

Studio Design - Knowledge Organiser

GLOSSARY					
Ergonomics	Ensuring that things are designed with the comfort of the user in mind				
Sightlines	Ensuring an engineer has clear lines of sight to musicians during a recording				
COMPONENTS OF A MODERN STUDIO					
Recording/Live Room	Control Room	Mixing Console	Monitors	Outboard Effects	DAW
<ul style="list-style-type: none"> Where the musicians perform/where sound is captured Acoustically treated with sound absorbing materials 	<ul style="list-style-type: none"> Where the engineer operates the recording equipment Acoustically treated with sound absorbing materials 	<ul style="list-style-type: none"> Where the engineer has control over the audio signal path Has channels for mics, instruments and other audio sources Has access to various processing tools 	<ul style="list-style-type: none"> Used to playback audio signals Full range speakers for an extended low frequency response (ported) Near field monitors for critical mixing (sealed) 	<ul style="list-style-type: none"> External processing units used to shape the sound of the recording Often used in conjunction with the mixing console 	<ul style="list-style-type: none"> Used for recording, editing and mixing audio Allows the engineer to manipulate the audio signal using digital processing tools
AN IDEAL RECORDING STUDIO					
<ul style="list-style-type: none"> Ergonomics – The studio should be designed with the engineer's comfort in mind <ul style="list-style-type: none"> Mixing desk at a comfortable height Adjustable seating Essential equipment such as outboard gear, monitors and computer screens positioned nearby for easy access Listening Position – The engineer's listening position should be at an equal distance from both the left and right monitors <ul style="list-style-type: none"> The monitors should form an equilateral triangle with the engineer's ears Allows for accurate stereo imaging and ensures the mix is being heard accurately Sightlines – The control room should have clear lines of view to the live room <ul style="list-style-type: none"> Allows the engineer to communicate with the musicians during recording Can be achieved using a large window connecting the live and control rooms or through a video monitoring system Acoustic Treatment – The control and live rooms should have proper acoustic treatment to control sound reflections/resonances <ul style="list-style-type: none"> Absorptive materials such as acoustic panels Bass traps to reduce the low-frequency resonances that can build up in small spaces 					