648C LoanMaker® Setup Guide

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Setup Routine - [Setup] Function Key

The [Setup] function key accesses several setup routines to configure the calculator. All are started by pushing the [Setup] key and then entering the appropriate code number, e.g., a code number of 97249 allows you to change the insurance rates and other options.

Changing the Installment-Loan Calendar

Code = 24

Enter this code to set the calendar methods for installment-loan interest accrual and A.P.R. calculations.

The "Actual" calendar uses a conventional 365/366 day calendar to compute the number of days in the first period. This method is used by most simple-interest accounting systems. (Unlike simple-interest accounting systems, however, the 648C assumes subsequent periods are uniform. With the actual calendar, 648C results are very close to a simple-interest system.)

The "Federal" calendar uses the method described in Regulation Z and resolves the first period into 0 or more unit periods and some number of odd-days.

IL AC/FED 1/2?_

Enter a 1 to use an Actual calendar or a 2 to use the "Federal" calendar in the first period. This entry affects the amount of interest that will be charged for the first period. If you are using a simple-interest accounting system, it is suggested that you use the Actual calendar.

Although it is common to see the "Federal" calendar used to compute interest, it was not designed for that purpose. (It was designed to be used to compute the A.P.R.)

APR AC/FED 1/2?_

Enter a 1 to use an actual calendar or a 2 to use the "Federal" calendar in the first period. This entry affects the A.P.R. percentage calculated in both the installment loan and A.P.R. routines. If you are using the U. S. Rule (common on simple-interest accounting systems), the Actual calendar method will produce an A.P.R. that agrees with the interest rate if there are no prepaid charges.

The "Federal" calendar is more common and is the one described in detail in Regulation Z (although both the "federal" calendar and U. S. Rule methods are specifically permitted under the regulation).

Installing/Modifying the Installment Loan Credit Insurance Plan

Code = 48	Enter this code to install or maintain a credit-insurance plan.
STATE (1-54)?_	(This prompt appears if the insurance state code was zero.)
	The LoanMaker has the formulas for all 50 states and District of Columbia within the program. You need to tell it which state you want by entering the appropriate code number from the List of States below. This entry selects the formulas used to calculate the life and disability premiums.
ss (##)?_	The current insurance state and code number are displayed. Push [ENTER] to keep the same state or enter the new code number.
	If you enter a new state code, the current credit insurance plan will be erased. You can enter a code of 0 to remove credit insurance from the calculator.
ss Y/N?_	The selected state abbreviation (e.g., "MN" for Minnesota) appears. If this is correct, push [YES], otherwise push [NO] to return the previous prompt.

If the selected state allows the sale of both gross and net life insurance, you can choose here which type you wish to use. If only one type is allowed, that type is displayed.

GROSS/NET 1/2?_ GROSS ONLY NET ONLY	Enter a 1 to use gross life or a 2 to use net life insurance.

If a particular state requires the use of an I&M discount percentage, the published rates are automatically used by the calculator based on the type of insurance, i.e., decreasing gross, decreasing net, or level.

SGL/YR x.xx?_ SGL/MOB x.xx?_	If the displayed installment-loan single-life rate shown is correct, push [ENTER], otherwise enter the correct rate. The rate can be either a rate per $100 per year (SGL/YR) or per $1000 per month (SGL/MOB).
JNT/YR x.xx?_ JNT/MOB x.xx?_	If the displayed installment-loan joint-life rate shown is correct, push [ENTER], otherwise enter the correct rate.

The following two prompts appear for gross life only. (For net insurance, the above rates are converted to the correct rate to insure a balloon payment thus separate level rates are not required.)

`SGL/LVL  x.xx?_`   Enter the single level insurance rate.
                          This is a rate per $100 per year.

`JNT/LVL  x.xx?_`   Enter the joint level insurance rate.
                          This is a rate per $100 per year.

The next prompt determines whether you want to provide some disability insurance on a balloon payment. If you answer [YES], the portion of the balloon payment equivalent to the regular monthly payment will be covered.

`H ON BALLOON N?_`   Push [YES] to cover a portion of the balloon payment,
                          otherwise push [NO].

The table of A&H (disability) rates can be entered for every 3-month, 6-month, or 12-month step. Rates for terms between the entered rates are interpolated or bracketed according to the selected state's regulations.

After entering rates on annual steps, you can modify the A&H rates by 3-month or 6-month steps. This technique allows you to change the interpolated or bracketed rates if you wish.

`H STEP 12/6/3?_`   Enter a 3, 6 or 12 to use 3-month, 6-month, or 12-month
                          steps.

`xx-M HR x.xx?_`   The first A&H rate is displayed (or a 0 is displayed if this
                          is a new table). Enter the rate or confirm it is correct.

`xx-M HR x.xx?_`   Enter or confirm the next rate.

`.`   Continue to enter the A&H rates until you reach the end
`.`   of the table, at which point enter a 0 as the next A&H rate
`.`   to signify that this is the end of the A&H table. (Up to 15
                          years of A&H rates can be entered.)
`xx-M HR x.xx?_`

This completes the entry of the insurance plan. You can review the entered data by specifying code 222 to view the setup.

Installing/Modifying a Second Set of A&H Rates

`Code = 49`   Use this code to enter or change a second set of A&H
                          rates. The table entry is the same as shown above.

Setting the Installment Loan Payment Frequency

Code = 50   Use this code to select the multiple-payment frequency option or to set the calculator up for a single payment frequency.

FREQ SETUP 0?_   To be able to compute loans with different payment frequencies, enter a 0 at this prompt. This will cause the calculator to present the FREQ xx?_ prompt for each loan allowing you to change the payment frequency from one loan to the next.

To calculate loans only for a certain frequency, enter that frequency at this prompt. For example, if you enter a 12 at this prompt, the calculator will assume you only want to compute monthly loans and will not present the FREQ xx?_ prompt in the loan routines.

Enabling a Prepaid Charge

CODE = 51   Use this code to enable or disable the prepaid charge prompt in the installment and single-payment loan routines.

PPD CHG Y/N?_   Push [YES] to enable the prepaid charge, or [NO] to disable it.

Installing/Modifying the Single-Payment Loan Credit Insurance Plan

Code = 52   Use this code to install or change the credit-insurance plan for single-payment loans.

SP SGL/YR x.xx?_   Enter the single-payment-loan single-life rate.
SP SGL/MOB x.xx?_

SP JNT/YR x.xx?_   Enter the single-payment-loan joint-life rate.
SP JNT/MOB x.xx?_

Viewing Single Premium Rates

Code = 99   Enter a setup code of 99 after computing an installment loan to view the single-premium life and A&H rates used.

Enable/Disable Balloon Payment Loans

Code = 53

USE BALLOON Y?_   Push [YES] to enable the balloon loan capabilities, or [NO] to disable them.

Computing Loans with Long First Periods

The LoanMaker will calculate loans with long or short-first day periods, however, there is a limit to the length of a long first period (this is to prevent the inadvertent calculation of loans with very long first periods). The limit on the length of the first period varies by payment frequency:

Payment Freq	Maximum Number of Days
1	427
2	270
4	136
12	95
26	45
52	35

The limit on the length of the first period can be removed by using the following setup option. Caution should be exercised when removing the limit for several reasons:

1) The lender may not be willing to accept or write loans with very long first periods except in unusual cases (such as Student Loans, for example), and

2) Although the LoanMaker will calculate credit life and disability premiums for such loans, you should confirm with the credit insurance company that coverage is available on such loans (frequently it is not, or the insurance company has a special way to calculate the premiums).

Even with the check removed, there is a limit of 10,000 days on the length of the first period (about 27 years).

Prompt	User Response
Code = 154	Use this code to enable or disable the check on the maximum length of the first period.
LONG 1ST PER Y/N?_	Push [YES] to remove the check on the length of the first period, or [NO] to install it.

Viewing the Calendar Options and Credit Insurance Plan

`Code = 222`	Enter 222 to view (or print) the calendar options and credit insurance plan. Continue to press [ENTER] to display all the parameters.
`IL: ACTUAL CAL` `IL: FEDERAL CAL`	The installment loan interest accrual calendar method is displayed.
`APR: ACTUAL CAL` `APR: FEDERAL CAL`	The A.P.R. calendar method is displayed.
`ss* LIFE TYPE x`	The state abbreviation and current life type is displayed. If an asterisk appears after the state abbreviation, the life type has been changed from the default life type (see Modifying the Default Life Insurance Types). The remainder of the insurance plan will be displayed or printed.

Modifying the Default Life Insurance Types

        This routine allows you to set the specific gross and net life types to be used for the selected state. You must execute this routine after you have selected the insurance state (see Installing/Maintaining the Installment Loan Credit-Insurance Plan).

        To change the life rates after you have changed the life types, execute the Installing/Maintaining the Installment Loan Credit-Insurance Plan routine but do not change the state. If you change the state, the credit insurance plan will be erased, including the changes you have made in this routine.

        The life type numbers are P*ROM's standard life types (contact P*ROM for additional information on these life types).

`Code = 4848`	Enter 4848 to modify the gross and net life types for the selected state. (You must select the state first using code 48.)
`ss GR LIFE xx?_`	The current installment-loan gross life type is shown. Enter the desired life type or push [ENTER] to retain the displayed life type. (ss) is the state abbreviation. Valid gross life types are 1, 2, and 19.
`ss NET LIFE xx?_`	The current installment-loan net life type is shown. Enter the desired life type or push [ENTER] to retain the displayed life type. Valid net life types are 4, 5, 6, 7, 8, 41, 46, and 88.
`ss SP LIFE xx?_`	The current single-payment loan life type is shown. Enter the desired life type or push [ENTER] to retain the displayed life type. Valid single-payment life types are 1, 2, 5 and 7.

Enabling the Printer

`CODE?_`	Enter the code number 9911.
`PRINTER Y`	The printer is enabled. Enter the code number again to disable the printer.

Transferring the Setup to Another Calculator

The Setup of a 648C calculator can involve several rates and options. Once you have a calculator set up the way you want it, you can transfer it to another 648C calculator in about a minute.

This can be done two ways.

You can transfer the data to a cassette tape and then use the cassette tape to set up additional calculators, or you can transfer the data directly to another calculator with a special interconnecting cable.

The direct method is a little faster, however, the cassette tape method has the advantage that the cassette tape can be distributed to remote locations.

The 648C setup routine has two code numbers reserved for this feature. The first (30294) sends the data in the calculator to the cassette tape recorder or another calculator. The second (49203) receives data from a cassette tape recorder or another calculator.

To make a cassette tape, make sure the "master" calculator is setup exactly the way you want it. Then push [Setup] and enter the code number 30294. You will see the prompt "SEND DATA Y/N?". Start the tape recorder in the record mode and then push [YES] on the "master" calculator.

To use the tape to transfer the data to a "slave" calculator, push [Setup] on the calculator and enter the code number 49203. The message "READY TO RECEIVE" will appear briefly and then disappear. When it disappears, start the cassette tape in the playback mode.

To transfer the setup directly from the master calculator to the slave calculator, enter the receive code number (49203) first. After the message "READY TO RECEIVE" disappears on the slave calculator, enter the send code number (30294) on the master calculator.

The following items are transferred:

> Insurance state selection
> Life plan and rates
> Disability plan and rates (both tables)
> All setup options (calendar settings, etc.)
> "Your Name"
> Printer flag

List of States and Credit Insurance Types

The following table lists the most common types of insurance used in each particular state. In some states, other methods may be in use by certain insurance carriers. The methods listed are current as of this writing, however, states are frequently changing credit insurance regulations and you may find that a LoanMaker calculator has to be updated to the current version to obtain accurate credit insurance calculations. Calculators can be updated by returning them to PROM Software at the address inside the front cover of this User's Guide.

Code	Abbr	Rates[1]	IL Life Types	A&H method	SP Life Type
0		Code used to indicate no credit insurance.			
1	AK	.49/.82	1/5	Interpolate	1
2	AL	1.23/1.845	2/7	Interpolate	1
3	AR	.65/1.10	1/5	Interpolate	1
4	AZ	.44/.66	1/5	Interpolate	1
5	CA	.65/.98	0/41	Interpolate	1
6	CO	.80/1.32	2/7	Interpolate	2
7	CT	.50/.75	1/5	Interpolate	1
8	DC		1/5	Interpolate	1
9	DE	.65/.98	1/5	Interpolate	1
10	FL	.50/.87	1/5	Bracket	1
11	GA	.45/.675	1/5	Interpolate	1
12	HI	.40/.70	1/5	Interpolate	1
13	IA	.47/.78	1/5	Interpolate	1
14	ID	.54/.89	1/5	Interpolate	1
15	IL	.50/.835	1/5	Bracket	1
16	IN	.65/1.08	1/5	Bracket	1
17	KS	.65/1.08	1/5	Interpolate	1
18	KY	.65/.98	1/5	Bracket	1
19	LA	1.00/1.50	1/5	Bracket	1
20	MA	.49/.78	0/7	Interpolate	7

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[1]   These rates are typical and not necessarily correct for all insurance carriers or plans. Make sure you confirm these rates with your insurance company or agent before using them to compute credit insurance premiums. Rates marked "Spec" must be obtained from your insurance company.

21	MD[2]	.56/.94	1/5	Interpolate	1
22	ME	.50/.84	0/7	Interpolate	7
23	MI	.48/.75	1/5	Interpolate	1
24	MN	.40/.667	0/5	Interpolate	5
25	MO	.55/.90	1/5	Interpolate	1
26	MS	.80/1.39	1/5	Bracket	1
27	MT	.60/.90	1/5	Interpolate	1
28	NC	.60/1.00	1/5	Interpolate	1
29	ND	.40/.68	1/5	Interpolate	1
30	NE	.55/.92	1/5	Bracket	1
31	NH	.595/.9246	2/7	Interpolate	2
32	NJ	.62/.93	2/7	Interpolate	2
33	NM	.65/.975	1/5	Interpolate	1
34	NV	.65/1.00	1/5	Bracket	1
35	NY	Spec	0/4	Interpolate	0
36	OH	.769/1.346	2/7	Interpolate	2
37	OK	.68/1.02	1/5	Interpolate	1
38	OR	.77/1.275	2/7	Interpolate	2
39	PA	Spec	2/7	Interpolate	2
40	RI	.72/1.152	2/7	Interpolate	2
41	SC	.65/1.25	1/5	Interpolate	1
42	SD	.60/.90	1/5	Bracket	1
43	TN	.66/1.00	1/5	Interpolate	1
44	TX	.36/.54	1/5	Interpolate	1
45	UT	.65/1.105	2/7	Interpolate	2
46	VA[3]	.6485/1.0700	2/7	Interpolate	2
47	VT	.55/.88	0/41	Interpolate	0
48	WA	.60/1.00	1/5	Interpolate	1
49	WI	.33/.55	1/5	Interpolate	1
50	WV	.65/1.00	19/0	Bracket	0

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[2]   Maryland uses different life rates based on the term of the loan. You will be prompted for the life rates to be used for terms over 48 months (typically 0.52 and 0.87) in the Setup Routine.

[3]   In Virginia, both net and gross insurance can be sold. State code 46 (VA) uses the gross insurance formula published by Virginia. State codes 53 (V2) and 54 (V3) use net insurance methods filed by leading insurers. These net insurance formulas are not necessarily correct for all insurance carriers. Check with your insurance carrier before using the LoanMaker to compute the exact credit insurance premium.

51	WY	.50/.80	1/5	Interpolate	1
52	P2	Spec	2/7	Interpolate	2
53	V2[3]	.6485/1.0700	0/7	Interpolate	7
54	V3[3]	.6485/1.0700	0/46	Interpolate	0

State number 52 is an alternate set of plans for Pennsylvania with a different I&M discount.

Single premium life rates are rounded to 4 places for gross insurance (except New Hampshire and Virginia which are 5 places), and to 6 decimal places for net insurance.

Intermediate A&H rates (rates for terms between the entered rates) are interpolated or bracketed according to the entry in the above table. If interpolated, the intermediate rates are rounded to six decimal places. If bracketed, and you enter annual rates, the rates will be bracketed annually. If you enter rates for each 6-month step, the rates will be bracketed on 6-month steps, and so forth.

You must install credit insurance rates in order to compute credit insurance premiums. If you want to remove the credit insurance rates, enter a state code of "0".

You can "fine-tune" the life premiums computed by the LoanMaker by making small changes in the entered life rate. E.g., if the single-rate for a particular state is $0.50 but the premium computed by the LoanMaker is just a little below the one you are trying to match, try increasing the single-life rate by a cent or even a few tenths of a cent (e.g., $0.503). You may be able to get a very close premium match by making small adjustments (up or down) in the life rates.