RELIABLE CELLULAR-LIKE TECHNOLOGY

Unique tree network for optimal coverage without interference from existing Wi-Fi networks

EASY PLUG-AND-PLAY SYSTEM Self-networking system enables easy infrastructure setup

EXCEPTIONAL READABILITY

High resolution e-paper display for 180° viewing

LONG BATTERY LIFE & FAST UPDATES

Unique wireless protocol tuned to optimize the power consumption and network efficiency

ANTI-JAMMIMG FROM Wi-Fi 13,500 graphic tags are fully updated per hour

INTELLIGENT SYSTEM Acknowledges updates; battery level and signal strength notifications

ELSA-E Electronic Shelf Labeling System

Ultra-thin · Full graphic Autonomous system · Environmentally friendly







Technical Specification



MODEL NAME: EF22-S2

INFRASTRUCTURE	
SIZE (W x H x T) mm	70 x 37.4 x 9.6
WEIGHT, g	24
ANTENNA	EMBEDDED
NETWORK	
INTERFACE	WIRELESS
FREQUENCY	SUB-GHz ISM
OPERATION MODE	SELF-NETWORKING (AUTOMATIC CONNECTION BUILT-UP AND RECOVERY)
ENCRYPTION	AES 128-bit
TRANSMISSION RANGE	100 METERS (LINE OF SIGHT)
OPERATING CONDITION	S
OPERATING TEMP/HUMIDITY	0 ~ 40°C / 35 ~ 55% (non-condensed)
STORAGE TEMP/HUMIDITY	0 ~ 40°C / 35 ~ 80% (non-condensed)
POWER	1 x CR2450
APPLICATIONS	Retail, Smart Display
Display	
RESOLUTION	250 x 122
DPI	130 pixel

Device Setup:

Access Point Setting

The Access Point has a wired connection to the base station (computer) and communicates wirelessly with the Router(s) via the M2COMM proprietary protocol.

Please refer to below procedure to setup your Access Point.



Status Indicators and Assembly:



LED status functions: Red –Power-on self-test error Green –Power on indicator Blue –Network connection, shall flash slowly during boot-up and stay on while connection is built up successfully.



Green network activity indicator

Access Point - Network Port:

GREEN network activity indicator—turns on when a cable connects the port to another Gigabit Ethernet port YELLOW activity indicator—Flashes to indicate network activity over that port



Attach included Antenna



Plug one end of the supplied Cat 5E cable into the Access Point, the other end should be plugged into your computer.



Connect the supplied AC power adaptor as shown. Use only the adapter that came with your Access Point

Router Setting

The Router(s) operate wirelessly, via the M2COMM proprietary protocol, with the Access Point and aisle light.

Please refer to below procedure to setup the Router.



Status Indicators and Assembly:



LED status functions: Red –Power-on self-test error Green –Power on indicator Blue –Network connection, shall flash slowly during boot-up and stay on while connection is built up successfully.



Attach included Antenna



Connect the included AC power adaptor as shown. Use only the adapter that came with your Router

ELSA-E Demo System IP setting:

The ELSA-E demo system is designed to use either a static IP address for a single Access Point or a dynamic IP address when multiple Access Points are installed.

IP Address Configuration (Static IP):

Ensure that your Access Point is connected to your computer.

The Access Point comes pre-configured with a default IP Address (192.168.2.1). It's necessary to modify the IP Address of the Ethernet port on your computer that is cabled to the M2COMM Access Point so that they can communicate with one another.

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apter settings	View your active networks			
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	Unidentified network Public network	Access type Connection	No Eth	network occess
	Change your networking settings			

Using your computer mouse, click on Ethernet

	15	
eneral		
Connection		
IPv-4 Connect	ivity:	No network access
IPv6 Connect	tvity:	No network access
Media State:		Enabled
Duration:		01:14:14
Speed:		100.0 Mbps
Activity ———		6 9
Activity ———	Sent —	Received
Activity	Sent —	Received

Select Properties



Select Internet Protocol Version 4 (TCP/IPv4), and select Properties

Internet Protocol Version 4 (TCP	/IPv4) Properties X
General	
You can get IP settings assigned this capability. Otherwise, you n for the appropriate IP settings.	automatically if your network supports eed to ask your network administrator
Obtain an IP address auton	nétically s:
IP address:	292 . 368 . 2 . 100
Subriet maski	255 . 255 . 255 . 0
Default gateway:	
C Obtain DIS server address	autometically.
(i) Use the following DNS serve	er addresses:
Preferred DNS server:	
Alternate DNS server:	· · ·
Validate settings upon exit	Advanced
	OK Cancel

Check Use the following IP address and enter information shown above. Select OK to apply new settings

IP Address Configuration (Dynamic IP):

For installations that contain multiple Access Points an external TCP/IP Ethernet hub is required. And please contact M2COMM for further details.

Software Installation:

Put below two executable files into the same folder on your computer. And double-click the "ELSA1.0_2.x.x.xxx.exe" file to begin the installation.

ELSA1.0_2.7.3.638.exe

You may be asked for permission to allow the program to make changes to your computer; you must agree to this to enable installation to start.

Follow the on-screen instructions to finish the installation process.



Click Next> to continue

Please read the following License Agreement. You must accept the terms of this agreement before continuing with the installation. ELSA Software Suite IMPORTANT - READ CAREFULLY: DO NOT INSTALL, COPY OR USE THE ENCLOSED SOFTWARE, DOCUMENTATION (AS DEFINED BELOW), OR ANY PORTION THEREOF, (COLLECTIVELY 'SOFTWARE') UNTIL YOU HAVE CAREFULLY READ AND AGREED TO THE FOLLOWING TERMS AND CONDITIONS. THIS IS A LEGAL AGREEMENT ("AGREEMENT") BETWEEN YOUL (ETHER AN	cense Agreement	
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Select Accept, and Click Next> to continue

Please read the following important informa-	ation boforo continuina	Ľ
Please read the following important informa	adon before contanding.	C
When you are ready to continue with Setu	p, dick Next.	
Version 2.7.3.638		*
- Handheld association page is showing set	rver error after auto uporade	
- Fix failed auto deployment		
- Fix layouts for few stores		
Version 2.7.1.594		
[Update]		
- Update daemon to v2.1.0b (3025)		
Version 2,7.0,584		
[New]		
- PP Scheduler		
- Add / edit XML layout now is being valida	atura	
Pregulation and promotional pictogram re-	atore	×.
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		10

Click Next to continue



Click Install to start



Click *Finish* to complete the installation

The ELSA-E Demo system has now been installed and executed on your computer. The icon will be hidden inside the toolbar, and you should now be able to locate this icon on your computer screen, by right click.

Open in browser (M2COMM ELSA Software)

Show M2COMM ELSA Software console

Turn off M2COMM ELSA Software

And you can also launch the ELSA software by double click the icon on desktop.



Setting Up the ELSA-E 2.7" ESL

Ensure that the Access Point is connected to your computer that the Router(s) and 2.7" ESL are installed throughout your premises and are powered on.

• Install the AP



Input "*sa*" for user name and "*passw0rd*" for password, to access the ELSA web.



Press "Start" to initial the ELSA system installation process.

Input your stor	e name
Store name:	m2comm_test
	Submit

Input the store name, and press *Submit*



ELSA system will find the connected AP, and press "Yes" to confirm

• Preparing the Network



ELSA system will start to find the available wireless channel to use, and the whole process will take 1 hour.

Press "Show detail" for more information.

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		Network Prepa Visu can go to in Jude ch	ration Complete. Hall footers now		
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Press "Install Routers" for next step, when the progress bar reaches to 100%

• Install Router

Power on the Router

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After the ELSA system install the Router automatically, press "Install tags"

Confirmation	
ELSA system found that you have follo	owing routers.
Online router: 1 Offline router: 0 Connecting router: 0 Not registered router: 0	
Do you want to continue?	
Mea	NO

Press "Yes" to confirm the device status and enter to next step

• Install Tags





Select "Keyboard" to input the MAC address posted on the bottom side of the ESL

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Check "Without product" and Press "Power-on"

• Power ON Tags

Щай		
fow do you want to	power-on the tags?	
\frown		

Select "Auto power-on"

Wait for ESL to show the "wakeup" page

• Finish

After several minutes, the ELSA web will show "register finish" page

Total routers to be registered	0
Pedistarad routers unfinished	0
Registered routers - finish	0
Total tags to be registered	1
Registered tags - unfinished	0
Registered tags - finish	1
Total SARA to be registered	0
Registered SARA - unfinished	0
Registered SARA - finish	0

finish

Press "Finish" to leave the installation wizard and back to ELSA dashboard

Load the CSV file to import the inventory list first.

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SV file	inventory99.csv	
	\square	Commence

Result	
Done importing product - New product: 32 - Updated product: 0 - Deleted product: 0 - Associated product changed: 0 - Deassociated tag: 0	
	OK

Press "**OK**" to finish the inventory importing



Switch to "ESL Management" page, and double click the 2.2"ESL

Profile Me	dium 2.2" Red
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Select any one of the product, and press "Save"

ELSA - E (1.0)	RTE: ex (harring year)	80				
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Waiting for the job status become from "Processing" to "SUCCESS"



2.2" ESL shown with image

How to Display FCC ID Label(After certification, display it on the "Pairing Page)

Wake Up the Tag: Ensure the EPD is not blank or shows a "sleep mark" (red/black square in the top-left corner).
 If "sleep mark" present. please activate wake-up mode from ELSA WEB until ED removes the "sleep mark."

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Active wake-up mode from ELSA web

- 2. Switch Screens: Switch the EPD display to the "Pairing Page
 - Select the ED from ELSA WEB, then click the "Show Barcode" button.

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• The ED will be preset to display the "Pairing Page" upon shipment.



2.2" ESL FCC ID display results

Battery Caution:

The elements of the instructional safeguard shall be as follows:

- element 1a: not available
- element 2: "Do not ingest battery, Chemical Burn Hazard" or equivalent wording
 element 3: the following or equivalent text
 [The remote control supplied with] This product contains a coin / button cell battery. If the coin / button cell battery is
 swallowed, it can cause severe internal burns in just 2 hours and can lead to death.
 element 4: the following or equivalent text
 Keep new and used batteries away from children
 If the battery compartment does not close securely, stop using the product and keep it away from children.
 - If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention.

FCC Statement:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-Reorient or relocate the receiving antenna.

-Increase the separation between the equipment and receiver.

-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and a human body.

NCC Statement:

低功率射頻器材技術規範

取得審驗證明之低功率射頻器材,非經核准,公司、商號或使 用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。 低功率射 頻器材之使用不得影響飛航安全及干擾合法通信;經發現有干擾現象時,應立即停用,並改善至無干擾時方得繼續使 用。前述合法通信,指依電信管理法規定作業之無線電通信。低功率射頻器材須忍受合法通信或工業、科學及 醫療用電波輻射 性電機設備之干擾。

M2COMMUNICATION Inc. 17 Floor, No. 32 Gaotie 2nd Road, Zhubei City, Hsinchu County 302, Taiwan (R.O.C.) Tel: +886 3 657 8939 Fax: +886 3 657 6909 http://www.m2comm.co SALES AND SUPPORT: info@m2comm.co

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