Contents

1. Information about this instruction manual

Thank you for choosing our product. We hope you have lots of fun with the device.

Before initial installation, carefully read the safety instructions and the instructions in full. Follow the warnings on the device and in the user manual.

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

1.1. Signs and symbols

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

DANGER!
Warning of imminent danger to life!

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

CAREFUL!
Warning of possible moderate and/or minor injuries!

NOTE!
Take note of instructions to avoid property damage!

Further information on how to use the device

WARNING!
Warning of danger from electric shock!

WARNING!
Warning of danger due to loud volume!

• Bullet point/Information about events during operation

▶ Instructions to be executed

■ Safety instructions to be carried out

2. Intended use

This is an information electronic device intended for the use of multimedia content as a gaming platform. The device is intended for private use only and not for commercial use. Please note that in case of unintended use, the liability ceases:

- Do not convert the device without our consent and use only spare parts and accessories supplied or approved by us.
- Follow all the information in this user manual, especially the safety instructions. Any other operation is deemed to be inappropriate and may result in personal injury or damage to property.
- Do not use the device in extreme environmental conditions.

3. Conformity

3.1. EU conformity information

ELDOHM hereby declares that the radio equipment type "Iconic Arcade" 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 EU countries (see table) is only permitted inside buildings.

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

$$C\epsilon$$

AT	BE	BG	CZ	DK
EE	FR	DE	IS	IE
IT	GR	ES	CY	LV
LI	LT	LU	HU	MT
NL	NO	PL	PT	RO
SI	SK	TR	FI	SE
CH	GB	HR		

AT = Austria, BE = Belgium, CZ = Czechia, DK = Denmark, EE = Estonia,
FR = France, DE = Germany, IS = Iceland, IE = Ireland, IT = Italy,
GR = 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, GB = United Kingdom of Great Britain and Northern Ireland,
HR = Croatia

3.1.1.   WLAN information

Frequency range: 2.4 GHz/5 GHz
WLAN 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 applicable < 14)

3.2. UK – Declaration of conformity

UK CA The manufacturer hereby declares that the product conforms to all relevant British requirements.

3.3. FCC Compliance Statement

NOTE: This device 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 device 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 device does cause harmful interference to radio or television reception, which can be determined by turning the device 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 device and receiver.
- Connect the device 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 device. 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 helpful the following booklet, prepared by the FCC: "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 may be used by children aged 8 years and over and by persons with impaired physical, sensory or mental abilities or lack of experience and knowledge, as long as they are supervised or trained in the safe use of the device and understand the hazards involved.

■ Children must be supervised to ensure they do not play with the device.

■ Cleaning and user maintenance must not be carried out by children without supervision.

■ The device and accessories must be stored in a place out of the reach of children.

4.1. Operational safety

■ Use only the power adaptor supplied.

■ Do not expose the device to dripping water or spray, and do not place liquid-filled vessels, such as vases, on or in the immediate vicinity of the device.

■ Do not pour liquids into the device.

DANGER!
Electrocution hazard!

If the power adaptor is exposed, there is a risk of electric shock or fire!

    ■ Never open the housing of the device or the power adaptor!

    ■ 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 pass items through the slots and openings into the inside of the device. This could result in an electrical short circuit, an electric shock or even a fire, resulting in damage to your device.

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

- unusual sounds are heard from the power adaptor or the device, you notice smoke coming from the device or power adaptor.
- there is visible damage to the device, power adaptor or power cable.
- liquids have entered the interior of the device.

■ Replace the defective power cable/power adaptor with original parts. Under no circumstances may they be repaired.

WARNING!
Electrocution hazard!

If repaired improperly, there is a risk of an electric shock!

■ Never open the housing of the device or power supply!

■ In the event of a breakdown, contact the Service Centre or another suitable workshop.

4.2. Place of installation

■ Do not use the device in potentially explosive areas. These include, for example, tank installations, fuel storage areas or areas where solvents are processed. This device must also not be used in areas with particulate air (e.g. flour or wood dust).

■ Keep your device and all connected devices away from humidity 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 metre away from radio 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 VDU workstations within the meaning of the relevant VDU workstation regulation (in Germany §2).

4.3. Electricity supply

■ Do not cover the power adaptor.

■ Never touch the power adaptor with wet hands.

■ The socket must always be close to the unit and easily accessible.

■ Only touch the power adaptor on the housing if you want to pull it out of the socket.

■ To disconnect the power supply to your device (via the power adaptor), unplug the power adaptor from the socket.

■ Only operate the power adaptor on grounded sockets with the values specified in the technical data.

■ In the event of a thunderstorm, pull the power adaptor out of the socket.

4.4. Display information

■ Do not drop items on the display.

■ Do not place any items 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, package the brushed parts with protective gloves and send them to your Service Centre for proper disposal. Wash your hands with soap afterwards, as it cannot be ruled out that chemicals may have leaked.

5. Delivery contents

> ⚠️ **DANGER!**
> **Choking hazard!**
> There is a risk of asphyxiation by swallowing or inhaling small parts or foil.
>
> ■ Keep the wrapping away from children.

▸ Remove the product from the packaging and remove all packaging material.

▸ Please check the completeness of the delivery and notify us within 14 days of purchase if the delivery is not complete.

5.1. Parts list for the arcade machine

With the package you have purchased, you will receive:
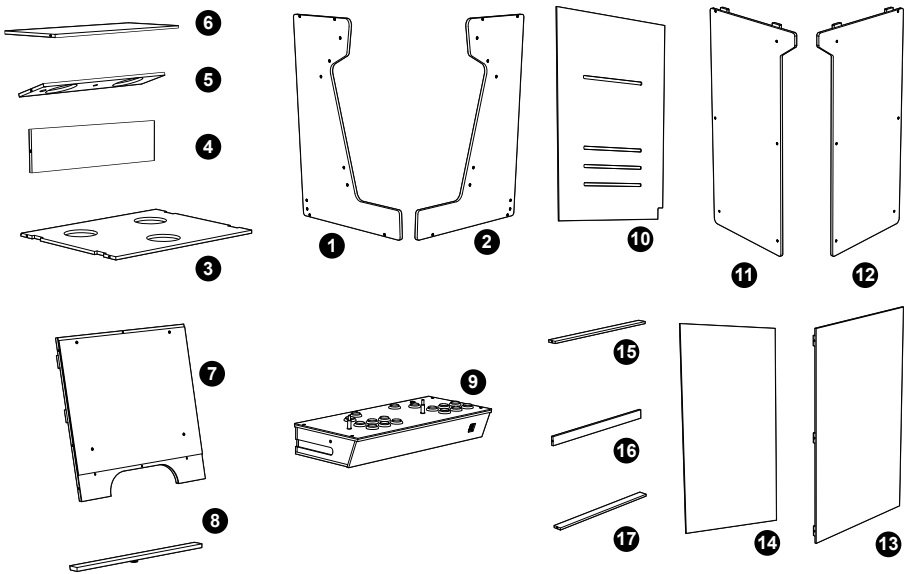
Housing	
1	Side section – top left
2	Side section – top right
3	Top piece
4	Front panel speakers
5	Speaker element
6	Cover speakers

Housing	
7	Display with frame and controller
8	Display connector piece
9	Console
10	Top back panel
11	Side section – bottom left
12	Side section – bottom right
13	Front base panel
14	Back base panel
15	Top connector piece
16	Central connector piece
17	Base connector piece
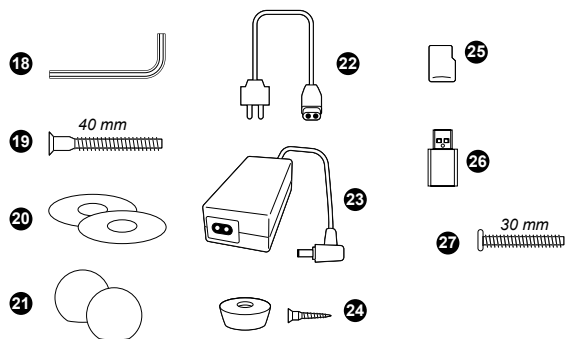
Accessories	
18	Allen key M5 (2x)
19	Screws 40mm (33x)
20	Cover plates for joysticks (2x)
21	Balls for joysticks (2x)
22	Power adaptor (image may differ depending on country)
23	Power supply adaptors
24	Rubber feet (6x) for console with fastening screws (6x)
25	USB stick for software installation
26	MicroSD card

27	Screws 30mm (2x)

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

With the package you have purchased, you will receive:
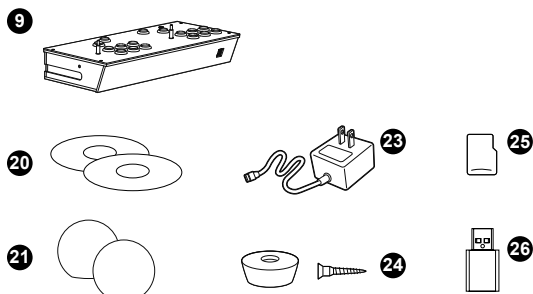
Accessories	
9	Console
20	Cover plates for joysticks (2x)
21	Balls for joysticks (2x)
23	Power adaptor (image may differ depending on country)
24	Rubber feet (6x) for console with fastening screws (6x)
25	USB stick for software installation
26	MicroSD card

6.   Setup

The following describes the installation
- of the console,
- the assembly of the arcade machine (top, base) with display,
- the connecting cable,
- as well as the connection of the power adaptor

.
A second person is recommended to assist with the installation of the housing.

Use the supplied Allen key to attach the screws. Do not tighten the screws too tight to avoid damaging the housing.

6.1. Console

The following parts are required for this step:

9	Console
25	MicroSD card
20	Cover plates for joysticks (2x)
21	Balls for joysticks (2x)
24	Rubber feet (6x) for console with fastening screws (6x)
	Crosshead screwdriver (not included)
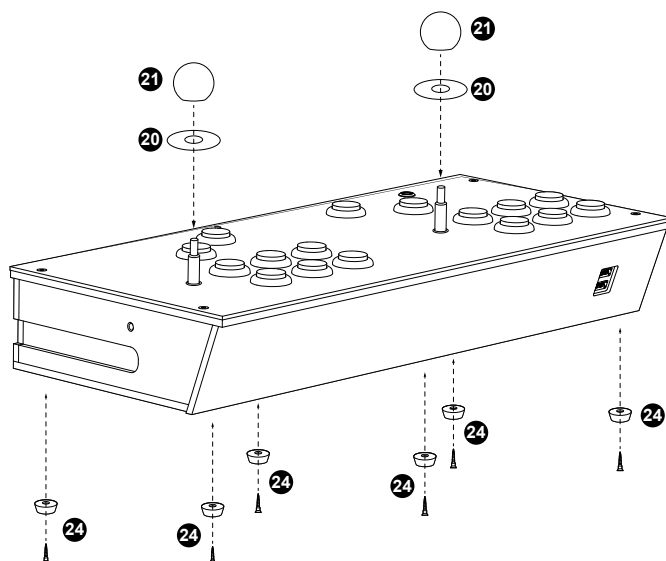
▸ Place the cover plates for the joystick over the joystick's pins.

▸ Screw the balls for the joystick onto the pins.

▸ Attach the rubber feet of the console with the screws provided. Use a commercially available crosshead screwdriver.

If you are running the console by itself without an arcade machine, continue with chapter '8. Initial installation' on page 26.
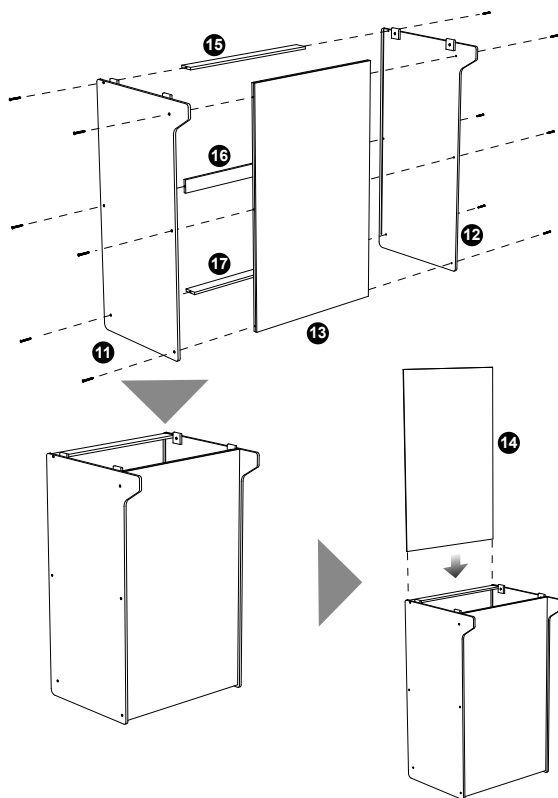
6.2. Arcade Machine

6.2.1. Base

The following parts are required for this step:

|	
11	Side section – bottom left
12	Side section – bottom right
13	Front base panel
14	Back base panel
15	Base connector piece
16	Base connector piece
17	Base connector piece
18	Allen key
19	Mounting screws (12x)

▸ Perform setup of the lower part as shown.

6.2.2. Top & Display

The following parts are required for this step:

1	Side section – top left
2	Side section – top right
3	Top piece
4	Front panel speakers
5	Speaker element
6	Cover speakers
7	Display with frame and controller
8	Display connector piece
18	Allen key size
19	Mounting screws (12x)

▸ Perform setup of the upper part and the installation of the display as shown.

▸ Only tighten the screws of the upper part at the end to make it easier to insert the display.
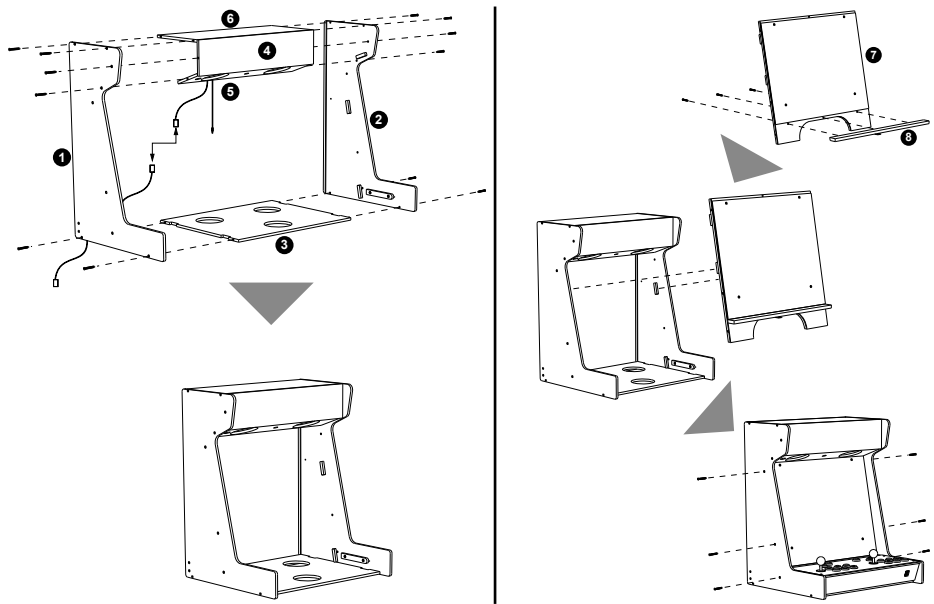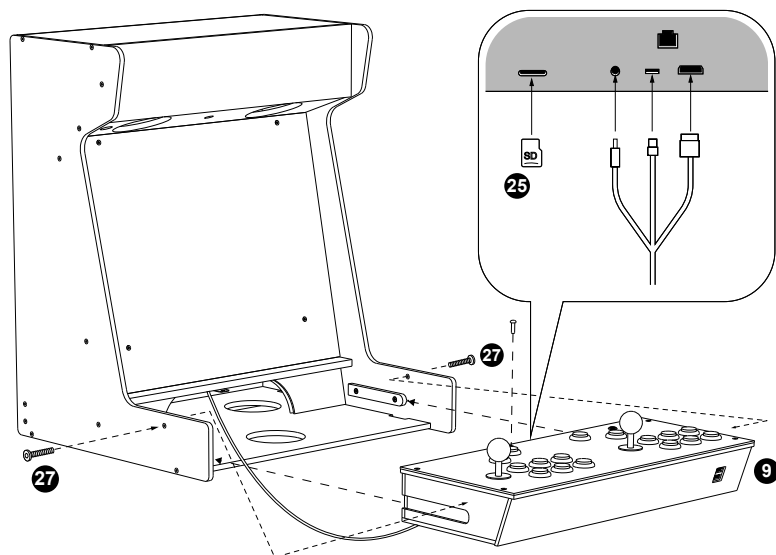
▶ Connect the console connection cable to the console:
  – HDMI connector for the display to the HDMI port,
  – USB-C power plug into the USB-C port,
  – 3.5 mm jack plug into the audio connector 3.5 mm jack.
▶ Optional: For a wired network connection, plug one end of the network cable into the LAN port.
▶ Insert the MicroSD card labelled up into the card slot on the back of the console until the card locks in. To remove it at a later date, press it further into the slot until it unlocks.
▶ Insert the control panel into the guide provided.

6.2.3. Cabling

The following part is required for this step:

10	Top back panel

▸ Connect the cables:
  – power cable (d) of power switch (b) with controller (g),
  – power cable (c) of power switch (b) with connection cable of power adaptor (e),
  – 3.5 mm audio cable (h) from controller (g) to amplifier (a).
▸ Pass the console connection cable (f) through the opening.
▸ Insert the back panel into the guide and slide it down.
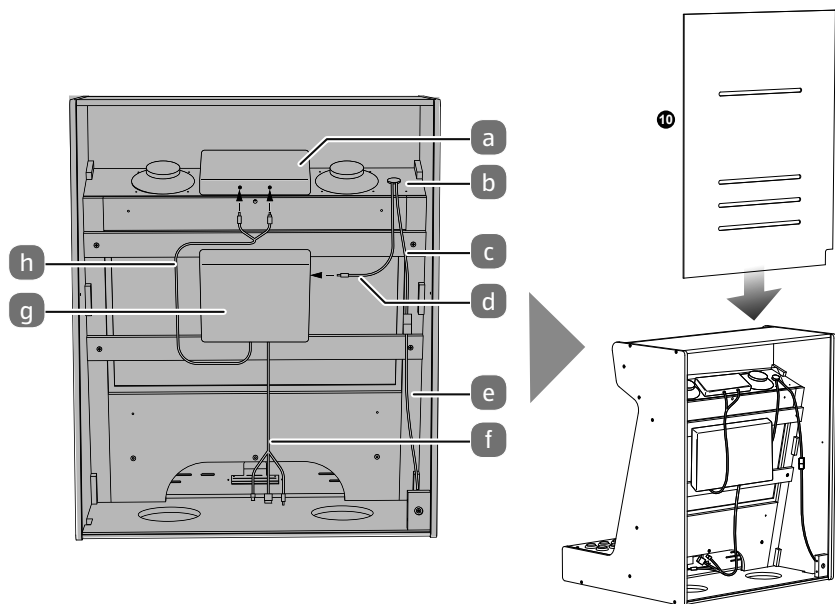
6.2.4.   Installation

‣ Connect the top to the bottom.
‣ 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 cable for the wired network connection in '6.2.2. Top & Display' on page 20, connect the connector of the LAN cable to a hub/switch/router.
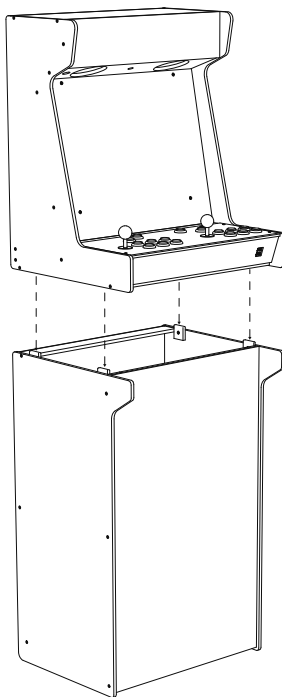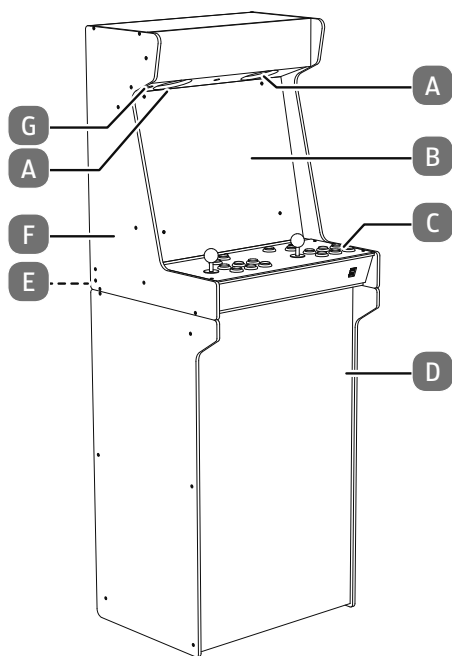
⚠ **CAREFUL!**
Risk of injury!

To prevent injuries caused by the device tipping over, the arcade machine must be firmly anchored to the wall.

■ Use suitable mounting fittings for the wall.

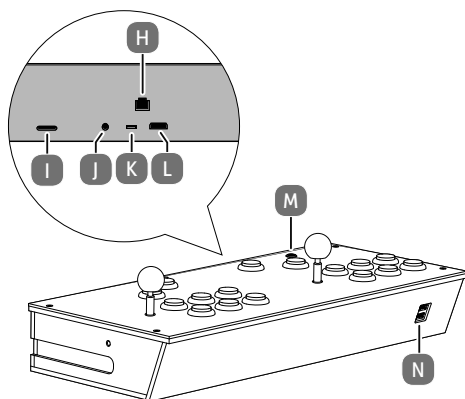# 7. Device overview

7.1. Arcade Machine

A. Speakers
B. Display
C. Console
D. Base of the housing
E. Connection for mains adaptor
F. Upper part of the housing
G. Power switches

7.2. Console

H. LAN connection
I. MicroSD memory card slot
J. Audio connection
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.   Initial installation

8.1.   Connection setup

8.1.1.   Power adaptor when operating with arcade machines
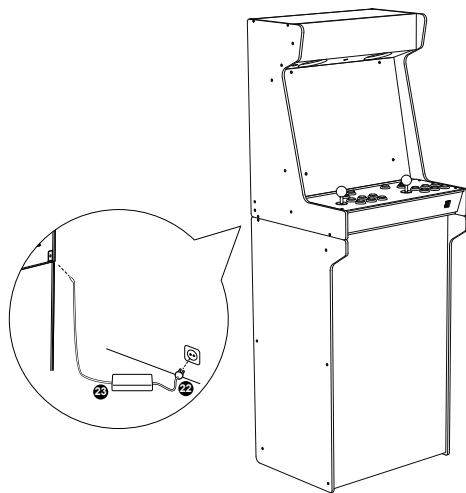
▶ Connect the supplied power adaptor to the power adaptor port at the back of the arcade machine.

▶ Connect the other end to an easily accessible power socket. The power socket must be close to the unit and easily accessible.

8.1.2. Operation of the console by itself

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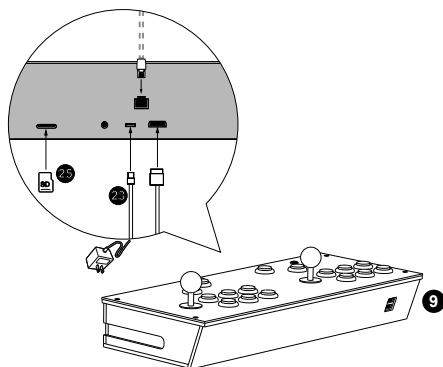▸ Connect the other end to an easily accessible power socket. The power socket must be close to the unit and easily accessible.
▸ Connect a screen to the HDMI port on the back of the console.
▸ Optional: For a wired network connection, plug one end of the network cable into the LAN port and connect the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

8.2. USB-stick for initial setup

▸ Plug the supplied USB memory stick into one of the USB ports on the front of the console.

8.3. Switching the device on/off

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

▸ To turn the device on,
  – press the on/off button on the console (if you purchased the version without an arcade machine), or
  – enable the on/off switch **0/1** on the arcade machine at **1**.
▸ Press or turn the switch again to turn the device off.

9.   Using the console
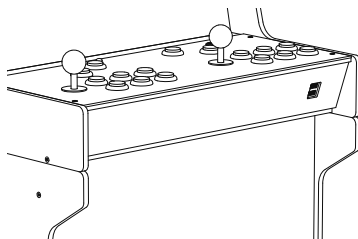
With the console you can operate all menus and games as well as input into text fields.
The buttons to use and their functions are shown at the bottom of the screen and in dialogue boxes.

Joystick

    ▲ ▼ ◀ ▶   Navigate the menus in all directions

        ▲ ▼   Selection of 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 inputs and menus; return 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 at the same time to exit a running game.
- If a direction is displayed with the joystick instead of the names of the buttons (A, B, X, Y), this means the arrangement of the buttons is as follows:

Joystick   Button

     ▶   **A**

     ▼   **B**

     ▲   **X**

     ◀   **Y**

10. Initial setup

▶ Plug the supplied 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 switching on for the first time, the main screen is displayed for the initial setup of the device.

- **LOCALE** – Selection of language and country settings
- **WIRELESS** – Setting up the WLAN network connection
- **INSTALL** – Selection of game packages
- **EXIT** – Restarting the system after installation
- **TEST** – Functional test of the hardware
- **ABOUT** – Display license information

Go through the next steps in the order given.

10.1. Language/country settings

▶ Select the **LOCALE** icon with the joystick and confirm with the **A** button.
▶ Select the desired country with the joystick and confirm with the **A** button.
▶ Now select the desired menu language with the joystick.
▶ Finally, press the **A** button.

Language and country settings have been completed.

▶ After finishing, press the **B** button to return to the main menu.

10.2. Establish a WLAN connection

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

If you want to connect the device via WLAN, do the following:

▶ In the main menu, use the joystick to select the **WIRELESS** icon and confirm with the **A** button.
▶ Select the desired WLAN network with the joystick and confirm with the **A** button.
▶ If the selected network requires a password, you can enter it with the joystick:

   ▲ ▼   Selecting letters, numbers, characters

   ◀   in text fields: delete last character

   ▶   in text fields: next letter/space

▶ Finally, press the **A** button.
▶ After finishing, press the **B** button to return to the main menu.

10.3. Install 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 contain emulators already required for older platforms. All four are freely available and differ in operation and number of games included. Alternatively, you can install the default operating system on the already built-in Raspberry Pi and customize the software as you wish.

▸ Select the point **INSTALL** on the joystick and confirm with the **A** button.

A selection of operating systems is available.

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

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

▸ After finishing, press the **B** button to return to the main menu.

10.4. Restart the system

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

▸ Select the **EXIT** icon with the joystick and confirm with the **A** button.
▸ Remove the USB memory stick from the USB port.
▸ Finally, press the **A** button to restart the device.

The device starts with the gaming distribution of your choice and the initial setup is complete.

10.5. Functional testing of the hardware

Perform a functional test of the joystick and display, the buttons, and the inserted storage device.

▸ Select the **TEST** icon with the joystick and confirm with the **A** button.
▸ Select the desired hardware from the menu and confirm with the **A** button.
▸ After finishing, press the **B** button to return to the main menu.

11. Cleaning and maintenance

WARNING!
Electrocution hazard!

If the housing is opened and parts in the device are touched, there is a risk of life due to electric shock!

■ Do not open the housing of the device. It contains no parts to be serviced. Always pull out the power adaptor before cleaning.

▶ Clean the housing only using a mist-damp, lint-free cloth.

▶ Do not use solvents, corrosive or gaseous cleaning agents.
▶ Clean the display with special cleaning agents (e.g. glass cleaner).
▶ In order to prevent damage to the device, no liquids must enter the interior of the device.
▶ Do not expose the screen to bright sunlight or ultraviolet radiation.

12. Storage when not in use

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

13. Pixel error on the display

In spite of state-of-the-art production, due to the highly complex technology, in rare cases single or several light points can fail.

Active Matrix TFTs with a resolution of **1,920 x 1,080 pixels**, which are composed of three sub-pixels (red, green, blue), use a total of **ca. 6.2 million** controls. Due to this very high number of transistors and the associated extremely complex manufacturing process, there may be isolated failures or incorrect control of pixels or individual sub-pixels.

5 Pixel

5 Pixel

Zeilen

Pixel

blau

grün

Sub-Pixel

rot
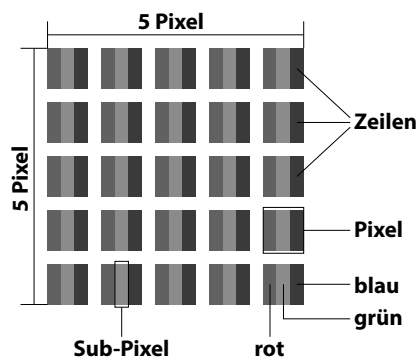
| Pixel error class	Error type 1 continuously luminous pixel	Error type 2 continuously black pixel	Error type 3 defective subpixel	
			luminous	black
0	0	0	0	0
I	1	1	2 1 0	1 3 5
II	2	2	5 5-n*	0 2 x n* 10
III	5	15	50 50-n* 0	0 2 x n* 100
IV	50	150	500 500-n* 0	0 2 x n* 1000

$n*=1.5$

The permissible number of errors of the above types in each error class 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 warranty cases.

14. Disposing of the product

PACKAGING

Your appliance 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.

BOX	BAG	FOAM
Recycle	Recycle	Don't Recycle
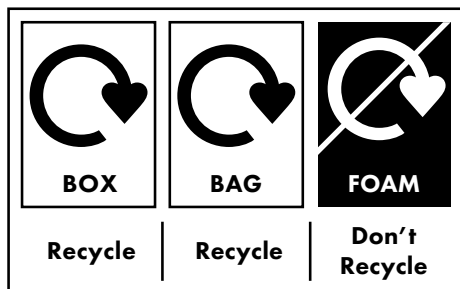
APPLIANCE

Old appliances may not be disposed of with household waste!

Should the product no longer be capable of being used at some point in time, **dispose of it in accordance with the regulations in force in your city or country**.

Please ensure your recycling information applies to the local regulations.

This ensures that old appliances are recycled in a professional manner and also rules out negative consequences for the environment. For this reason, electrical equipment is marked with the symbol shown here.

15. Technical data

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

Power Adaptor (included with Arcade Machine)	
Manufacturer	ShenZhen Xinspower Technology Co., Ltd Importer: MEDION AG Am Zehnthof 77 45307 Essen Germany HR number: HRB 13274
Model name	A1001-1207500D
Input voltage/input AC frequency/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 efficiency in operation	88.7%
Efficiency at low load (10%)	82.8%
Power consumption at zero load	0.06 W

Power adaptor (only supplied with console alone)	
Manufacturer	Kuantech (Beihai) Co., Ltd. Importer: MEDION AG Am Zehnthof 77 45307 Essen Germany HR number: HRB 13274
Model names	KSA-15E-051300HU KSA-15E-051300HE KSA-15E-051300HK KSA-15E-051300HA KSA-15E-051300HI
Input voltage/input AC frequency/current	100-240 V ~ 50-60 Hz, 0.5 A max.

Power adaptor (only supplied with console alone)	
Output voltage/current	5.1 V $=$ 3.0 A
Output power	15.0 W
Average efficiency in operation	≥ 82,7%
Efficiency at low load (10%)	> 85,8%
Power consumption at zero load	≤ 0,10 W

Screen	
Picture size	52.6 cm (20.7'), TFT
Aspect ratio	16:9
Resolution	1,920 x 1,080 pixels

Connections	
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 jack connector for audio
	1x MicroSD card slot

Ambient values	
Temperatures	In operation: 0 °C ~ +35 °C Not in use: -20 °C ~ +60 °C
Humidity (non-condensing)	In operation: < 80% Not in use: < 90%

Dimensions/Weights	
Arcade Machine	approx. 560 x 1580 x 500 mm (WxHxD) approx. 26.5 kg

Dimensions/Weights	
Console	approx. 282 x 143 x 207-239 mm (WxHxD)
	approx. 2.9 kg

16. Licence information

Created with Free Pascal and Lazarus.

Uses Material Icons © Google under Apache License V2.

Uses FlagKit © 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 an easy way to install from the respective original downloads.

Running on an unchanged 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 only play properly licensed games!

17. Service information

Do you need any help? Questions?
Do not go back to the store; contact us!
Visit https://iconicarcade.com/support
We are at your disposal!

 Service

 Instructions for use

 Conformity information

18. Imprint

Copyright 2023
All rights reserved.

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.