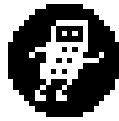


The Athlete's Calculator for the Palm Computing Platform



Users Guide

Version 1.4
January 2003

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Getting Started

Installing The Athlete's Calculator in Your Palm

Whether you downloaded the software from our Web site or received it in the mail, you should have a file called `AthCalc.prc` on your desktop or laptop computer (on the hard disk or on a floppy diskette). If you have a file named `AthCalc.ZIP`, that is **not** the proper file; that's a compressed or "zipped" file that you must uncompress with standard "unzipping" software (which we do not provide). If you are running Windows XP, you **MUST** "extract" the files from the ZIP file before

proceeding.

If you do not have the file `AthCalc.prc`, you cannot proceed. If you **do** have `AthCalc.prc`, here's how to install it on your handheld unit:

Windows:

Double-click on the file **Install.exe**, and the entire installation process will be self-explanatory.

If anything goes wrong with that approach, double-click on the file **AthCalc.prc**. A window labelled **Install Tool** should appear, with a `UserName` selection box with the name of one or more Palm handheld units. Select the one you wish to install the software in, and click on **OK**. A second **Install Tool** window will appear, showing **AthCalc** in a list of programs to be installed. Click on **Done**, and another window will appear informing you that **AthCalc** will be installed in your Palm the next time you do a HotSync. Perform a HotSync and the software will be installed.

Macintosh:

Select **Install Handheld Files** from the **HotSync** menu. Make sure the User is set to the handheld unit in which you want to install the software, and drag the **AthCalc.prc** file into the large box in the window (or use the **Add To List** button to select the file). Close the window, perform a HotSync, and the software will be installed.

Starting the Application

From the **Applications** window on your **Palm**, look for the icon labelled **AthleteCalc** which looks like this:



Entering Your Serial Number/Unlocking the Application

After clicking on the icon, the application will start and you'll see this screen:



The screenshot shows the application window titled "The Athlete's Calculator™". It features input fields for "Time", "Distance" (with a dropdown menu set to "miles"), and "Pace" (with a dropdown menu set to "/mile"). Below these fields is a numeric keypad with digits 0-9, a decimal point, and a "Del" key. To the right of the keypad are buttons for "Calculate", "+", "-", "*", and "/". At the bottom are "Clear" and "Clear All" buttons.

The *second* time you use the program the **Calculate** button will read **Enter S/N**, and the calculation functions will be disabled until you enter the seven-digit serial number that you were provided when you purchased the software. Enter the serial number by tapping on the numbers in the lower-left of the screen, and then tap on **Enter S/N**. If you enter the number correctly, the button

will change to **Calculate** and you can proceed.

If you run into a problem, this probably means that when you provided your Palm name to Stevens Creek Software, you did so incorrectly. In order to provide you with a serial number for your software, we need the *User Name* of your PalmPilot. To get the User Name, tap on the Applications button, then tap on the HotSync application. If you have a PalmPilot (Personal or Professional), the top line of the screen will read, "Welcome, XXX." "XXX" is your user name; that's what we need. If you have a Palm III or IBM WorkPad, the name appears in the extreme upper right of the same HotSync screen. Please be sure you supply it to us EXACTLY as it appears, including upper or lower case letters, punctuation, and spaces as appropriate. Just [email it to Stevens Creek Software technical support](#) and wait for a new serial number to be provided to you.

Getting Help

We recommend of course continuing to read this manual to learn about all the features of The Athlete's Calculator. Once you are running the software, there may be a few things you can't remember. If you select any of the "Help" options from the **Help** menu, you'll find help on the relevant subject:



Basic Data Entry

The Active Field

Along the top left, note the three buttons: **Time**, **Distance**, and **Pace**. The "active" field is always highlighted, and a round-cornered rectangle also helps to show you which information you are entering. The active field is the field into which you are currently entering a number. To switch the active field, just tap on either **Time**, **Distance**, or **Pace** to make that field the active field.



Entering a Number into the Active Field

To enter a number into the active field, tap on the numbers in the lower -left corner of the screen. The button marked **Del** is used to delete (erase) the last character entered; you can erase the entire entry

by pressing the **Clear** button.

The Athlete's Calculator™

Time 32523

Distance ▼ miles

Pace ▼ /mile

0 1 2 3 Calculate

4 5 6 7 + - * /

8 9 . Del Clear Clear All

To enter "simple" numbers, just press the numbers in sequence, e.g., "32" or "26.2". To enter numbers which are times, do exactly the same thing, ignoring the need to enter the "colon" character (:); the software will insert those for you automatically. For example, "4517" becomes "45:17" automatically. Note that "34" is 34 *seconds*. To enter 34 minutes, enter "3400".

In this example, you want to enter a time of 3 hours, 25 minutes, and 23 seconds, so you tap the "3", "2", "5", "2", and "3" buttons sequentially:

Now watch what happens when you tap on the **Distance** button in order to enter the distance:

The Athlete's Calculator™

Time 3:25:23

Distance 26.2 ▼ miles

Pace ▼ /mile

0 1 2 3 Calculate

4 5 6 7 + - * /

8 9 . Del Clear Clear All

Notice that the colons have been inserted into the time, and now the Distance field is active, so that tapping "26.2" enters that number into the distance field.

Note that if the "Number Format" set by the Prefs application on your Palm calls for a comma to be used as a decimal point instead of a period, the key next to the "Del" key will be labelled ",", as appropriate.

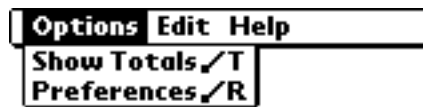
Calculating Pace

Now to calculate pace, just tap on the **Calculate** button. As you see at the right, the pace is calculated and displayed in the Pace field.



Setting Feedback Preferences

When you tap the buttons on the screen, you will by default hear a standard very light sound which is used in all Palm applications to indicate that a button has been tapped. In many applications, if you "miss" a button nothing will happen, so it's not that important to have aural feedback. In **The Athlete's Calculator**, however, if you miss a button you may get the wrong answer, so a special feature of the software lets you get a longer, louder feedback when you tap buttons. Tap the **Menu** button on your Palm, and select



Preferences from the **Options** menu. You'll see this screen:



If you check the button, you'll get a louder sound when you tap the buttons.

Using Graffiti for Data Entry

If you find it easier, you can use Graffiti (tm) as well as the on-screen buttons for data entry. The characters which are recognized are:

- **Data Entry**
 - 0-9 and . (period) - Add the character in the current field
 - Backspace - Erase the last character entered
 - c - Clear the current field
 - r - Reset (clear) all fields

- **Data Entry (for the Distance field only)**

- m - Switch to miles
- k - Switch to kilometers
- y - Switch to yards
- f - Switch to feet

- **Navigation**

- Tab - Move from field to field (and calculate if appropriate)
- t - Switch to time field
- d - Switch to distance field
- p - Switch to pace field

- **Actions**

- =, Return (new line) - Calculate
- +, -, *, / - Perform indicated operation
- s - Toggle button confirmation sound on and off

Using the Clipboard

The **Edit Menu** gives you four choices:

Options	Edit	Help
Cut		✓X
Copy		✓C
Paste		✓P
Copy All to Memo		✓A

Cut and **Copy** will cut and copy the contents of the currently active field. **Paste** pastes the contents of the clipboard into the currently active field, but it can do much more, because all of the Graffiti commands listed in the previous section are active. Thus if you have (we'll use T for Tab and R for Return): "4523T10kTR" on the clipboard and go to **The Athlete's Calculator** and do a **Paste**, "4523" will be pasted into the Time field, then a Tab will skip to the Distance field (and convert the "4523" to "45:23" in the Time field, then "10" will be pasted into the Distance field and the units will be set to kilometers, then Tab moves to the Pace field and R (Return) calculates the Pace.

Copy All to Memo copies the contents of all three fields, plus the date and some other information, to the clipboard, and transfers you to the MemoPad application where you can paste the information into a memo. See [Transferring Information using the Clipboard](#) for more about this feature.

More Calculations

Calculating Time or Distance

The basic rule of **The Athlete's Calculator** is that it will always calculate an empty field if the remaining two fields are filled. So if your workout covers a known (or roughly known) distance at a known (or roughly known) pace, fill in **Distance** and **Pace**, press **Calculate**, and the **Time** will be calculated. You might do this, for example, to estimate your finishing time in a marathon - enter the distance and your estimated (or hoped-for) pace, press **Calculate**, and you'll see the expected finishing time (see example below). If you run an unknown route, you can estimate the distance by entering **Time** and **Pace** and pressing **Calculate**.

Time

Distance 26.2 ▼ miles

Pace 7:45 ▼ /mile

Enter distance and pace

Time 3:23:03

Distance 26.2 ▼ miles

Pace 7:45 ▼ /mile

Press Calculate to calculate time

Repeating a Calculation

After a field has been entered and used in a calculation (by pressing the **Calculate** button), you can enter a new value in that field simply by entering a number; there's no need to press the **Clear** button. For example, let's say you are estimating your finish time in a marathon and you entered distance and pace, pressed **Calculate**, and saw the predicted finish time (as shown above). Now if you want to see the finishing time for a different pace, simply enter a new number and press **Calculate** (assuming Pace was already the active field; if it wasn't, tap on **Pace** first).

Time 3:23:03

Distance 26.2 ▼ miles

Pace 7:55 ▼ /mile

Enter a new pace

Time 3:27:26

Distance 26.2 ▼ miles

Pace 7:55 ▼ /mile

Press Calculate again to calculate new time

Performing a New Calculation

To perform a completely new calculation, you can clear all three fields by tapping the **Clear All** button.

Units of Measurement

Selecting and Converting Units

Units for the distance and pace can be changed using the pop-up menus at the right of the screen:

Distance Units

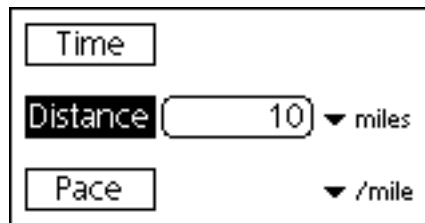
miles
km
yards
meters
feet

Pace Units

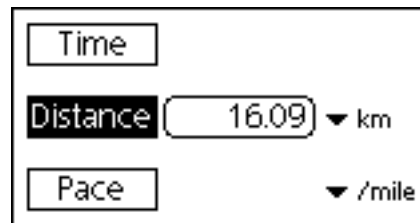
/mile
/km
mph
kph
/100y
/100m

To enter a distance or pace in appropriate units, select the units *before* entering the number, unless you want to convert them. For example, if the distance units are in miles, and you enter "10" because

you ran a 10K, now if you switch the distance units to kilometers (km), the number will automatically change to "16.09", because the program has converted 10 miles into 16.09 kilometers:

A screenshot of the application interface. It features three input fields: 'Time' at the top, 'Distance' in the middle, and 'Pace' at the bottom. The 'Distance' field is highlighted with a black background and contains the number '10'. To the right of the 'Distance' field is a dropdown menu showing 'miles'. To the right of the 'Pace' field is a dropdown menu showing '/mile'.

Enter distance in miles

A screenshot of the application interface, similar to the previous one but with the 'Distance' field now containing '16.09' and the dropdown menu showing 'km'. The 'Time' and 'Pace' fields remain unchanged.

Change units

Of course you can use this feature intentionally. If you swim a pace of 1:20 per hundred meters, you can set the pace units to **/100m**, tap on **Pace** to make pace the active field, enter "120", and then change the pace units to **mph** or **/mile** to see what your pace is in miles per hour or minutes per mile, for example.

The last units you use are always saved, so that each time you start the application, it will return to your "default" units.

Using the Mini-Calculator

In the lower right corner of the screen you see four standard calculator buttons: +, -, *, and /, which allow you to perform addition, subtraction, multiplication, and division, respectively. What is unique to **The Athlete's Calculator** is that these operations work on times expressed as hours:minutes:seconds as well as they do on "regular" numbers, and furthermore, whenever they are used to modify a number, the other fields are modified appropriately.

A screenshot of the 'The Athlete's Calculator' application. The title bar at the top reads 'The Athlete's Calculator™'. Below the title are three input fields: 'Time', 'Distance', and 'Pace'. The 'Distance' field has a dropdown menu showing 'miles', and the 'Pace' field has a dropdown menu showing '/mile'. At the bottom of the screen is a numeric keypad with buttons for digits 0-9, a decimal point, and a 'Del' button. To the right of the numeric keypad are four buttons: '+', '-', '*', and '/'. Below these are two buttons: 'Clear' and 'Clear All'.

Let's take an example. Suppose you read in a book of training advice that you should "do your long runs at a pace 30% slower than your 10K race pace." Let's start by assuming you know your most recent 10K time, but not the pace. First calculate your pace as described above - enter the time and distance, and press **Calculate**. Your screen should look like this:

Time	42:10
Distance	10 ▼ km
Pace	6:47.2 ▼ /mile

Because you now want to modify the pace, tap on **Pace** to make it the active field. Next tap the * button, followed by **1.3**. What you'll see at this point is shown at the left. The pace field is active and is enclosed by the large round-cornered rectangle, which lets you know that it is the field that is about to be modified. At the same time, your mini-calculator number appears just below the **Calculate** button, enclosed by a smaller round-cornered rectangle of its own to show you that that is the number you're currently entering.

The Athlete's Calculator™									
Time	42:10								
Distance	10 ▼ km								
Pace	6:47.2 ▼ /mile								
0	1	2	3	Calculate					
4	5	6	7	*1.3					
8	9	.	Del	+	-	*	/		
				Clear		Clear All			

Now when you press **Calculate**, two calculations are actually performed. First, the pace is multiplied by 1.3, as you requested with your calculation. Then the software proceeds with a recalculation. Because it doesn't make sense to recalculate pace from the time and distance (that would negate the effect of the multiplication!), the program instead recalculates the time:

Time	54:49
Distance	10 ▼ km
Pace	8:49.3 ▼ /mile

At this point you have learned that if your 10K time is 42:10, your long run pace (according to this advice) should be 8:49/mile. You also see how long it would take you to run a 10K at that pace, but that probably isn't of interest. What you really want to know is how long it's going to take you to run your 20-mile run at that pace. To find out, tap on **Distance**, enter **20**, then tap on Calculate, and here's what you'll see:

Time	2:56:27
Distance	20 ▼ miles
Pace	8:49.3 ▼ /mile

Your 20-miler should take you just under 3 hours at the recommended pace.

Adding Split Times with the Mini-Calculator

You can use the calculator function buttons repeatedly, just like a real calculator, without hitting the **Calculate** button. For example, suppose you have just run a series of 400-meter intervals on the track, in times of 72.6, 73.4, 75.2, 72.8, 73.1, and 71.6 seconds. What was your total time spent running?

Press **Clear All** if you need to reset the calculator; that will also make Time the active field. Now enter **72.6**, tap **+**. You should see this:



The Athlete's Calculator™

Time	1:12.6
Distance	▼ miles
Pace	▼ /mile

0	1	2	3	Calculate <div>+</div> <div>+</div> <div>-</div> <div>*</div> <div>/</div> <div>Clear</div> <div>Clear All</div>
4	5	6	7	
8	9	.	Del	

Note that as the time was entered, it was automatically converted from 72.6 seconds to one minute, 12.6 seconds. Now enter **73.4** and tap **+** again. The program will add your two times, and, since the last key you pushed was **+** and not **Calculate**, the mini-calculator is still active and ready for you to enter the next number:



Continue by entering: **75.2+72.8+73.1+71.6**. At the end, since you're done, tap the **Calculate** button to show the final total and de-activate the mini-calculator. If you're a user of **The Athlete's Diary for Palm**, you might use this feature, then select **Copy** from the **Edit** menu to copy the total time to be pasted into **The Athlete's Diary**.

Limitations

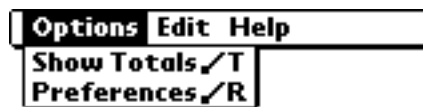
The Athlete's Calculator is designed to deal with time, distance, and pace - all by definition are positive numbers. If you use the subtract function of the Mini-calculator and the result would be negative, the result is set to zero instead.

If a calculation results in a number too large to be displayed in the available space (or if you try to enter too many digits into any field), the field is reset to zero.

Any attempt to add, subtract, multiply, or divide by zero is simply ignored.

Calculating Splits

Showing and Using Totals



There is one final option in the software, which is activated using the menus. Press the **Menu** button on the Palm, and then select **Show Totals** from the **Options** menu to activate the mode in which all calculations which are performed are added together automatically. If you tap the **Menu** button again, you'll see that the first menu item has now changed to **Hide Totals**; tap on this to de-activate the automatic totals feature. **The Athlete's Calculator** will always remember the last setting (Showing or Hiding Totals), and will return to that setting when you use the calculator the next time.

There are two typical cases in which you will be interested in totals - the case of even (equal-distance) splits, and the case of uneven (unequal distance) splits. Both are similar, although in the first case you have fewer numbers to enter.

Let's take the previous example - the case of running a series of 400-meter intervals on the track. Here's the sequence of operations:

1. Tap on **Clear All** if necessary
2. Tap on the Palm's **Menu** button. If the first item in the **Options** menu reads **Hide Totals**, cancel the menu (tap elsewhere on the screen); if the first item reads **Show Totals**, tap on it to activate the **Totals** mode.
3. Enter the first time: **72.6**.
4. Tap on **Distance**.
5. Tap on the units pop-up menu at the right, and select **meters**.
6. Enter **400**.
7. Tap on **Calculate** to calculate the pace of the first split.
8. Tap on **Time** to make it the active field.
9. Enter the next time: **73.4**, and tap on **Calculate** again. The screen should now look like this:
- 10.



11. Note that the large numbers show the current split (last lap's time, distance, and pace), while the small numbers below them show the total time and distance, and the average pace, over all of the laps which have been entered thus far. To continue entering and adding the remaining laps, simply repeat step 9 as many times as necessary - enter the lap time, press **Calculate**, and so on.
12. At the end, you might want to convert the distance units to some other units, like miles, so that you can see the total distance run in units more appropriate to longer distances. To do so simply select the distance units pop-up and choose the desired units. Both the latest distance as well as the total distance will be automatically converted.

What if the distances are unequal? Perhaps you do a bike ride where you ride to a mountain, ride up the mountain, ride down the mountain, and then ride home, and you want to know your average speed for the different legs of the ride. Your bike computer, of course, only shows your average speed for the entire ride, but if you measured the time and distance for each leg, **The Athlete's Calculator** can do the calculations for you. Or, perhaps you ran a 50K race in which you took your splits at each of the unevenly spaced aid stations. Again, **The Athlete's Calculator** can calculate your splits for each leg, as well as for the total race, all at the same time. You simply need to enter both time and distance for each leg of the workout or race; otherwise things are as above.

Predicting Finish Times

Another application - predict your finishing time in a marathon, assuming unequal paces during the race. Most marathoners figure the first 20 miles is one race; the last 6.2 another. Here's how you would calculate your estimated finishing time:

1. Tap on the Palm's **Menu** button. If the first item in the **Options** menu reads **Hide Totals**, cancel the menu (tap elsewhere on the screen); if the first item reads **Show Totals**, tap on it to activate the **Totals** mode.

2. Tap **Clear All** to make sure all the fields and totals are zeroed.
3. If necessary, tap on the units pop-up menu and select the desired distance units - **miles** for distance and **/mile** for pace.
4. Tap on **Distance** and then enter **20**.
5. Tap on **Pace**. Let's say your estimated beginning pace is 7:45 minutes/mile, so enter **745**.
6. Tap on **Calculate**: 2:35:00 should appear in the time field, which is your time for the first 20 miles..
7. Tap on **Distance**, then **6.2**.
8. Tap on **Pace**, then **815**, assuming you'll slow down 30 seconds/mile during the last 6.2 miles.
9. Tap on **Calculate** and you should see the screen below, indicating that your total time will be 3:26:09, representing an average pace/mile of 7:52.1 over the full 26.2 miles:

Time	51:09
	3:26:09 Total
Distance	6.2 ▼ miles
	26.20 Total
Pace	8:15 ▼ /mile
	7:52.1 Average

Transferring Information Using the Clipboard

If you are looking for an athletic log program for your Palm, you should consider [The Athlete's Diary for Palm](#). However, to a limited extent and with greater difficulty, **The Athlete's Calculator** for Palm can also be used to generate data which can be saved and merged into other applications, including the desktop version (Macintosh and Windows) of [The Athlete's Diary](#).

Options	Edit	Help
	Cut	✓X
	Copy	✓C
	Paste	✓P
	Copy All to Memo	✓A

Select **Copy All to Memo** from the **Edit** menu. When you select this option (or its equivalent using Graffiti shortcuts), the distance, time, and pace, along with today's date, will be transferred to your Palm clipboard in a format which is consistent with **The Athlete's Diary**. This format is a series of fields, separated by Tabs. These fields are

1. Date
2. Two upper-case letters, the first representing type of workout, the second representing the sport (see below)
3. Distance, followed by a single letter representing the units of distance
4. Time
5. Pace
6. Route/workout (blank)
7. Carriage return

After selecting **Copy All to Memo**, the software jumps to the MemoPad application, where you can choose the memo into which you want to paste the information. We recommend creating one memo for all your data (rather than a separate memo for each entry); a single memo in the Palm can contain 4000 characters which should hold quite a few workouts. This memo must contain one

"header" line, in which you should write something like "Athlete's Diary info" (the actual words don't matter). Select that memo, then use the Paste function to paste in your new workout starting on the second line of the memo; additional workouts will be pasted on additional lines. Usually one workout will "wraparound" and take up more than one line; just make sure the next workout starts on a separate line.

Once the data are in the memo, you can modify it or add to it. In the second field, the first letter defaults to a T representing training; you can change this to I or R for Intervals or Race, as appropriate. The second letter, which represents your sport, is automatically chosen according to the pace units. It's set to R for Running if your pace is in minutes per mile or kilometer, to C for Cycling if your pace is in mph or kph, and to S for Swimming if your pace is in minutes per 100 yards or meters. Again, you can simply change this if it is wrong.

To add in a Route/Workout description, tap at the end of the line (*after* the Tab following the pace but *before* the carriage return) and enter whatever descriptive material (up to 254 characters if you want compatibility with **The Athlete's Diary**) you want. To add a Comment, insert a Tab and then enter your comment. You will not need to add a return, since one is already there.

Once you HotSync your Palm, the file named MEMOPAD.DAT on your desktop computer will contain your workouts. If you have version 3.2 of **The Athlete's Diary** (released May 11, 1997), you can use the **Merge** function of the software to extract your workouts from the MEMOPAD.DAT file with no further ado. All your other memos will be ignored; only the one containing information in **The Athlete's Diary** format will be read and extracted (but see the "catch" described below).

To merge the data into your **Athlete's Diary** log following a HotSync, follow these steps:

- **Using Windows:** simply select **Merge** from the **File** menu, select the file MEMOPAD.DAT, and click OK.
- **Using a Macintosh:** the Merge function only shows you files of type TEXT, which does not include MEMOPAD.DAT. To bypass this restriction, hold down the **Option** key when you select **Merge** from the **File** menu; now you'll be able to select MEMOPAD.DAT and merge it into your log.
- Note that because this is not an "official Palm HotSync," the data will still be in the memo on your Palm. Since you don't want to transfer the information twice, the next time you use the Palm, select the merged workouts from the memo and delete that text.

Another minor "catch." If you do use this method of moving information from Palm to desktop and then into your log, there are some minor restrictions on the other data (other than your workouts) which can be in your Palm memos. A line cannot start with a date (e.g., "7/13/97") followed immediately by a Tab or **The Athlete's Diary** will attempt to read that line when you Merge the memo. Additionally, if the first word on any line starts with "Sports", "Prefer", "Routes", "Keyword", and the first character following the first space on that line is a number, that number of lines following the line in question will be skipped when reading the file. Both of these situations should be rather unlikely, so you needn't worry about them too much.

If you have an earlier version of **The Athlete's Diary**, or want to transfer the workout information to some other file, you can open the file MEMOPAD.DAT with a text editor. You'll find embedded within it (along with your other memos and some non-printing characters), your workout data. If you copy and paste this information into a separate file, you'll be able to merge it into your **Athlete's Diary** log. If you are merging using **The Athlete's Diary** version 3.1 or earlier, you'll need to make sure the dates are "zero-padded" (i.e., *not* 5/6/97 but instead 05/06/97).

Additional reading

Stevens Creek Software manages [The Athlete's Bookstore](#), which sells over a hundred

book titles of interest to runners, cyclists, swimmers, triathletes, and other fitness enthusiasts.

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