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***ACS360 SmartSpeaker***

***User Manual***

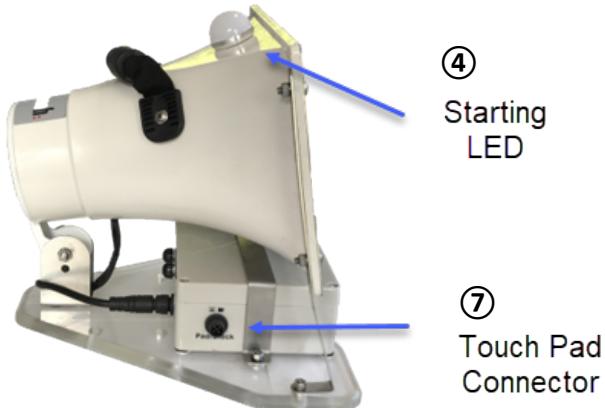
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# Table of Contents

Table of Contents .....	1
SmartSpeaker Controls & Indicators .....	3
1. Turning on and off.....	6
1.1: Turning unit on .....	6
1.2: Turning unit off.....	6
1.3: Battery Level.....	6
1.4: Resetting the unit .....	7
2. Connecting to your Performance Stopwatch .....	8
3. Use with a Performance Stopwatch .....	8
3.1: SmartSpeaker unit modes .....	8
3.2: Stopwatch in Pace Mode.....	9
3.3: Stopwatch in Race Mode.....	9
3.4: Stopwatch in Interval Mode .....	9
4. Other Menu Items.....	10
4.1: Group.....	10
4.2: Channel.....	10
5. Connecting to Your Computer.....	11
.....	12
5.1: Windows PCs .....	13
5.2: Version Information .....	13
6. Use as Race Starting System .....	14
6.1: Using Touchpads .....	17
6.2: Using Start Blocks with Force Switch .....	17
7. Charging the battery .....	19

7.1 Mini Speaker power cable.....	19
8. Caring for your AutoCoach device .....	20
8.1: Storage .....	20
8.2: Handling .....	20
8.3: Labelling .....	20
8.4: Resetting .....	20

# SmartSpeaker Controls & Indicators



Note: There are two types of button presses on left & right dials. A “Short Press” is of less than 0.4 Seconds Duration. A “Long Press” is of greater than 0.6 Seconds duration.

① **Right Dial** - **Menu /Enter /On** – when long pressed inwards. **Menu Item Selection** – rotate dial to cycle through the menu items.

**Battery Level Readout** – short press dial activates a voiced reading of the speaker's remaining battery percentage and current volume level.

② **Left Dial** - **Volume /Select / Off** – In normal state twist dial to set desired volume. Immediately after changing the **Right Dial**, rotating the **Left Dial** will list selection for the current **Menu** section. Should you wish to enter the new setting, immediately long press the **Right Dial** for saving your selection.

**Status Readout** – short press inwards to activate a voiced reading of each of the speaker's menu sections (Normal/Timing, Group and Channel).

③ **Status LED** – will flash when Speaker Unit is on; blue with more than 50% battery, green when less than 50% but more than 25% and red when less than 25%. When Menu is activated, LED will remain steadily lit for 15 seconds of inactivity and then resume flashing. The LED will also flash during reception of wireless data.

④ **Starting LEDs** – will flash brightly during the Race Starts, so an athlete can see the start, or a person can time at some distance accurately.

⑤ **Splash Resistant Loudspeaker** –

**Normal Mode** – sounds start beeps, start whistles, a starter's voice and intervals during sets. **Timing Mode** – reads out times recorded on the Stopwatch. **PA Speaker** – can amplify a Stopwatch user's voice. **Relay Mode** – announces and indicates relay change-over times.

⑥ **USB Port** – data transfer and battery recharging. **Expansion** – for use with other devices.

⑦ **Touch Pad Connectors** – connection to touchpads or starting block pressure sensors.

# 1. Turning on and off

## 1.1: Turning unit on

If the unit is off (Status LED ③ not flashing), long pressing the right dial will turn the unit on. The Status LED ③ will confirm that the unit is on by flashing and announcing “On”. Upon start up the unit will announce its installed software version and its Network ID.

## 1.2: Turning unit off

The unit will automatically turn off after approx. 45 minutes inactivity. Just before turning itself off, it will announce “Off”. The unit can be manually shut down by long pressing the left dial. The unit will announce “Off” as it turns off, and the Status LED ③ will stop flashing.

## 1.3: Battery Level

When the unit’s battery falls below 50%, the Status LED ③ will turn from blue to green. When the battery falls below 25%, the Status LED ③ will start flashing red. At this point we recommend charging the Speaker Unit.



## 1.4: Resetting the unit

The unit can be reset to default conditions by holding in left and right dials simultaneously for more than approx. 10 Seconds. After a few seconds the unit will announce “Reboot, reboot” followed by the Status LED flashing for approx. 1 second. After booting, the unit will announce the software version (e.g “Version 5.01”).



Hold in both Dials for more than 10 Seconds to Reboot

## 2. Connecting to your Performance Stopwatch

**Please upgrade Firmware of each device each time in order to communicate correctly!**

1. To connect to your Stopwatch, first setup your Watch by turning it on and finding the Setup Mode. In Setup Mode, set Channel number (e.g. Channel 15). \*
2. Turn on your SmartSpeaker Unit by pressing in the right dial until the unit announces “On” and the Status LED ③ blinks. If you are using the default settings, no other settings need be changed, except what mode you wish (normal, timing etc.). To change the mode, simply rotate the right dial till the unit announces the desired mode.
3. To change a setting such as Channel or group (**for customers who have purchased more than one system – otherwise don’t change!**) Proceed by rotating the right Dial until the Speaker Unit announces “Channel” or “Group”.
4. To change Channel (**only required for multiple systems – not recommended to change!**) Rotate the right Dial until the Speaker Unit announces “Channel”. From here, as in step 2, rotate the left Dial and until the Channel number matches your number used for in the Stopwatch (e.g. Channel 15), then long press the left dial until the Speaker Unit confirms your selection by announcing “Store”.
5. Confirm your connection by starting a race in “Race Mode” on your Watch and listening for the Starter Sounds from the Speaker Unit.

\*Refer to Performance Stopwatch User Manual for detailed instructions regarding your Watch.

## 3. Use with a Performance Stopwatch

### 3.1: SmartSpeaker unit modes

Firstly, we need to ensure the speaker unit is set to the desired mode (Normal, Timing, Relays, Block-time...) by rotating the right Dial until the SmartSpeaker announces the desired mode “e.g. Normal/Timing/Relay/Block-time”. When you

want the recorded times to be announced by the speaker, Timing Mode should be selected, otherwise Normal Mode should be selected. In Timing Mode, as the first swimmer receives a time by either the Stopwatch or a touchpad, the time will be spoken. If another lane finishes within 2.5 seconds of the first, the unit will add “Left” or “Right” before that time in order to avoid ambiguity. In both Normal and Timing Mode the SmartSpeaker behaves as follows.

### **3.2: Stopwatch in Pace Mode**

The SmartSpeaker will play either an “in water start” (two warning beeps and a start beep), or a “race start” (a voiced “Take Your Marks” and a start beep) depending on what button is used with the Watch. Regardless of which start is chosen, the Speaker Unit will also produce a bright white starting flash.

After the start, the SmartSpeaker will continue playing the pre-selected start commands and flash in time with the pace set on the Watch.

### **3.3: Stopwatch in Race Mode**

The SmartSpeaker will play a starter’s whistle, then a starter’s “Take Your Marks”, start beep, start flash and start cancel “Stand Down” and pool exit whistles – all controlled through the Watch.

### **3.4: Stopwatch in Interval Mode**

Same as in Pace Mode.

## 4. Other Menu Items

### 4.1: Group

To reach Group, rotate the right Dial until the SmartSpeaker announces “Group”. From here, use the left dial to choose a desired group then hold in the right dial until the Speaker Unit confirms the selection by announcing “Store”. **This setting should be “Group 0” for customers with a single system. Group 1, 2 etc. are only required for multiple lane race meets.**

### 4.2: Channel

To setup Channel, rotate the right dial until the SmartSpeaker announces “Channel”. From here, use the left dial to choose a desired channel then hold in the right dial until the SmartSpeaker confirms the selection by announcing “Store”. **The default channel is “Channel 15” and should not be changed unless advised to do so.**

## 5. Connecting to Your Computer

When connecting to your computer, make sure that you carefully connect the SmartSpeaker end of the USB cable before the computer end, ensure the locating bump on the plug is correctly oriented towards the socket and carefully plug in the cable. Ensure the SmartSpeaker is turned on so it can respond to commands in the Immerse Manager Pro program.





✗ INCORRECT!

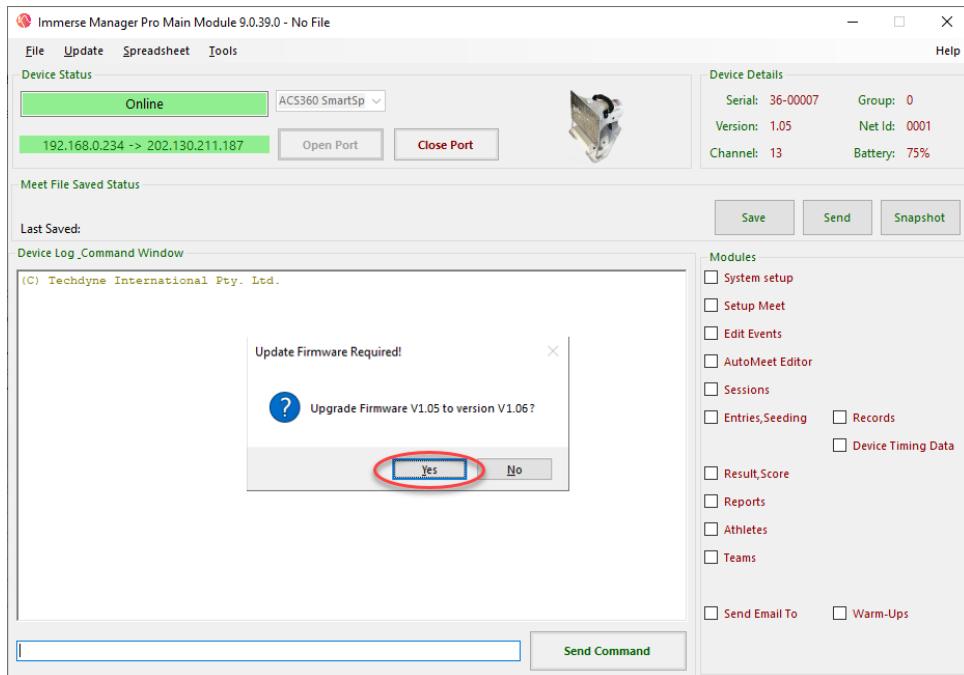


✓ CORRECT!

! Make sure the  
cable is pushed in  
fully

## 5.1: Windows PCs

Either as part of the installation, or as an emailed or downloaded file you can update the firmware of an AutoCoach Device. Before upgrading, be sure to have at least 20 percent battery level remaining and do not operate any controls or other programs on your computer whilst the upgrade is in progress! After a successful upgrade, the unit will then reboot.



## 5.2: Version Information

To get a summary of the device state type “ver” in the bottom terminal window. This lists all relevant settings on the unit. The version number will be displayed on the Device Details panel once device is online.

## 6. Use as Race Starting System

With an expansion cable, the ACS360 SmartSpeaker can be connected to an existing race timing system, such as Omega or Colorado etc. As a socket needs to be fitted, the adapter cable should be ordered at the same time as ordering your SmartSpeaker unit.



Expansion connector supports touch pads or starting block pressure sensors. Each speaker can connect to two starting blocks and two touch pads.





Adaptor to connect  
Touch Pad and Start  
Block cable to Smart  
Speaker



Socket to insert  
the adaptor

The adapter cable plugs into the race start socket as shown. Carefully line up the adaptor cable to match the pins on the speaker socket.



Take note that the small grooves line up before inserting cable into socket



The cable should connect firmly into the speaker socket

## 6.1: Using Touchpads

One ACS360 SmartSpeaker can connect to two touchpads. Connect the left lane touchpad to the black terminals, and the right lane touchpad to the red terminals. In **Interval** mode, touchpads are live all the time, and a retouch is detected after 2 seconds from the last touch. In **Race** mode touchpads are active after a “dead time” delay from the start (keep this in mind when testing the pads before a race).

If doing “Over The Top” race starts, ensure swimmers holding the lane ropes are 2 meters from the pads or more, so no accidental pad touch can occur in the active race!

## 6.2: Using Start Blocks with Force Switch

One ACS360 SmartSpeaker unit can connect to a start block that has a force switch (red terminals), and optionally a touchpad (black terminals) in the same lane.

Using the start block force switch, SmartSpeakers with the “Block-time” option can measure reflex delay from start beep (time to when athlete starts to push back on the blocks) and “Block-time” (the time from start of start beep to when the feet leave the blocks). If a start has occurred and the reflex time is shorter than 0.2 seconds, a high beep will be emitted. All reflex times are then spoken so the diver can hear this time before they hit the water. A reflex time of less than 0.15 seconds is considered invalid, and a DQ beep is emitted first.

If the touchpad and the force switch are used together, and the “Relay” option is purchased, the SmartSpeaker can measure Relay Changeover times (time from touchpad pressed to the time diver leaves the blocks). It can also indicate if an invalid changeover has occurred (diver left before touchpad touched). Changeovers measured between 0.07 and 0.15 seconds result in a high pitch “beep”, then the changeover time in hundredths of a second is quickly spoken, so the diving athlete can hear their time before they hit the water.

If the “Wall Time” feature is purchased, an ACS360 SmartSpeaker can announce the time touchpads are activated for measuring turn times on the wall. Rotate the

right dial until “wall Time” is announced. Two pads can be used to monitor wall times in two adjacent lanes.

## 7. Charging the battery

The SmartSpeaker can be recharged with the supplied AC Adapter (5V 1000mA USB socket), or by connecting the unit to a PC or MAC via the supplied USB cable.



From 0% Battery level, charging usually completes within 3 hours. We recommend recharging when the battery level is below 30%, in order to be confident that you have enough power for a day's usage.

**Do not leave battery completely flat for more than a few weeks as this can reduce the life of the Li Polymer battery. If storing for an extended time fully charge the battery and turn the unit off.**



### 7.1 Mini Speaker power cable

The mini speaker and later builds of the ACS360 Speaker use a three-ring plug as the charger cable. Please ***DO NOT USE to charge the ACS100/ACS110 AutoCoach Stopwatch as this can fit into the headphone socket.*** The Stopwatches are charged by the supplied mini-USB cable.

# 8. Caring for your AutoCoach device

## 8.1: Storage

Try to store in an as dry and cool place as possible. Always stand the Speaker Unit on its base and take care not to drop the unit on hard surfaces. Never place a wet device inside any sort of storage box or container – wipe it dry first!

## 8.2: Handling

The Speaker Unit is water RESISTANT, and NOT waterproof. **Do not submerge** the SmartSpeaker. After usage around splashes, make sure to shake water out of the unit and wipe off remaining droplets. Take care with the orange handle as it can be broken if dropped or crushed. Replacement handles are readily available if damaged in transit.

## 8.3: Labelling

Please place a large visible sticker on your speaker unit to ensure it is not accidentally taken or stolen. Make sure an organization name and phone number is clearly seen. If using more than one squad, write the name and squad number for that speaker on it to avoid confusion!

## 8.4: Resetting

If the program fails to respond or the device will not turn on, try performing a reboot as per [Section 1.4](#). Please record what you were doing when the problem happened and report to us in order for the problem to be investigated.

When resetting the device, the settings will reset to their default values – typically they are: Volume 5, Group 0 and Channel 15. These default values should match the default values of your Stopwatch and is useful if you're having trouble connecting the two devices or have forgotten either of the devices' settings.

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:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator & your body.