-time Session

To initiate Voyager's unique half-session option, press the session group select key  after adjusting light and sound levels in the preview mode and before starting your program. The indicator light will then start blinking, indicating your selected program is now in half-session mode. All 18 Voyager programs have the half-session option which provides a total of 36 unique opportunities.

◆ Sound Select

Four different sounds are available in the Voyager and you can step through them with each press of this key. A fifth "blank" sound (no sound at all) is also available should you wish to hear the external sound source by itself (Walkman, stereo, etc.). For example, while listening to music or using the ColorPulse feature.


Turning Off the Unit

The Voyager will shut off automatically at the completion of each program. The center indicator light will remain on for 30 seconds more before shutting off.

If for some reason you need to stop the program before completion, **lightly** press the #3 or #6 key. The lights will shut off completely. If the lights are still pulsating on low you have pressed the #3 or #6 key too strongly and the unit believes you are requesting preview mode. If this should occur, press either the #3 or #6 key again. The unit will begin a program. Then press the #3 or #6 key once more **lightly** and the Voyager will shut off.

To Pause a Session

If for some reason you must interrupt your session but you still wish to continue with the program press the session group

select  key for **just an instant**. You will hear a “blip” and the unit will pause the program. The lights *will continue* to blink but the program will remain on hold until you press session group select a second time. Remember that you are on pause or you may drain your battery if you are not using A/C.

Suggestions

- ◆ For the first time user we recommend program #2 for relaxation and program #14 for energy.
- ◆ Try to be in a reclining position to enjoy a total experience.
- ◆ You need to be on the unit for a minimum of 10 minutes to receive any noticeable benefit.
- ◆ Use as often as you like. Most people like to use the Voyager once a day.
- ◆ Feel free to use your favorite earphones.
- ◆ Allow a few minutes after a session to reacclimate yourself.
- ◆ Have no expectations going into a session—just have fun.

Definitions

HemiTone

Another unique feature of your Voyager system is its adjustable HemiTone (binaural beat) generator. HemiTone is Theta Technologies' name for the binaural beat produced when one ear hears a tone of slightly different pitch than the other ear; the difference between the two is perceived as a subtle pulsing beat frequency which is actually synthesized within your brain, which then tends to “entrain” or fall into step with the beat.







The binaural beat frequency programmed into sessions numbered 3, 4, 5, 10 and 11 can be adjusted to suit your taste. Adjust the pitch to a comfortable level, then press the HemiTone key to increase or decrease the beat frequency. In general, a faster beat is more energizing, while a slower beat is more relaxing. You don't need to use the lights to enjoy the HemiTone; try unplugging the glasses, closing your eyes, and listening to the subtly pulsing HemiTone. The preset HemiTone programs are intended to “entrain” to relaxed, yet alert, mental states.


ColorPulse

The ColorPulse feature is a unique entertainment bonus. When external sound is playing through the Voyager, activating the ColorPulse feature causes the light brightness to vary with the loudness or “beat” of the music, greatly increasing the visual effects experienced with the system. Here are a few tips for enhancing your ColorPulse experience:

- ◆ The range of maximum to minimum brightness for ColorPulse is sensitive to the external volume. If the volume is too high, the lights will simply stay bright. If too low, they will stay rather dim (which you may prefer). Try adjusting the source to the appropriate level, then changing the Voyager volume setting to your taste.

How to Use ColorPulse

- 1 Press on .
- 2 Press program 3 .
- 3 Press Sound Select  four times to "blank" channel.
- 4 Press ColorPulse .
- 5 Connect one end of the Patch Cord, which comes with your unit, to the Voyager external input jack . Connect the other end into your stereo headphone output (earphone jack). You can now adjust the Voyager light intensity by changing the sound volume on your stereo system.
- 6 Press program 3 .

You are now into a 30-minute ColorPulse program. The system will automatically shut-off in 30 minutes. If you wish to terminate ColorPulse during the program press 3 .

Note:

Pushing buttons out of sequence may cause the computer program to lock-up. If this should occur, simply disconnect the power source and start over.

Program Descriptions

Here are descriptions and suggested uses for the 18 internal sessions.

Session 1

Sleep Time Descent into Delta. Use while tired, but not yet sleepy, or if you wake up during the night and cannot get back to sleep. Try also #6 if this session is too short to be effective. 20 minutes.

Session 2

Theta One A more leisurely version of #8. Use for creative visualization, problem solving, and with learning tapes. Especially effective for deep relaxation. 30 minutes.

Session 3

HemiTone 1 Deeper relaxation version of #10—descends further into Theta. Use also for sleep induction and memorization. Includes HemiTone beats. 30 minutes.

Session 4

Tranquility The only program where the light remains steady and bright, creating a pure red field to your closed eyes. HemiTone helps in providing a calming effect. The brightness cannot be adjusted. 30 minutes.

Session 5

HemiTone 2 Intense visual imagery while descending to a long stay in the Theta state. Optimized for twilight learning. Includes HemiTone beats. 40 minutes.

Session 6

Deep Relax A longer, gradual descent into Theta, with much time spent in the Theta state. Use this with language and other learning tapes; change the internal sound selection and pitch to a comfortable level, or press the sound select key until no sound is heard. 40 minutes.

Session 7

Cat Nap Take a few minutes to unwind—move into a dream-like state releasing the tensions of the day. 10 minutes.

Session 8

Visions A quick ramp to the Theta state; useful for creative visualization prior to brainstorming new ideas and for general relaxation. Quick perk-up at end. 25 minutes.

Session 9

Relax A gentle descent into low Alpha, with a short return to Beta at the end. Designed for quick relaxation during your lunch break or after returning home from a hard day's work. 30 minutes.

Session 10

HemiTone 3 Very relaxing and especially useful for meditators and others who prefer a gentle, harmonious experience. Designed to relax without inducing sleep, and includes subtle binaural beat frequencies which enhance overall relaxation. 30 minutes.

Session 11

Inner Focus This program will allow you to move into a very relaxed space. Users report this session will capture your imagination. 30 minutes.

Session 12

Mind Magic 1 Developed for use on airplanes in order to counteract jet-lag, this complex session ramps from Beta down to Alpha and Theta, then back. Light patterns and sounds also change. Users have reported feeling the equivalent of several hours' sleep after just one session. 60 minutes.

Session 13

Sports Users describe this program as being both energizing and relaxing. Session 13 allows for mental focus creating that competitive edge. 15 minutes.

Session 14

Energize A short but intense ascent from low Alpha to Beta (15 Hz). The sound was specially developed to energize; try it at higher volumes and focus your attention on it. Higher light brightness is also useful. Just the right length for that afternoon break. 15 minutes.

Session 15

Mind Magic 2 Multiple changes in frequency and light pattern designed to induce especially vivid geometrical imagery. Recommended for artists or would-be artists. Great also for pure entertainment—why watch another TV rerun? 30 minutes.

Session 16

Mind Magic 3 Designed to reduce tension while imparting a renewed sense of vigor. Especially useful after returning home from work or that too-long meeting. 45 minutes.

Session 17

Fourth of July Very high energy with lots of color display. Designed for enhancing productivity. 20 minutes.

Session 18

Nova Express Again, very high energy, fantastic geometric patterns, entertaining and a favorite. 20 minutes.

Are There People who Should Not Use Light/Sound Machines?

Individuals with the very rare condition known as Photosensitive Epilepsy should not be exposed to flickering light except under medical supervision. Likewise, we suggest that people who are uncomfortable with bright light, those with heart conditions, or those who feel at all uncomfortable with the light/sound experience, should consult their physician prior to regular use.

Care and Maintenance

The Voyager was designed to provide years of trouble-free use with proper care. Please observe the following suggestions to help maximize the life of your unit.

- ◆ Don't wrap the LiteFrames cable around the glasses as this can eventually break the wires.
- ◆ Disconnect all wires from the control unit while not in use.
- ◆ The power input will not recharge an internal battery. However, you can use rechargeable NiCad 9v batteries (such as those found at Radio Shack) inside the Voyager in conjunction with an external recharger.
- ◆ If you clean the keypad or case, use a mild soap on a damp cloth. Do not use alcohol or other solvents.
- ◆ You can attach virtually any headphones to the audio output. However, do not attach glasses designed for other light/sound machines to the Voyager as they may damage the unit.

The Voyager Limited Warranty and Release from Liability

1. **REPAIR OF DEFECTIVE PARTS.** The Voyager is guaranteed from manufacturing defects for a period of one year from the date of purchase. Any defective parts will be repaired free of charge (exclusive of shipping costs) during that one year period. This limited warranty does not cover defects caused by a purchaser's misuse or accident, or defects caused by fire, flood or other natural disaster. This limited warranty will be void if A) a power supply other than that provided by the manufacturer is used, or B) lights other than those provided by the manufacturer are used. In addition, the Warranty Card must be returned to the manufacturer for this limited warranty to apply. This warranty shall be the sole and exclusive remedy of purchaser for damages arising from or relating to the purchase of the Voyager.

When shipping the Voyager to the manufacturer, be sure to include name, address, telephone and a description of the problem. PURCHASER MUST CONTACT FACTORY FOR AUTHORIZATION BEFORE RETURNING THE VOYAGER FOR ANY REASON. Shipping address is as follows: 35928 SE 49th Street, Fall City, WA 98024.

2. **DISCLAIMER.** EXCEPT AS PROVIDED IN PARAGRAPH 1 ABOVE, THE PURCHASER ACKNOWLEDGES THAT HE/SHE IS PURCHASING THE VOYAGER "AS IS." THE MANUFACTURER AND SELLER SPECIFICALLY DISCLAIM ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND OF FITNESS FOR A PARTICULAR PURPOSE OR USE. THE MANUFACTURER AND SELLER ALSO ASSUME NO LIABILITY FOR ANY LOSS OR DAMAGE ARISING FROM THEORIES OF TORTIOUS CONDUCT, INCLUDING NEGLIGENCE AND STRICT CONDUCT.

3. **RELEASE FROM LIABILITY.** The purchaser is fully aware that the Voyager is an experimental device that provides audio and visual stimuli to prompt electrical activity in the brain. Because the Voyager is experimental, the purchaser understands that Theta Technologies, Inc. is not certain that it is suitable for all applications or users, each of whom may be affected differently by the Voyager because of his/her unique physical and emotional makeup. Persons who have a history of seizures, hallucinations or other physical or mental problems should use the Voyager only under medical supervision.

The purchaser further understands that Theta Technologies, Inc., its agents and employees, will not be held liable in any way for any occurrence of any kind and nature whatsoever in connection with his/her use of the Voyager, or another person's use of the Voyager, that may result or ostensibly result in physical or emotional damage to the purchaser or others. Furthermore, in consideration of and part payment for the Voyager, the purchaser hereby personally assumes all risks in connection with his/her use of the Voyager, and shall advise other users of the Voyager of the experimental nature of this device, especially regarding use by those with a history of seizures. Furthermore, the purchaser assumes all risks in connection with use of the Voyager with other persons.

4. **LIMITATION OF DAMAGES.** If, notwithstanding the foregoing, there should arise any question of liability on the part of the manufacturer or seller, the purchaser agrees that such liability is limited to the cost of replacement of the Voyager.

5. **PURCHASER REPRESENTATIONS.** The purchaser represents that he/she is of legal age and legally competent, and understands that the terms set forth herein are contractual and not mere recital. The purchaser has read or will fully read the User's Guide before using the Voyager.