

ARTWORK							
Artist:	Armando Andrade Tudela						
Title:	<i>Casas Alteradas</i>						
Acc. No:	T12771						
Year:	2006						
Medium:	35 mm Slide Installation <i>(Please note that slide technology is nearly obsolete for which you may find that sourcing equipment and duplicating slides for exhibition sets may prove difficult!)</i>						
Dimensions:	<table border="0"> <tr> <td>Gallery Space:</td> <td>variable</td> </tr> <tr> <td>Projected Image:</td> <td>H/W circa 666 x 1000 mm (each)</td> </tr> <tr> <td>Perspex Stand (each):</td> <td>H/W/D: 490 x 385 x 390 mm</td> </tr> </table>	Gallery Space:	variable	Projected Image:	H/W circa 666 x 1000 mm (each)	Perspex Stand (each):	H/W/D: 490 x 385 x 390 mm
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DESCRIPTION							
<p><i>Casa Alteradas</i> is a 2-channel slide projection consisting of images taken by the artist in the private homes of two architects: one is Oscar Niemeyer's <i>Casa das Canoas</i> (1951) in Rio; the other Flavio de Carvalho's <i>Hacienda Capoava</i> (1929–36), which is situated just outside São Paulo.</p> <p>In addition to these images, Andrade also uses photographs, which he took in a dance hall in Rio and a hotel in São Paulo. The attraction of these venues was their interior decoration: both were saturated with mirrors, reflections and patterns.</p> <p>The projected slides, depicting both interiors and exteriors and are presented in a sequence of overlaid images so that at any one time four images can be seen. Their overlaying renders them abstract, as different combinations of exterior and interior shots are overlaid. The slide projectors are placed on specially designed Perspex stands which add to the visual appearance of the work.</p>							
 <p><i>Installation View: Tate Modern 2007 Outset Frieze Displays</i></p>							
ORIGIN							
<p><i>Casa Alteradas</i> was first shown at the São Paulo Biennial in 2006, for which Andrade finalised the concept of the work and its primary display features. The original intention was to show a two channel projection, each consisting of two slides projected on top of another by using two slide projectors per channel. This led, however, to the technical problem that the projections appeared too bright as the brightness on the projection surface was doubled. In order to resolve this, Andrade investigated the possibility of creating overlaid images by 'sandwiching' two slides into one mount. This proved successful and achieved the desired visual effect; the technical set-up, however, remained partly unresolved. Andrade chose purposely not to unveil the simple principle behind the overlaid projection and hence the equipment set-up appears as if the overlay is created in 'real time' by superimposing slides from two separate projectors to make each composite image. In consequence, four slide projectors are used instead of the two required to show the 2-channel 'sandwiched' slide images.</p> <p>This principle is followed through with the design of the Perspex stands and their sloping shelves which align the bottom and top projector so that their projections accurately overlap.</p> <p>The synchronising system enhances this in the way in which it controls the speed of the slides alternations and the changeovers between top and bottom row projectors. For Andrade, the specific 'clonk' sound of the projector model also plays an important part of the work and adds a rhythm which correlates with the visuals.</p>							
							

EXHIBITION FORMAT DETAILS

32 individual slide images form the basis of countless combinations that are spread over 4 carousel slide projectors. 35 mm slides have an aspect ratio 2:3. One playback sequence takes approximately two minutes.

There are 19 slides per carousel each consisting of two slides per mount. This adds up to a total of 152 single slides per display set. At first sight, these combinations seem randomly chosen until one recognises continuous architectural lines intersecting or connecting within the two projected images. Furthermore there is also a particular order in the way in which each slide pair stands in contrast to the preceding and subsequent pairs: this order is accentuated by occasional pauses in the sequence.

Slides are an unstable medium which will gradually fade over the course of the display owing to exposure to light and heat, so back-up sets must be provided to replace the faded sets every two months. This forecast is based on a 70-hour playback per week.

The four carousels are identified as Top Right (TR) and Left (TL) and Bottom Right (BR) and Left (BL). During playback the two bottom and top projectors act as pairs in the way in which they alternate, change over and pause.

The INSTRUCTION FOR MAKING EXHIBITION SETS can be found in a separate document.

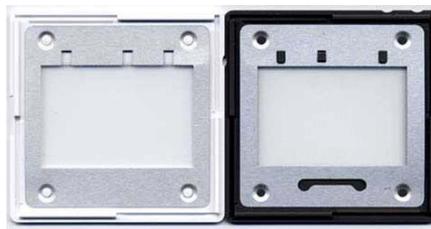
This manual points out whether the slide sits at the front or back in the mount and if the orientation of the slide is mirrored or upside-down.

According to our experience, the mounting works best when using slide mounts with peg registration which simplifies the positioning of the two slides. (See examples below)

- WESS AAA002 (23.4 x 34.8 mm, peg registered, anti newton glass, 3:2 aspect ratio, 50pcs/box @ \$16.49) www.wessmounts.net
- GEPE Art.:6050 (23.4 x 34.8 mm, peg registered, anti newton glass, 3:2 aspect ratio, 2.5 mm glass, 50pcs/box @ €31.45) www.gepe.com



WESS AAA002



GEPE Art.:6050

EQUIPMENT LIST

- 4x Kodak slide projectors S-AV 2050 (please allow for 1x additional spare projector)
- 4x Kodak slide carousels
- 4x Kodak Retinar zoom Lenses 70–120mm
- 1x Synchronisation program file for Dataton Pax or Smart-Pax

The cue tone is outputted as mp3 and written on Audio-CD. A CD-player and amplifier are required for play back. The synchronisation file only works in combination with Dataton. If a different system such as Stumpfl SD Event 2x4 is used, the program will need to be re-written. The same applies if a different slide projector model will be used. See 'Details of the Installation' for more information.

- Slide synchronisation control unit Dataton Pax

EXHIBITION-SPACE REQUIREMENTS

GALLERY SIZE

There are no particular requirements to show this work as the layout is flexible and can be adopted according to its surroundings. The images are projected next to each other with an image size of H/W circa 666 x 1000 mm (each). The projected images should not be centred on a wall but follow the natural flow of the gallery in a rather unpretentious way. It is also possible to take this work out of the standard set-up of a self-contained gallery in order to broaden the way in which it can be encountered. The projection distance is also flexible as the slide projectors are fitted with zoom lenses.

CONFIGURATION

In order to achieve a successful display, please consider the ideal viewing point where members of the public can gather without obscuring the images, especially as they are projected quite near floor level. Also the position of the Perspex shelf with the slide projectors should be chosen so that they are secure. This can either be done by positioning them against a wall with a barrier around it or by showing the work in a rather narrow room which already reduces the number of visitors that can enter at the same time. Please contact Carl Freedman Gallery, London to discuss the configuration of *Casas Alteradas* in advance.

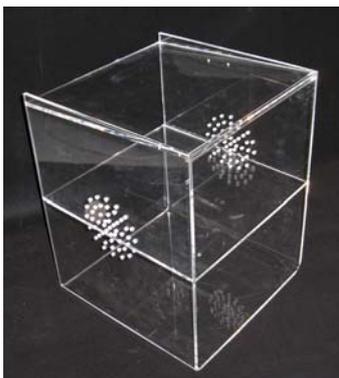
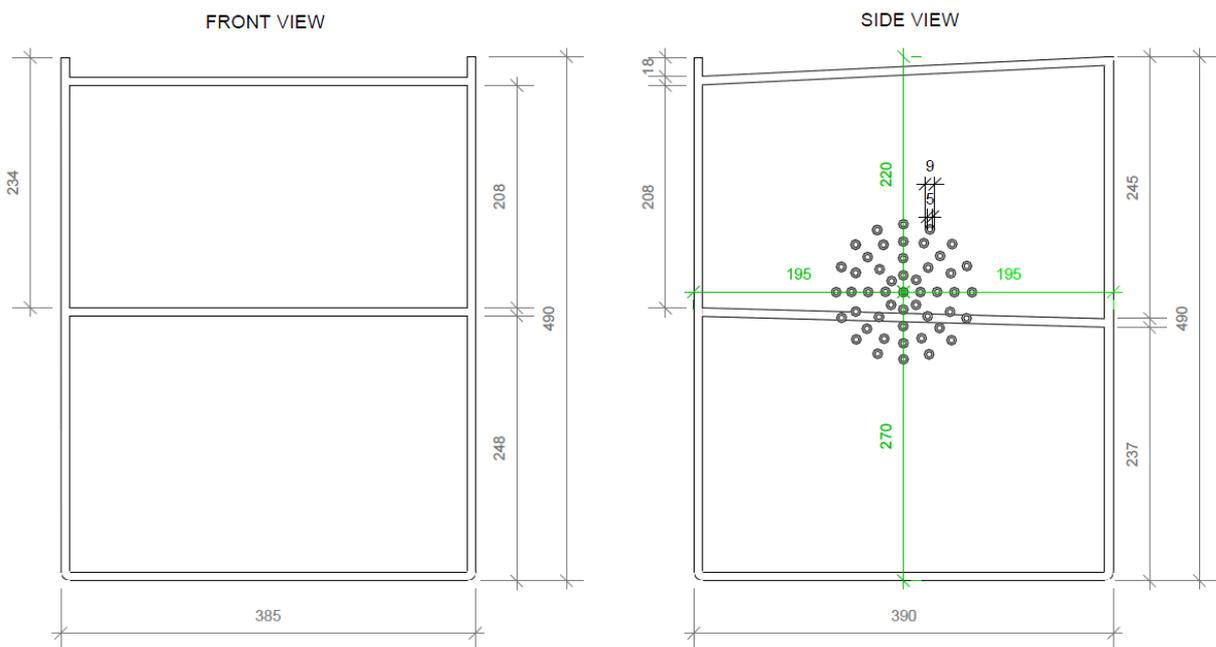
WALL COLOUR & FLOOR

The images should be projected on a white wall. There is no particular specification for the floor finish.

DETAILS OF THE INSTALLATION

PERSPEX SHELF

There are two identical display stands that are made out of 8 mm Perspex. The outer U-shape is made from one piece and bent at the bottom as a consequence of which the edges are rounded. Owing to the slight slope of the shelves, the upper projector points downwards and the lower one upwards so that the projected images overlap on the wall. There is a pattern of circular holes on either side which allows for better ventilation. The stands should be positioned directly on the floor.



Display Stand: diagonal view



Display Stand: front view



Display Stand: rear view

SYNCHRONISING SYSTEM

The flow chart below illustrates the way in which the playback of the slides alternates between the two upper and lower projectors. The logic behind the sequence is primarily driven by Andrade's visual specifications as well as incorporating the operation features of the Kodak S-AV 2050s. The sequence is set up so that overheating of the projectors is prevented. This is reflected by the way in which the lamps are controlled to switch ON and OFF depending whether the projectors are in active mode or not.

If the equipment setup remains as specified, the synchronisation file can be read by Dataton Pax unit. Alternatively the synchronisation file can be re-written using the Dataton software which only runs on Mac OS9 or by using a Smart-Pax unit on which the programming can be entered manually using the multicoloured remote it comes with. This sequence is output as an mp3 file written on Audio-CD for which a CD-Player and an amplifier are needed for playback. The volume level on the amplifier needs to be adjusted so that the impulses can be clearly detected by the Dataton Pax unit is connected through a AUDIO PHONO PLUG LINE IN and a 4x RS-232 OUT to the slide projectors.

Though we recommend using the Kodak S-AV 2050s slide projectors and the Dataton synchronising system, we are also fully aware that slide technology is on the verge of becoming obsolete which means it might be difficult to source the equipment needed. If a different system is going to be used please consider the following operation features which take you through the key characteristics of the sequence:

- Load slide #1 in all 4 projectors (top + bottom)
 - Switch ON lamp in top projectors + Lamp stays OFF at bottom projectors
 - TOP: Slide #1 stays on for 2sec
 - TOP: FW to slide #2 for 4sec (this is a paused slide which stands twice as along)
 - TOP: FW to slide #3 for 2sec
 - TOP: FW to slide #4 for 2sec
 - TOP: FW to slide #5 for 2sec
 - TOP: FW to slide #6 + Lamp OFF (This is the first slide pair that shows at the top once the bottom slides 1-3 are finished)
 - BOT: Lamp ON, slide #1 for 2 sec (This is the slide pair that has already fallen in place)
 - BOT: FW to slide #2 for 2sec
 - BOT: FW to slide #3 for 2sec
 - BOT: FW to slide #4 + Lamp OFF (This is the first slide pair that shows at the bottom once the top slides 6-9 are finished)
 - TOP: Lamp ON, slide #6 for 2 sec (This is the slide pair that has already fallen in place)
 - TOP: FW to slide #7 for 2sec
 - TOP: FW to slide #8 for 2sec
 - TOP: FW to slide #9 for 4sec (this is a paused slide which stands twice as along)
 - TOP: FW to slide #10 + Lamp OFF (This is the first slide pair that shows at the top once the bottom slides 4-7 are finished)
- - -to be continued until end = slide pairs #19, then rewind all 4 carousels to start position - - -

As a checklist for the system requirements please consider the following:

- 4x identical slide projectors must be used as the synchronising device can only communicate with one type of interface ports. Check that the synchronising device supports the projector make and model and comes with the right set of cables.
- The speed in which the slides alternate must allow for different standing times such as the 4sec pauses opposed to the 2sec.
- The response time in which the LAMP ON/OFF can be controlled.
- Rewind options when only 19 out of possible 80 slides in carousel are being used.
- Please allow for sufficient time to test and trial and to check for overheating!

SLIDE PROJECTORS

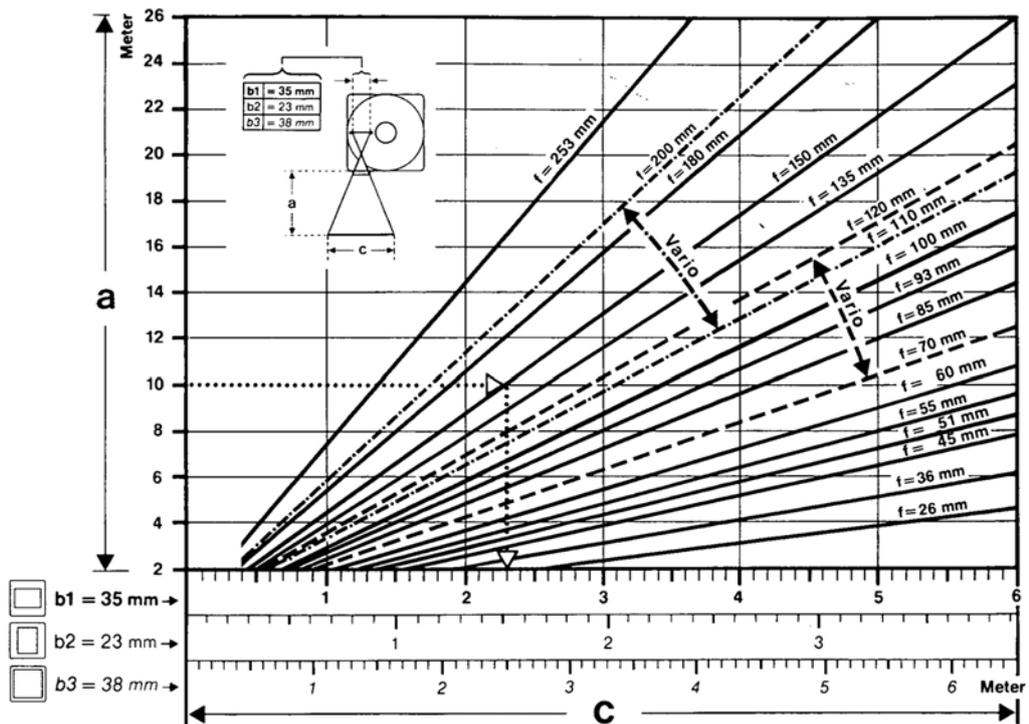
The projectors sit inside the Perspex stands. They are fitted with Vario zoom lenses which give maximum flexibility to determine the most suitable throw. The projectors should be set up so that the projections from top and bottom row projectors overlap on the wall as precisely as possible. The images are projected next to each other with an image size of H/W c.666 x 1000 mm each.

There should be no vertical gap at all between the two projections and the tops and bottoms of both projections should align perfectly.

When slide projectors are controlled by an external synchronising device, the switch on the side of each unit must be set to EXT.

Below is a chart that shows the throwing distance and corresponding image size.

For further details please consult the manual provided.



SPARES AND CONSUMABLES

- 180x 250W Halogen Lamps / Osram A1/223 24V slide projector bulbs (2 per week / £1.25 each)
- WESS AAA002 (23.4 x 34.8 mm, peg registered, anti newton glass, 3:2 aspect ratio, 50pcs/box @ \$16.49) www.wessmounts.net
OR
- GEPE Art.:6050 (23.4 x 34.8 mm, peg registered, anti newton glass, 3:2 aspect ratio, 2.5 mm glass, 50pcs/box @ €31.45) www.gepe.com

DISPLAY COSTS

The overall cost of a 3-month display including 2x Exhibition Sets, Equipment Hire and Spares add up to £3,032.16. This is based on an average of 70 hours per week. Please note that the total costs for making exhibitions sets reduces when processed as bulk. (See minor price difference between 2x and 3x Exhibitions Sets.)

SLIDE DUPLICATION

This quote is based on Activity slide lab in Germany (www.activity-studios.de) who charge in average €4.50 per 35mm slide duplicate which adds up to €684.00 per exhibition copy (152x @ €4.50)

EQUIPMENT HIRE

This estimate is based on a quote from <http://www.insightlighting.co.uk/> for the duration of 13 weeks:

4x Kodak S-AV 2050 incl. 70-120mm lens + slide magazine	45.00	0.5	13	1170.00
1 Kodak S-AV 2050 body only (spare)	FOC	0	13	0.00
1 Dataton Pax Unit with 4xSAV adapters	35.00	0.5	13	227.50
1 RCA phono-phono short audio cable	FOC	0	13	0.00
Estimate Net £1397.50 VAT @17.5% £44.56				Estimate total £1,642.06

SPARES AND CONSUMABLES

100x Slide Projector Bulbs (2 per week per projector @£1.25 each)	£125.00
5x boxes of 50pcs WESS AAA002 (76x per set x 3 sets = 228 mounts)	£50.00

(Please note that the costs are subject to change depending on the country of display, additional shipping costs and exchange rates. Also due to the approaching obsolescence of slide technology there are large price variations which can occur in short time.)

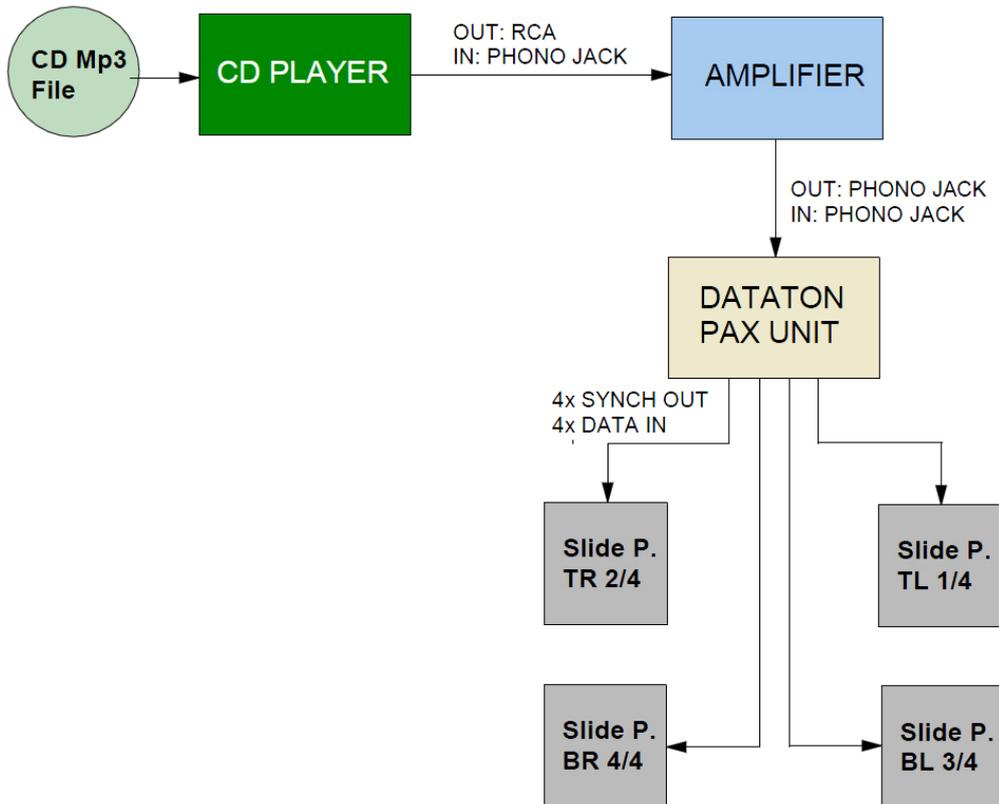
TECHNICAL KNOWLEDGE NEEDED FOR THE INSTALLATION

The technician installing this work should have in-depth experience with slide projectors and synchronising systems. Depending on the slide projector model to be used, it might also be necessary to carry out in-house maintenance and servicing for which the standard procedure for the Kodak S-AV 2050's can be found below.

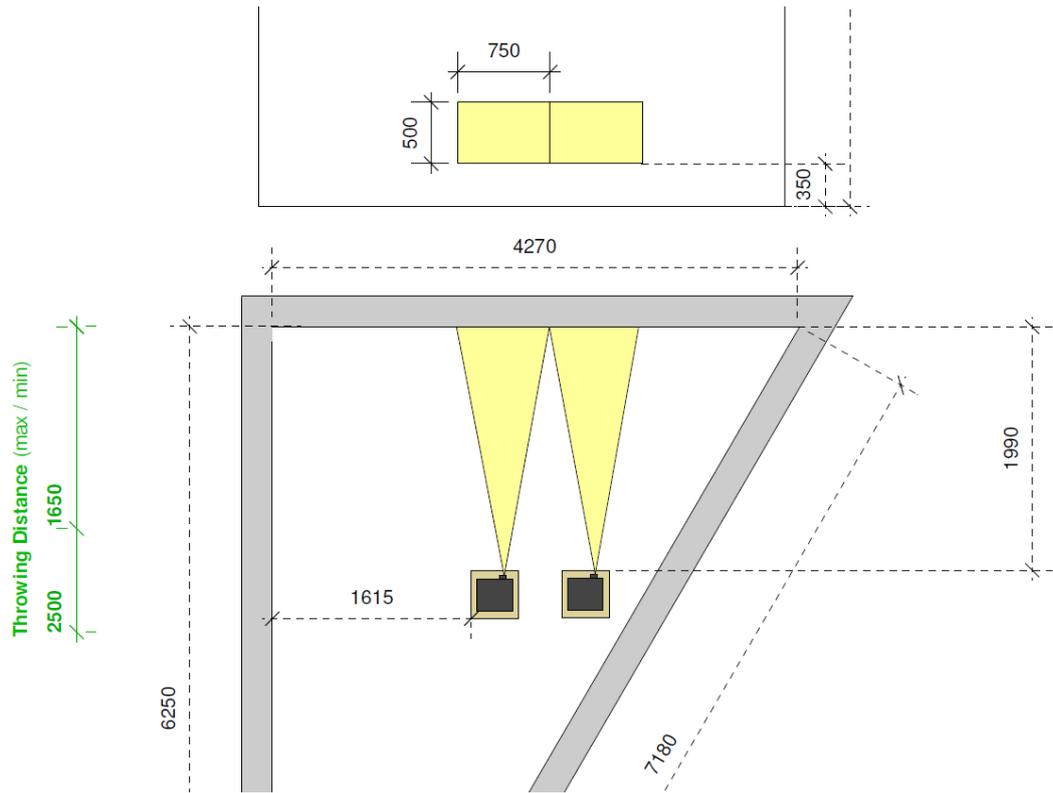
POWER REQUIREMENTS

Gallery: 5x 220V Mains Power (4x slide projectors + 1 Dataton Pax)
 Fat Wall: 2x 220V Mains Power (1x CD-Player + 1x Amplifier)

WIRING CHART



GALLERY PLAN



REPORT CREATED

by: Tina Weidner

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