

# Recording Studio Introduction

Identify Uses of Studio

Uses -

Band Recording.

Sound effects

theatre film (foley) Foley.

Audio Books.

Voice overs / Voice actors

Music.

Games.

Radio

Benefits

Benefits -

Isolating individual ~~instrument~~ / ~~voice~~ aspects.

No sound pollution - less "spill"

Ability re-record.

Ability Modify.

Editing - export tracks

Easy editing

Mixing - control of different sounds.

Click track - metronome

Accurate sound.

High Quality Equipment / Expense

Acoustic treatment of room.

Range of Microphones.

No Prints! of feet  
or disk,

Multitrack

Computer + Software.

Microphones.

Stands - mics & instrument.

Cables. - various

Effects units

Mixing desk.

Cart to Reel.

Chair.

Sound casing. - Acoustic baffles.

DI box - Direct Injection

Monitors.

Pop shields.

Signal Processors

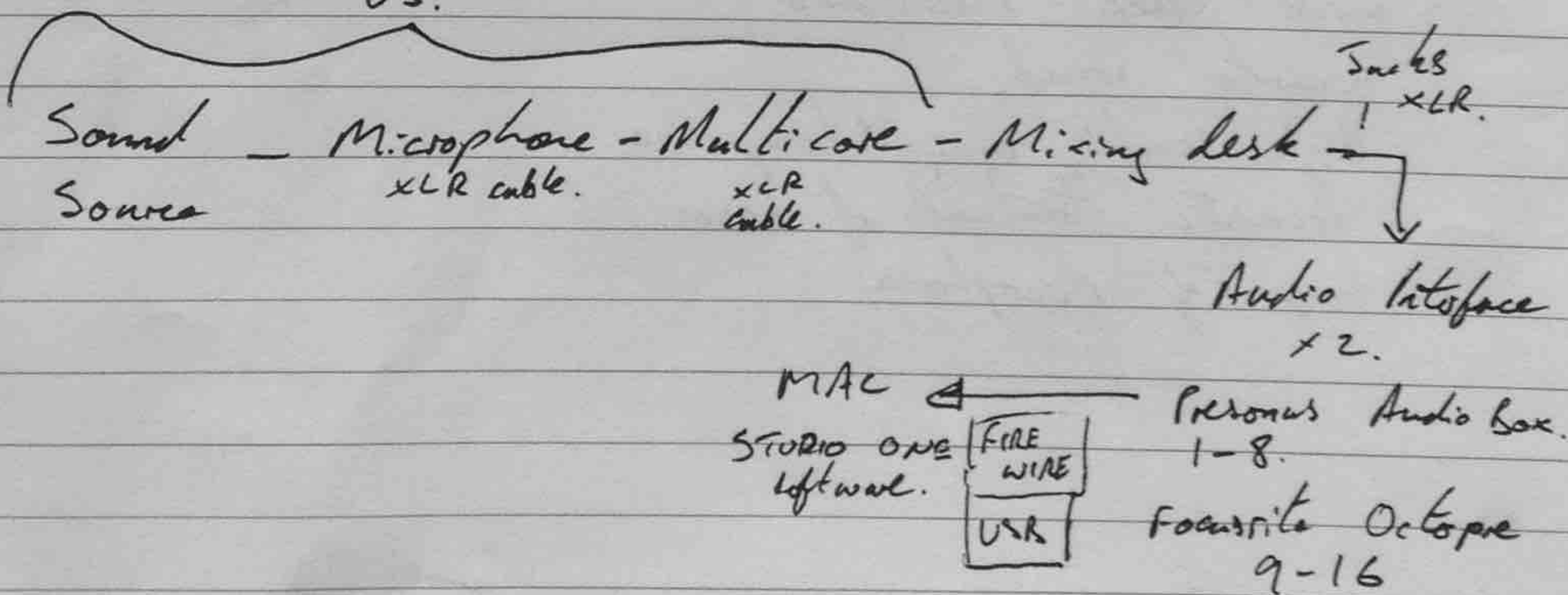
Ampl.

Instruments.

Audio Interface

Signal Source Route.

vs.



Mixing Desk - MIDAS Verona. 32ch

Fade everything on  $\phi$  across top

1) Copy Pk.

Should pick up signal. - no red.

Both green LEDs and occasional Amber.

2) Red fader - Master fader. -  $\phi$  ensure yellow light on

3) Fade Up channel.

4) Mute - Red button on channel.

5) Repeat for other channels

Aux 1 & 2 headphones.

Microphones - Phantom Power 48v. Condenser.

Recording - for screen

- open up Studio One 2.

- create new

- name

- Add track

- Name track.

- select input.

Mixing desk central console Blue faders 1-8.

- click Pre-arming on track

- Record at bottom

Research the 2 main types of microphone in the table below - this should include characteristics of each type and what they can be used for:

Dynamic Microphones	Condenser Microphones
<p>General Use.</p> <p>Sturdy</p> <p>Resistant (Durable).</p> <p>High Volume levels. <sup>live</sup></p> <p>No internal Amp.</p> <p>Don't require batteries or additional power.</p> <p>Moving Coil</p> <p>Dynamic because of</p> <p>Used on stage</p> <p>Resistant to moisture</p> <p>Micing loud sources but a guitar amp. down to high SPL (Sound Pressure Level)</p> <p>Handly</p> <p>Tailored to frequency range.</p> <p>Cardioid - pickup pattern usually.</p>	<p>Costly.</p> <p>Not Robust.</p> <p>can be effected by heat &amp; humidity.</p> <p>Require phantom power 48V.</p> <p>Sensitive</p> <p>Vocals</p> <p>Wide frequency range.</p> <p>Great transient sound response</p> <p>One can change pickup pattern.</p>

Polar Pattern  
Pickup pattern.  
Why. & what are they  
Omnidirectional  
Cardioid.

Figure 8.

Research the microphones in the table below to create yourself a reference guide for your portfolio:

Microphone	Type	Uses	Cost <i>check prices.</i>
Shure SM58	Dynamic Unidirectional	Stage - Vocals	Around £90
AKG 414	Condenser. Large Diaphragm.	Studio - vocal overhead. Acoustic	Around £1,500 Pair.
Audix D6	Dynamic. Cardioid.	Kick Drum. Low frequency.	£170.
AKG 451	Condenser. Small diaphragm	Overhead. Vocal. high hat. percussion. acoustic guitar.	£535.
Shure SM57	Dynamic Unidirectional	Drum Amp acoustic etc instruments	£90.
Rode NT5	Condenser. Small Diaphragm.	Acoustic drum overheads. Cymbals. Live performance.	£280.
Sennheiser E604	Condenser Unidirectional clip on	Toms, snares percussion Brush, Woodblock.	£240.
Behringer C-2	Condenser. Unidirectional	Piano	£45
Shure SM7B	Condenser Adjustable frequency.	Vocals Talking	£360

If a drum kit was recorded using the following microphone setup, how much would this cost to buy:

1x Audix D6 / 2x Shure SM57 / 1x AKG 451 / 3x Sennheiser E604 / 2x AKG 414

↓  
£170

↓  
£180

↓  
£535

↓  
£720

↓  
£1,500

£3,105.