

4x4 KEYPAD FOR DM BASED QUEUE MANAGEMENT SYSTEM

Keypad Configurations & Operating Instruction Manual

Power ON device it will show following screen

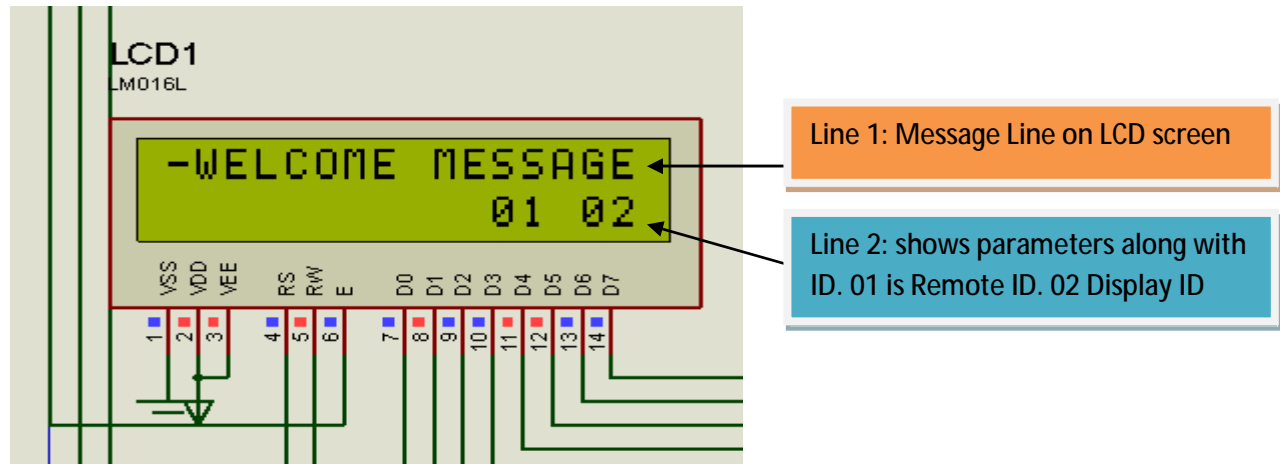


Figure 1: First Screen On Power ON.

Device is set to use default parameters, user can change these parameters from programming mode.

Long press # key to enter into programming mode.

Note: User can input numeric data like ID using numeric keys of keypad.

Press # key to save parameters to memory set in programming mode.

Press * key to exit without saving changes made from programming mode.

1. **Programming Mode:** To enter in to programming mode, long Press # key. User will be prompted to enter password. Enter password 12345.

Following Parameters to be set by user:

- a. **Display ID:** User will be prompted to set Display ID. Display ID is ranging from 01 to 32 for slave display to which this remote keypad is attached with. To enter numeric values, use numeric keys of keypad. Press 'A' key to move on to next parameter. If user doesn't want to change value of display ID, simply press 'A' key, it will take default value.
- b. **Remote ID:** User will be prompted to enter remote ID. Remote ID is ranging from 01 to 32. To enter numeric values, use numeric keys of keypad. Press 'A' key to move on to next parameter. If user doesn't want to change value, simply press 'A' key, it will take

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default value. **Note: it is not necessary that Display ID and remote ID are same. It can be different but should be within range.**

- c. Digit Selection: User will be prompted to select digits 2 digit or 3 digits. if its ticket number will be 2 digits i.e. from 00 to 99 or 3 digit i.e. from 000 to 999. Press numeric 2 key for 2 digit and numeric 3 key for 3 digit values. Press 'A' key to move on to next parameter. If user doesn't want to change value, simply press 'A' key, it will take stored value from its memory if any.
- d. Buzzer: User can keep key press tone ON or OFF. If buzzer is OFF, no sound will be produced on key press. Press numeric 1 key for Buzzer ON, numeric 0 to keep Buzzer OFF. Press 'A' key to move on to next parameter. If user doesn't want to change value, simply press 'A', it will take default value.
- e. Service Mode: User needs to select for single service or multiple service. To enter numeric values, use numeric keys of keypad. Press numeric 0 key for single service and numeric 1 key for multiple services. Press 'A' key to move on to next parameter. If user doesn't want to change value of display ID, simply press 'A' key, it will take stored value from its memory if any.
- f. Service ID: User needs to choose service ID ranging from A to Z for multiple services. If single service is chosen, this menu will not appear. Press 1 key to scroll from A to Z or press 0 key to scroll from Z to A. Press 'A' key to move on to next parameter. If user doesn't want to change value, simply press 'A' key, it will take stored value from its memory if any.

Once all parameters are selected press # key to save all parameters permanently in memory and exit from programming mode. Any changes made will be saved in memory.

Or any time user can press * key to exit from programming mode without saving any changes made. All changes made will be discarded.

Now device is ready to use. On LCD screen it will display last number it called.

- 2. Here are key combinations mentioned for various functions of Remote keypad:
 - a. Next Number: press 'D' key then press # key (i.e. D+#). This will call next number. Say last number served with service A was A022, it will call A023.
 - b. Previous Number: press 'B' key then press # key (i.e. B+#). This will call previous number. Say last number server by service A was 045 it will call A044.
 - c. Repeat Number: Press 'A' key then press # key (i.e. A+#). Call same number again. Say last number called by this keypad is A045, it will repeat this number again.

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- d. Clear Count Number: Long press 'C' key for minimum 3 seconds. User will be prompt with message to "Clear ?". Press # key to clear count values. Press * key to cancel it. Once clear is confirmed, it cannot be undone. Then count will start from 000.
- e. Call Emergency Number: Long press 'B' key, and then enter number then press # key. Say user needs to call 67 as an emergency number. Then long press B then enter 67, it will call A067(say Remote is having service ID A). now once this emergency number is served, user when press next , it will call last served number. Say last server number was 47, so after serving emergency number, A067 when next is pressed, it will call A048.
- f. Call Direct Number: Long press 'A' key, then enter number then press # key. User can call a direct number say 11. Enter 011 as it will prompt on screen to enter direct number to be called. Say device is having service ID A , so it will call A011. Now as A011 is served, and next is pressed, it will call A012 and it will go up to A999.

Note: digit selection and service ID should match as it is synchronized with PC, Master Display.

There are two types of services:

1. Single service Multiple Counters: Single service will be served by all counters max 32 counters can be connected. Every counter (Slave) will have some unique ID (01 to 32), keypad will have unique ID (01 to 32). Here token configuration will be controlled at master display. Say counter 01 pressed next, current serving number at master is 128 → 02, so it will now show 129 → 01, so counter with ID 01 will serve token number 129. Now say counter 16 pressed next so master will update to 130 → 16. Whenever Master Display receives next call from any of counter it will display next number, this incremented number would be displayed over Master Display, Slave Display and on Keypad LCD.
2. Multiple Service Multiple Counters: With this configuration, there may be same service offered at few counters. Every counter (Slave) will have some unique ID (01 to 32), keypad will have unique ID (01 to 32), and there will some service ID. Max 10 services can be offered (A,B,...Z)(Though 26 alphabets are there but user can use any of 10 only, once 10 services get registered, 11 will get discarded). Every service will have unique alphabet but some counters can have same service alphabet. Master Display will always have ID 00. So whenever counter keypad press next, Master display will check its service alphabet, and update the Display to its new count. Say Counter 01 pressed next, it has service alphabet A, Master will check counter ID with its service alphabet and say last server number with A service ID was 022 new would be 023 so Master will display A023 → 01 and same will be updated to Slave display and Keypad LCD. If there is now

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next pressed from counter 12 with service ID B, master display will check its service ID, look for last served number, updatar new number to Master, Slave and Keypad

Various parameter values are shown on screen, have a look at below figures to see what it shows.

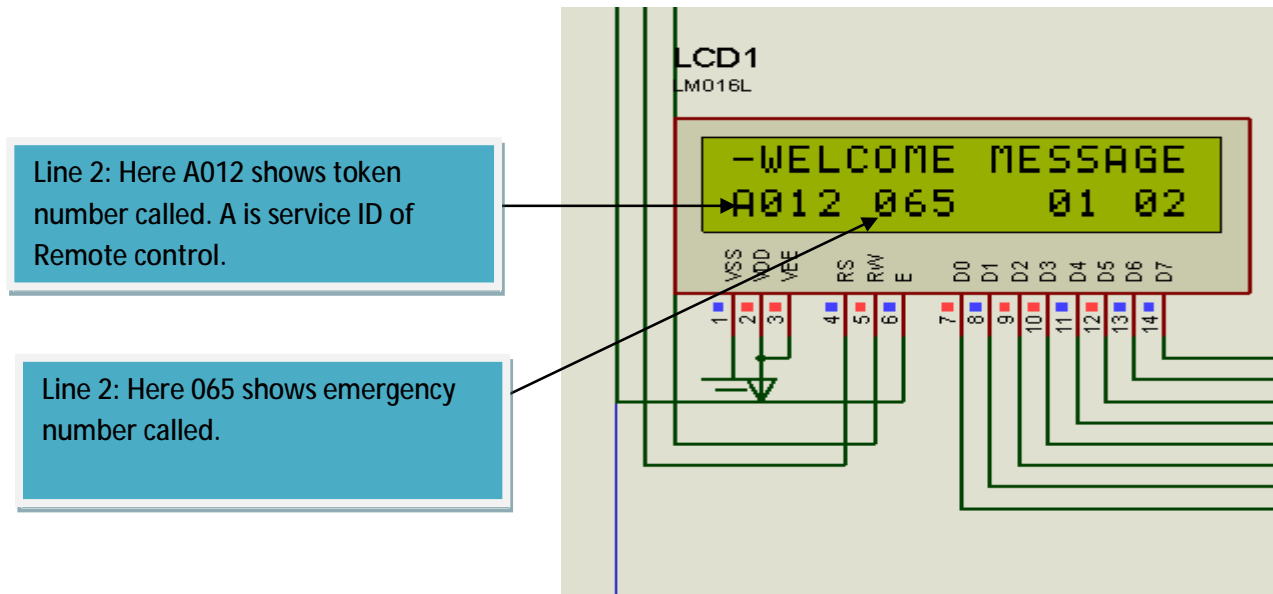


Figure 2: Emergency Number and Token Number

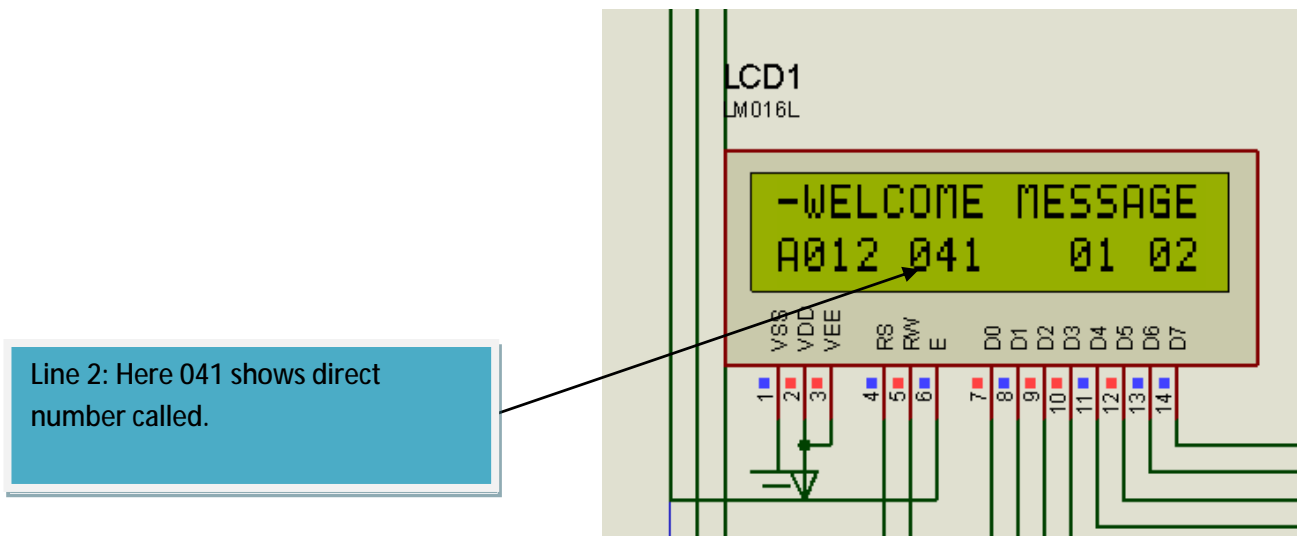


Figure 3: Direct Number As Entered By User.