



USER MANUAL

v1.4 (ENGLISH)

iChessOne

info@ichess.one

The mission of iChessOne is to promote chess as a sport for everyone and to encourage logical, creative and unconventional thinking.

I PRODUCT OVERVIEW

I.1 Introduction

Immerse yourself in the rich heritage of chess with the iChessOne board, a harmonious blend of traditional aesthetics and cutting-edge technology. Meticulously crafted in the timeless Staunton style, the pieces rest on a board that exudes warmth and authenticity while incorporating state-of-the-art electronic features. Whether playing in the comfort of your living room or connecting with an opponent from a distant land, iChessOne promises an unparalleled chess experience. With its groundbreaking folding design and sophisticated wireless data transmission system, it has never been easier to take this unique chess board on the road. More than just a board, iChessOne is a comprehensive chess system, perfect for both casual play and rigorous analysis. From offline play and game saving features to challenging the built-in AI or the vast world of online chess, every detail is designed with the chess enthusiast in mind. Expertly handcrafted in Europe and enriched by the insights of a global community, iChessOne beautifully blends tradition and innovation. As the boundaries between classic and contemporary chess are redefined, experience the unfolding future of chess with iChessOne.

I.2 TECHNICAL SPECIFICATIONS

- **SMART Board:** Tournament size board measures 470x470mm (18.5"x18.5") when unfolded, and 470x235mm (18.5"x9.25") when folded. Made of natural wood.
- **Power Source:** Built-in 2000mAh battery, rechargeable via USB-C port.
- **Chess Pieces:** Crafted from selected natural woods, with precision weights and advanced sensors to ensure satisfying and seamless gameplay.
- **Weight:** The SMART Board alone weighs 1.45kg (2.87lb); the full set weighs 2.5kg (4.85lb), including all 34 pieces, an elegant wooden phone stand, a pen, and a USB-C cable.

I.3 CHESS PIECE RECOGNITION

The iChessOne features an ultra-efficient hybrid piece recognition system. Using advanced algorithms and precision sensors, players can seamlessly switch to blitz or even bullet mode, experiencing the natural flow of movement as with non-electronic boards, while the system captures every move with impeccable speed and accuracy.

Note: Due to the built-in RFID technology, avoid placing metallic or magnetic items near the board during play to ensure optimal piece recognition.

2 GETTING STARTED

2.1 UNPACKING AND CHECKING THE CONTENTS

Upon receiving your iChessOne, please unpack it carefully and ensure all components are included. Your package should contain:

- 34 chess pieces (including two additional queens)
- Phone stand
- USB-C cable
- USB-C to USB-A adapter
- Protective cotton bag
- Pen

2.2 CHARGING YOUR BOARD

When using the iChessOne for the first time, it is recommended to fully charge the battery. To charge the board, connect the provided USB-C cable to a suitable adapter or USB port on your PC. For the fastest charging, we recommend using phone adapters. Any standard phone charger (5 Volts output) will work. A full charge takes approximately 6 hours.

2.3 SWITCHING ON THE BOARD

To switch on your iChessOne board, press the “ON/OFF” button located on the side of the board. During the start-up process, you will see a short LED animation, with the central squares (d4, d5, e4, and e5) blinking white. Once the animation is complete, your iChessOne is ready for use.

2.4 SWITCHING OFF THE BOARD

When you want to switch off your iChessOne, press the “ON/OFF” button for three seconds. The button will blink red after 2 seconds, and upon releasing it, the light will gradually fade and the board will turn off completely.

Note: If the board starts blinking red after turning off, it indicates that a firmware update is in progress. This update can take a few minutes, and it is important not to reset or turn on the board during this process.

2.5 PLACING THE CHESS PIECES

Before you start a game, place the pieces on the board in the starting position. This ensures proper synchronization during gameplay. If you have a board without notifications (no letters and numbers on the edges), it is advisable to enable the auto-rotation feature in the app menu.

2.6 INSTALLING AND RUNNING THE ICHESSONE APP

2.6.1 INSTALL THE ICHESSONE APP

To play with iChessOne, you need the iChessOne app on your mobile device. You can download it from the Google Play (Android) or the AppStore (iOs). Search term "iChessOne". After installation, you can create a game directly.



Lighting parameters and board settings can be modified through the game settings in the app.

2.6.2 GRANT NECESSARY PERMISSIONS

Open the app and accept the requested permissions. It is essential to grant access to Location and Bluetooth, as these are necessary for proper connection to the board.

Note: The app does not collect any user information or location data.

2.6.3 CONFIGURE YOUR CHESS PLATFORM ACCOUNT

If you want to play online games, you need to configure your Chess Platform account with the iChessOne app. Currently the app is integrated with Lichess, and Chess.com integration will be available soon.

- Go to the app settings and find the Integrations section.
- For Lichess integration, click on the "Link to Lichess.org" button and authorize the connection.
Note: The iChessOne app does not store any data, including your Lichess account password, and it uses the official Lichess API, ensuring compliance with Lichess's terms of service.
- After successful connection, your Lichess username will be visible in the Integrations section. There you can also log out or change the Lichess account.

2.7 CONNECTING YOUR BOARD TO THE ICHESSONE APP

2.7.1 OPEN THE ICHESSONE APP AND NAVIGATE TO THE “BOARD” SECTION

Open the iChessOne app on your mobile device and navigate from the bottom bar to the “Board” section, where you will see a list of available chessboards.

2.7.2 CHECKING THE BOARD STATUS

Make sure that your board is in searching mode (blinking blue). If the LED is solid blue, the board is already connected to another device and needs to be disconnected first. If the Status LED is solid white, the board is powered on but not in searching mode. To activate searching mode, shortly press the ON/OFF button, and the LED will start blinking blue. The connection status indicator on the board icon in the app shows:

- Green: The app is currently connected to this board.
- Orange: Board is available but not connected.
- Red: Board is saved but not available for connection.

2.7.3 CONNECTING TO THE BOARD AND UPDATE FIRMWARE

In the “Board” section, select your board from the list. If an ⓘ indicator is visible, it means that a firmware update is available. Click the Download button to transfer the update to the board.

On the board tile, the icon on the left indicates the connection status and available updates. On the right side are buttons for Download (if an update is available), Settings, and Connect/Disconnect. Use these buttons to manage your board.

Note: If you turn off the board without manually disconnecting it through the app, and it was previously connected to this device, it will automatically reconnect when you turn it back on. Otherwise, you must reconnect by clicking the “Connect” button in the app (next to the board's name in the list).

2.7.4 PERFORM INITIAL SETUP

Click the Settings icon on the board tile to configure your board.

- Optionally, change the board name that will be visible in the app.
- Click the “LED Test” button to light all the LEDs in rows from the last to the first status bar.
- Place the chess pieces in the starting position and check if they are recognized correctly. The real-time position is displayed in the board visualization.

3 BUTTON & LED STATUS EXPLANATION

3.1 ICHESSONE BOARD OFF

- **Short press - checks battery level**
 - Flashing green: battery level >85%
 - Solid green: battery level >60%
 - Solid orange: battery level >35%
 - Solid red: battery level >20%
 - Flashing red: battery level <20%
- **Long press - turns the chessboard on**
 - Solid white: indicates that the board is on.

3.2 ICHESSONE BOARD ON

- **Short press - checks the battery level. LED behavior is the same as when the board is off**
- **Short press (additional function) - activates Bluetooth mode (for 15 seconds):**
 - Flashing blue: chessboard is ready to connect via Bluetooth
 - Solid blue: chessboard is connected to a device via Bluetooth
- **Long press - turns the chessboard off**
 - Red blink and fading out: indicates that the board is turning off.

3.3 SPECIAL INDICATIONS

- **Firmware update**
 - White blinking after switching off the chessboard.

3.4 HARD RESET

In unexpected situations, if you encounter issues with your chessboard and all other troubleshooting steps have failed, you can perform a hard reset. To do this, press and hold the ON/OFF button for more than 8 seconds. After releasing the button, the chessboard will restart automatically.

4 PLAYING A GAME ON ICHESSONE

4.1 LED INDICATORS AND GAME FEEDBACK

The iChessOne board uses customizable multi-colored LED lights to provide visual feedback for various game events, such as move confirmation, available moves, and status changes. All of these lighting behaviors can be defined and adjusted in the game settings within the iChessOne app, allowing you to choose the colors and determine whether the LEDs should blink or stay on.

4.1.1 STATUS BAR BEHAVIOR

The status bar consists of eight multi-colored LEDs, each placed near the squares of the first and last row along the edge of the board. The status bar provides important visual cues throughout the game:

- **GAME START AND PLAYER COLORS**

At the start of the game, the status bar on the side of the player who is playing with the assigned color lights up green, whether in an online game or against the AI. In offline (1v1) mode, the status bar will also light up green to indicate which player is starting when the game resumes.

- **GAME END**

The status bar shows the result at the end of the game:

- Solid green: the winning side
- Solid red: the losing side
- Solid orange: both sides of the status bar will be orange if the game is a draw

- **INCORRECT MOVE WARNING**

If an invalid move is made (e.g. an out-of-turn move), the status bar will flash red several times to alert the user that something needs to be corrected on the board.

- **CONNECTION FEEDBACK**

When the chess board connects to a mobile device, the status bar will light blue sequentially to confirm the connection. If the board disconnects, the LEDs will turn off one by one to indicate the disconnection.

4.1.2 MOVE CONFIRMATION AND AVAILABLE MOVES

The iChessOne board provides clear visual feedback using LED lights to confirm your actions and guide you during the game. When a piece is removed from its square, the square lights up to indicate that the board has registered the action. If the "Available Moves" option is enabled in the app, all legal target squares for the selected piece will also light up to help you visualize the possible moves.

If this option is disabled, only the starting square will light up until the piece is placed on its new square. When the piece is placed, the destination square will flash briefly to confirm that the move has been detected, and then both squares will return to normal.

4.1.3 OPPONENT'S MOVES

When playing against an AI or an online opponent, the iChessOne board will indicate the opponent's move using the LEDs. The square from which the opponent's piece has moved and the target square will either blink or remain steady (depending on your settings) in the colors you have defined in the app.

After you physically move the opponent's piece to the target square, the lights will turn off, confirming that the move has been recognized by the board, and the game continues.

4.2 MANAGING YOUR TIME AND MAKING MOVES EFFICIENTLY

When playing online with iChessOne, the clock starts running immediately when the opponent makes a move. The time it takes for the opponent's pieces to move around the board is subtracted from the remaining time. It is also important to maintain a stable Internet connection when playing online, as a weak connection can cause delays and interruptions, potentially affecting the game.

iChessOne supports the premove feature, which allows a single move to be queued in advance, before the opponent's move is made. Only one premove can be set at a time, i.e. a sequence of moves cannot be queued. However, the premove can be modified as often as necessary while waiting for the opponent's move, with the final premove being executed automatically when the opponent's move is received. The option to enable premoves is available in the game settings within the iChessOne app.

Care should be taken when using premoves to avoid mistakes. If a premove becomes illegal after the opponent's move, it will not be executed. In such cases the board will indicate how to correct the position.

Once iChessOne displays the opponent's move, it is possible to make the next move before the opponent's piece is physically placed on the board. For example, if you capture your opponent's piece, you can immediately remove it and place your own piece on the target square.

When playing offline against the AI, the same time management and premove rules apply. However, there is an optional setting that pauses the clock until the AI's move is properly placed on the board. This option is available in the favorite presets or when setting up a new game.

4.3 MOVING CHESS PIECES AND ADJUSTING MOVE SENSITIVITY

The iChessOne board is designed to provide an experience similar to playing on a traditional non-electronic chessboard. Pieces can be moved naturally across the board without having to press on any squares.

For players who prefer to slide pieces across the board, there is an adjustable option in the game settings called Sliding Move Delay. This setting controls how quickly the board detects and registers a move when pieces are moved from one square to another. Users who prefer sliding pieces should adjust this parameter to their preference. By default, the delay is set to allow for fast and energetic movement across the board. However, moving pieces too slowly can cause the board to detect an intermediate square along the way.

In offline games, or when playing against the AI, this move can easily be undone and repeated. In online games, once the move is sent to the external chess platform, it cannot be undone unless the opponent agrees. Therefore it is important to be aware of the move speed in online play to avoid mistakes.

To avoid unintentional moves, it is recommended to:

- Move pieces more quickly to the destination square, or
- Lift the pieces and place them directly on the destination square for each move.

In offline 1v1 games, there is an option to disable automatic move confirmation, which means that a move is accepted only after pressing the clock button on the mobile device screen. This setting can be helpful for players to remember the use of the chess clock in classic chess tournaments.

4.4 SPECIAL MOVES

4.4.1 CASTLING (SHORT AND LONG)

Castling is a special move in chess where both the king and the rook are moved. Castling starts with the king moving two squares towards the rook, according to the chess rules. If the move is valid, the iChessOne board will show the correct position for the rook. It's important to note that if the rook is moved first, the board will recognize it as a regular rook move and castling will no longer be possible.

In Chess960, the player's behavior remains the same as in classical chess, with one notable difference: when the king lands on the rook's starting square, the following steps must be taken:

- Lift the King
- Lift the Rook from its square
- Place the King in its proper castling position
- Finally, place the Rook in its new position

During castling, a dialog will appear on the mobile device with information about the castling move and the coordinates for placing the king and rook. This window will automatically disappear once the castling move has been completed correctly and the board is ready for the next move. Alternatively, players can close the window manually by clicking the Ignore button at the bottom of the dialog.

When castling is performed by a remote opponent (whether playing online or against AI), the board will indicate the move in two steps: first showing how to move the king, and then showing how to move the

rook. In such cases, both pieces can be moved to their final positions simultaneously, and the board will not register an error if the rook is moved first.

4.4.2 EN PASSANT (CAPTURING IN PASSING)

En Passant is a special pawn capture that occurs when a pawn moves two squares forward from its starting position and lands beside an opposing pawn. The opposing pawn has the right to capture the moved pawn as if it had only moved one square. This capture must be made immediately on the next move, or the right is forfeited.

When performing en passant on the iChessOne board, move the capturing pawn diagonally to the square behind the opponent's pawn (as in a normal capture). After the pawn is moved to the correct square, the opponent's captured pawn will light up red, indicating that it must be removed from the board.

4.4.3 PAWN PROMOTION

Pawn promotion occurs when a pawn reaches the opposite side of the board and is promoted to another piece of the player's choice. In iChessOne this process is performed exactly as it would be on a traditional, non-electronic chessboard. The pawn is removed from the penultimate rank and the chosen piece (queen, rook, bishop, knight or even king in non-standard chess variants such as Antichess) is placed on the promotion square. If the pawn captures an opponent's piece during promotion, both the pawn and the captured piece are removed, and the promoted piece is placed on the square.

If a pawn is moved to the final square without being promoted immediately, the iChessOne board will flash the square three times in red as a reminder. The square will then remain solid red until the pawn is replaced by the chosen promotion piece.

When a remote opponent makes a promotion (whether online or against AI), a dialog box appears on the mobile device showing the piece selected for promotion and the board coordinates of the move. This window will automatically disappear once the promotion is completed correctly and the board is ready for the next move. Alternatively, players can manually close the window by clicking the Ignore button. In addition, the iChessOne board will highlight the squares as it would for a regular move.

iChessOne has full piece recognition, so, if a player selects a promoted piece he does not have, the game cannot continue on the physical board. In this rare case, the remainder of the game must be completed using the board visualization on the mobile device.

4.5 HANDLING ILLEGAL OR INCORRECT MOVES

If an illegal or incorrect move is made, the iChessOne board provides clear feedback to help the player correct the mistake. The board is equipped with a built-in chess engine which ensures that the game is played according to the rules of the selected chess variant.

In the event of an error, such as improper piece placement, incorrect moves, or any other rule violation, the board will highlight the relevant squares and indicate what needs to be corrected. Depending on the situation, the player must either return the piece to its original position or adjust it to a correct position.

4.5.1 KING IN CHECK (STANDARD MOVE OR ACCIDENTAL EXPOSURE)

If a move is made that leaves the king in check or exposes the king to attack, the squares of the incorrectly moved piece, the attacking piece and the king will flash three times to indicate the error. The iChessOne board will then indicate that the moved piece should be returned or corrected. The player is prompted to either return the piece to its original square or make another legal move.

If the piece can be legally repositioned without returning to the original square (for example, moving the pawn directly to g3 instead of back to g2 and then to g3), this adjustment is allowed, ensuring that the player can correct the error without unnecessary steps.



Fig. 1 Illegal move 1

4.5.2 ILLEGAL CASTLING

If castling is attempted through or into an attacked square, or with a king that has already moved, the iChessOne board will provide visual feedback. The square of the incorrectly moved piece, the attacking piece and the attacked square will flash three times. The board will then prompt the player to return the king and rook to their original squares, as if undoing the castling move. Before making a new move, the position on the board must be corrected.



Fig. 2 Illegal move 2

4.5.3 INCORRECT PAWN PROMOTION

If an incorrect pawn promotion is made (such as promotion to an opponent's piece, to another pawn or to a king), the iChessOne board will signal the error. The promotion square will blink red three times, followed by a continuous red light on the square until the mistake is corrected. If another incorrect piece is placed during the correction attempt, the square will blink red three more times and remain lit until a valid piece is placed.

4.5.4 UNRECOGNIZED OR MISSING PIECE

If an unrecognized piece (i.e., a piece from outside the game) is placed on the board, the iChessOne board will signal the error. The affected square will blink red three times, followed by a continuous red light until the situation is corrected. Correcting the error requires removing the unrecognized piece from the board.

If a piece is removed from the board during play, the square where the piece was removed will remain red until the piece is returned. This can also happen if a piece is placed too close to the edge of a square and out of range of the occupancy sensor. When playing, users should try to place pieces close to the center of the square, which will also increase the playing time on one battery charge.

4.5.5 MOVING OUT OF TURN OR WITH THE WRONG PIECE

If a player moves out of turn or uses a piece that doesn't belong to him, the iChessOne board will signal the error by flashing red three times in the status bar on the side of the player who made the wrong move. The board will then prompt the player to return the piece to its original square, as if the move were being undone. The correct squares for picking up and placing the piece are highlighted to guide the player in correcting the error.

When playing against AI or online opponents, if the player wishes to use the premove feature, they have to ensure that the option is enabled in the Game Settings section of the app. If premove is not enabled, the board will treat the move as out of turn, signaling that the sequence of moves has not been allowed.

4.5.6 ILLEGAL MOVE

If an illegal move is made on the iChessOne board, e.g. moving a bishop from f8 to b4 when a pawn is blocking the way on d6, the board will signal the error. The square where the piece was incorrectly placed will blink red three times and then remain red until the situation is corrected. The player must return the piece to its original position or make a valid move to continue the game.

If the illegal move involved a capture, the board will indicate in red the square where the capturing piece was incorrectly placed. To correct the error, all the pieces involved must be returned to their original positions.



Fig. 3 Illegal move 3

4.5.7 INCORRECT PLACEMENT OF REMOTE OPPONENT'S PIECE

If a remote opponent's piece is incorrectly placed on the wrong square or the wrong piece is moved, the iChessOne board will signal the error. The square where the piece was placed incorrectly will flash red three times and then remain red until the correct piece is placed on the correct square as indicated by the board.

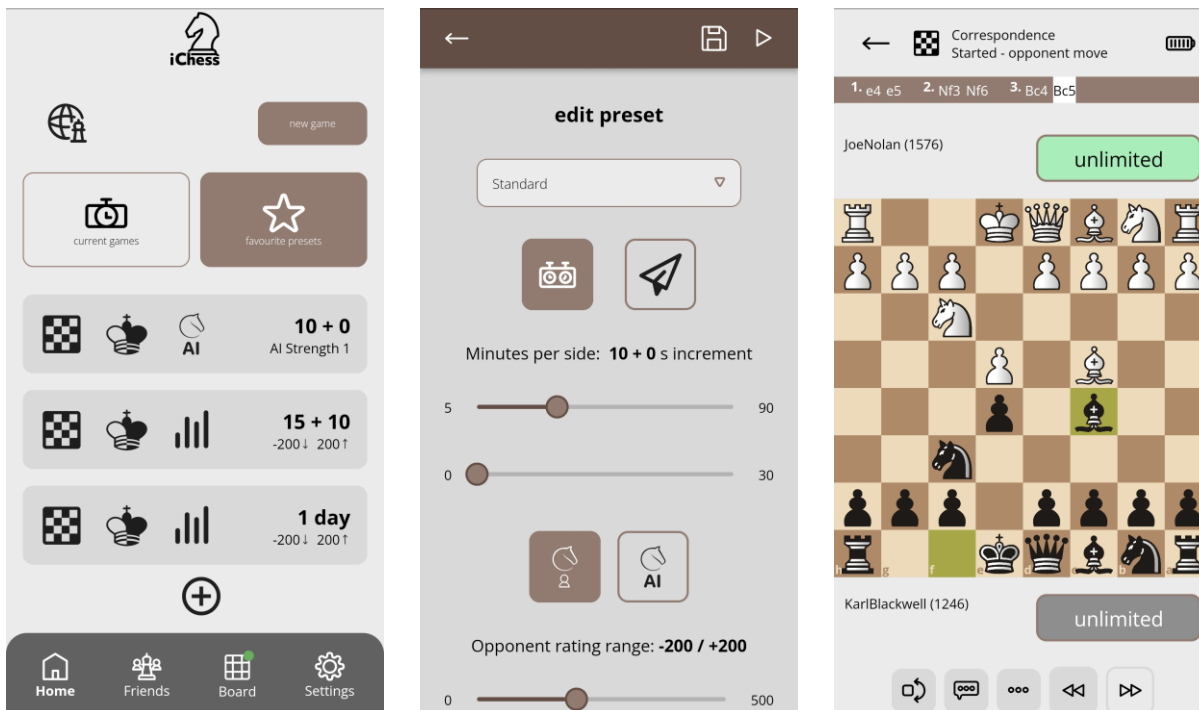
If another piece from the opponent's side is mistakenly moved, the board will flash red three times in the incorrect piece's square and then instruct the player to return the piece to its original position before completing the correct move.

5 PLAY ONLINE ON MAJOR CHESS PLATFORMS

The iChessOne board offers a unique combination of the traditional chess experience with modern online play features. It supports leading online chess platforms such as Lichess and Chess.com, providing a natural and engaging chess experience on a physical board.

To start playing online, access the “Play Online” feature in the iChessOne app. For Lichess users, a simple authorization within the app connects the account, allowing quick and direct access to online matches.

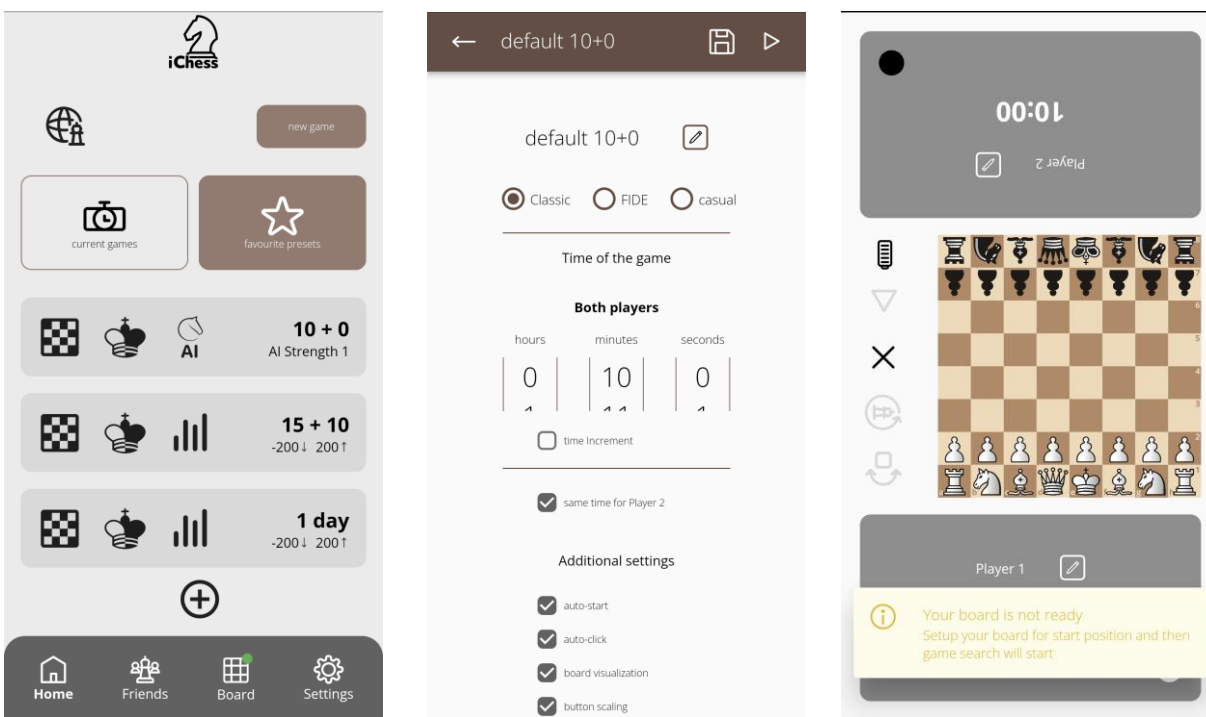
In addition to human opponents, the iChessOne supports play against chess engines of varying levels of difficulty. This option is suitable for all skill levels and offers a wide range of challenges. It supports both correspondence and real-time play. Correspondence play allows moves to be made over extended periods of time, making it ideal for players who prefer a slower pace or are playing with friends or family in different time zones. Real-time play offers a faster-paced, competitive experience for immediate engagement.



6 PLAY OFFLINE AND ANALYZE THE GAMES

When using the iChessOne board for offline games (player vs. player on a board), the log can be saved and a Portable Game Notification (PGN) file can be generated for further analysis, eliminating the need to manually record moves on paper. The app allows you to select the type of clock, offering classic and tournament styles, as well as casual games with no time limit. The auto-start feature automatically starts the clock when you start the game. With Auto-Click enabled, moves detected by the sensors are automatically confirmed. If this option is disabled, the board waits for the player to press a button on the mobile device screen, similar to pressing a clock in a chess tournament. The app view can be customized by adding a board visualization, scaling size of the move acceptance buttons, displaying a time bar, displaying tenths of seconds near the end of the game, and changing the color of the move acceptance buttons in the final period. The game can be paused at any time and resumed later. All finished games are automatically saved in the "Recent Games" section for later analysis.

The exceptional piece detection system, created by combination of ultra-fast magnetic sensors and RFID, allows games to be played in less than 1 minute per player, satisfying all blitz and bullet enthusiasts.



7 TERMS AND CONDITIONS

7.1 STANDARD ONE-YEAR MANUFACTURER WARRANTY

iChess provides a one-year warranty to the original purchaser of its products. This warranty covers defects in materials and workmanship under normal use and conditions, excluding software and consumables such as batteries.

iChess warrants that its products are free from defects. If a defect is discovered within the warranty period, customers should contact iChessOne Customer Support (info@ichess.one) with proof of purchase and a detailed description of the problem. The iChessOne team will assist in resolving the problem promptly.

Note: This warranty does not cover damage caused by misuse, abuse, accident, or unauthorized modifications. Software-related issues are handled separately under our software support policies, and consumables are covered under a limited warranty.

7.2 DISCLAIMER

iChess has made every effort to ensure that the information in this manual is accurate and complete. However, iChess assumes no responsibility for any errors, omissions, or inaccuracies that may be contained in this document. The company reserves the right to make changes in the hardware and software specifications described in this guide at any time without notice.

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iChess shall not be liable for any damages or losses resulting from the use of the iChessOne board or the information contained in this manual. Users are encouraged to visit the official product website www.ichess.one for the latest updates and product information.

8 FCC INFORMATION

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.

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

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

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

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction