

Arduino Flood Alert System – Complete Connections

This document lists all wiring connections for the Arduino Flood Alert System using a Water Level Sensor, LCD1602 (parallel, no potentiometer), LEDs, and a buzzer.

LCD1602 Connections (No Potentiometer)

LCD Pin	Pin Name	Connection
1	VSS	GND
2	VDD	5V
3	VO	2.2k Ω resistor to GND
4	RS	Arduino D12
5	RW	GND
6	E	Arduino D11
7–10	D0–D3	Not Connected
11	D4	Arduino D5
12	D5	Arduino D4
13	D6	Arduino D3
14	D7	Arduino D2
15	A (LED+)	5V via 220 Ω resistor
16	K (LED–)	GND

Water Level Sensor Connections

Sensor Pin	Connection
VCC	5V
GND	GND
SIG	Arduino A0

LED and Buzzer Connections

Component	Arduino Pin	Notes
Green LED	D6	Use 220 Ω resistor
Yellow LED	D7	Use 220 Ω resistor
Red LED	D8	Use 220 Ω resistor
Buzzer (+)	D9	Active or passive
Buzzer (–)	GND	

All GND connections must be tied to a common ground. This wiring is optimized for classroom use and stable operation.