

Dyson School of Design Engineering  
**DESE61003 Audio Experience Design**  
Initial Plan for the Installation

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*Please complete one of these documents for each installation, and email this file to KP  
([katarina.poole@imperial.ac.uk](mailto:katarina.poole@imperial.ac.uk)) before 5pm on Friday the 14<sup>th</sup> of February*

*Please do not write more than 400 words for each section, and try to be as clear as possible (bulleted  
lists are very welcome).*

**REMEMBER THAT THIS IS DOCUMENT WILL NOT BE ASSESSED, BUT IT'S ONLY A WAY TO SET THE  
GROUND FOR YOUR INSTALLATION WORK, AND ENSURE YOU HAVE MY SUPPORT**

**Installation name**

Directional Audio

**Installation aims**

Produce an informational display that outlines all the processes and method that we used to create our concept and have directional speakers placed at different locations in the display, narrating sections. The concept involves creating directional transducers using interference between ultrasonic transducers, this will make up the information on the display, as well as how Max will be used to produce the PWM signal to drive the ultrasonic array.

**Will you be able to present it in person on the 20<sup>th</sup> of March 2-5pm?**

YES/NO

**Work-packages and brief overview of the work-plan**

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**Students involved / WP and duties**

Student name and surname	WP and brief outline of duties
Danyaal Husain	Create electronic circuitry
Edward Isola	Build physical interface
Edward Isola + Danyaal Husain	Work on MAX audio modulation

**Itemised provisional budget**

ITEM(s)	COST
60 Ultrasonic Transceiver Probes	30
3 microcontrollers	39
TC4427A	39
LM358	6.99
MT3608 * 3	10.50
<b>TOTAL</b>	<b>125.50</b>