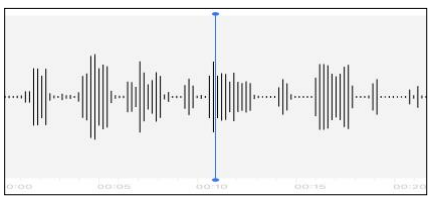
ScreenSkills

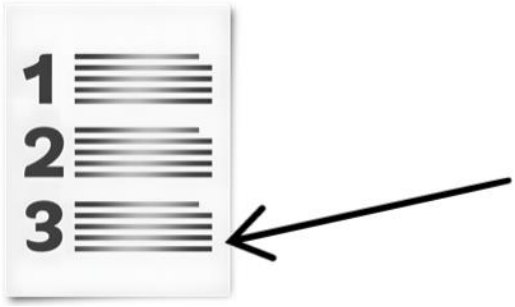
High-end TV

Picture in Final Post-Production

An Easy Read Guide

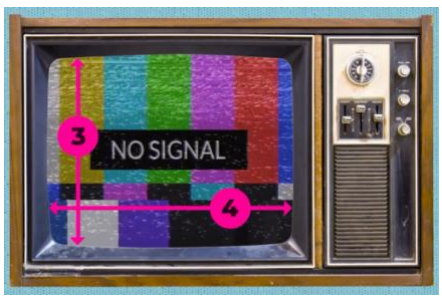


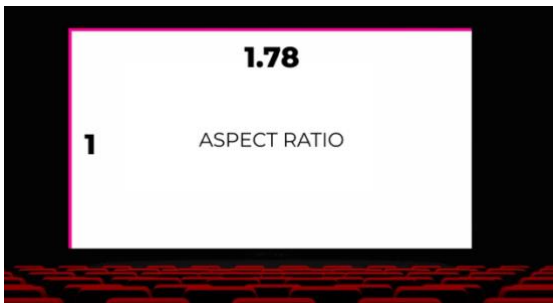
What Happens in Final Post?

	**Post-production** is the last thing done in making a TV programme or film.
	It is when the **Editor** and **Post-Production Department** put together the best things of everything that was filmed.
	It is also when music, sound and things like **voice over** are added
	and finished **visual effects (VFX)** are added.
	It is a very important stage of making a TV programme or film as it is when all the parts are put together.

ScreenSkills High-end TV	To learn more about who works in post-production see the module ‘Who Does What in Post-Production’
	This module explains some of the technical words used when talking about the picture and colour in final post-production.
	These technical decisions affect how a programme looks.
	Whatever department you work in it can be helpful to know about these technical choices.
	These technical decisions may also affect how you do your work.

What is Aspect Ratio?

	**Aspect ratio** shows how wide and tall a picture is on a screen. It helps in making films and TV shows.
	When you go to a shop to buy a TV, you see many sizes. But all TVs have the same shape, like a rectangle. This shape is called the aspect ratio.
	Aspect ratio is shown as two numbers. For example, 16:9 means the picture is 16 units wide and 9 units tall. This is the shape of most TVs today.
	Old TVs were nearly square, 4:3 ratio, from the 1950s to 1990s. TV shapes and quality have changed a lot since then.
	Now, most TVs and films use the 16:9 aspect ratio. This shape is like a cinema screen. It helps show more of the picture and makes it look better.

	Sometimes 16:9 is also called 1.78:1. These both show the same screen shape they are just written differently.
	To make films look special, filmmakers use wide aspect ratios like 2.35:1. This is called **Cinemascope** and is wider than TV screens.
	Films and TV shows use many aspect ratios. This helps them fit different screens, like TVs, computers and phones.
	Choosing an aspect ratio is a creative decision. It helps tell the story better. Filmmakers pick the best shape for their film or show.
	Sometimes, the **investor** or **broadcaster** wants an aspect ratio. Filmmakers may ask for a different shape to make their story look better.

	The **Director** explains why they want a certain aspect ratio. They check with the post-production team to ensure it works.
	Once agreed, the aspect ratio choice is shared with all departments. This ensures everyone knows how to make the film or TV show look right.
	Some cameras or lenses might not fit the chosen aspect ratio. In post-production, the edit team may change the shape or edit the image to make it fit.
	When a film or TV show does not fit the screen, you see black bars at the top and bottom. This is called ‘letterboxing’ because it is like looking through a letterbox in a door.
	If there are black bars at the side of the image to make it fit the screen this is called pillar boxing. This is because it looks like a pillar or post box.

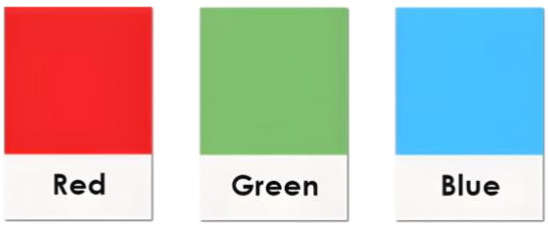
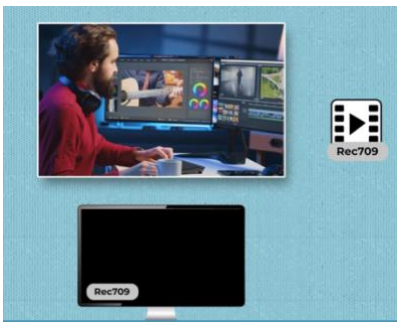
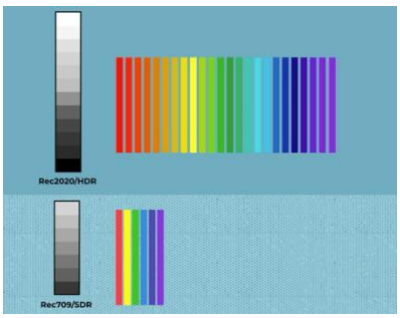
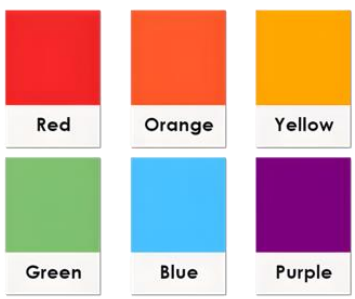
	Technology changes, so it's good to save the original footage. This way, you can change the aspect ratio in the future if needed.
	Aspect ratio choices need to be communicated to all departments before filming begins.
	This is because it affects how the camera is set up or how low the **Boom Operator** can hold the microphones.
	Aspect ratio can also affect how much of a **set** or **location** can be seen or how the actors move.
	Whatever department you are working in it is good for you to know what aspect ratio is being used.

What is Resolution?

	**Resolution** tells you how clear or sharp a video looks. It's measured by how many tiny squares, called **pixels,** are used to make up the picture on your screen. More pixels means clearer video.
	**Low resolution** 480pixels or 720pixels looks blurry on large displays. But if you're viewing on a small phone or with slow internet 480p might look just fine.
	**High resolution** or 4K is crisp and has smooth visuals even on a bigger screen.
	When deciding resolution you have to balance what you need because higher resolution means more storage and how fast it **loads** or **streams.** It also means more money.
	A broadcaster or **commissioner** will tell you resolution you need to film and deliver in.

What is Colour Space?

	Most people involved in making films and TV programmes are not expected to know about **colour space.** It can be helpful to understand a little in case someone mentions it.
	A colour space is a way to describe colours using numbers. It helps computers, TVs, and cameras understand and show colours correctly.
	It is like a recipe for colours. A cake recipe tells you how much flour, sugar and eggs to use. A colour space tells you how much red, green and blue to use to make the colour you want.
	When you watch a video on your phone, TV or computer, the colours need to look natural and not change too much across **shots** or **scenes**.
	Colour spaces help make colours look the same on different screens.

	Here are some of the most used colour spaces in video.
	**RGB** which stands for Red, Green, Blue. This is used in TV and computer screens and editing software.
	Each colour is made by mixing different amounts of red, green and blue light. The colour space which uses RGB is also called **Rec. 709.**
	Another colour space is **Rec. 2020.** This colour space has more colours than Rec. 709. It actually has more colours than exist in nature.
	Rec. 2020 was developed without any display in the world being able to show all these colours. Most high quality displays today use the Rec. 2020 and will show as many colours as they can.

	The final colour space is **DCI-P3** and this was developed when we moved from **film projection** to **digital cinema** projection.
	The extra colours in DCI-P3 can make images more lifelike than Rec.709.
	Sometimes a TV series or film might need be delivered in different colour spaces for different screens. For example one colour space for cinema projection and one for web streaming.
	You only need to know more about colour spaces if you are working as a **Director of Photography**, **Digital Imaging Technician** or in editing, **colour grading** and special effects.
	If you want to know more about these roles go to the module 'Who Does what in Post-Production'.

PHOTOSYMBOLS
Canva