## UBERDETAIL THE MAIN VIEWER

While completely replacing the kit's main viewer part* would result in the most accurate looking part, you can modify the existing part to look far better.

Use sheet plastic to frame in the diagonal walls, crown and baseboard as shown. Make sure to allow for the floor panel (kit part 15) when creating and mounting the diagonal walls and baseboard.

Fill in the angle around the viewer (or add another sheet of plastic) to square off the frame.

Part V5 from ParaGrafix's other TOS Bridge photoetch set is ideal for adding the lights below the screen.

* A replacement is available from Don's Light and Magic (www.dlmparts.com).

Add diagonal walls

Add crown
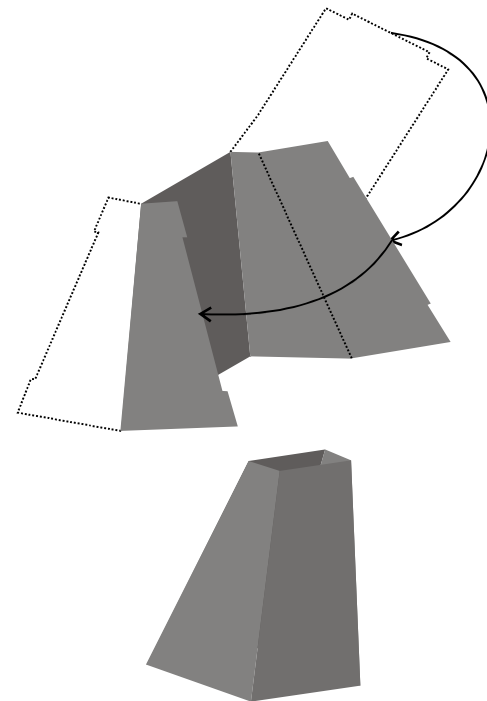
Fill Angle

Add "baseboard"

V5
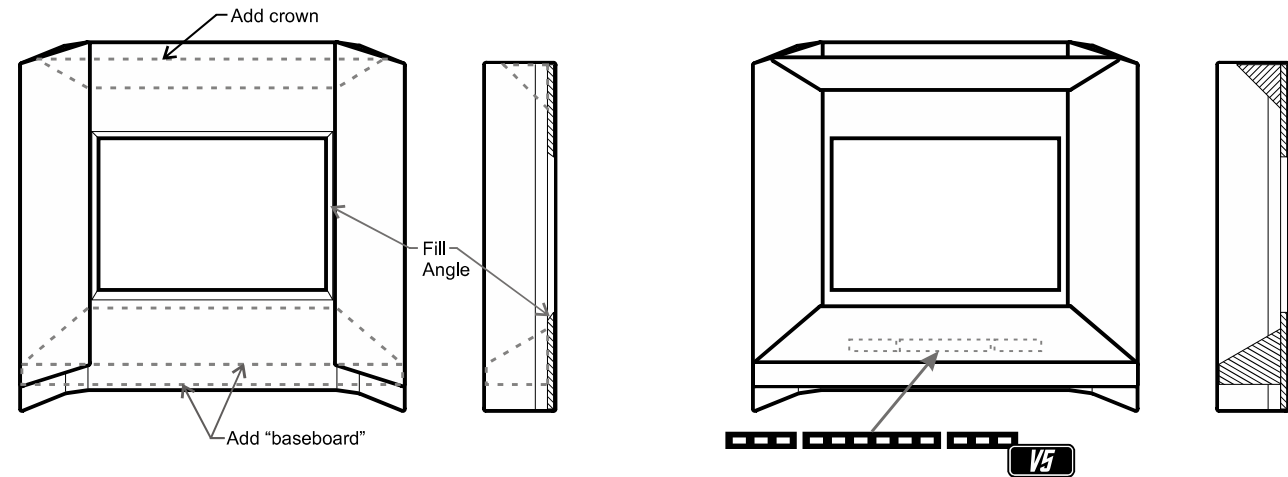
BONUS: SCANNERS

Fold the three scanners (marked "SCAN" on the photoetch fret) as shown. Attach some small plastic rod (around 0.075" diameter, 19 mm) over the engraved circle on the side of the scanner for the focus knob.

Mount one each on the left-hand side of the Science, Engineering and Environmental stations.

**TIP:** Mount a blue LED inside to simulate an operating scanner.

TOS BRIDGE DISPLAY SCREENS
Photoetch & Backlight Films
PARA GRAFIX PGX184

INTRODUCTION

Thank you for purchasing ParaGrafix's photoetch and backlight film set for the venerable USS Enterprise Bridge kit from AMT. We have made every effort to ensure that these parts can be used successfully by a modeler of modest experience, but there may be items that require advanced modeling techniques. For a basic primer on the use of photoetch, please visit http://www.ParaGrafix.biz/video-instructions-1.asp and other resources available on the web.

Key
Kit part (plastic): 1
Photoetched part: A
Backlight film: A

MATERIALS

In addition to the photoetch, you will also need scissors or a knife* to remove individual pieces from the main fret and a file to remove material left from cutting. Two types of adhesive are suggested: super glue (aka CA or cyanoacrylate) and Micro Krystal Klear and/or Testors Clear Part Adhesive. Micro Metal Foil adhesive may be used in place of super glue in many of the locations. You will also find that a glue stick comes in handy for attaching the cutting templates.

Additionally, to fold some pieces, you will need a pair of razor blades** or a specialty tool such as PhotoFold from ParaGrafix.

OPTIONAL: If you decide to do the "More Accurate" upper displays (see below) you will need plastic sheet (card). We suggest 0.04" or 0.05" (1 to 1.3 mm) for ease of use and structural integrity. 0.01 to 0.02 (0.2 to 0.5 mm) clear will also be useful if you "Überdetail" the lower displays.

* We prefer a #17 Xacto chisel blade.
** Extreme care must be taken when using razor blades. Risk of serious injury.

LOCATIONS

Each bridge station is designated by a letter – S for Science, E for Engineering, D for Defense, etc. We have made this nomenclature consistent for both the photoetch pieces as well as the backlight films. (These designators are also used for the decals supplied with the 2013 re-release of this kit.) Please see the figure at right showing the relationship between the kit parts (2-digit numbers) and the parts from this aftermarket detail set.

Note that since the procedure is identical, instructions are only shown for a single station.

TIP: Use an indelible marker to add either the kit part number or the corresponding letter to ensure that you are working with the correct pieces.

N 12 S 10 W 14 C 8 D 18 E 36 16 Main Viewer 39 35 M G
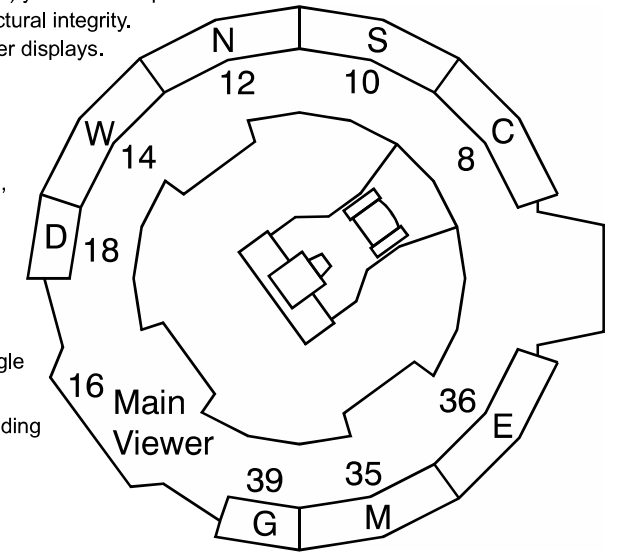
UPPER DISPLAY DECISION

The upper displays consist of a lone or pair of backlight films and corresponding photoetched frame(s), depending upon the location. There are two different ways to install these components, depending upon how much work you would like to do:

Easy(er)

This method is limited to removing the existing inner frame(s) from the various stations, cutting a hole for the backlight film(s), and attaching the frame(s) and film(s). While less work than the "more accurate" method, it is, as the other name implies, less accurate.

More Accurate

Remove both frames (you needn't be very picky about the inner frame), cut out the area for the recessed display area, cut a section of sheet plastic (with appropriate hole(s) for the display(s)), mount from behind, then attach the frame(s) and film(s). This is considerably more work than the other method, but it yields far more accurate results.
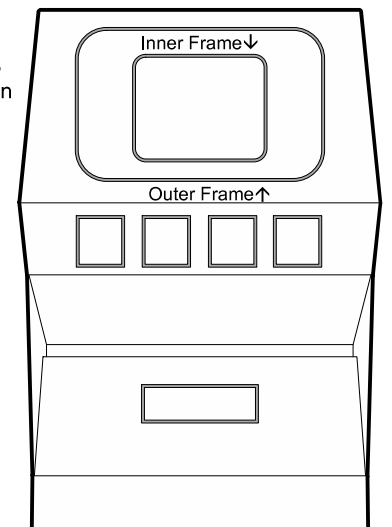
Inner Frame↓
Outer Frame↑

EASY[ER] UPPER DISPLAYS
REMOVE INNER FRAME
Remove the Inner Frame of each command station using your preferred method: filing, sanding, chiseling, etc. Make sure that the surface is smooth and free of tooling marks.

Remove

USE TEMPLATE
Trim the appropriate template (Defense shown here) to the inner, dashed line (marked "Kit") and adhere to the kit part using a removable adhesive such as a glue stick.

Carefully transfer the outline indicated as "remove" and the dashed one just outside of it to the kit part. A very sharp #11 Xacto works well for this.

Remove all of the plastic from the area indicated as "remove". Be careful not to go beyond the outline or there won't be enough material to attach the frame.

Defense REMOVE D

ATTACH FRAME
Using either super glue or Micro Metal Foil Adhesive, mount the frame so that it just touches the outline. Note that there should be a lip (aka "rabbit") inside the frame to allow the films to be mounted from the back side. Allow the adhesive to cure fully.

Follow the instructions for adding the Lower Displays and then paint the bridge section.

Photoetch Film Kit Part

ATTACH BACKLIGHT FILM
NOTE: The films have very tight tolerances. It is best to cut them a little large, then trim to fit.

NOTE: Use adhesive sparingly to help avoid bleeding of the printing.

Trim and mount the film(s) from the back side of the kit part. Hold in place using Micro Krystal Klear or Testors Clear Parts Adhesive.
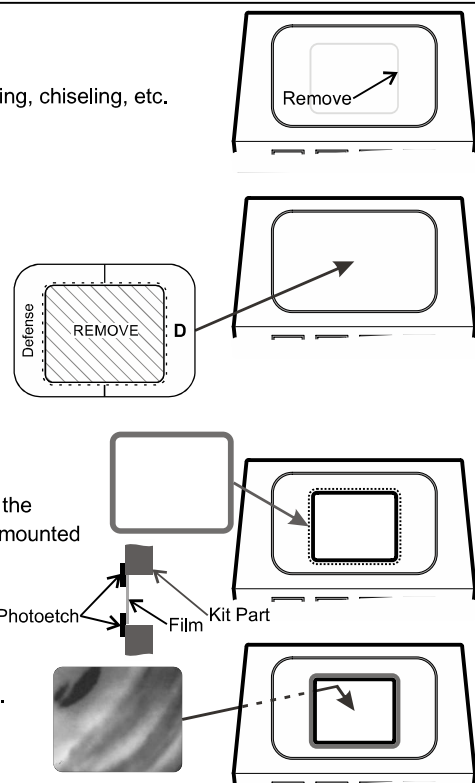
MORE ACCURATE UPPER DISPLAYS
REMOVE FRAMES
Remove the Inner and Outer Frame of each command station using your preferred method: filing, sanding, chiseling, etc. Make sure that the surface where the outer frame was is smooth and free of tooling marks - the inner frame area will be cut away so you don't have to be quite so careful.

Remove

DRAW CENTER LINES
Mark horizontal and vertical center lines on the part and mount the template so that the indicator marks line up with the center lines.

TIP: You may make a photocopy of the templates (or print them from the PDF on our web site) so that you can use one set for modifying the kit part and another for marking the plastic sheeting.

Defense REMOVE

Template

CUT OPENING
Cut to the outermost line (the trapezoid) on the template and remove. Make sure that the inner edges are smooth and clean as they will be seen when the model is finished.

CREATE NEW DISPLAY AREA
Cut piece of sheet plastic (card) (available at your local hobby shop) slightly larger than the cutout area of the upper display and attach the template. Drawing center lines will help with the next step.

Carefully transfer the outline indicated as "remove" and the dashed one just outside of it to the kit part. A very sharp #11 Xacto works well for this.

Remove all of the plastic from the area indicated as "remove". Be careful not to go beyond the outline or there won't be enough material to attach the frame.

Mark

Defense REMOVE

Plastic Sheet

MOUNT DISPLAY AREA
Attach the new sheet plastic part to the back of the kit part.

Photoetch Film Plastic Sheet
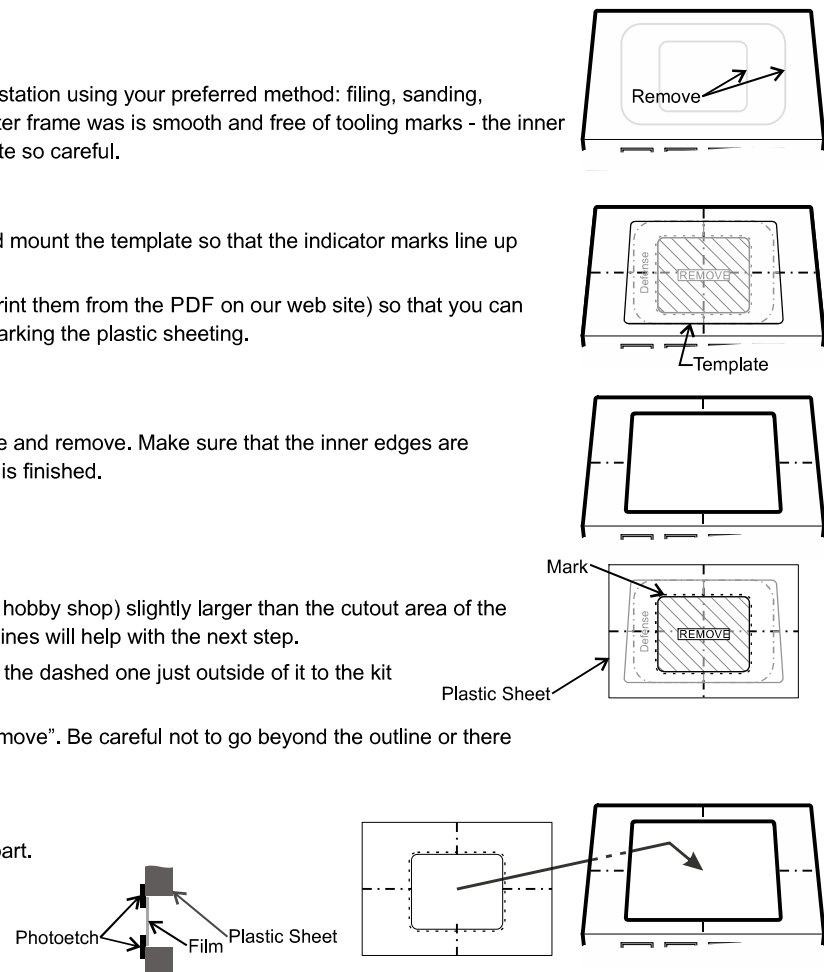
MOUNT FRAME AND FILM
Attach the frame(s) to the sheet plastic part at the location noted earlier. Ensure that there is a lip for the backlight film to attach to.

NOTE: The films have very tight tolerances. It is best to cut them a little large, then trim to fit.
NOTE: Use adhesive sparingly to help avoid bleeding of the printing.

Trim and mount the film(s) from the back side of the kit part. Hold in place using Micro Krystal Klear or Testors Clear Parts Adhesive.
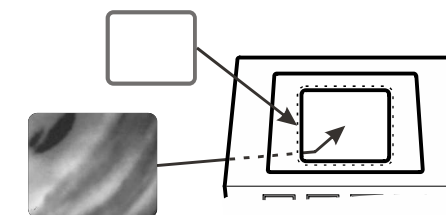
LOWER DISPLAYS
MODIFY KIT PART
Cut out a rectangle where the lower displays are, leaving a small lip around the circumference for attaching the photoetch.

REMOVE REMOVE

MOUNT PHOTOETCH
Glue the photoetch piece(s) to the front face of the panel. Note that the arrow on the back of each piece should point toward each other.
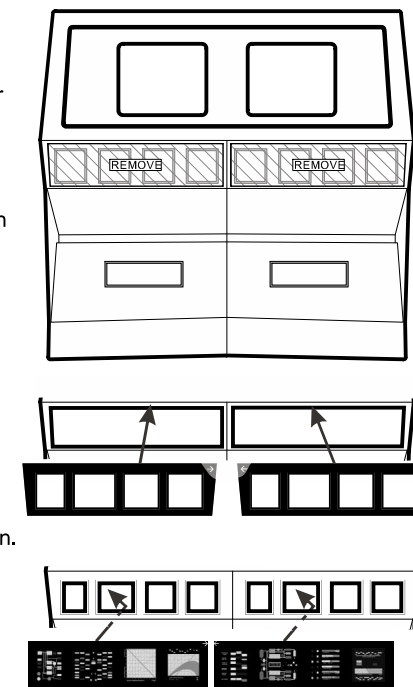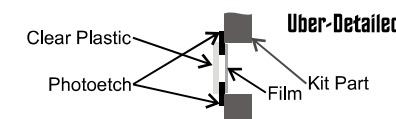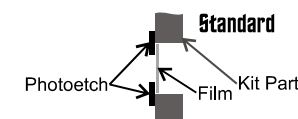
ATTACH BACKLIGHT FILMS
TIP: Paint the console before attaching the backlight films.

Mount the films from the back side and secure in place with Micro Krystal Klear or Testors Clear Parts Adhesive.

UBER-DETAILING
The bridge set had pieces of plexiglass mounted to the front of the lower display screens. Their outlines are engraved in the photoetch. Cut 0.01 to 0.02 (0.2 to 0.5 mm) clear plastic sheet to the same size as the outline and glue to the front of photoetch part. Note that all of the displays are different in width, but all are 3/8" (9.5 mm) tall except for the short, wide one at the Science station.

Standard
Photoetch Film Kit Part

Clear Plastic Uber-Detailed
Photoetch Film Kit Part

MAIN VIEWER
Cut the entire main viewer, flush with the back wall of kit part 16.

Paint and assemble the bridge per the kit instructions.

Mount your choice of backlight films.

16

Cut Cut

Film

EARTH OUTPOST
SECTOR Z-6
ROMULAN
STAR EMPIRE
ROMULUS
REMUS