



February 1980

00041-90149

Printed in U.S.A.

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# HP-41C

## Home Management Pac

### Quick Reference Card

#### Home Budgeting

(Minimum size 063)

**XEO** **BUDGET**

Press **[ ]** **[A]** to initialize

(Caution: destroys data in  $R_{00} \rightarrow R_{63}$ )

Input month (max. 6 characters).

Press **[F]**, input monthly forecast in each category.

Press **[A]**, input actual expenditures in each category, press **[R/S]**, *without data entry*, to advance to next category.

For tax deductible items: press **[D]** after keying-in entry.

To delete expenditure entries: access category, reinput erroneous entry with negative sign.

To obtain current balance: press **[B]**, **[R/S]**

To obtain summary of month: press **[E]**, **[R/S]**

To store monthly data: press **[G]**, insert blank card.

To read in monthly data: press **[I]**, read in data card.

## For Year-to-Date Data:

Update at *end* of month only, by pressing **[D]**  
Press **[E]** as desired for YTD summary  
To store YTD data: press **[H]**, insert blank card  
To read in YTD data: press **[J]** read in data card  
For interim storage execute STORE or RELOAD  
as desired

## Travel Expense Record

(Minimum size 063)

**[XEO]** TRAVEL, press **[A]** to initialize (Caution:  
destroys data in R<sub>00</sub>→R<sub>63</sub>)

Input date (in mm.ddyyyy format)

Input expenses in each category, press **[R/S]**  
*without data entry* for next category.

For following days: press **[B]**, input date and  
proceed as above.

To correct errors: press **[B]**, input date of erroneous  
entry, access category, reinput error with  
negative sign, input correct data and continue.

Then press **[B]** and input current date to return to  
current status.

To recall category totals, press **[C]**, **[R/S]**

To recall daily totals, press **[D]**, **[R/S]**

To record data: press **[E]**, insert blank cards

To read data: press **[E]**, read in data cards

For interim storage of data, execute STORE or  
RELOAD as desired.

## Stock Portfolio Evaluation

(Minimum size 063)

Place overlay on keyboard.

Begin program: **[XEO]** STOCKS

### To Input Portfolio Data:

Press **[A]**, see **NO. STOCKS=?**

Input number of different stocks in portfolio,  
**[R/S]**, see **NAME=?**

Input alpha name of first stock (max. 6 characters),  
**[R/S]**, see **NO. SHS (name) =?**

Input number of shares, **[R/S]**, see **PRC (name) =?**

Input price (in XXX.YZ format), **[R/S]**, see  
**COMM=?**

Input the commission, **[R/S]**, see **NAME=?**

Repeat above steps until all stocks have been  
input. **END** will be displayed.

### To Correct or Change Data:

Press **[E]**, see **NAME=?**

Input name of the stock to be corrected, press  
**[R/S]**, see **NO. SHS=?** etc.

Input correct data for the *single* stock to be corrected.

Repeat as necessary by pressing **[E]** for each  
stock to be corrected.

### Adding New Stocks:

Press **C** , see **NAME=?**

Input name of new stock, **R/S** , and other data as above.

Repeat inputs for all new stocks. When completed, press **R/S** *without prior data entry*, see **END**.

### To Delete a Stock:

Press **D** , see **NAME=?**

Input name, **R/S** . Stock is deleted, **END** is displayed.

### To Review Historical Data:

Press **B** , see name of stock.

Press **R/S** to obtain number of shares and price. Continue for rest of stocks until **END** is displayed.

### Calculate Current Value:

Press **B** **R/S** , see **PRC(name)=?**

Input current price, **R/S** , see **BETA=?**

Input Beta, **R/S** , see **DIV=?**

Input ann. div/sh, **R/S** , display **%CH=**

Continue to next stock, until all have been input and **END** is displayed.

### Evaluation and Summary:

Press **A** **R/S** , display **ORIG=**

Press **R/S** to display evaluation of total portfolio.

### To Store Data on Card:

Press **D** , input blank card(s). Label card(s) and retain.

### To Read Data Card:

Press **E** , input data cards.

For interim storage execute **STORE** and **RELOAD** as desired.

## Checking Account Reconciliation

(Minimum size 007)

**XEO** **CHECK**, input in order:

- The bank statement balance
  - The checkbook balance
  - Service charge on account, if any
- or, • Interest paid on account, if any

Calculator prompts with pause:

**CHECKS OUT**

**CHECK≠1=?**

Input amount of each outstanding check, press **R/S** *without data entry* when all have been entered. Total of outstanding checks is displayed.

Press **R/S** , calculator prompts:

**DPSTS OUT**

**DPST≠1=?**

Input outstanding deposits as above.

Press **[R/S]** after all deposits are input.  
 Calculator displays: total deposits outstanding,  
 adjusted bank statement balance, adjusted check-  
 book balance and difference.  
 Positive difference: more money in account than  
 shown by checkbook. Negative difference: less  
 money.

## Your Financial Calculator

(Minimum size 010)

Place overlay on keyboard.

**[XEQ]** **FINANCE**, see **0.00**.

To clear financial registers: press **[E]**, see  
**0.00**

Set proper payment mode:

Press **[C]** see **BEGIN** or **END**. Repeat until  
 proper display is seen.

Calculations

Input 3 (or 4) of following in any order:

- Number of periods, n **[A]**  
 or  $nx12$  **[A]**
- Interest rate per period, i **[B]**  
 or  $i \div 12$  **[B]**
- Present Value, PV **[C]**
- Payment, PMT **[D]**
- Future Value, FV  
 or Balance, BAL **[E]**

(Caution: be sure to observe sign convention:  
 negative for cash paid out, positive for cash  
 received).

Calculate unknown quantity by pressing appro-  
 priate key without prior data entry.

n	<b>[A]</b>
i	<b>[B]</b>
PV	<b>[C]</b>
PMT	<b>[D]</b>
FV (or BAL)	<b>[E]</b>

### To Review Data:

Press **[D]**. See mode setting, press **[R/S]** for n,  
 i, PV, PMT, FV. Or,

**[RCL]** **[A]** for n  
**[RCL]** **[B]** for i  
**[RCL]** **[C]** for PV  
**[RCL]** **[D]** for PMT  
**[RCL]** **[E]** for FV.

Repeat calculations with new data as desired by  
 inputting only the data which has changed. Press  
**[E]** as necessary to clear all financial registers  
 for new data.

## Accumulated Interest and Remaining Balance

(Minimum size 011)

Place *Finance* overlay on keyboard.

**XEQ BAL**, see **REM BAL**.

Follow instructions as above to calculate the values  $n$ ,  $i$ ,  $PV$ ,  $PMT$ ,  $FV$ .

Input number of first payment period,  $n_1$ , in the time frame of interest.

Press **J**, see  $N=(n_1)$ , press **R/S**, see **N=?**

Input number of the last payment period,  $n_j$ , in the time frame of interest. Press **R/S** to see remaining balance, accumulated principal, accumulated interest and incremental interest. Repeat for other periods as desired.

## Home Owner's Equity Analysis

(Minimum size 019)

**XEQ HOME**, see **PRICE=?**

Input price of house, **R/S**, see **DOWN=?**

Input down payment, **R/S**, see **%INT=?**

Input interest rate on mortgage, **R/S**, see **TERM=?** Input the term of the mortgage in years.

Press **R/S** to display mortgage payment.

Press **R/S**, see **%APPR=?**

Input expected annual depreciation rate, **R/S**, see **MONTHS=?**

Input number of months remaining in the year of purchase, **R/S**, see **TAXES=?**

Input annual property tax, **R/S**, see **%INC=?**

Input expected % increase of taxes per year.

Press **R/S** for monthly payment, total equity, tax deductibles, and appreciated value for first year. Continue pressing **R/S** for each succeeding year.

## The Rent or Buy Decision

(Minimum size 018)

**XEQ BUY?**

Input the following in order, pressing **R/S** after each input:

- Price of the house
- Down payment
- % interest on mortgage loan
- Term of the mortgage, in years.

The monthly mortgage payment is displayed.

Press **R/S** and input the following in order, pressing **R/S** after each:

- Number of years you will occupy the house
  - Expected yearly % appreciation of the house
- The anticipated market value at end of occupancy is displayed.

Press **R/S** and input % commission paid to sell house, **R/S**. The Net Cash Proceeds on Resale are displayed.

Press **[R/S]** and input, in order, pressing **[R/S]** after each:

- Closing costs on transaction
- Total marginal income tax rate (%)
- Monthly property taxes
- Monthly maintenance expenses
- Alternative monthly rent

The annual rate of return (% yield) on an investment in the house is displayed.

Press **[R/S]** and input the rate of interest obtainable on an alternative investment, **[R/S]**. The net \$GAIN (or loss) upon buying is displayed.

Press **[R/S]** twice to obtain the market value of house needed to provide an annual yield equivalent to the alternate investment. Press **[R/S]** again to obtain yearly % appreciation needed to obtain this market value.

## Tax Free Individual Retirement Account (IRA) or Keogh Planning

(Minimum size 013)

**[XEQ]** **IRA**, input in order:

- Annual investment
- Years until retirement
- % annual interest paid on the investment.

Calculator displays total paid in, future value of (tax-free) investment, and total dividends earned. Input current income tax rate and expected tax rate (in %) at retirement.

Future value of the investment at the anticipated retirement tax rate is displayed.

Input anticipated annual % inflation and see the future value, diminished due to inflation.

Program then calculates the future value of an identical but taxable investment and its value diminished by inflation.

## The True Cost of an Insurance Policy

(Minimum size 008)

**[XEQ]** **INS**, see **AMT=?**

Input face amount of policy, **[R/S]**, see **DIV=?**

Input annual dividend, **[R/S]**, see **PREM=?**, input annual premium, **[R/S]**, see **CASH VAL BEG=?**, input cash value at beginning of year, **[R/S]**, see **CASH VAL END=?**, input same at end of year,

**[R/S]**, see **% INT=?** Input interest rate obtainable on alternative investment, **[R/S]**. See displayed **TRUE COST=\$/THOU**.

To calculate interest paid on savings portion of policy, press **[R/S]**, input cost of \$1000 of term insurance, **[R/S]**. See **% INT=**.

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