Slide Mounting
for
Projection 101

How to properly mount slides using the RBT mounting system

A workshop by Steve & Suzanne Hughes of the Atlanta Stereographic Association

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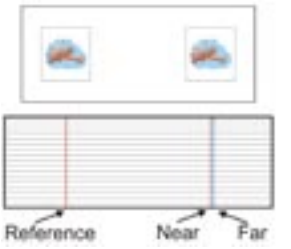
Working with the Window

The Problem

- Many people shoot 3D but never project the slides
- Slides look good in viewer, bad when projected
- Some mounts don't work for projection
- Proper technique seems hard

Simple But Workable Method

- Use mounting gauge
- Mount conservatively
- Buy a mounting jig
- Use RBT plastic mounts



Slide and mounting gauge


Mounting gauge on top of slide

The Mounting Gauge

- Precision made
- Specific to mounts
- Horizontal lines used to check vertical or rotation errors
- Vertical lines used to set the window

- Place 'Reference' line on a point in left image
- If same point in right image is left of 'Near' line, it's in front of window
- If same point in right image is right of 'Near' line, it's behind window

Basic Mounting Guide Lines

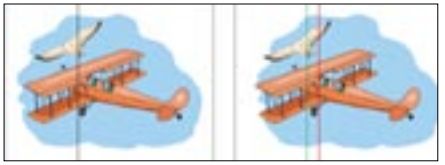
- Closest item at/behind window
- If not, no part can touch the window edge
- Same object in both images must be same height
- 'Closest' object - 'Farthest' object <= 1.2mm

- Follow these guide lines and get projectable slides 99% of the time
- To get the best slides, practice and study

Examples of Mounting using a Mounting Gauge

Near point set to bird

- Bird is ‘closest’ object in image
- Most people mount closest object at the near point or ‘window’
- May still have problems if the far point is too distant

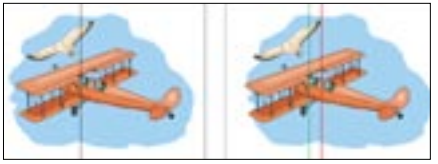


Near point set to bird

Near point set to bird

Near point set to plane

- The ‘closest’ object is ‘in front’ of the window
- Effective, but use sparingly
- Beware of objects that are cut off by the window - ‘ window violations’



Near point set to plane

Near point set to plane

Near point set to cloud

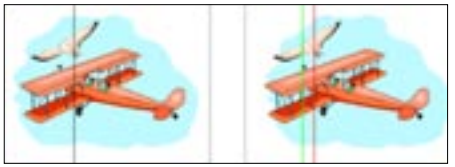
- Everything is in front of the window
- Going to extremes seldom works
- Image is hard to see in stereo

Near point set to cloud

Near point set to cloud

Far point set to bird

- Everything is too far behind the window
- Little, if any, 3d is seen
- Image is hard to see in stereo



Far point set to bird

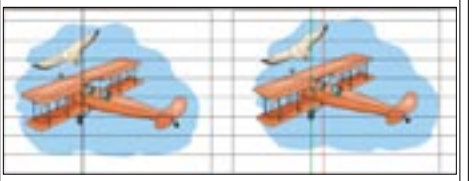
Far point set to bird

Most Common Errors

- Vertical alignment errors
- Rotational errors
- Window violations

Vertical Alignment Error

- Very common problem
- Usually consistent on vintage cameras
- Big problem on 'cha cha' shots
- Not too obvious in viewer, very obvious on screen

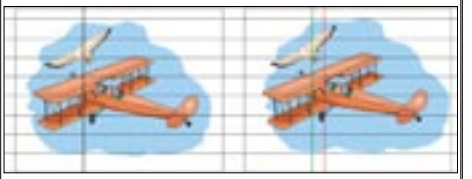


Right image higher than left

Vertical error

Rotational Error

- Rare with vintage cameras
- Common with 'cha cha' shots
- Really show up on screen



Rotational error

Rotational error

Window Violations

- When an object in front of window is cut off by window
- No part of an object in front of the window may touch the window's edge
- In this case, girl is cut off at waist

Window violation

Window violation

Tips and Tools

Balance Works Best

- Keep things at or behind window most of the time
- All points in image should fall between gauge 'near' and 'far' points
- Watch for grass, tree branches and very close objects when identifying the 'near' point

Choosing a Slide Mount

- If you will not project the image, many options
- Projection requires both good mounts and good mounting skills
- RBT plastic mounts are currently the most practical option for projection

Positives of RBT Mounts

- Rigid mount that won't warp in projector
- Mounting jig is available
- Good selection of sizes and masking options
- No taping or gluing
- Easy vertical offset adjustments

Negatives of RBT Mounts

- Expensive! About 60 cents per slide vs 10 cents for cardboard mounts
- Must be taken apart before use
- Hard to fix rotational errors

Cost of Tools Needed

- 'SAM' mounting jig - $195 - $350
- Alignment gauge - $10
- Slide cutter - $30
- Magnifier Visor - $38
- Light table - $60 - $150 (Gagne PortaTrace)
- Solder probe or cotton gloves - $5

Optional Tools

- 'SAM' mounting jig is optional but highly desirable
- Some kind of box to hold cut chips
- Storage pages for mounted slides or RBT mount boxes

Components of RBT Mount

- Two halves of mount, one black and one white
- Pin bars to position film chips
- 'Up' indicator • Vertical adjustment indicators

Mounting Procedure

- Mount the entire roll or all the images you want at once
- Always mount for projection
- Use the mounting gauge if you are not an expert

Begin with the film cutter on top of the light table.

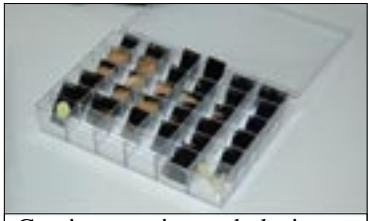
Use the magnifier visor to make accurate cuts.

Line up the cutter with the edge of the film clip.

Press down and cut the actual chip from the film roll.

Carefully remove the chip using the soldering probe.

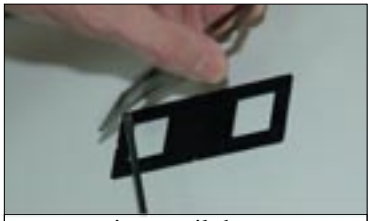
Place it into the slidebox keeping the pairs together.



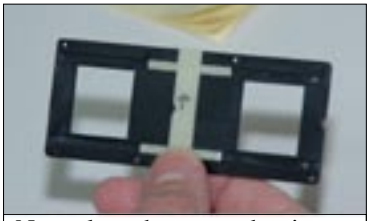
Continue cutting and placing until the roll is completely cut.

Carefully separate the two sides of the RBT mount

using a flatblade screwdriver and gently loosen each prong



one at a time until the two pieces are separate.



Now place the spacer bar in to the mount with the arrows ^.

Place one pin bar flush with the spacer.

Place another pin bar flush with the spacer on the other side.

Ensure the pin bars are flush with spacer for proper spacing.

Remove the spacer. The mount is now ready to be used.

Use the RBT mounting jig on a semi covered light table.

Place the prepared RBT mount in the mounting jig.

Carefully place the first chip so the holes fit onto the pins.

Place the second chip over the pins on the other side and verify they are not pseudo.

It is the 7 Perf European format mounting gauge that is used.

Align the left line in left picture and left line in right picture with the near point.

Slide the pins with chips to correct alignment.

Move left line in left picture to far point. Verify right line in right picture is not past far pt.

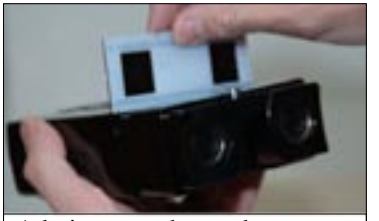
Once fully satisfied with the alignment,

snap the white part onto the mounted slide being careful

not to pop the chips off the pins.

Without removing slide, snap each pin around the slide.

Then remove the slide and be sure it is fully closed.



Admire your shot and mounting in a good viewer.

Store the mounted slide in an archival sleeve.

Materials for Mounting Slides, and Where to Get Them

Item	Approximate Cost	Source
SAM - RBT Mounting Jig	$195 for basic unit to > $350 for unit with light, etc.	1
RBT Mounts	$29 - $37 for a box of 50	1, 2 or 3
Alignment Gauge	$10	2, 4
Slide Cutter	$30	2
Storage Pages	$7.50 / 10 pages to $50 for 100 pages	3
Solder Probe	$5	Radio Shack (#64-2227)
3D Mounting Guide: A Practical Guide to Mounting Slides	$11	1, 2, 3
Slide Box		Craft Store
Magnifier Visor	$38	Micro-Mark (#18108)

(1) 3D Concepts - http://www.stereoscopy.com/3d-concepts/
(2) Berezin Stereo Photography Products - http://www.berezin.com/3d/
(3) Rocky Mountain Memories - http://www.rmm3d.com/
(4) 3D by DrT - http://home.att.net/~drt-3d/catalog/index.htm

Note: Prices and availability of 3D equipment varies quite a bit so you may need to check different suppliers to get the best price or delivery times.