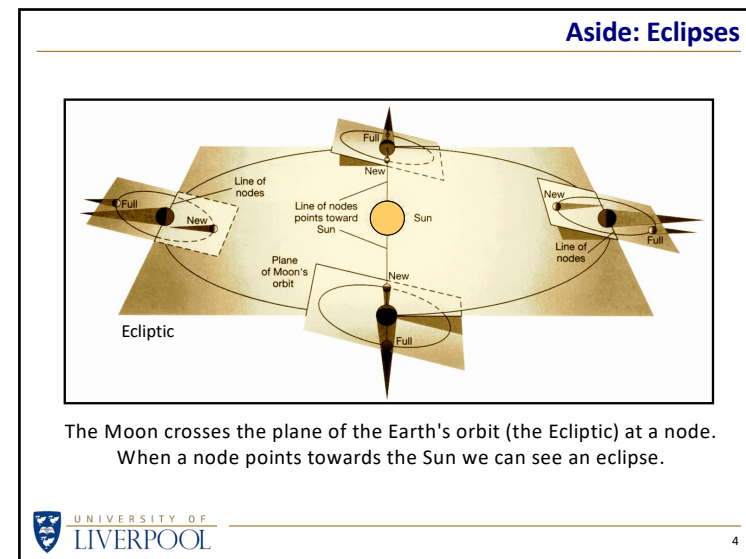
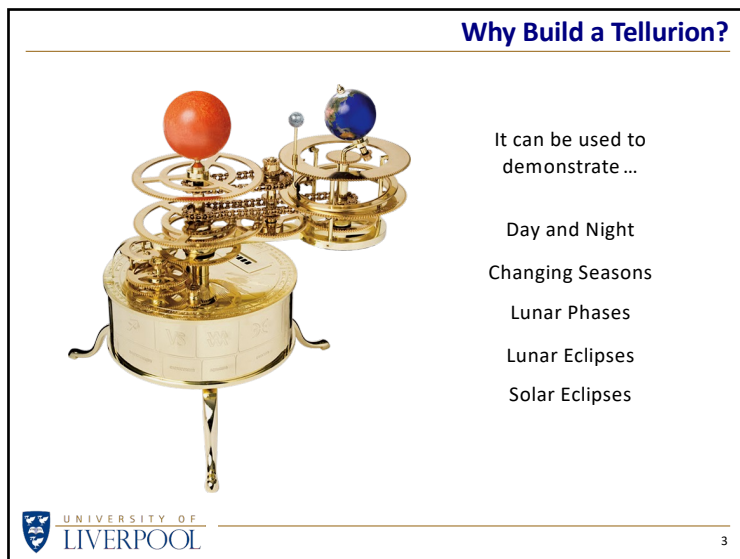
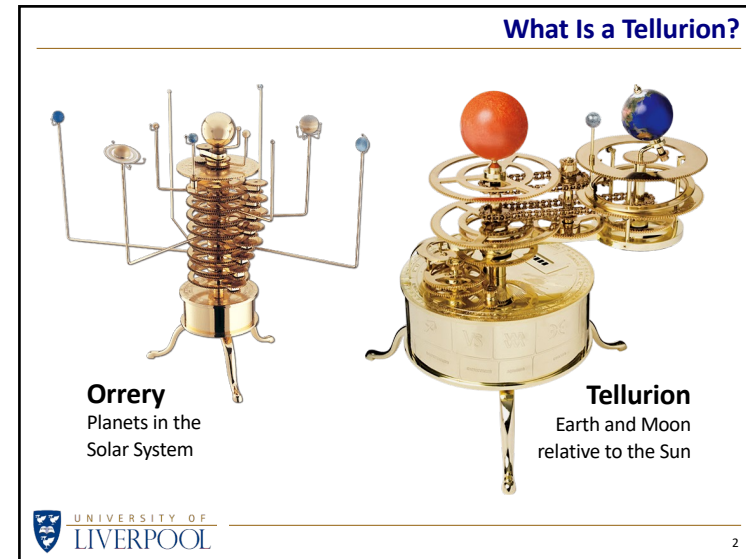
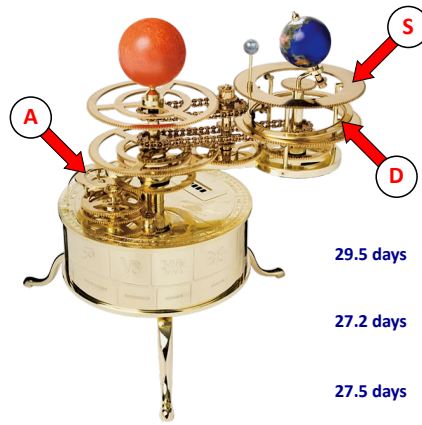


Building a Tellurion



Building a Tellurion

How It Works




Three different types of lunar month are built in to the mechanism...

- Synodic**
29.5 days
New Moon to New Moon
- Draconic**
27.2 days
Node to Node
- Anomalistic**
27.5 days
Perigee to Perigee

UNIVERSITY OF LIVERPOOL

5

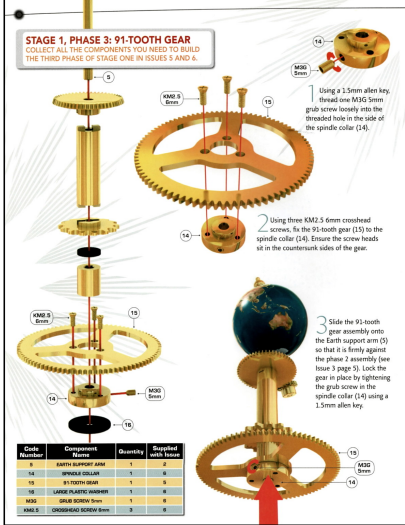
Collect the 52 Parts



UNIVERSITY OF LIVERPOOL

6

Instructions



STAGE 1, PHASE 3: 91-TOOTH GEAR
COLLECT ALL THE COMPONENTS YOU NEED TO BUILD THE THIRD PHASE OF STAGE ONE IN ISSUES 5 AND 6.

Using a 3.5mm allen key, thread one M3x5mm grub screw loosely into the threaded hole in the side of the spindle collar (14).

Using three M2x3.5 6mm crosshead screws, fix the 91-tooth gear (13) to the spindle collar (14). Ensure the screw heads sit in the countersink of the gear.

Slide the 91-tooth gear assembly onto the Earth support arm (5) so that it is firmly against the phase 2 assembly (see issue 3 page 5). Lock the gear in place by tightening the grub screw in the spindle collar (14) using a 1.5mm allen key.

Part Number	Component Name	Quantity	Suggested Unit Price
5	EARTH SUPPORT ARM	1	4
13	91-TOOTH GEAR	1	4
14	SPINDLE COLLAR	1	4
15	3.5mm GRUB SCREW	1	4
16	CROSS-HEAD SCREW DRIVER	1	4

Which part has which number and comes with which magazine?

How do these parts fit together?

Exploded view of this assembly

Finished view of this assembly

UNIVERSITY OF LIVERPOOL

7

Find the 52 Parts

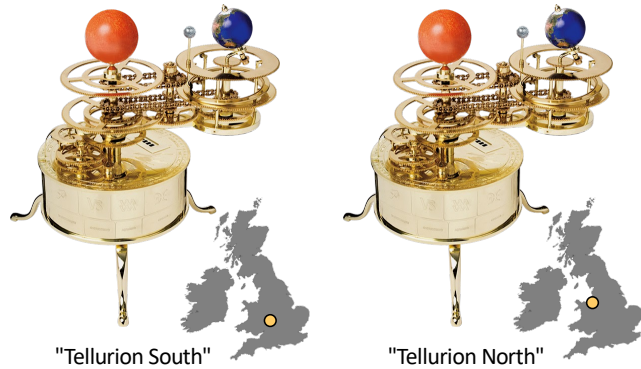


UNIVERSITY OF LIVERPOOL

8

Building a Tellurion

Duplication of Parts Led To ...



Beware!



For some, collecting parts and building orreries and tellurions can be addictive (or maybe an obsession).

Full Set of 52 Parts

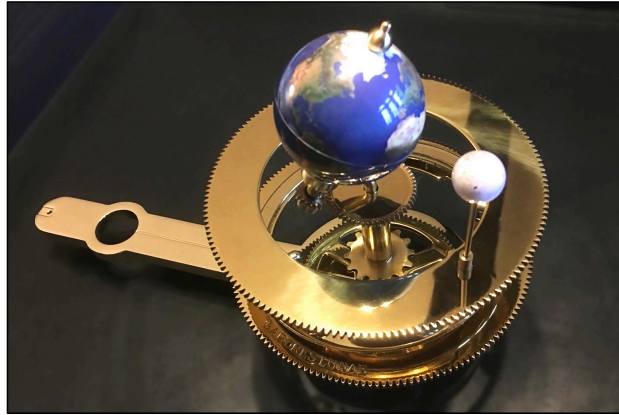


Earth

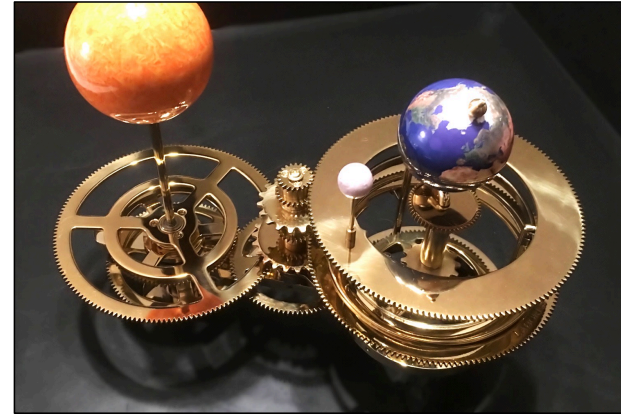


Building a Tellurion

Earth + Moon



Sun + Earth + Moon



Hints and Tips



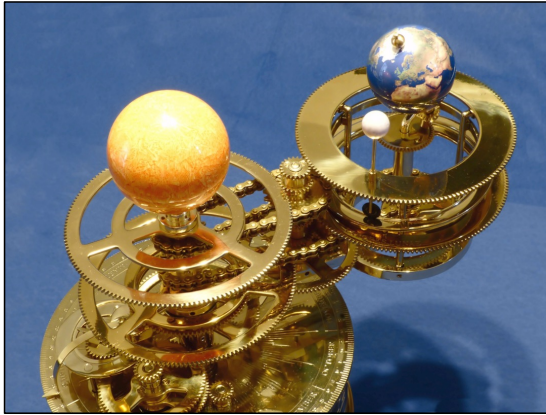
10 Hours Later



The tellurion took about
10 hours to build and a
few hours to fine tune.

Building a Tellurion

Tellurion Build Complete



Building a Tellurion



Eaglemoss

General information from Eaglemoss distributor

<https://en-gb.eaglemoss.com/our-other-collections/eaglemoss-classics/build-model-earth-moon-sun-orbiter>

Back issues and parts for orrery and tellurion

<https://shop.eaglemoss.com/solar-system>

Partworkcollectables

<https://partworkcollectables.co.uk/Eaglemoss-Build-A-Model-Solar-System>
<https://partworkcollectables.co.uk/Eaglemoss-Build-A-Model-Earth-Moon-Sun-Orbiter>

Back issues and parts also available from

Amazon / eBay / Facebook

Building a Tellurion

www.liverpool.ac.uk/~sdb/Talks

Dr Steve Barrett

MSAS 6 Apr 2023