



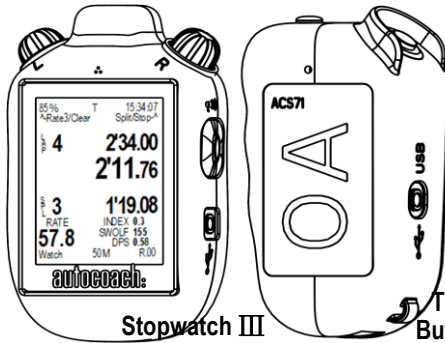
On Marks & Marshalling	Start	Timing	Place	Group
ON Marks!	12	0.1	35	1 N.Shaw HTR
	34	0.1	37.36	2 A.Krawczyk SSC
Ev 1 Ht 1 of 2			36.05	3 J.Jang PLC
Girls 10&U 25 BK	56	0.1	35	4 G.Leitch HTR
Msl Ev 4	78	0.1	36.05	5 F.Shaw HTR
			35	6 J.Hwang SSC
				7 S.Mitchell SSC
				8 A.Weber SSC

Equipment List		
	Equipment	Setting
1	*Tranceiver X1, Computer & Printer	
	*Speaker X4	Normal, Group0~3
2	*Starter X1	
	*Start Watch X1	Race Str ***
	*Timing Watch X4	Group0~3
3	*Timing Button X24	Lane1~8, Button A/B/C
	Touchpad X8 (connect speaker)	
	*Timing Display X4	Normal, Group0~3
	*Event Display X1	Normal, Group5~7
4	*Marshalling Display X1	Normal, Group5~7
	Multi-Function Display (MFD) & LED Player Big TV	

*Need same **Channel & Net ID**
 1: Necessary, 2:Single choice, 3&4: Multi choice

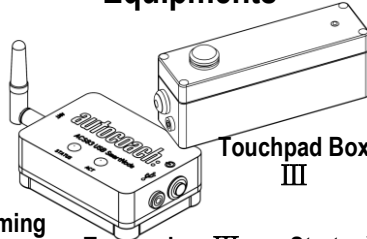
autocoach:

Autocoach System Equipments



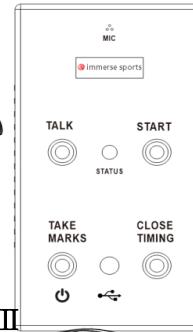
Stopwatch III

Timing Button III

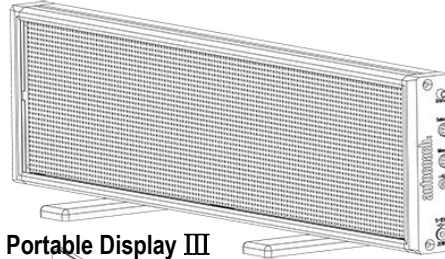


Transceiver III

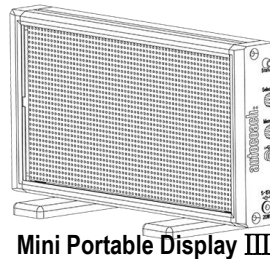
Starter III



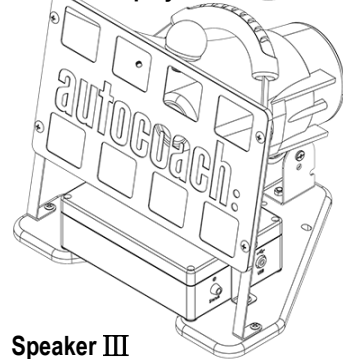
Touchpad Box III



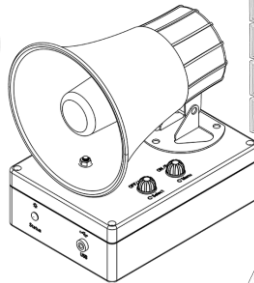
Portable Display III



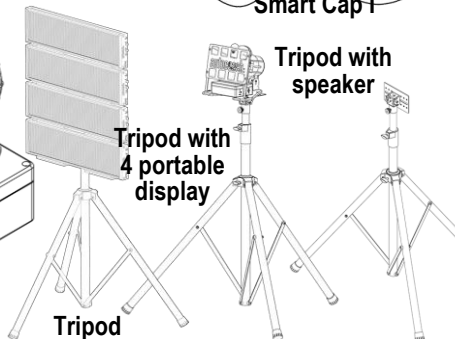
Mini Portable Display III



Speaker III



Mini Speaker III



Tripod with 4 portable display

Tripod with speaker



Smart Cap I

Devices energy saving behavior

Stopwatch/Speaker/Portable Display/ Timing Button/Starter power by chargeable battery. Use 3 works status (idle/hibernation/OFF) to extend battery life.

Idle status is device is ON but not doing timing. Device (not include stopwatch) status led flash every 5s when in hibernation status.

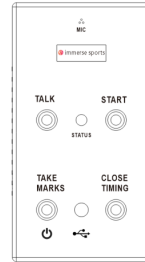
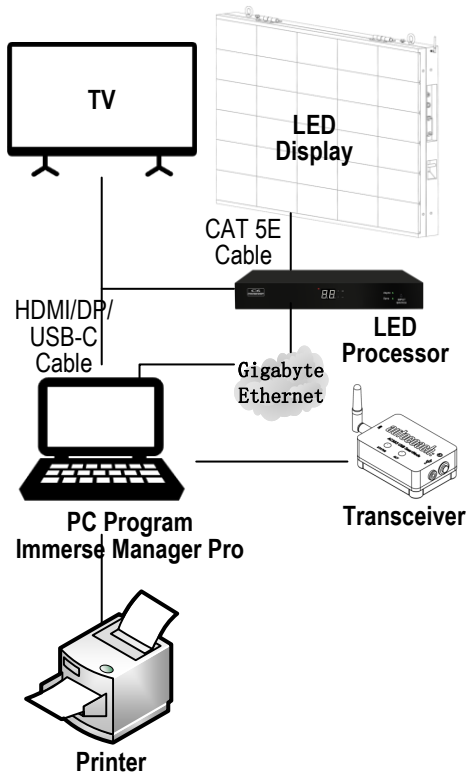
When transceiver is active, doesn't allow connected device enter hibernation and OFF status.

Device will automatically enter hibernation status if stay in idle status more than 45 minutes (speaker/portable display is 3 hours) without any local button/Knob operation or no data received from other device.

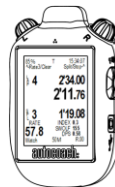
In 8 hours, if hibernation device has local button/knob operation or receive data from connected device, it will wake up and enter idle status, the status led will flash every one second. Long press stopwatch talk key can wake up hibernation device with same group setting.

After 8 hours, hibernation device will automatically turn off itself. And all led will be off too.

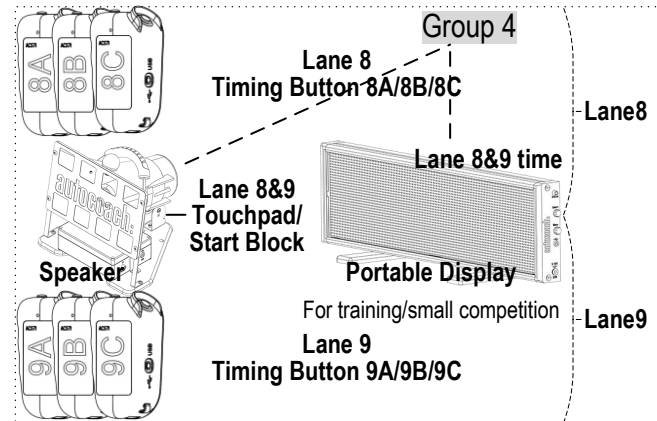
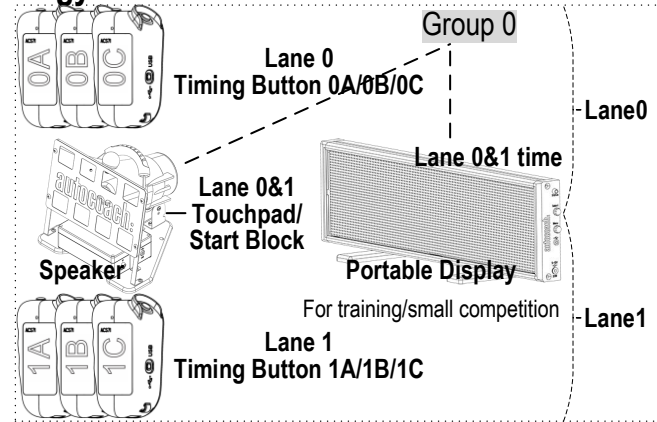
Autocoach timing system topology



Wireless network

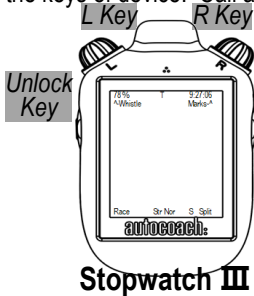


Watch



AutoCoach devices wireless connection

All autococh devices can work together if they have same **Net ID**, **Channel** and matched **Firmware version**. End user can update firmware by Immerse Manager Pro program and set up **Channel** by the keys of device. Call autococh for **Net ID** change service.



Stopwatch III

autococh:

www.autococh.co

with **Time Call tm**

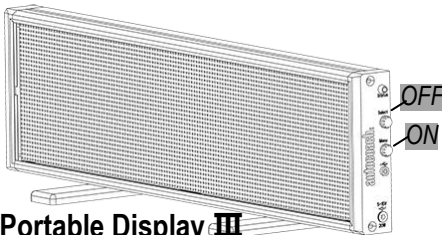
Device Information

Net ID: 30
Serial: 34567
Version: V1.45
Channel: 15
Model: ACS120

41%	T	15:26:47
^Reset Pace	Setting	Save-^
Pacetest Step	13	Option
Rate Count	15	
Channel	17	
Hours Adjust	19	
Minutes Adjust	21	
Rounding	23	
LCD Brightness	25	
Selects desired radio 2.4GHz wireless channel number.		
Setup	Net ID	30

Hold **R/L** key + **Unlock** key until hear "On" to turn on stopwatch, it will display the Net ID (**Net**), Channel (**CH**) and firmware version (**V**).

Hold **Unlock** key and rotate **L** key to **Setup** mode. Release **Unlock** key then rotate **L** key to **Channel** item. Rotate **R** key to select desired channel. Long press **R** key to sound "stored" to save the setting.



Portable Display III

Hold both **ON** & **OFF** key about 15 seconds until status led fast flash to reboot display. It will display firmware version (**V**).

When idle, rotate **On** key to **Chan** item, rotate **Off** key to select desired channel, long press **On** key until display "Saved" to save the setting.

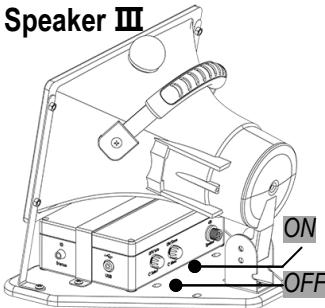
When idle, short press **ON** key to show **Net ID** (**Net**), short press **OFF** key to show **Channel & Group**.

AUTOCOACH:
V1.45

Bat 65%
Net 30

Gr 0
Chan 15

Speaker III



Hold Both **On** & **Off** key about 15 seconds until status led fast flash to reboot speaker, it will announce firmware version "**Version...**" and Net ID "**Network...**"

Rotate **On** key to hear "**Channel...**", rotate **Off** key to select desired channel value, long press **On** key to hear "**Stored**" to save value.

Transceiver/Timing button/Starter/Touchpad box/Smart cap

Need use USB cable to connect with computer. Then use Immerser Manager Pro program to setup **Net ID** and **Channel**.

Stopwatch III User Guide V5.06

For V1.48+ Firmware

General Operations

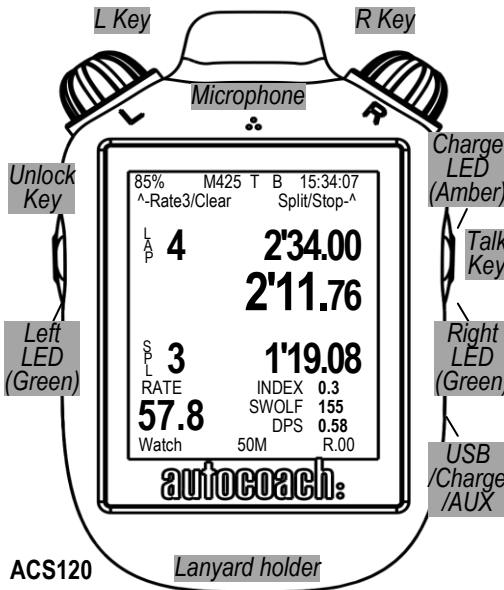
Turn On	Hold Unlock + R/L key until show logo
Turn Off	Hold Unlock + R/L key until screen off when it is idle. Auto turn off if idle 45 minutes. "B" on top line means beacon active and not allow turn off.
Volume	Rotate R key in Race/Group/Watch/Speed/Interval/BeepTest/Splits mode.
Talk/PA	Hold Talk key and talk to microphone, Rotate R key to change target device.
Change Mode	Hold Unlock key + Rotate L key
Hail Whistle	Press both Unlock & Talk key
Clear Screen	Long press L key when it is idle
Recall Screen	Press Unlock key when it is idle
Reset Device	Hold both R&L key about 15s until Left LED start fast flashing

Talk/PA

Hold Talk key & rotate R key to select target device	- ALL -	All devices can receive
	Speakers	Speakers can receive
	Watches	Watches can receive
	Athletes	Athletes can receive
	Lane #1	Odd athletes can receive
	Lane #2	Even athletes can receive
	Athlete 1~16	Matched athletes can receive

Packing List	Optional Items
Stopwatch	Storage bag
USB Cable	AUX cable
5V/1A Power Pack	AC101 Single ear headset

85%	M485 T	15:34:07
^Rate3/Clear		Start^A
<div> <div>Hold Talk key to talk</div> <div>Target Device</div> </div>		
PTT	25M	- ALL -



ACS120

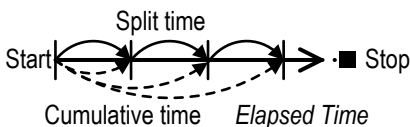
Lanyard holder

Specifications	
Wireless	2.4GHz/100mW (Max)
Screen	2.4 inches 240*320 pixels TFT (Sunlight Readable)
Memory	99 Splits/500 Records
Accuracy	Time: 0.01s , Velocity:0.01m/s
Range	10 hours
Power Pack	5V/1A/Mini USB Cable
Battery	3.7V/11.1WH
Environment	-40~60°C, 20~90%RH
IP Grade	IP65
Dimensions	105*65*31mm ³
Net Weight	160g

▲ Devices can work together (same Net & Channel).

Contact AutoCoach to set Net.

▲ Reset device when battery not flat if abnormal work.



Cumulative time: An elapsed time cover a distance from the start to a given point.

Split time: An elapsed time cover a given section of the whole distance.

Elapsed Time: An elapsed time cover total finished distance.

autocoach:

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Web: www.autocoach.com.au

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ACS120 Stopwatch III modes overview ●Yes ○ No			Suffix				
			M	E	L	S	W
Normal	Watch	Split time/Cumulative time/Stroke rate/DS/SW/SI/Reflex compensation /LAP/ Dual Watch etc.	●	●	●	●	●
	Speed	Split velocity/Cumulative time/Stroke rate/DS/SW/SI/Reflex compensation/LAP mode.	●	●	●	○	●
Race	Race	International standard start signals/split time/Cumulative time. Support pool swimming, running, marathon, open water swimming, etc.	●	*	△	●	○
	Score	Work with portable display and speaker, timing & score for ball games (football /waterpolo /basketball etc). Also can use for diving.	●	○	●	○	○
Group (Slave watch)		Work with master stopwatch (Race/Interval/Pace/PaceTst mode), timing for up to 10 lanes.	●	●	○	●	○
Training	Interval	Auto start & timing for team sprint training in two lanes. Interval [10] (Rapid spread) mode can do strokerate too. Normally for novice trainnig.	●	●	○	●	○
	Pace	Split time/Cumulative time/Stroke rate/DS/SW/SI/Reflex compensation /LAP/ Dual Watch etc.	●	●	○	○	○
Testing	PaceTst	Decreasing cycle time pace mode. Test end if swimmer can't arrive start line before next start signal sounded. Score is the last split time.	●	●	○	○	○
	BeepTst	20m shutter run, 10/20m shutter swimming test. Testing end If can't catch start signal. L/R key can test multiple people.	●	○	○	○	○
Data Analysis	Graph	Show Split times in bar graph and Split velocities in line graph for Watch /Speed /Race modes, easily to know min & max split and variety. Only enable when record more than 2 laps.	●	●	●	○	●
	Splits	Review splits lap by lap. split time, cumulative time, split velocity, stroke rate, DS,SW,SI etc.	●	●	●	●	●
	Memory	Review last 500 records of Watch /Speed /Race modes.	●	●	●	●	●
Others	Setup	Emit external audio to other AutoCoach devices.	●	●	●	●	●
	AUX	Auto start & timing for team sprint training. Easy for novice swimmer.	●	●	●	○	●
Remarks		* Not allow Multi timing type and athletic race start. △ not allow Str Nrm/Str Top/Str Man race start type.					

Swimming Turning Training

83% M253 T 17:14:35

^Whistle

Marks^

EXIT POOL EXIT POOL

W0 029

W0 023

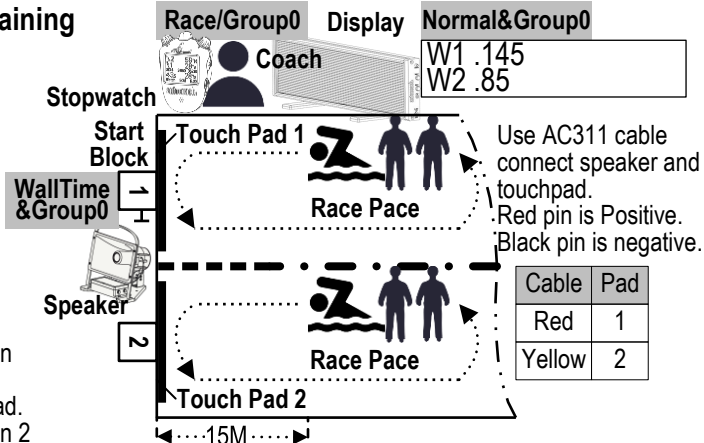
Race

Normal

S Split

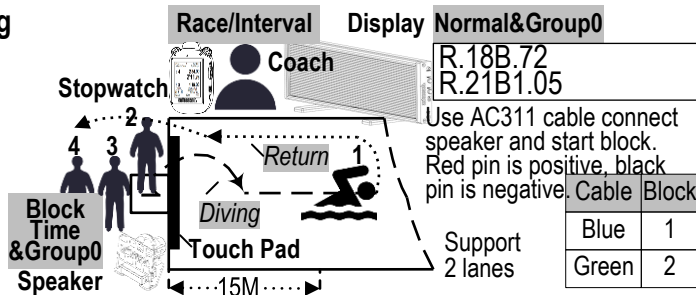
Wall Time (W): The duration of freestyle or back stroke swimmer's feet touch the pad. It will be ignored if more than 2 seconds.

Swimmers queue in water 15 meters away to the start block. Swim towards the block at race pace start to do turning training. When the feet of swimmer left off touch pad, display and stopwatch will show the wall time immediately, and the speaker will synchronously sound the time too.



Swimming Start Training

83%	M211 T	17:14:35
^Split/Finish	Split/Finish^	
RACE IS IN PROGRESS		
1.5	1.5	
	R.18B.72	
LAP 1		
	R.21B1.05	
LAP 1		
Race	Normal	S Split



Reaction Time(R): The time between start beep and the swimmer's feet start to push the block back.

Block Time(B): The time between start beep and the swimmer's feet stop pushing the block back (swimmer feet leave block).

Stopwatch set to race or interval mode, press the start button, swimmer start diving when hear start beep from stopwatch or speaker.

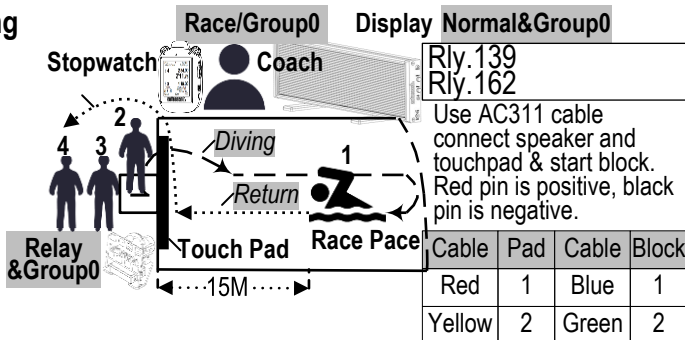
When the diving swimmer's feet leave block, display and stopwatch will display the reaction time and block time, speaker sound the block time synchronously.

If $0.15 < R < 0.21$, speaker will sound a high beep to indicator good start. If $R < 0.15$, it will sound a false start alarm. If $R > 1$, it will be ignored.

Stopwatch set to interval mode can automatically and continuously sound start beep for multi swimmers efficient training.

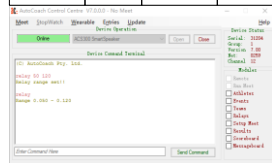
Swimming Relay Training

81%	M211 T	16:08:29
^Whistle	Marks^	
EXIT POOL EXIT POOL		
	Rly .139	
	Rly .162	
Race	Normal	S Split



Changeover Time(Rly): The time between returning swimmer touch the pad and leaving swimmer's feet leave block.

Connect speaker with computer by the USB cable. Run Immerse Manager Pro program on computer. Type in command "relay" to setup desire changeover time. For example, command "relay 80 190" set desire changeover time to 0.08~0.19s. Value range is 0~0.255s.



The 1st swimmer stay in water 15 meters away to start block. The 2nd to 4th swimmers queue behide the block. When the speaker and stopwatch sound "Ready", the 2nd swimmer aboard the block to get ready, and the 1st swimmer swims towards the block at race pace. The changeover training start. When the 1st swimmer touch the pad and the 2nd swimmers left off block, speaker and stopwatch will sound "Ready" again for next changeover to start.

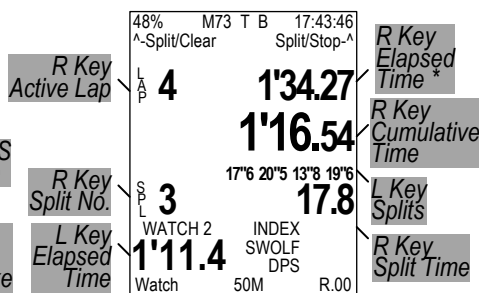
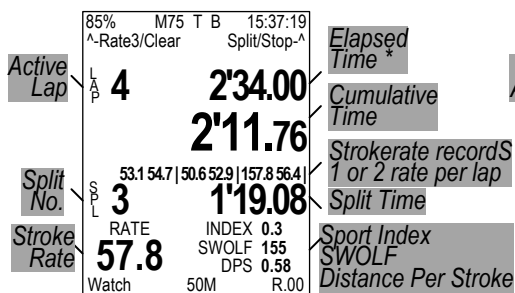
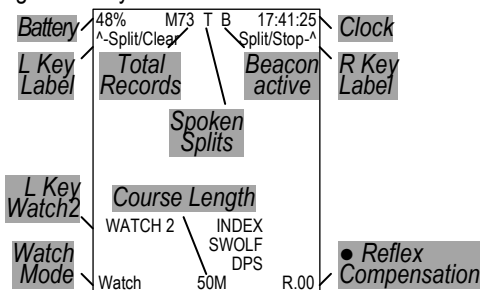
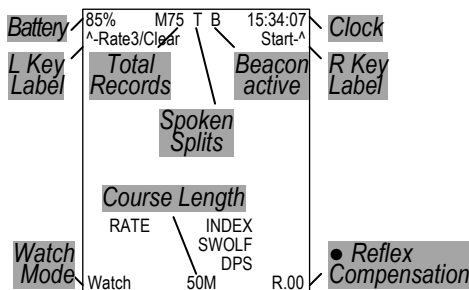
The return swimmer will exit pool safely when the diving swimmer in water.

The diving swimmer will return when they reach 15 meter line, then become return swimmer for next changeover, and so on.

When the feet of diving swimmer leave block, display and stopwatch will show changeover time immediately, and the speaker will synchronously sound changeover time too. Speaker will sound false start alarm (blare) to indicator disqualification when got negative changeover time. And higher beep means the changeover time is in the desire range.

Watch Mode Single stopwatch
Operation is same as Speed mode

Watch Mode Dual stopwatches
When "Rate Count" in setup mode is "Dual Watch", L Key can timing like R key instead of strokerate function.



INDEX : Product of DS and velocity. Higher is better. Bigger than 10 is un-avable.

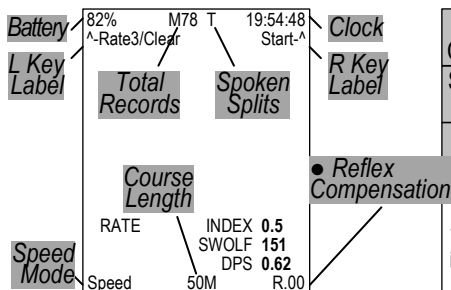
SWOLF: Stroke cycle count plug split time. Lower is better.

DPS: Distance in meters covered a swim cycle

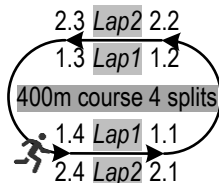
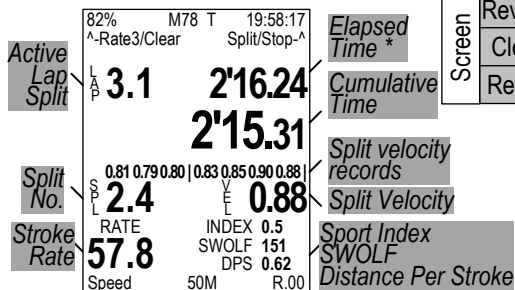
***** : When reflex compensation set to **LAP**, here is split time.

• : Compensation time when following the start signal of another start system. Between 0.16-0.30s.

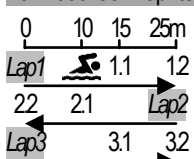
Speed Mode



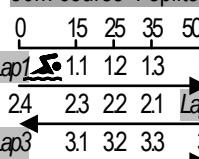
Set Reflex Compensation		Hold unlock key & rotate R key. It is split time if set to LAP.	
Stroke Rate	Short Press L key two times to cover strokes equal "Rate Count" In Setup mode.		
Talk Time	Rotate R key clockwise to show "T" on top line		
Timing	Start	Short press R key	
	Timing	Short press R key	
	Stop	Long press R key	
	Review	Rotate L key	
Screen	Clear	Long press L key	
	Recall	Press unlock key	



25m course 2 splits



50m course 4 splits



Battery 78% M75 T B 9:27:06
 ^Whistle Marks-^

L Key Label EXIT POOL EXIT POOL
Total Records **PC Connected**

Spoken Splits

Race Mode Race Normal S Split
Race Type S: Swim A: Aths

Clock **R Key Label**

Timing Type

Race Mode

Note: Difference Race/Start type use difference start signals

Pre Set	Race Type	Set "Race Type" in setup mode
	Start Type	Set "Starts" in setup mode
	Timing Type	Hold unlock key & rotate R key
Operation	Short press L/R key	Whistle/Marks/Race/Split
	Long press L/R key	Exit pool/Abort/Finish
	Double click R key	False start after start timing
Others	Rotate L key	Scroll history splits
	Rotate R key	Change volume

78% M75 T B 9:32:29
 ^Split/Finish Split/Finish-^

RACE IS IN PROGRESS
 1'02.6 1'02.6
 20"7 18"7 18"0

R Key Laps 4 **57.44**
 L Key Laps 4 **56.58**

Race Normal S Split

L&R Key Elapsed Time
R Key Splits
*** R Key Cumulative**
L Key Splits
*** L Key Cumulative**

Timing Type	Description
Split	L/R timing key for one person with split times
Singl*	L/R timing key for one person with finish time
Multi●	L/R timing key for multi persons with finish time
Note	* Disable when transceiver is active. ● For triathlon and open water event.

41% T 15:26:47
 ^Reset Pace Setting Option Save-^

Start Method Starts Lane Order Course Training Race Type Match Period Pacetest Step
 Ovr Top Normal Str Top Str Nm Str Man

Race Type Race mode starting method. Str modes need timekeepers. Man modes are for Officials.

Setup Mode Setup Net ID 30

Older Setting
Select New Value

Start Method	Start Watch Timing	On Block Signal	Exit Pool Signal	Exit Pool Method
Normal	Enable	Long Whistle	Double Whistle	Before next start
StrNor	Disable	Long Whistle	Double Whistle	Before next start
OvrTop	Enable	Long Whistle	Double Beeps	After next start
StrTop	Disable	Long Whistle	Double Beeps	After next start
StrMan	Disable	None	Double Beeps	After next start

Race Type	Timing Type	Start Signals					
Swim	Singl/Split	Long Whistle (Ready)	Take your marks (On Marks)	Stand down (Abort)	Beep (Start)	Alarm beep (False Start)	Double Whistle (Exit Pool)
Swim	Multi	Long Whistle (Ready)	Take your marks (On Marks)	Stand down (Abort)	Beep (Start)	No signal for cancel race	No signal for exit pool
Aths	Singl/Split	On your marks (On Marks)	Set (Set)	Stand down (Abort)	Shot (Start)	Alarm beep (False Start)	Double Whistle (Exit Pool)
Aths	Multi	Long Whistle (Ready)	Set (Set)	Stand down (Abort)	Shot (Start)	No signal for cancel race	No signal for exit

Group Mode (Slave watch)

Slave watch timing for 2 lanes. Master watch (Race /Interval /Pace /PaceTst mode) start/stop timing. 5 slave watches for 10 lanes. Group 0 are 1st & 2nd lane...

63% T 9:32:29
 ^Lane 1 Lane 0-^

RACE IS IN PROGRESS
 1'43.8 1'43.8
 47"8 54"6

R Key Laps 3 **57.44**
 L Key Laps 3 **56.58**

L3 Group 1 L2

L&R Key Elapsed Time
R Key Splits
*** R Key Cumulative**
L Key Splits
*** R Key Cumulative**
R Key Lane No.

Group	Hold unlock key & rotate R key set value
Timing	Short press R/L key when timing. *Interval /Pace mode record split time.
Review	Rotate L key
Volume	Rotate R key

timing by slave watch

1. Hold **Unlock** key & rotate **L** key to **Setup** mode.
2. Rotate **L** key to **Starts**, rotate **R** key to select start method, long press **R** key to store.
3. Rotate **L** key to **Race Type**, rotate **R** key to **Swim**, long press **R** key to store.
4. Hold **Unlock** key & rotate **L** key to **Race** mode.
5. Hold **Unlock** key & rotate **R** key select timing type for slave watch. **Singl** only record finish time for one person. **Split** can do multi split times for one person. **Multi** means L/R key can record finish times for multi persons in open water swim race.

41%	T	15:26:47
^Reset Pace		Save-
Setting		Option
Starts	Swim	
Lane Order	Aths	
Course		
Training		
Race Type		
Match Period		
Pacetest Step		
Select what sports mode the stopwatch will be configured for use with.		
Setup	Net ID	30



Stopwatch III running race start procedures

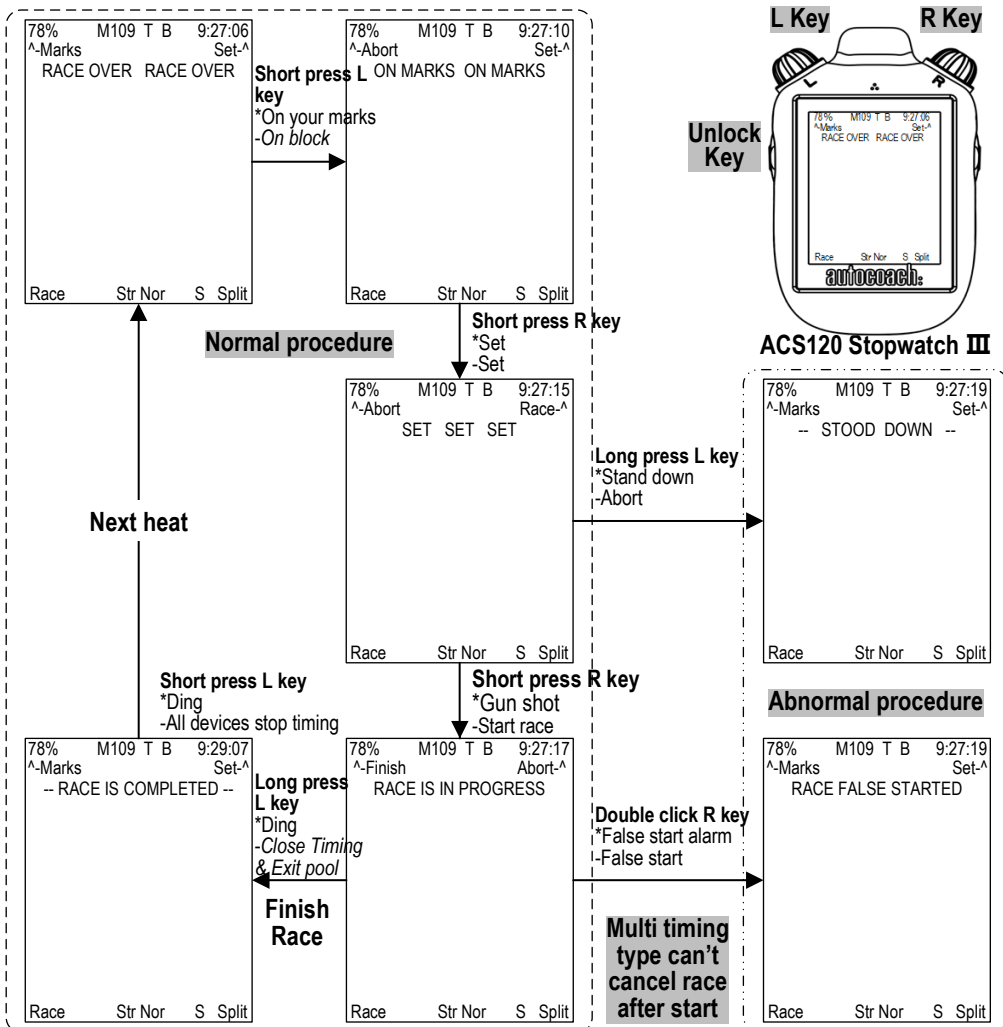
timing by slave watch

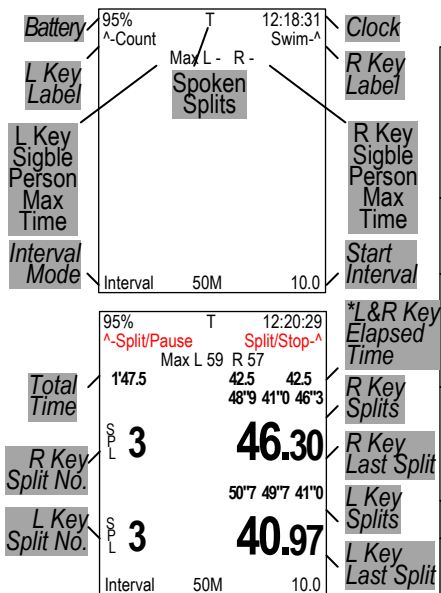
Setup start watch (master watch)

1. Hold **Unlock** key & rotate **L** key to **Setup** mode.
2. Rotate **L** key to **Starts**, rotate **R** key to select start method, long press **R** key to store.
3. Rotate **L** key to **Race Type**, rotate **R** key to **Swim**, long press **R** key to store.
4. Hold **Unlock** key & rotate **L** key to **Race** mode.
5. Hold **Unlock** key & rotate **R** key select timing type for slave watch. **Singl** only record finish time for one person. **Split** can do multi split times for one person. **Multi** means L/R key can record finish times for multi persons in marathon race.

41%	T	15:26:47
^Reset Pace	Setting	Save-^
Starts	Ovr Top	Option
Lane Order	Normal	
Course	Str Top	
Training	Str Nrm	
Race Type	Str Man	
Match Period		
Pacetest Step		
Race mode starting method.		
Str modes need timekeepers.		
Man modes are for Officials.		
Setup	Net ID	30

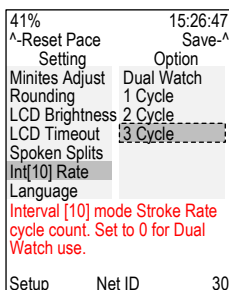
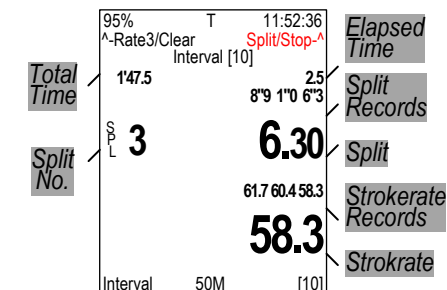
41%	T	15:26:47
^Reset Pace	Setting	Save-^
Starts	Swim	Option
Lane Order	Aths	
Course		
Training		
Race Type		
Match Period		
Pacetest Step		
Select what sports mode the stopwatch will be configured for use with.		
Setup	Net ID	30





Interval Mode

Pre Set	L key start type	Set "Training" in setup mode
	Start Interval	Hold unlock key & rotate R key
Start	Rapid Spread	Start interval set to [10]. Only show split numbers below 10s for rapid spread.
	Race Type	Short press R key when idle
Timing	Train Type	Short press L key when idle
	Timing	Short press R/L key when active
Screen	Pause/Resume	Long press L key when active
	Stop Timing	Long press R key when active
Screen	Review	Rotate L key
	Clean	Long press L key when idle
Screen	Recall	Press unlock key when idle
	Spoken Splits	Enable Spoken Splits in setup mode
Screen	*Max L/R (second)	If more than Max L/R, L/R key elapsed time auto subtract start interval for next swimmer .



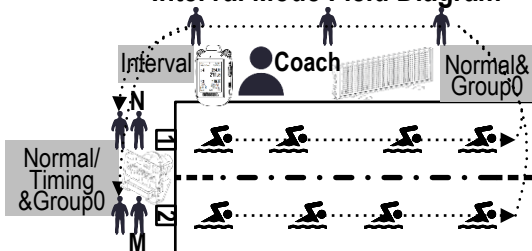
Interval Mode

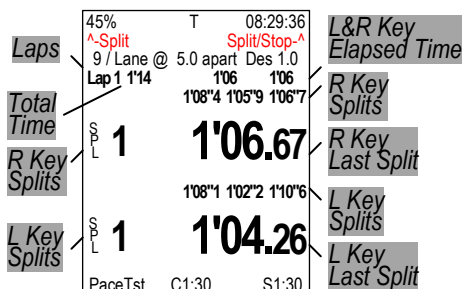
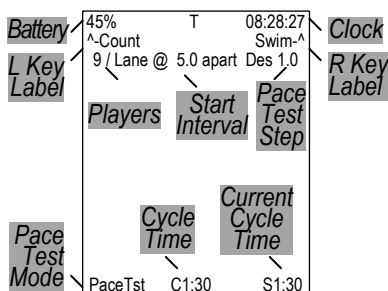
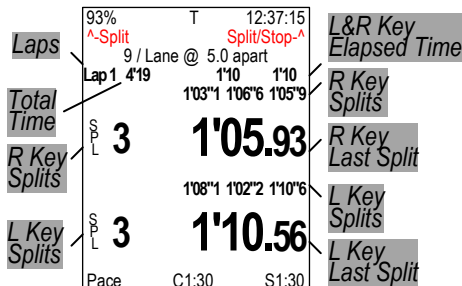
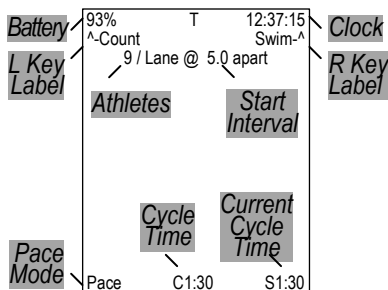
Rapid spread + Strokerate

Set start interval time to [10] to rapid spread mode. Only show split numbers below 10s for rapid spread. Use for one lane training.

In setup mode, set Int[10] Rate to 1/2/3 Cycle for **L** key strokrate.

Interval Mode Field Diagram

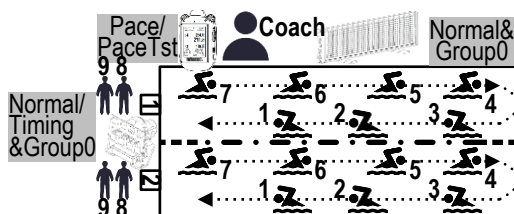




Pace Mode

Pre Set	Start Type	Set "Training" in setup mode
	Start Interval	Hold unlock key & rotate R key
	Athletes	Rotate R key
Start	Cycle Time	Rotate L key
	Race Start	Short press R key when idle
Timing	Train Start	Short press L key when idle
	Timing	Short press R/L key when active
Screen	Stop Timing	Long press R key when active
	Clean	Long press L key when idle
Screen	Recall	Press unlock key when idle
	Can set new cycle time duaring timing, 5 slave watches (Group 0-4) support up to 10 lanes.	

Pace /PaceTest Mode Field Diagram



PaceTst Mode

Set	Start Type	"Training" in setup mode
	Start Interval	Hold unlock key & rotate R key
	Pacetest Step	"Pacetest Step" In setup mode
Start	Players	Rotate R key when idle
	Cycle Time	Rotate L key when idle
Timing	Race Type	Short press R key when idle
	Train Type	Short press L key when idle
Screen	Split	Short press R/L key
	Stop Timing	Long press R key
Screen	Clean	Long press L key when idle
	Recall	Press unlick key when idle

Ready

ON Marks!

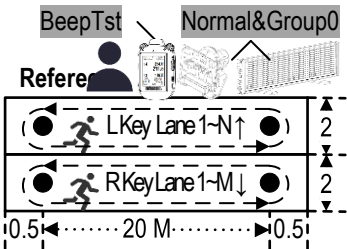
Portable Display
Status

L1 @ 1:30

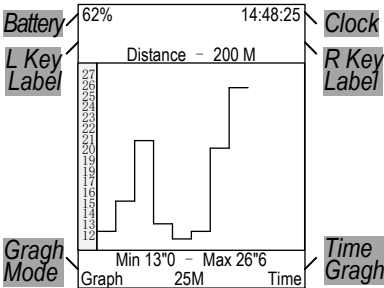
BeepTst Mode

Start	Short press R key when idle
Record	Short press R/L key when active
Stop	Long press R key when active
Volume	Rotate R key
Select	Hold unlock key & rotate R key
Test Type	AIS : Australia Institute BNCF: British National Coach Federation WP10: 10 meters water polo WP20: 20 meters water polo

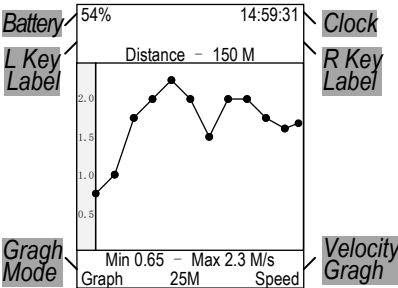
BeepTest Mode Field Diagram



Time graph



Velocity graph



Graph Mode

Show Split times in bar graph and Split velocities in line graph for **Watch /Speed /Race** modes records (more than 3 Laps).

Group 0

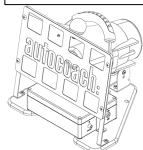
95% T 15:48:52
^ - Mode Start/ Pause - ^
Period Timer
12'49.3
Match Period
Home Visitors
15 **18**
Home Points **Visitor Points**
Score Hm Vi Group 0

Points (Home vs Visitor)

H15 V18

Period Time mm:ss

12:49



Speaker
#5

39% 17:15:27
^ - Reset Pace Setting Option Save - ^
Starts Lane Order Course Training Race Type Match Period Pacetest Step
Score mode match period time before the air horn sounds when the period time expires.
Setup Net ID 30

Group 1

95% T 15:48:52
^ - Mode Start/ Pause - ^
Period Timer
26.0
Shot time
Home Visitors
2 **5**
Home fouls **Visitor Fouls**
Score Hm Vi Group 1

Mini Fouls

Portable Display **H2V5**

Shot time s

26.0

Score Mode

Need 2 stopwatches & 2 portable displays (#4 can be mini display), 1 speaker.
Stopwatch can setup period time/shot timing. Portable display show score/period time /shot time. Speaker announce when period/shot time down to 0.
All devices need same **Net** and **Channel**.
Device #1/3/5 set to **Group 0**, #2/4 set to **Group 1**.
Also can use PC (Immerse Manager Pro program) to connect with multi-function display (MFD) to display score board.
Refer to related user manual.

Note: Portable display I (ACS250 /ACS200) can not display fouls.

In **Score** mode, hold stopwatch **Unlock** key & rotate **R** key to display **Hm Vi**. Shot time will automatically pause/resume with period time.

#1 watch control #3 display			#2 watch control #4 display			Match Period
Points	Show	Short press L key	Fouls	Show	Short press L key	For #2 watch (group 1), The unit of Match Period is seconds (not minutes) for shot time .
	Home	Rotate L key		Home	Rotate L key	
	Visitors	Rotate R key		Visitors	Rotate R key	
Period Time	Show	Long press L key	Shot Time	Show	Long press L key	
	Timing	Short press R key		Timing	Short press R key	
	Pause	Short press R key		Pause	Short press R key	
	Reset	Long press R key		Reset	Long press R key	

Group 0

Watch #1 Score mode, hold **unlock** key & rotate **R** key to display **DV# DD**

95% T 15:48:52
^ - Mode Start/ Pause - ^
Period Timer
13'14
Match Period
Diving # Difficulty
5 **3.5**
Round **Difficulty Digital**
Score Dv# DD Group 0

Round Difficulty Digital

#5 D3.5

Diving Mode

Setup **Match Period / Diving Time** in **Setup** mode.

Group 0		Watch Operations	Group 1	
Dv# DD	Show	Short press L key	Show	Ev Ht
	Dv#	Rotate L key	Event	Ev Ht
	DD	Rotate R key	Heat	
Time	Show	Long press L key	Show	Time
	Timing	Long press R key	Timing	
	Pause	Long press R key	Pause	
	Resume	Long press R key	Resume	

Portable Display #3
Group 0

Portable Display #4
Group 1

Group 1

Watch #2 Score mode, hold **unlock** key & rotate **R** key to display **Ev Ht**.

95% T 15:48:52
^ - Mode Start/ Pause - ^
Period Timer
12.6
Diving Time
Event Heat
4 **2**
Event **Heat**
Score Ev Ht Group 1

Event Heat

E4 H2

Setup Mode

Battery	41%	T	15:26:47	Clock
L Key Label	^Reset Pace	Setting	Save-^	R Key Label
Active Item	Starts	Option		Older Value
Item Detail	Lane Order	Ovr Top		Select New Value
Setup Mode	Course	Str Top		Net ID
	Training	Str Nrm		
	Race Type	Str Man		
	Match Period			
	Pacetest Step			
	Race mode starting method. Str modes need timekeepers. Man modes are for Officials.			
	Setup	Net ID	30	

Starts	Start method of Race mode
Lane Order	Pool lanes number ordering
Course	Course length
Training	Training race start sounds of Interval/Pace/PaceTst mode of left key pressed
Race Type	Race Start sounds of Race/Interval/Pace/PaceTst mode of R key pressed
Match Period	Match Period time of Score mode
Pacetest Step	Cycle time decline step Of PaceTst mode
Rate Count	Strokerate cycle count of Watch/Speed mode
Channel	2.4GHz wireless channel number
Hours Adjust	Sets the time of day clock hours
Minutes Adjust	Sets the time of day clock minutes
Rounding	Resolution of LCD timing display
LCD Brightness	Lower brightness for longer battery life
LCD Timeout	High brightness LCD timer duration
Spoken Splits	Enable/Disable spoken time/splits
Int[10] Rate	Interval[10] mode Strokerate cycle count
Language	Select stopwatch UI language

Setup mode operations

Select Item	Rotate L key
Select Value	Rotate R key
Save Value	Long press R key until sound "Stored"
Reset Pace Clock	Short press L key reset Pace Clock of portable display

Splits Mode

R/L Key Datas	Short press R/L key
Select Lap	Rotate L key

Battery	38%	T	17:25:31	Clock
L key data	^L Lane		R Lane-^	R key data
Lap	Lap 2 of 2	50M		Distance
Split time	Split	[54"58]		
Split Acc	Accumulative	1'49"02		
Split Velocity	Velocity	1.18 0.99 0.58 1.02		
Stroke Rate	Rate	57.9	SI 24.1	
Work mode	Mode:	Speed		
Total distance	137M	Lane 0		
	100%			
Splits mode	Splits	50M	Right	R/L key data

Clock
R key data
Distance

Sport Index

Lane Number

Distance rate

R/L key data

Memory Mode

Select Record	Rotate L key
Recall Record	Long press R key recall in Graph mode
Erase All records	Rotate L key to record 1, long press L key

Battery	52%	T	17:10:35	Clock
Erase ALL records	^Erase All		Recall-^	Recall records
Date time	2023 Nov 29 15:25:44			
Laps /Course /Lane	4 Laps 25 Ln0			
Memory mode	Watch Mode			Work mode
	Memory	1 of 82	Recs	Record ID /Total

Audio Player

AUX Cable

Stopwatch

Others
Stopwatch

(••)
Wireless

Speaker

Smart Cap

Audio Emit

Connect stopwatch with audio player by AUX cable. Press PTT button enable audio emit. Rotate R key to select receiver device (stopwatch/speaker/smart cap).

85%	15:34:07
^Rate3/Clear	Start-^
Press PTT key to emit	Rotate R key select devices
PTT	25M - ALL -

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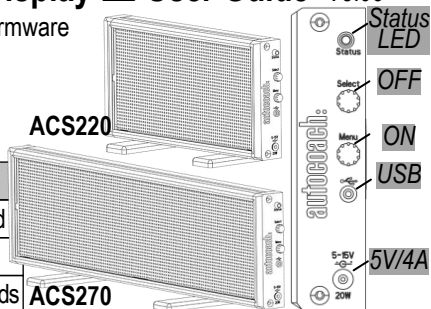
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▲ Devices can work together (same Net & Channel).

Contact AutoCoach to set Net.

▲ Reset device when battery not flat if abnormal work.

Packing List
Display & Portable Bag
USB-3.5mm Cable
5V/4A Power Pack & D Cords



Mode	Rotate ON key to desired mode, rotate OFF key select value, long press ON key to "Saved".	
Normal	Default mode, can set 01/01 second timing resolution. Show lap time, split time, velocity, strokrate, Beep Test level, race meet information. Will switch to Normal mode when stopwatch timing. Resume old mode when stopwatch idle.	
Clock	24 hours (hh:mm:ss or hh:mm) real time clock	
Pace	Two 60s clocks (30s difference) copy analog pace clock.	
ACS270 Pace 5/ Pace 10	Advanced pace clock with 6 characters (red/yellow/green/cyan/magenta/blue, 1~9-0-B~Q). Cycle time (0:15~4:35/0:15~5:00) of each color increase 5/10s from left to right. Swimmer start with personal color character.	
CountUp/CntDown	Count up/down timer (0-2 hours), down to 0 to switch Up/Down.	

Group	Group 0 is 1st&2nd lanes, group 1 is 3rd&4th lanes, etc.
Channel	2.4GHz wireless channel (odd 11-25)
Swap	Swap layout of left/right lanes. Stopwatch start timing in race mode to check lane number.

Others Operations	Turn On	Long press ON key to "Net..." & "Grp..."
	Turn Off	Long press OFF key to "OFF". Idle 45mins auto off.
	Reset	Hold two keys about 15s until green led start fast flashing.
	Adjust Brightness	Rotate OFF key when idle
	Show Battery & Net ID	Short press ON key
Status LED (RGB)	Show Group & Channel	Short press OFF key
	Status: OFF(off)/Idle(slow flash)/Timing(fast flash) Signal: Blue (good), Green (normal), Red (bad) Battery: Blue>75%, Green 20~75%, Red <20% Charging: Constantly red	

Specifications		
Model	ACS270	ACS220
Wireless	2.4GHz/100mW	
LED Matrix	128*32	64*32
Characters	8*1/16*2	4*1/8*2
Time Range	9:59:59	59:59
Lanes	2	2 (in turn)
Power Pack	5V/4A	
Battery	3.7V/37WH	
Environment	-40~60°C, 20~90%RH	
IP Grade	IP66	
Dimensions/cm	70*20*5	38*20*5
Net Weight	3.6kg	2.1kg
Package	7kg	3.3kg

Optional Accessories		
ACS203 Tripod	Mount 1pcs ACS270	Metal/3.5kg/50kg Load/1~1.86m height /102*28*39cm ³ packed
ACS205 Tripod	Mount 5pcs ACS270	Metal/5kg/80kg load /1.3~2.1m height / 102*28*39cm ³ packed
ACS202 Tripod	Mount 1pcs ACS220	Metal & plastic /1kg/1.63m height / 55cm packed length

Portable Display Screenshots

Stopwatch @ Watch Mode

9.9	9.9	ss
59:59	59:59	mm:ss
1:02:03	1:02	hh:mm:ss
1:35:27.49	15.74	/hh:mm
R 53	R 53	Split Time (Yellow)
		Strokerate (Megenta)

Stopwatch @ Speed Mode

R 53	V 1.5	V 1.5	Split Velocity (Yellow)
R 53	16:24	R 53	Strokerate (Magenta)

Stopwatch @ Interval/Pace Mode

59	59	59 59	ss
1:14	1:14	1:14	Elapsed Time (Green)
1:26.31	35.4	1:35.4	mm:ss
R Key Split Time (Yellow)		1:26.3	
L Key Split Time (Magenta)			

Stopwatch @ PaceTst Mode

L 1	@ 1:50	Lap 1	@ 1:50
-----	--------	-------	--------

Stopwatch @ BeepTst Mode

L 10.10	10.10
---------	-------

*Stopwatch @ Score Mode

H 105	V 108	H: Home team	V: Vistor team
-------	-------	--------------	----------------

*Stopwatch @ Score Mode

Count Up/Down Timer h:mm:ss

2:00:00	15:00
---------	-------

Clock Mode hh:mm:ss / hh:mm

Clock	Clock
-------	-------

16:52:47	16:52
----------	-------

• Longer strings scroll to left.

* Need rotate ON key to exit Score mode

ACS270

ACS220

Lanes No. (Red)

Stopwatch @ Race Mode

10	9.9	10	9.9	Elapsed Time (Green)
12.15	13.16	13.16		R Key Split Time (Yellow)
1:32.61	12.15			L Key Split Time (Magenta)
Ready.				
Abort !				

Start Infos

ON Marks!
False Start!

Ev 4 Ht 1of 2
Mixed Open 50 br Prel
Ev 5 Ht 1of 1
Boys Open 200 br Prel
Ev 6 Ht 1of 1
Girls Open 200 br Prel

Mixed Event (Green)

Men's Event (Cyan)

Women's Event (Magenta)

Msl Ev 9

Marshalling Event

Ev 6 Ht 1of 1
Msl Ev 9

Current Event/Heat
Marshalling Event

Speaker @ Relay Mode Rly:Changeover Time (s)

Rly .139	Rly .139	Lane1
Rly .162	Rly .162	Lane2

Rly -.021
Rly -.028

Rly -.021
Rly -.028

Lane1
Lane2

False Start

Speaker @ BlockTime

R:Reaction Time (s) B:Block Time (s)

R --B --	R --B --	Lane1
R 38B 1.02	R 38B 1.02	Lane2

Speaker @ WallTime Mode W:Wall Time (s)

W1 .145	W1 .145	Lane1
W2 .85	W2 .85	Lane2

Check Display Paramenters

Bat 79%
Net 259

Battery
Net ID

Operator

Short press
ON key

Grp 0
Chn 15

Group
Channel

Short press
OFF key

AutoCoach:
V1.47

Firmware
Version

Hold ON+OFF key
about 15s

Pace

00 30

Pace 5
1:10-1:35

11111 00

741889 49



Pace 5
1:00-1:25

43218731

Athletes	60	65	70	75	80	85
1	1	1	1	1	1	1
2	2	2	2	2	2	2
3	3	3	3	3	3	3
4	4	4	4	4	4	4
5	5	5	5	5	5	5
6	6	6	6	6	6	6
7	7	7	7	7	7	7
8	8	8	8	8	8	8
9	9	9	9	9	9	9

Pace 5
0:55-1:20

9753EF31

Athletes	55	60	65	70	75	80
1	1	1	1	1	1	1
2	2	2	2	2	2	2
3	3	3	3	3	3	3
4	4	4	4	4	4	4
5	5	5	5	5	5	5
6	6	6	6	6	6	6
7	7	7	7	7	7	7
8	8	8	8	8	8	8
9	9	9	9	9	9	9
10	10	10	10	10	10	10
11	11	11	11	11	11	11
12	12	12	12	12	12	12
13	13	13	13	13	13	13
14	14	14	14	14	14	14
15	15	15	15	15	15	15
16	16	16	16	16	16	16

Character display time
 10s
 5s
 0s

Pace

00 30

Pace 10
1:10-2:00

11111 00

13251B 42



Pace 10
1:00-1:50

63236B50

Athletes	60	70	80	90	100	110
1	1	1	1	1	1	1
2	2	2	2	2	2	2
3	3	3	3	3	3	3
4	4	4	4	4	4	4
5	5	5	5	5	5	5
6	6	6	6	6	6	6
7	7	7	7	7	7	7
8	8	8	8	8	8	8
9	9	9	9	9	9	9
10	10	10	10	10	10	10
11	11	11	11	11	11	11

Pace 10
0:55-1:45

951EC031

Athletes	55	65	75	85	95	105
1	1	1	1	1	1	1
2	2	2	2	2	2	2
3	3	3	3	3	3	3
4	4	4	4	4	4	4
5	5	5	5	5	5	5
6	6	6	6	6	6	6
7	7	7	7	7	7	7
8	8	8	8	8	8	8
9	9	9	9	9	9	9
10	10	10	10	10	10	10
11	11	11	11	11	11	11
12	12	12	12	12	12	12
13	13	13	13	13	13	13
14	14	14	14	14	14	14
15	15	15	15	15	15	15
16	16	16	16	16	16	16
17	17	17	17	17	17	17
18	18	18	18	18	18	18
19	19	19	19	19	19	19
20	20	20	20	20	20	20
21	21	21	21	21	21	21

Portable Display Pace mode ACS270/ACS220

Two 60s timers for pace training. Cyan and yellow timer are 30s difference. Replace traditional analog pace clock.

Portable Display Pace5/10 mode Only for ACS270

Amazing advanced pace clock for team pace training. Cycle time range is 0:15~4:35 (Pace 5) or 0:15~5:00 (Pace 10). 6 characters (1-9-0-B-Q) in difference colors (red/yellow/green/cyan/magenta/blue) for 6 difference cycle times. From left to right, the cycle time of each color increase 5s (Pace 5) /10s (Pace 10). Each character will display 5/10 seconds. One color one lane. Each swimmer start with personal character (such as red 6). Faster swimmer start first.

The two white numbers in right side is 60s timer.

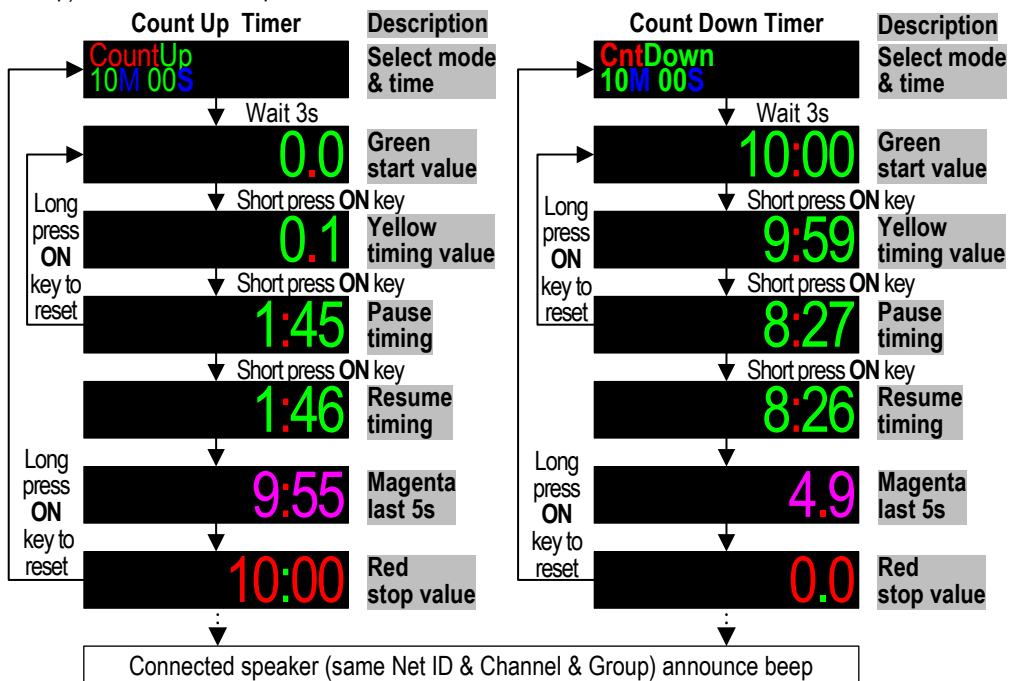
Short press **ON** Key of portable display (Pace/Pace 5/Pace 10 mode) or **L** key of connected Stopwatch (Setup mode) can reset pace clock.



ACS270/ACS220 Portable display III Timer mode

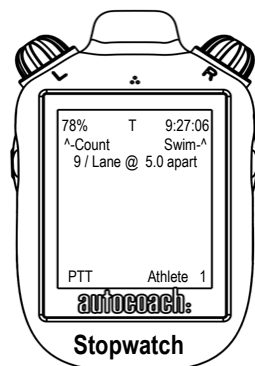
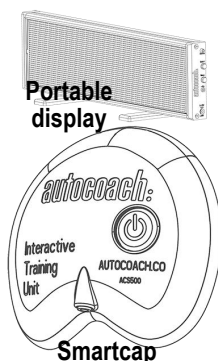
Rotate **On** key to "CountUp" / "CntDown", rotate **OFF** key to select value. When value down to 0, can change mode between **CountUp** / **CntDown**.

When timer go up/down to the target value, the connected speaker (same Net ID & Channel & Group) will announce beep.



ACS270 Portable Display work with smartcap

Lap	Lap Time
L1	11.3
Split	Split Time
S2	18.6
Training time	
37.9	



autocoach: Speaker III Uder Guide

Tel : +61 3 9029 0973

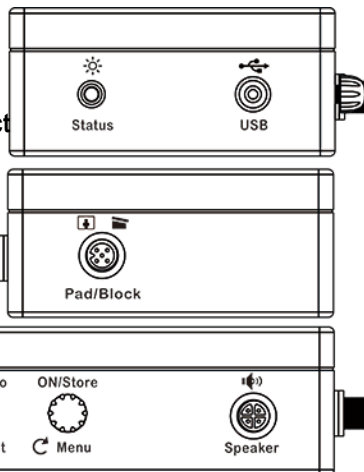
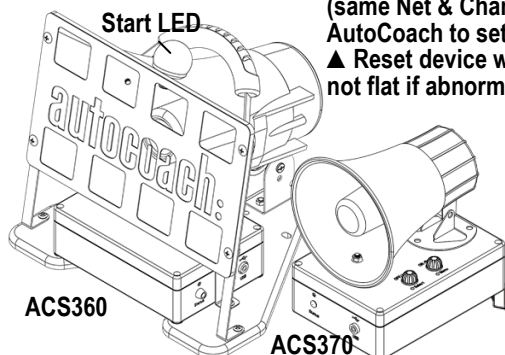
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▲ Devices can work together (same Net & Channel). Contact AutoCoach to set Net.

▲ Reset device when battery not flat if abnormal work.



Mode	Rotate ON key to desired mode. Rotate OFF key select Channel/Group value, long press ON key to save.
Normal	Default mode without spoken time result
Timing	Add spoken time result base Normal mode
Relay	Relay training (refer stopwatch manual)
BlockTime	Start training (refer stopwatch manual)
WallTime	Turning training (refer stopwatch manual)
Channel	2.4GHz wireless channel (odd 11-25)
Group	Group 0 is 1st&2nd lanes, group 1 is 3rd&4th lanes...

Others Operations	Turn On	Long press ON key to sound "ON"
	Turn Off	Long press OFF key to sound "OFF". Idle 45mins auto off.
	Reset	Hold Two keys 15s to green led start fast flashing
	Volume	Rotate OFF key
	Check Battery/Group	Short press ON key
	Check Mode&Channel	Short press OFF key

Start LED	White LED flash one time when start timing
Status LED (RGB)	Status: OFF(off)/Idle(slow flash)/Timing(fast flash) Signal: Blue (good), Green (normal), Red (bad) Battery: Blue>75%, Green 20~75%, Red <20% Charging: Constantly red

AC311 cable Description

Relay/start/turning training refer stopwatch manual.
Red plug is positive, black plug is negative.
Red/Black cable → touchpad1, Blue/Black cable → startblock1,
Yellow/Black Cable → touchpad2, Green/Black cable → startblock2.

"T" support touchpad & block		
Model	ACS360T ACS360	ACS370T ACS370
Wireless	2.4GHz/100mW	
A/D Jack	No start signal output	
Volume	>110dB	>95dB
Power Pack	5V/1A/3.5mm plug	
Battery	3.7V/17.76WH	
Environment	-40~60°C/20~90%RH	
IP Grade	IP66	
Dimensions cm	29*25*26	17*12*22
Net Weight	2.8kg	1kg
Package	3.3kg	1.2kg

Packing List

Speaker	AC321 Carry bag (mini speaker)
5V/1A Power pack	USB-3.5mm Cable
Optional Accessories	
AC203 Tripod	Metal/3.5kg/50kg load /1~1.86m height /102*28*39cm ³ packed
AC311 Pad&Block Cable	Dual lanes Touchpad & Startblock adapter cable

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Timing Button III User Guide V5.06

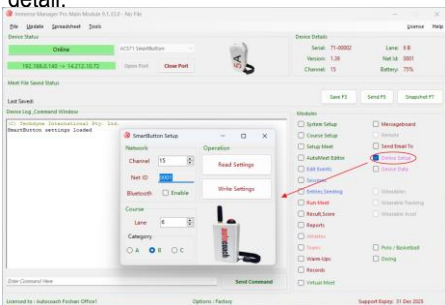
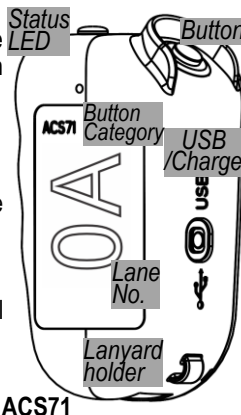
For V1.48+ Firmware

▲ Devices can work together (same Net & Channel). Contact AutoCoach to set Net.

▲ Reset device when battery not flat if abnormal work.

Timing button can work with other autocoach devices when they are same **Channel & Net ID**. When devices connect with computer by usb cable and open with Immerse Manager Pro program, it will display the settings in the main window. Can set up **Channel, Lane, Category** in device setup window. **Contact Autocoach to set Net ID**.

Each lane support 3 timing buttons (button category A/B/C). Timing result will locally store and also remotely store in Immerse Manager Pro program of computer. Multi-press timing button at endpoint, system will use the last time as final time of this button. Refer to Immerse Manager Pro manual for more detail.



Current Race													
Lane	Athlete Name	Team	Age	En	HCI	HCI2	DQ	Seed Time	Place	HP	Post Time	Waltz	TFal
0	Holt-Jordan	WOW	19	2	1	1	1	34.99					
1	Fahnestock	WOW	19	2	1	1	1	34.99				10.46	
2	Kirk-Lip	OTT	19	2	1	1	1	34.99					
3	Mayer-Harsh	TRL	19	2	1	1	1	34.99					
4	Yang-Lee	OTT	19	2	1	1	1	34.97					
5	Valenzuela	MEN	19	2	1	1	1	34.98					
6	Waller-Job	TRL	19	2	1	1	1	34.99					
7	Salvador-Lopez	MEN	19	2	1	1	1	34.98					
8	Autocoach-Maria	HOP	19	2	1	1	1	34.99					
9	Fahnestock	SEY	19	2	1	1	1	34.99					

Turn On	When it is off (led off), hold button down about 2 seconds until led slowly flash. It will sound volume up tone.
Turn Off	When it is idle (led slowly flash), hold button down about 2 seconds until led off. It will sound volume down tone. * Not allowed turn off when it is timing.
Timing	Short/long press button when it is timing
Reset	Hold button down about 15 seconds until status led fast flash to start reset.
Status LED (RB)	Status: OFF(off)/Idle(slow flash)/Timing(fast flash) Signal: Blue (good/normal), Red (bad) Battery: Blue>20%, Red <20% Charging: Constantly red
Specifications	
Wireless	2.4GHz/100mW
Power Pack	5V/1A
Dimensions	51*110*15mm ³
Battery	3.7V/7.4WH
Environment	-40~60°C, 20~90%RH
Net Weight	82g
IP Grade	IP66

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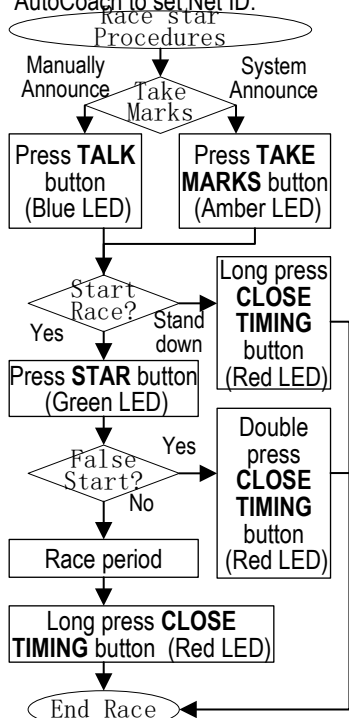
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▲ Devices can work together (same Net & Channel). Contact AutoCoach to set Net.

▲ Reset device when battery not flat if abnormal work.

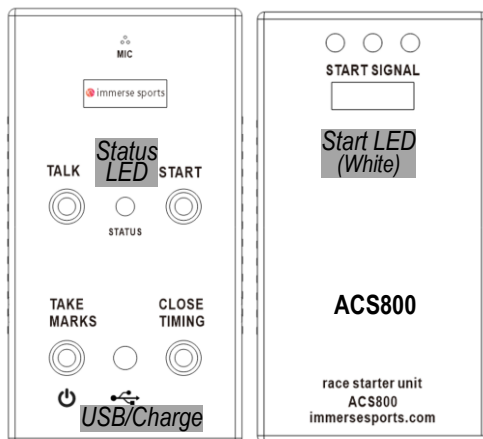
Starter can operate race start procedures. Need work with Connected Transceiver and speaker (same **Net ID** & **Channel** settings). Use Immerse Manager Pro program to setup **Channel**. Contact AutoCoach to set **Net ID**.



Specifications	
Wireless	2.4GHz/100mW
Power Pack	5V/1A
Battery	3.7V/7.4WH
Environment	-40~60°C 20~90%RH
IP Grade	IP54
Dimensions	150*80*38mm ³
Net Weight	170g

Starter III User Guide V5.06

For V1.48+ firmware



Note

Starter only work when Immerse Manager Pro program connected with transceiver. Don't use with stopwatch.

Turn ON	Hold TAKE MARKS key 2s until status led flash. TALK key (Blue LED) and TAKE MARKS Key (Amber LED) will active when it is ON.
Turn OFF	When it is idle (Blue & Amber Keys active, Green & Red keys inactive, Status led slowly flashing), hold TAKE MARKS key 2s until red Status LED flash 3 times, then it turn off all LEDs and be OFF. Not allowed turn off if transceiver is active.
Reset Device	Hold both TAKE MARKS & CLOSE TIMING keys about 15s until green status led start fast flash.
Talk /Ready	Hold TALK key and talk to microphone. Inform athletes aboard block or enter water to get ready.
Take Marks	Press TAKE MARKS key , speaker announce "Take your marks".
Start	Press START key, speaker announce start beep and system start timing.
Close Timing	Long press CLOSE TIMING key to close timing, speaker will announce "Ding".
Stand Down	After take marks, long press CLOSE TIMING key to cancel start. Speaker announce "Stand down".
False Start	When it is timing, double press CLOSE TIMING key, speaker will announce "False start" alarm.
Start LED	White LED flash one time when start timing
Status LED (RGB)	Status: OFF (off)/Idle (slow flash)/Timing (fast flash) Signal: Blue (good), Green (normal), Red (bad) Battery: Blue >75%, Green 20~75%, Red <20% Charging: Constantly red

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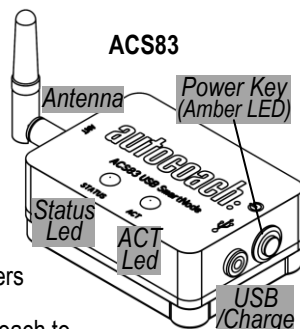
▲ Devices can work together (same Net & Channel).

Contact AutoCoach to set Net.

▲ Reset device when battery not flat if abnormal work.

Transceiver connect with computer by USB cable, it is the wireless communicate bridge between Immerse manager Pro program and others timing devices. All devices need set to same **Net ID & Channel**.

Use Immerse Manager Pro program to setup **Channel**. Contact AutoCoach to set Net ID.



Note	All others devices dosen't allowed turn off or hibernate when transciever is ON.
Turn ON	Hold Power key 2s until Power LED & status led slowly flashing.
Turn OFF	When no timing (Status & Power leds slowly flashing, ACT LED is OFF), hold Power key 2s until Status Red LED flash 3 times, then it turn off all LEDs and be OFF.
Reset Device	Hold Power key 15s until green status led start fast flashing.
Status LED (RGB)	Status: OFF(off)/Idle(slow flash)/Timing(fast flash) Signal: Blue (good), Green (normal), Red (bad) Battery: Blue>75%, Green 20~75%, Red <20% Charging: Constantly red
ACT LED (RGB)	Starting(blue) / timing(green) / close timing(red) / stanby(OFF)
Power Key	ON : device is on.
Amber LED	OFF: device is off.

Specifications	
Wirreless	2.4GHz/100mW
Power Pack	5V/1A
Battery	3.7V/11.1WH
Environment	-40~60°C, 20~90%RH
IP Grade	IP66
Dimensions	123*60*39mm ³
Net Weight	135g

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▲ Devices can work together (same Net & Channel).

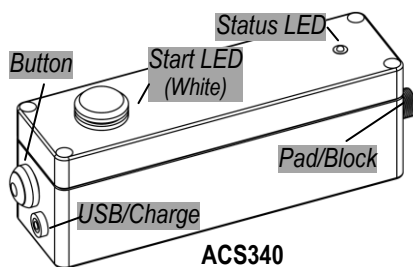
Contact AutoCoach to set Net.

▲ Reset device when battery not flat if abnormal work.

Touchpad box can use AC311 cable to connect with switch type (analog signal) touchpad of difference brand and upgrade it to wireless touchpad. Doesn't support digital interface touchpad. It is powered by battery and don't need plug in power cord. When athlete touch the pad, timing result will wireless transmit to transceiver (same **Net ID** and **Channel** setting) which connected with computer, and receive by Immerse Manager Pro program. When touchpad box connect with computer by USB cable and open with Immerse Manager Pro program, it will display the settings in the main window. Can set up **Channel** in device setup window. **Contact Autocoach to set Net ID.**

Touchpad Box III User Guide V5.06

For V1.48+ Firmware



ACS340

Turn On	When it is off (led off), hold button down about 2 seconds until blue led flash. White start LED will flash 3 times.
Turn Off	When it is idle (blue led slowly flash), hold button down about 2 seconds until white start LED flash 3 times and all leds off. * Not allowed turn off when it is timing.
Reset	Hold button down about 15 seconds until status LED fast flash.
Start LED	White LED flash one time when start timing. Flash 3 times when turn on/off.
Status LED (RB)	Status: OFF(off)/Idle(slow flash)/Timing(fast flash) Signal: Blue (good/normal), Red (bad) Battery: Blue>20%, Red <20% Charging: Constantly red
AC311 cable Description	
Red plug is positive, black plug is negative. Red/Black cable → pad1, Blue/Black cable → block1, Yellow/Black Cable → pad2, Green/Black cable → block2.	

Specifications	
Wireless	2.4GHz/100mW
Power Pack	5V/1A
Battery	3.7V/11.1WH
Environment	-40~60°C, 20~90%RH
IP Grade	IP66
Dimensions	181*45*67.5mm ³
Net Weight	180g

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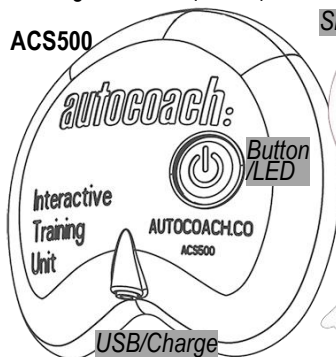
Smart Cap I User Guide V5.06

For V1.35+ Firmware

Smart cap built-in bone speaker, wear with silicone swimming cap, work independently or together with stopwatch. Provide various real time voice feedback during the whole swimming training. Also can receive voice guide from coach by stopwatch. Built-in high-precision motion & GPS sensors can record motion gesture and path of particle for further graphic data analysis by Autocoach Manager program.

ACS500

Silicone Cap



Work with stopwatch with same **Net ID** & **Channel**. Hold **Talk** key and rotate **R** key to select target athletes (Athlete1~16/Line1~2)

Work Mode	Talking	Team training. Receive private start signal & timing result from stopwatch.
	Auto Time	Individual training. Announce custom timing options without stopwatch.
	Tracking	Open water swimming. Trace path of particle by GPS sensor. * Available for ACS500G.
Operation	Turn On	Press button down 3 seconds until green led flash. It will sound "On ... Battery *%".
	Turn Off	Press button down 3 seconds until leds off. It will sound "Shuts down ... Off".
	Change Mode	Double click button when idle.
	Battery Level	Click button in Talking mode.
	Reset	Hold button down about 15 seconds until reboot. Will report firmware version/Net ID/Channel/Athlete number/Battery level.

StopwatchIII			ACS500 Specifications	
LED			Wireless	2.4GHz
Off	All LEDs Off		Power Pack	5V/1A
Idle	Green /Red	Short flash	Battery	3.7V/0.75AH
		Long flash	Environment	-40~60°C
Timing			Ingress Protection	IP67
Charge	Amber	On	Dimensions	11*10*3cm ³
Red led indicate weak signal or low battery			Net Weight	120g

▲ Devices with same Net & Channel can work together. Contact AutoCoach to set Net.

▲ Reset device when battery not flat if abnormal work.



Auto Timing Options

Reset Time
Head Tilt Start
Glide Warning
Turn Times
Push-off
Lap Numbers
Split Numbers

Split Times
Stroke Index
Stroke Rate
Session PBs
Cumulative Times
Cumulative
Technique Hints

Connect Smart cap with computer and open with Autocoach Manager program, can setup **Channel/Athlete Num/Auto timing options**

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New User's guide

1. Recommend operate devices refer this document. It is the most easy way to understand basic operations.
2. Understand devices relationship in topology graph.
3. Understand all devices need to set to same **Net ID & Channel** so that they can work together. Each organization's devices has unique **Net ID**, so that they don't affect other's devices in same filed. Please contact device provider if need change **Net ID**.
4. Understand the relationship between **Group** setting and lane number about watch/Speaker/portable display.

Group	Lane No. (0-9/9-0)	Lane No. (1-10/10-1)
0	0&1	1&2
1	2&3	3&4
2	4&5	5&6
3	6&7	7&8
4	8&9	9&10

Portable display Group 5-7 are special setting for display marshalling/event information. Refer to system setup module of Immerser Manager Pro program.

5. Understand with various application scenes about difference work modes of stopwatch/speaker/portable display.
6. Understand how to turn on/turn off/reset device, and how to change/save device settings. Understand device status led behavior (red/green/blue/white color, slowly/fast flashing).
7. Understand basic operation procedure
Turn on → select work mode & settings → put device in proper position → speaker connect with touchpad & start block → filed testing → confirm lane number correct → start to use.
8. Refer Immerse Manager Pro program to do related operations.
9. Carefully maintain devices. Fully charge battery every 3 months to get longer battery life. Wipe off water of surface and clean device after finish using, and keep it in original carry bag.
10. **When found water intrude into device case, turn off device immediately and wipe off water. Contact device provider to get proper service. Don't try to charge or turn it on again, otherwise no chance to fix it.**

FCC Caution.

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.

FCC Radiation Exposure Statement:

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