SNS COLLEGE OF TECHNOLOGY

Coimbatore-35
An Autonomous Institution

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

19ITT204 – MICROCONTROLLER & EMBEDDED SYSTEMS

III YEAR - V SEM

UNIT 5 – Embedded System Development

Topic- Intruder Alarm System

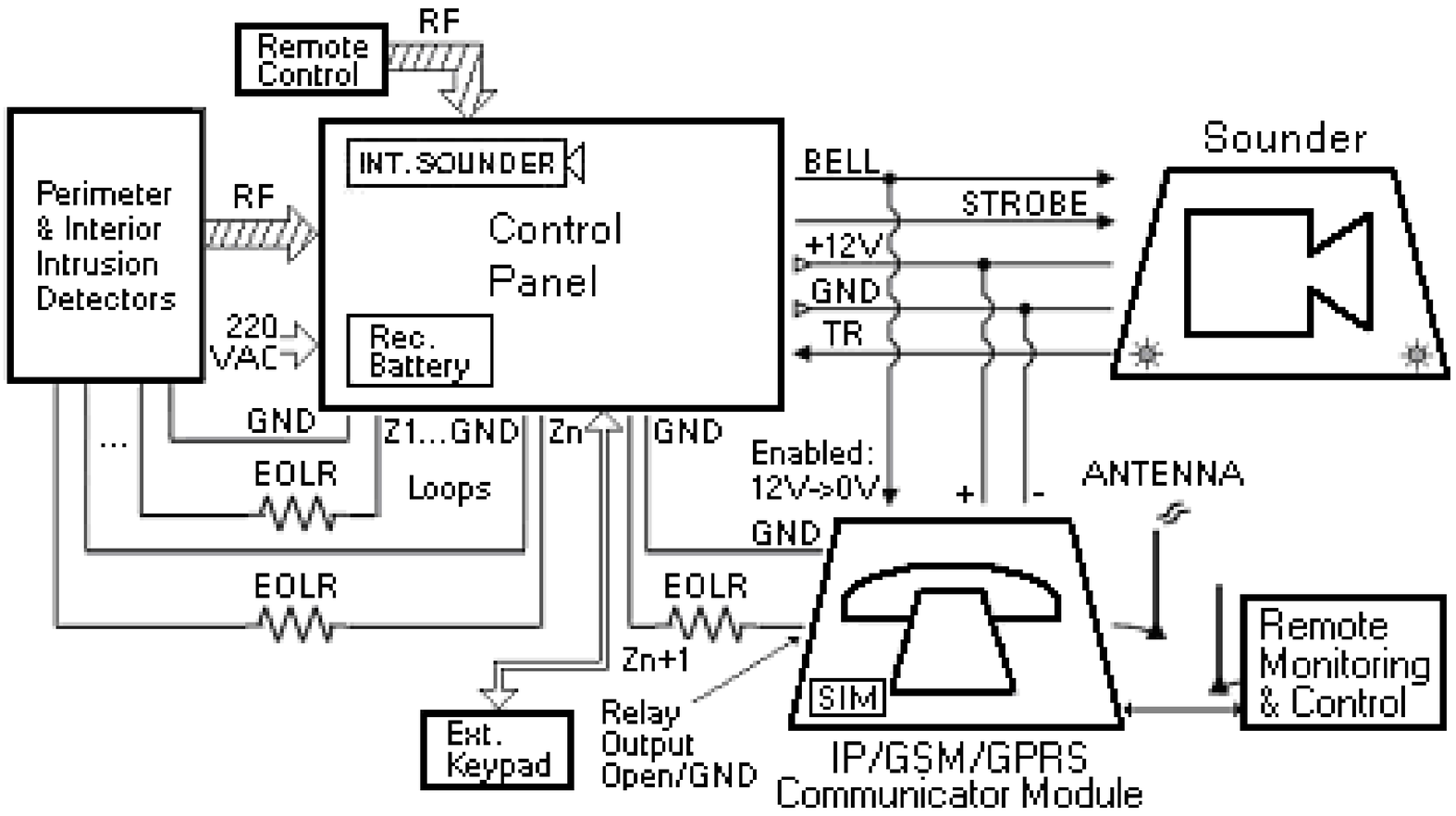
Intruder Alarm System

- Security alarm systems for intrusion prevention is massively present in our own homes and Companies.
- A basic intruder alarm system consists of a control panel, with rechargeable battery power backup and internal or external keypads, several interior and perimeter intrusion detectors, and one external sounder, at least

Intruder Alarm System

- An intruder alarm system can be classified as an hardwired, wireless, or an hybrid system.
- Wireless systems are used when there is not pre-wiring, operating at 433/868 MHz.
- Most secure intruder alarm systems are hardwired systems, because wireless systems will use additional battery power and, even with Anti-jamming protection, still can be affected by radio-frequency interferences.
- Hybrid alarm systems allow simultaneously the installation of wireless and hardwired detectors, being the most versatile.

Intruder Alarm System



Intruder Alarm System

- The STROBE signal is the output from the alarm control panel that will enable the flash lamps from the external sounder.
- The BELL signal is the output signal from the alarm control panel, used for triggering the alarm sounder devices.
- Both signals trigger from 12V to 0V.
- VBAT (+12V) and GND are the power source terminals for the alarm control panel and the external sounder.
- Finally, Tamper Return (TR) is the external sounder output signal, used to indicate an opened sounder cover tamper.

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