

NEC FA & FE Series

LED MODULE

SAFETY MANUAL

LED-FA012i2	LED-FE012i2
LED-FA015i2	LED-FE015i2
LED-FA019i2	LED-FE019i2
LED-FA025i2	LED-FE025i2
LED-FA031i2	LED-FE031i2
LED-FA038i2	LED-FE038i2
LED-FA012i2-SB	LED-FE012i2-E
LED-FA015i2-SB	LED-FE015i2-E
	LED-FE019i2-E

2022-07-13

MODEL: LED-FA012i2, LED-FA015i2, LED-FA019i2, LED-FA025i2, LED-FA031i2, LED-FA038i2
LED-FE012i2, LED-FE015i2, LED-FE019i2, LED-FE025i2, LED-FE031i2, LED-FE038i2

The regulations for this LED Display applied to one of model names listed above.

TABLE OF CONTENT

1	SAFETY AND COMPLIANCE GUIDELINES	3
1.1	Safety Symbols Used in this Manual.....	3
1.2	Qualification of Personnel	3
1.3	Personal Protection	3
1.4	General Safety Guidelines	4
1.4.1	Ambient Temperature	5
1.4.2	Risk of Fire	5
1.5	Safety for Electricity and Power Supply	6
1.6	Installation Setup – Wall Mounting	7
2	DECLARATION OF CONFORMITY.....	8
3	DISPOSAL.....	12
3.1	Within the European Union	12
3.2	Outside the European Union	12
4	COPYRIGHT AND DISCLAIMER.....	13
4.1	Copyright	13
4.2	Disclaimer	13
5	SERVICE & SUPPORT	14

1 SAFETY AND COMPLIANCE GUIDELINES

- Read the instruction manuals carefully and follow the given instructions and safety information thoroughly.
- The operating safety of the system is only ensured through its proper use.
- Only operate the system with supplied accessories and tools.

1.1 Safety Symbols Used in this Manual

Safety instructions emphasize potential hazards for personal injury or property damage. This manual uses the following safety notices to indicate the severity of a potential hazard:

	 WARNING!
	A warning for a potentially hazardous situation that can result in death, personal injury, or property damage if not adhered to.

	 Caution!
	A recommendation for a potentially hazardous situation that may result in personal injury or property damage if not adhered to.

Notice
A recommendation for a potentially hazardous situation that may result in property damage if not adhered to.

1.2 Qualification of Personnel

Only authorized and qualified technical personnel can perform the installation. Before the installation, the installation technician must be convinced of the completeness of the scope of supply including the required accessories. The technician may only use the prescribed network cables, please see the cabling in this manual.

There must be a security officer who is responsible for the security at diverse tasks during the installation.

Only personal qualified by Sharp NEC DISPLAY SOLUTIONS and/or respectively authorized personal may carry out repairs, service and maintenance work on the system. A case of service occurs as soon as one component is damaged in any way, is not fully functional any more.

Only trained personnel, such as electricians or NEC personnel, may connect the internal power supply to mains power supply.

1.3 Personal Protection

	 WARNING!
	Electric shock hazards. Follow the relevant legal electric requirements of the country, where the system will be mounted, installed and operated, as well as the existing regulations of the operator, such as work, operating and safety regulations.

	⚠ WARNING!
	Suspended loads can cause severe head injuries. Wear safety helmets when working with suspended loads.

	⚠ Caution!	
	Risk of crushing and product damage due to heavy weight of the product. • When assembling heavy objects, take great care to avoid crushing hands or limbs. • Treat the cabinets with great care while lifting, placing or transporting them to avoid injuries and damages at the cases or LED pixel cards.	

1.4 General Safety Guidelines

	⚠ WARNING!
	Risk of electric shock or fire due to high-voltage components. • Do not expose this unit to rain or moisture. • Do not submerge this unit partially, or completely in water, or liquids. • Do not use this unit's polarized plug with an extension cord receptacle or other outlets unless the prongs can be fully inserted. • Do not open the cabinet because of the high-voltage components inside. There are no user-serviceable parts inside. • Only qualified service personnel are allowed to service and open the unit.

	⚠ Caution!
	Risk of electric shock. • If not in use, fully disengage the power to the unit by disconnecting the power cord from the AC outlet. • Do not use damaged cables. Check cables regularly. Replace damaged cables immediately, they are not user-serviceable.

	⚠ Caution!	
	Risk of fire and product damage by aggressive substances. Keep the system away from aggressive substances, inflammable gases and vapors.	

	⚠ Caution!
	Risk of fire, injuries and product damage. • Keep the system away from flammable material. • Never block the air ventilation spaces around the LED Wall. Keep them free at all times. • Only use the supplied cables, which are fit for the system and its components.

	⚠ Caution!
	Risk of crushing and product damage due to heavy weight of the product. The cabinets are top-heavy. Never leave them standing freely. Always use the mounting arrangement.

	Caution! Risk of product damage due to dusty environment. Do not install or operate the system in a dusty environment.
	Caution! Risk of product damage by moisture or water. Do not clean the system with water. Do not wipe the LED Pixel Cards with a damp cloth.

Attention!

The installation should be performed only after you are thoroughly familiar with all of the proper installation instructions and safety checks. This manual contains fundamental information that should be observed in connection with the installation, start-up, operation and maintenance of the LED video display. Neglect or not following these instructions will increase the risk of hazards and injury to the user.

Before work on the system, the power must be disconnected, and the system must be checked for absence of power and secured against further connection of power.

Clean the unit only with materials or chemicals that are inert, nonabrasive, noncorrosive and non-marking. Consult the manufacturer for further advice should any doubts exist regarding any cleaning procedure.

1.4.1 Ambient Temperature

The ambient temperature of the FA Series is maximum +40°C and minimum -20°C.

To avoid damage of the LED wall by over-heating, do not exceed the ambient temperature.

1.4.2 Risk of Fire

Keep flammable materials away from the installation. During operation a lot of energy is transferred into heat. The installation should be placed so that the amount of air flow required for safe operation of the equipment is not compromised.

Proper ventilation must be provided. Never block the air ventilation holes. Keep them free at all times.

To protect the power cable against overload maximum 10 cabinets shall be wired in a row at 100 V AC or 20 modules at 240 V AC. The total load must not exceed 16 A per cable.

To avoid risk of fire due to overheating of the cables, only use the supplied cables that are meant for the system and its components. Damaged cables must be replaced by new cables. The cables are not user serviceable.

1.5 Safety for Electricity and Power Supply

The electrical systems and their components are **not** to be opened. The parts inside modules, which are **not user-serviceable**, hold high voltages, including when these components are **not** in-use for a long time. Accessing these components may lead to serious injury, or property damage.

Only authorized and qualified personnel may open the system and its components! All repairs to the system may only be carried out by Sharp NEC DISPLAY SOLUTIONS and/or by respectively authorized and qualified technical personnel.

Power cables and connectors are especially designed to be used indoor according to protection class IP20. Only use the supplied cables and plugs. The usage of other manufacturers can cause property damage.

This equipment is designed to be used in the condition of the power cord connected to earth. If the power cord is not connected to the earth, it may cause electric shock. Make sure the power cord is earthed properly.

	 WARNING!
	Risk of electric shock and property damage. Ensure the system is properly grounded.

	 Caution!
	Risk of overload of the power cable. To protect the power cable against overload maximum 10 cabinets shall be wired in a row at 100 V AC or 20 modules at 240 V AC. The total load must not exceed 16 A per cable.

- The limit values specified in the technical data must never be exceeded.
- Only operate the system with supplied accessories (cables, power distribution, assist grip, transport carts). However, a power cord to supply power is not included.
- Do not operate or touch the system with wet hands.
- Use the provided transition ramps (cable channels). Protect the cable against kinks and sharp edges.

Notice
Use a TN-S power distribution system with a separate neutral and grounding conductor. Due to voltage differences in the neutral conductor, large ground current loops can be avoided therewith. The complete electrical system should be protected by an appropriately rated disconnect switch, circuit breakers, over voltage protector and Ground Fault Current Interrupters. The power system needs to be installed according to the local electrical installation codes. For Europe, installations have to be conform to DIN-EN 60364 – the standard for electrical installation of buildings, (and related harmonized Norms). In Germany, the VDE 0100 should be followed and adhered to.

1.6 Installation Setup – Wall Mounting

For the limited space for installation, you may either cut a same size space as the LED display on the wall, then install the LED display in this space or fix the support structure directly onto the wall. It requires solid walls. Observe the ventilation requirements.

All additional fixation components and tools must be determined by a detailed static calculation to ensure a safe and high-performance LED system. Front maintenance will be very convenient.

	 Caution!
	Risk of personal injury and product damage by unsuitable wall mounting equipment. Before starting the installation: • Ensure that the installation site is suitable for the cable routing plan. If necessary, mark important points of the plan on the wall used for the installation. • Regarding the installation site: Analyze the wall used for the installation and the weight of the complete LED Wall (see Table 1). Choose installation equipment, e.g. tools, screws and dowels, that are suitable for the wall conditions and the weight of the LED Wall. Stability hazard: The device may fall, causing serious personal injury or death. To prevent injury, this device must be securely attached to the floor/wall in accordance with the installation instructions.

Table 1: Dimensions and Weight for LED Wall 4×4, 5×5, 6×6

	4 × 4 LED Wall	5 × 5 LED Wall	6 × 6 LED Wall
Dimensions incl. frame (W × H)	2472×1488 mm	3080×1830 mm	3688×2172 mm
Weight	259 kg	381 kg	503 kg

2 DECLARATION OF CONFORMITY

- CE
- FCC
- RoHS
- AEEE Yönetmeliğine Uygundur
- EAC
- Electromagnetic Compatibility Directive (EMC) 2014/30/EU
- Low Voltage Directive 2014/35/EU
- ETL

CE Information



WARNING!

Operation of this equipment in a residential environment could cause radio interference.

UK Information



FOR CUSTOMERS IN U.K. IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

GREEN-AND-YELLOW: "Earth"
BLUE: "Neutral"
BROWN: "Live"

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

- The wire which is coloured GREEN-AND-YELLOW must be connected to the terminal in the plug which is marked by the letter **E** or by the safety earth symbol or coloured green or green-and-yellow.
- The wire which is coloured BLUE must be connected to the terminal which is marked with the letter **N** or coloured black.
- The wire which is coloured BROWN must be connected to the terminal which is marked

Информация EAC



МОДЕЛЬ

LED-FA012i2	LED-FA015i2	LED-FA019i2	LED-FA025i2
LED-FA031i2	LED-FA038i2		
LED-FE012i2	LED-FE015i2	LED-FE019i2	LED-FE025i2
LED-FE031i2	LED-FE038i2		

FCC Information (for USA only)



WARNING!

- The Federal Communications Commission does not allow any modification or changes to the unit EXCEPT those specified by NEC Display Solutions of America, Inc. in this manual. Failure to comply with this government regulation could void your right to operate this equipment.
- This equipment has been tested and found to comply with the limits for a class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Supplier's Declaration of Conformity (for USA only)

This device complies with Part 15 of 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.

U.S. Responsible Party: NEC Display Solutions of America, Inc.

Address: 3250 Lacey Rd, Ste 500
Downers Grove, IL 60515

Telephone Number: 630-467-3000

Type of Product LED MODULE

Equipment Classification: Class A Peripheral

Model Number:	LED-FA012i2	LED-FA015i2	LED-FA019i2
	LED-FA025i2	LED-FA031i2	LED-FA038i2
	LED-FE012i2	LED-FE015i2	LED-FE019i2
	LED-FE025i2	LED-FE031i2	LED-FE038i2



If necessary, the user should contact the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet, prepared by the Federal Communications Commission, helpful: "How to Identify and Resolve Radio-TV Interference Problems." This booklet is available from the U.S. Government Printing Office, Washington, D.C., 20402, Stock No. 004-000-0034.

VCCI Information

ご使用前に

この装置は、クラス A 機器です。この装置を住宅環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

VCCI-A

高調波電流規格 JIS C 61000-3-2 適合品

KC Information

경고:

이 기기는 업무용 환경에서 사용할 목적으로 적합성평가를 받은 기기로서 가정용 환경에서 사용하는 경우

Taiwan Information

- 型號：
LED-FA012i2、LED-FA015i2、LED-FA019i2、LED-FA025i2、LED-FA031i2、LED-FA038i2、
LED-FE012i2、LED-FE015i2、LED-FE019i2、LED-FE025i2、LED-FE031i2、LED-FE038i2、
LED-FA012i2-SB、LED-FA015i2-SB、LED-FE012i2-E、LED-FE015i2-E、LED-FE019i2-E
- 商品名稱：廣告機
- 對角線: 27"/698cm
- 亮度:
800 cd/m2(LED-FA012i2、LED-FA015i2、LED-FA019i2、LED-FA025i2、LED-FA031i2、
LED-FA038i2、LED-FE012i2、LED-FE015i2、LED-FE019i2、LED-FE025i2、LED-FE031i2、
LED-FE038i2)
600 cd/m2(LED-FE012i2-E、LED-FE015i2-E、LED-FE019i2-E)
400 cd/m2(LED-FA012i2-SB、LED-FA015i2-SB)
- 對比度: 5000:1
- 輸入電壓: 100 - 240 V AC
- 輸入頻率: 50/60 Hz
- 輸入電流: 16 A
- 生產國別: 中國
- 注意：請勿打開機殼、小心高壓電擊、機內並無用戶配件。
- 使用方法：確保 LED 模塊周圍通風良好，以便正常散熱。請勿擋住通風口，或將 LED 模塊放在散熱器或其他熱源附近。
- 進口商: 台灣恩益禧股份有限公司
- 進口商地址: 台北市中山區南京東路二段 167 號 7 樓
- 進口商電話: 02-8500-0000 (代表號)
- 委製廠：Sharp NEC Display Solutions, Ltd.

警告使用者：

此為甲類資訊技術設備，於居住環境中使用時，可能會造成射頻擾動，在此種情況下，使用者會被要求採取某些適當的對策。

設備名稱：廣告機 Equipment name		主型號（型式）：LED-FA012i2 Type designation (Type)				
系列型號：LED-FA015i2, LED-FA019i2, LED-FA023i2, LED-FA025i2, LED-FA027i2, LED-FA031i2, LED-FA038i2, LED-FE012i2, LED-FE015i2, LED-FE019i2, LED-FE023i2, LED-FE025i2, LED-FE027i2, LED-FE031i2, LED-FE038i2						
單元 Unit	限用物質及其化學符號 Restricted substances and its chemical symbols					
	鉛Lead (Pb)	汞Mercury (Hg)	鎘Cadmium (Cd)	六價鉻 Hexavalent chromium (Cr ⁺⁶)	多溴聯苯 Polybrominated biphenyls (PBB)	多溴二苯醚 Polybrominated diphenyl ethers (PBDE)
外殼	○	○	○	○	○	○
電路板組件	—	○	○	○	○	○
玻璃面板	—	○	○	○	○	○
開關	○	○	○	○	○	○
電源插接器	○	○	○	○	○	○
備考1. “超出0.1 wt %”及“超出0.01 wt %”係指限用物質之百分比含量超出百分比含量基準值。 Note 1 : “Exceeding 0.1 wt %” and “exceeding 0.01 wt %” indicate that the percentage content of the restricted substance exceeds the reference percentage value of presence condition.						
備考2. “○”係指該項限用物質之百分比含量未超出百分比含量基準值。 Note 2 : “○” indicates that the percentage content of the restricted substance does not exceed the percentage of reference value of presence.						
備考3. “—”係指該項限用物質為排除項目。 Note 3 : The “—” indicates that the restricted substance corresponds to the exemption.						

UAE



3 DISPOSAL

3.1 Within the European Union

WEEE Mark (European Directive 2012/19/EU and amendments)



Disposing of your used product: In the European Union

EU-wide legislation as implemented in each Member State requires that used electrical and electronic products carrying the mark (see on the left) must be disposed of separately from normal household waste. This includes monitors and electrical accessories, such as signal cables or power cords. When you dispose of such products, please follow the guidance of your local authority or ask the shop where you purchased the product, or if applicable, follow applicable legislation or agreement you may have. The mark on electrical and electronic products may only apply to the current European Member States.

3.2 Outside the European Union

If you wish to dispose of used electrical and electronic products outside the European Union, please contact your local authority and ask for the correct method of disposal.

4 COPYRIGHT AND DISCLAIMER

4.1 Copyright

This document is © NEC Display Solutions, Ltd. 2019

NEC is a registered trademark of NEC Corporation.

All product and company names are property of their respective owners. Use of them does not imply any affiliation with or endorsement by them.

NovaStar and NovaLCT is a registered trademark of NovaStar Tech Co., Ltd.

The terms HDMI and HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing Administrator, Inc. in the United States and other countries.

4.2 Disclaimer

All instructions and specifications in this manual are based on information available at the time of publishing for the features and safety guidelines of the described products.

Technical specifications, measurements, weights and properties are not guaranteed.

The manufacturer reserves the right to make product alterations within legal provisions as well as changes to improve product quality.

Sharp NEC DISPLAY SOLUTIONS shall not be liable for personal injury or damage to materials caused by failure to observe this warning and safety information of this manual. Furthermore, Sharp NEC DISPLAY SOLUTIONS cannot be held responsible for damage or injury, caused by incorrect, inadequate or unsafe use, maintenance or installation of the entire system. The liability as well as the effects of the same will become void if other than genuine parts are used.

LOCAL REGULATIONS

This product and assembly variants that are shown in these instructions for assembly and use may be subject to local regulations, guidelines and norms.

The product use bears the responsibility for compliance to and with such regulations.

Subject to local regulations, we reserve the right not to supply all products illustrated here.

5 SERVICE & SUPPORT

Service & Support in Europe

Please contact:

Sharp NEC Display Solutions Europe GmbH.

Landshuter Allee 12-14, D-80637 München

Phone: + 49 (0) 89/99699-0

Fax: + 49 (0) 89/99699-500

For the latest information please see

<https://www.sharpnecdisplays.eu>

Data is subject to change without notice.

Sales Office List for Asia/Pacific

For the latest information please see

<https://www.sharp-nec-displays.com/ap/contact/index.html>

Дата изготовления указана на картонной коробке. Ознакомьтесь с ней.

Импортер – Шарп НЭК Дисплей Солюшенс Европа ГмбХ

119034, Москва, Турчанинов переулок, д. 6, строение 2, офис 39-50.

Sharp NEC Display Solutions, Ltd.

4-28, Мита 1-чом, Минато-ку, Токио, Япония

Сделано в Китае

Вы можете связаться с представительством Шарп НЭК Дисплей Солюшенс Европа в России, по емайлу info-cis@sharpnec-displays.eu, или получить необходимую информацию на нашем сайте

<https://www.sharpnecdisplays.eu/p/ru/ru/home.xhtml>

安全のために必ず守ること

この取扱説明書に使用している表示と意味は次のようになっています。

誤った取扱いをしたときに生じる危険とその程度を、次の表示で区分しています。



警告

誤った取扱いをしたときに、死亡や重傷などの重大な結果に結びつく可能性があるもの



注意

誤った取扱いをしたときに、傷害または家屋・家財などの障害に結びつくもの

図記号の意味は次のとおりです。

▲記号は注意(警告を含む)をうながすことを表しています。

⊘記号はしてはいけないことを表しています。

●記号はしなければならないことを表しています。



警告

⊘ 振動や衝撃を与えないでください。

⊘ 不安定な場所や振動のある場所に設置しないでください。

● 設置は必ず工事専門業者にご依頼ください。

⊘ 電源コードを傷つけないでください。重い物をのせたり、熱器具に近づけたり、無理に引っ張ったり、折り曲げたま力を加えないでください。コードが破損して火災や感電の原因になります。

⊘ 本製品に水などがかった場合はすぐに電源を切り、運用を中止してください。そのまま使用すると、故障・火災・感電の原因となります。



⊘ 修理・改造はしないでください。けが・火災・感電の原因になります。



⊘ 雷が鳴り出したら、電源コードには触れないでください。感電の原因になります。



● 正しい電源電圧で使用してください。指定の電源電圧以外で仕様すると火災・感電の原因となります。



⊘ 故障(画面が映らない)や煙、異常な発熱、変な音・においがするときには電源を切り、すぐに工事専門業者または販売店に修理を依頼してください。



注意

⊘ 濡れた手で配線工事を行わないでください。けが・感電の原因になります。

⊘ 狭い場所には設置しないでください。

⊘ 直射日光や熱器具のそばには置かないでください。

⊘ 放熱の悪い環境での使用は避けてください。故障の原因になります。

⊘ 本製品は屋内での使用と想定しています。屋外では使用しないでください。故障の原因となります。

⊘ 本製品の RJ-45 ポートは本機専用のインターフェースです。ネットワークに接続しないでください。特に過電圧が加わるおそれのあるネットワークに接続すると、故障・感電の原因になります。



⊘ 次のような場所での使用や保管は避けてください。

- 熱器具の近く
- 湿気・ほこりが多い場所、油煙の当る所
- 腐食ガスが多い所
- 製品が氷結する所



● 長時間ご使用にならないときは、安全のために配電盤からの電源供給を停止してください。



● メンテナンスの際は、電源供給を停止してください。

この商品に関する技術相談、アフターサービス等はお買い上げの国内でのみ有効です。

保証とアフターサービス

- 保証期間経過後の修理については、お買い上げの販売店にご相談ください。
修理によって機能が維持できる場合は、お客様のご要望により有料修理いたします。
- その他、アフターサービスについてご不明の場合は、お買い上げの販売店または修理受付／アフターサービス窓口にご相談ください。

法人ユーザー様の窓口
NEC モニター・インフォメーションセンター フリーコール:0120-975-380 携帯電話・PHS からでもご利用いただけます。
受付時間:月～金 9:00～18:00 土曜・日曜・祝日は休ませていただきます。また、これ以外の当社休日につきましても 休ませていただく場合がありますので、ご容赦願います。

アフターサービスを依頼される場合は次の内容をご連絡ください。

- | | |
|---|-----------------------|
| ●お名前 | ●製造番号（本体背面のラベルに記載） |
| ●ご住所（付近の目標など） | ●故障の症状、状況など（できるだけ詳しく） |
| ●電話番号 | ●購入年月日または使用年数 |
| ●品 名：LED モジュール | |
| ●形 名：LED-FA012i2／LED-FA015i2／LED-FA019i2 | |
| LED-FA025i2／LED-FA031i2／LED-FA038i2 | |
| LED-FE012i2／LED-FE015i2／LED-FE019i2 | |
| LED-FE025i2／LED-FE031i2／LED-FE038i2 | |
| LED-FA012i2-SB／LED-FA015i2-SB | |
| LED-FE012i2-E／LED-FE015i2-E／LED-FE019i2-E | |

LED モジュール以外については販売店にお問い合わせください。