

TM3

Hardware Installation Manual

Updated: October 2007



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1.0 Introduction

TM3 is a powerful tool, which gives complete access to computers. Our philosophy in designing this product was to give you the ability to operate a computer using only your eyes.

With TM3 and an on-screen keyboard you are able to:

Type words, phrases, and documents
Access menus, scroll bars, icons, and buttons
Surf the Web
Create designs, drawings, and artwork with CAD software
Perform any other task that requires a mouse

We hope that TM3 will meet your needs and create new opportunities for you. If you have suggestions or comments regarding this product please contact EyeTech (see below).

This manual covers hardware version TM3

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General product information
Technical support
Order placement and inquiries about
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2.0 Safety Information

2.1 Avoiding Strain Injuries

Our experience at EyeTech Digital Systems has shown that there are two types of strain that can occur from using eye-tracking devices: neck strain and eye strain. If you notice discomfort, pain, or fatigue in either of these areas, stop using TM3 and rest until you feel well again.

The length of time that a person can use TM3 before feeling strain or fatigue varies from person to person. You need to listen to your body and rest when it tells you.

2.2 Other Warnings

TM3 can be a great tool for controlling your computer, but you may make errors. Do not use TM3 to control any equipment which might affect the health or safety of the user.

2.3 Information on Infrared (IR) Lights

TM3 uses IR lights to illuminate the eyes and provide reference points for the eye tracker. The IR light is produced by LED's at a wavelength of 880 nanometers. This type of IR light occurs naturally in sunlight and in light from incandescent lamps.

The total power consumed by the lights is approximately 2 watts. The measured irradiance at the user's eye under normal operating conditions is less than .5 milliwatts per square centimeter. This is well within the safety guidelines given in the book *1996 TLVs and BEIs* by the American Conference of Governmental Industrial Hygienists.

You may want to consider replacing incandescent bulbs with compact fluorescent bulbs if you experience lighting problems.

3.0 Installation

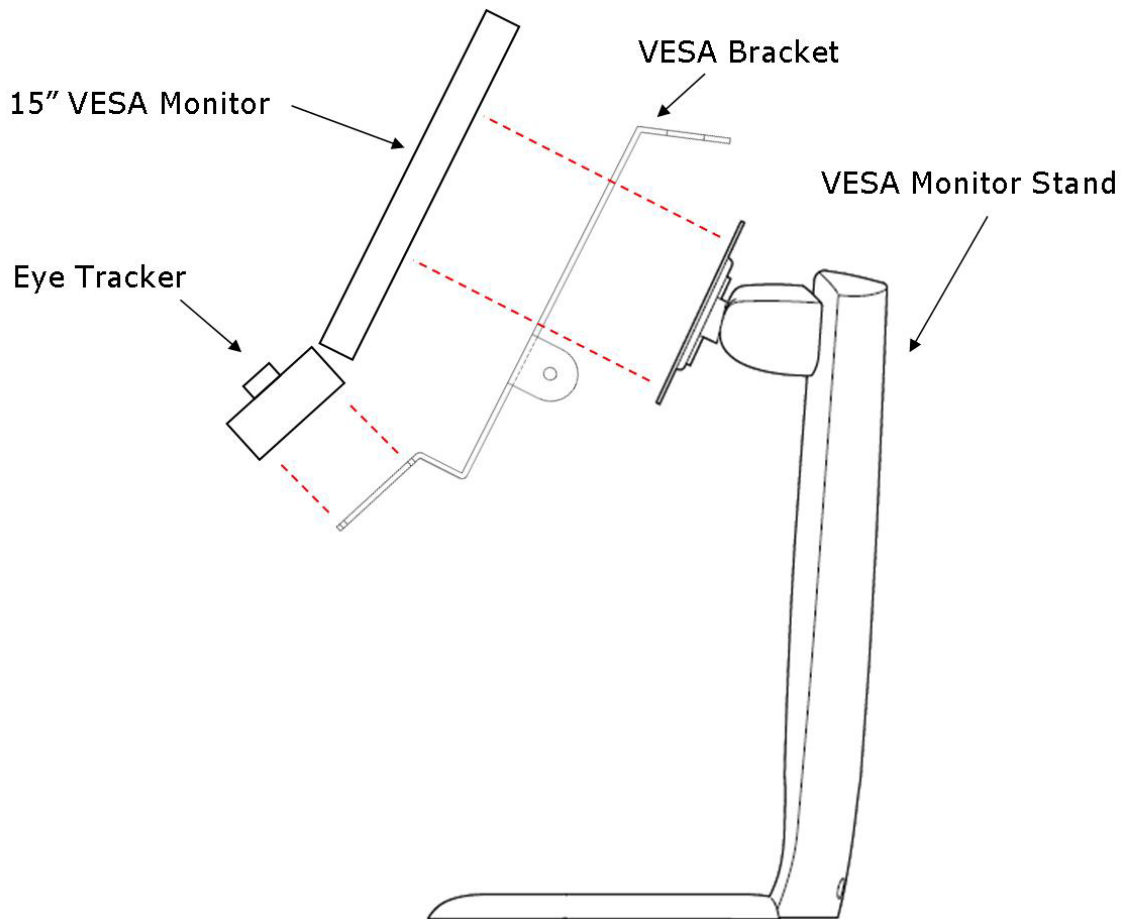
3.1 Room Lighting

Fluorescent lights have no effect on the TM3 eye tracker. Incandescent lights or windows may degrade the operation of TM3, especially if the light source is behind the monitor or behind the user. A light source directly to the side or directly above the user will not usually be a problem. Changing incandescent light bulbs to compact florescent bulbs may improve the performance of the TM3.

3.2 Desktop Installation of TM3

NOTE: TM3 hardware usually comes pre-configured with either a laptop stand or a VESA mount to be attached to a tablet PC or desktop monitor. When using a CRT monitor, the ET2 eye tracker is recommended.





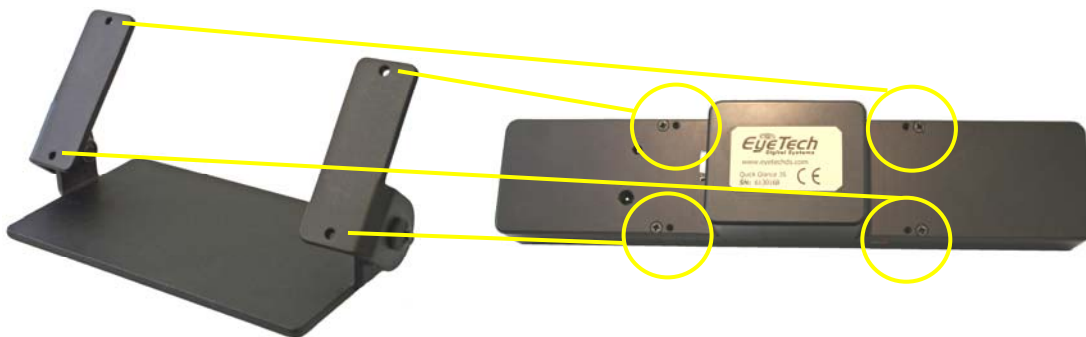
1	Line up the four mounting holes on the TM3 tracking module with the four mounting holes on the TM3 VESA bracket.
2	Insert each of the four screws provided with the bracket in the mounting holes from the back of the stand and tracking module.
3	Tighten the four screws with the included wrench.
4	Line up the four mounting holes on the 15 inch VESA monitor with the four mounting holes on both the TM3 VESA bracket and the VESA desktop stand.
5	Insert each of the four screws provided with either the VESA desktop stand or the VESA monitor into the four mounting holes on the VESA monitor.
6	Tighten the four screws.

For standard monitor sizes larger than 15 inches and widescreen monitor sizes larger than 19 inches, it is recommended that external lights be used in conjunction with the TM3 module.

3.3 Laptop Installation of TM3



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| 1 | Line up the four mounting holes on the TM3 tracking module with the four mounting holes on the TM3 stand. |
| 2 | Insert each of the four screws provided into the mounting holes on the back of the stand and tracking module. |



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| 3 | Tighten the four screws with the included wrench. |
| 4 | Verify that the camera is attached to the computer via the FireWire cable. |
| 5 | Verify that the red LED light on the side of the camera is on. If it is not, the camera is not receiving power from the FireWire port. If this is the case, you need to use the included power supply. |