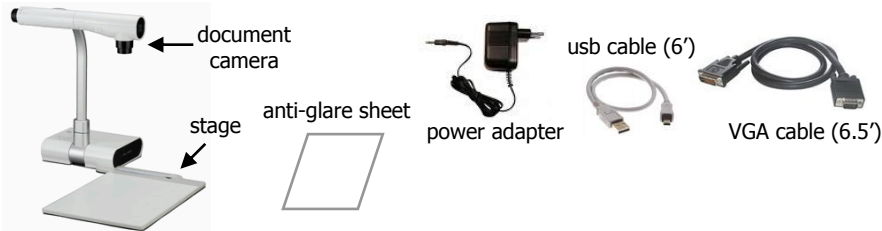


### Pieces, Parts and Setup

The TT-02s Document Camera ("Elmo") includes the following parts:



Always use the Elmo on a flat, stable surface. When carrying, be sure to hold the lower part of the main unit. Never hold the Elmo by the neck or camera head.

The Elmo must be used in conjunction with an LCD projector. There are several ways to connect the Elmo to a projector.

**VGA cable:** A VGA connection will provide slightly higher quality than an RCA connection. However, it will require some cable reconfiguration (plugging/unplugging). This option may work well when the Elmo is in one location (e.g. library) for an extended period of time.

**RCA cable:** While an RCA connection may appear slightly "jittery," it is a very simple setup for teachers who have ceiling-mounted projectors. This option is recommended if the Elmo will be moved frequently between rooms with projectors. The Elmo does NOT come with an RCA cable. However, every room with a ceiling-mounted projector has an RCA cable coming down from the ceiling (RCA cables can also be purchased in many lengths from places like Radio Shack).

### DIP Switch Settings

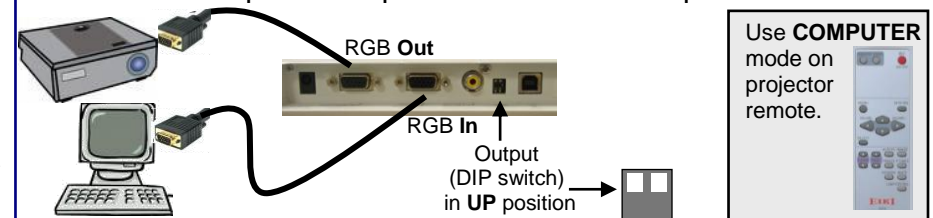
The second port from the right on the back of the Elmo is a DIP switch. Different DIP switch positions are required, depending on whether the Elmo is connected with a VGA or RCA cable. Use a small screw driver or pen to carefully adjust the left switch according to the diagrams below.



### VGA Connection (Option 1)

If using with a computer already connected to a projector:

1. Unplug VGA cable going to the #2 end of the "Y" cable at the back of the computer and plug it into the **RGB Out** port on the Elmo.
2. Use VGA cable supplied with Elmo to connect from the #2 end of "Y" cable (on back of computer) to the **RGB In** port on the Elmo.  
[If using with just a projector (no computer), simply connect a VGA cable from the projector to the **RGB Out** port on the Elmo.]
3. Make sure both DIP switches are in the **UP** position.
4. Connect the power adapter to the Elmo and a power source.

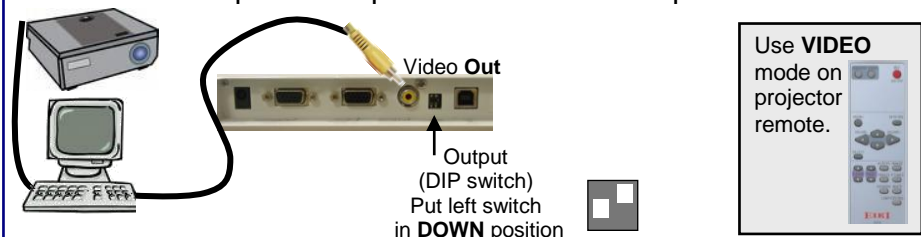


**OPTIONAL USB CONNECTION IN VGA MODE:** When a USB cable is connected, images from the Elmo can be "scanned" and pasted into documents. See reverse for details.

### RCA Connection (Option 2)

This setup uses one RCA cable (not supplied with Elmo, but every new projector installation has one). RCA cables usually have yellow, red and white plugs on the end – only the yellow (video) plug is needed.

1. In classrooms with ceiling-mounted projectors, locate the yellow RCA plug dangling from the ceiling near the computer. Plug it into the yellow **Video Out** port on the back of the Elmo.
2. Make sure the left DIP switch is in the **DOWN** position.
3. Connect the power adapter to the Elmo and a power source.

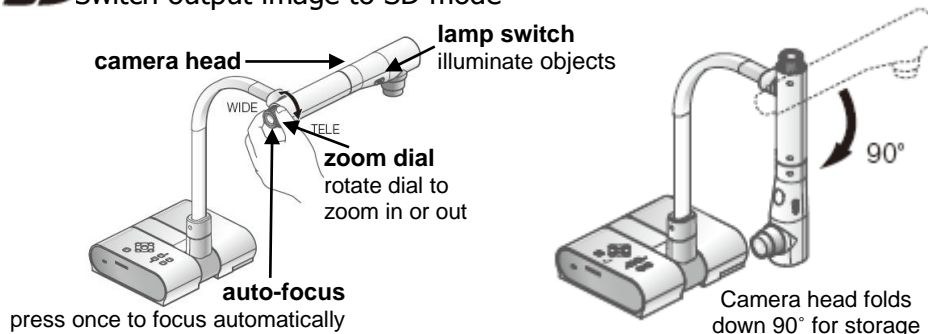




## Functions and Settings

Function buttons on the base of the unit include:

- Power:** Turn Elmo **ON** or **OFF** (keep Power button held down for 2-3 seconds to turn OFF).
- PC:** Display computer image on projector (if using a VGA connection)
- Camera:** Display Elmo image on projector
- Brightness:** Brighten or darken the camera image
- Save image to SD card
- Switch output image to SD mode



## Display Print or 3-D Objects...Endless Possibilities

After connecting the appropriate cables and turning the power **ON**, place a print or 3-D object beneath the camera. Objects may be placed on the stage or the stage may be removed. Use the **zoom** and **auto-focus** features (and lamp, if needed) to project a clear, sharp image.

**Tip:** To reduce glare when displaying glossy objects, place the supplied anti-glare sheet over the area where the glare is occurring.

Ways to use the Elmo for instruction in your classroom:

- Read a book for all to see
- Demonstrate with manipulatives (coins, blocks, letters), tools such as a clock or ruler or any "show and tell" object.
- Display and discuss artwork, primary source documents, newspapers, maps, graphs, nutrition labels and other print or graphic objects.
- Mark-up/edit writing pieces by overlaying with acetate.
- Demonstrate a process such as a science dissection or art technique.
- Rather than projecting onto a screen, tape a large sheet of paper to the wall when displaying a graphic organizer, venn diagram or blank map and have students filling in the necessary information.

## Capture Images with TWAIN software

Capturing images is only possible when using a **VGA connection**.

To "scan" or capture images displayed via the Elmo you must first install the Elmo **TWAIN** software. Use the **Start** menu to select **My Computer**. Navigate to **S:\Software\Elmo**. Double-click the **Setup** icon and follow the prompts.

After the software is installed, use the supplied **USB cable** to connect the Elmo to the computer. Once the software is installed and the USB cable is connected, images from the Elmo can be "scanned" into programs such as Powerpoint or Word.

1. Open the program in which you wish to insert an image.
2. Use the **Insert** menu to select **Picture... From Scanner or Camera**. Click the **Custom Insert** button.
3. Click the **Still** button to preview the image. When ready, click the **Transfer** button and the image will be transferred to the open document.



## SD Card Options

**SD** (Secure Digital) is a type of memory card commonly used in digital cameras and other devices. If you choose to use the optional SD slot, you must supply your own SD card (it does not come with the Elmo).

**Display images from an SD card:**

1. Insert an SD card into the slot on the side panel (push the card again to remove it).
2. Press the button to display images saved on the SD card.
3. Press or to advance to the next image. Press or to display the previous image.

The zoom feature can be used with SD card images.

**Save images to an SD card:**

1. Press the button to switch to camera mode.
2. Press the button to save whatever image is being displayed. When the mark lights up on the screen, the saving is in process. When the mark goes out, the saving process is complete.