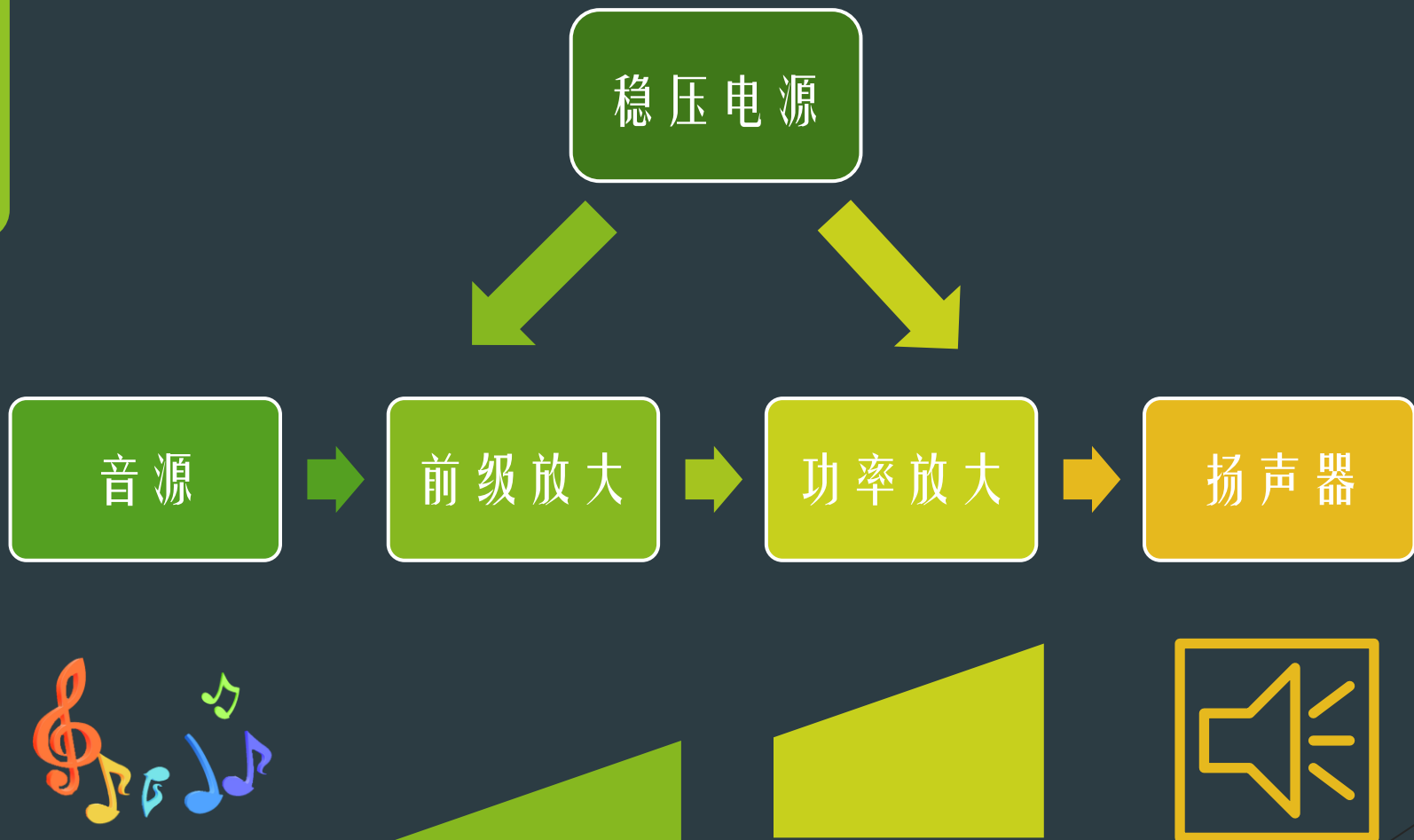


# 单端甲类前级放大电路的 分析与调试

小组成员：李智 林柚 兰建伟

# 音频放大



稳压电源电路

前级放大电路

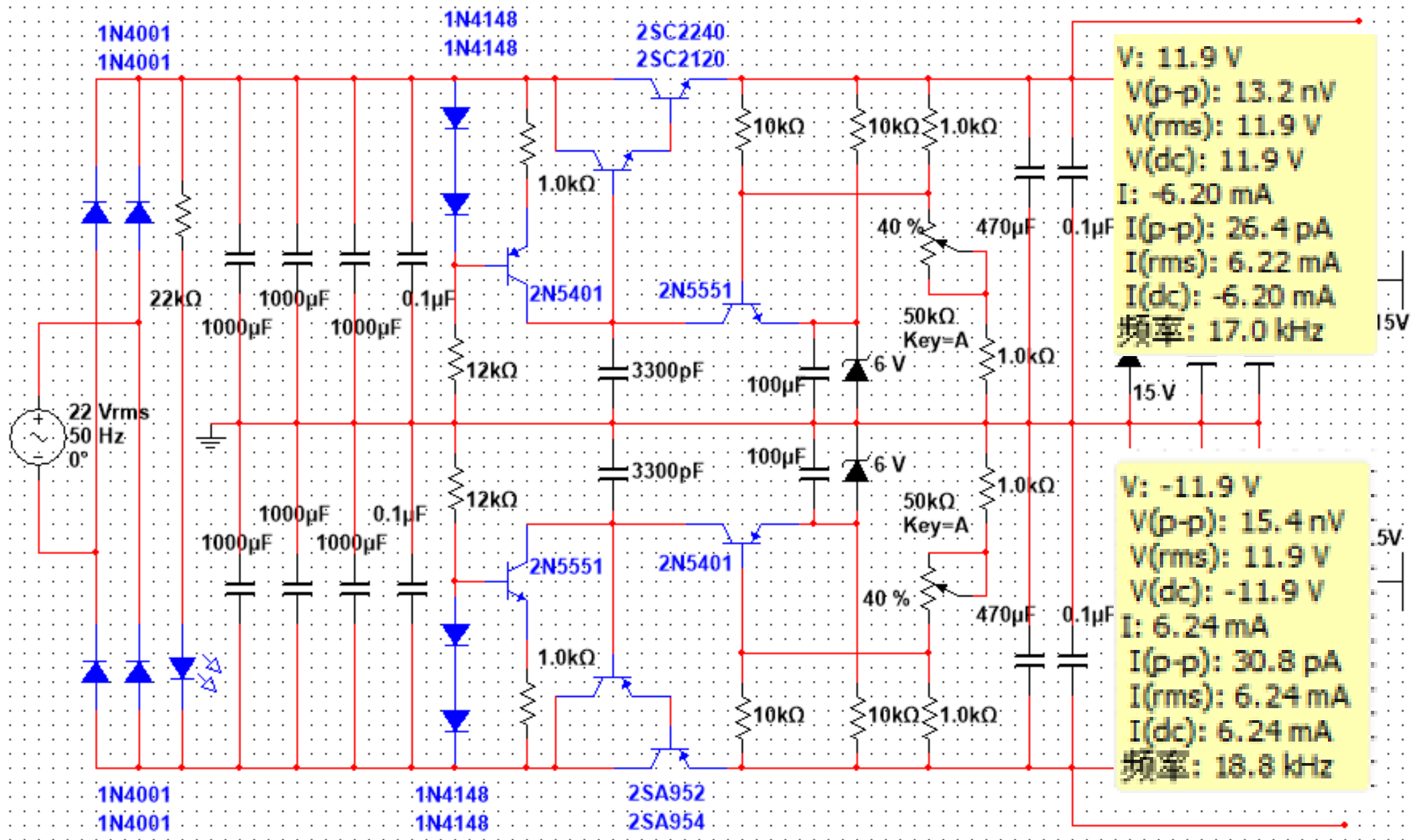
20w功率放大电路

# 稳压电源电路

## 洼田式直流稳压电源（改造版）

- 稳定输出电压
- 滤除直流电压的纹波
- 减小输出电压波动随频率变化的影响
- 避免多级放大器各级通过电源耦合

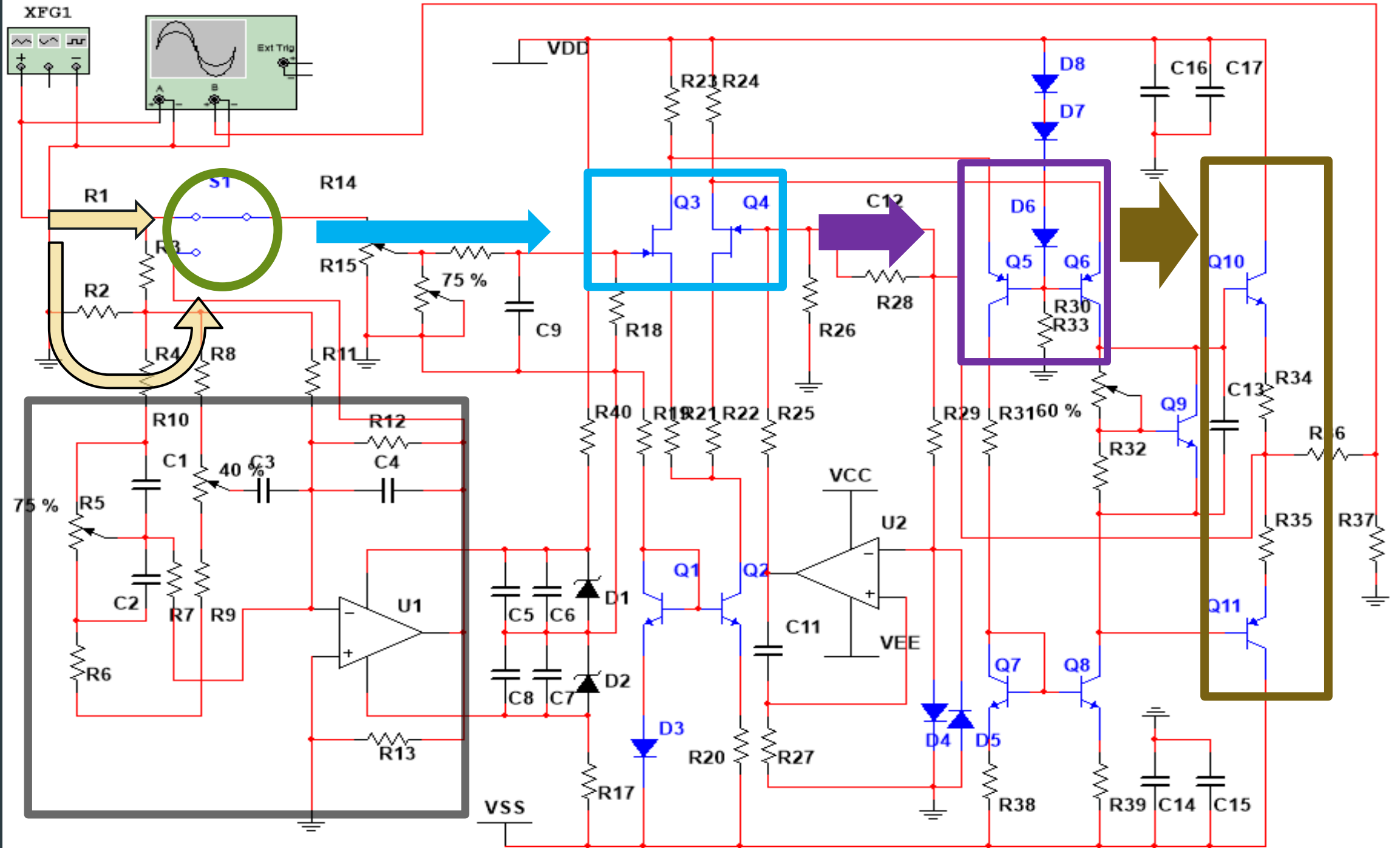




## 前级放大电路

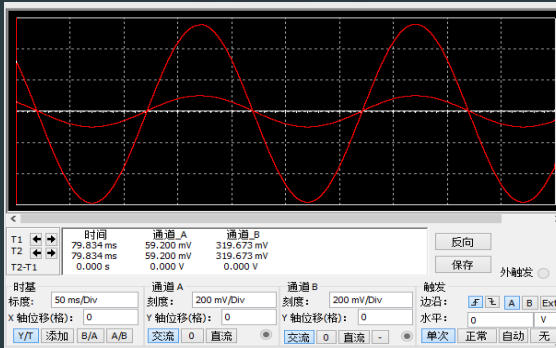
- 信号初步放大（电压放大）
- 音量调节
- 音调控制
- 音源与后级缓冲



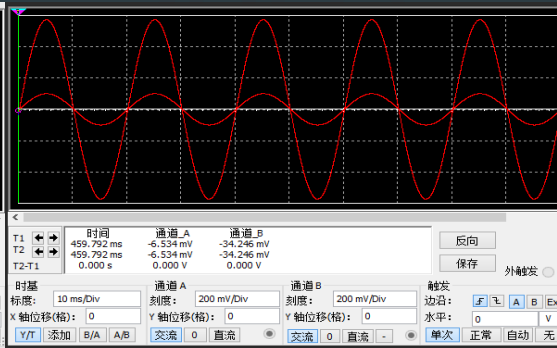


# Hi-Fi 放大

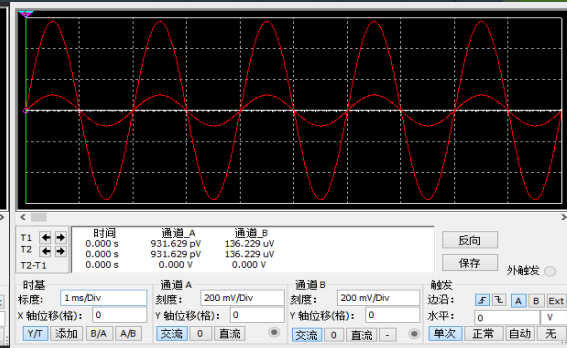
## 5Hz



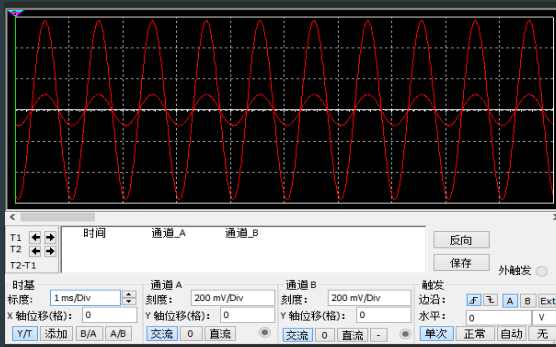
## 50Hz



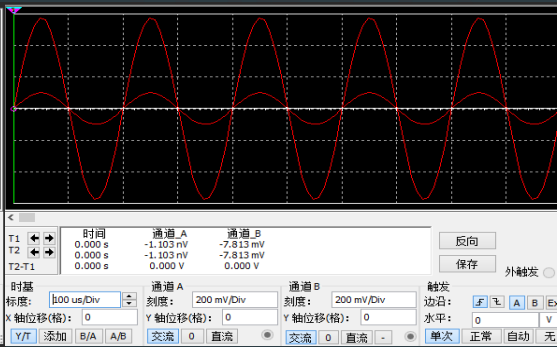
## 500Hz



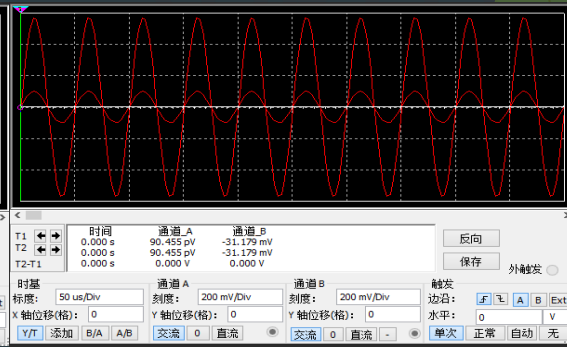
## 1KHz



## 10KHz



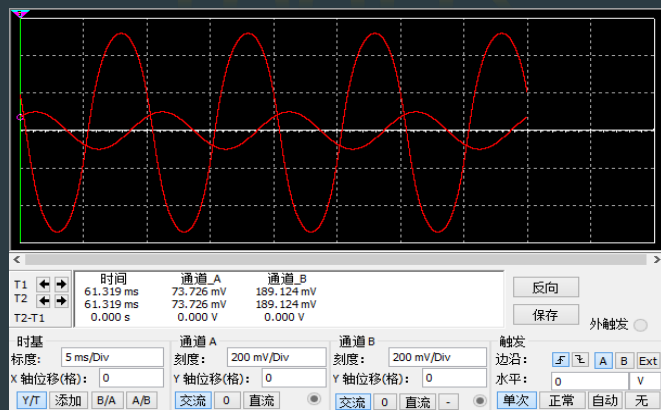
## 20KHz



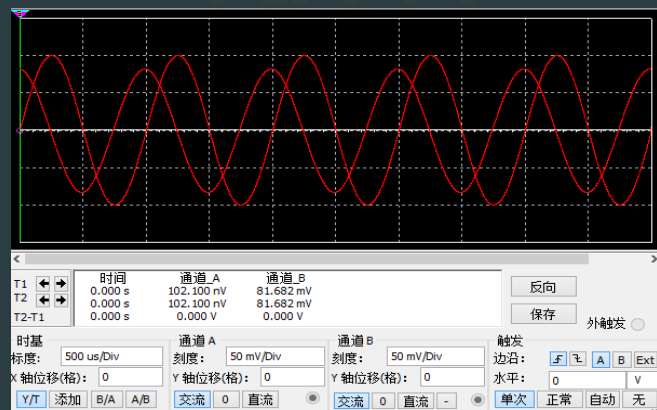


# 音调放大

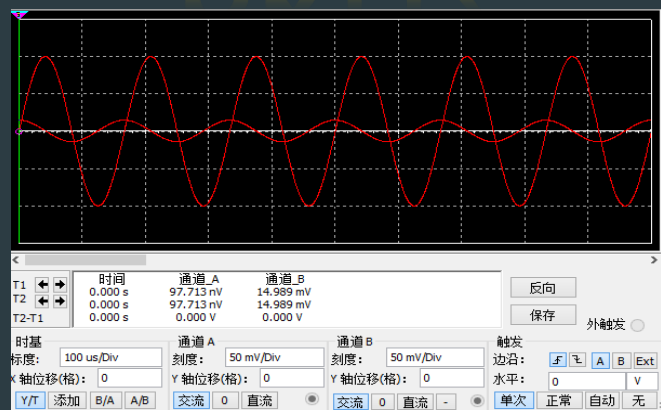
## 100Hz



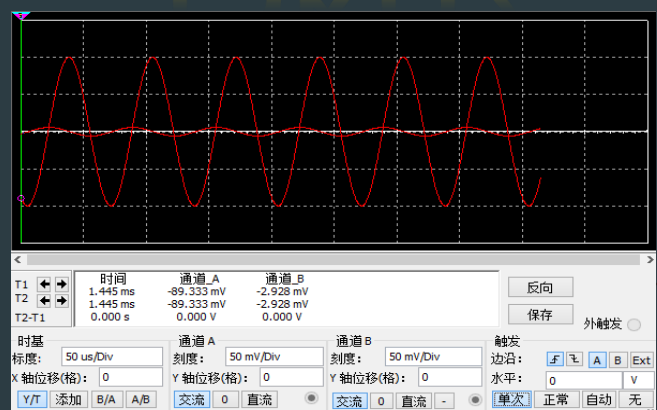
## 1KHz



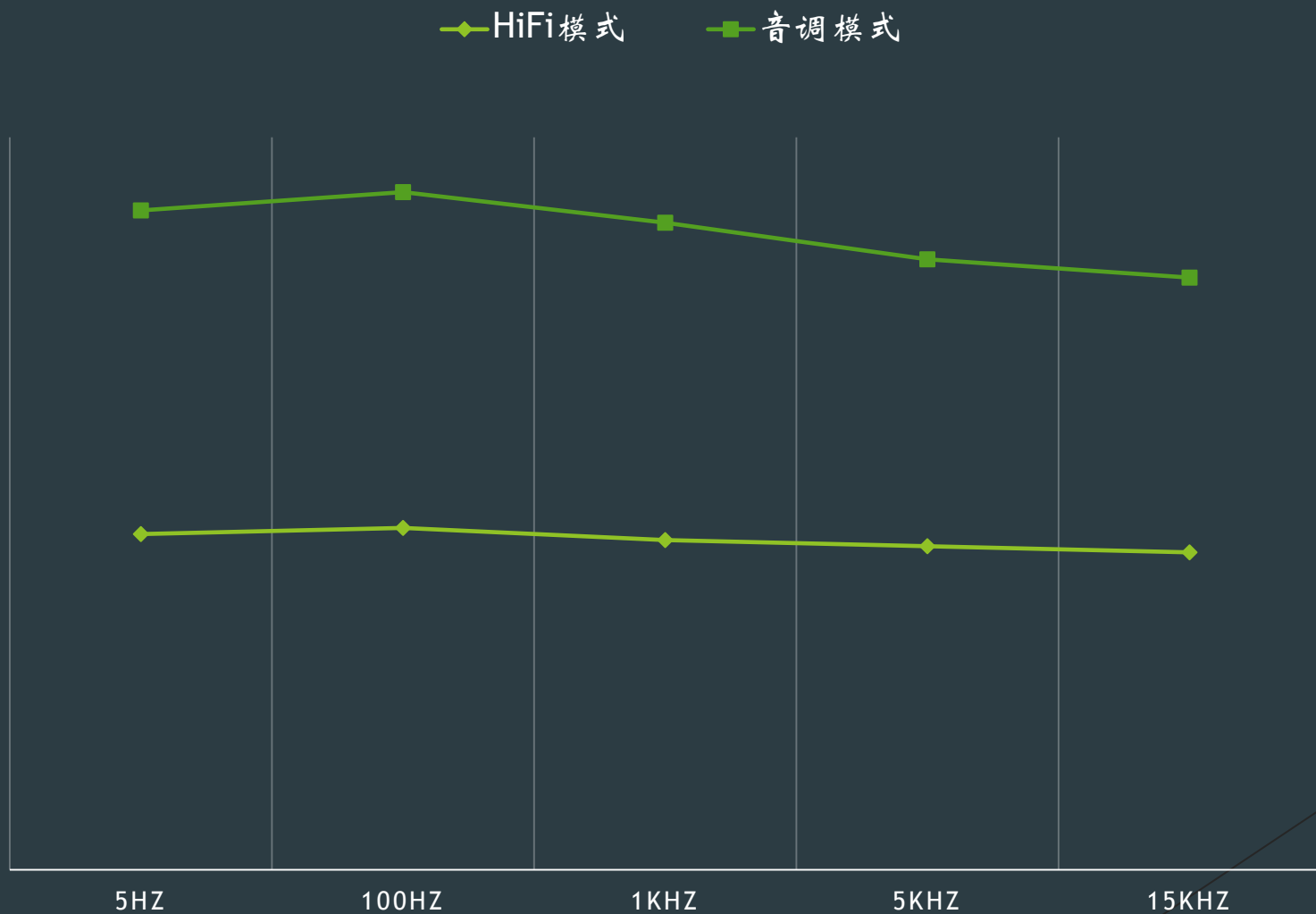
## 6KHz



## 15KHz



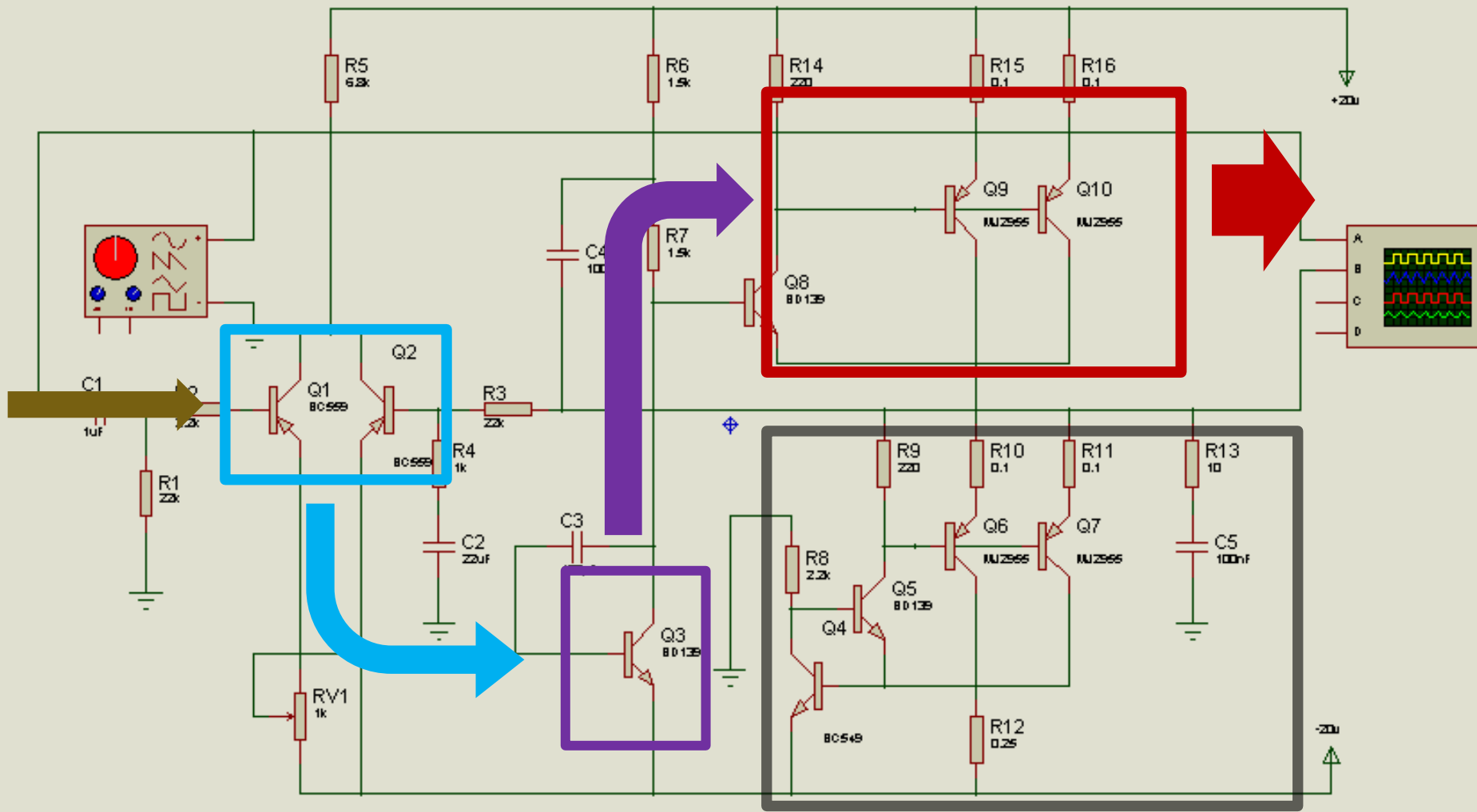
# 放大分析



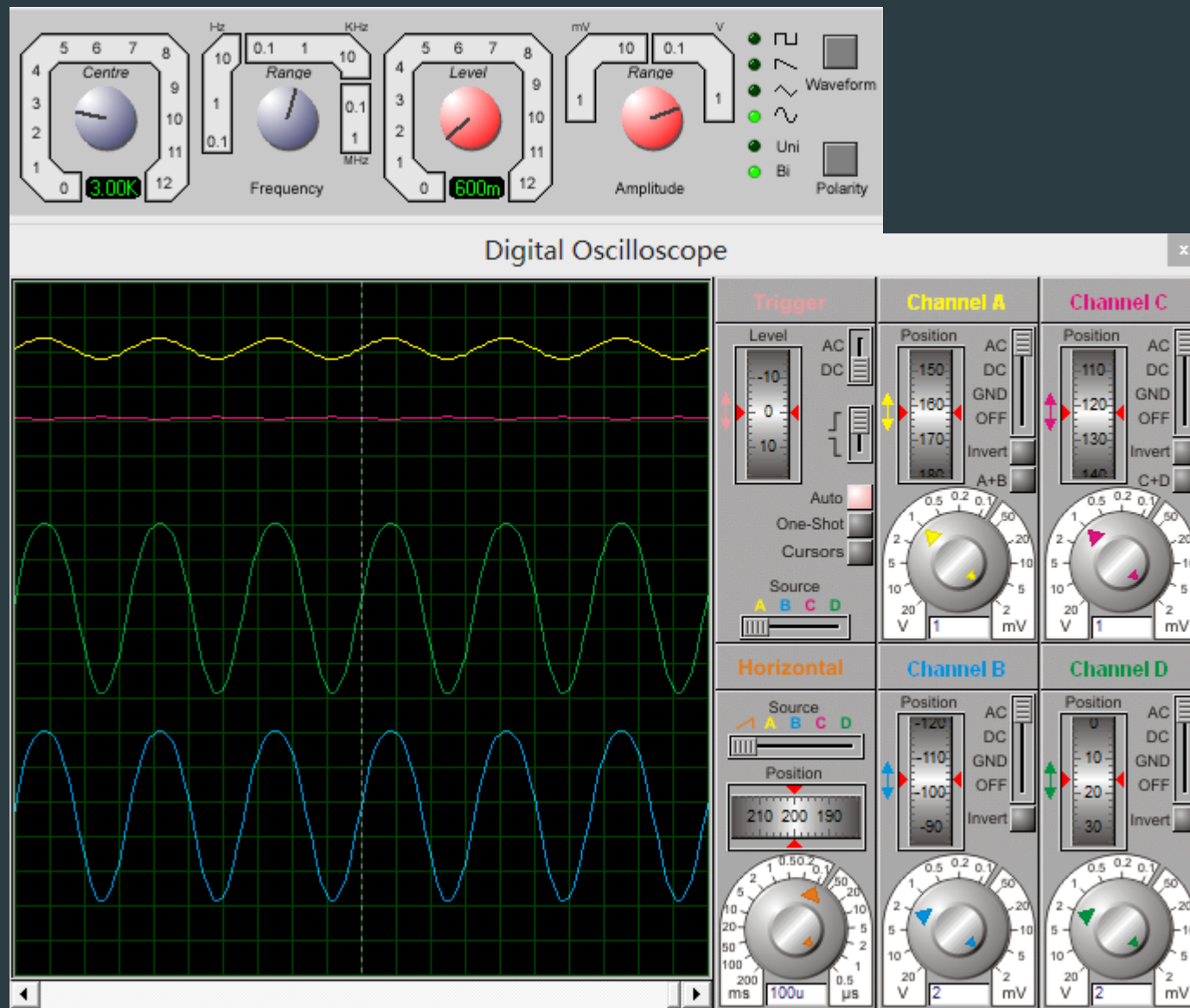
## 20w 功率放大电路



- 功率放大（电流放大）
- 推动扬声器

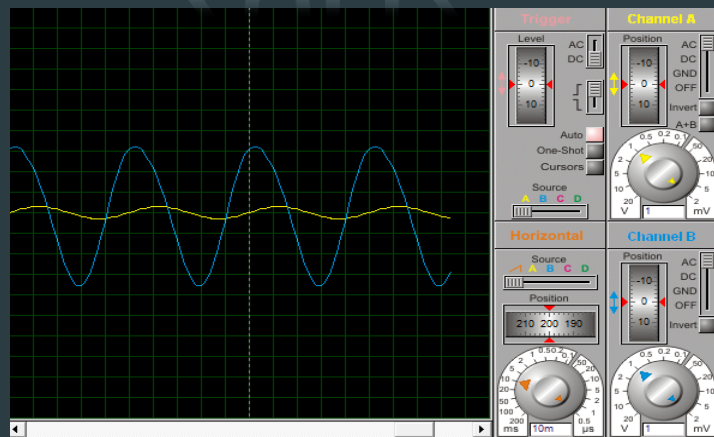


# 功率放大

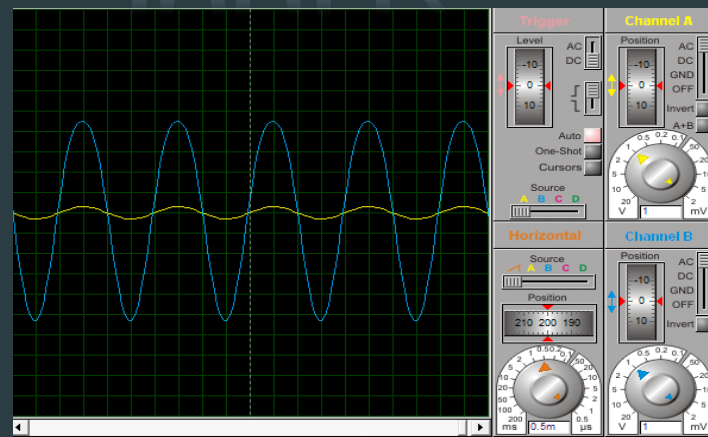


# 功率放大

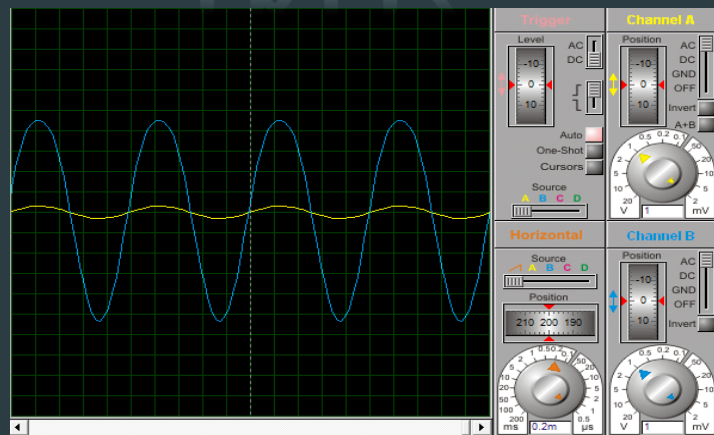
## 20Hz



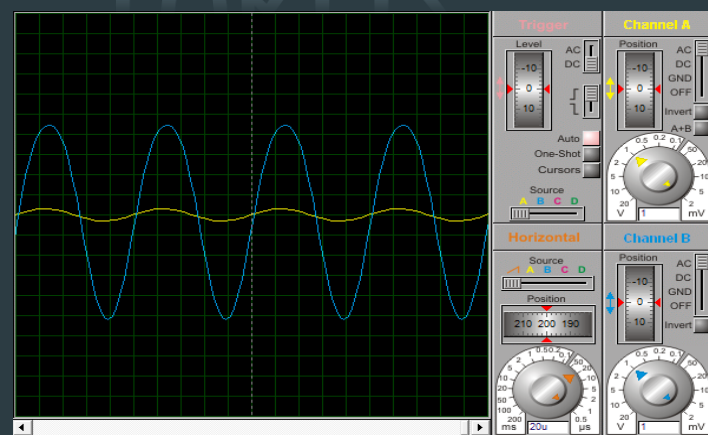
## 500Hz



## 1kHz



## 10kHz



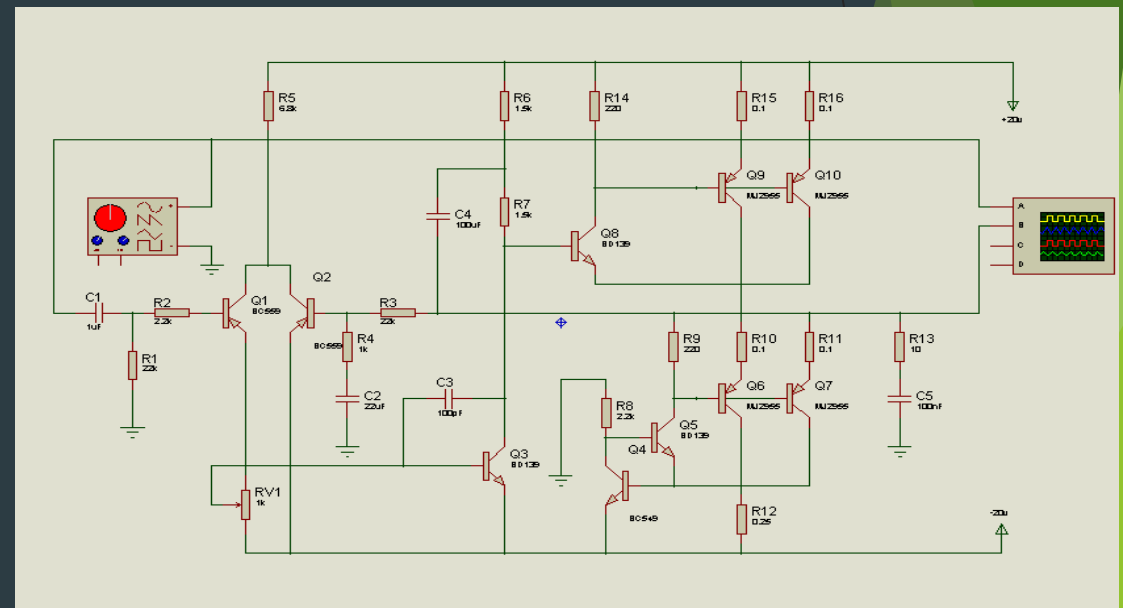
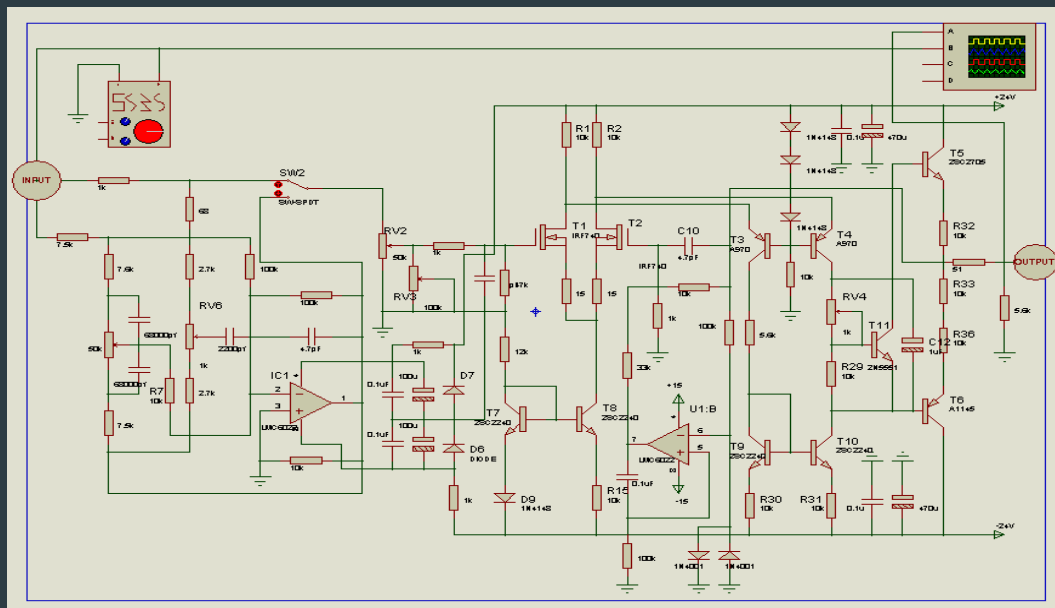
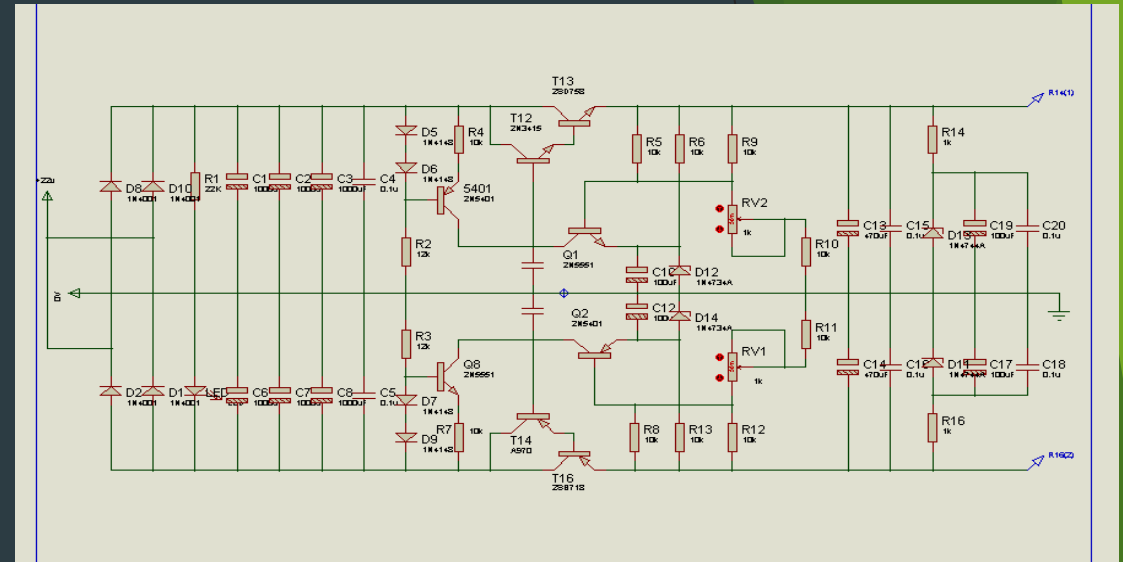
稳压电源电路

前级放大电路

20w 功率放大电路



# 仿真花絮





# 小组成员分工及感悟

# 李智

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- ◆ 课题提出
- ◆ 相关资料查阅
- ◆ 电路仿真分析
- ◆ 幻灯片制作
- ◆ 成果报告

# 林 柚

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- ◆相关资料查阅
- ◆电路分析
- ◆电路仿真（洼田稳压电源、前级放大）
- ◆论文撰写

# 兰建伟

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- ◆相关资料查阅
- ◆电路分析
- ◆电路仿真（功率放大电路、前级放大）
- ◆论文撰写

谢谢！