

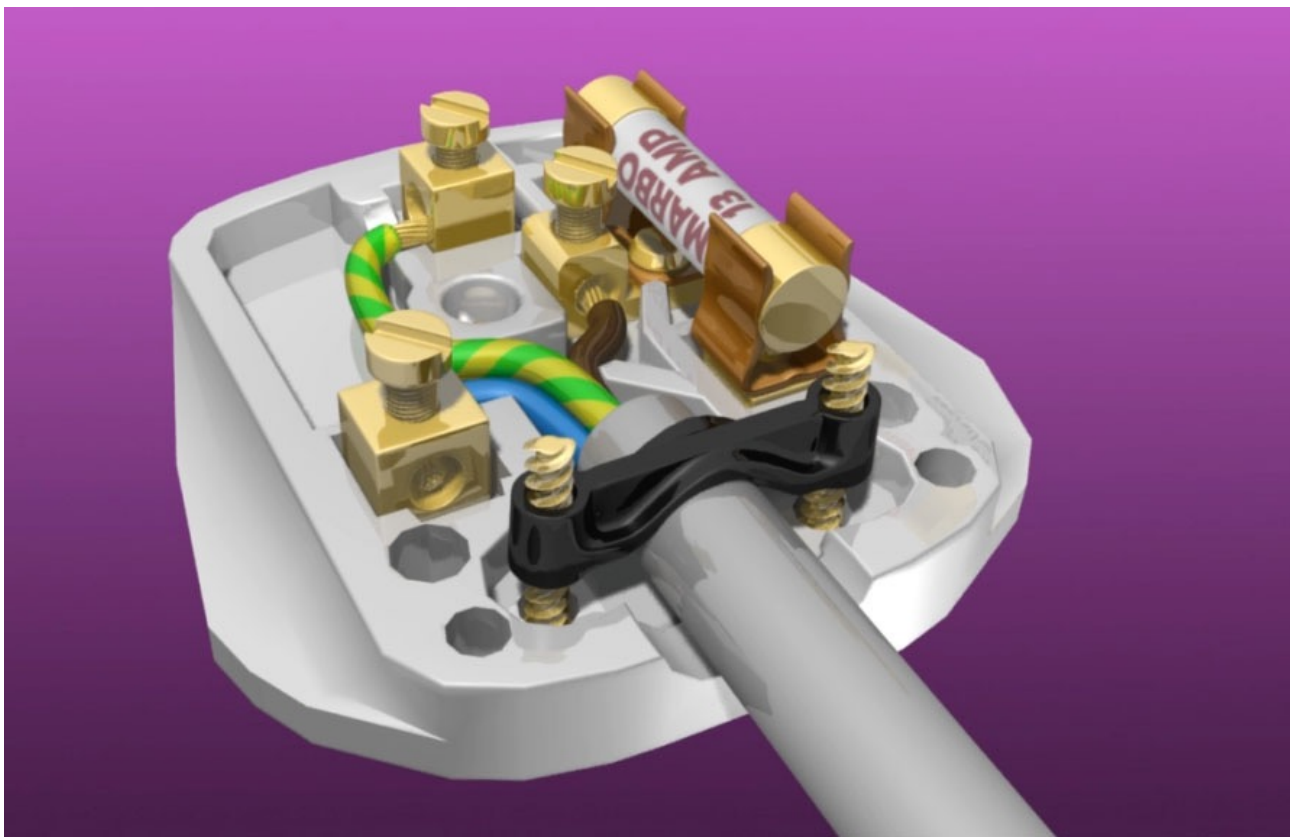
MA 3DCA Module Guide:

Production Methods:

Code: M7X00661

Module value 20 credits

(Revised 03-10-2017)



The British Standard 13 Amp Plug by Jamie Wilson (MA 3DCA 2015-16)

From the Programme Document:**Content:**

To gain a systematic knowledge of contemporary industry standard media production software relevant to their chosen field of research.

Aims:

1. To enable the student to gain a systematic knowledge of contemporary industry standard media production software relevant to their chosen field of research;
2. To orientate the student towards the on-going process of self-learning and development.

Module Intended Learning Outcomes:

Upon successful completion of this module, the student will be able to demonstrate:

A systematic understanding of a range of contemporary industry standard media production software and originality in the application of that knowledge within his/her chosen field of research;

The ability to identify, analyse, evaluate and employ appropriate software techniques, some of which are at the forefront of their field of study;

The ability to identify and apply personal learning methods.

Module Tuition Information:**Semester 1:**

Thursday 3.00pm to 5.00pm

Room Number AD204

Part one of this module runs from the beginning of October through to the beginning of December when Part 1 is then assessed via a presentation of your animation work.

The Part 1 assessment will contribute 50% of the marks to this module.

Semester 2:

Times to be confirmed

Room Number AD204

Part two of this module runs from the beginning of January through to the beginning of May when Part 2 is then assessed via a presentation of your animation work.

The Part 2 assessment will contribute 50% of the marks to this module.

Module Content of Part 1:

You will be making a complete instructional film which will demonstrate to an audience how to complete a difficult technical task.

This part of the module is designed to encourage you to use a mixture different applications and packages to complete the finished animated film. The key to this project is the integration of a 3D application (MAYA) with a compositing package like After Effects and Painting package like Photoshop. Sound editing can also be included.

The Task:

Your task is to make a short animated film of how to re-wire a British standard 13 amp plug. You probably don't even know how to do this yourself as all mains operated goods that you purchase from shops like a table lamp, electric iron or a television all come with a plug already connected to the mains lead.

Sometimes, there are occasions where a 13 amp plug has to be reconnected to the cable and it is vitally important to know how to do this safely and correctly. This is where your film will help. Your film will explain, through the use of 3D graphics, photoshop and after effects, how a 13 amp plug is rewired successfully and safely.

The 13 amp Mains Plug:

This simple household item is one of the most common objects found in British households, schools, factories, hospitals, etc. and was invented in 1943 by a committee. Without it, nothing that needs mains electricity would work.

Very few people actually know how to attach a 13amp plug to a cable so this is your chance to show them. This was not always the case as electrical appliances in Britain before the 1990's were supplied without plugs so at least one member of the household had to learn how to do it.

The 13 amp Mains Plug is a big challenge to build in MAYA because of the nature of it's design, the different materials involved, the way the parts are fastened together and the pliable/flexible elements.

WARNING:



Danger of Fatal Electrocution.

DO NOT attempt to dismantle any 13amp plug. They are extremely dangerous when taken apart or the cover removed. The voltage in the UK is 240 volts AC which is lethal, so DO NOT, under any circumstances, attempt to dismantle one.

Your tutor will demonstrate how the plug works and how the cable is connected. DO NOT attempt to do this yourself.

Extensive reference photographs are available in a single Photoshop file which can be downloaded from the learning animation website.

This can be a difficult project for most students:

Included in your work load is a build of all the working parts of a 13 amp plug. The parts have to be accurate in their dimensions and have to fit together precisely. Every part has to be included including the fiddly little screws.

Why do we have to build a 13 Amp Plug?

Why a 13 Amp Plug, surely there must be other more exiting things to base an instructional film on? No there isn't anything quite like this object. A plug and it's cable is made up off at least seven different materials, each having a distinct attribute. Four of these materials are flexible (they bend) which gives you an additional challenge. The plug

can assembled in a logical way by simply sliding some of the parts into the main casting. Other parts are fastened by one of three types of screw. The cable is flexible and the separate wires have to be bent into position in order to make an electrical connection. It is a tour-de-force of architectural modelling. If you can model this object you should be able to model any man-made or manufactured object.

Why not try moving or planning the choreographing the plug parts first?

Sometimes, rather than launching into the difficult building phase of all the plug parts, it is a good idea to try to do the animation (choreography) of the sequence first.

Although you will need to build a primitive set of parts first, doing it this way, means that you can accurately know from which angle the parts will be seen and this will determine how detailed they should be when viewed from a specific angle.

What you will be learning.

This module is design primarily to explore different applications or packages associated with computer animation production. In this part of the module your will be exploring modelling, surface attributes, lighting and basic control of motion in MAYA. You will be using Photoshop to prepare surface textures and some overlay artwork. You will be using Adobe After Effects and Premier in the post production phase of the project.

The animation production which will use all of these applications together, will be an instructional video about how to prepare and safely wire up a British Standard 13 amp mains plug.

Supporting Web Material for Part 1:

Use this site link below for more information and detail about this part of Production Methods.

This has been written specially for you so take advantage.

http://www.learninganimation.co.uk/production_meth_P1/index.htm

Hints & Tips for Production Methods Part 1:

Research:

Always do as much research as possible. The tutor has real 13 amp plugs for you to look at, borrow to disassemble, and play with. There is also a full set of scale photographs from all relevant angles, so there is NO excuse for wrong dimensions.

Modelling:

Think about what you need to build for the sequence. If details remain out of sight, why build them in the first place. If it is not seen then don't bother.

Be careful however, Some details that may not be visible directly, can be seen in reflections and in shadows.

Choreography:

When you are choreographing your sequence, make sure you use the screen space effectively, both in terms of 3D and 2D stages. Ask your self questions like:-

"Is this the best way to arrange my players on the screen?",

"Would it be better if this was larger or smaller or further over to the left?",

3D Camera:

Use your 3D camera by choreographing some moves or close ups.

The Brief:

Don't forget the bigger picture (the overall brief)

"What are the messages I am trying to transmit?".

Legibility:

Is everything on screen clear and legible (readable or seeable)?

"Is this the right colour according to my reference and is the contrast helpful?",

Compositing:

Take advantage of the compositing process:-

You can choose a replacement background providing you rendered using the alpha channel.

You can use drop shadows,

typographic overlays which can move, rotate and scale,

re-colour, change focus,

and numerous other effects which could help your sequence.

You can also use the compositing process to completely re-time your sequence.

PART 1: Weekly Activities:

Week No:	Lecture / Tutorial	Practical Studio Work
	The lecturer demonstrates and explains the practical and creative aspects of the topics listed below,	This is where you work on your own in the studio on the activities listed below and the lecturer will help you if you need it.
Week 1:	An examination of a real 13 Amp Plug	Your Own Practical Studio time on modelling plug parts
Week 2:	Making primitive parts which can used for testing the choreography.	Your Own Practical Studio time on modelling primitive parts
Week 3:	Rigging the primitive parts ready for animation	Your Own Practical Studio time on rigging primitives
Week 4:	Modelling a plug plastic casting	Your Own Practical Studio time on modelling.
Week 5:	Modelling and rigging the cables.	Your Own Practical Studio time on modelling and rigging cables
Week 6:	Modelling the other components.	Your Own Practical Studio time on the components.
Week 7:	Modelling the other components.	Your Own Practical Studio time on the components.
Week 8:	Organising surface attributes & lighting	Your Own Practical Studio time on surface attributes & lighting
Week 9:	Organising surface attributes & lighting	Your Own Practical Studio time on surface attributes & lighting
Week 10:	Final choreography.	Your Own Practical Studio time on Final choreography.
Week 11:	A Reminder of the finishing processes	Your Own Practical Studio time
BREAK	No lectures or Tutorials	Your Own Practical Studio time
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Week 12:	A Reminder of the finishing processes	Your Own Practical Studio time
Week 13:	Part 1 Assessment Presentations.	The Presentation of your 13 Amp Plug Video
week 14:	None	Preparation time for other Modules

Module Content of Part 2:

Now that you are experienced using three applications together and understand how they inter-relate, you can now experiment with software of your choice.

The software that you choose to research is really up to you. Your reasons for making your choice can vary, but firstly, you may find your software could be useful for the group production that you and your colleagues are about to embark on. Secondly you may find it useful for your future career. There are other valid reasons, for instance, you may be curious as to whether an application will open possibilities to use other specialised software.

What software can I choose to study?

Most animation or film making software is acceptable.

3D Production software would include one of the many subsets of MAYA like Particles, Nparticles, Rigid Dynamics, Paint Effects and others.

Cinema 4D, 3Ds Max, Poser, Blender and Flash.

Modelling Software like Z-Brush, Mudbox, Sketchup.

Specialist software can also be considered like Real Flow or Houdini.

Before You Choose:

Before you choose the software to study, you must check with your tutor to see if it is available to run on the college computers and whether it is licensed or not.

Your Presentation:

Your presentation should include:-

The reason why you have chosen the particular software

What in your view makes the software preferable to other similar packages.

What packages are the main competitor to your choice of software.

Examples of where the software has been used in well known films, TV programmes or other medias.

Examples of your development in using the software.

The presentation should be **PowerPoint** but other methods like Web based or DVD media can be considered.

Other Important Information:

If you choose to follow a tutorial, it is important to show the stages of development.

Showing just the end result doesn't show how you learnt and how you progressed.

Remember that failed attempts at using the software can be just as interesting as successful attempts and won't necessarily reduce the marks you gain in this part of the module.

All your visual material should be within the PowerPoint presentation unless you need to show videos which are sometimes easier to show outside PowerPoint.

Things You Shouldn't Do:

Do not run the application you are studying during the presentation. Use screen grabs within PowerPoint to show your progress.

Do not give a tutorial about how to use the application. We are interested in how you relate to the software and what you have discovered.

Do not just show the end result of your experimentation. It is your journey through your exploration that we want to see as well as the end result.

Do not think that making mistakes using the software is a bad thing. Sometimes, you can only learn through making mistakes.

Supporting Web Material for Part 2:

This part of the production methods module is driven by your own research and choice of application but look at the Assignment Specification. There is no online support for this part of the module.

PART 2: Weekly Activities:

Week No:	Lecture / Tutorial	Practical Studio Work
Week 1:	Structuring & scheduling your time on this part of the module	Your Own Practical Studio time in putting a plan in place.
Week 2:	Deciding which application to explore.	Your Own Practical Studio time.
Week 3:	Research and Experimentation.	Your Own Practical Studio time.
Week 4:	Research and Experimentation..	Your Own Practical Studio time.
Week 5:	Research and Experimentation.	Your Own Practical Studio time.
Week 6:	Research and Experimentation.	Your Own Practical Studio time.
Week 7:	Research and Experimentation.	Your Own Practical Studio time.
Week 8:	Research and Experimentation.	Your Own Practical Studio time.
Week 9:	Research and Experimentation.	Your Own Practical Studio time.
BREAK	No lectures or Tutorials	Your Own Practical Studio time
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Week 10:	Research and Experimentation.	Your Own Practical Studio time.
Week 11:	Setting up your presentation.	Your Own Practical Studio time.
Week 12:	Setting up your presentation.	Your Own Practical Studio time
Week 13:	Part 2 Assessment Presentations.	The Presentation of your Research.

Reading Lists:

Essential Texts

Author	Date	Title	Publisher
Lister, Kelly, Dovey, Giddings, & Grant	2002	New Media: a Critical Introduction	Routledge

Background Reading

Author	Date	Title	Publisher
Dancyger K.	2006	The Technique of Film and Video Editing. History, theory and practice	Focal Press
Goodman, D	2004	Javascript Bible	John Wiley & Sons Inc
Gross, P	2003	Macromedia Director MX and Lingo: Training from the Source,	Macromedia
Liverman, M	2004	The Animator's Motion Capture Guide: Organizing, Managing, Editing	Charles River Media, Inc
Magnenat-Thalmann, N	2001	Computer Animation and Simulation 2001: Proceedings of the Eurographics Workshop in Manchester, UK, September 2-3, 2001 (Eurographics)	Springer; 1 edition (October 5, 2001)
Menasche E	2004	How to Do Everything with a Soundtrack	Osborne McGraw-Hill
Plant D	2002	Lingo Line by Line	Que
Rice J	2003	24P Digital Video Production (Digital Video and Audio)	McGraw-Hill Education
Yetter, Y.	2007	Unleashing Zbrush	Course Technology PTR
Pilling, J. (Ed)	1997	A Reader in Animation Studies	London: John Libbey

Finally:

Don't forget to ask your tutor if you are not sure about any issue or topic on this Module Guide or any issue arising from the Assignment Specification.

Can I ask a question at any time?

Yes, even during assessments.

I don't like asking questions because:-

I will look stupid in front of my Colleagues.

Your colleagues may want to ask the same question but are too shy to do so.

Although it is nice to demand the respect of your colleagues, it doesn't really matter what they think of you at this stage of the programme.

I don't like asking questions because:-

I will look stupid in front of my Tutor and he /she will not give me good marks.

Not true. If you ask questions it means that you are awake and are listening.