

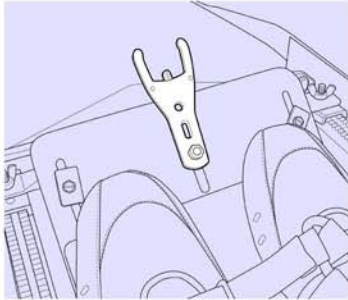
## ActiveTime installation and operating instructions

Congratulations on purchasing one of the new generation of wire free performance monitors from Active Tools. Your ActiveTime has been designed to be as easy as possible to use but the following information should help you get the best from it. If you do have any queries please email us at [queries@active-tools.com](mailto:queries@active-tools.com) or contact your local distributor.

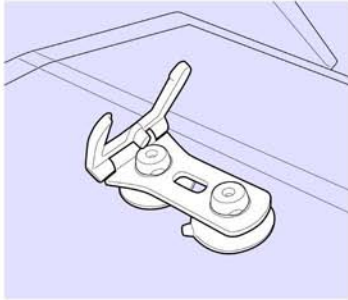
### Mounting your ActiveTime

Your ActiveTime comes with two mounting brackets and whichever bracket you fit we strongly recommend that you use the lanyard to attach it to your boat so that it cannot be lost.

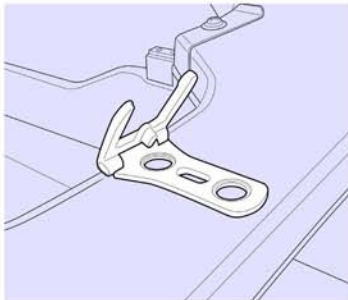
The flat bracket is intended to be fixed permanently, or semi permanently, to the boat you most often use. It is usually best to mount it under a footplate nut.



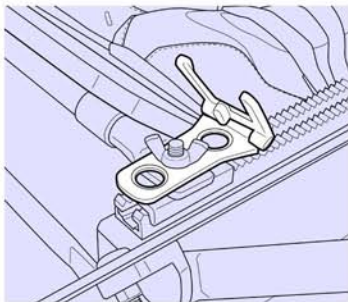
The removable bracket, with suction cups on it, is for use in boats that you row in only occasionally and it is attached by wetting the cups and pressing them down onto a flat surface (normally on the stern). We recommend removing the bracket after each outing in case the cups lose suction over time. This bracket is hinged so that you can adjust it to the optimum viewing angle.



The removable bracket can also be used on most wing riggers by replacing the suction cups and foam pad with the Velcro strips provided. We recommend that the more flexible Velcro strip is fixed to the bracket and the other one is attached to your rigger.



The suction cup bracket can also be used to mount the unit to a foot stretcher screw by removing the suckers and the foam pad. If you then refit the suckers to the bracket you must also fit the foam pad, as without this your ActiveTime will not float when attached to this bracket.



Please note that if you have purchased a heel switch full fitting instructions are supplied with it.

### Operating your ActiveTime unit

#### General points are:

Your ActiveTime will turn on with a 3 second button press and off either after 20 minutes of inactivity or when the button is held down for 3 seconds when in Clock mode.

To cycle through the six operating modes, click the top button. The highlighted function will then flash and if you leave it highlighted for more than 3 seconds it will be selected.

#### CLOCK (Clock Symbol)

This displays either the time of day, in 12 or 24-hour format, or it can be set to display nothing.

To set the time, start with the unit turned on and hold the button down for 8 seconds (the display will go blank after 3 seconds) and '12' will flash. Pressing the button will change this to a flashing '24' and then to '--', which means that no clock time will be

# ACTIVETIME



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displayed. After 4 seconds of inactivity the hour digits will flash and they can be set by pressing, or holding, the button. Minutes can then be set in the same way.

#### ROLLING START (Feet Symbol)

- When this icon is selected a workpiece will be timed from the second of two heel switch activations within a space of 10 seconds. You can time a workpiece that is up to 10 hours long.
- Timing will stop when the heel switch is activated three times within 10 seconds (with the first signal determining the time recorded).
- Alternatively you can end the timing automatically. If you stop rowing, or paddle very lightly, for more than 5 seconds the display will flash. If you then activate the heel switch three times within 20 seconds, or push the button twice, the time that you stopped rowing hard will be used as the end of the timed piece. This means that you can time races without having to have the presence of mind to activate the heel switch as you cross the finish line.
- Intermediate times, ratings and average checks can be recorded by clicking the heelswitch once at any point in the timed piece. Up to five of these can be recorded in each timed piece.
- Pressing the button briefly will reset the unit so that it is ready to time another piece.
- You can use the unit as a conventional stopwatch. To do this you start timing by pressing the button once and stop timing by pressing it twice. Intermediate times can be recorded by pressing the button once at any point.
- The unit will reset to Clock mode when the button is held for 3 seconds.

#### STANDING START (Flag Symbol)

This is similar to Rolling Start, but the workpieces will be timed from the first stroke taken.

#### RATE WATCH MODE (Stopwatch Symbol)

When this icon is selected a spectator can take the ratings of crews by pressing the button in time with their catches.

## RECALL (Folder Symbol)

When this icon is selected the overall and intermediate timings, average ratings and average Checks of the last 10 workouts can be reviewed.

The last workout will be displayed first and you can cycle through the others by pressing the button. After the overall time, average rating and Check for a workout are displayed, any interim times, ratings and Checks are cycled through automatically. Sequential 'bars' on the display identify the interval being shown.

The unit will reset to 'clock' mode when the button is held for 3 seconds.

## CHECK FACTOR (ch00 displayed on bottom line of display)

When this function is selected the unit will display a factor that represents the smoothness of your rowing. This is derived from the magnitude of the maximum boat decelerations measured during each stroke.

Checks vary considerably depending on boat types and crew weights but they are a useful way of evaluating technical changes, for comparing crews and for seeing how consistent a crew's technique is throughout a race.

## Heel switch fibre optics cleaning instructions.

If the heelswitch does not operate reliably clean the ends of the fibre optic cables on the mounting bracket and the ends of the small circular light pipes on the rear of the ActiveTime unit. This should be done by gentle wiping them with a soft cloth wetted with a dilute solution of dishwashing liquid.

The cable ends in the heelswitch can be cleaned by holding the switch in its 'activated' position (by pulling the cords). The length of white pipe cleaner provided can then be wetted and inserted through the small (3mm/1/8th inch) hole on the rear of the heelswitch and gently slid in and out three or four times.

## Battery Changing Instructions

You will need a new type CR2032 battery, which are widely available. You will also need a replacement rubber O-Ring seal as otherwise the water tightness of the battery compartment cannot be guaranteed. While the electronics in the unit are in a separate sealed area any water leaks into the battery compartment may cause corrosion problems. Replacement O-Rings are available at no cost from the Active-Tools website.

To change the battery unscrew the 4 screws on the rear of the case. Replace the O-Ring and fit the new battery the same way round as the old one (negative contact inserted first) and refit the cover. Take care to only touch the positive contact (the battery case) as touching both contacts can leave deposits that cause the battery to discharge prematurely.

## Frequently Asked Questions

### Does adjusting the mounting angle of my ActiveTime unit affect its operation?

The unit is designed to work at any mounting angle between horizontal and vertical. However if you do change the mounting angle during an outing it can take up to one minute for the unit to give accurate rate and Check readings.

### Is it important that I mount my ActiveTime square to the centreline of the boat and not leaning to one side?

Slight misalignments will not cause problems although Check readings may not be completely accurate. In particular, using the Suction Cup Bracket on the angled rear decks of boats will not cause any significant problems.

### If my heel switch is not operating correctly what should I do?

- Check that the ActiveTime unit is pushed fully home in its mounting bracket.
- Check that the ends of the fibre optic cables are flush with the inner face of the mounting bracket.
- Clean the ends of the fibre optic cables and the small circular light pipes on the rear of the ActiveTime unit.
- Clean the heel switch fibre optic cable ends.

### The button on my unit occasionally sticks.

Remove the battery compartment cover, lift out the button and clean both the button moulding and the recesses it slides in on both the main moulding and the battery cover. Use a soft cloth wetted with a dilute solution of dishwashing liquid and remember to fit a new O-Ring seal when re-assembling the unit.

### Why does my unit occasionally not display ratings?

This is because your ActiveTime uses the variation in boat speed during the stroke to calculate ratings and in some situations these are too small to be used reliably. This can happen when only some of your crew is rowing or when your full crew is rowing at an artificially light pressure.

Sharp downward changes of pressure, eg from firm to light, can also cause the display to go blank for a few strokes. This is because your ActiveTime marks these types of changes so that it can automatically capture the finish times of recorded work pieces.

### My ActiveTime does not turn on or turns on and shows unusual readings.

The battery on the unit probably needs to be replaced.

### I occasionally see inconsistent rate readings

Your ActiveTime calculates ratings by timing between the maximum boat decelerations of consecutive strokes. Certain conditions, such as gusting winds and very rough water, can affect the spacing of these peaks and minor variations in rate can therefore be seen. In extreme conditions the unit may even struggle to establish ratings for a number of strokes.

In practice these problems only happen very occasionally and then in conditions where exact ratings are somewhat irrelevant.

### When more than one person in our crew use an ActiveTime to record races we find the average checks vary slightly

This is usually because the units have not both been mounted absolutely square to the boat.

### Is my ActiveTime suitable for all boat types and any water conditions?

Your ActiveTime is designed for use in 'racing' sliding seat rowing boats used in normal water conditions. It may work in other situations but is likely to give less stable readings.

### When I set off, why do I have to take two strokes before ratings are displayed?

Your ActiveTime calculates ratings by timing between the maximum decelerations of consecutive strokes so ratings can't be calculated until two full strokes have been taken.

### I find that the race times I record sometimes differ from the published race times

The best way to ensure accuracy is to be aware of the exact timing marks on the course and to record times when the same part of your boat passes the timing marks. Using the stern of the boat tends to work best for most people.

The other factor that affects accuracy is that if you stop the timing automatically, by ceasing rowing, slight errors can be introduced.

### How long will my battery last?

The battery life you will normally achieve is around 150 hours of rowing. This will give most users many months of use.

### Do I need to take special care of my ActiveTime unit?

To maximise battery life it is a good idea to avoid excessively high temperatures, such as those encountered in closed vehicles on hot sunny days. These can reach 150 degrees Fahrenheit / 65 degrees Centigrade.

### Why does my ActiveTime not always show ratings when I move it backwards and forwards in my hand?

If you turn your ActiveTime on and then rotate it to a different angle it can take up to 60 seconds for it to calculate the angle it has been changed to and establish an accurate rate.

### Can I use my ActiveTime when coxing?

Your ActiveTime will be mounted at 180 degrees to its normal orientation so it will generally not work correctly.

### Why does my ActiveTime sometimes start timing without me pressing the button when I am using it as a hand held stop watch?

If you are in Standing Start mode this is because your hand is reflecting back the infrared signal for the heel switch. To stop this happening hold the unit by its side edges so that your hand is not against its rear face. If you are in standing Start mode the timing is starting because you have shaken the unit.

This problem can only occur when starting timing as once timing has been started by pressing the button it can only be stopped by further button presses.

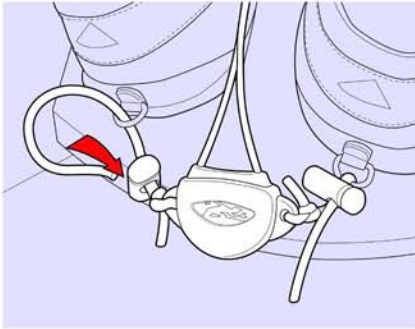
We always welcome queries and suggestions so please feel free to contact us at: [feedback@active-tools.com](mailto:feedback@active-tools.com).

We can only improve our products if you share your experience of using them with us.

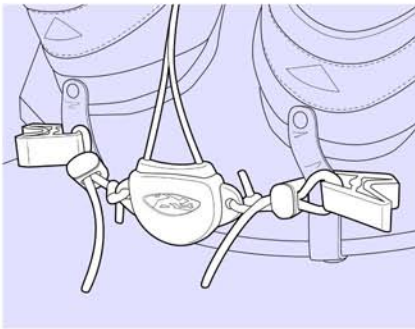
## Heel Switch installation instructions

First check that your heel restraints are in good working order. It is an unfortunate fact that many boats have restraints that are missing, loose, or in such poor condition that they are dangerous and could prove lethal in a capsized.

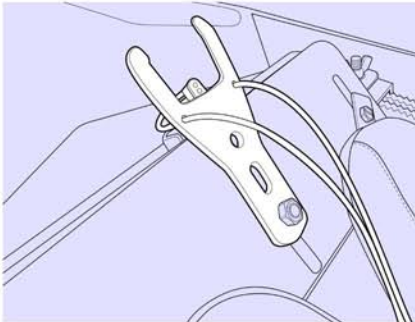
Using the Cord Locks provided, attach the elastic cords on the heel switch to the heel restraint attachment loops on your boat's shoes, as per the illustration (the heel restraints have been removed for clarity). The cords should have enough play in them that the switch is not operated until your heels have moved apart by 25-50mm (1-2 inches). The exact amount of play is a matter of personal preference so may need adjusting in use.



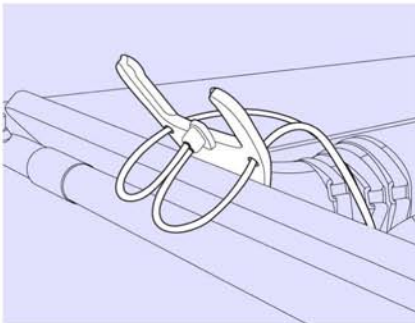
Some shoes use straps as heel restraints, rather than cords. If that is the case use the two small plastic clips to attach the cords, as per the illustration.



Route the twin fibre optic cables upwards through the two holes in the mounting bracket and back into the small holes on the rear of the bracket so that their ends are exactly flush with the front face, as per the illustrations.



If the small holes have rubber plugs in them these need to be removed. If the bracket is subsequently used without the fibre optic cables in place the holes need covering with tape, otherwise the timing functions may not work properly as they can be triggered by stray sunlight.



A Heel Switch with an extended fibre optic cable can be supplied and the cost of the standard Heel Switch will be refunded if it is sent back unused.

## HEEL SWITCH



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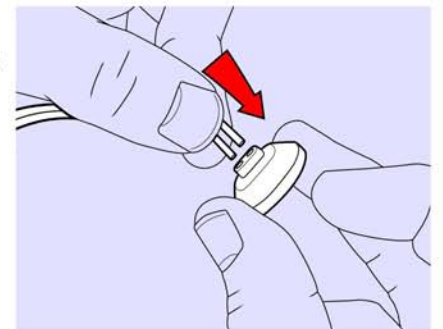


## Cable shortening instructions

Depending on where you mount the bracket you may need to shorten the cables and this must be done using the yellow Fibre Optic Cable Cutter provided.

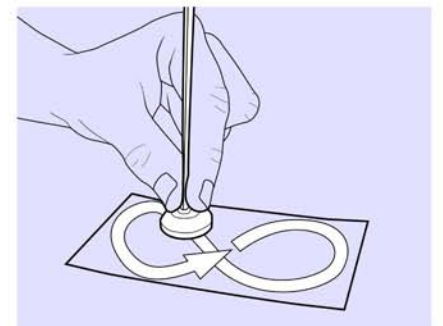
If you have shortened the cable the newly cut ends now need to be polished. This is straightforward to do with the kit provided and will only take 2 minutes.

First insert the cable ends into the two holes in the top face of the cable holder.



Then place the wet and dry sandpaper on a flat surface with the dark surface facing up and slide the fibre and holder over it in a figure of eight motion. This motion needs to be repeated 10 times with a light downward pressure being applied to the cable with the tips of your fingers.

Now place the light green lapping film on a flat surface with the matt side facing up and repeat the figure of eight motion 30 times. The cable can then be removed from the holder and any dust wiped off the ends. Please note that the polishing kit can only be used twice as the lapping film will then be worn out.



## Heel Switch operating instructions

To operate the heel switch you need to move your heels apart and most people find this easiest either at, or near, backstops. You can either make a 'lift and move apart' movement, so that the soles of the shoes twist, rather than bend sideways, or you can raise one foot towards you while leaving the other one down on the foot plate.

## Heel Switch fibre optic cleaning instructions

If the heel switch does not operate reliably clean the ends of the fibre optic cables on the mounting bracket and the ends of the small circular light pipes on the rear of the ActiveTime unit. This should be done by gentle wiping them with a soft cloth wetted with a dilute solution of dishwashing liquid.

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- Clean the ends of the fibre optic cables and the small circular light pipes on the rear of the ActiveTime unit.
- Clean the heel switch fibre optic cable ends.

### Can the heel switch interfere with the functioning of my heel restraints?

The switch will not affect your heel restraints in any way. In fact fitting the switch is an ideal opportunity to check that your heel restraints are in good working order. Many boats have restraints that are missing or in such poor condition that they are dangerous and could prove fatal in a capsized.

### Can I use my heel switch with the suction cup bracket?

This is possible but you risk damaging the cable if the bracket becomes detached so it is not recommended.

We always welcome queries and suggestions so please feel free to contact us at: [feedback@active-tools.com](mailto:feedback@active-tools.com). We can only improve our products if you share your experience of using them with us.