



접지(Grounding)

2005. 4. 4.

접지의 종류 및 적절한 사용

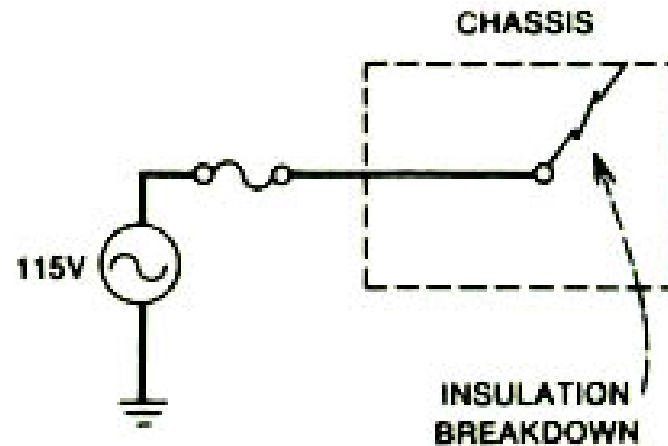
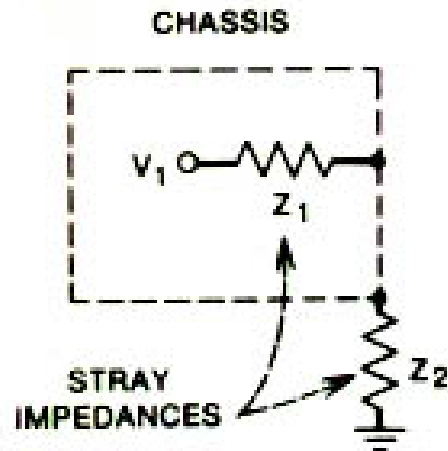
류 대 우

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2-1 Safety Grounds (1)

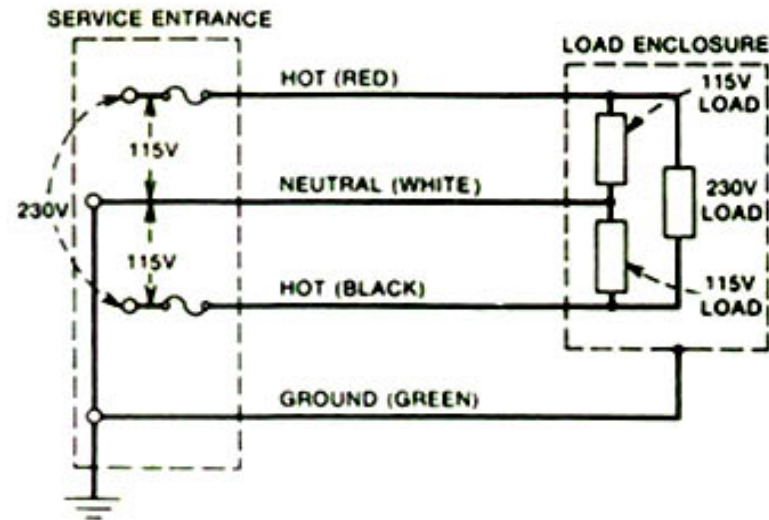
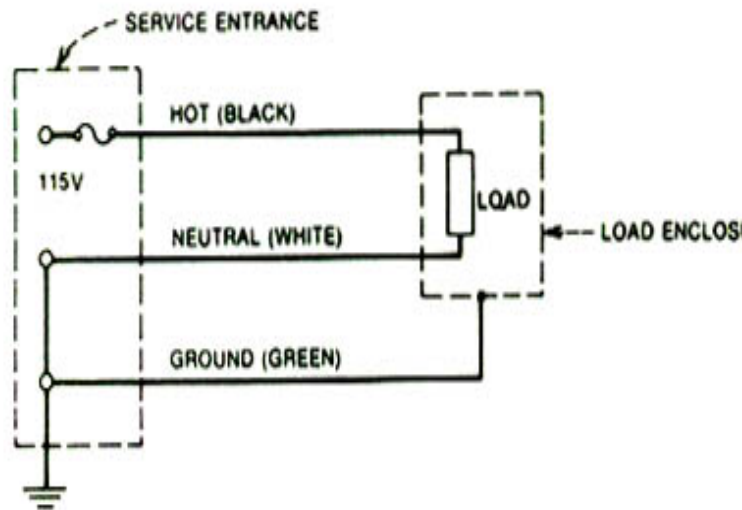


- 부유 임피던스

- 절연 파괴



2-2 Safety Grounds (2)



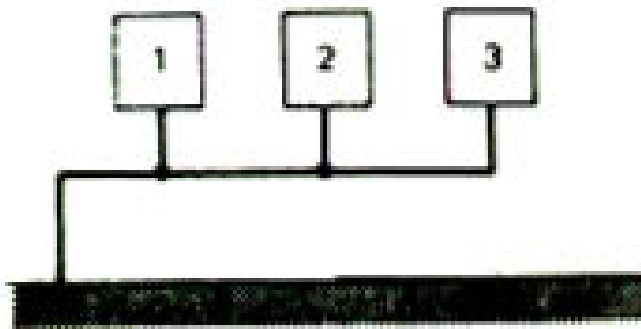
- 표준 교류 **115V** 전력의 배분회로
- **3**개의 리드선
- **115/ 230 V**의 교류 전력 분배 회로
- **4**개의 리드선



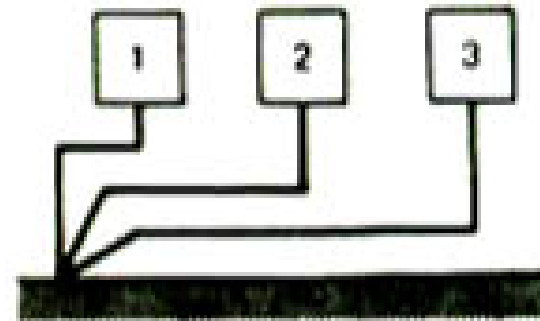
2-3 신호 접지 (Signal Grounds)



- 단일점 접지



SERIES CONNECTION



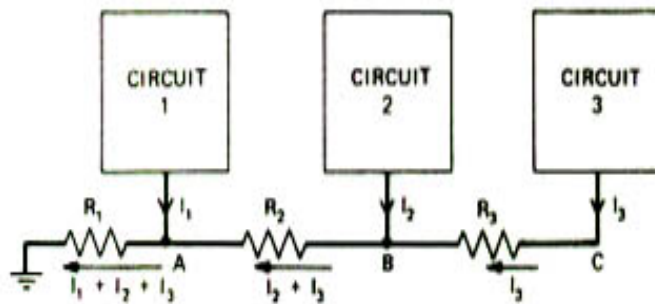
PARALLEL CONNECTION

- 다중점 접지
- 복합형 접지

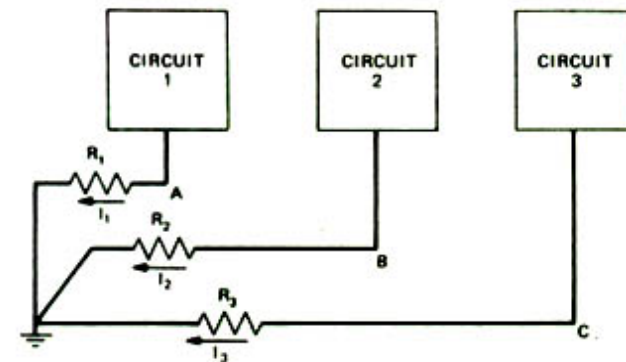


2-4 단일점 접지 (Single-Point Ground Systems)

- 공통 접지 시스템
(Common Grounding System)

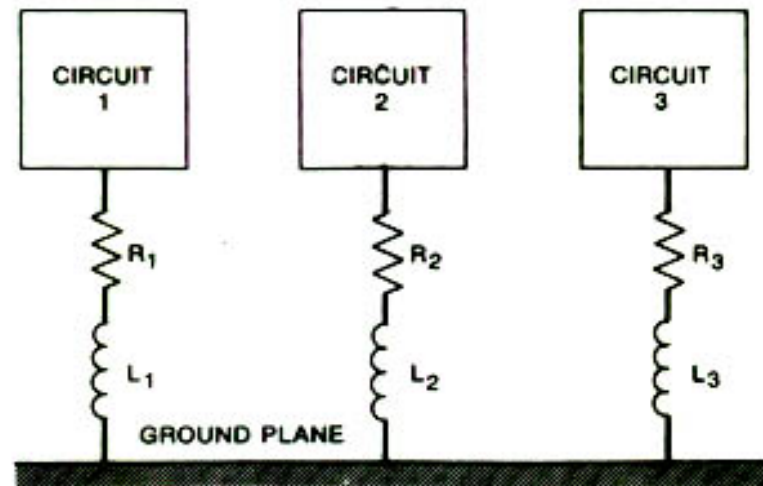


- 분리 접지 시스템
(Separate Grounding System)





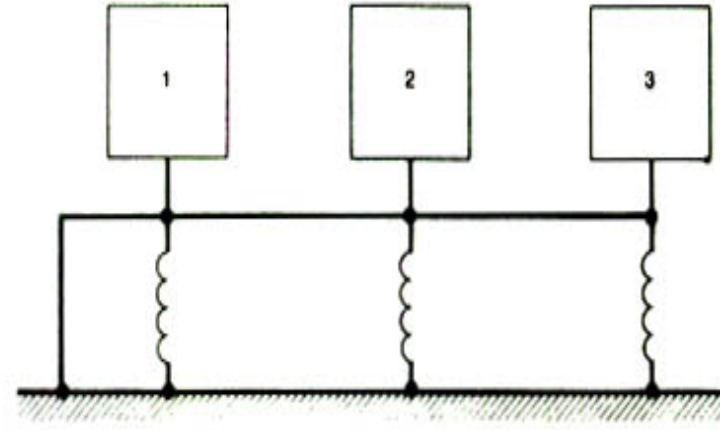
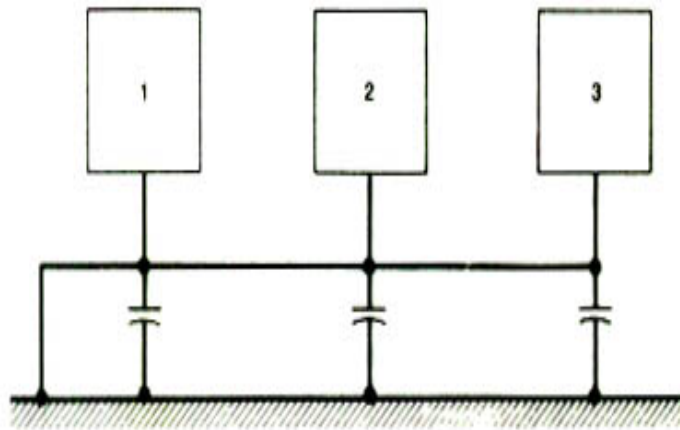
2-5 다중점 접지 (Multipoint Ground Systems)



- **10MHz** 이상의 주파수에 효과적
- 임피던스 R_1 , R_3 , L_1 , L_3 를 최소화



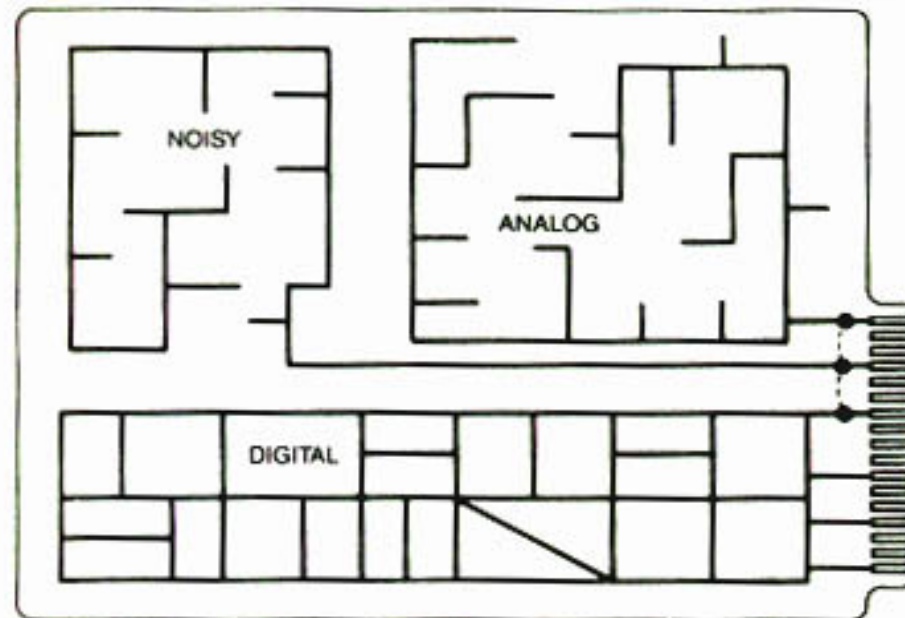
2-6 복합형 접지 (Hybrid Grounds)



- 다중점 접지처럼 동작
- 단일점 접지처럼 동작



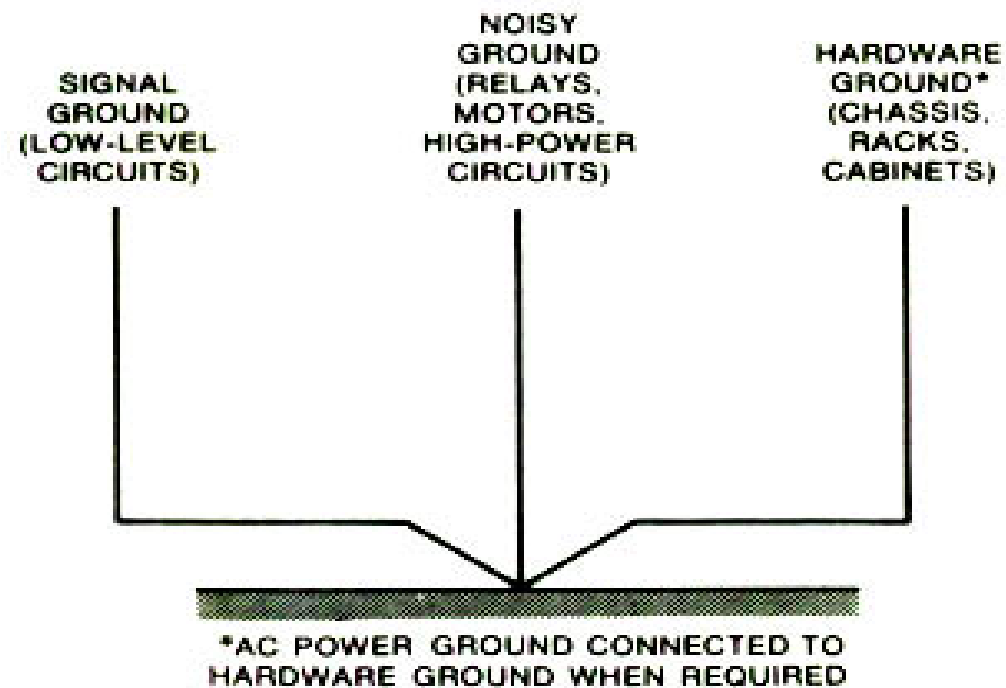
2-7 Functional Ground Layout



- 와이어링 기판



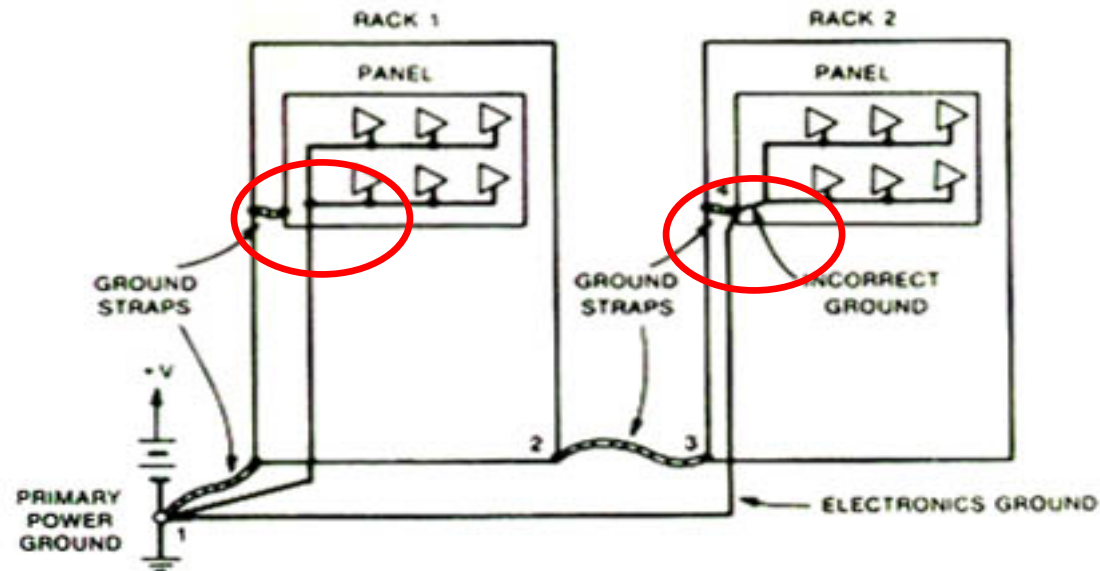
2-8 실제적인 저주파 접지



- 서로 분리된 접지등급



2-9 Hardware Grounds



- 선반 위에 고정시킨 전기 회로는 접지 연결과 분리
- **Rack 1:** 잘된 접지
- **Rack 2:** 잘못된 접지