## MASTER AMORTIZER

# The Multi-faceted Amortizing Program from Applied Programming Solutions Copyright ©1992-1996. All Rights Reserved. 

## Help Index

The Index lists Help topics available for Master Amortizer. Use the scroll bar to see entries not currently visible in the Help window. To learn how to use Help, press F1 or choose How to Use Help from the Help menu.

Commands<br>File<br>Edit<br>View<br>Accessories<br>Window<br>Procedures<br>Using command buttons<br>Creating an amortization<br>Printing an amortization<br>Exporting an amortization file<br>Saving data for future use<br>Affecting appearance<br>Solving for Unknowns<br>Variable rate loans<br>Adjusting Payments

## File Menu

This menu item displays the File pulldown menu which contains commands used to work with files and to print Amortization schedules.

Open
Save
Save As
Print
Print Setup
Export
Exit

## Edit Menu

This menu item displays the Edit pulldown menu which contains commands to edit variables and parameters that affect your mortgage.

Edit Variables
Parameters

## View Menu

This menu item displays the View pulldown menu which contains commands for displaying payment and amortization schedules.

Payment Table
Mortgage Table
Schedule
PC Status
Tool Bar
Status Bar

## Accessories Menu

This menu item displays the Accessories pulldown menu which contains commands for using accessories.

Calculator
AmortCalc

## Window Menu

This menu item displays the Window pulldown menu which contains commands for arranging the View windows on the main window.

Tile
Cascade
Arrange Icons
Close All

## Open

This pulldown item allows you to open data files saved previously with the "Save As" item.

## Save

This pulldown item allows you to save changed parameters and data to the current file. This file is either the initialization file or a file created with the "Save As" item.

Initialization File
When Amortizer is first loaded it reads an initialization file (AMORTW.INI) to load all the parameters and data with default data. You can save changes to this data in the initialization file or in separate data files.

## Save As

This pulldown item allows you to save parameters and data to a new file. This file can be reopened later to reuse data for specific amortizations.

## Print

This pulldown item allows you to print an Amortization schedule using the currently selected printer.

## Print Setup

This pulldown item allows you to select the Print Setup Dialog to select an active printer, select a font or set the parameters in the device driver.

## Export

This pulldown item allows you to export an amortization schedule file in a quote and comma delimited format that can be imported to LOTUS®, QUATTRO®, or EXCEL® or in an ascii file for import to a word processor.

## Exit

This pulldown item exits the program. You are prompted to save any changed data.

## Edit Variables

This pulldown item displays the Edit Dialog that allows you to enter your mortgage amount, interest rate, and the duration of your mortgage. If you want you can also enter a thirty(30) character description and names \& addresses that will print on the amortization schedule. The fields are pre-loaded with default data.

## Parameters

This pulldown item displays the Parameters Dialog that allows selection and entry of data that affects the way an amortization schedule is created.

## Payment Table

This pulldown item displays a window with a table that compares payments on various principal amounts based on your selected principal in increments selected in the window and on your selected interest rate in $.5 \%, .25 \%$ or $.125 \%$ increments.

## Mortgage Table

This pulldown item displays a window with a chart that compares monthly payment and total amount paid for your mortgage for different durations.

## Schedule

This pulldown item displays a window with an amortization schedule based on selected parameters and the data entered in the Edit dialog. You can also review the affect of increasing payments, the balance of the loan at the end of any period and make minor payment adjustments.

## PC Status

This pulldown item displays a dialog with hardware, memory, and disk information.
Certainly not necessary for an amortization, but good information to have.
This information should be valid. However, if you do not have an IBM or compatible clone some of the data could be erroneous.

## Tool Bar

This pulldown item allows you to display or hide the Tool Bar at the top of the window.

## Status Bar

This pulldown item allows you to display or hide the Status Bar at the bottom of the window.

## Calculator

This pulldown item starts the WINDOWS Calculator.

## AmortCalc

This pulldown item starts the AmortCalc program to solve for unknowns.

## Tile

This pulldown item arranges child windows in a tiled fashion across the screen.

## Cascade

This pulldown item arranges child windows so that each caption bar is visible.

## Arrange Icons

This pulldown item arranges icons of child windows along the bottom of the main window.

## Close All

This pulldown item closes all child windows that are currently active.

## EDIT VARIABLES DIALOG

This dialog allows the user to enter specific data for creating an amortization. Data elements available include:

Loan Amount
Interest Rate
Simple Interest
Rule-of-78 Interest
Canadian Interest
Number of Years
Months
Description
For Name/address
By Name/address

## Loan Amount

Amount of principal borrowed. Amount must be between $\$ 100.00$ and $\$ 99,999,999.99$.

Interest Rate
The annual percentage rate(APR), expressed as a percent. Value must be between $1.00 \%$ and $25.00 \%$.

## Number of Years

Duration of loan, expressed in years. Value must be between 1 and 35 .

## Months

Months in addition to whole years. ex: 42 month loan is 3 years and 6 months. Value must be between 0 and 11 .

## Description

Optional description of the purpose of the loan. The description can be up to thirty(30) characters in length and will be printed on the amortization if selected in the Dialog.

For Name/Address
Optional set of three lines for entering the name and address of the person the amortization is for. Each line can be up to thirty (30) characters in length and will be printed on the amortization if selected in the Dialog.

By Name/Address
Optional set of three lines for entering the name and address of the person creating the amortization. Each line can be up to thirty (30) characters in length and will be printed on the amortization if selected in the Dialog.

## OPEN DIALOG

This dialog allows the user to open a previously saved data file by selecting the file and selecting OK. You can change directories by double clicking on the directory entries. You can change drives by selecting the arrow on the drive box and double clicking on the appropriate drive.

## SAVE AS DIALOG

This dialog allows the user to save data and parameters to be used again to rebuild an amortization. The dialog assumes a default file extention(*.amt) and displays existing data files to prevent overwriting. Selecting drives and directories works the same way as in the Open Dialog.

## PRINT SETUP DIALOG

This dialog allows the user to select a printer, select a font or run the setup to set paper size, etc. Your default printer is highlighted and will be used if you don't select another.
Double clicking on a printer or selecting a printer and clicking on OK will select that printer for use. The layout of the various prints are fairly precise and can be affected by the font you choose. Some trial and error may be necessary. Font selection is not available for Windows 3.0.

## EXPORT DIALOG

This dialog allows the user to save an amortization schedule as a quote and comma delimited file for import into a spreadsheet or as an ascii file for import into a word processor. The dialog assumes a default file extention(*.wkt or *txt) and displays existing data files to prevent overwriting. Selecting drives and directories works the same way as in the Open Dialog .

## PARAMETERS DIALOG

This dialog allows the user to select specific parameters that affect the appearance of the amortization. Selections include:

Start Year
Balloon Payment Month
Annual Payments
Days until 1st Payment
Date of 1st Payment
Print first year only
Start Month
Year End

## Start Year

The year that the first payment on the loan is due. If you are creating an amortization for a business, this should be the fiscal year.

Balloon Payment Month
The payment number(month) that a balloon payment that pays off the loan is due.

## Annual Payments

The number of payments each year. Most mortgages and installment loans have monthly(12) payments. You are also allowed to select semi-monthly(24), quarterly(4), or annual(1) payments.

## Comparison Increment

The dollar amount used in the Payment Table Window to increment the loan principal for comparing payments at different principal amounts.

## Days Until 1st Payment

The number of days until the first payment is due on the loan. This is normally 30 days(default) for a mortgage and 30 to 45 days for an installment loan. The number of days will affect the amount of interest paid on the loan. It should represent the time between the date the loan was made and the date the first payment is due. If in doubt, use the default.

## Date of 1st Payment

The date the first payment is due on the loan. This date will print on the Amortization Schedule next to the number of payments and is for information purposes only. It will not affect the payment or interest. You can change the date with the spin buttons or enter the date directly in MM/DD/YY format.

Print first year only
Print only the first year of the amortization. This allows you to print only one year of a loan that has a variable rate. You can then create a new amortization next year for the new rate.

## Start Month

The month that the first payment is due. Must be selected by clicking on the list.

## Year End

For a business that has a fiscal year different from the calendar year, this is the last month of the fiscal year. For individuals this is December.

## Rule-of-78 Interest

Rule-of-78 interest is the type usually used with installment loans. It is weighted toward charging more interest in the early months of a loan to make up for early pay-offs.

## Simple Interest

Simple interest is the type usually used with mortgage loans. It is calculated by multiplying the monthly interest rate times the outstanding balance. This amount is then subtracted from the payment and the rest is applied to the principal.

## Canadian Interest

Canadian interest is the type used in Canada. It is calculated by compounding the interest on a semi-annual basis.

## About

This pulldown item displays basic info about the program including version number.

## PC STATUS DIALOG

This dialog displays basic information about your computer. Certainly not necessary for an amortization, but good information to have.
This information should be valid. However, if you do not have an IBM or compatible clone some of the data could be erroneous.

## AMORTCALC <br> for WINDOWS ${ }^{\circledR}$ <br> A companion program for Master Amortizer <br> from Applied Programming Solutions <br> Copyright © 1993-1996. All Rights Reserved.

This program is designed to be run from Master Amortizer. However, you can run it standalone for a quick answer to the unknown value of a loan equation.

You must enter three of the variables to solve for the forth. For example: if you want to pay $\$ 500$ toward a $\$ 20,000$ loan at $8.25 \%$ the program will tell you the duration of the loan.

to clear all variables.
Note: A certain payment amount never pays off a loan amount in exactly the number of months chosen. The last payment is always a little more or less than the other payments. For this reason, calculating a loan amount, interest rate, or duration will never come out exact. You should round the result to the most logical number.
For example: a $\$ 50,000$ loan at $8.00 \%$ for 30 years would require a payment of $\$ 366.88$. If you enter this same payment at $8.00 \%$ for 30 years, the program calculates a loan amount of $\$ 49,999.69$. This is not an error. In real life the last payment will vary to make up the difference.

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## AMORTIZATION WINDOW

This window displays an amortization schedule based on the parameters chosen and information entered into the Edit Dialog. You can also select the following:
Remaining Balance
Larger Payments
Alter Payment
Click on:
to print the Amortization Schedule on the currently selected printer. You must use this print button to print a schedule with an altered payment.

Remaining Balance
Clicking on this button creates a dialog that allows you to review the balance of the loan at the end of any period.

## Larger Payments

Clicking on this button creates a dialog that allows you to view the result of making larger payments over the life of your loan. For example: paying an extra $\$ 10.00$ per period would reduce both the duration of the loan and the amount of interest paid.

## Alter Payment

Clicking on this button creates a dialog that allows you to adjust the payment made each period. The purpose of this is to make minor adjustments to match an existing loan. If you make an adjustment of more than a few cents, your schedule will not be accurate and will not be for the proper duration. If you want to print a schedule with an adjusted payment, you must print from the AMORTIZATION WINDOW.

## PAYMENT TABLE WINDOW

This window displays a comparative payment table. Payments are based on different interest rates (along the left side) and at different principal amounts (along the upper center) based on the interest rate and amount currently selected and on the Comparison Increment set in the Window. Use the up/down arrows next to the increment to change its value. You can also increment the interest rate by $.125 \%, .25 \%, .5 \%$. The payments will change as amount, interest rate, or duration changes.

## Click on:

to print the Payment Table on the currently selected printer.

## MORTGAGE TABLE WINDOW

This window displays comparative monthly payments and total amount paid for a loan at different durations. Amounts are based on the data in the Edit Dialog, calculated for progressive durations. Durations start at ten years and progress in five year increments up to thirty-five years. The payments will change as parameters, interest rate, or data changes.

## Click on:

to print the Mortgage Table on the currently selected printer.
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## Creating an Amortization

## To create an amortization:

0 Select Variables from the Edit menu to open the Edit Dialog.
e Enter the amount of the loan, the interest rate, the type of interest, and the number of years.
6 Select Parameters from the Edit menu to open the Parameters Dialog.
4 Select the year the loan begins, the month of any balloon payment, the number of payments per year,
the number of days till the first payment, the date of the first payment, the month that the loan begins, and the month that ends your fiscal year.
9 Select Schedule from the View menu.
6 You can minimize the Amortization Window, change your data and create a new amortization to compare with the first.
© You can also review the affect of increasing your payment or the remaining balance at the end of any period.

## Related Topics

Printing an amortization

## Printing an Amortization

## To print an amortization:

0 Perform steps 1 through 6 of the procedure titled: Creating an amortization.
e. In the Edit Variables Dialog, make sure you have checked print description and print By/For if you want this information printed.
6 Select Print Setup from the File menu if you want to select a printer, a printer font, or run the printer setup.
4 Select Print from the File menu.
Related Topics
Affecting appearance

## Exporting an Amortization File

To export an amortization file:
0 Perform steps 1 through 6 of the procedure titled: Creating an amortization. e Select Export from the File menu.
© Select export to a spreadsheet or to text.
4 Enter a name for the file in the Export Dialog and click OK. The dialog displays existing export files to prevent overwriting and allows selection of other directories.

## Saving Data For Future Use

## To save data for future use:

0 Select Save from the File menu, if you have made any changes to the data.
e A save dialog gives you the option of saving the changes to the initialization file or selecting NO to open the Save As Dialog.
6 Enter a name for the file in the Save As Dialog and click OK. The dialog displays existing data files to prevent overwriting and allows selection of other directories.
4 If you know you want to save the changes to a new file, select Save As to begin with.

## Affecting Appearance

To change the appearance of an amortization:
0 Select Variables from the Edit menu to open the Edit Dialog.
e Enter a description for the loan and the Name and address for a "Prepared by" and "Prepared for" message.
9 Check the Print Description and the Print By boxes to have them printed on the amortization.

## Related Topics

Printing an amortization

## Solving Unknowns

To solve for unknown variables in a loan calculation:
0 Select AmortCalc to run the AmortCalc program.
e You must enter any three of the variables for the loan and the program will calculate the forth.
6 Select Help in the AmortCalc program for a discussion of calculations.

## Variable Rate Loans

## To handle a variable rate loan:

0 Perform steps 1 through 6 of the procedure titled: Creating an amortization.
e. Select Print first year only from the Parameters Dialog.

6 Select Print from the File menu.
4 In subsequent years enter the remaining balance of the prior year and the remaining duration of the loan and print one year again.

Related Topics
Printing an amortization

## Adjusting Payments

To adjust a payment to match an existing loan:
0 Perform steps 1 through 6 of the procedure titled: Creating an amortization.
e Select Schedule from the View menu.
9 Click on the Alter Payment button in the window.
9 After adjusting the payment in the edit box, click on OK.
9 Large adjustments produce an incorrect result. You should only use this to make minor adjustments. To print a schedule with an adjusted payment you must print from the AMORTIZATION WINDOW.

## Related Topics

Creating an amortization

## Command Buttons

## The command buttons execute the following commands：

Executes the Open command of the File Menu．


Executes the Save As command of the File Menu． 6

Executes the Print Setup command of the File Menu． $\rightarrow$

Executes the Export command of the File Menu． 4

Executes the Edit Variables command of the Edit Menu． P

Executes the Parameters command of the Edit Menu．国

Executes the Payment Table command of the View Menu．同

Executes the Mortgage Table command of the View Menu．图

Executes the Schedule command of the View Menu． Q

Executes the PC Status command of the View Menu．
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Executes the WINDOWSTм Calculator．国

Executes the AmortCalc Program． 9

Executes the Help Index．

## Amortizer Terminology

## Close

Annual Payments<br>Balloon Payment Month<br>By Name/address<br>Canadian Interest<br>Comparison Increment<br>Date of 1st Payment<br>Days until 1st Payment<br>Description<br>For Name/address<br>Initialization File<br>Interest Rate<br>Loan Amount<br>Months<br>Mortgage Table<br>Number of Years<br>Payment Table<br>Rule-of-78<br>Schedule<br>Simple Interest<br>Start Month<br>Start Year<br>Year End

