

Features

12/24 hours mode clock

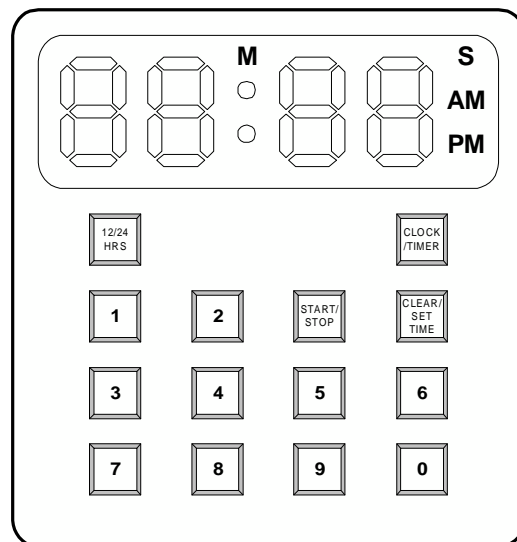
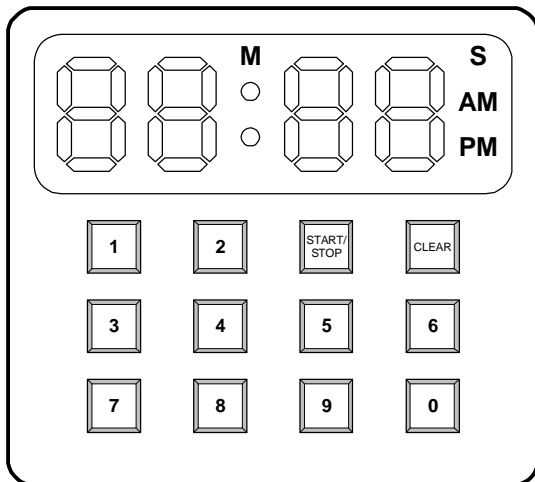
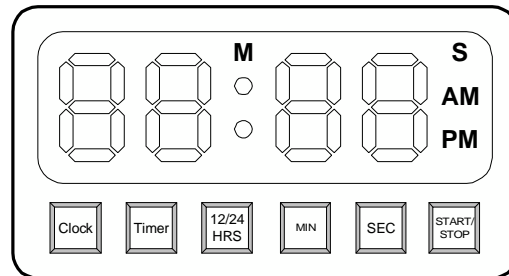
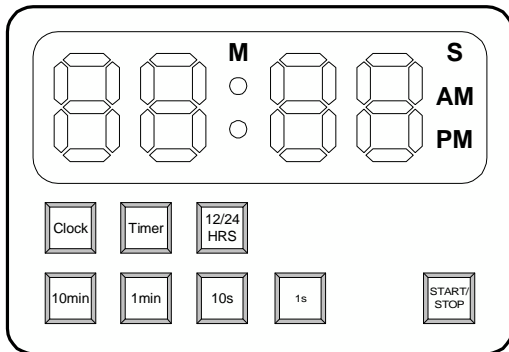
Count up/down timer function

Timer range: 99 min 59 sec

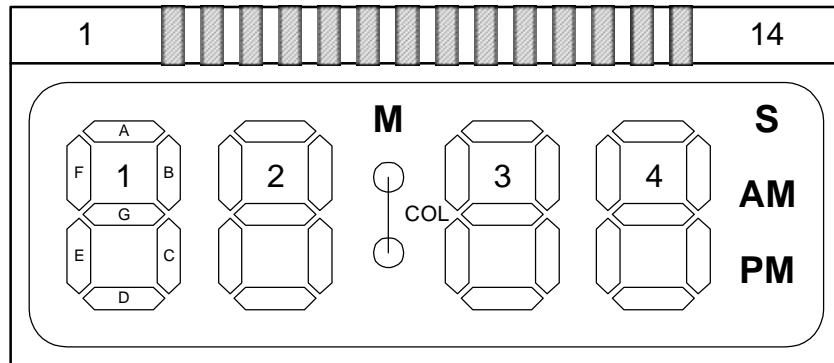
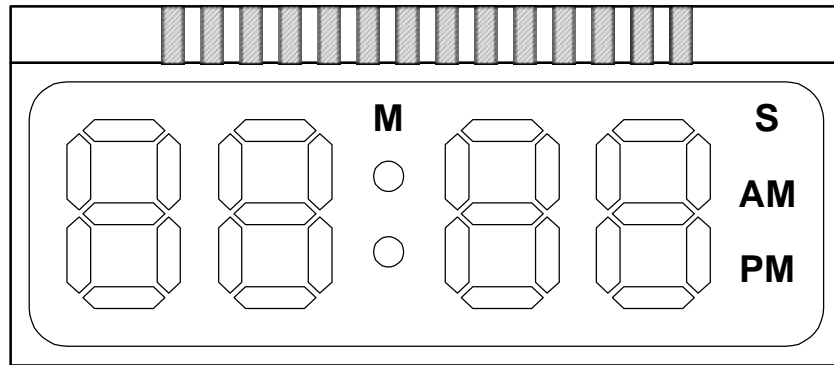
4 type of Keyboard (6 Keys, 8 Keys, 12 Keys, 14 Keys)

Operating voltage 3.0V

Product Outlook



LCD Layout Diagram



| IC Pin | LCD Pin | COM0 | COM1 | COM2 | COM3 | IC Pin | LCD Pin | COM0 | COM1 | COM2 | COM3 |
|--------|---------|------|------|------|------|--------|---------|------|------|------|------|
| SEG21 | 1 | 1A | 1F | 1E | | SEG4 | 8 | 4A | 4F | 4E | |
| SEG12 | 2 | 1B | 1G | 1C | 1D | SEG3 | 9 | 4B | 4G | 4C | 4D |
| SEG10 | 3 | 2A | 2F | 2E | | SEG1 | 10 | S | AM | PM | |
| SEG9 | 4 | 2B | 2G | 2C | 2D | COM5 | 11 | COM5 | | | |
| SEG8 | 5 | M | COL | | | COM4 | 12 | | COM4 | | |
| SEG7 | 6 | 3A | 3F | 3E | | COM3 | 13 | | | COM3 | |
| SEG6 | 7 | 3B | 3G | 3C | 3D | COM2 | 14 | | | | COM2 |

LCD Voltage = 4.5 Volts

LCD Duty = 1/4

LCD Bias = 1/3

Operation Description

6 Keys Timer with Clock

- **Clock Mode**

- Press **CLOCK** key to change clock mode.

- **Setting of Real Time Clock**

- At clock mode press and hold **CLOCK** key for 1 seconds to set hour and minute.
- The LCD will flash, then press **MIN** or **SEC** key to adjust. Adjust of second will to zero. To rapidly increase the numbers, press and hold until the correct time is achieved.
- The setting mode will automatically revert back to time mode after 1 minute if no changes are made.

- **12/24 Hour Mode Setting**

- Press **12/24HRS** to alternative 12 / 24 hour mode.

- **Timer Mode**

- Press **TIMER** key to change timer mode

- **Count Up Timer**

- In timer mode, press **START/STOP** key will count up when the timer value is zero. M and S on LCD display will flash.
- Press **START/STOP** key will stop the timer when counting up.
- Press **START/STOP** key without change the timer value will continue to count up. If the timer value have been changed, press **START/STOP** key will count down.
- The count up timer range is 99 min. 59 sec.
- When the timer value is over 99 min. 59 sec. It will be reset to 00 min. 00 sec. and count up automatically.
- Press **M** and **S** keys at same time will reset the timer.

- **Count Down Timer**

- In timer mode, press **M** or **S** key to adjust the timer value. Then press **START/STOP** key will count down. M and S on the display will flash.
- Press **START/STOP** key will stop the timer when counting down.
- Press **START/STOP** key will continue to count down when the timer value is not 00 min. 00 sec.
- When the timer count down to 00 min. 00 sec., the alarm sounds 1 min. Then reload the timer value.
- Press **M** and **S** keys at same time will reset the timer.

8 Keys Timer with Clock

● Clock Mode

- Press **CLOCK** key to change clock mode.

● Setting of Real Time Clock

- At clock mode press and hold **CLOCK** key for 1 seconds to set hour and minute.
- The LCD will flash, then press **10min** , **1min** , **10sec** or **1sec** key to adjust. Adjust of second will to zero. To rapidly increase the numbers, press and hold until the correct time is achieved.
- The setting mode will automatically revert back to time mode after 1 minute if no changes are made.

● 12/24 Hour Mode Setting

- Press **12/24HRS** to alternative 12 / 24 hour mode.

● Timer Mode

- Press **TIMER** key to change timer mode

● Count Up Timer

- In timer mode, press **START/STOP** key will count up when the timer value is zero. M and S on LCD display will flash.
- Press **START/STOP** key will stop the timer when counting up.
- Press **START/STOP** key without change the timer value will continue to count up. If the timer value have been changed, press **START/STOP** key will count down.
- The count up timer range is 99 min. 59 sec.
- When the timer value is over 99 min. 59 sec. It will be reset to 00 min. 00 sec. and count up automatically.
- Press **M** and **S** keys at same time will reset the timer.

● Count Down Timer

- In timer mode, press **M** , **S** , **10min** , **1min** , **10sec** or **1sec** key to adjust the timer value. Then press **START/STOP** key will count down. M and S on the display will flash.
- Press **START/STOP** key will stop the timer when counting down.
- Press **START/STOP** key will continue to count down when the timer value is not 00 min. 00 sec.
- When the timer count down to 00 min. 00 sec., the alarm sounds 1 min. Then reload the timer value.
- Press **M** and **S** keys at same time will reset the timer.

14 Keys Timer with Clock

● Clock Mode

- Press **CLOCK/TIMER** key to change clock mode.

● Setting of Real Time Clock

- At clock mode press and hold **CLEAR/SET TIME** key for 1 seconds to set hour and minute.
- The LCD will flash, then press **0** to **9** keys to adjust. Adjust of second will to zero. **The Time showing will roll from the Right to Left.**
- In 12 hour mode, press **START/STOP** can switch AM and PM.
- Press **CLEAR/SET TIME** in setting mode will cancel the setting and go back to clock mode.
- If the input is correct, it will go back to clock mode automatically.
- The setting mode will automatically revert back to time mode after 1 minute if no changes are made.

● 12/24 Hour Mode Setting

- Press **12/24HRS** to alternative 12 / 24 hour mode.

● Timer Mode

- Press **CLOCK/TIMER** key to change timer mode

● Count Up Timer

- In timer mode, press **START/STOP** key will count up when the timer value is zero. M and S will flash.
- Press **START/STOP** key will stop the timer when counting up.
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- The count up timer range is 99 min. 59 sec.
- When the timer value is over 99 min. 59 sec. It will be reset to 00 min. 00 sec. and count up automatically.
- Press **CLEAR/SET TIME** key will reset the timer.

● Count Down Timer

- In timer mode, press **0** to **9** keys to adjust the timer value. **The Time showing will roll from the Right to Left.** Then press **START/STOP** key will count down. M and S on the display will flash.
- Press **START/STOP** key will stop the timer when counting down.
- Press **START/STOP** key will continue to count down when the timer value is not 00 min. 00

sec.

- When the timer count down to 00 min. 00 sec., the alarm sounds 1 min. Then reload the timer value.
- Press **CLEAR/SET TIME** key will reset the timer.

12 Keys Timer

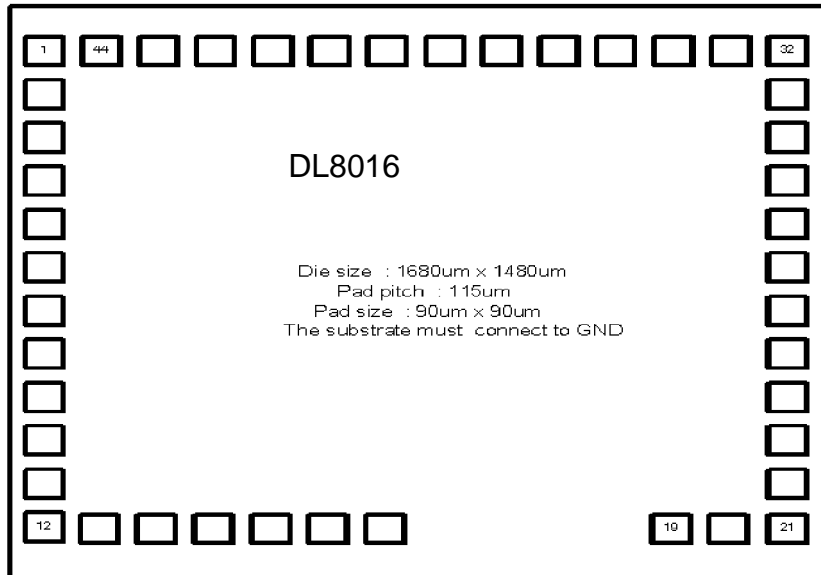
● Count Up Timer

- In timer mode, press **START/STOP** key will count up when the timer value is zero. M and S will flash.
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- The count up timer range is 99 min. 59 sec.
- When the timer value is over 99 min. 59 sec. It will be reset to 00 min. 00 sec. and count up automatically.
- Press **Clear** key will reset the timer.

● Count Down Timer

- In timer mode, press **0** to **9** keys to adjust the timer value. **The Time showing will roll from the Right to Left.** Then press **START/STOP** key will count down. M and S on the display will flash.
 - Press **START/STOP** key will stop the timer when counting down.
 - Press **START/STOP** key will continue to count down when the timer value is not 00 min. 00 sec.
 - When the timer count down to 00 min. 00 sec., the alarm sounds 1 min. Then reload the timer value.
 - Press **Clear** key will reset the timer.
-

Pad list:



PIN ASSIGNMENT

| No | Name | X | Y | No | Name | X | Y |
|----|------|---------|---------|----|-------|---------|---------|
| 1 | BAK | 77.50 | 1399.10 | 23 | SEG9 | 1602.50 | 344.70 |
| 2 | XIN | 77.50 | 1269.10 | 24 | SEG10 | 1602.50 | 464.10 |
| 3 | XOUT | 77.50 | 1154.10 | 25 | SEG11 | 1602.50 | 579.10 |
| 4 | GND | 77.50 | 1039.10 | 26 | SEG12 | 1602.50 | 694.10 |
| 5 | VDD1 | 77.50 | 924.10 | 27 | SEG21 | 1602.50 | 809.10 |
| 6 | VDD2 | 77.50 | 809.10 | 28 | SEG22 | 1602.50 | 924.10 |
| 7 | VDD3 | 77.50 | 694.10 | 29 | SEG23 | 1602.50 | 1039.10 |
| 8 | CUP1 | 77.50 | 579.10 | 30 | IOA1 | 1602.50 | 1154.10 |
| 9 | CUP2 | 77.50 | 464.10 | 31 | IOA2 | 1602.50 | 1269.10 |
| 10 | COM1 | 77.50 | 349.10 | 32 | IOA3 | 1602.50 | 1399.10 |
| 11 | COM2 | 77.50 | 224.50 | 33 | IOA4 | 1472.50 | 1399.10 |
| 12 | COM3 | 77.50 | 77.50 | 34 | IOB1 | 1357.50 | 1399.10 |
| 13 | COM4 | 207.50 | 77.50 | 35 | IOB2 | 1242.50 | 1399.10 |
| 14 | COM5 | 322.50 | 77.50 | 36 | IOB3 | 1127.50 | 1399.10 |
| 15 | SEG1 | 437.50 | 77.50 | 37 | IOB4 | 1012.50 | 1399.10 |
| 16 | SEG2 | 552.50 | 77.50 | 38 | IOC1 | 897.50 | 1399.10 |
| 17 | SEG3 | 667.50 | 77.50 | 39 | IOC2 | 782.50 | 1399.10 |
| 18 | SEG4 | 782.50 | 77.50 | 40 | IOC3 | 667.50 | 1399.10 |
| 19 | SEG5 | 1366.80 | 77.50 | 41 | IOC4 | 552.50 | 1399.10 |
| 20 | SEG6 | 1481.80 | 77.50 | 42 | RESET | 437.50 | 1399.10 |
| 21 | SEG7 | 1602.50 | 77.50 | 43 | INT | 322.50 | 1399.10 |
| 22 | SEG8 | 1602.50 | 224.50 | 44 | TEST | 207.50 | 1399.10 |