HOW DO I TAKE A BEAUTIFUL PHOTO OF SPACE?

Video transcript: Using a telescope

- *Image of the Garnet star by Adam Ryder*
- *Image of the Moon by Sergei Golyshev*
- *Image of Jupiter by Chris Swatton*
- *Image of a starry sky by Mark Chance Photography*
- *Image of the Moon by Stephen Usher*

LJ RICH:

Well I figured out how to take some decent night time snaps with my compact camera, and also I know how to use a DSLR to get the most out of my shots.

A telescope like this looks expensive but I happen to know this costs around £150 from a department store. So how can I use this to improve my pictures?

MARK THOMPSON:

Well this is what I call a refracting telescope and it's actually a brilliant instrument to get started as it's so simple – you just get it out of the box, bit of work and you set the thing up. You use it to turn a camera into a really powerful camera and this becomes like a whopping great zoom lens. So you just use the camera on the end of the telescope and take pictures.

LJ RICH:

So hang on – I can use my smartphone's camera, plonk it on the end of the telescope and take a beautiful shot of the Moon?

MARK THOMPSON:

Absolutely. The eyepiece of the telescope is magnifying the image. All you do is get your camera lined up with the eyepiece and snap – and there you go. So you've got to be really precise to get it lined up.

LJ RICH:

It's quite tricky. There we go I've got something. Let's just use the thing to focus. Lovely. That's also quite impressive.

MARK THOMPSON:

Getting better, there's some nice detail there. Why don't you have a go with a DSLR camera and the telescope?

You just need to put one of these adapters on first. So you need to actually take the lens off the camera and replace it with this thing. There's no lens in it, it's just an adapter. And take the eyepiece out of the telescope.

LJ RICH:

Just finding the little red dot to match up – there we go. OK.

MARK THOMPSON:

Then you slot the whole lot into the tube with the eyepiece, turning the telescope into a whopping great zoom lens. Press the button.

LJ RICH:

There we go.

MARK THOMPSON:

Ah look at that.

LJ RICH:

That's the Moon right there.

It's not just the Moon you can capture; these images were all taken by members of the public using a DSLR attached to a telescope.

- *Images of Jupiter by Andrew Houghton*
- *Image of the North American Nebula by Mike Crowle*
- *Image of the Garnet star by Adam Ryder*

OK, after connecting a camera up to a telescope I want more. There must be more gadgets you can show me!

MARK THOMPSON:

Well there are. Believe it or not, something you might already have is the humble webcam and they are brilliant at taking pictures of planets. Do you want to try one?

LJ RICH:

Absolutely.

MARK THOMPSON:

Let's give it a go.

Contributor images courtesy of the BBC Stargazing LIVE and The Sky At Night Flickr group: http://www.flickr.com/groups/bbcskyatnight