

Instruction Manual

16 series message display

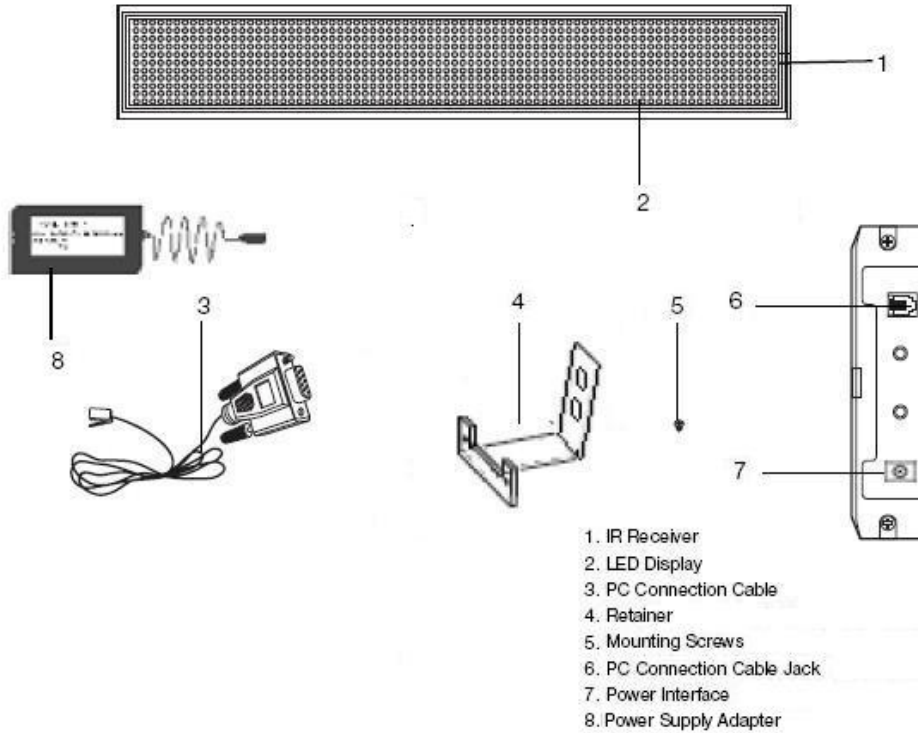


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INSTRUCTION

Operating Elements



Electric Table

Model	Power supply types	Power supply parameter	
		Input	Output
LZ-16*128IDM-D500+R+RS232	Internal power supply	100-240V	12V4A
LZ-16*160IDM-D500+R+RS232	Internal power supply	100-240V	12V5A
LZ-16*192IDM-D500+R+RS232	External power supply	100-240V	5V30A
LZ-16*256IDM-D500+R+RS232	External power supply	100-240V	5V30A
LZ-16*128SDP-D500+R+RS232	Internal power supply	100-240V	12V4A
LZ-16*160SDP-D500+R+RS232	Internal power supply	100-240V	12V5A
LZ-16*192SDP-D500+R+RS232	External power supply	100-240V	5V30A
LZ-16*256SDP-D500+R+RS232	External power supply	100-240V	5V30A

Warning:

Be certain that the voltage information of the device matches your power supply.

Safety Instructions

For your own safety, do not connect the device to the network until you have fully read these instructions. The following basic safety measures must be followed when using the device.

- Store the instruction manual nearby in order to be able to consult it when needed at all times.
- This instruction manual must also be provided if the device is given to a third party.
- Do not use the appliance outdoors.
- Protect the device from extreme heat, direct sunlight and dust.
- Only use the device at moderate latitudes, avoid tropical and particularly damp climates.
- Protect the appliance from any moisture, including splashes and dampness.
- Before connecting the device to the power supply, make sure that the line voltage and type of electricity match the information of **[ELECTRIC TABLE]**.
- Do not use near water e.g. bathtub, basin, sink, washtub, in a damp basement or near a swimming pool.
- Do not bend the cable. Do not leave the cable near sharp edges.
- Regularly check the device for damage.
- If the power cable is damaged, it must be replaced by a professional.
- Do not open the housing under any circumstances.
- Do not attempt to repair the device yourself under any circumstances.
- Consult a retailer or qualified customer service provider for maintenance and repair.
- Avoid areas with insufficient ventilation (book cases, behind curtains, between pieces of furniture).
- Ensure that the air vents of the device are not covered by newspapers, table cloths, curtains, etc.
- Always use the plug to disconnect from the power supply, do not pull the cable.
- The plug must be accessible at all times.
- In case of emergencies, immediately remove the plug from the socket.
- Remove the plug from the socket if the device is not being used for long periods of time.
- Do not place any objects filled with liquids, such as vases, on the device.
- Do not place any objects with open flames, such as candles, on the device.
- Do not let children use the device unsupervised.
- Place the device on a level surface. Mount the device on the wall professionally in order to avoid it falling and injuring others.
- The device does not contain any components that can be repaired by the end user. Never attempt to repair the appliance by yourself. Allow the device to be repaired by customer services to similarly qualified person, using original replacement parts.
- **Warning:** In the event of a malfunction due to electrostatic charging and electrical short circuiting, reset the device by disconnecting it from the power supply.
- Please dispose of used batteries in an ecological manner.
- Improper disposal of rechargeable batteries endangers the environment and your health

Remote Control

Inserting Batteries

Open the battery tray of the remote control.

Insert the two batteries provided (type LR3/R3/AAA) in the tray. Note the polarity (+/-).

Close the battery tray.

- Only use the recommend battery type or that of equal value.
- Batteries of different types or combinations of old and new batteries may not be used together.
- The batteries should be removed if the device will not be used for a long period of time.
- Immediately remove dead batteries from the battery tray in order to avoid leakage.
- If the batteries have leaked, remove them carefully using a cloth and dispose of them in an ecological manner. Wipe the battery tray clean with a cloth.
- If battery acid comes into contact with your skin or eyes seek medical attention immediately.

Use

Point the remote control at the IR receive and press the desired button. Be certain that there are no objects between the remote

Environmental protection



Do not put your used batteries, nickel cadmium, rechargeable, round cell or starter batteries in with your household rubbish. Take them to an appropriate disposal/collection site

Environmental Protection



Discarded electric appliances are recyclable and should not be discarded in the domestic waste! Please actively support us in conserving resources and protecting the environment by returning this appliance to the collection centers (if available).

Beginning Use

Wall Installation

- Drill four holes for both Wall Retainers with relevant screws on the installation location. Keep the distance between the retainers as large as possible on both sides (no more than the length of the whole display) in order to provide good stability.
- Remove the Plastic Side Cover, and then slide the Bar Display into the Wall Retainers.
- The mounting screws are screwed into the small holes of the both Wall Retainer to hold the Display in place.
- Replace the Plastic Side Cover.
- The device will give an acoustic signal when it is turned on
- Do not attach the power cable with nails or screws, let it hang loose or hang it from anything. Do not place the power cable in the vicinity of fluids or chemicals.
- An acoustic signal will be given when a button on the remote control is pressed.



Consult a professional if you don't feel capable of installing the device.

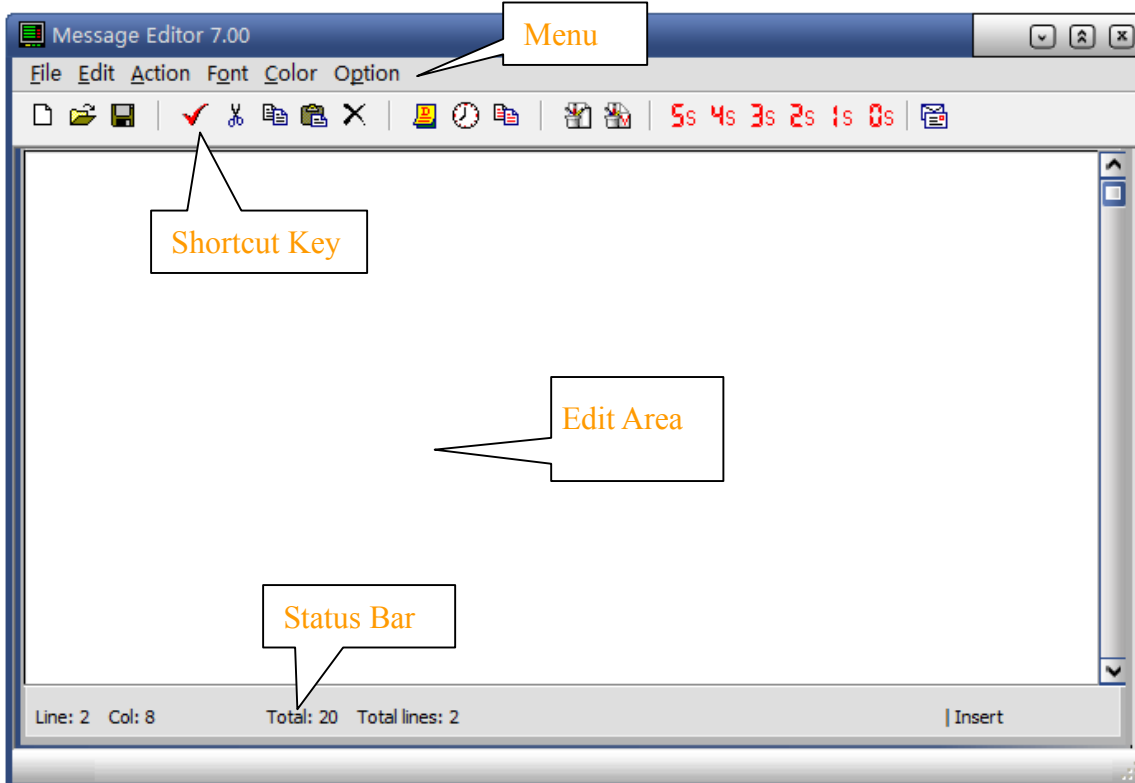
Note:

The device can be operated via remote control or with PC cable and software provided. In the following, both of them will be introduced.

Software -Operation

Window for Message Editing *Message Editor 7.00*

- Click on MsgEditor7.0→MsgEditor 7.0 to open the Message Editor. The following window will appear:



Menu Description:

Item	Name	Description
File	New	Create new message
	Open	Open file
	Save	Save message
	Save As	Save message to another file
	Exit	Exit the software
Edit	Select All	Select Mark all
	Copy	Copy
	Cut	Cut
	Paste	Paste
	Del	Delete
	Copy text to Clipboard	Copy text to clipboard
	Cut text to Clipboard	Cut text to clipboard
	Paste Text from Clipboard	Paste text from clipboard
Action	See Appendix I	
Font	See Appendix II	
Color	See Appendix II	
	Date...	Insert current date

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	Time	Insert current time
	New Page	Open new page
	Europe Character	Insert European symbol
	Pause	See Appendix II
	Graphics...	Insert image(*.jpg,*.bmp)

Shortcut Key Description:

New	Create new message
Open	Open file
Save	Save message
Select	Select mark all
Cut	Cut
Copy	Copy
Paste	Paste
Del	Delete
Date...	Insert current date
Time	Insert current time
New page	Open new page
Picture Load	Insert image(*.jpg,*.bmp)
Picture View	Preview of the inserted image
Pause 0-5 s	A corresponding pause(0-5 s) will be inserted after the message appears
Transmit	Transfer message to LED display

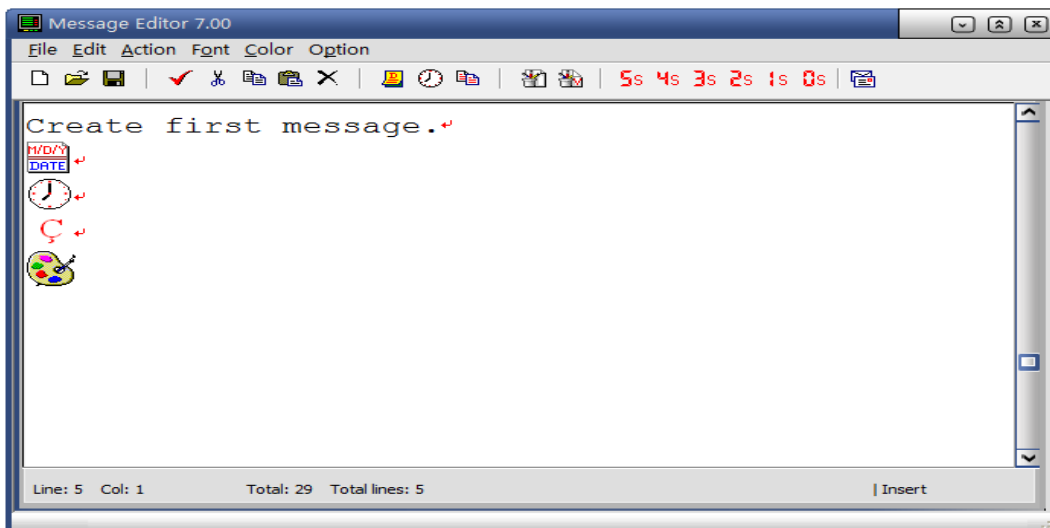
Software - Text, Date, Time, Special Symbols, Image and Saving

Create and Save a Simple Message with Text, Date, Time, Special European Symbols and Image

- Open the message editing window

Text

- Create the following message:

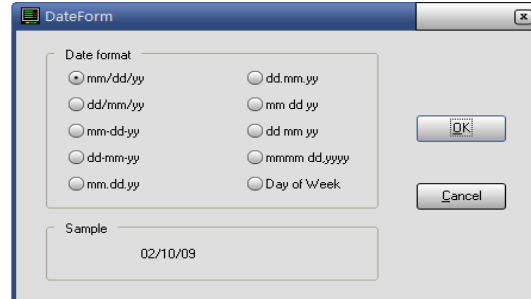


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- Enter the text as the illustration.
- Inserting a line break with the computer keyboard causes each line to be displayed individually on the LED display.

Date

- Enter the date in the same manner, using the shortcut key(Date) or Click on **Option → Date**. A window will open in which you can select the date format. Click **OK** to apply the settings or **Cancel** to stop. You will find an example on the Sample.

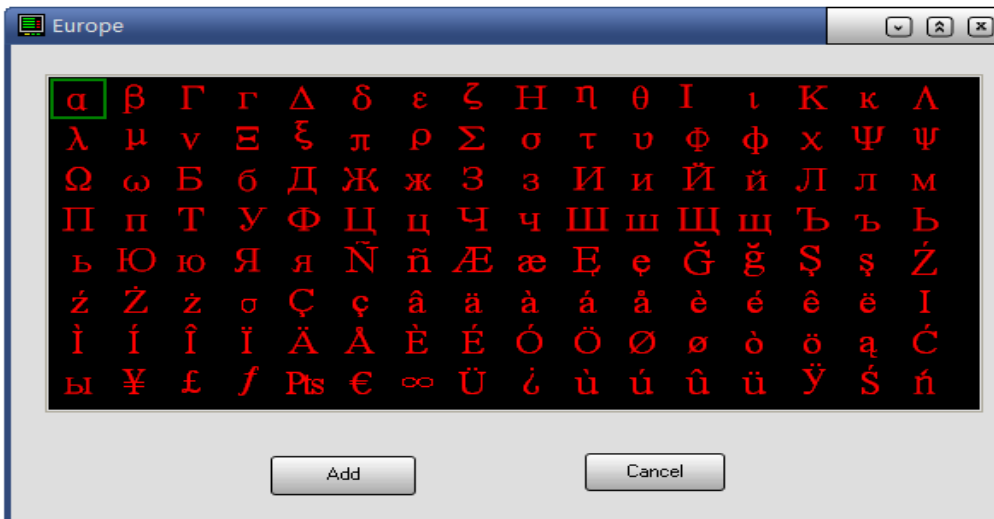


Time

- To enter the time, using the shortcut key(Time) or click on **Option → Time**.

Special European Symbols

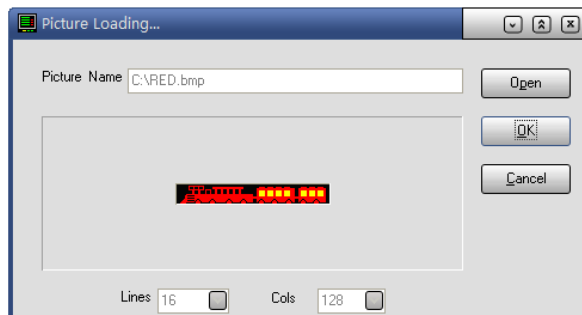
- Click on **Option → Europe Character**. A window with the available symbols will open.



- Select a symbol by clicking on it. To insert it, click **Add**. Click **Cancel** to close the window.

Insert an Image

- Images can be inserted as *.bmp or *.jpg formats.
- Click the shortcut key(Load Picture) or click **Option→Graphics** to insert the image. Select the image and click **Open**.
- The window “Picture Loading...” will open. Click **OK** to insert the image.**Open** to load a new image or **Cancel** to stop.



- You can see the image which you are insert to the edit area by click the shortcut key(Picture View).

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Note: The default size of the LED display is 16 x 128 pixels. The photo size need correspond with the LED display.

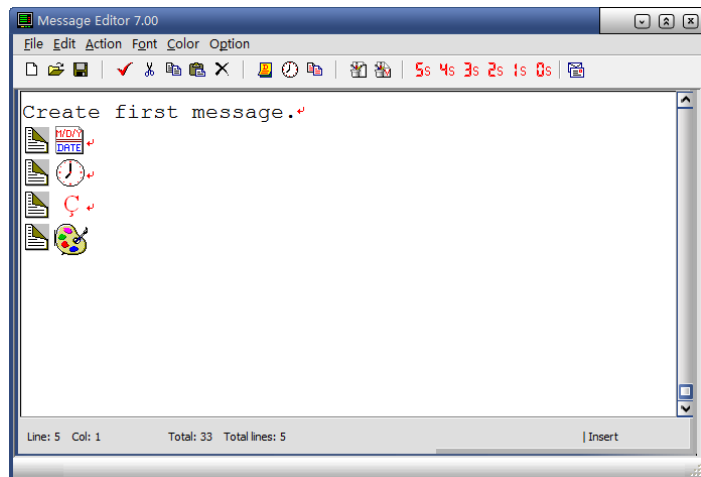
Saving, Opening and Creating New Messages

- To be able to return to a message at a later time, click File→Save and save the message with a file name. If you would like to save the same message under a different name, click File→Save As... and save the message again. To return to the message later, click File→Open and then open your saved message. To open or save, you can also use the shortcut key (Open) and shortcut key (Save).
- To create a new message, click **File→New** or shortcut key (New).

Software – Insert Pages

Insert a New Page

- You can save a maximum of 255 pages (messages) per message. and each page at most include 116 characters.
- To insert a new page, click the shortcut key (New Page) after entering a paragraph or click **Option→New Page**.



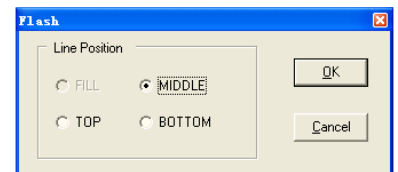
Software – Single Column / Double Column Displays

Display Methods – Single Column / Double Column Display

- The type of action must be inserted prior to the text to be displayed.
- Click Action. Click the desired action. A dialogue window will open. You can determine where (Top, Middle or Bottom) placed the message
- If you would only like to create, for example, a one column message with two words without a paragraph break, a different action can be chosen for each word and one can be placed on top and the other on the bottom. When the message is transferred, one word will be on top and the other word will be on the bottom. Note that font sizes larger than 16 cannot be used for two column messages.
- These settings can also be used for one column displays. Select top, bottom or middle accordingly.

Flash
Hold
InterLock
Roll ▶
Scroll
Slide
Rotation
Snow
Sparkle
Spray
Starburst
Switch
Twinkle
Wipe ▶
Shutter

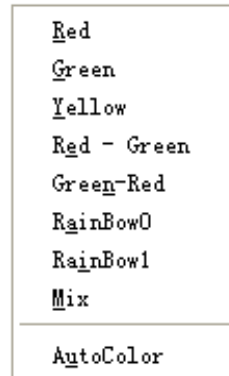
Auto Mode



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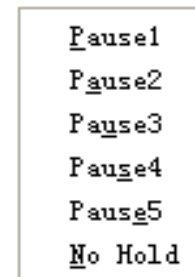
Font and Color

- Click **Font** and select the desired font.
- Always insert the font before the text to be displayed.
- Click **Color** and select the desired color.
- Enter the Welcome and press the enter key on your keyboard to move to the next column.
- Choose a different font size.
- Choose a different color, if you would like.
- Now enter the text Home.

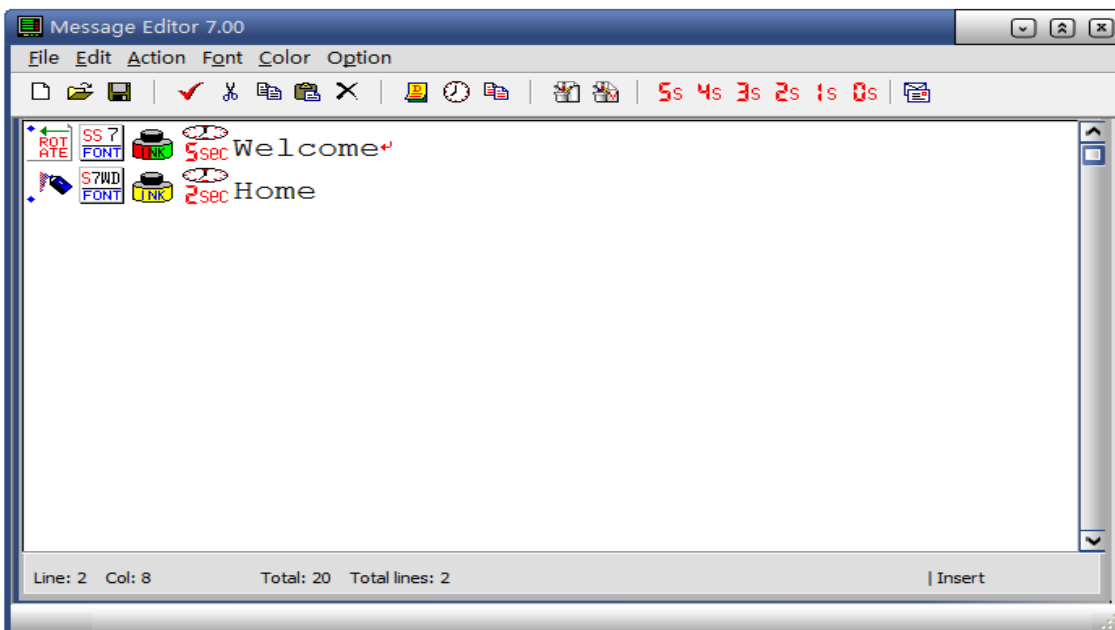


Insert a Pause

- A pause means that the text will be displayed longer.
- Click **Option**→**Pause**.
- Click the desired pause.
- Insert pauses before the text.



The Completed Message:



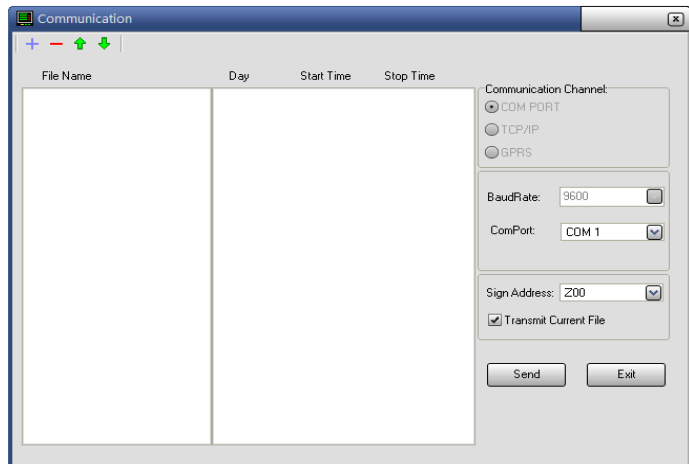
Software – Transfer Message to the LED Display

- After editing the message, click the shortcut key(Transmit) or click **File**→**Transmit...**
- The *Communication* window will open and you need choose one way to transfer.

Software – Transfer Message to the LED Display

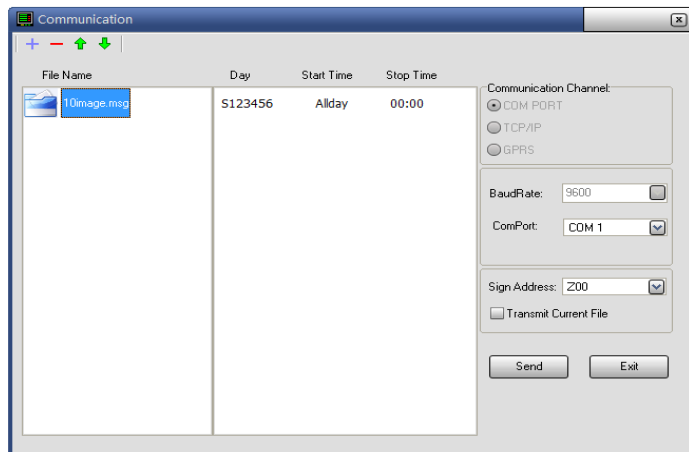
Transmit Single File

- Make sure **Transmit Current File** is checked.
- If you are using only one LED display, leave the **Sign Address** at **Z00**. The **Sign Address** can be changed if multiple LED displays will be operated via the same serial connection.
- Choose the right ComPort.
- Click **Send** to begin the transfer.
- Click **Exit** to close the window.



Transmit Multi File

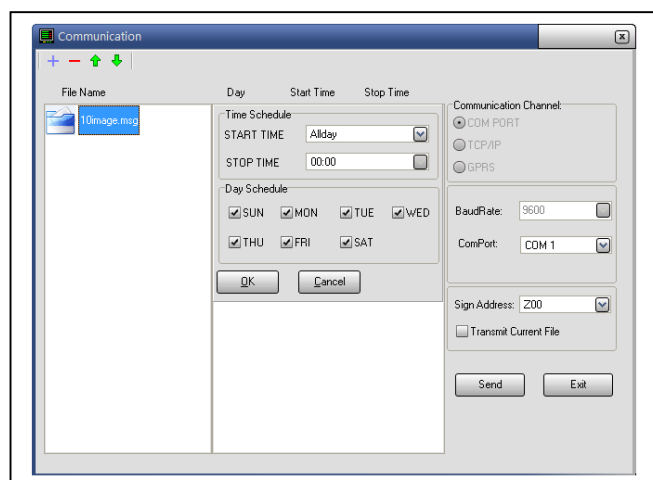
- Make sure **Transmit Current File** is unchecked
- If you are using only one LED display, leave the **Sign Address** at **Z00**. The **Sign Address** can be changed if multiple LED displays will be operated via the same serial connection.
- Click button **+** to add some file or using button **-** to delete some file. You can use button **↑** and button **↓** while you want to adjust the file sequence.
- Choose the right ComPort.
- Click **Send** to begin the transfer.
- Click **Exit** to close the window.



Software – PC Synchronization and Programming

Time Programming

- A fade up and fade down time can be specified for each message.
- Open the communication window. Double click the filename. the time schedule and day schedule will appear.
- Set the start and stop times and the days of the week on which the message should be displayed..
- Click **Send** to transfer the messages.
- The messages will now be displayed and faded out at the programmed times.



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Appendix I:

LED Display	Description	LED Display	Description
Auto	Automatic by device	Wipe Out	Wipe from the middle outwards
Hold	Immediate display	Wipe Middle	Wipe from the middle
Rotate	Rotate	In lock	Interlocking
Scroll	Rollen	Slide	Slide from right to left
Roll Left	Scroll left	Spray	Spray
Roll Right	Roll right	Shutter	Shutter
Roll Up	Roll up	Snow	Snow
Roll Down	Roll down	Stburst	With flashing star animations
Roll Out	Scroll out wards	Switch	Weave vertically
Roll In	Scroll inwards	Sparkle	Sparkle
Wipe Left	Wipe Left	Flash	Flash
Wipe Right	Wipe Right	Twinkle	Twinkle
Wipe Up	Wipe upwards	For short forms, please see Remote Control- Change the Font, Colour, Pause and Display Method	
Wipe Down	Wipe downwards		
Wipe In	Wipe inwards		

Appendix II:

Function	Description	LED Display	Function	Description	LED Display
Font	Sans Serif 7	SS7	Color	Red	RED
	Sans Serif 7 Wide	SS7W		Green	GREEN
	Sans Serif 7 double	SS7D		Yellow	YELLOW
	Sans Serif 7 d-wide	SS7WD		Rainbow 0	RAINBOW 0
	Serif 7	SF7		Rainbow 1	RAINBOW 1
	Serif 7 double	SF7D		Green on Red	GR
	Serif 12	SS16		Red on Green	RG
	Serif 16	SF16		Mix	MIX
Pause	Pause 1	P05	AutoColor	AUTO	
	Pause 2	P04			
	Pause 3	P03			
	Pause 4	P02			
	Pause 5	P01			
	NO HOLD	P00			

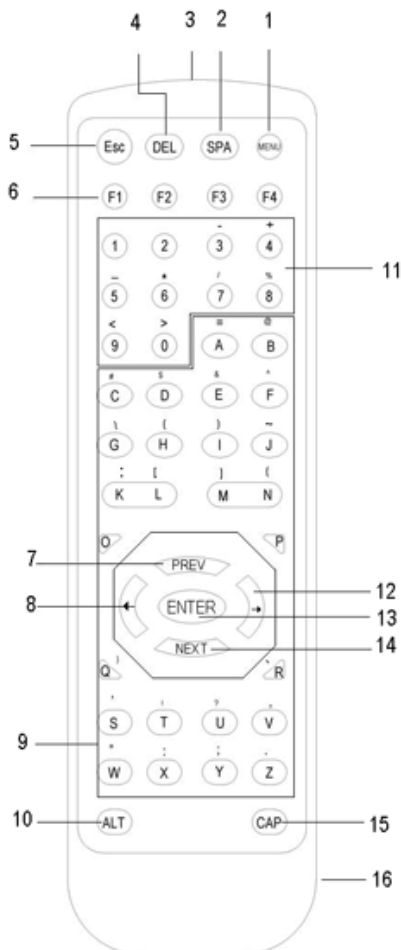
16pixel High Series LED Sign's Remote Control User Manual

One: Foreword,

All 16 pixels high series LED Sign has two operation styles, through software on computer (PC) or through remote control only. For the first style, refer to 《LED Sign software user manual》.

The LED Sign use high sensitivity IR(Infra-red)remote control to input message, make sequence, check status, setting, testing, etc.

Two: Remote Control Buttons



1. MENU Button (Open Menu)
2. SPA Button (Blank Spaces; Input Time and Date)
3. IR Sensor
4. DEL Button (Delete Last Entry)
5. ESC Button (Leave Menu; Go One Step Back)
6. F1-F4 Buttons (Program Messages)
7. PREV Button (Previous Selection)
8. ◀ Button (Select)
9. Alphanumeric Buttons (Input Letters and Numbers)
10. ALT Button (Button for Upper Characters on Keys)
11. Alphanumeric Buttons (Input Numbers and Symbols)
12. ▶ Button (Selection)
13. ENTER Button (Confirm)
14. NEXT Button (Next Selection; Save)
15. CAP Button (Switch Between Upper and Lower Case Letters)
16. Battery Tray (Rear Side)

Not Illustrated:
2 Batteries LR3/R3/AAA
Installation CD-ROM

Explanation:

1. MEUN button, when in message displaying, press MEUN button, it will enter MENU. After message editing, press MEUN button, it will ask if to save. In different menu or in editing interface, press ESC button, it will stop editing or back to upper menu, or begin displaying message. (If no editing has done, pres ESC to exit, and press ENTER to confirm it will not ask if to save)
2. ENTER button, press it to confirm and back.
3. ALT button. The remote control doesn't support pressing two buttons simultaneously, so to realize button combination function, you need two steps, press ALT button at first, the press the character or number button. For example, to input symbol '[' (its corresponding key is 'L'), two steps: press ALT button at first, then press 'L'. You can use method to input below symbols: ~!@#\$\$%^&*()_+|`-={}[]:";'>?./,<

Three: Special function button

ESC: back without save

DEL: delete

SPA: space

MENU: Main menu

F1: text properties (Font\Color\Pause\Action)

F2: to set message's display location on the Sign

F3: To insert European symbol

F4: insert/delete page(message)

PREV: previous

NEXT: next

<-: move to left

->: move to right, and one combination button for testing

ENTER: confirm

ALT: to input punctuation, symbol

CAP: switch between upper and lower case

Four: Menu & Function

Main Menu:

When in message displaying, press MEUN button, it will enter MENU, which has 5 submenus, press PREV, NEXT to select one submenu, then press ENTER to confirm, or press ESC to back to MENU.

1.EDIT RUN SEQUENCE

2.EDIT FILES

3.SETUP TIME & DATE

4.SETUP PANEL ID

5.SYSTEM OPERATION

1) EDIT MEUN SEQUENCE: set message displaying sequence list, which is comprised of one string of TEXT names. For example, "ABCD" means current displaying messages are A, B, C, and D. One character stands for one file label, it will display as green if the message file is valid, or red if invalid and will not display the message it stands for.

Note: If the sequence list has no message files, the Sign will display current time only.

2) EDIT FILES: one file can has many pages; one page is up to 116 ASCII characters.

a) Edit file name

1) In EDIT FILES of main menu, press ENTER to edit file. Display as below:

->FILE : A

A stands for the editing FILE LABEL, which also can be number or special 16

symbol. If A has message inside, it will display as below:

```
->FILE : A *012
```

Explanation:

'*' means the file is not empty, 'g' mean the file is in picture format. 012 means there are 12 pages(messages) inside, max is 999

2) You can move cursor up, down, left, right, or directly input the file label like 'C' to select. Display as:

```
->FILE : C * 012
```

3) Now press ESC to back to main menu, or press ENTER to edit.

b) Edit message

1) If there is message, it will display as below:

```
> Thank You! AAA
```

Now you can input or delete message, each character input will occupy the right end, for example, if you input '!', now it will display as below:

```
> Thank You! AAA!
```

2) Press DEL to delete the character at the right end. If you delete all characters, it will display as below:

```
Empty !
```

3) If you haven't preset character parameters, by default, the characters you input will set as "AutoColor", "AutoMode", pause time at 3 seconds.

4) Press F1 to select Font\Color\Pause\Action, as below:

```
Font Color Pause Action  
SS7 AUTO 03 Automode
```

Now press F to select fonts, press C to select color, press P to select pause

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time, and press A to select action mode.

*** Fonts available as below:**

SS7 : Scansserif 5X7

SS7W : Scansserif wide 5X7

SS7D :Scansserif double 5X7

SS7WD :Scansserif double wide 5X7

SF7 :serifa 5X7

SF7D :serifa double 5X7

SS16: Scansserif 16x12

SF16: serifa 16x12

*** Colors available as below:**

AUTO: can display plenty colors randomly(recommend)

RED

GREEN

YELLOW

RAINBOW0

RAINBOW1

GR: Green on Red

RG: Red on Green

MIX: set color as "Red, Green, Yellow" automatically.

*** Press P to set the message's pause time, default is 3 seconds, as below:**

Font	Color	Pause	Action
SS7	AUTO	=>P03	Automode

Press 0-5 to select, max at 5 seconds. Then press ENTER to confirm and exit.

*** Press A to set action mode, as below:**

Action

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> auto

Select relative number or character to select the action mode it stands for. For example, press C, it will show as below:

> Wipe up

Then press ENTER to confirm and exit.

* Action mode and relative number or character:

Auto mode	0
Hold	1
Rotate	2
Scroll	3
Roll left	4
Roll right	5
Roll up	6
Roll down	7
Roll out	8
Roll in	9
Wipe left	A
Wipe righ	B
Wipe up	C
Wipe down	D
Wipe in	E
Wipe out	F
Wipe midd	G
Interlock	H
Slide	I
Spray	J
Shutter	K
Snow	L

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Starburst	M
Switch	N
Sparkle	O
Flash	P
Twinkle	Q

Note: also can press PREV, NEXT to select action mode.

5) Press F2 to set the message's display location on the Sign, as below:

```
VERI : Middle Top Bottom : M
HORI : Center Left Right : C
```

You can select either of 6 locations from M, T, B, C, L, R. Veri is to set in vertical direction, HORI to set in horizontal direction.

6) Press F3 to set European symbols, as below:

EuroChar: _

Press A button, it will display `1> Ä, Å, å, ä, à, á, â, ã`

Then press 1-9 to select.

7) After you input, press ENT, it will display as below:

Save (Y/N)?

Press Y to save and back to EDIT FILES menu, or press N to not save.

8) Press cursor <UP>, <DOWN> to switch among different pages (messages) within the same file. If it displays the first page now, you press <DOWN>, it will display as below:

Save (Y/N)?

Press Y to save, or press N to not save, then it will display as below:

NewPage(Y/N)?

Press Y to insert a new page, or press N to quit.

3. SETUP TIME & DATE

It will display as below:

> Thu 11:00 2003-05-23

Now MON Thu is in red, press cursor up or down to change the value, or left or right to change the item to be display in red.

4. SETUP PANEL ID.

The Sign's ID has 3-bytes, first one byte is the Sign's model, the last 2 bytes is the Sign's number.

5.SYSTEM OPERATION:

There are 2 submenus here, press PREV, NEXT to select.

>1.Brightness

1) Brightness:

There are 10 brightness levels to select: 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 100%.

2) Clear all files:

>2.Clear All

Press ENTER, it will display as below:

Sure(Y/N) !

Press Y to clear all files, or press N not to clear any and exit.

Five: In main menu, press DEL, SPA, -> one by one to start testing the Sign.