Arduino Smart Irrigation System - Connection Table

Relay Module

Connection	Arduino Pin / Port	Notes
IN	D3	Controls ON/OFF of relay
VCC	External 5V	Use separate power if possible
GND	GND (shared)	Connect to Arduino GND

Soil Moisture Sensor

Connection	Arduino Pin / Port	Notes
VCC	5V	Sensor power
GND	GND	Ground
OUT	D6	Digital output (0 = wet, 1 = dry)

DS18B20 Temperature Sensor

Connection	Arduino Pin / Port	Notes
VCC	5V	Power
GND	GND	Ground
DATA	D2 4	1.7k Ohm resistor to 5V (pull-up required)

LCD Display (ST7032 - I2C)

Connection	Arduino Pin / Port	Notes
SDA	A4	I2C Data
SCL	A5	I2C Clock
VCC	5V	Power
GND	GND	Ground