THE C64 MINI

User Guide

RETRO GAMES LTD

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Whilst every care has been taken to verify the accuracy of the information and links provided in this guide, we cannot be held liable or responsible for any loss, damage or inconvenience caused as a result of any inaccuracies.

User Guide – March 2018

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OVERVIEW

THEC64 Mini home computer is a compact, modern take on the classic home computer system that first appeared in 1982. THEC64 Mini is instantly reminiscent of the original design, although the keyboard is purely aesthetic and non-functional.
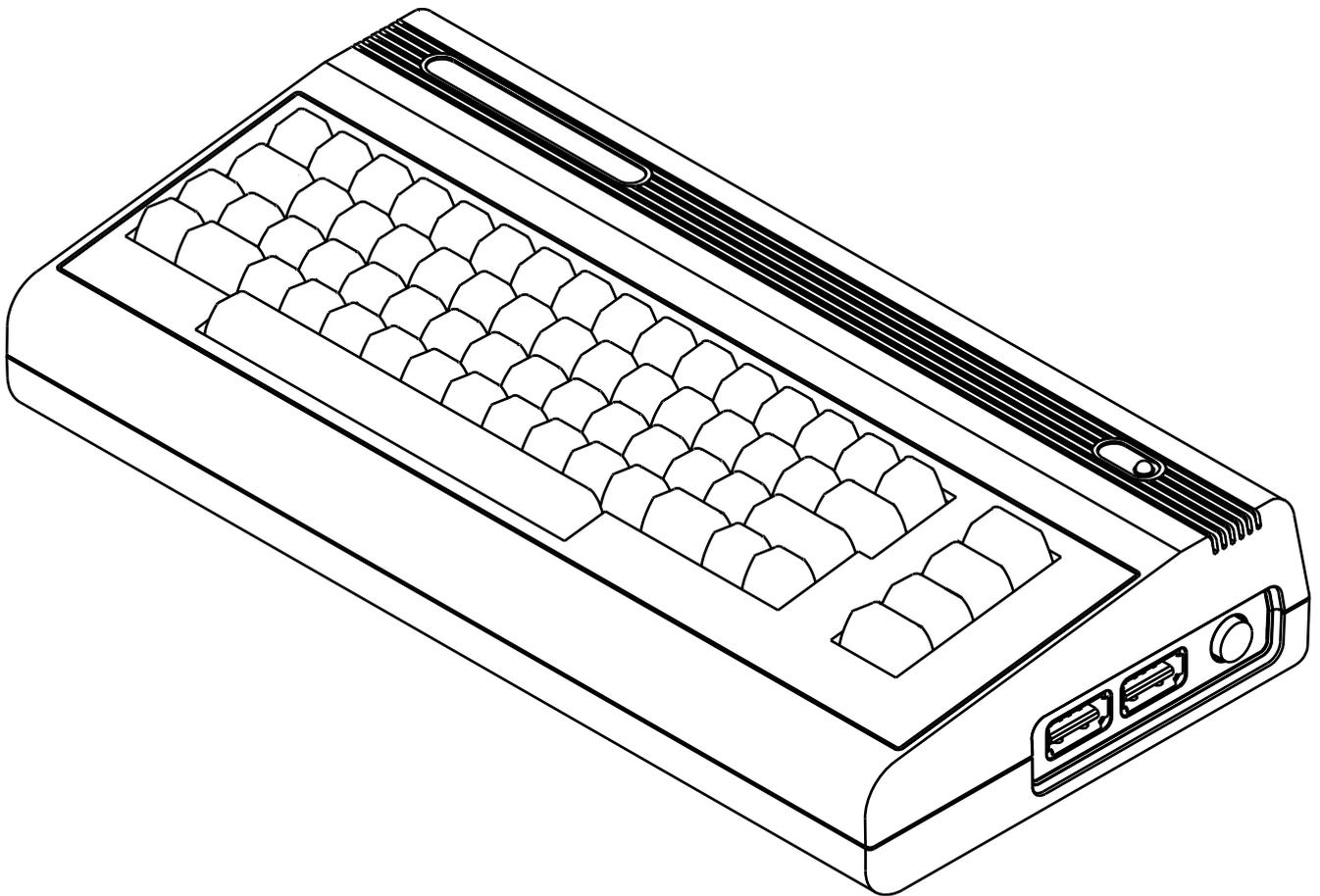
A selection of classic C64 games are pre-installed on THEC64 Mini, ready to be played with the supplied THEC64 Joystick.

THEC64 Mini includes a virtual on-screen keyboard for selecting keys during a game. For most games that need access to a keyboard, this will be more than sufficient. Alternatively, connect a USB keyboard (not supplied), giving you access to any keys you might need when playing games or programming in BASIC. See **www.thec64.com/basic** for more information on C64 BASIC and how to begin programming.

THEC64 Mini also provides a number of options via the ▤ (MENU) button on THEC64 Joystick, including saving and loading during any game.

CHAPTER 1 describes the recommended order for connecting, powering on and shutting down THEC64 Mini.

See **CHAPTER 2** for more information about THEC64 Joystick.

See **CHAPTER 6** for information on using Virtual and USB keyboards.

We hope you have hours of fun, either reliving your childhood or enjoying the C64 for the first time!

CHAPTER 1

SETTING UP

- Unpacking THEC64 Mini
- Connecting and Starting THEC64 Mini
- Shutting down THEC64 Mini

UNPACKING THEC64 MINI

Before connecting anything, check the contents of the packaging. You should have:

- THEC64 Mini Computer
- THEC64 Joystick (USB)
- HDMI Cable
- Micro-USB to USB Power Supply Cable

> **Please make sure to use a 5v 1A AC adapter that has been approved for use in your country, and read its instruction manual to ensure that it is able to supply power to THEC64 Mini.**

CONNECTING AND STARTING THEC64 MINI

1. Ensure that your HD TV or Monitor is switched OFF before you connect THEC64 Mini

2. Connect one end of the HDMI cable into THEC64 Mini, and then connect the other end to your HD TV or Monitor

POWER LED

HDMI

USB PORTS

MICRO-USB POWER

POWER ON / OFF
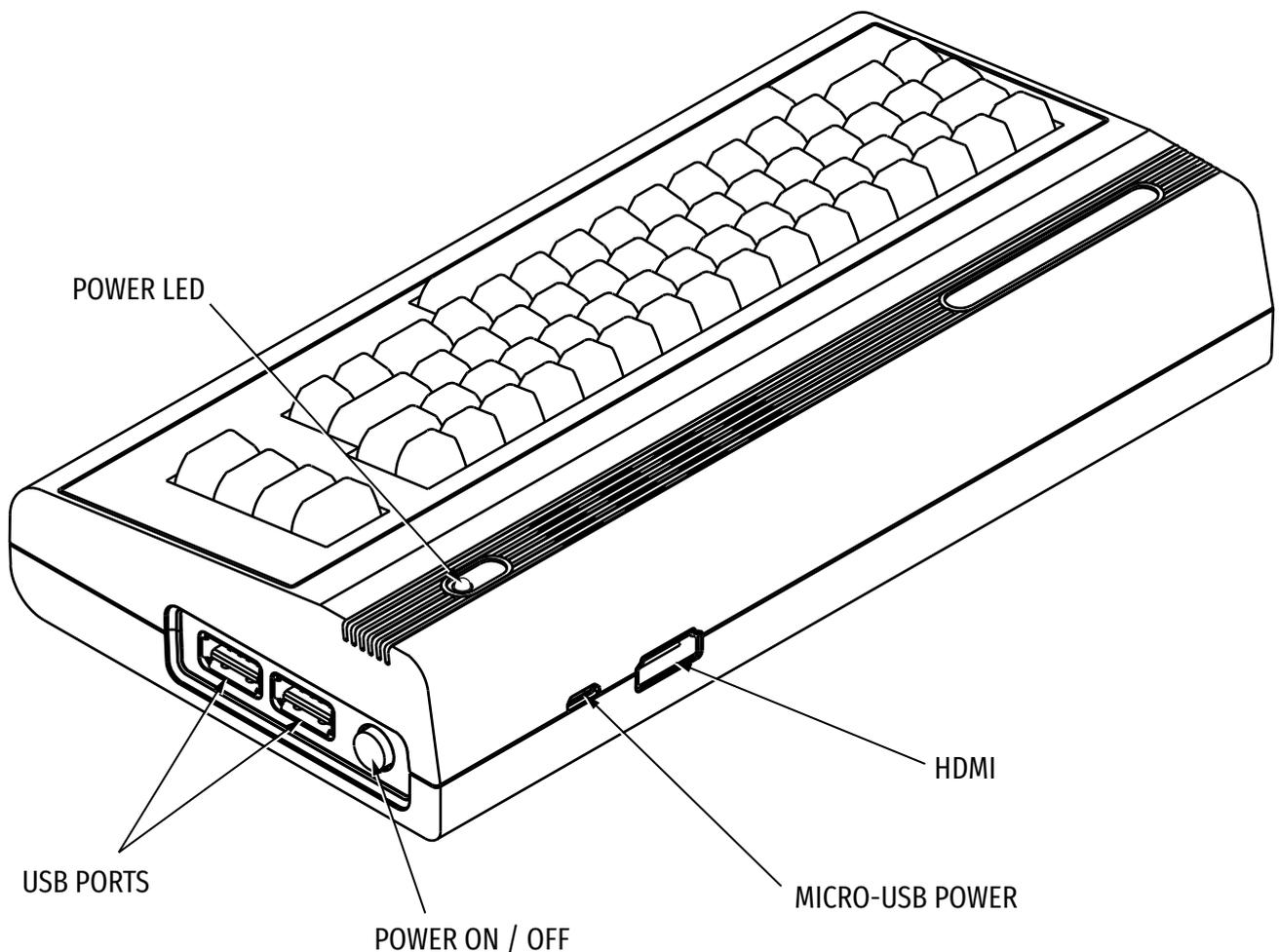
3. Connect THEC64 Joystick to either of THEC64 Mini's USB ports. See **CHAPTER 2** for full details on THEC64 Joystick

4. Connect the supplied USB power cable into a suitable USB power source, and then connect the other end to the Micro-USB port on THEC64 Mini

5. THEC64 Mini automatically turns ON and the Power LED glows red

6. Switch ON your HD TV or Monitor and choose the appropriate HDMI input source.

SHUTTING DOWN THEC64 MINI

1. When you are ready to turn THEC64 Mini off, press the power switch once. This places THEC64 Mini into a shutdown state

2. To turn THEC64 Mini back on, press and hold the power switch for two seconds until the Power LED glows red

3. In the unlikely event that THEC64 Mini fails to respond, press and hold the power switch for approximately six seconds to force THEC64 Mini to shutdown.

Please refer to **CHAPTER 8** for full safety information when using THEC64 Mini.

CHAPTER **2**

THEC64 JOYSTICK

To use THEC64 Joystick, connect it to an unoccupied USB port before you switch on or before you launch a game. THEC64 Mini will not recognise a joystick that is plugged in while a game is running.

THEC64 Joystick has a DIRECTIONAL STICK and eight buttons, referred to as left **FIRE**, right **FIRE**, **TL**, **TR**, **A**, **B**, **C** and **≣** (MENU).

DIRECTIONAL STICK

RIGHT FIRE

LEFT FIRE

TR

TL

≣ MENU

A   B   C
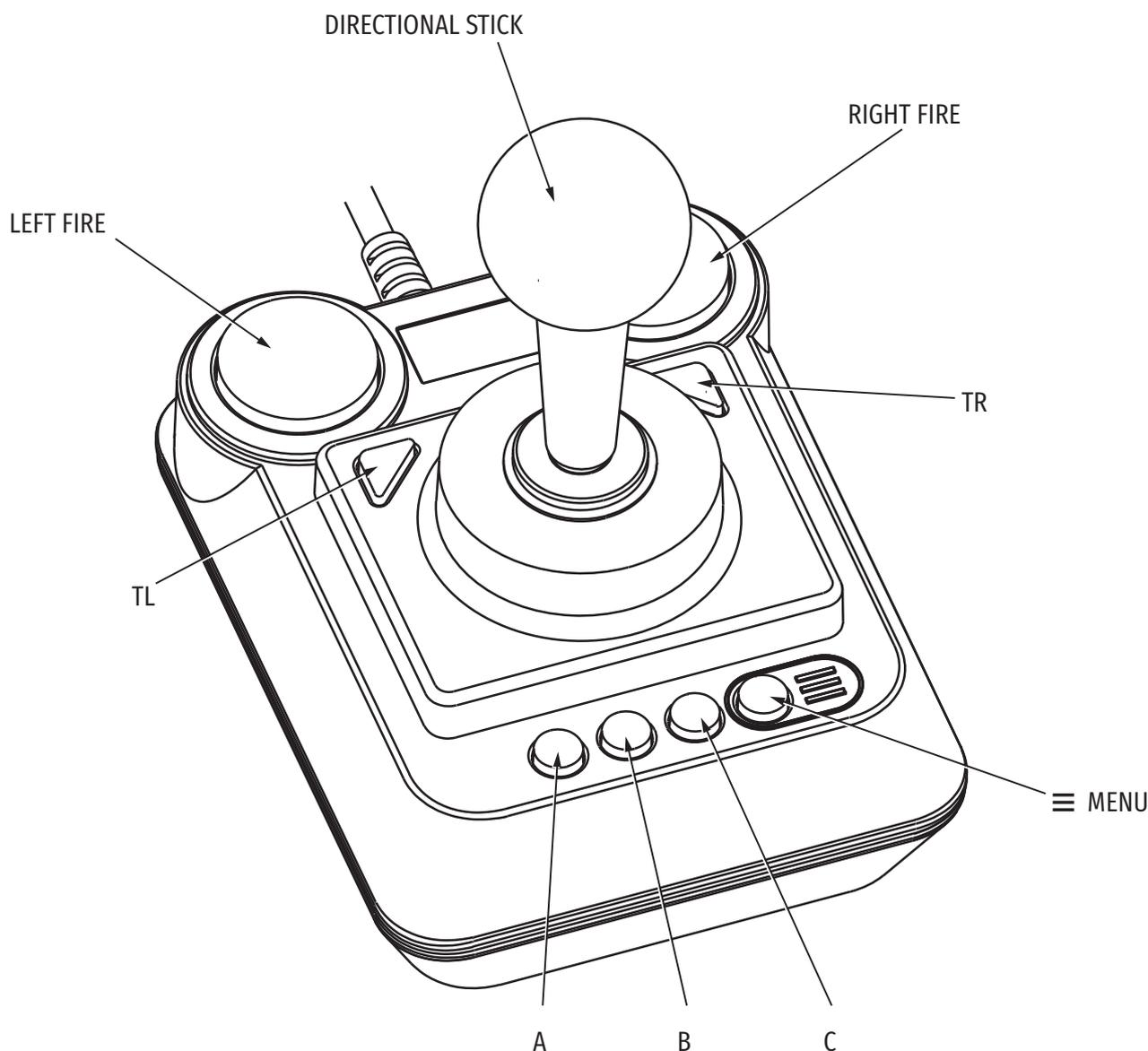
The joystick is used to:

(i) Highlight and select items in the menus and screens (using the DIRECTIONAL STICK and the left or right **FIRE** buttons and using **≣** to leave most screens and return to the previous one)

(ii) Play the games

The games supplied with THEC64 Mini use some or all of the joystick buttons during play. Other games may also require a keyboard (virtual or USB) during play. At a minimum, all games will use the DIRECTIONAL STICK and either **FIRE** button. You always have use of the **≣** button from within any game, which temporarily suspends the game by default, and offers a number of game options.

See **CHAPTER 5** for more information on the **≣** button and playing games.

CHAPTER **3**

USING THEC64 MINI FOR THE FIRST TIME

1. When you first switch on THEC64 Mini, you choose which language it will use for all the non-game menus and screens
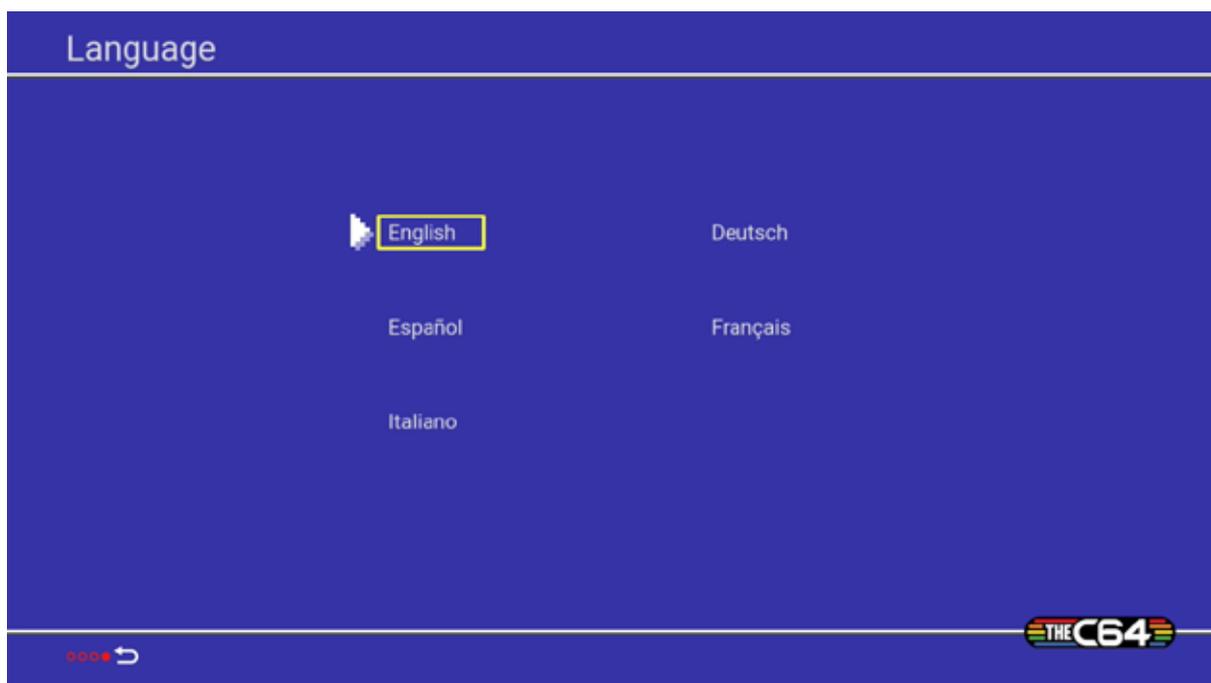
2. Choose your preferred language for THEC64 Mini using THEC64 Joystick and pressing **FIRE**. This setting affects all the non-game menus and screens. THEC64 Mini will now remember your choice and use it automatically. To change it later, see the OPTIONS below the GAMES CAROUSEL on the HOME screen, as described in **CHAPTER 4**. See **CHAPTER 2** for full details on using THEC64 Joystick

3. Having chosen your preferred language setting, press the ▤ button on THEC64 Joystick to go to the HOME screen
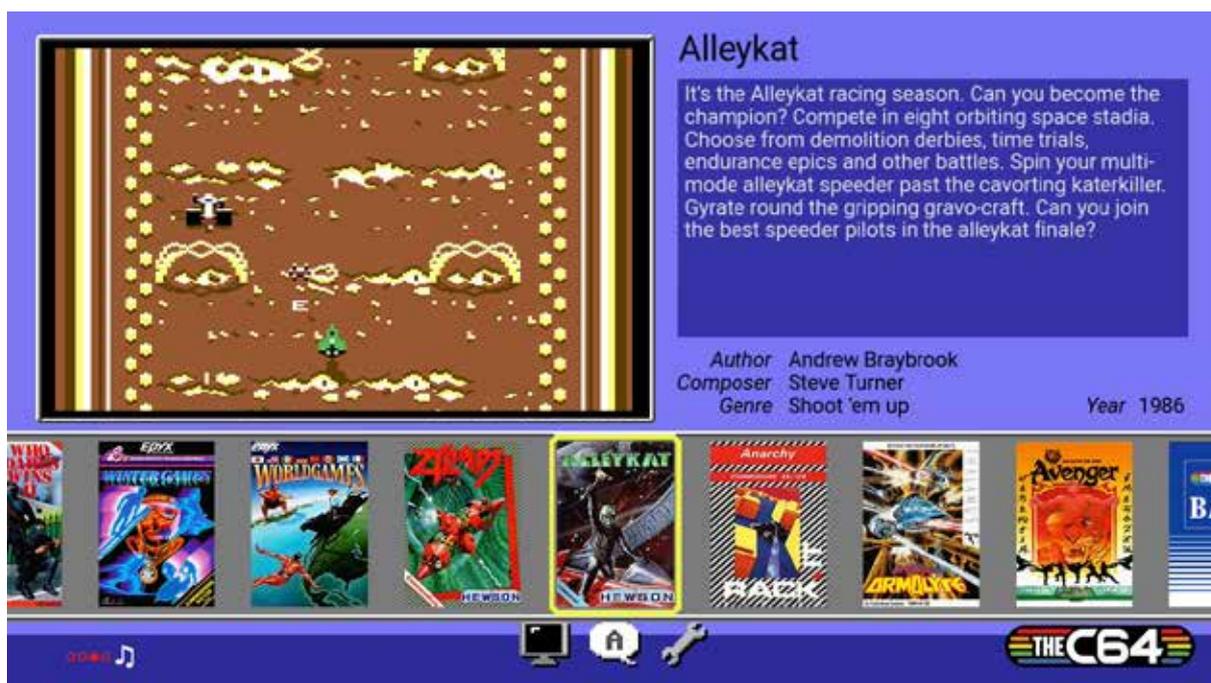
4. You're now ready to explore the HOME screen.

CHAPTER 4

THE HOME SCREEN

- Games Carousel
- Game Preview
- Game Overview
- Options

The HOME screen is where you choose which game to play and access the configuration options.

GAME PREVIEW   GAME OVERVIEW
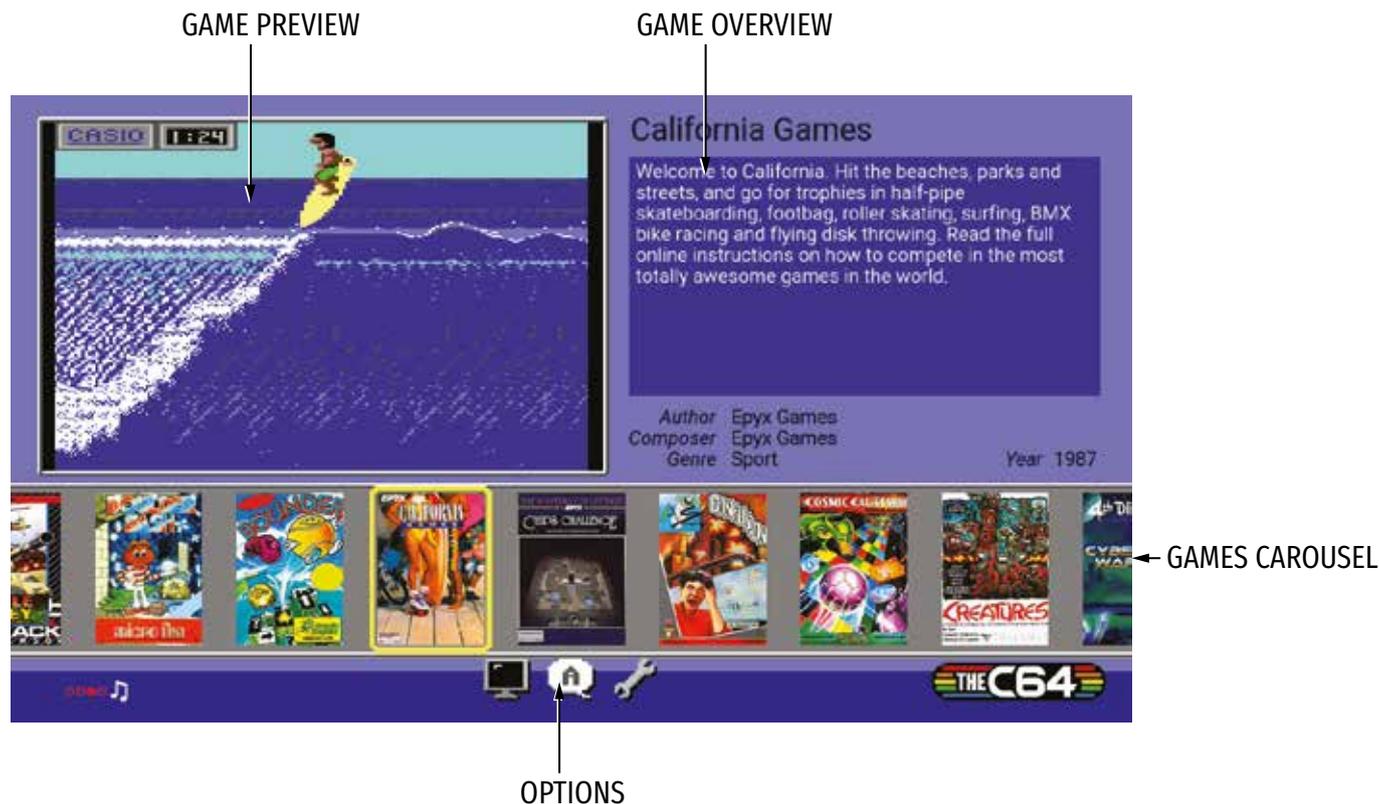

GAMES CAROUSEL

OPTIONS

GAMES CAROUSEL

Use the Joystick UP and DOWN to move the highlight between the GAMES CAROUSEL and the OPTIONS windows. Wherever you are on the HOME screen, LEFT and RIGHT chooses an item, and FIRE makes a selection.

GAME PREVIEW

This window shows preview images from the highlighted title in the GAMES CAROUSEL.

GAME OVERVIEW

This window displays information about the highlighted title, giving a summary of the game, what type of game it is and who created it. More information and full instructions for each game are available online at **www.thec64.com/games**

See **CHAPTER 5** for further information on playing the games.

OPTIONS

Choose from a selection of options that change how THEC64 Mini or a connected USB keyboard operates.

To choose an option, move LEFT or RIGHT on the Joystick and press either FIRE button. Press the ☰ button to come out of the current screen.

Select this option to choose how the games **display** on your HD TV or monitor.

- Pixel perfect — This mode gives a fuller display width, with square pixels.

- European 4:3 — This mode reproduces the display width of the original European computer

- North American 4:3 — This mode reproduces the display width of the original North American computer

You can also choose an additional CRT mode to introduce a softer, scanline effect should you want the games to look as if they are displaying on an old TV display.

For best results, set your TV Aspect to Auto to preserve the aspect ratio of THEC64 Mini. We recommend not using 4:3, 16:9 or any zoom modes.

Select this option to choose the **language** to be used on all the screens. It is the same option that appears automatically when you first power on THEC64 Mini.

Please note that these settings do not change the language used in the supplied games (which is English).

Select this icon to change **system** settings. There are four options available:

- USB keyboard — Use this option to select which keyboard layout to use with a USB keyboard. See **CHAPTER 6** for further details

- Legal notices — This option presents a collection of legal notices and other information

- System information — This option shows which version of THEC64 Mini firmware you have. See **CHAPTER 7** for further details about upgrading your firmware

- Factory reset — This option allows you to reset your THEC64 Mini back to its factory state, erasing all data. See **CHAPTER 7** for further details.

Press button C on THEC64 Joystick whilst on the HOME screen to toggle the menu music off and on.

CHAPTER 5

PLAYING GAMES

- Choose a Game
- Game Controls
- Start a Game
- The ≡ Button

CHOOSE A GAME

Push LEFT or RIGHT on the Joystick to step through the games displayed by the GAMES CAROUSEL.

The GAME PREVIEW and GAME OVERVIEW windows on the HOME screen give you a summary of the highlighted game.

Press **FIRE** on the Joystick to launch the highlighted game.

GAME CONTROLS

The majority of games use LEFT, RIGHT, UP, DOWN and either **FIRE** button to play. Some games make use of the additional buttons on THEC64 Joystick. To see the full game instructions and controls, visit **www.thec64.com/games**.

PLAY A GAME

TL or FIRE
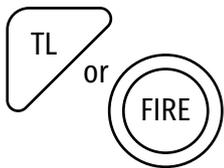
THEC64 Mini uses the **TL** button on THEC64 Joystick to start playing most games. If that doesn't work, try either the left **FIRE** or right **FIRE** button instead.

THE ≡ BUTTON

Pressing the **≡** button during gameplay will temporarily suspend the game and reveal the game options menu.

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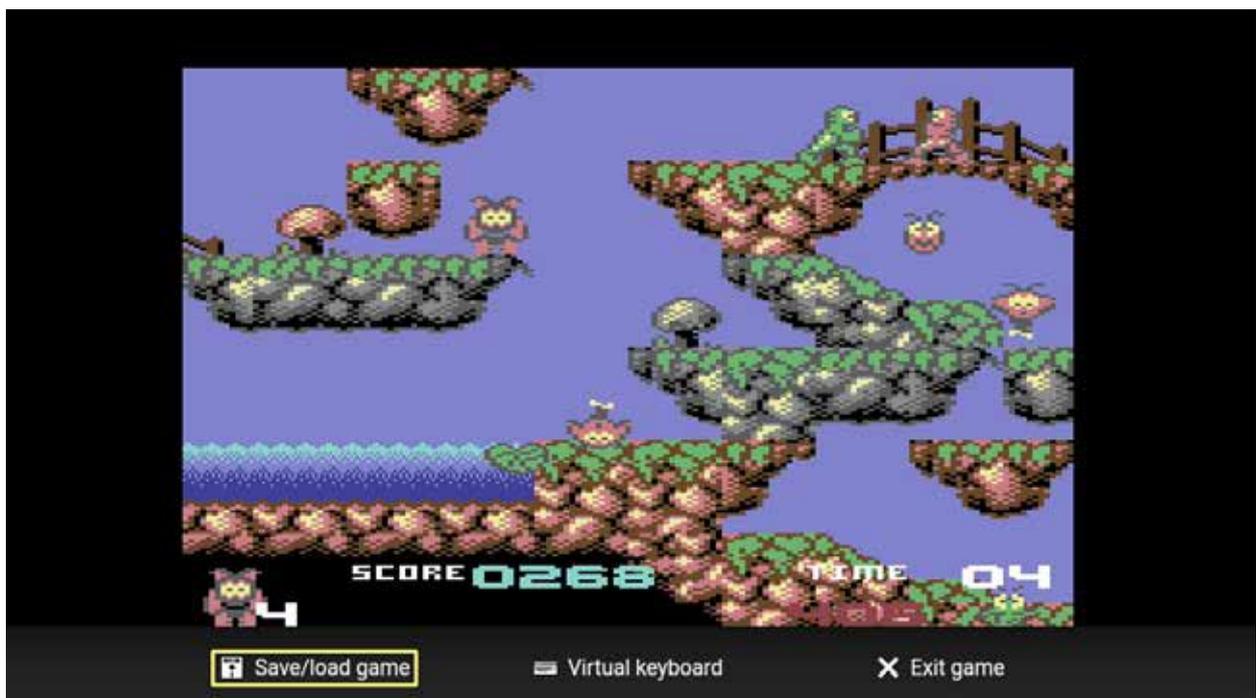There are a number of options available when you press the ▤ button during play:

SAVE/LOAD GAME

Use this to save your current position in the game, or load a previously saved game so you can continue to play from that position. Each game has four slots available to save to, and each slot can be overwritten at any time with a different save.

Use LEFT/RIGHT to highlight a slot.

●○○○ Press button [A] to save to the highlighted slot.

○○●○ Press button [C] to load from the highlighted slot.

○○○● ↩ Press ▤ to return to the game.

After a save or load, the menu closes automatically and the game instantly resumes play.

VIRTUAL KEYBOARD

Some games require you to press keys during play, like when entering names into a high score table or selecting options from a menu.

Use the supplied Virtual keyboard option to reveal an on-screen keyboard you control using the joystick. Alternatively you can plug in a USB keyboard.

See **CHAPTER 6** for details about using Virtual and USB keyboards.

○○○● ↩ After using the Virtual keyboard, press the ▤ button to close it and instantly restore joystick control to the current game.

EXIT GAME

To quit the current game and return to the HOME screen, select this option. To keep your progress, make sure you have used the Save option first.

CHAPTER **6**

KEYBOARDS

- The Virtual Keyboard
- USB Keyboards

THE VIRTUAL KEYBOARD

Press the ▤ button in a game and select the 'Virtual keyboard' option. An on-screen keyboard appears on the right-side. Through THEC64 Joystick, the Virtual keyboard gives access to all the keys of an original C64 computer.

See **CHAPTER 5** for more details about the menu options.

> **Whilst in the Virtual keyboard, the game is running but the Joystick temporarily operates the keyboard rather than the game. If this isn't suitable for the game you are playing, then connect a USB keyboard (NOT supplied) so you can use a keyboard *and* the Joystick at the same time.**

FIRE   Select the currently highlighted key

TL   Jump to the next keyboard section (there are three)

TR   Press the SPACEBAR

A   Press the RETURN key

C   Press the BACKSPACE key

The current key is highlighted on the Virtual keyboard and you push LEFT, RIGHT, UP or DOWN on the Joystick to highlight a different key. You can also press the **TL** button to quickly move the highlight between the three different sections of the Virtual keyboard.

Press **FIRE** to press the currently highlighted key and send that to the game.

Press the ▤ button to close the Virtual keyboard at any time. You are instantly given back control of the game.

> **Note that the Virtual Keyboard can only send one key press at a time, so if pressing keys simultaneously or rapidly pressing keys is required, then use a USB keyboard instead.**

USB KEYBOARDS

USB peripherals are only registered by THEC64 Mini whilst you are on the HOME screen, so to use a USB keyboard, connect to an unoccupied USB port before you launch a game from the HOME screen. THEC64 Mini supports the following USB keyboard layouts:

- US QWERTY
- UK QWERTY
- French AZERTY
- Italian QWERTY
- German QWERTZ
- Spanish QWERTY

Go to the OPTIONS beneath the GAMES CAROUSEL on the HOME screen and select the icon for changing system settings. Now choose the 'USB keyboard' option and then choose the appropriate layout for your keyboard, e.g. UK for a UK QWERTY keyboard.

See **CHAPTER 4** for more information on the HOME screen.

After making your selection, press the ▤ button to return to the previous screen.

When you connect a USB keyboard to THEC64 Mini, you gain access to all the keys present on the original C64 computer.

For letters, numbers and punctuation just press the usual keys on your USB keyboard. The C64 function keys are also replicated by pressing the usual function keys, e.g. for F1 press F1 and so on. However, modern keyboards don't have all of the keys present on the original C64 keyboard:

Original C64 key	USB keyboard equivalent
RESTORE	TAB
RUN/STOP	Esc
C=	Windows key / Command (⌘)
←	Grave accent key (to the left of 1)
⬆	^ (Shift+6)

A complete listing of the keyboard mapping is available at **www.thec64.com/keyboard**. This is useful when you are using C64 BASIC and want to access the graphical symbols found on the original C64 keys.

CHAPTER **7**

TECHNICAL HELP

- Firmware Upgrades
- Factory Reset
- USB Devices
- Forced Shutdown

FIRMWARE UPGRADES

Firmware upgrades for THEC64 Mini provide new features and/or correct any technical issues. We always recommend that you use the latest version of the firmware.

1. Check the current firmware version on THEC64 Mini by selecting the SYSTEM icon from the OPTIONS on the HOME screen, and then choose **System information** from the menu. Look for the Build version (e.g. theC64-1.0.1-argent). See **CHAPTER 4** for more information about the HOME screen

2. Use a computer capable of storing files on a USB memory stick (formatted to FAT32) and visit **www.thec64.com/upgrade**. Follow the links to access the latest firmware build. Check that the latest version on the website is greater than the version installed on your Mini

3. If there is a more recent firmware version on the website, download and save the file (e.g. theC64-1_1_0.bin) to your USB memory stick. Don't place it inside a folder on the stick, or rename the file. If you do, THEC64 Mini won't find the upgrade

4. Ensure you have a joystick connected to THEC64 Mini

5. Insert the USB memory stick into a spare USB port on THEC64 Mini

6. Select the SYSTEM icon from the OPTIONS on the HOME screen on THEC64 Mini, and choose **System information**
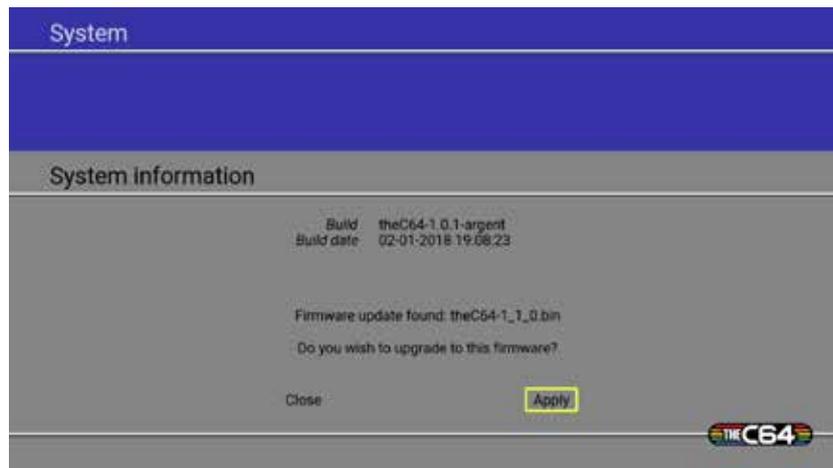

7. The upgrade file is detected and you are asked to close or apply

8. If you apply, then the upgrade begins. If you choose not to upgrade at this time, select Close and press FIRE, or just press the ▤ button on the joystick

9. After a successful upgrade, your THEC64 Mini will shut down and restart automatically.

> **Note that you cannot install an earlier firmware than the build version currently installed.**

FACTORY RESET

Select the SYSTEM icon from the OPTIONS on the HOME screen. One of the settings is 'Factory reset'. This resets THEC64 Mini and is an option you should not need to use very often, if at all.

Selecting 'Factory reset' will permanently erase any previously saved settings (e.g. Display, Language, USB keyboard) and any saved game positions stored on THEC64 Mini.
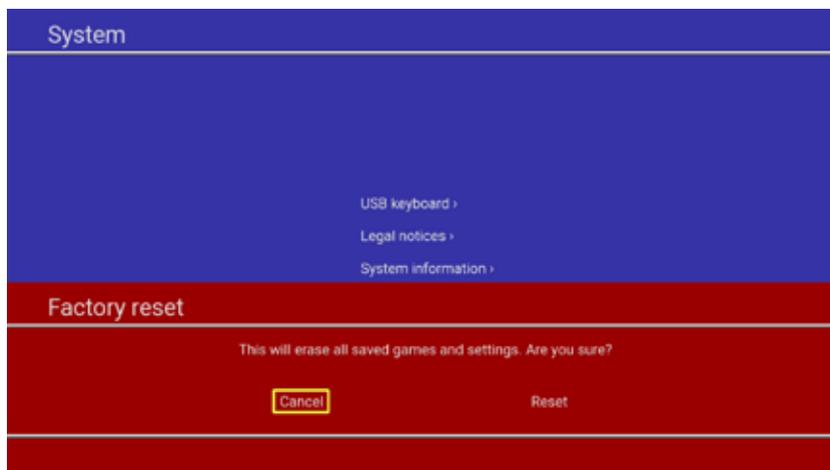
To reset THEC64 Mini, highlight the 'Reset' option and press 🔳FIRE to confirm. THEC64 Mini will reboot afterwards, and take you to the Language screen. See **CHAPTER 3** for more details

USB DEVICES

Connect USB devices to THEC64 Mini before you launch a game from the CAROUSEL on the HOME screen, else they will not be registered by the computer and will not work within the game. For this reason, if you unplug all THEC64 Joysticks from THEC64 Mini while playing a game, the game will immediately exit and return you to the HOME screen.

Only connect THEC64 Joystick, USB keyboards and USB memory sticks to THEC64 Mini. Other USB devices are unlikely to work and could affect the performance of THEC64 Mini.

FORCED SHUTDOWN

In the unlikely event that THEC64 Mini does not respond when pressing the power switch to shut it down, press and hold the switch in for approximately six seconds and THEC64 Mini will shut down. To turn THEC64 Mini back on, press and hold the power switch for two seconds until the Power LED glows red.

For other technical queries, visit **www.thec64.com/contact** or send an email to **support@thec64.com**.

CHAPTER 8

CARING FOR YOU AND THEC64 MINI

- Caution
- Epilepsy Information

Please take a moment to read the following advice regarding THEC64 Mini:

CAUTION

- Do not connect cables while THEC64 Mini is powered on

- Any certified 5V/1A AC power supply with a USB port can be used

- Only connect USB keyboards, controllers and USB memory sticks

- Keep THEC64 Mini and all cables out of the reach of young children

- Do not position THEC64 Mini where it may cause someone to trip or stumble

- Do not power off THEC64 Mini whilst data is being loaded or saved

- Do not expose THEC64 Mini to any of the following: liquids, high temperatures, high humidity, steam, direct sunlight, excessive dust or smoke

- Do not touch THEC64 Mini or connected cables during an electrical storm

- Do not allow small particles or any foreign objects to get inside THEC64 Mini

- Do not touch any of the connectors on THEC64 Mini

EPILEPSY INFORMATION

Some games might trigger symptoms in a small number of users who suffer from or are prone to epileptic seizures or blackouts, due to the rapid colour-cycling and other graphical effects employed. These effects could trigger a previously undetected condition in people with no previous history of seizures or epilepsy.

Stop using THEC64 Mini immediately and consult a doctor if you or anyone using THEC64 Mini experiences dizziness, eye or muscle twitches, disorientation, affected vision, any involuntary movements, convulsions or seizures. Only resume after taking medical advice.

To reduce the chance of experiencing symptoms associated with epilepsy:

- Use THEC64 Mini in a well-lit area and always keep a sensible distance away from the TV or Monitor screen

- Avoid prolonged use of THEC64 Mini. Take at least a fifteen minute break after each hour of continuous play

- Avoid using THEC64 Mini when you are tired or need sleep

- Stop using THEC64 Mini immediately if you feel tired, experience discomfort or pain in your limbs or begin to feel ill