

# ZMF TAP N SET CHESS CLOCK

ZMARTFUN ELECTRONICS, INC.



Please, download the app **TapNSet** for free from the  
Play Store or the App Store, respectively.

# **CONTENTS**

1. PRODUCT DESCRIPTION .....	4
2. PROGRAMMING WITH YOUR CELLPHONE .....	6
3. MENU OPTIONS .....	8
3.1 Quick Time Change .....	8
3.2 Set Time in Hours and Minutes .....	8
3.3 Set Time in Minutes and Seconds.....	9
3.4 Set Delay .....	9
3.5 Set Increment .....	9
3.6 Set Tournament Modes .....	10
3.7 Set Scrabble Mode .....	11
3.8 Set FIDE Mode .....	11
3.9 Set Increment Mode.....	12
3.10 Set LED Indicators to On/Off.....	12
3.11 Set Sound to On/Off .....	12
3.12 Exit Menu .....	12
4. PENALTY TIME CHANGES.....	13
5. REPLACING BATTERIES .....	13
6. RETURNS .....	13
7. TECHNICAL SPECIFICATIONS .....	13
8. TROUBLESHOOTING.....	14

# **1. PRODUCT DESCRIPTION**

The ZMF Tap N Set™ chess clock is unlike any other clock on the market. It can be programmed using an app on your cellphone – you just tap your phone against the clock. (Note that programming with phone and app only works if the clock hasn't started running yet.) It can also be programmed just like the ZMF-II or ZMF-Pro clocks. These clocks were designed and engineered by avid chess players in the USA, but they can be used for nearly every competitive two-player board game. Key features of the Tap N Set™ clock include:

- Programmable via cellphone app; set time controls in the app, and tap the phone against the clock before starting it.
- Touch sensing button and push button models available.
- Program menus are simple to use and understand.
- Delay, Increment, and Scrabble programmable between 1 and 40 minutes.
- Large LCD display.
- Programmable tournament modes with and without move counter. Three time controls available.
- Double click option prevents clock from being reset when it is paused.
- Three different preset settings/modes can be kept in memory at all times.
- Highly accurate clock.
- Sound and LED indicators can be turned off.
- Clock can be used for nearly every competitive two-player board game.
- Low power consumption. Batteries (2 AA; not included) should provide power for more than 400 hours of use under normal conditions.
- Very strong plastic enclosure to protect your clock.
- Affordable price.
- Patent pending.
- **DESIGNED AND ASSEMBLED IN THE USA!**

The main components of this clock are:

- 1) Touch sensing or push “player” buttons (depending on the model)
- 2) LED player indicators
- 3) Cellphone should be tapped here to program the clock
- 4) LCD display
- 5) On/Off slide switch.
- 6) Menu, Set/Stop button
- 7) Battery compartment



## 2. PROGRAMMING WITH YOUR CELLPHONE

The ZMF Tap N Set™ clock can be programmed with an app available for Android® and iOS®. The app can be downloaded for free from the Play Store or the App Store, respectively.



Just enter the time settings that you want to use and tap the cellphone against the clock between the two LED indicators at point "3" as shown in the image below:



Note that the time setting must be a valid one for the clock to receive it. For example, a time setting of 10 minutes for one player and zero minutes for the other won't be accepted by the clock.

When programming the ZMF Tap N Set™ clock with a cellphone, the phone will vibrate and the clock's LED indicators will momentarily blink to indicate that the operation was successful. The location of the NFC antenna in a cellphone can vary depending on model. The best way to find out where the antenna is located is to try tapping the cellphone against the clock using the bottom, middle, or top part of the phone until it connects.

### 3. MENU OPTIONS

To enter the menu options:

1. Press the menu button to stop the game (assuming a game is in progress).
2. Double click the menu button to reset the timer to its preset setting/mode.
3. Press and hold the menu button for 5 seconds.
4. Use either of the player buttons to navigate through the menu options.

#### 3.1 Quick Time Change



1. Press the menu button to stop the game.
2. Double click the menu button to reset the timer to its preset setting/mode.
3. Press and hold for 5 seconds the menu button to enter the menu options.  
If a regular time setting was preset (example: **MM:SS MM:SS**, or **HH:MM HH:MM**) then a flashing time display will be seen (example: flashing **05:00 05:00**).
4. Press the menu button one more time to enter "Quick Time Change" mode or press any of the player buttons to enter the menu options. If in "Quick Time Change" mode, make changes using the player buttons and the menu button until time is set.

Note: A quick touch of either of the player buttons is required to increase or decrease the time by one unit. If the finger/hand is left touching the button the time will keep changing. This feature was intentionally included in the clock design to facilitate setting up the time in the unit.

#### 3.2 Set Time in Hours and Minutes



1. Press the menu button to enter this mode when a flashing "**HH:MM HH:MM**" is displayed. Time can be set in hours and minutes (HH:MM).



2. Use either of the player buttons to change the time and accept the settings using the menu button.

### 3.3 Set Time in Minutes and Seconds

A digital display showing the time setting mode. The display is divided into two sections, each showing "MM:SS" in a seven-segment font. The first section is "07:55" and the second is "07:55".

1. Press the menu button to enter this mode when a flashing "**MM:SS** **MM:SS**" is displayed. Time can be set in minutes and seconds (MM:SS).
2. Use either of the player buttons to change the time and accept the settings using the menu button.

### 3.4 Set Delay

A digital display showing the delay setting mode. The display is divided into two sections. The first section shows "DEL" and the second section shows "00".

1. Press the menu button to enter this mode when a flashing "**DEL 00**" is displayed. A flashing "00" will be displayed ("00" is the default setting for the delay value).
2. Use either of the player buttons to set the number of seconds for the delay. A maximum of 60 seconds can be programmed for this function.
3. Press the menu button to accept the settings.
4. Go to "**PLAY - - - -**" and press the menu button to start a new game.

### 3.5 Set Increment

A digital display showing the increment setting mode. The display is divided into two sections. The first section shows "INC" and the second section shows "00".

1. Press the menu button to enter this mode when a flashing "**INC - 00**" is displayed. A flashing "00" will be displayed.
2. Use either of the player buttons to set the number of seconds for the increment. A maximum of 60 seconds can be programmed for this function.
3. Press the menu button to accept the settings.
4. Go to "**PLAY - - - -**" and press the menu button to start a new game.

## 3.6 Set Tournament Modes

P-00 000

1. Press the menu button to enter this mode when a flashing "P-00 000" is displayed.
2. Enter the number of moves that you want for the first time control. Choose **2t** or **3t** for two or three time controls respectively with the move counter off (New Feature). Press the menu button
3. Enter the number of minutes that you want for the first time control, and then press the menu button. Skip to step 5 if the move counter is off (options **2t** or **3t**).
4. If only two time controls are required, press the menu button (example: -**ALL** 000 with a flashing 000). If three time controls are required then use either of the player buttons to set the number of moves for the second time control and press the menu button (ex: **2-20** 000 with a flashing 000).
5. Enter the number of minutes that you want for the second time control and then press the menu button.
6. If three time controls were selected from step 4 or option **3t** was selected, then enter the number of minutes for the third time control and press the menu button.
7. Go to "**PLAY** - - -" and press the menu button to start a new game.

**Example 1:** The following settings "**1-40 60**" and "**-ALL 30**" correspond to 40 moves in 60 minutes and 30 minutes will be added to the clocks after the first time control to finish the game.

**Example 2:** The following settings "**1-40 60**", "**2-20 30**", and "**3 -- 30**" correspond to 40 moves in 60 minutes for the first time control, then 20 moves in 30 minutes for the second time control, and 30 minutes to finish the game for the third time control.

**Example 3:** The following settings "**1-2t 60**" and "**-ALL 30**" correspond to two time controls of 60 and then 30 minutes with the move counter off.

**Note:** If increment or delay options are enabled, the number of moves made by each player is displayed approximately 0.5 seconds after each player makes his move or the delay countdown counter reaches zero respectively. If the move

counter is off (options **2t** and **3t**) the number of moves won't be displayed. The unit starts counting moves right after the player with white pieces makes his first move. Black should start the clock.

### 3.7 Set Scrabble Mode

The image shows a rectangular LCD display with a white background and black text. The text is arranged in two groups: "SCRA" on the left and "OFF" on the right, with a small gap between them. The font is a simple, blocky digital typeface.

In Scrabble mode both timers can be programmed from 1 to 40 minutes. When any of the timers reaches zero, it will count up until negative 10 minutes is reached.

1. Press the menu button when a flashing "**SCRA OFF**" is displayed. The next display will be shown "**SCRA OFF**" with a flashing "**OFF**".
2. Use either of the player buttons to set the starting time from 1 to 40 minutes for each player.
3. Use either of the player buttons to go to "**PLAY - - - -**" and press the menu button.

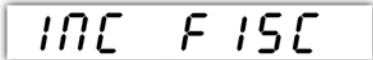
### 3.8 Set FIDE Mode

The image shows a rectangular LCD display with a white background and black text. The text is arranged in two groups: "FIDE" on the left and "OFF" on the right, with a small gap between them. The font is a simple, blocky digital typeface.

In this mode the clock stops working when one of the timers goes to **00:00**. A flag will indicate what timer ran out of time first and the other player's timer will stop working. Use this setting only for FIDE competitions unless indicated otherwise.

1. Press the menu button when a flashing "**FIDE OFF**" is displayed. The next display will be shown "**FIDE ON**".
2. Use either of the player buttons to go to "**PLAY - - - -**" and press the menu button.

### 3.9 Set Increment Mode

A rectangular LCD display showing the text "INC F ISC" in a monospaced font.

Set the increment mode to either Fisher or Bronstein. The default increment mode is the Fischer setting.

### 3.10 Set LED Indicators to On/Off


A rectangular LCD display showing the text "LED ON" in a monospaced font.

This setting turns the LED light indicators on or off. These LEDs are used to indicate whose turn it is to move.

This setting turns the LED light indicators on or off. These LEDs are used to indicate whose turn it is to move.

1. Press the menu button when a flashing "**LED ON**" or "**LED OFF**" is displayed. This will toggle the LED indicators between the on/off options.


### 3.11 Set Sound to On/Off

A rectangular LCD display showing the text "SOUN ON" in a monospaced font.

This setting turns the sound in your unit on or off.

1. Press the menu button when a flashing "**SOUN ON**" or "**SOUN OFF**" is displayed. This will toggle the sound between the on/off options.

### 3.12 Exit Menu

A rectangular LCD display showing the text "PLAY ----" in a monospaced font.

Press the menu button when a flashing "**PLAY ----**" is displayed to accept all your settings and start a new game. All settings are automatically stored in memory.

## **4. PENALTY TIME CHANGES**

Use this procedure in the event that the arbiter needs to increase or reduce a player's remaining time. Also, the number of moves can be adjusted if the clock is in tournament mode.

1. Press the menu button once to stop the timers (assuming the game is in progress).
2. Press and hold the menu button for five seconds.
3. Use the touch sensors and the menu button to make any necessary changes. If in tournament mode the number of moves can be changed also.

## **5. REPLACING BATTERIES**

Batteries should be replaced when the low-bat icon is on. Use 2 AA batteries. Refer to the technical specifications below for more details.

1. Turn off the unit.
2. Place your clock on a table with the display facing down. Care should be taken as not to scratch the display.
3. Remove the battery compartment cover.
4. Replace the 2 AA batteries. There are some marks in the batteries compartment cover that indicate the proper battery polarity direction.
5. Replace the battery compartment cover.

## **6. RETURNS**

Our clock units come with a **one year warranty** against manufacturing defects. Read the troubleshooting section in your manual. A proof of purchase with the purchase date on it will be required for any returns.

## **7. TECHNICAL SPECIFICATIONS**

- When not in use, power should be turned off to maximize batteries lifetime.
- Requires 2 AA batteries. Use alkaline batteries only (recommended). Do not mix old or rechargeable batteries with new ones. Do not use batteries with a voltage higher than 1.5V like the Oxyride batteries; doing so might permanently damage the circuitry in your unit.
- Batteries should provide power for more than 400 hours of use under normal conditions.
- < 4 mA consumption.
- Maximum Input Voltage: 3.5V
- High display quality.
- Operating temperature: -30 °C to 80 °C.
- Chess clocks are intended for indoor and outdoor use.

## **8. TROUBLESHOOTING**

<p><b><u>Problem:</u></b> The clock won't accept programming from the cellphone.</p>	<p><b><u>Solution:</u></b> Make sure that your cellphone has NFC capabilities and that the NFC option is on. When programming the ZMF Tap N Set™ clock with a cellphone, the phone will vibrate and the clock's LED indicators will momentarily blink to indicate that the operation was successful. The location of the NFC antenna in a cellphone can vary depending on model. The best way to find out where the antenna is located is to try tapping the cellphone against the clock using the bottom, middle, or top part of the phone until it works.</p>
<p><b><u>Problem:</u></b> I replaced the batteries but the clock is not working. The clock was working before the batteries replacement.</p>	<p><b><u>Solution:</u></b> Make sure that the batteries are installed in the proper polarity direction. There are some marks in the batteries holder that indicate the proper battery direction. Check the on/off slide switch.</p>

<p><b><u>Problem:</u></b> When playing a game the timing in the clock does not behave as expected.</p>	<p><b><u>Solution:</u></b> Make sure that the menu options for delay "<b>DEL 00</b>", increment "<b>INC 00</b>", Scrabble "<b>SCRA ON</b>", and tournament modes "<b>P-00 000</b>" are all set appropriately.</p>
<p><b><u>Problem:</u></b> There is no beeping sound coming out of the clock.</p>	<p><b><u>Solution:</u></b> Set the menu option for the sound from off "<b>SOUN OFF</b>" to on "<b>SOUN ON</b>". Refer to the "Set Sound to On/Off" procedure in your clock manual.</p>
<p><b><u>Problem:</u></b> The LED light indicators do not work.</p>	<p><b><u>Solution:</u></b> Set the menu option for the LED indicators from off "<b>LED OFF</b>" to on "<b>LED ON</b>". Refer to the "Set LED Indicators to On/Off" procedure in your clock manual.</p>

