

Users-Manual for PmntUtil and PmntUtilC

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by
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Brief Summary:

PmntUtil is a Loan Calculator that has a very powerful Payment Schedule Editor.

- Calculate Fixed Interest Loans
- Compound Interest Daily, Weekly, Bi-Weekly, Monthly, Quarterly, Semi-Annually, or Annually
- Make Payments Daily, Weekly, Bi-Weekly, Monthly, Quarterly, Semi-Annually, or Annually
- Change # of days per year as 360, 361, 362, 363, 364, 365, 366
- Specify Term of Loan in Weeks, Months, or Days
- Specify whether the Payment occurs before the Interest is Compounded or After
- Enter the Date of first payment and track your payments by date
- Save up to 5 scenarios
- View a Summary Screen Showing Current Loan's Totals
- Go to a Payment Schedule Screen and view the entire loan Payment-by-Payment
- Alter individually payments and re-calculate the remainder of the loan
- Re-finance the entire Loan from any Altered payment in multiple ways
- View the state of the loan at any payment
- Calculate Balloon Payments
- Print the entire Loan and Payment Schedule to your PC Printer
- Onscreen help to guide you

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Chapter 1 - Purchasing / Registering



Palm-Basics

Above is a diagram showing where the different buttons are and what they are called. The diagram's main purpose is as a guide for the next section on how to Register the program you purchased.

Registering Program

Sending the Fee

For up-to-date instructions on how to pay the \$10 fee visit me at
<http://www.witkowski-design.com> .

Registration-Screen

A screenshot of a registration screen. At the top is a red banner with the text "Register Now!". Below this, the text reads: "To purchase this title please purchase it at my web-site: www.Witkowski-Design.com". This is followed by "FEE \$10". Then, "Send Reference# when Registering." and "Reference # : EDMUNDWI". Below that is "Reg-Key : " followed by a dotted line and an upward-pointing arrow. At the bottom left is a button labeled "exit" and at the bottom right is a button labeled "Register".

Register Now!

To purchase this title please
purchase it at my web-site:
www.Witkowski-Design.com

FEE \$10

Send Reference# when Registering.

Reference # : EDMUNDWI

Reg-Key : ↑

A Reg-Key will unlock the 15-day limitation and allow the program to run indefinitely. In order for me to Generate your unique Reg-Key I need you to send me your REFERENCE# and which Palm-Model (PalmIII, PalmV, etc.) you use. The REFERENCE# is found on the Registration-Screen.

There are two ways to get to the Registration-Screen:

- 1) Allow the program to expire and the only screen it goes to is the Registration-Screen.
- 2) Hit the REGISTER button on the Introduction Screen. The REFERENCE# should be 8 Capital Letters and/or Numbers. In some instances it will say "No Ref#" which is a valid REFERENCE#.

Reg-Key

The Reg-Key must be entered in the Text-Field to the right of "Registration Code:" The Reg-Key is case sensitive and MUST be entered exactly as I give it to you. After entering the Reg-Key into the Text-Field press the REGISTER button. If you entered it incorrectly it will display INVALID. If you entered it correctly it will return to the application and refuse you further access to the Registration-Screen.

Upgrading Older Versions

Upgrading versions to applications you already purchased are FREE as long as the Reg-Key given when you purchased is still valid. Contact the programmer for further assistance. There are two ways to upgrade a newer version: Delete Old One or Overwrite Old One.

Don't forget to HotSync first to back up your database with your PC so you don't lose any saved data. Assuming you have your PalmDesktop Software set to Synchronize Palm and PC, or Palm overwrites PC, the 1st being the best choice, your database will be backed up on your PC during a HotSync.

Delete Old One

To delete ANY Palm application you must go to the Palm System Menu (see diagram) and choose DELETE. Then a list will appear showing all currently HotSynced programs. Choose the application name you want to DELETE (in this case PMNTUTIL) and delete it. You are now ready to HotSync the new version into your Palm.

Overwrite Old One

As the Programmer/Developer, I often just HOTSynchronize the newer version of a program into my palm over top of the older version. This usually works, however, I have encountered times when it still sees the older version no matter how many times I HotSync the newer version over top of the older version. In this case, you must DELETE the older version BEFORE HotSyncing the newer version (see section-a above.)

Chapter 2 – DataBase and Data Loss

Database Files

There is 1 database for PmntUtil and that is PmntUtilDb1.PDB

Backup

Everytime you HotSync your Palm in its cradle the database is backed-up on your PC, assuming your System Conduit is set to "HandHeld overwrite PC". This is good and bad. It is bad because it overwrites the PC files with the HandHeld files every time you HotSync, which could potentially overwrite good data with bad data. There is no conduit at this time. Conduits are a more sophisticated (and more complicated for both programmer and end-user to set-up) and allow for synchronization between both PC and Handheld (similar to your Address Book and MemoPad). What is happening here is a blind copy to your PC every HotSync.

Restoring

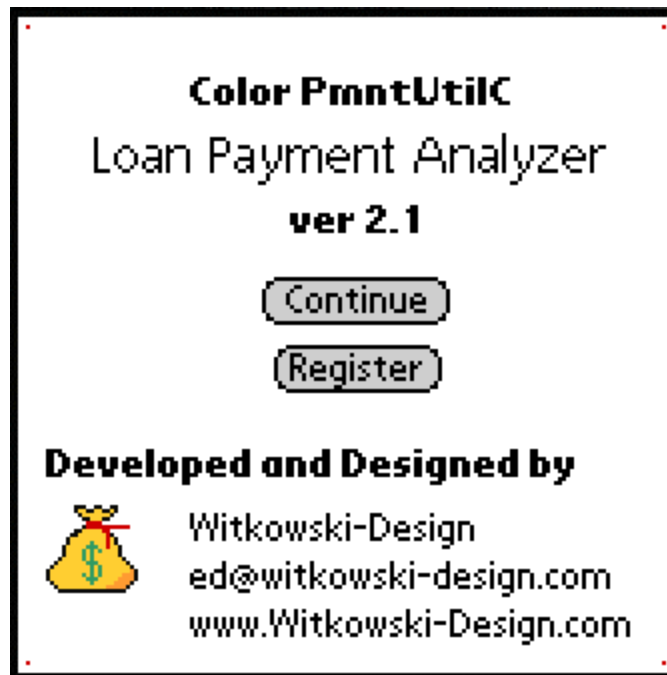
If you ever DELETE PmntUtil or do a Hard-Reset you will need to re-HotSync PmntUtil.PRC and then HotSync PmntUtilDb1.PDB into your Palm. This should restore everything.

Location

Where are they located? Well, your PalmDesktop Software sets up a Palm Folder and then in that folder sets up a USER-NAME folder and then in that folder sets up a BACKUP folder. Each installation can be customized and I can not say where it will be on everyone's, but I can say where it is on my PC. I took Default values and for my User-Name I choose "WitkowE", so my database files are located in:

C:\Palm\WitkowE\Backup

Chapter 3 – Introduction Screen



Description

The Introduction Screen contains the Title and the version # so you know if you have the latest version. At the bottom it contains the developer's name (who you will contact if you have any questions) and e-mail address ed@witkowski-design.com

Continue Button

The **Continue** button will take you to the **Primary Loan** Screen where you calculate the Loan Variables.

Register Button

The **Register** button takes you to the Registration Screen where you enter your unique Reg-Key to unlock the 15-day limitation (for more information see Chapter 1 Section-ii for directions on Registering.)

Chapter 4 – Primary Loan Screen

The screenshot shows a software interface titled "PmntUtlc" with a red header bar. Below the header, the following fields are displayed:

- Loan is 30.0 ▼ Years
- # days in Year ▼ 365
- 1 Payment Every ▼ Month
- Annual Int 8.963 % ▼ Monthly
- Amt.Borrowed 125,700.00
- Payment = 1,008.07 (with 'B' and 'E' buttons next to it)
- 2000-09-28 (in a dotted box) # Pmts = 360

At the bottom, there are four buttons: Schedule, Summ, Save, and Load.

Description

The Primary Loan Screen is very flexible and with the exception of a non-fixed interest rate, you can enter almost any existing loan and calculate its periodic payment.

Loan Settings

In the diagram above:

- Term of Loan: set to 30 Years
- # days per Year: set to 365
- Frequency of Payments: set to Monthly
- Interest: set to 8.963% which is compounded Monthly
- Principal: set to \$125,700
- B/E: set to 'E' which means payment comes at END of month as opposed to the beginning and the interest is compounded in the middle of the month.
- Periodic Payment: Calculated at \$1,008.07
- Date of 1st Payment: set to September 11, 2000 in Year-Month-Day format
- Total # of Payments is calculated at 360 payments shown at bottom.

Calculating Periodic Payment

I say 'periodic' payment because each payment is not necessarily a monthly payment. After you have entered the Term of the loan, # of days per year, the frequency of payments, the interest rate and the frequency of compounding, the principal amount borrowed, and (optionally) the date of first payment, press either the PAYMENT button or the 'B' or 'E' button and the periodic payment will be re-calculated and the payment

schedule RESET (so be sure to save any changes you made to the payment schedule if you don't want to lose any changes.)

Saving / Loading

PmntUtil allows you to save up to 5 loan scenarios giving each up to an 8-character description. The screen layout is the same for both, with the exception that the SAVE button makes that screen a SAVE ONLY screen and the LOAD button makes it a READ ONLY. Let's assume you want to save the loan entered above:

Load / Save Data

Enter Name and Save Data
or 'C' to clear that data.

1	House	C
2	Jeep	C
3	Condo	C
4	C
5	C

Cancel

As you can see there are already (in this example) 3 loan scenarios saved. So you would tap inside the 4th field to place the cursor there and enter an 8-character description of the loan. When you are done, hit the NUMBER button to the left of the field you just entered the name on. You can overwrite existing scenarios (it will prompt you to verify) and you can erase existing scenarios by hitting the 'C' button to the right of the field to clear that one from the database (it will prompt you to verify.)

The LOAD screen is exactly the same but allows you to read a loan scenario from the database instead of saving it into the database.

Summary Screen

Hitting the SUMM button will bring up a summary of the loan as shown below:

Summary	
Summary After Payment# 360	
Current Balance	-
Payment	1,008.07
Interest	-
Principal	-
Principal Paid	125,700.00
Interest Paid	237,205.20
Total Paid	362,905.20
Total # Pmts =	360
<input type="button" value="Return"/>	

The Summary Screen summarizes the entire loan, thus the Payment# will be the last payment. The Current Balance at the end of the loan is zero, so that quantity isn't shown as well as the breakdown of the periodic payment (how much of it goes toward interest and how much goes toward the principal.) These quantities are shown on the Schedule Screen's Summary page.

Schedule Screen

Hit the SCHEDULE button to go to the Amortization Table or the Payment Schedule as I like to call it (see the next chapter for details.) At this time, due to memory limitations and calculation delays, I have limited the Maximum # of payments allowed on the Schedule screen to be 360. Therefore, if the loan you are calculating has 720 total payments, that is fine on the first screen but you won't be allowed to view its amortization schedule on the Schedule Screen.

Chapter 5 – Schedule Screen

Schedule			
#	Date	Payment	Balance
1	09-00	1,008.07	125,630.80
2	10-00	1,008.07	125,561.09
3	11-00	1,008.07	125,490.86
4	12-00	1,008.07	125,420.10
5	01-01	1,008.07	125,348.81
6	02-01	1,008.07	125,276.99
7	03-01	1,008.07	125,204.63
<div>ReturnSummaryCalculate</div> <div>Printhelp</div>			

Description

This screen has the entire Payment Schedule from the first payment to the last. This is the most important feature of PmntUtil; being able to change any payment and see its effect on the loan. You can alter any payment to be lower than it should have been, and then either adjust the very next payment to put you back on track or refinance the entire loan from that payment to the end. You can also pay bigger payments to see how soon the loan would be paid off!

Balloon Payments

There are two types of Balloon Payments that PmntUtil can Calculate. The first applies to Mortgages that give you a Monthly Payment based on a 30-year Mortgage but after 3-years you agree to pay it off. In this case, the balloon payment is nothing more than the BALANCE after the 36th payment was made. Either scroll down to the 36th line and read the Balance on the end of that line, or hit the SUMMARY button and type 36 in the field and hit the "This Payment" button. The Summary Screen will have the Current Balance.

The second type of Balloon Payment is when you know the Balloon Payment that will be the final payment but you don't know what the reduced payments will be. To calculate this type of Balloon Payment, on ANY LINE enter the Final Balloon Payment prefixed by a 'B'.

Scrolling through the Schedule

There are two ways to scroll through the payment schedule: 1) use the Scroll Buttons at the bottom (see Palm Diagram in Chapter-1) or 2) use the #-button in the upper left of the screen in conjunction with the payment# field directly below it to jump to any payment.

To use the #-button method of scrolling just keep tapping the #-button to advance the list. The jump to the very end of the loan write an 'e' or 'E' in the payment# field and hit the #-button. You can also write any payment#, for example 225, and hit the #-button and it will take a few seconds to calculate the loan at that payment and then it will display payments 225 - 231.

Printing the Schedule

The Print Button will create a MemoPad entry in your Palm. If you HotSync your Palm in its cradle with your PC, and you have the conduit set to either Synchronize the MemoPad between Palm and PC or Palm overwrites PC, then your MemoPad entries will download to your PC during the HotSync.

Now you can open up your PalmDesktop Software (on your PC not your Palm) that you use to HotSync with, and view the MemoPad entries. You can either print it directly to your PC Printer from here or export the MemoPad entry to MS-Word or MS-Excel or whatever you want to edit and view with.

Please note that the more # of payments there are, the longer it takes to generate the print-out (upwards to 1-minute when 360payments.) It will export to your MemoPad for you to use your PalmDesktop Software, that you HotSync with, in order to print it out.

The print out contains:

- Line1 - PmntUtil Printout (title)
- Line2 - Principal Balance
- Line3 - Term of Loan
- Line4 - Payment Frequency
- Line5 - Interest and Compound Frequency
- Line6 - Whether Payment Precedes or follows Compounding
- Line7 - Periodic Payment amount
- Line8 - Total # of Payments
- Line9 - Total Interest Paid
- Line10 - Total Paid
- Line 11 and beyond are the Payments.

Altering a Payment

This is the most exciting feature! To alter a payment you must PREFIX the payment with a letter (A, F, R, or M) to signify that is the payment you want to alter and hit the CALCULATE button. You can only make 1 payment adjustment at a time, but there are no limits to the amount of changes you can make.

Please note, to RESET your payment schedule, return to the first Loan Screen and hit the PAYMENT button. If you make ANY calculations once returning from the Schedule Screen your Payment Schedule will be RESET. But if you don't make any changes once returning from the Schedule Screen your newly altered payment schedule will remain intact, thus, it is wise to SAVE your changes after making them if you don't want to lose them.

Example - Prefix A

The Prefix-A makes ALL payments the same from that field and beyond.

Let's assume a 30-year Mortgage of \$125,700 with Monthly payments of \$1008.07 and an interest rate of 8.963% compounded monthly. Also, each payment occurs after interest is compounded so the 'E' is selected.

Let's assume you want to double your monthly payments. Instead of going one-by-one to each of the 360 payments and scribbling the altered amount:

- 1) Start at the first field beneath the word PAYMENT and scribble the new amount as A2016.14
- 2) Hit the CALCULATE button (Note: it may take a few seconds to calculate!)
- 3) Write an 'e' in the field below the #-button and hit the #-button
- 4) It should show payments 79-85 with \$456.50 being the last payment.

Example - Prefix M

The Prefix-M Modifies the current payment.

Continuing from the previous example, after doubling our monthly payments we got our loan down to 7-years with 85 payments of \$2016.14 Now let's assume after 5-years (or the 60th payment) you want to drop \$10,000 down on the Mortgage. You would:

- 1) Enter 60 beneath the #-button and hit the #-button to jump to that payment.
- 2) In the PAYMENT field you would write M10000
- 3) Hit the CALCULATE button.
- 4) If you enter 'e' and hit the #-button you will notice you are now down to 80 payments with the last one being \$1,107.10

Let's use another example with the Prefix M. Let's assume at the 66th payment (about 5 1/2 years into the Mortgage) you are short on cash. So you only pay \$200. You would:

- 1) Enter 66 beneath the #-button and hit the #-button to jump to that payment.
- 2) In the PAYMENT field you would write M200
- 3) Hit the CALCULATE button.
- 4) You'll notice the 67th payment compensates at \$3845.85 so that the 68th payment and beyond are back to the payments of \$2016.14

Example - Prefix F

The Prefix-F Refinances the current Balance, after the payment Prefixed by F is made, to the end of the current # of payments (which started out as 360 payments and is now down to 80 payments.)

Continuing from the previous example, let's assume the 67th payment is too much and you want to refinance after the \$200 payment. You would:

- 1) Enter 66 beneath the #-button and hit the #-button to jump to that payment.
- 2) In the Payment field where the 200 is written, Append an F on the front of it so it says F200

- 3) Hit the CALCULATE button.
- 4) It refinances the loan from payment 67-80 with payments of \$2244.06 with the last one being \$0.06

Example - Prefix R

The Prefix-R Refinances the current Balance, after the payment Prefixed by R is made, to the end of the original # of payments (which started out as 360 payments.) In the previous example, had we used R instead of F, we would have:

- 1) Enter 66 beneath the #-button and hit the #-button to jump to that payment.
- 2) In the Payment field where the 200 is written, Append an R on the front of it so it says R200
- 3) Hit the CALCULATE button.
- 4) It refinances the loan from payment 67 - 360 with payments of \$233.06 with the last payment being \$231.68

Example - Prefix B

The Prefix-B calculates the Balloon Schedule. Let try a different example: suppose that you want to finance a car-loan for \$60,000 over 5years at 7% APR. Your payments would be \$1,188.07 each month. Now if the 60th payment, which will be the Balloon, is estimated to be \$35,000 what would the other payments be?

- 1) On any line enter B35000
- 2) Hit the CALCULATE button.
- 3) Your Monthly Payments are calculated to be \$709.10 every month with a final balloon payment of \$35,000

Summary Button

Similar to the Summary button on the first Loan Screen (in fact they are the same Summary Screen) this one is slightly different. Hitting the SUMMARY button will popup the following screen:

The screenshot shows a screen with a red header bar containing the text "Which Payment ???". Below the header, the text "Which Payment # do you want to see summarized ?" is displayed. In the center, the number "12" is shown next to a dotted line. To the right of the number are two buttons: "<< This Payment" and "Last Payment".

This Summary Screen is a Payment-by-Payment summary. In other words, after paying your loan for 12 months, you can see the state of the loan after the 12th payment

is made, by entering a 12 and hitting the "<<This Payment" button. Hitting the "Last Payment" button will calculate the entire loan to the end and show you a summary (which is exactly what the Summary button does on the first Loan Screen.

Summary Example

The last example we had a 30-year Mortgage of \$125,700 with Monthly payments of \$1008.07. To view the state of the Loan after the 12th payment, enter a 12 and hit the button "<< This Payment" and the following screen will show:

Summary	
Summary After Payment# 12	
Current Balance	124,834.66
Payment	1,008.07
Interest	932.97
Principal	75.10
Principal Paid	865.34
Interest Paid	11,231.50
Total Paid	12,096.84
Total # Pmts =	360
<input type="button" value="Return"/>	

What the summary screen above is showing is the current balance is \$124,834.66 and you've paid \$865.34 (which totals \$125,700 which was the original amount borrowed.) It also shows that after making 12 payments (not necessarily all the same payment) you have paid \$12,096.84 of which \$865.34 went to the principal and \$11,231.50 was pure interest! It shows that you have a total of 360 payments and you have only paid 12 so far. And finally, it shows that your 12th payment was of the amount \$1008.07 of which \$932.97 was to interest and \$75.10 went toward the principal.