The Martin ShowDesigner

The following is a get you started guide, a quickstart manual

Open the ShowDesigner by double clicking on the 

icon. You are presented with various toolbars and a new working window. Most of our work will be done in this window. You may open other windows to view your work at the same time. I would use caution as to being too cluttered. This is personal choice.

Lets build a basic stage set and put some lighting on it.

Step 1. Importing objects

The first thing we need to do is load up a library of things we are going to be using in our stage set. We have to import objects like a cyclorama etc.

- Click on 'File' (on the menu bar)
- Click on 'Object list' (a new window appears)
- Click on 'Import' (in the new window)
- Select 'Stage attributes' from the file dialog
- Click op 'Open' (a list of objects appears)
- Select 'Stage floor 20m X 20m' from the list
- Click on 'OK'

You just imported a stage floor. We also need a Cyclorama, so do the following

- Click on 'Import'
- Select 'Stage attributes'
- Click on 'Open'
- Select 'Cyclorama 18m X 18m'
- Click on 'OK'

Because we have enough to create a simple scene, you can close the window with objects in them by clicking on the ‘Close’ button.

Step 2. Building a simple stage

Now lets put the imported objects into our scene.

- Click on ‘Edit’ (on the menu bar)
- Click on ‘Insert’, you can do the same by clicking on the  icon.
- Now click on the main window. A small box will appear with your two objects in it. Click on ‘Stage floor 20m X 20m’ and the stage floor will go into your window. The position where you clicked will determine the position of the active object. Click on ‘Display mode’ and ‘Solid’ so that we can see it better.

It’s a bit large at the moment; to make it easier to work with we need to zoom out. You can do this by clicking on the  icon. Then click and hold down the left mouse button and drag it downward to zoom out. To quickly show the complete scene you can click two times (you need to pause about one second between the to clicks) on one of the tabs at the top of the window. These can also be used to change the view to another side.

Now we need to insert our cyclorama we do the same as before

- Click on ‘Edit’
- Click on ‘Insert’ (or use the icon as described above)
- Click ‘Cyclorama 18m X 18m’

As you can see it’s not in the correct position and we need to place it on our stage. To do this, click on the  icon. Now click on the cyclorama and hold down the left mouse button. The cyclorama should now be active (bordered in red). By moving the mouse you can drag the cyclorama down onto the stage. Once it’s in position, you can let the mouse button go. This operation is limited to vertical

movement, to move the cyclorama horizontally to it correct position you need to click on the  icon, click on the cyclorama and hold the mouse button. When the cyclorama is active you can move it horizontally by moving the mouse sideways. Clicking on the  icon can combine both these operations.

At this stage, it would be a good idea to save our work.

- Click on 'File'
- Click on 'Save As'
- Enter a name for the new scene (for instance, test one).
- Click on 'Save'

Step 3. Building two truss towers

Now lets put some trussing on our stage. In this exercise, we will put a simple truss together; you can experiment with others later.

- Click 'File'
- Click 'Object list'
- Click 'Import'
- Open the 'Truss English' library
- Select 'Tower 12 X12 8 feet'
- Click 'Close '

Now put the truss on stage

- Click 'Edit'
- Click 'Insert'
- Click in the main window
- Select 'Tower 12 X 12 8 feet'

Move it to the side of the stage. Use the icons we used to move the cyclorama.

We need more pieces of tower, instead of importing them, let's duplicate them it's quicker.

To do this make sure the tower piece is active (bordered in red) then,

- Click ‘Edit’
- Click ‘Duplicate’, you can do the same by clicking on the  icon.
- Then click in the main window.

You can now repeat this until we have four pieces of tower.

We now need to join all the bits together to make two legs for our truss.

Do the following

- Click on one piece (until it becomes red)
- Right click (a menu window appears) click ‘Select’(object turns green), this can also be done by pressing the ‘+’ key on you numeric keypad
- Make the piece you want to join it to active(turns red)

You now have one object active and one object selected. Now we need to align these two pieces, to do this

- Click ‘Operations’ (menu bar)
- Click ‘Align’
  A window will be display giving you all the possibilities, they are grouped in vertical and horizontal alignment possibilities.
- Click on the  icon in the vertical box to put the top of the selected objects at the same vertical position as the bottom of the active object.
- Click on the  icon in the horizontal box to put right side of the selected objects at the same horizontal position as the right side of the active object.
- Click on ‘OK’

Just a quick note, in the align dialog the green squares represent the selected objects (bordered in green) and the red squares represent the active object (bordered in red). The align-function will never move the active object it only moves the selected objects.

Now lets do the same for the other two pieces of truss so that we have two legs. Be sure that the object you selected above is no longer selected. This can be done by

- Click on the selected object (green)
- Right click
- Click on select in the menu.

A quick way to deselect all selected objects is by pressing the Shift and Esc key together

Once you have done that, you will want to move the legs into a rough position. Before you do that, lets group them so we can work with them as if it was one object so we don't have to align them again.

Look at one leg, you have a red and a green piece. Click with the right button on the red piece and click 'Select', go to operations and click group or use the  icon. The selected objects will now become one piece. Do the same with the other leg.

Roughly, move them into position.

We need to move the cyclorama now as it's in the way of the towers. Make it active (borders red) and change to top view. This can be done by clicking on one of the buttons at the top of the window. Now drag it upward to the rear of our stage. Save your work so far.

Step 4. Building a truss bridge

We now need to make the bridge.

- Click 'File'
- Click 'Object list'
- Click 'Import'
- Open the 'English truss' library

- Select ‘Truss (20.5 X 20.5 x 8 feet)’
- Click ‘OK’
- Click ‘Close’
- Click ‘Edit’
- Click ‘Insert’
- Click in window
- Click ‘Truss (20.5 X 20.5 x 8 feet)’

We now see our piece of truss in the window, but it’s the wrong way round. With the use of the  icons you can turn it round.

We need to duplicate it, align it and then group it. If you have forgotten how to do this, go back and look how we did the towers. We will use four pieces to make our bridge.

Move your legs in to meet the bridge, look at the top, side, back and front view to make sure you have aligned it correctly, then group the whole lot, towers and all. You can now place your truss in the centre of your stage.

Step 5. Placing the lights

With the stage and the truss built let’s look at lighting. The Martin ShowDesigner has inbuilt fixtures we can use; we just have to select them from the library.

Click on the icon that looks like this  and you will be able to insert a fixture. Now click on the truss where you want the lamp to be and another window will appear. This window shows all the manufactures of the fixtures that are in the current scene. New scenes start with all the Martin fixtures. When you move the mouse over the text ‘Martin’, another window will appear that shows all the fixtures

of Martin. Select the Mac 500 mode 4 (fixture will appear on the place you clicked) Place six Mac 500s on the truss.

If they are not aligned you can align them now. Using the same procedure as for the truss.

All fixtures will be automatically patched, but you can change this by activating a Mac (turns red) then right click on it and choose 'Properties', 'Patch". In this dialog you can enter the port (link) to which the fixture is connected and the offset it is set on. By pressing the 'Auto' button, the fixture will be patched on a free address.

Before we go any further lets put a drum kit on stage, this will give us something to focus on and make it look pleasing.

- Click 'File'
- Click 'Object list'
- Click 'Import'
- Open the 'Musical instruments' library
- Select 'Drum kit'
- Click 'Close'
- Click 'Edit'
- Click 'Insert'
- Click on window
- Move into position

Step 6. Creating cues

We now need to switch on the lights and position them into a look for our first Cue.

Click on the first Mac 500 and right click, go to 'Properties' and colour it, turn the lamp on. Give it a gobo if you like. To position the beam use this icon  , then drag the beam to the position you want.

You can use the  icon to focus the fixture on the position you click in stead of dragging it to the correct location. When you click to start dragging the beam, it can happen that another fixture becomes active, if you hold down the 'Alt' key before you click this doesn't happen. If you focus the fixtures in two different views (for instance top and front) you can focus them on the correct 3D position. Both these operations work on the selected (green) and the active (red) fixtures.

Do the same to all of the Macs until you have a look that you like. Click 'Cue', 'Save cue as' in the menu bar, name it and save it.

You can now change the light settings and focus and save it as another cue. When you have a number of cues you can open the cue-list. Selecting 'Cue list' in the 'File' menu does this. The 'Cue list' shows you all the cues in the scene and allows you to link them together, enter timing and do a cross-fade from one cue to another.

Step 7. Placing a bitmap on the cyclorama

Let's have a quick look at putting a bitmap on our backdrop. You can paste a bitmap on any surface, but here we will use the cyclorama.

The first thing you must do is making sure you know where your bitmap is. Then do the following.

- Click 'File'
- Click 'Material list' (a window will open)
- Right click on the black area of the window
- Select 'New'
- Select 'Texture'. There are two kind of materials.
  Simple: which is a colour with reflectance and transparency parameters and
  Texture: which is a simple material combined with a bitmap. The colour of the texture material comes from the bitmap.
- Select rectangular mapping (as it's the backdrop)

- Use the ‘Browse’ function to find your bitmap
- Click ‘Open’
- Click ‘Preview’
- Click ‘OK’
- Fiddle with the controls here until you are happy
- Click ‘OK’
- Click ‘Close’

Now we have created the material for the cyclorama, we need to assign it to the cyclorama. You can do this as follows

- Make the cyclorama the active object (red)
- Right click
- Select ‘Properties’
- Click on Materials
- Select the material already on the cyclorama (left window)
- Then select the new material (in the right window)
- Click ‘OK’

Step 8. Rendering a picture

Up to now we have been working with a 2D view of our scene, if we want to render a picture we need to create a 3D view. This is done as follows

- Click ‘Window’
- Click ‘New 3D window’

Now you see a second window appear on you screen. You now need to set up the camera for this view.

- Click ‘Camera’
- Click ‘Full view’ in the menu to make the complete scene visible.
- Click on the  icon. This is the camera inspect function. It allows you to rotate the camera around an object or around the current focal point of the camera.

- Click on the drum-kit and hold the button down to make this object the focal point of the camera.
- Now move the mouse to move the camera.

When you let the button go the scene will be redrawn. To get a better view of the scene you can change the display mode to ‘Solid’ (click ‘Display mode’ and ‘Solid’). If you are happy with the camera position you can render the scene to create a realistic view. To do this

- Click ‘Display Mode’
- Click ‘Render’
- Click ‘Start’

A window will be shown that gives you a few options. You can switch shadow on or off, you can switch smoke on or off, set the ambient light level and a cut-off percentage. The cut-off percentage can be used to ignore fixture with a dimmer level less or equal to the cut-off level. Be aware that smoke calculations can take a long time, so use this wisely. When you click ‘Ok’ the picture will be calculated. This will take a few minutes, depending on the size of the window.