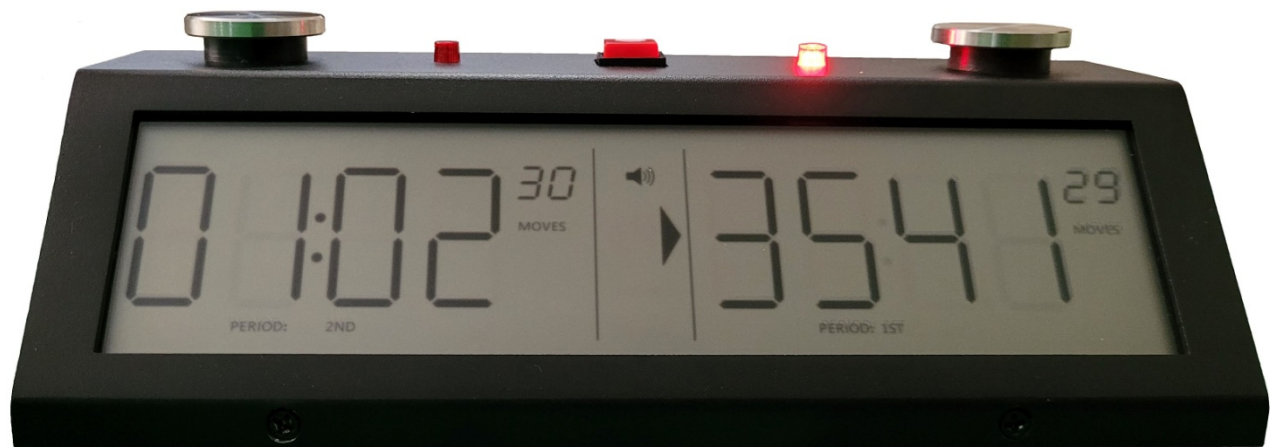# TapNset-Pro

Professional Game Timer

ZMARTFUN ELECTRONICS, INC.

Please, download the app

TapNSet (or Tap N Set)

for free from the Play Store or the App Store, respectively.

CONTENTS

1. PRODUCT DESCRIPTION

The TapNSet-Pro 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 TapNSet-Pro clock include:

- DESIGNED AND ASSEMBLED IN THE USA!
- First clock available in the market with dual display to allow spectators watch the time.
- Clock comes with a magnetic cover to cover one of the displays if necessary in a tournament setting.
- Can be connected to the HOS sensory board (each sold separately). Cable is provided with the sensory board.
- Stainless steel touch sensing buttons.
- Programmable via cellphone app; set time controls in the app, and tap the phone against the clock before starting it.
- Very easy to program menus.
- Delay, Increment, Hour-glass, and Scrabble programmable between 1 and 40 minutes (New Feature) timing modes.
- Delay can be displayed in three different modes.
- Programmable tournament modes with and without move counter. Three time controls available.
- Three different preset settings/modes can be kept in memory at all times.
- Highly accurate clock (very precise crystal oscillator used).
- Sound and LED indicators can be turned off.
- Clock can be used for nearly every competitive two-player board game like Scrabble, Shogi, and Go.
- Low power consumption. Batteries should provide power for more than 900 hours of use under normal conditions (compare to 600 hours of use that other clocks offer). Alkaline batteries should be used for better results.

- Very strong painted metal enclosure to protect your clock
- Patent pending.
- 3 AA batteries included.

The main features of these clocks are

1) Touch sensing player buttons.
2) On/Off slide switch located underneath the clock.
3) Button used to stop/reset game, enter menu options, and accept settings.
4) LED player indicators.
5) First clock on the market with double side LCD high-contrast displays.
6) TapNSet NFC round antenna to program the clock.
7) Connects to HOS sensory board (each sold separately).

2. PROGRAMMING WITH YOUR CELLPHONE

The TapNSet-Pro 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.
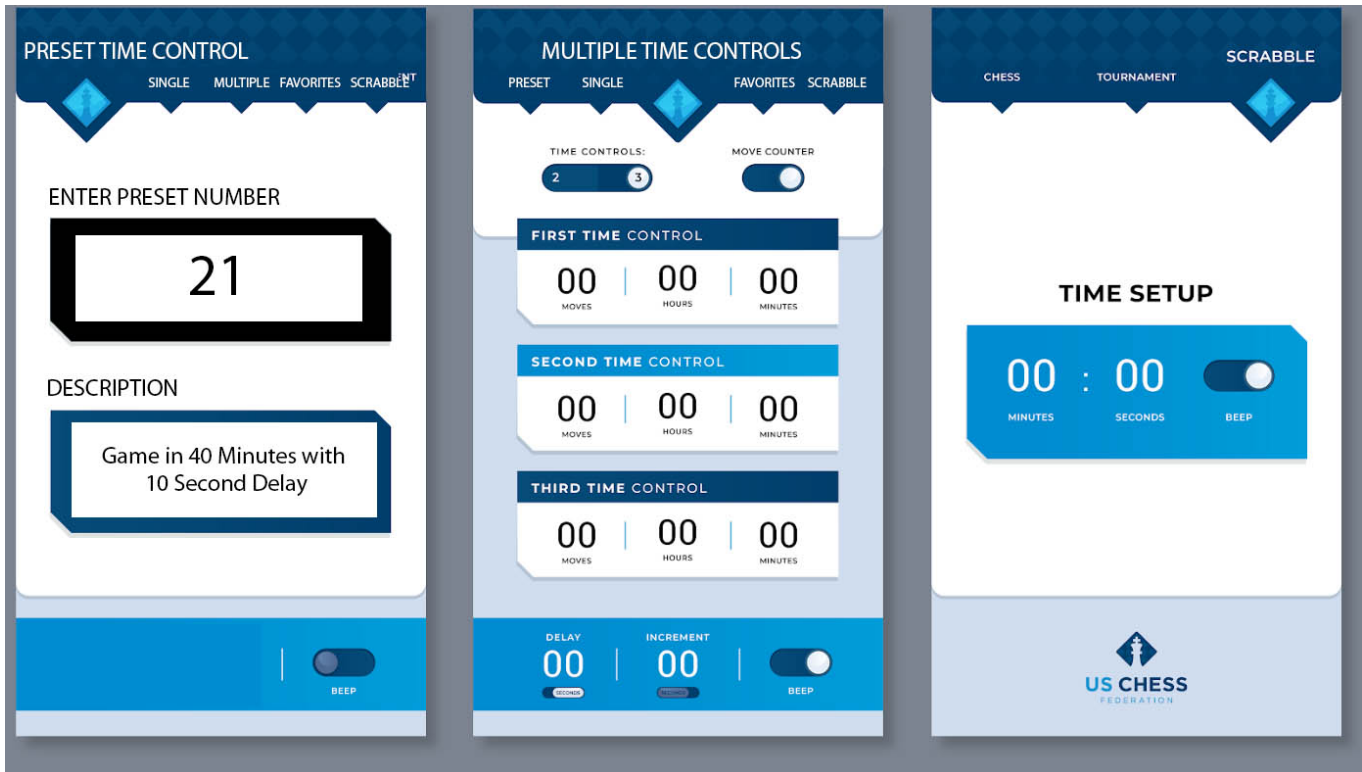
1. Make sure that your cellphone has NFC capabilities and that the NFC option is on. If the cellphone doesn't have NFC capabilities, it might cause the app to crash.
2. Download the Tapnset (or search for Tap N Set) app.
3. Enter a valid time in the app. Note that the time setting must be a valid one 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.
4. The first time programming the clock, you might need to find where the NFC antenna is located in the cellphone. Move the clock slowly sideways as indicated in the next picture below until the clock is programmed. The cellphone NFC antenna might be located at the bottom, middle, or top part of the phone depending on the model.

5. Tap the cellphone against the round antenna located on one side of the clock and hold the cellphone touching the antenna for a few seconds. When programming the timer wait a few seconds until the clock is programmed. Do not tap the clock quickly as it won't give the timer enough time to get programmed.

When programming the TapNSet-Pro 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 the 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. SETTING THE CLOCK MANUALLY (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 for 5 seconds the menu button.

4. Use any of the player's touch buttons to navigate through the menu options.

3.1 Quick Time Change

`05:00   05:00`

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 (ex: **MM:SS   MM:SS**, or **HH:MM HH:MM**) then a flashing time display will be seen (ex: 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 any of the players' buttons is required to increment or decrement 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

`HH:MM   HH:MM`

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 any of the player buttons to change the time and accept the settings using the menu button.

3.3 Set Time in Minutes and Seconds

`MM:SS   MM:SS`

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 any of the player buttons to change the time and accept the settings using the menu button.

3.4 Set Delay

```
OEL    F 00
```

1. Press the menu button to enter this mode when a flashing "**DEL   F 00**" is displayed. A flashing "F" will be displayed ("F" is the default setting).
2. Use any of the players touch buttons to set the delay mode.
    * **F** - Flashing: The display flashes back and forth between the delay seconds and the actual clock time. This is the default setting from factory.
    * **C** - Countdown: Only shows the delay seconds counting down.
    * **t** - Time only: Only shows the actual clock time.
3. Use any of the player buttons to set the number of seconds for the delay. A maximum of 60 seconds can be programmed for this function.
4. Press the menu button to accept the settings.
5. Go to "**PLAY**   - - - -" and press the menu button to start a new game.

3.5 Set Increment

```
INC     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 any 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 (ex: **-ALL 000** with a flashing **000**). If three time controls are required then use any of the player's 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: The number of moves that have been made by each player is displayed for approximately 0.5 seconds after each player makes his move. If the move counter is off (options **2t** and **3t**) the current time control will be displayed

10

instead. The unit starts counting moves right after the player with white pieces makes his first move. <u>Black should start the clock.</u>

3.7 Set Hourglass Mode

`HOGL    000`

When playing in this mode, the time that each player uses to think is subtracted from his clock and added to his opponent's clock. A player loses when his time reaches zero. For example, if both players start with 30 seconds and the first player to act spends 5 seconds to make his first move then his time will be 25 seconds and his opponent's time will be 35 seconds.

1. Press the menu button when a flashing "**HOGL   000**" is displayed.
2. Set the desired time by pressing any of the player's buttons. A maximum of 3 minutes and a minimum of 5 seconds can be set in this mode.
3. Press the menu button to accept your settings.

3.8 Set Increment Mode

`INC  PrE-`

Set the Fisher increment mode to either before or after the move is made. The default Fischer increment mode is before the move is made.

3.9 Set Scrabble Mode

`SCrA    OFF`

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 any of the touch sensor buttons to set the starting time from 1 to 40 minutes for each player.
3. Use any of the touch sensor buttons to go to "**PLAY   - - - -**" and press the menu button.

3.10 Set FIDE Mode

```
F I D E     O F F
```

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 any of the touch sensor buttons to go to "**PLAY   - - - -**" and press the menu button.
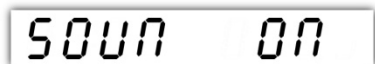
3.11 Set LED Indicators to On/Off

```
L E D        O n
```

This setting turns on or off the LED light indicators. 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.

3.12 Set Sound to On/Off

```
S O U n      O n
```

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

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.

3.13 Exit Menu

```
PLAY  - - - -
```

Press the menu button when a flashing **"PLAY   - - - -"** is displayed to accept all your setting 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 displays are starting to look dim or when the low battery indicator is on in the LCD display. Use 3 AA batteries. Alkaline AA batteries should be used for better results. Refer to the technical specifications below for more details.
1. Turn off the unit.
2. Place your clock on a table with the displays facing down. Care should be taken as not to scratch the displays.

3. Remove the battery compartment cover using a small Phillips screwdriver.
4. Replace the 3 AA batteries. Refer to the engraved marks in the batteries holder 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 3 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 for the TapNset-Pro clocks should provide power for more than 900 hours of use under normal conditions (compare to 600 hours of use that other clocks offer).
- < 20 mA consumption.
- Maximum Input Voltage: 6.5V
- High contrast TN Reflective Positive LCD displays.
- Double side displays.
- Operating temperature: -30 ºC to 80 ºC.
- These units with LCD displays can be used either indoors or outdoors.

8. TROUBLESHOOTING

Problem: The clock won't accept programming from the cellphone.	**Solution:** Make sure that your cellphone has NFC capabilities and that the NFC option is on. When programming the TapNSet-Pro 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.
Problem: I cannot find the app TapNSet in the Play Store or the App Store.	**Solution:** Try searching for "Tap N Set" instead with spaces added in between. If the app still doesn't show, report the problem to Questions@zmartfun.com.
Problem: The display in my clock is not bright anymore and the clock sometimes behaves erratically changing turns by itself.	**Solution:** This is an indication that the batteries need to be replaced. The touch sensing circuitry needed for the touch buttons is very sensitive to small changes in the supply voltage. When the batteries are drained or near drained, the clock might behave erratically from time to time changing turns by itself, and also the display will not be as bright as before. Replacing the batteries will return your unit to normal operation.
Problem: I replaced the batteries but the clock is not working. The clock was working before the batteries replacement.	**Solution:** 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.
Problem: When playing a game the timing in the clock	**Solution:** Make sure that the menu options for delay **"DEL 00"**, increment **"INC 00"**, hourglass **"HOGL 000"**, Scrabble **"SCRA**

would not behave as expected.	**ON"**, and tournament modes **"P-00 000"** are all set to zero or off.
Problem: There is no beeping sound coming out of the clock.	**Solution:** Set the menu option for the sound from off **"SOUN OFF"** to on **"SOUN ON"**. Refer to the "Set Sound to On/Off" procedure in your clock manual.
Problem: The LED light indicators do not work.	**Solution:** Set the menu option for the led indicators from off **"LED OFF"** to on **"LED ON"**. Refer to the "Set LED Indicators to On/Off" procedure in your clock manual.

Visit www.zmfchess.com/support to download manual in pdf format.