



# <3D Holography Machine - HOLOMARK >

## User Manual

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Version 1.0

12/22/2022

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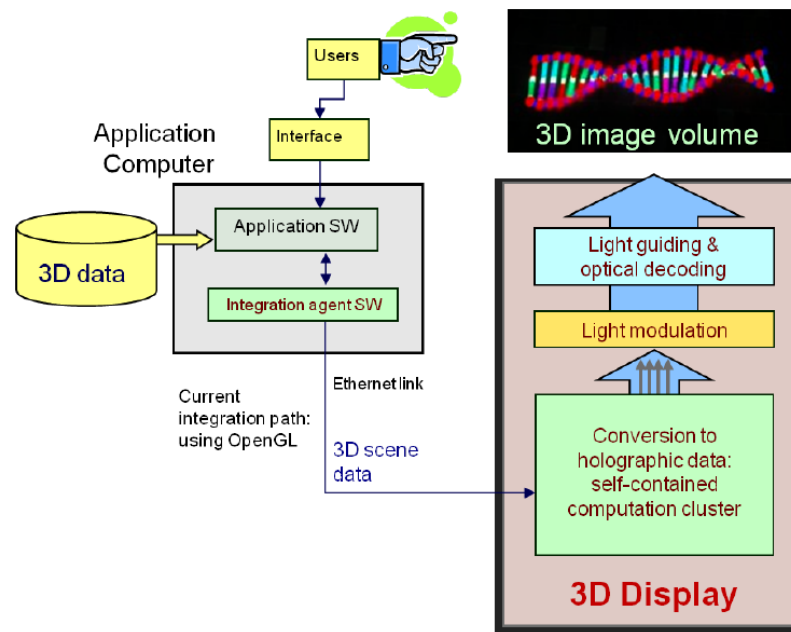
# 1. INTRODUCTION

*Holmark is proud to present our new range of holographic equipment's for education, research and industry. A hologram is a record of interaction between two beams of coherent light, in the form of microscopic pattern of interference fringes. Holmark's Classic Mastering systems are designed to deliver repeated performance in recording high quality security h o l o g r a m s.*

## 1.1 Overview

*Instructions: Briefly describe in general terms the system/application and the purpose for which it is intended, written in non-technical terminology. Consider including a high-level, business context diagram(s) for the system. The description should include, but is not limited to, the following:*

- **ARCHITECTURE:**
  - *3D dimensional image is converted to hologram using three subsystem present in display*
  - *Computational subsystem converts 3D data to holographic data.*



- **KEY FEATURES:**
  - *Dynamic Real Time Holographs*
  - *Full 3D shot in a single shot*
  - *No Motion Parallax*

## 2. Getting Started

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### 2.1 Cautions & Warnings

*Holomark was designed and tested in compliance with low voltage directive and electromagnetic. This manual includes information and warnings which must be observed by the user. It contains information notes as well as information of importance to safety of personnel and property. If the equipment is used in a manner not specified in the manual, the protection provided by the equipment may be impaired. Symbols are categorized as follows:*



Important information.



Risk for physical damage on person or property.



Risk for electrical shock that might cause damage to person or property.



Risk for laser light causing damage to person or property.

2.2 Set-up Considerations and Computer requirements

Holomark is controlled by the software HoloManager running on an external computer. It needs to be installed prior to installation of the Holomark base unit. Make sure the computer fulfills the minimum requirements. You can find the HoloManager app on our website(xyz.com).

Type	Model
Operating system	Windows 10, 64-bit
Memory	16 GB RAM (8 GB minimum)
Hard drive	556 GB SSD (256 GB minimum) and external USB3 hard drive
Processor	Intel Core i7
Display	Full HD (1920x1080) or higher

2.3 HoloMark Installation

On unboxing the machine, you will find the following parts inside the box.

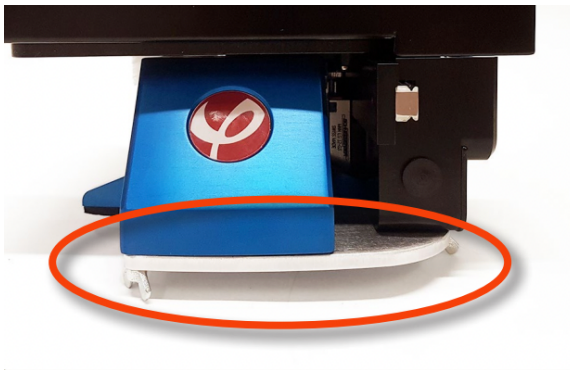


*HoloMark with a motorized stage contains the following parts:*

- 1 HoloMark with motorized stage*
- 2 Objective protective cap*
- 3 Laser unit with optical fiber*
- 4 Vessel holders for motorized stage*
- 5 HoloLid 6-well*
- 6 Transportation plate*
- 7 USB memory with HoloManager*
- 8 Main unit power supply*
- 9 Laser unit power supply*
- 10 Laser unit power adapters*
- 11 HoloLid Petri*
- 12 Cotton swabs*
- 13 USB cables*
- 14 Spacer plates for fixed stage (not shown)*

- *All the parts are marked in the figure above.*

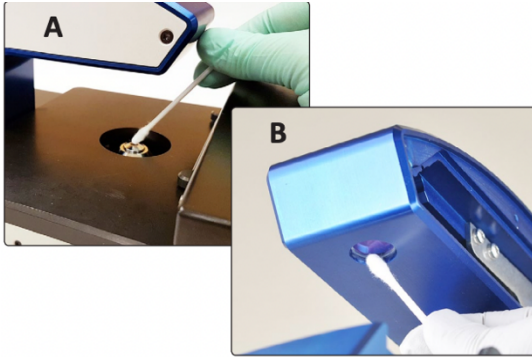
## 2.1 Installation Steps



### 1 REMOVAL OF TRANSPORTATION PLATE

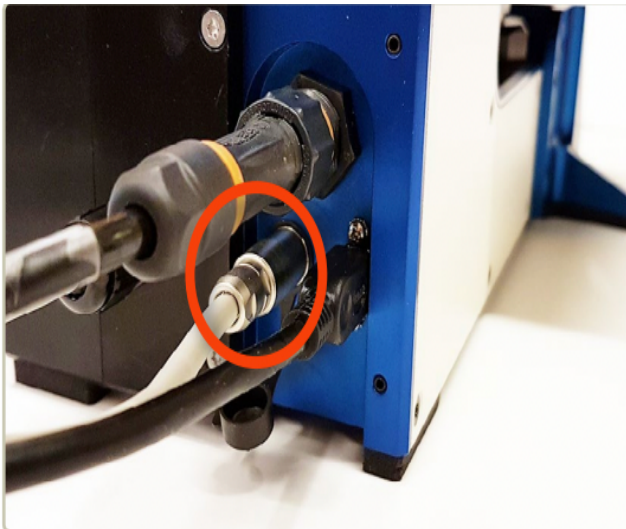
- Turn HoloMark upside down. Let it rest on the protective foam it came in.
- Remove the six screws holding the plate.
- Turn the instrument back (right side up) and remove the tape and protective foam.





## 2 CLEANING OPTICAL SURFACES

- The top of the objective (A) and the object beam window (B) are cleaned with a fresh cotton swab dipped in 70% ethanol.



## 3 CONNECTING THE LASER UNIT

**The optical fiber must be handled gently. Do not forcefully stretch or bend the fiber. Do not touch the fiber tip.**

- Carefully remove the protective cap from the Optical fiber tip. Save the protective cap for future use.
- Connect the Laser unit power supply to the Laser unit.
- Connect the laser unit power supply to a power outlet, using one of the Laser unit power adapters.