Student Name: Deadline: 15th September 2017

Please research the following microphones and complete the specifications table.

Extended Question: Explain how microphones work and discuss the differences between a dynamic and condenser microphone.

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| --- | --- | --- | --- |
| **Microphone** | **Transducer Type** | **Polar Pattern** | **Frequency Response** |
| Example:Shure SM58Users:paul.clifford:Desktop:SM_58_6_cols.jpg | Dynamic | Cardioid | 50Hz-15kHz |
| AKG C414 |  |  |  |
| AKG D112 |  |  |  |
| AKG C1000S |  |  |  |
| Neumann TLM 102 |  |  |  |
| Shure SM57 |  |  |  |
| Rode NT2-A Users:paul.clifford:Desktop:Rode-NT2-Aa.jpg |  |  |  |
| Rode NT5 |  |  |  |
| **Microphone** | **Transducer Type** | **Polar Pattern** | **Frequency Response** |
| Example:Shure SM58Users:paul.clifford:Desktop:SM_58_6_cols.jpg | Dynamic | Cardioid | 50Hz-15kHz |
| AKG C414 | Condenser | Multiple | 20Hz-20kHz |
| AKG D112 | Dynamic | Cardioid | 20-17kHz |
| AKG C1000S | Condenser | Cardioid | 50Hz-20kHz |
| AKG SolidTube | Condenser | Cardioid | 20Hz-20kHz |
| Shure SM57 | Dynamic | Cardioid | 40Hz-15kHz |
| Rode NT2-AUsers:paul.clifford:Desktop:Rode-NT2-Aa.jpg | Condenser | Multiple | 20Hz-20kHz |
| Rode M3Users:paul.clifford:Desktop:29187-rode-m3-large.jpg | Condenser | Cardioid | 40Hz-20kHz |

Complete the table of stereo microphone techniques

|  |  |
| --- | --- |
| **Technique** | **Description** |
| Macintosh HD:Users:paul.clifford:Desktop:DM00580.jpgXY coincident pair |  |
| Macintosh HD:Users:paul.clifford:Desktop:DPA Stereo setup.JPGAB spaced pair |  |
| Macintosh HD:Users:paul.clifford:Desktop:DM00581.jpgORTF near concident pair |  |
| Blumlein stereoMacintosh HD:Users:paul.clifford:Desktop:blumlein_diagram.jpg |  |
| Macintosh HD:Users:paul.clifford:Desktop:MSDiagram.jpgMS-Mid Side stereo  |  |

**BONUS question**: Explain the difference between ambient and close microphone techniques.