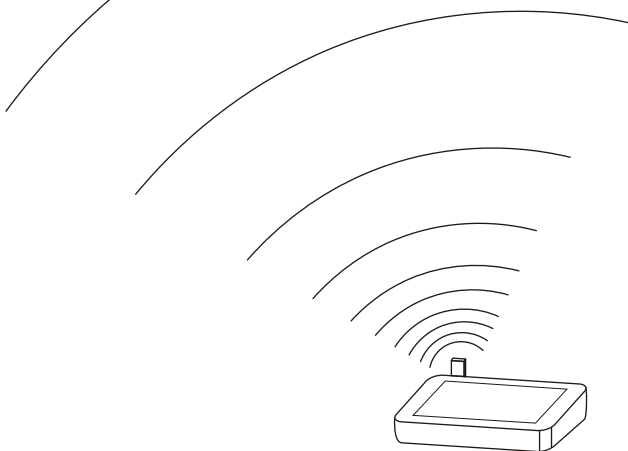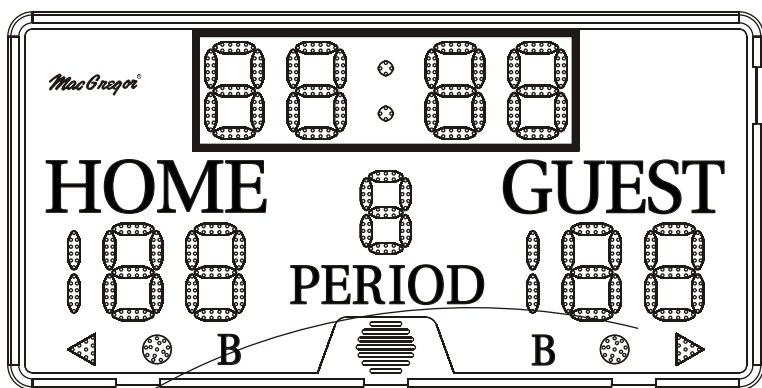# LARGE 6" LED DISPLAY WIRELESS

TIMER & SCORER

Operating Instructions
MODEL: SK3048

MacGregor® TIMER & SCORER

MODEL : SK3048

	○	1.Timer & Score/shot Clock (Basketball, Handball, Karate, Wrestling)
	○	2.Score & Sets (Volleyball, Badminton, Table Tennis)
	○	3.Stop Watch (Track & Field sports)
	○	4.Match & Pin Timer (Judo)
	○	5.Round & Count Down Timer (Boxing)
	○	6.Electronic Metronome
	○	7.Program Timer
	○	8.Clock & Alarm

ON ○

S ○

VOLUME ⬍

HORN

CHARGE INDICATOR ○

GAME SELECT

SHOT CLOCK

TIMER

CLEAR ○ 1/10 SEC

M+1 S+1

M-1 S-1

RESET TIMER

START STOP

◀ ◀ SET **BONUS** SET CLR **PERIOD** ▶ SET **BONUS** ▶

-1 (HOME) SCORE

+1

SCORE CLR

FOUL +1

CHG SIDE

FOUL CLR

FOUL +1

-1 (GUEST) SCORE

+1

S+1

S-1

RESET SHOT CLOCK

START STOP

INDEX

1. General

Scoreboard display
The SK3048 wireless timer & scorer is designed as:

* User friendly, plug & play, easy to use.
* 6 inches (15.2 cm) Large digit Viewing distance: within 330 feet (100 meters),
* Multi-sport
  Provide timing & scoring for various sports such as basketball, team handball,
  Wrestling, boxing & judo.
  Scoring for tennis, badminton, table tennis. Stopwatch for running contest.
* Clock & Alarm
  When not used in sports, it can be used as digital clock with alarm function.
* Dimension: 48 inches (122cm) Width x 24 inches (61cm) Height x 4 inches (10cm) Depth
  Weight: 22. 68 lb (10.25kgs). Shipping weight: 44 lb (20kgs). (Include remote control)
* FCC test approval
  This device has been tested and found to comply with the limits for class B
  digital device, pursuant to part 15 of the FCC rule.
* Wide range power adaptor
  AC 100 to 240V full range power input, consuming power<25 Watts
  This device can be used in any country in the world without any change.
* Wireless remote control
  Max control distance is 330 feet (100 meters)
  The controller will not function when communication is out of range.
  AC100 to 240V power adaptor.
  Dimension: 12 inches (31cm) x 8 inches (20cm) x 3 inches (7.4cm)
  Weight: 3.7 lb (1.7kg)

2. Power on set up scoreboard display

To supply power to the scoreboard display:
Plug the output end of the Power Adaptor into power receptacle on the unit and then plug the AC input into a standard 100-240 volt AC outlet. See Figure 2-1 below.
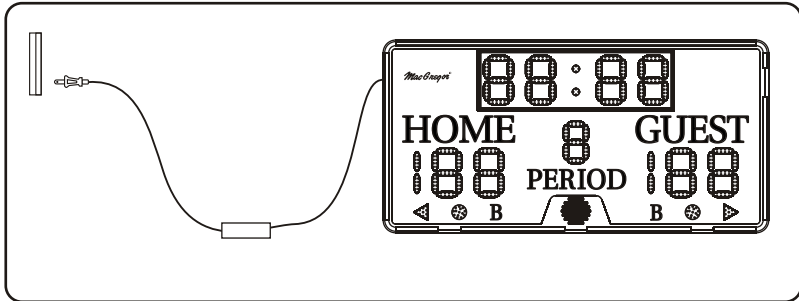
Figure 2-1

The display on standby will show random information.

3. Power on set up wireless remote control

1. Plug the appropriate end of the DC wall transformer into the power receptacle on remote control. see figure 3-1 below.
2. Plug the wall transformer into a standard 100-240V volt AC outlet. see figure 3-1 below.
3. Plug the wireless high-frequency module into the connector port of the control box. see figure 3-2 below.
4. Switch the power on. then control box begins to work. the display data will send to scoreboard display see figure 3-2 below.

Figure 3-1

Figure 3-2

4. Wireless scoreboard display feature diagram

2 : 1

HOME   GUEST
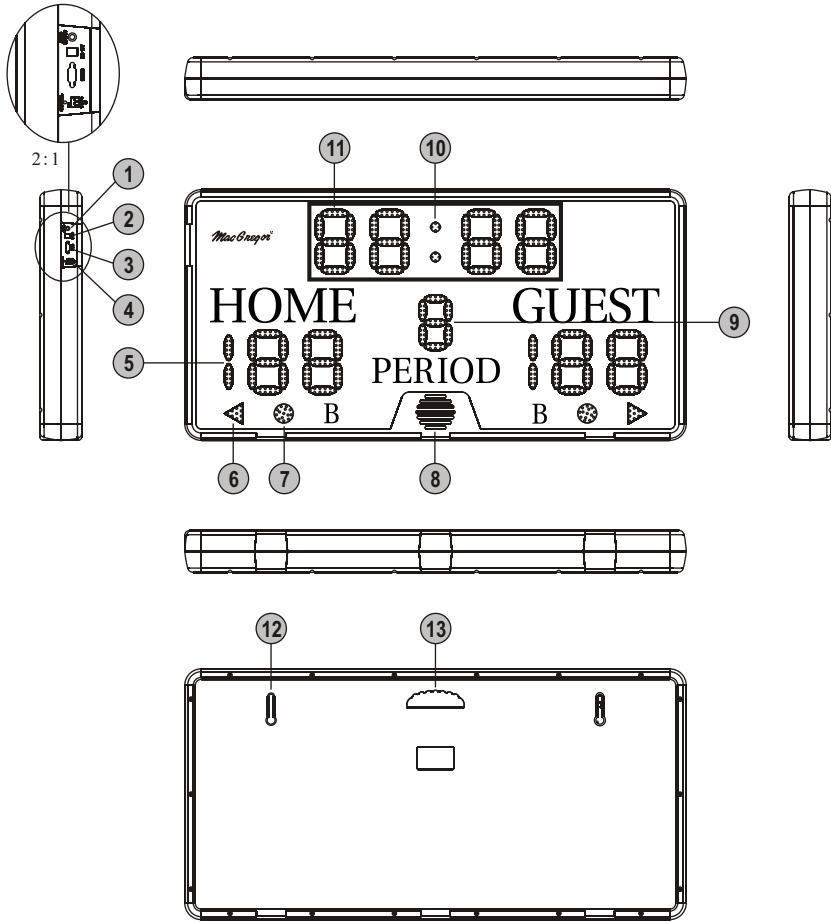
PERIOD

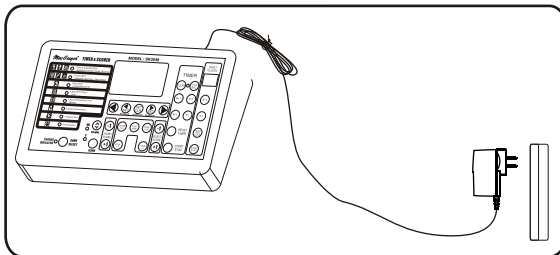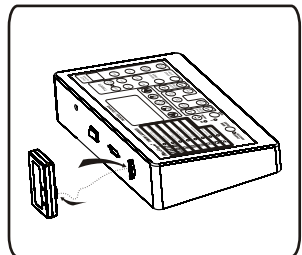|	
① Ext. speaker port	⑩ Time colon
② Power input port	⑪ Game time/clock display
③ Data cable connector	⑫ Mounting hole
④ Freq. channel selection switch	⑬ Handle
⑤ Home score	
⑥ Possession indicator	
⑦ Bonus indicator	
⑧ Speaker	
⑨ Period number	

5. Wireless remote control feature diagram

Diagram-1
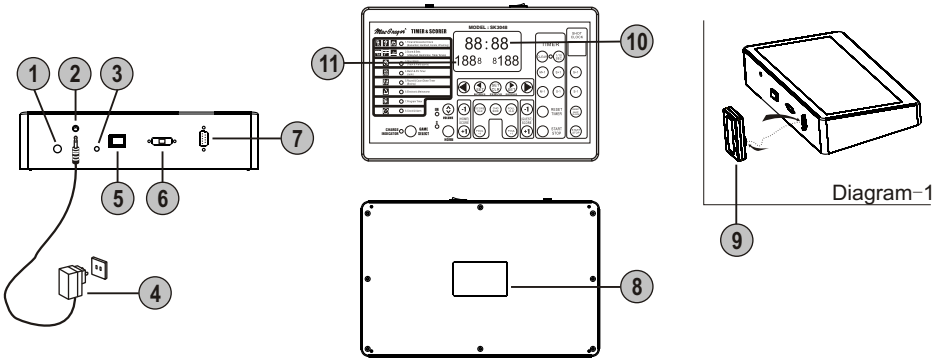
① Built-in speaker	⑦ Wireless module connector/ data cable connector
② Power adaptor DC input	
③ Ext. Speaker port	⑧ Model label
④ AC to DC power adaptor	⑨ Wireless module
⑤ Power On/Off Switch	⑩ Game time/clock display
⑥ Freq. channel selection switch	⑪ Score display
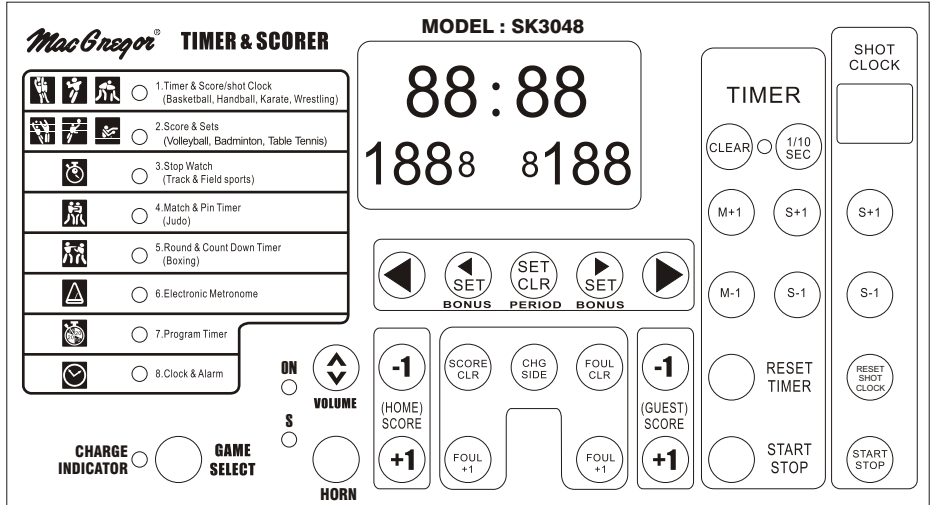
∗ This control box with an internal rechargeable battery can operate for 6 hours after fully charged.

∗ The rechargeable battery will automatically charge when DC power is plugged in. It takes 20 hours to fully charge a new battery.

∗ Low battery indication (left hand side score display: L$_0$ and game time stops)

4

6. Set up scoreboard display with wireless module

Diagram-1

HOME GUEST
PERIOD

（OPTIONAL） （OPTIONAL）
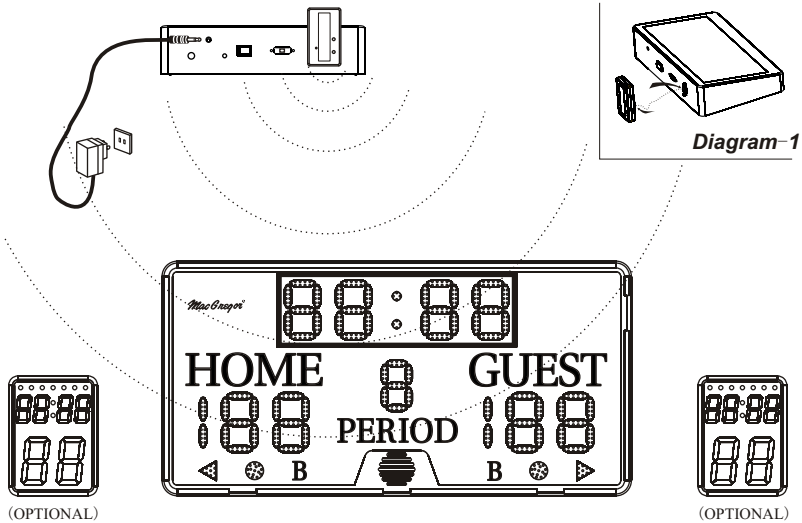
WIRELESS CONNECTION

1. The scoreboard display with internal wireless module will automatically operate when the power switch is turned on. The wireless function will be shut down when data cable socket is plugged in and changed to cable connection mode.
2. Plug in the wireless module into the remote control and fasten by screw driver. （See diagram-1）
3. Select and match the same channel with scoreboard display. Be sure to turn off the power when changing channel.

Freq, channel selection	channel	FREQ
	A	905MHz
	B	907MHz
	C	909MHz
	D	911MHz
	E	913MHz
	F	915MHz
	G	917MHz
	H	919MHz
	I	921MHz
	J	923MHz
	K	925MHz
	L	927MHz

4. Turn on control box power and the default game time data will be sent to scoreboard display. This confirms the set up is correct and the scoreboard display can be operated.
5. If there is wireless interference, please turn off both scoreboard display and remote control and select other channel until no interference. If all wireless channels receive interference change to cable connection.

7. Set up scoreboard display with data cable connect

Remote Control connects Scoreboard and Shot Clock.
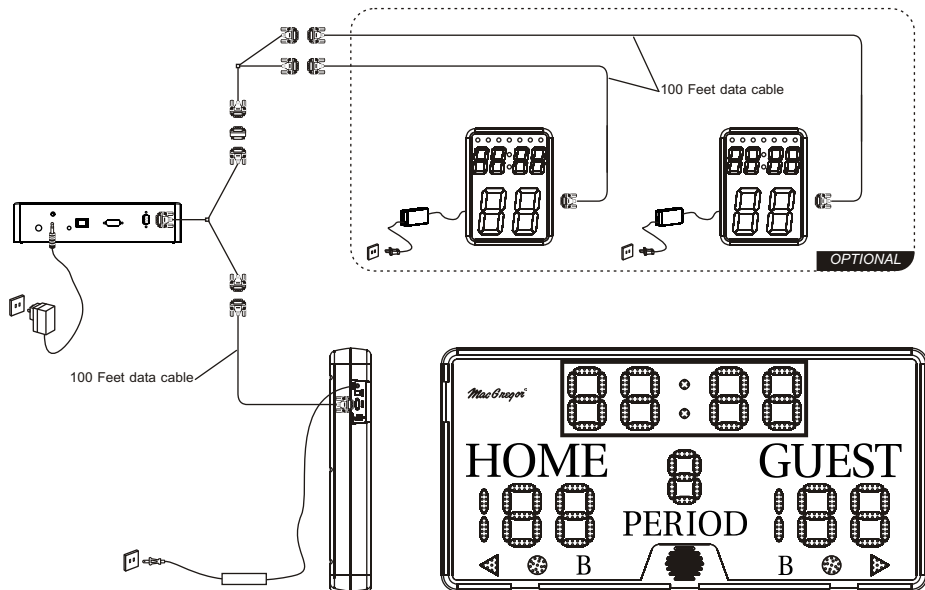
DATA CABLE CONNECTION
1. Turn off the remote control.
2. Remove the wireless module from the remote control box.
3. Connect the data cable separator into the remote control data cable connect position.
4. Connect the 100 Feet data cable into the data cable separator.
5. Turn off scoreboard display.
6. Connect the data cable into the scoreboard display data cable connect position.
7. Turn on scoreboard display.
8. Turn on remote control box. The default game data will be sent to scoreboard display to confirm correct data cable connection.

Remote Control connects 2 Scoreboards.
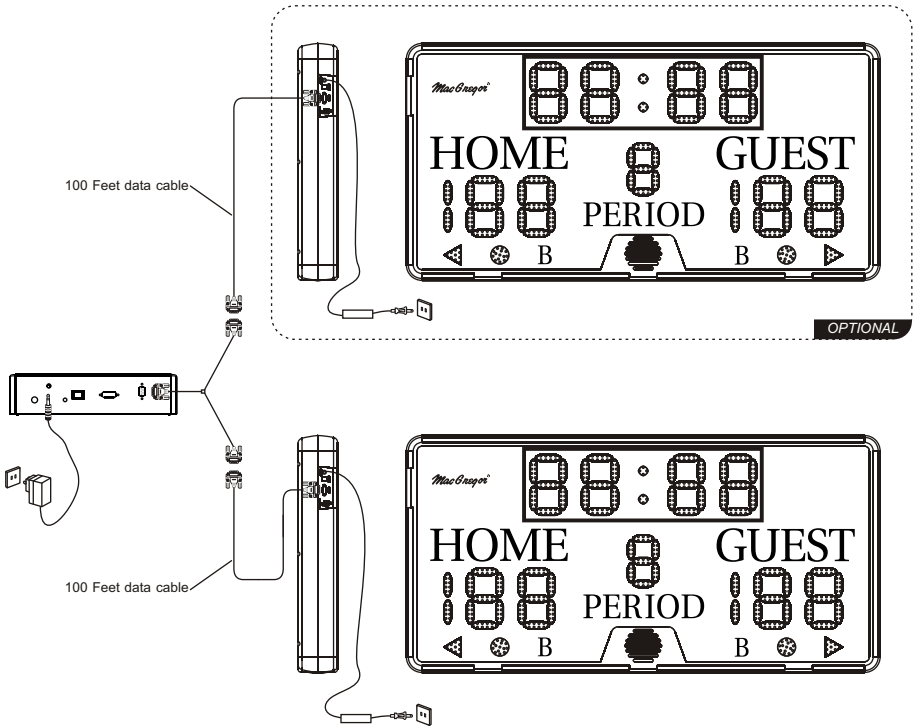
8. Power on set up

1. Press "GAME SELECT" button to choose the desired function used.
2. The first game can be selected as l and 1A that is for basketball with 30-sec. display. Total 8 game types may be selected.
3. When time is up, the whistle will sound or be silent depends on the "VOLUME" adjusted.
4. Press "HORN" button for sound, used as manual whistle.
5. Press "CHG SIDE" button to swap scores.
6. Press "◀ " or " ▶" will show the possession arrow.
7. Press the "1/10 SEC" button (when LED lit) will change the final minute to be displayed in second: 1/10 second format for game type 1.
8. Press "VOLUME" button to turn off sound, then press "HORN" button for 5 seconds to enter sleep mode. All the display LED will turn off except S−LED is flashing during the sleep mode. To recall from sleep mode just press any button on the remote control.

9. Operation procedures

<div>

1 GAME TIMER & SCORER
Displays remaining game time & score:
Upper display: Game timer (max=99:59)
Lower display: Scorer (max=199)

</div>

| Basketball |
| Wrestling |
| Karate |
| Team Handball |

Game Timer (count down)

Operation	Key Operation Timer	Display
1. Set game timer (ex: 20 minutes)	HOLD DOWN (M+1)	20:00 0 0
2. Set period	PERIOD (PERIOD +1)	□ – Ꮞ
3. Begin game-time is entered into memory	START STOP	19:59 0 0
4. Stop game	START STOP	19:59 0 0
5. Restart game	START STOP	19:58 0 0
6. Game time expires (🔔 chirp)		0:00 25 36
7. Reset game time-clock returns to set time	RESET TIMER	20:00 25:36

- Game timer stopped too late:
  Use M+1 and S+1 keys to adjust time difference.
- Changing game time:
  Press CLEAR key then set as needed using steps 1 and 2 noted above.
- Change count down timer to count up timer:
  Press CLEAR then SET CLR button, the upper colon LED
  will be flashing(indicating count-up function).
  Press M+1, S+1 to desire stop time.
  Press RESET TIMER then START/STOP button, the display
  will run up to desire stop time.

Scorer

Operation	Key Scorer	Display
1. Guest team gains a point	SCORE (+1) GUEST	19:20 0 1
2. Home team gains a point	SCORE (+1) HOME	19:15 1 1
3. Home team gains a point	SCORE (+1) HOME	19:15 2 1
4. Reset to 0 vs. 0	SCORE CLR	19:15 0 0

- Point added in error:
  - Use score button-1 to adjust.

Press (PERIOD +1) to change period from 0 to 4

Press (PERIOD CLR) to clear period indication

Game Timer (count up)

Game timer display can be changed from displaying the remaining game time (count down) to the elapsed time (count up). Maximum setting: 99:59. In this mode the upper colon between the minutes and seconds blinks.

Operation	Key Operation Timer	Display
1. Erase previous setting	(CLEAR)	0:00 0 0
2. Change display to count up mode (⬜🔊 buzzer)	(SET CLR)	0 00 0 0
3. Set game timer (ex: 20 minutes)	HOLD DOWN (M+1)	20 00 0 0
4. Begin game-time returns to 0:00 & start Game time is entered into memory	◯ RESET TIMER + ◯ START STOP	0 0 0 0
5. Stop game	◯ START STOP	0 09 0 0
6. Restart game	◯ START STOP	0:10 0 0
7. Game time expires (⬜🔊 chirp)		20:00 0 0
8. Return time to 0:00	◯ RESET TIMER	0 00 0 0

Game timer stopped too late:
Use M-1 and S-1 keys to adjust time difference.

Changing game time:
Press CLEAR key and set as needed using steps 3 and 4 noted above.

Returning to count down display:
Press the timer's CLEAR key, and then press the SET CLR key. Set game timer according to game time using the steps shown on the previous page.

1A GAME TIMER & SHOT CLOCK, SCORES

Displays remaining game time and remaining shot clock time:
Upper display: Game timer (max=99:59)
Lower display: 30 sec timer/shot clock(resets at 30 seconds or user setting)

Game Timer & Shot Clock or Score display			
Operation	Key Operation		Display
	Timer	Shot Clock	
1. Set game timer (ex: 20 minutes)	HOLD DOWN (M+1)		20:00 / 30
2. Set shot clock		(S+1) (S-1)	20:00 / 30
3. Beginning shot clock time is memoried	◯ START STOP	(START STOP)	19:59 / 29
4. Shot hits rim		(RESET Shot Clock)	19:58 / 30
5. Game interrupted	◯ START STOP		19:50 / 22
6. Restart game & shot clock start simultaneously	◯ START STOP		19:49 / 21
(1).30 seconds expires (buzzer)			19:28 / 0
(2).Reset to 30 seconds		(RESET Shot Clock)	19:28 / 30
(3).Restart game	◯ START STOP	(START STOP)	19:27 / 29
7. Game time expires (buzzer)			00:00 / 06
8. Reset game time	◯ RESET TIMER	(RESET Shot Clock)	20:00 / 30

- Game timer stopped too late:
    Use M+1 and S+1 keys to adjust time difference.
- Changing game time: Press CLEAR key and set as needed using steps 1 and 2
   noted above.
- Changing shot clock to a setting other than 30 seconds:
   Press CLEAR key and before pressing START/STOP key, set as needed using
   the S+1 key or S-1 key (At the SHOT CLOCK section of the control panel).
   The set time will be entered into memory.
- Press score keys will change to score display at lower part. May use it as previous
   page.
- Press shot timer keys will change to shot timer display. May use it as above.
- The game select type LED will flash to indicate function for shot clock.

2 SCORE & SETS

Displays sets won and game score.
Upper display: Sets(max=99)
Lower display: Score(max=199)

Volleyball
Badminton
Table Tennis

Score		
Operation	Key Operation Score	Display
1. Home team gains a point	SCORE +1 HOME	0 0 1 0
2. Guest team gains a point	SCORE +1 GUEST	0 0 1 1
3. Guest team gains a point	SCORE +1 GUEST	0 0 1 2
4. Change courts (if desired)	CHG SIDE	0 0 2 1
5. Reset to 0 vs. 0	SCORE CLR	0 0 0 0

- Extra point added in error.
     Use SCORE-1 to adjust.

Sets		
Operation	Key Operation Sets	Display
1. Home team gains a point	SET HOME BONUS	1 0 0 0
2. Guest team gains a point	SET GUEST BONUS	1 1 0 0
3. Guest team gains a point	SET GUEST BONUS	1 2 0 0
4. Change courts (if desired)	CHG SIDE	2 1 0 0
5. Reset to 0 vs. 0	CLR BONUS	0 0 0 0

- Extra set added in error:
     Press SET CLR key and add the correct number of sets.

Serve/Side Out/Possession Indicator		
Operation	Key Operation Serve	Display
1. Home team gets service/side out	◄ HOME	◄ 1 2 3 4
2. Guest team gets service/side out	► GUEST	1 2 ► 3 4
3. Change courts (if desired)	CHG SIDE	◄ 2 1 4 3
4. Reset 0 vs. 0	CLR BONUS	0 0 0 0

3 STOPWATCH

Displays split-time stopwatch:
Upper display: Minutes: Seconds (max=59 minutes, 59 seconds)
Lower left display: Hours (max=199 hours)
Lower right display: 1/100 seconds (max=99 1/100 seconds)

Stopwatch		
Operation	Key Operation Stopwatch	Display
1. Start	◯ START STOP	00:00 01
2. Stop	◯ START STOP	15:24 2 93
3. Reset to 00:00	◯ RESET TIMER	00:00 00

• When the timer is running, press RESET TIMER will stop display but the timer keeps running internally.
The lower left display will blink "UP" to indicate this status.
Press RESET TIMER again will show the running time again.

4 MATCH & PIN TIMER

Displays remaining match time and elapsed pin time:
Upper display: Match timer (max=99:59)
Lower display: Pin timer (resets to 30 seconds)

Judo

Match & Pin Timer			
Operation	Key Operation		Display
	Timer	Shot Clock	
1. Set match time (ex:7 minutes)	HOLD DOWN (M+1)		7:00 0
2. Begin match-time is entered into memory	○ START STOP	(S+1)	7:00 0
3. Pin begins		START STOP	3:23 1
4. Stop match during pin-pause pin timer Time Start/Stop button timer & pin timer simultaneously	○ START STOP		3:35 12
5. Restart match-resume pin timer Time Start/Stop button starts both timer & pin timer simultaneously	○ START STOP		3:34 13
6. Pin broken free		START STOP	3:25 22
(1).Next pin begins		START STOP	1:31 1
(2).30 seconds elapse (🔔 buzzer) Match time automatically stops			1:00 30
7. Game time expires (🔔 buzzer) Buzzer will not sound if pin is in progress			00:00 22
8. Reset game time	○ RESET TIMER		7:00 0

- Match stopped too late:
  Use timer S-1 and shot clock S-1 keys to adjust time & pin timer difference.
- Pinned player already has waza ari: (Becomes ippon after 25 seconds)
  Press the shot clock RESET key once during the pin countdown. 25 seconds
  will appear on the lower left display and buzzer will sound after those 25
  seconds run out. Pressing RESET once more during the countdown will
  cancel the 25 seconds setting.
- Match time reaches 0:00 during a pin:
  The match will continue without sounding a buzzer, so the pin count will not
  be interrupted. When the pin is broken free, press the START/STOP key on
  the shot clock panel. The buzzer will ring and the match will end.
- Changing the pin timer to a setting other than 30 seconds:
  Press the CLEAR key and before pressing the timer START/STOP key, set
  the desired time using S+1 or S-1 key on the shot clock panel and press
  RESET.

5 ROUND & BREAK COUNTDOWN TIMER | Boxing |

Sequentially display designated round and remaining time for
round and breaks. During breaks the colon between the minutes
and seconds blinks. Also display current round number and
buzzer will sound every second for downcount:
Upper display: Round timer (max=99:59)
Lower display: Round number (max=99)

Round & Break Countdown Timer			
Operation	Key Operation		Display
	Timer	Shot Clock	
1. Set round time (ex:3 minutes)	Three times (M+1)		3:00 0
2. Enter round time into memory	◯ RESET TIMER		0:00 0
3. Set break time (ex: 1 minute)	(M+1)		1:00 0
4. Enter break time into memory	◯ RESET TIMER		0:00 0
5. Set number of rounds for match (ex:3 rounds)		3 TIMES (S+1)	0:00 3
6. Return to round time display	◯ RESET TIMER		3:00 1
7. Begin match-Round number will appear in the lower left display	◯ START STOP		2:59 1
8. Stop round	◯ START STOP		1:35 1
9. Restart round			1:34 1
10. Knock-down-(▢◗ chirp) every second		START STOP	:35 1
11. Match continues-(▢◗ chirp) will stop		START STOP	:28 1
(1).Knocked down again (▢◗ chirp) every secnd		START STOP	1:20 1
(2).10 seconds expires. Stop downcount and round timer.	◯ START STOP	START STOP	1:10 1
(3).Sound match-over buzzer (▢◗ buzzer)	◯ BUZZER		1:10 1
12. First round completed (▢◗ buzzer)			0:00 1
13. Break time is displayed			:59 1
14. Break time ends (▢◗ buzzer)			0:00 1

...... Continued from previous page

|			
15. Next round time is displayed. Round number changes to 2.			3:00 2
16. Designated number of rounds completed (🔊 buzzer)			0:00 3
17. Begin new match.	◯ RESET TIMER		3:00 1

- Round stopped too late:
    Use timer M+1 and S+1 keys to adjust time. Use shot clock S-1 to adjust round.
- Round time reaches 0:00 during downcount
    The match will continue without sounding the buzzer, so the downcount will not be interrupted.
- Changing round/break times:
    Press CLEAR key and set as needed using steps 1 through 6 on previous page.
- In the final round, the breaktime display will disappear.

6 ELECTRONIC METRONOME:

Upper display: Rhythm times
Lower Left display: How many chirps per minute
Lower Right display: How many soft chirps followed by one loud chirp

Electronic Metronome:		
Operation	Key Operation Rhythm	Display
One Loud/soft chirps	(M+1)	0:00 120:5
One Loud/soft chirps	Twice (M+1)	0:00 120:3
Chirps/one minute	(S+1)	0:00 121:3
Chirps/one minute	Twice (S+1)	0:00 119:3
Start rhythm (🔊 chirp)	◯ START STOP	0:01 119:3
Stop rhythm (🔊 chirp)	◯ START STOP	0:05 119:3
Reset rhythm times	◯ RESET TIMER	0:00 119:3

7 PROGRAM TIMER

Timer may be programmed to consecutively count-down and display a maximum of nine time periods. Use for interval training and division of time for classes and other training.

        Upper display: Timer (max=99:59)
        Lower left display: Repetitions (max=99 times)
        Lower right display: Program number (max=9 programs)

| Program Timer		
Operation	Key Operation Program Timer	Display
1. Set program 1 (P1) to desired time. (ex: 5 min)	(M+1) 5TIMES	5:00 0　P1
2. Enter time for program 1 into memory. Change program number to 2.	○ RESET TIMER	0:00 0　P2
3. Follow steps 1 &2 above for desired number of programs(9 max).		5:00 1　P2
4. Complete program setting. Set the desired number of repetitions using the shot clock`s SEC+1 key (max=99 times) and press timer RESET and START. Current program round is displayed and timer will stop, sounding buzzer.	○ RESET TIMER	5:00 1　P1

5. Start
  Program 1 (P1) will start counting down and buzzer will sound when it reaches 0:00 P2 will subsequently start.
  Completion of all programs is considered one round.
	○ START STOP	4:59　(🔊 buzzer)
		1　P1
		0:00　(🔊 buzzer)
		1　P2
		3:00　(🔊 buzzer)
		1　P2
		0:00　(🔊 buzzer)
		1　P2
		5:00　(🔊 buzzer)
		2　P2

6. Stop	○ START STOP	2:28 11　P1
7. Return to beginning of program	○ RESET TIMER	5:00 0　P1

- Changing set times:
  Press timer CLEAR key and set as needed using steps 1 through 4 above.

8   CLOCK, ALARM

Displays time in 12 hour format normally, will change to 24 hours display when stopped for editing.

    Upper display: Hours: Minutes

    Lower right display: Seconds

Clock			
Operation	Key Operation		Display
	Clock	Shot Clock	

1. Set hours using M+1 or M-1 key
   Set minutes using S+1or S-1 key
   Set seconds using S+1 key on shot clock panel
	(M+1)
	
	(S+1)
		(S+1)	9:35
			20

2. Start	◯ START STOP		9:35 21
3. Alarm	(SET) GUEST BONUS		12:00 AL OFF
4. Alarm on/off	(SET) HOME BONUS		12:00 AL ON
5. Alarm time setting.	(M+1)		13:00 AL ON
	(S+1)		13:59 AL OFF
6. Return to clock	(SET) GUEST BONUS		9:36 45

- When the current clock reaches the Alarm time, A 5 second alarm will be activated.
- Current time and Alarm will not be affected by changing game type, but if power is switched off, current time will be lost.

10. Specifications

POWER ADAPTOR: AC100V~240V, 50Hz/60Hz.
DISPLAY INPUT POWER: DC12V
CONSUMING POWER OF SCORE BOARD DISPLAY: <25 Watts
CONSUMING POWER OF WIRELESS REMOTE CONTROL: <20Watt
VIEWING DISTANCE: >330 feet (100 meters)
WIRELESS CONTROL DISTANCE: max 330 feet (100 meters)
TIME ACCURACY: Within 0.5 sec per day.
DIMENSION: 48 inches (122cm) Width x 24 inches (61cm) Height x 4 inches (10cm) Depth
WEIGHT: 22. 68 lb (10.25kgs) Approx.

Cautions

- For indoor use only. Avoid outdoor storage.

- Keep away from high temperatures, humidity, dew, water and direct sunlight.

- Always disconnect power cord and other cables by holding plug.

- Clean with damp cloth only.

NOTE: This equipment has been tested and found to comply with the limits for Class B digital device, pursuant to Part 15 of the FCC Rules.

11. Scoreboard display component part description list
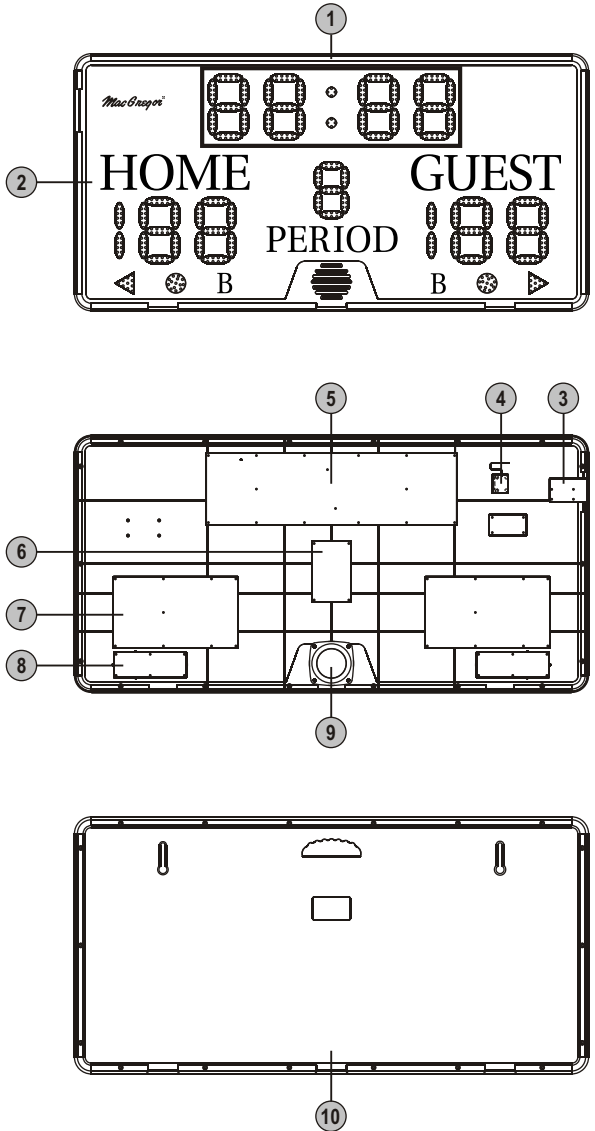
ITEM	DESCRIPTION	QTY	PART NUMBER
1	Front plastic frame	1	
2	Front lens	1	
3	Control board	1	
4	Wireless module	1	

⑤	Game time/clock board	1	
⑥	Period number board	1	
⑦	Score board	2	
⑧	Bonus and possession indicator board	2	
⑨	Speaker	1	
⑩	Back plastic frame	1	