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July 27, 2004

Hong Kong Standards and Testing Centre.  
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Attention: To Whom It May Concern

**Re: 200KHz Bandwidth requirement (Wireless Microphone)**

As requested, please find the following information:

1. The sound signal is input by microphone, amplified by Q1, Q2 transistor, then through R7, C3, D1 attenuator, at last the loud voice is filtrated by C5, C6, thus in this way to avoid the bandwidth exceeded 200KHz. The sound signal is transmitted by Q3 transistor to reach frequency modulation. (Please refer to the diagram).
2. The transistor oscillator circuit is composed of Q3, R11, C7, C8, L2, C11, and C13. FM signal is combined by C10, after resonated by L1, C12, C15, then through L3 and antenna to be launched outside. (see the diagram)

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**Chinese version:**

1. 声音信號經過咪頭輸入後，經過 Q1, Q2 三極管放大，再經 R7, C3, D1 衰減音頻信號後再經 C5, C6 過濾“高音”，以防調幅超過 200KHZ。声音信號通過晶體管 Q3，達到調頻(見圖)。
2. Q3, R11, C7, C8, L2, C11, C13 構成晶體振動綫路。調頻信號由 C10 耦合，再經過 L1, C12, C15 諧振後經 L3，天綫發射出去。

Thank you for your support.

**Best Regards,**  
**Karen / Fanny,**  
**Columbia Telecommunications Ltd.**