

# Digital Clock - JEHHEJ



**JEHHEJ**  
**Huangyq /Hongry**

Summary:

A LED digital clock

## Contents

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1	Introduction	3
2	Workflow	3
3	Components	3
4	Circuit Principle	4
5	Block Schematic	4
5.1	Input . . . . .	5
5.2	Basic Digital Clock . . . . .	5
5.3	Time Adjust Part . . . . .	5
5.4	Show-Day Part . . . . .	6
5.5	Alarm Part . . . . .	6
6	Schematic Diagram	7



## 1 INTRODUCTION

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## 2 WORKFLOW

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## 3 COMPONENTS

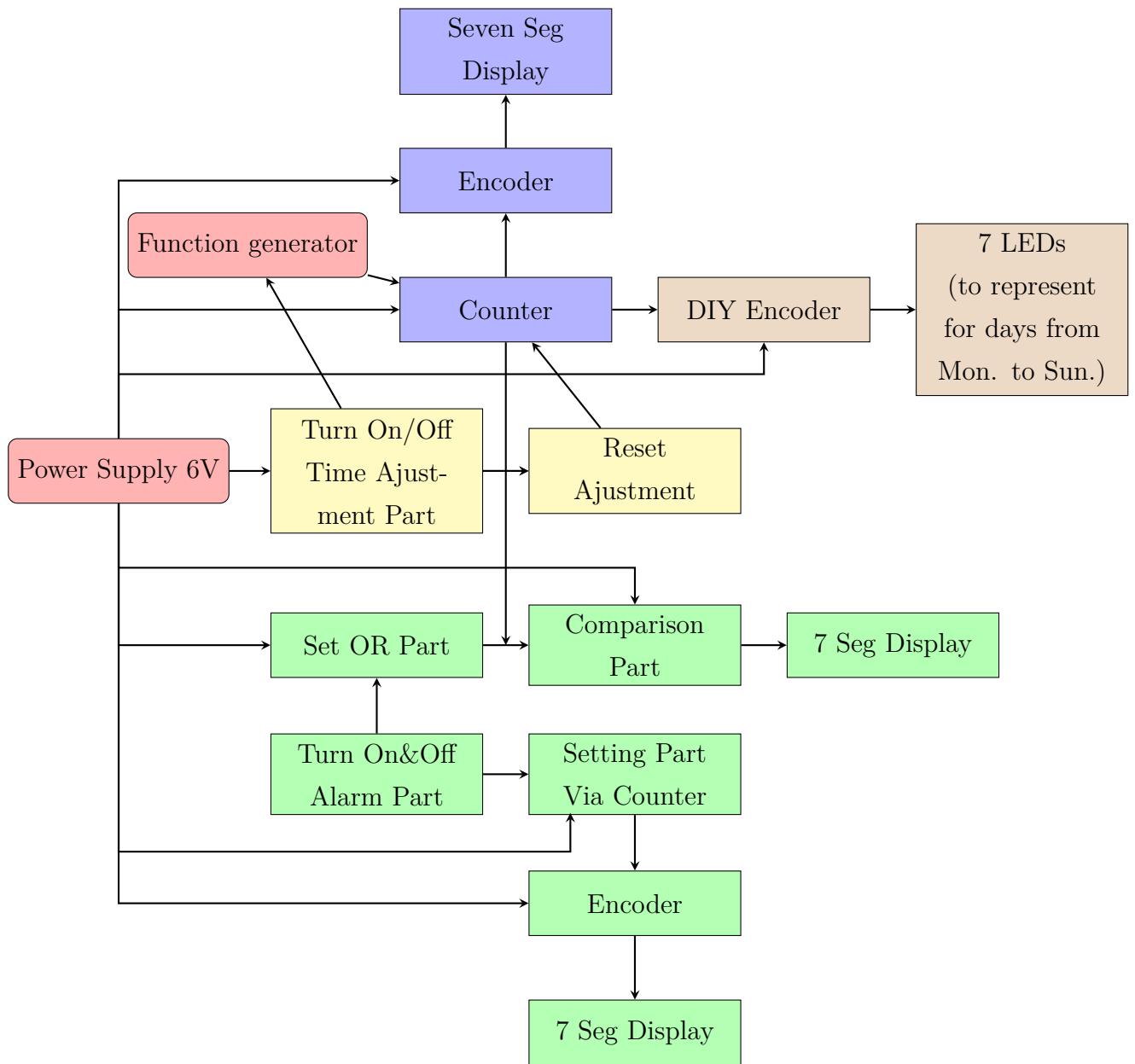
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TABLE 1: COMPONENT LIST.

Name	Type	Quantity
Battery Box		1
Timer555		1
Capactior	$0.01\mu F$	1
	$0.1\mu F$	1
Resistor	$1k\Omega$	1
	$2k\Omega$	1
	$100\Omega$	3
JK Flip Flop	74HC112	27
Seven Seg Display		12
Seven Seg Encoder	74LS48D	12
Switch		10
NOT Gate	74AS04M	20
NAND Gate	7400N	20
XOR Gate	7486N	10
OR Gate	7432N	5
Piezo Buzzer		1
CMOS	IRF510	4
LED	White	10

## 4 CIRCUIT PRINCIPLE

## 5 BLOCK SCHEMATIC



FRAME 1: COLOR BLOCK

Red Block: Input

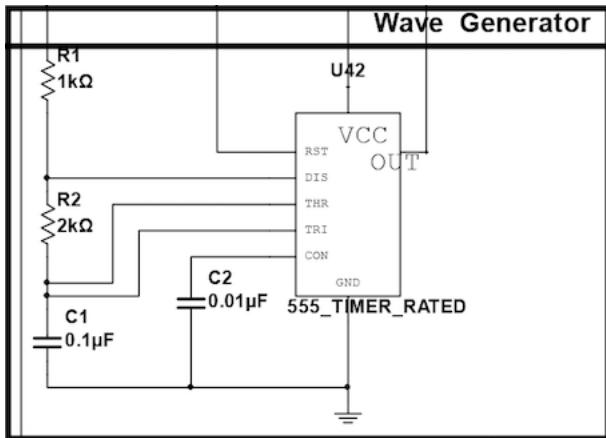
Purple Block: Basic Digital Clock

Yellow Block: Time Adjust Part

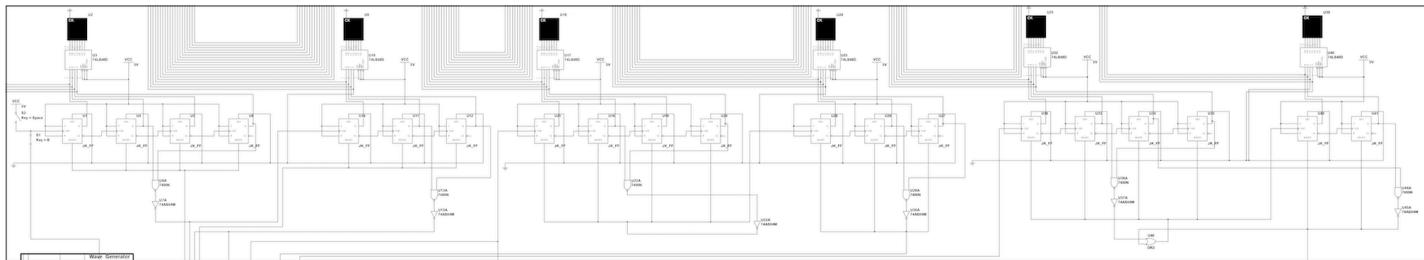
Brown Block: Show-Day Part

Green Block: Alarm Part

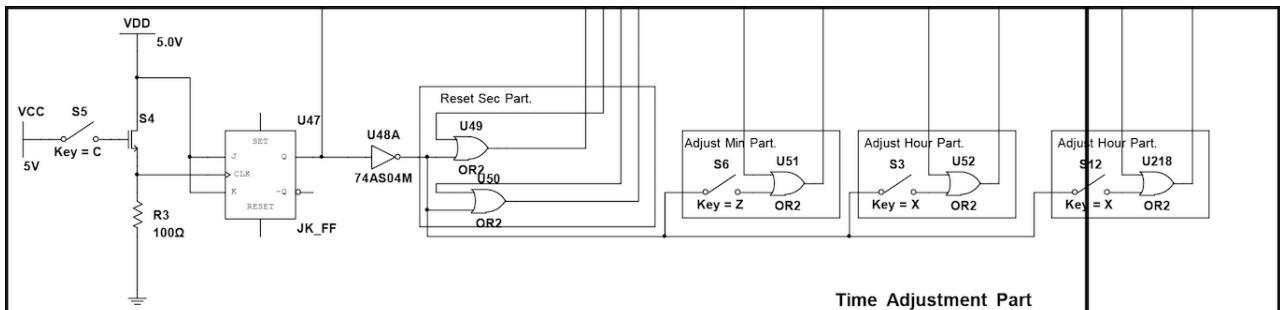
## 5.1 INPUT



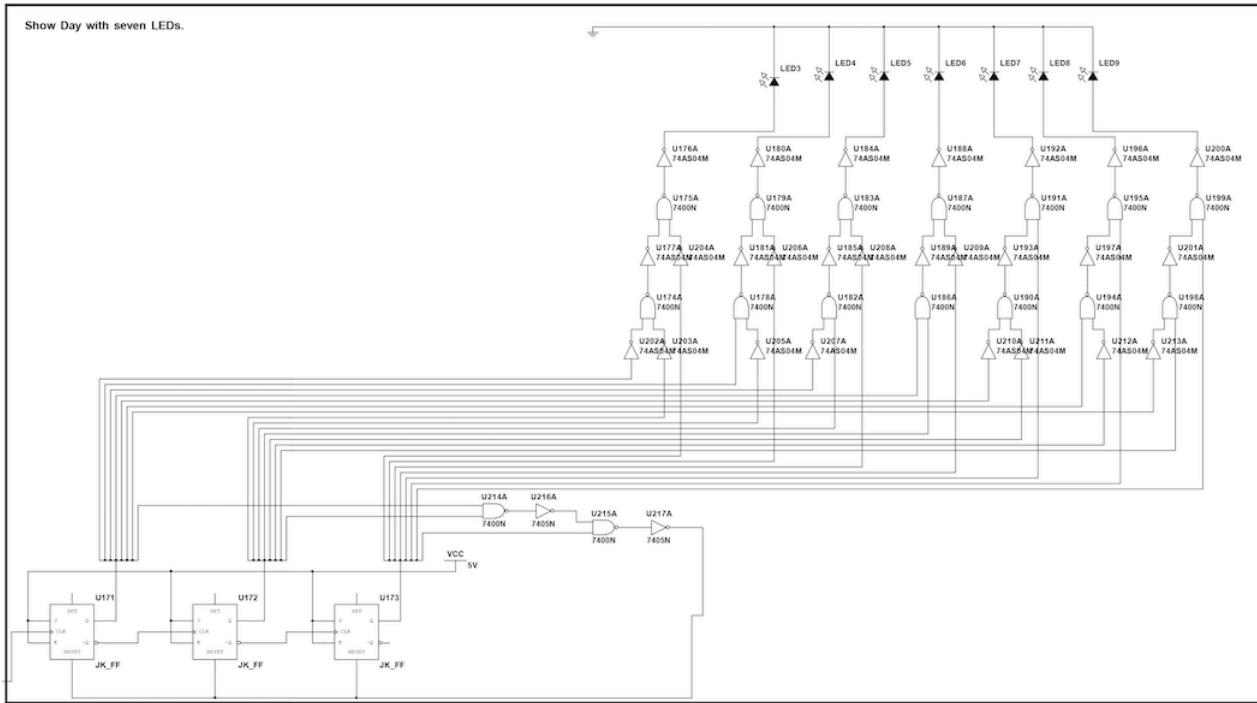
## 5.2 BASIC DIGITAL CLOCK



## 5.3 TIME ADJUST PART



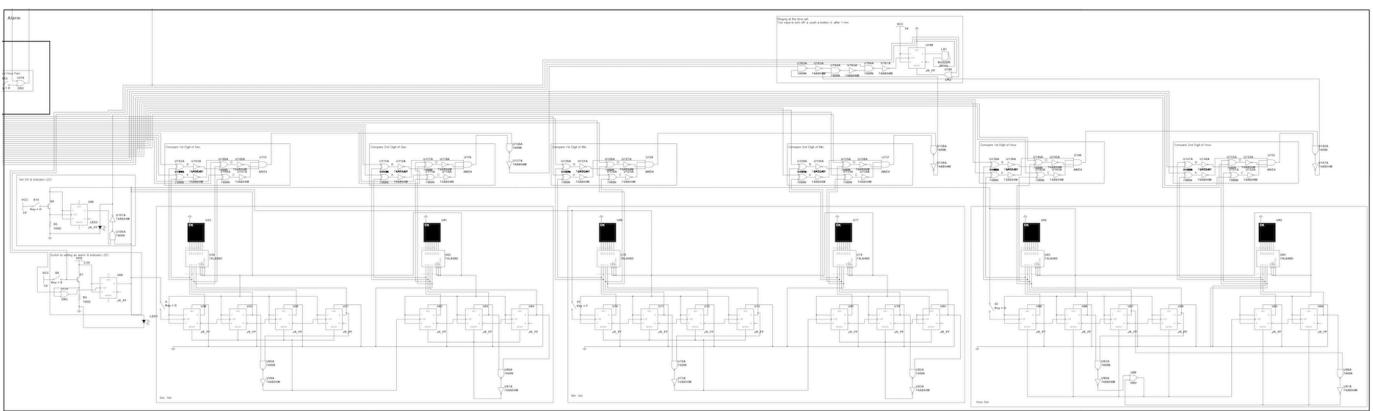
## 5.4 SHOW-DAY PART



### FRAME 2: TIPS

Using 7 Led Lights to indicate From Mon. to Sun.

## 5.5 ALARM PART



## 6 SCHEMATIC DIAGRAM

