

HOLOGRAPHY & LASER DIFFRACTION GRATINGS

SECTION A.

★ **HOLOGRAMS FOR SALE** (FOR DIFFRACTION GRATINGS, [CLICK HERE](#))

Stock and Custom HOLOGRAMS are available Now, or can be “Made to Order” within a few days, Typically. Stock Holograms or Diffraction Gratings are normally shipped within 2-3 weeks (or less).

Here are a Few examples:

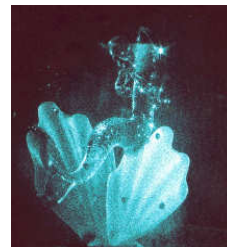


STARFISH

This is a “White-Light REFLECTION Hologram” and is Viewable under Sunlight, or Suitable Electrical Lighting.



HUMMINGBIRD



MERMAID

The ABOVE are LASER TRANSMISSION HOLOGRAMS and require a LASER (Any VISIBLE LASER will Work) in order to VIEW these HOLOGRAMS. It is very difficult to Photograph HOLOGRAMS very well. Both of these are “Stunningly Beautiful” when “Played Back”, LIVE.

SECTION B

★ **COURSES**- Complete “Introduction to HOLOGRAPHY” Courses Provide “Hands-On” Training on how to make these miraculous works of art! Either Small Groups (8 pupils or less) are taught, with individualized attention to everyone's needs and interests. Normally, these run evenings, once a week for 6 weeks. Private Classes- are available to rare candidates with a very strong interest and desire to excel at this Craft/Artwork. A deep level of dedication and “other” outstanding qualifications would allow someone to be considered for this rigorous individual type instruction. This can be arranged according to available times for both the scholar and the instructor, Mr. Elkins.

★ **EXHIBITS** - Exhibitions of HOLOGRAPHY of Robin Elkins have been displayed at EVENTS, such as the “Manifolds of Actuality” Multi-Media Presentations, as well as during Lectures or Select Exhibits upon arrangement with **Elk Industries, LLC**. We welcome the opportunity to share these remarkable experiences with Museums, Trade Shows, Schools, and/or a wide variety of Venues.

Creativity is boundless Yet everything is Connected.



SECTION C.

JUST WHAT IS HOLOGRAPHY, AND, WHAT ARE THESE “DIFFRACTION GRATINGS”?

First of all, the Concept of HOLOGRAPHY was initially Dr. Dennis Gabor who “Started things going”

You can read more about this (ONLINE) at: http://en.wikipedia.org/wiki/Holographic_paradigm

HOLOGRAMS were, for some time, and in certain places, called “Gaborograms”. However, Dr. Gabor lacked the essentially very convenient (Light, Optical) Source in order to make his Holograms – The LASER, which was Invented in the (late) 1950's by Dr. Gordon Gould, and (First) Built by Dr. T. Maiman (of Hughes Aircraft) in 1960. It had turned out, that the **LASER** is the underlying Scientific Instrument essential to virtually **every** modern day Hologram.

The word HOLOGRAM comes from the root, “HOLOS”, which (meaning Whole), and “Gram”, (meaning Message). For some of my earlier days, I mistakenly thought that “HOLOS” Meant GHOST, and that HOLOGRAMS were “GHOST MESSAGES”. They can certainly be very Gostly Looking, depending upon which ones you see!

A HOLOGRAM can be made to Illustrate, in Real-Time and Space, every Visible, and many “other” features of essentially (most) any OBJECT, Usually, in FULL 3-Dimensions, or, in some cases 4-Dimensions (Time representation (and movement)) is added to the ILLUSTRATION.

These days, Holograms and Holography, as a Profession, is conducted in a Workshop, or Usually a Laboratory, where there are LASERS, or at Least ONE LASER, and many Optical Elements, such as mirrors, lenses, mounts, mounting Systems, as well as the MEDIA, itself, which is usually either Glass Plates coated with a Light-Sensitive, incredibly high resolution emulsion (the light sensitive material), or Films, which have essentially the same, or different Emulsions.

There are 2 Main Types of HOLOGRAMS -

1. **TRANSMISSION HOLOGRAMS** – where the Object or the Subject is viewed from Behind the **Plate or Film**, which is Also the side that the light source is used for **“Playback”** is coming from. To View them, you will be on the opposite Side of the Plate or Film, as where the Light Source is coming from. **Prices for 2.5 inch x 2.5 inch PLATES \$50 (each)**
2. **REFLECTION HOLOGRAMS** – Some of these are VERY common, metallic-looking-used for Security or Novelty items. In essence, Reflection HOLOGRAMS are viewed from the Same “Side” as the Light is coming from, which is in FRONT of the Plate – which is Also the Side that the Viewer is on. Excellent Quality or “Museum Quality” Reflection HOLOGRAMS are usually very Rare, although, in the 1970's there used to be “HOLOGRAM Stores” filled with them! **Prices for 2.5 inch x 2.5 inch PLATES \$50 (each)**

At **Elk Industries**, we are making more of Both Types – LASER Transmission, and Reflection types, as items for sale. Each Hologram is the Culmination of Hours of Hand Craftmanship and work effort, and are made using some of the Highest Quality Plates Available in the World, today. The **Emulsion** contains Silver Halide.

The LASER Transmission HOLOGRAMS require a LASER to **“Playback”** the **HOLOGRAPHIC IMAGE**. However, we feel that the LASER Transmission HOLOGRAMS are the MOST Intriguing, fantastic, and beautiful of all HOLOGRAMS to Behold.

Usually, a Low Cost, Low Power LASER is sufficient to ILLUMINATE a LASER Transmission Hologram of small Size, such as 2.5 inches x 2.5 inches (63 mm x 63 mm), or 4 inches x 5 inches (101.6 mm x 127 mm). This is a Common Size of Our **STOCK HOLOGRAMS**. Generally, besides the LASER, there is something else required in most cases to view LASER Transmission Holograms – a **Simple Lens**. This can be a Magnifying Glass, a Sphere of Glass (Crystal Ball), or a Lens, available from Elk Industries. Of course, we sell Plenty of LASERS, too, of many Types, Powers, and Colors!



SECTION D.

DIFFRACTION GRATINGS

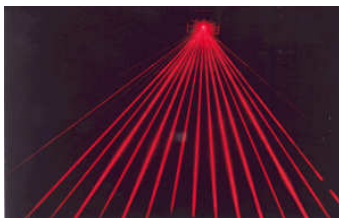
Diffraction Gratings are a whole heck of a Lot of FUN! They are generally a type of LASER Transmission HOLOGRAMS, yet, instead of being Representations of a 3-Dimensional Object, they are typically used to Generate Incredible LASER Patterns. Some are commonly used in, or to Create, LASER Light Shows.

How they usually Operate is Simple – You simply place the Diffraction Grating in front of a (Visible) LASER, and you will SEE the Pattern; either right in the Air (known as Aerial Beam effects), or as Projections onto Screens, Walls, Ceilings... (essentially Anywhere it is otherwise Dark). The Aerial Beam Effects are often Enhanced with the Use of FOG, as from Dry Ice (Solid-State Carbon Dioxide in a vessel of Water), Smoke, or the like. Then, you will SEE the Diffracted LASER Light more Clearly, and with Greater Contrast. Other than that, the Diffraction Gratings are a Source of a (virtually) Endless Array of Projected Images – things Like “Star Fields”, “Diamond Bursts”, Dot Patterns of Any Kind, or, in some cases, recognizable Patterns, or Shapes (Generally 2-Dimensional) such as a “Hand with Pointed Finger”, a “Snowflake”, a “Heart – Shape”, a “Skull”, or Pretty much ANY “Line Art” is, or can be Made into a Pattern Generated from a Diffraction Grating.

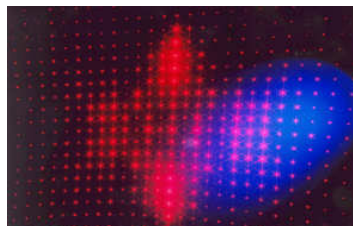
Yes, of course, this Sounds Remarkable, Sensational, or so, However, When You actually SEE these Patterns – **WOW!** You might be VERY Startled! They can convert a Dark Space into a “LASER Galaxy” of endless, Moving Displays so “Intense” and “Moving” that they (most always) Produce an enhanced Mental State – one of euphoria, or so.

Then, How are these Diffraction Gratings Made, or Formed? This, my friend, is somewhat of a “Black Art”; where those of Us who Create them are (at least) somewhat Cautious about Who this “Magic” is revealed to, or it may be (Completely) be kept a Secret. However, here at **Elk Industries**, You can Purchase these HOLOGRAPHIC DIFFRACTION GRATINGS, and therefore, do not need to (even) know How they are Made, You can get to Use them all you want (under proper care)! Isn't That Grand?

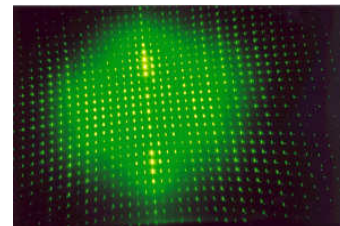
Well, we have before you, Photographs of various (either) Projected Images, or Aerial Beam Effects, all which are Available from **Elk Industries**. These are Generally High Quality Holographic Diffraction Gratings on Glass Plates, which measure 2.5 inches x 2.5 inches. However, the Area of the Diffraction Element may not extend from “Edge to Edge” of the Plate. Rather, there is a Central, or Large Portion of the Plate that has the Diffraction Pattern Registered onto it, ready for “Playback” or Projection at any time you may so Desire.



AERIAL BEAM EFFECT - “FAN”



STAR MARTRIX IN RED
With BLUE ElkLight Accent



TIGHT MATRIX IN GREEN

ZILLIONS MORE (DIFFERENT ONES) IN STOCK. PRICE IS \$50 EACH.