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Information about this user manual 1.



Thank you for choosing our product. We wish you a lot of fun with the device.

Read the safety instructions and the entire manual carefully before first use. Observe the warnings on the device and in the user manual.

Always keep the user manual within reach. If you sell or distribute the device, be sure to provide this user manual as it is an integral part of the product.

Explanation of symbols 1.1.

If a section of text is marked with one of the following warning icons, the danger described in the text must be avoided in order to prevent the possible consequences described there.



DANGER! Warning of imminent

danger to life!



WARNING!

Warning of possible danger to life and/or serious, irreversible injuries!



WARNING!

Warning of danger due to high volume!





Bullet point / Information about events during use

Instruction for action



CAUTION!

Warning of possible moderate and/or minor injuries!



NOTICE!

Please note instructions to avoid property damage!



Further information on how to use the device



WARNING! Warning of danger from electric shock!

Mandatory safety instructions

2. Proper use

This is an information technology device and is intended for the use of multimedia content as a gaming platform. The device is intended for private use only and not for commercial use. Note that the warranty shall be void in cases of improper use:

- Do not convert the device without our consent and use only replacement parts and accessories supplied or approved by us.
- Observe all the information in this user manual, especially the safety instructions. Any other use is deemed improper and can cause personal injury or property damage.
- Do not use the device in extreme environmental conditions.

3. Conformity

3.1. EU declaration of conformity

ELDOHM hereby declares that the Iconic Arcade radio equipment type complies with Directive 2014/53/EU (RE Directive), Directive 2009/125/EC (Eco-Design Directive) and Directive 2011/65/EU (RoHS Directive).

The full EU declaration of conformity can be downloaded from www.iconicarcade. com/en/doc.

If your device works with a network connection in the 5 GHz frequency range of the built-in wireless LAN solution, its use in the EU countries (see table) is only allowed inside buildings.

Always observe the respective legal situation in the country of use.



AT	BE	BG	CZ	DK
EE	FR	DE	IS	IE
П	EL	ES	CY	LV
LI	LT	LU	HU	MT
NL	NO	PL	PT	RO
SI	SK	TR	FI	SE
СН	UK(NI)	HR		

AT = Austria, BE = Belgium, CZ = Czech Republic, DK = Denmark, EE = Estonia,

FR = France, DE = Germany, IS = Iceland, IE = Ireland, IT = Italy,

EL = Greece, ES = Spain, CY = Cyprus, LV = Latvia, LT = Lithuania,

LU = Luxembourg, HU = Hungary, MT = Malta, NL = Netherlands, NO = Norway,

PL = Poland, PT = Portugal, RO = Romania, SI = Slovenia, SK = Slovakia,

TR = Turkey, FI = Finland, SE = Sweden, CH = Switzerland, UK(NI) = Northern Ireland, HR = Croatia

3.1.1. Wi-Fi information

Frequency range:	2.4 GHz / 5 GHz
Wi-Fi standard:	802.11 a/b/g/n/ac
Encryption:	WEP/WPA/WPA2

Frequency range/MHz	Channel	Max. transmission power/ dBm
2400 - 2483.5	1 - 13	< 20
5150 - 5250	36 - 48	< 23
5250 - 5350	52 - 64	< 23
5470 - 5725	100 - 140	< 30
5735 - 5835	149 - 165	(if present < 14)

3.2. UK – Declaration of Conformity

The manufacturer hereby declares that the product is in conformity with all relevant British requirements.

3.3. FCC Compliance Statement

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of 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 technician for help.

WARNING: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. Shielded interface cables, if any, must be used in order to comply with the emission limits. 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.

You may also find the following booklet, which was prepared by the FCC, to be 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.

4. Safety instructions

- This device can be used by children eight years old and above as well as by persons with reduced physical, sensory or mental abilities or with a lack of experience and knowledge if they are supervised or have been trained in the safe operation of the device and understand the dangers which may result.
- Children must be supervised to make sure they do not play with the device.
- Cleaning and user maintenance must not be performed by children without supervision.
- The device and accessories must be stored in a place out of the reach of children.

4.1. Operating safety

- Only use the supplied power adapter.
- Do not expose the device to dripping water or water spray, and do not place liquid-filled vessels, such as vases, on or near the device.
- Do not pour liquids into the device.



DANGER!

Risk of electric shock!

If the power adapter is open, there is a risk of electric shock or fire!

- Never open the housing of the device or of the power adapter!
- Never operate the device with the housing open.
- Do not cover these openings, as this could lead to overheating or even a fire.

Do not put any objects into the device through the slots and openings. This could result in an electric short circuit, an electric shock or even a fire, resulting in damage to your device.

Turn off the device immediately, or do not turn it on at all, unplug the power plug and contact customer service if:

- You hear unusual sounds from the power adapter or the device, you notice smoke on the device or power adapter.
- There is visible damage to the device, power adapter or power cord.
- Liquids have gotten inside the device.
- Replace the defective power cord/power adapter with original parts. These must not be repaired under any circumstances.



WARNING!

Risk of electric shock!

If a repair is done improperly, there is a risk of electric shock!

- Never open the housing of the device or of the power supply adapter!
- In the event of a malfunction, contact the Service Center or another suitable workshop.

4.2. Installation location

- Do not use the device in potentially explosive areas. These include, for example, tank systems, fuel storage areas or areas where solvents are processed. This device also must not be used in areas with particulate air (e.g. flour or wood dust).
- Keep your device and all connected devices away from moisture and avoid dust, heat and direct sunlight. Failure to observe these instructions may result in malfunctions or damage to the device.
- Do not operate the device outdoors, as external influences such as rain, snow, etc. could damage the device.
- Keep at least one meter away from high-frequency and magnetic interference sources (TV sets, loudspeakers, mobile phones, DECT phones, etc.) to prevent malfunctions and data loss.
- This device is not suitable for use at workstations as defined by the German Ordinance for Work with Visual Display Units (BildschArbV, Section 2).

4.3. Power supply

- Do not cover the power adapter.
- Never touch the power adapter with wet hands.
- The outlet must always be close to the device and easily accessible.
- Only touch the power adapter on the housing if you want to pull it out of the outlet.
- To disconnect the power supply to your device (via the power adapter), unplug the power adapter from the outlet.
- Only operate the power adapter in grounded outlets with the values specified in the technical specifications.
- In the event of a thunderstorm, unplug the power adapter from the outlet.

4.4. Notes on the display

- Do not let any objects fall onto the display.
- Do not place any objects on the device.
- Do not touch the display with angular objects.
- Do not scratch the display with your fingernails or hard objects.
- There is a risk of injury if the display breaks. If this happens, wear protective gloves to package the broken parts and send them to your service center for proper disposal. Wash your hands with soap afterwards, as it cannot be ruled out that chemicals may have leaked.

5. Package contents



DANGER!

Risk of choking and suffocation!

Risk of choking and suffocation from swallowing or inhaling small parts or plastic wrap.

■ Keep the plastic wrap out of the reach of children.

- Take the product from the packaging and remove all packaging material.
- Please check your purchase to ensure that all items are included. If anything is missing, please contact us within 14 days of purchase.

5.1. Parts list of the arcade machine

The following items are supplied with your product:



Housing		
1	Top left side part	
2	Top right side part	
3	Attachment	
4	Front panel for loudspeakers	
5	Speaker element	
6	Cover for speakers	

	Housing
7	Display with frame and controller
8	Display connector
9	Console
10	Top back panel
11	Bottom left side part
12	Bottom right side part
13	Bottom front panel
14	Bottom back panel
15	Top connector
16	Center connector
17	Bottom connector



Accessories		
18	Allen key M5 (2x)	
19	Screws (33x)	
20	Cover discs for joysticks (2x)	
21	Balls for joysticks (2x)	
22	Power cable (figure differs depending on country)	
23	Power adapter	
24	Rubber feet (6x) for console with fastening screws (6x)	
25	USB memory stick for software installation	
26	microSD card	

5.2. Parts list for the console (version without arcade machine)

The following items are supplied with your product:



Accessories		
9	Console	
20	Cover discs for joysticks (2x)	
21	Balls for joysticks (2x)	
23	Power adapter (figure differs depending on country)	
24	Rubber feet (6x) for console with fastening screws (6x)	
25	USB memory stick for software installation	
26	microSD card	

6. Assembly

The installation for

- The console,
- The assembly of the arcade machine (top, bottom) with display,
- The connecting cable,
- And the connection of the power adapter

are described in the following.

For the assembly, a second person is recommended to assist with installation of the housing.



Use the supplied Allen key to attach the screws. To avoid damaging the housing, do not overtighten the screws.

6.1. Console

The following parts are required for this step:

9	Console
25	microSD card
20	Cover discs for joysticks (2x)
21	Balls for joysticks (2x)
24	Rubber feet (6x) for console with fastening screws (6x)
	Phillips screwdriver (not included in package contents)



- Place the cover discs for the joysticks over the joystick pins.
- Tightly screw the balls for the joysticks onto the pins.
- Only if you use the console without arcade machine: Attach the rubber feet of the console with the provided screws. Use a standard Phillips screwdriver.

If you will operate the console alone, without an arcade machine, continue with Chapter "8. Startup" on page 25.

6.2. Arcade machine

6.2.1. Bottom part

The following parts are required for this step:

11	Bottom left side part
12	Bottom right side part
13	Bottom front panel
14	Bottom back panel
15	Top connector
16	Center connector
17	Bottom connector
18	Allen key
19	Mounting screws (12x)

• Assemble the bottom part as shown.



6.2.2. Top part and display

The following parts are required for this step:

1	Top left side part
2	Top right side part
3	Attachment
4	Front panel for loudspeakers
5	Speaker element
6	Cover for speakers
7	Display with frame and controller
8	Display connector
18	Allen key
19	Mounting screws (12x)

- Assemble the upper part and install the display as shown.
- To make it easier to insert the display, do not tighten the screws of the upper part until the end.





- Connect the console connecting cord to the console:
 - HDMI connector for the display to the HDMI port,
 - USB-C power connector to the USB-C port,
 - 3.5 mm jack plug to the 3.5 mm audio jack.
- Optional: For a wired network connection, plug one end of the network cable into the LAN port.
- Insert the microSD card with the label facing up into the card slot on the back of the console until the card locks into place. To remove it at a later time, press it further into the slot until it unlocks.
- Insert the control panel into the intended guide.

6.2.3. Cords

The following parts are required for this step:

10 Top back panel

- Connect the cords:
 - Power cord (d) of the power switch (b) to the controller (g),
 - Power cord (c) of the power switch (b) to the connecting cord of the power adapter (e),
 - 3.5 mm audio cord (h) from the controller (g) to amplifier (a).
- Feed the console connecting cord (f) through the opening.
- Insert the back panel into the guide and slide it down.



6.2.4. Setup

- Connect the top part to the bottom part.
- Place and operate the device on a stable, level and vibration-free surface to prevent the device from falling.
- Optional: If you have connected a LAN cord for the wired network connection in "6.2.2. Top part and display" on page 19, connect the connector of the LAN cord to a hub/switch/router.



CAUTION! Risk of injury!

The arcade machine must be firmly anchored to the wall to prevent it from tipping over and causing injuries.

■ Use suitable fastening fittings for the wall.



7. Device overview

7.1. Arcade machine



- A. Loudspeakers
- B. Display
- C. Console
- D. Bottom part of the housing
- E. Power adapter port
- F. Upper part of the housing
- G. Power switch

7.2. Console



- H. LAN port
- I. MicroSD memory card slot
- J. Audio port
- K. USB-C port
- L. HDMI port
- M. On/off switch (only for the version without arcade machine)
- N. 2x USB 3.2 ports

8. Startup

8.1. Connecting

8.1.1. Power adapter for operation with arcade machine



- Connect the supplied power adapter to the power adapter port at the back of the arcade machine.
- Connect the other end to an easily accessible power outlet. The power outlet must be located close to the device and easily accessible.

8.1.2. Operation of the console alone



- Connect the supplied power adapter to the USB-C port on the back of the console.
- Connect the other end to an easily accessible power outlet. The power outlet must be located close to the device and easily accessible.
- Connect a screen to the HDMI port on the back of the console.
- Optional: For a wired network connection, plug one end of the network cable into the LAN port and connect the other connector of the LAN cord to a hub/ switch/router.

8.2. Using the USB memory stick for initial setup

Insert the included USB memory stick into one of the USB ports on the front of the console.

8.3. Turning the device on/off



Before turning on the device for the first time, insert the included USB memory stick into one of the USB ports on the front of the console to start the initial setup.

- To turn on the device,
 - Press the on/off switch on the console (if you purchased the version without an arcade machine) or
 - Switch the **0/1** on/off switch on the arcade machine to **1**.
- > Press or switch the switch again to turn the device off.

9. Operating the console



You can use the console to operate all menus and games as well as enter information into text fields.

The buttons to use and their functions are shown at the bottom of the screen and in dialog boxes.

Joystick

- - Select letters, numbers, characters in text fields
 - In text fields: delete last character
 - In text fields: next letter/space

A button Confirm entries

B button Cancel entries and menus; go back to the previous menu

The operation depends on the respective retro distribution, the emulated system and the game and may differ from this table. Please note the following:

- For some distributions, the **A** and **B** buttons can be switched.
- Press the **START** and **SELECT** buttons simultaneously to exit a running game.
- If a joystick direction is shown instead of the button names (A, B, X, Y), this means the buttons are arranged as follows:

Joystick Button

- ► A
- **-** − B
- ▲ X
- ^
- Y

10. Initial setup

- Insert the included USB memory stick into one of the two USB ports on the front of the console.
- Press the on/off switch to turn the device on.

After being turned on for the first time, the device will show the main screen for initial setup.

- LOCALE Select language and country settings
- WIRELESS Set up the Wi-Fi network connection
- INSTALL Select game packages
- EXIT Restart the system after installation
- TEST Run function test on the hardware
- ABOUT Display license information

Go through the next steps in the order given.

10.1. Language/country settings

- Select **LOCALE** with the joystick and confirm this with the **A** button.
- Select the desired country with the joystick and confirm this with the **A** button.
- Now use the joystick to select the desired menu language.
- Finally, press the **A** button.

The language and country settings are complete.

• After this is done, press the **B** button to return to the main menu.

10.2. Establishing a Wi-Fi connection

If you have already connected a LAN cord, continue with the next chapter.

If you want to connect the device via Wi-Fi, follow these steps:

- Use the joystick to select **WIRELESS** in the main menu and confirm this with the **A** button.
- Use the joystick to select the desired Wi-Fi network and confirm this with the **A** button.
- If the selected network requires a password, you can enter it with the joystick:
 - - In text fields: delete last character
 - In text fields: next letter/space
- Finally, press the **A** button.
- After this is done, press the **B** button to return to the main menu.

10.3. Installing an operating system (Linux distribution)

Iconic Arcade requires a Linux-based operating system. This must be installed on the SD card. It is possible to select from four common distributions, which already contain emulators required for older platforms. All four are freely available and differ in their operation and number of games included. Alternatively, you can install the default operating system on the built-in Raspberry Pi and customize the software as you wish.

• Use the joystick to select **INSTALL** and confirm this with the **A** button.

A selection of operating systems is available.

• Select the desired operating system with the joystick and confirm this with the **A** button to start the installation.

The process may take some time. The progress is shown in the display.

• After this is done, press the **B** button to return to the main menu.

10.4. Restarting the system

Once all the initial setup steps have been completed, the system must be restarted. This activates the selected gaming distribution.

- Use the joystick to select **EXIT** and confirm this with the **A** button.
- Remove the USB memory stick from the USB port.
- Finally, confirm this with the **A** button to restart the device.

The device starts with the gaming distribution you selected and the initial setup is complete.

10.5. Function test of the hardware

Run a function test on the joystick, display, buttons and inserted storage medium.

- Use the joystick to select **TEST** and confirm this with the **A** button.
- Select the desired hardware from the menu and confirm this with the **A** button.
- After this is done, press the **B** button to return to the main menu.

11. Cleaning and maintenance



WARNING!

Risk of electric shock!

There is a risk of fatal electric shock if the housing is opened and parts in the device are touched!

- Do not open the housing of the device. It contains no parts to be maintained. Always unplug the power adapter before cleaning.
- Clean the housing only with a slightly damp, lint-free cloth.
- Do not use solvents, corrosive or gaseous cleaning agents.
- Clean the display with special cleaning agents (e.g. glass cleaner).
- To prevent damage to the device, liquids must not get inside the device.
- Do not expose the screen to bright sunlight or ultraviolet radiation.

12. Storage when not in use

If you will not use the device for an extended period of time, store it in a dry, cool place and make sure the device is protected from dust and extreme temperature fluctuations.

13. Pixel error on the display

Despite state-of-the-art manufacturing, individual or multiple phosphor dots can fail in rare cases due to the highly complex technology.

In the case of active matrix TFTs with a resolution of **1920 x 1080 pixels**, each composed of three subpixels (red, green, blue), a total of **approximately 6.2 million** drivers are used. Due to this very high number of transistors and the associated extremely complex manufacturing process, isolated failures or incorrect control of pixels or individual subpixels can occur.



Pixel error	Error type 1 continuously lit pixel	Error type 2 continuously black pixel	Error type 3 defective subpixel	
Class			lit	black
0	0	0	0	0
I	1	1	2 1 0	1 3 5
II	2	2	5 5-n*	0 2 x n* 10
111	5	15	50 50-n* 0	0 2 x n* 100
IV	50	150	500 500-n* 0	0 2 x n* 1000

n*=1.5

The permitted number of errors in each error class for the aforementioned error types refers to one million pixels and must be converted according to the physical resolution of the displays.

Your device complies with the European standard ISO 9241-307 class II (pixel error class). Pixel errors up to the specified maximum number are not a warranty case.





PACKAGING

The product has been packaged to protect it from damage in transit. The packaging is made of materials that can be recycled in an environmentally friendly manner.



DEVICE

All old appliances marked with the symbol illustrated must not be disposed of in normal household rubbish.

In accordance with Directive 2012/19/EU, the device must be properly

disposed of at the end of its service life.

This involves separating the materials in the appliance for the purpose of recycling as well as minimising the environmental impact and negative effects on human health.

Take old devices to a collection point for electrical scrap or a recycling centre. Before doing so, remove the batteries from the device and take them to a separate collection point for used batteries.

Contact your local waste disposal company or your local authority for more information on this subject.

	Raspberry Pi	
Processor	Raspberry Pi4 B (1.8 GHz)	
Memory	1GB/2GB LPDDR4-3200 on-board	
Radio transmission	Wi-Fi 2.4/5.0 GHz IEEE 802.11.ac Bluetooth 5.0, BLE	

15 Technical specifications

Power adapter (included with arcade machine)		
Manufacturer	ShenZhen Xinspower Technology Co., Ltd Importer: MEDION AG Am Zehnthof 77 45307 Essen Germany Commercial Register Number: HRB 13274	
Model designation	A1001-1207500D	

Power adapter (included with arcade machine)		
Input voltage / input AC fre- quency / current	100-240 V ~ 50-60 Hz, 2.5 A max.	
Output voltage / current	12 V === 7.5 A	
Output power	90.0 W	
Average operational efficiency	88.7%	
Efficiency at low load (10%)	82.8%	
Power consumption at zero load	0.06 W	

Power adapter (only supplied with console alone)		
Manufacturer	Kuantech (Beihai) Co., Ltd. Importer: MEDION AG Am Zehnthof 77 45307 Essen Germany Commercial Register Number: HRB 13274	
Model designations	KSA-15E-051300HU KSA-15E-051300HE KSA-15E-051300HK KSA-15E-051300HA KSA-15E-051300HI	
Input voltage / input AC fre- quency / current	100-240 V ~ 50-60 Hz, 0.5 A max.	
Output voltage / current	5.1 V 3.0 A	
Output power	15.0 W	
Average operational efficiency	≥ 82,7%	
Efficiency at low load (10%)	> 85,8%	

Power adapter (only supplied with console alone)		
Power consumption at zero load	≤ 0,10 W	

Screen		
Image size	52.6 cm (20.7"), TFT	
Aspect ratio	16:9	
Resolution	1920 x 1080 pixels	

Ports	
Arcade machine	Power supply connection DC-IN
Console	1x HDMI-out type A
	1x Giga LAN
	2x USB 3.2 Gen1 type A (5.1V/3A)
	1x 3.5 mm audio jack
	1x MicroSD card slot

Ambient values		
Temperatures	Operating: 0 °C ~ +35 °C Not operating: -20 °C ~ +60 °C	
Humidity (non-condensing)	Operating: < 80% Not operating: < 90%	

Dimensions / weights		
Arcade machine	Approx. 560 x 1580 x 500 mm (WxHxD) Approx. 26.5 kg	
Console	Approx. 282 x 143 x 207-239 mm (WxHxD) Approx. 2.9 kg	

16. License information

Created with Free Pascal and Lazarus.

Uses Material Icons © Google under Apache License V2.

Used FlagKit $\ensuremath{\mathbb{C}}$ 2016 Bowtie AB under MIT license.

IconicArcade is not affiliated with any of the distributions, nor are we responsible for their content. We only offer a simple option for installation from the respective original downloads.

Runs on an unmodified Raspberry Pi OS (Debian 11 "Bullseye"). Leave the desktop to access comprehensive license information and source code.

IconicArcade does not support or promote piracy in any way. Please play only properly licensed games!

17. Service information

Do you need help? Have any questions? Do not go back to the store; contact us! Visit https://iconicarcade.com/support We are glad to help you!



Service



User manual



Declarations of conformity

18. Legal Notice

Copyright 2023 All rights reserved.

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Eldohm International Ltd. Rm. 505, 5/F, Tower A, New Mandarin Plaza, 14 Science Museum Road, TST East, Hong Kong.

Please note that the above address is not a return address. Always contact our customer service first.