Texas Instruments
TI-99/4 Home Computer

Diskette Software

Model PHD 5027

Invoice Management

Seven programs which bring computer accuracy to your invoicing system. The package is also designed to work with the Inventory Management package.

■ INITIALIZATION — Customize files for your company, including methods and terms of payment.

■ UPDATE — Enter customer and inventory data.

■ INVOICE WRITING AND INVOICE PRINTING — Write and print your invoices.

■ DELETE — Delete unwanted records.

■ CONVERT 1 — Convert your data to a format readable by the Personal Record Keeping or Statistics Command Module.

■ CONVERT 2 — Convert back into a format readable by the Invoice Management package.

Designed for use with the TI-99/4 Home Computer, the TI Disk Memory System (TI Disk Drive Controller and TI Disk Memory Drive), and the Personal Record Keeping or Statistics Solid State Software™ Command Module (all sold separately).

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Author: Texas Instruments

Language: TI-99/4 BASIC

Hardware: TI-99/4 Home Computer
          Disk Controller and Drive
          TI RS232 Interface
          80-Column RS232C-Compatible Printer
          Personal Record Keeping or Statistics <u>Solid</u> <u>State</u>
             <u>Software</u>TM Command Module

   Media: Diskette

Maintaining accurate customer records is a vital aspect of any
business. The income you receive by invoicing your customers is
a prime source of revenue for your business. Therefore, you
want to be sure that your customer information, such as address,
discounts, and payment date, is kept current and accurate. With
the Invoice Management package for the Home Computer, you can
bring computer speed, accuracy, and detail to your invoice
records.

The Invoice Management package contains seven programs to help
you maintain accurate records.

●   INITIALIZATION -- Sets up the records and then lets you
    specify the method and terms of payment to meet the needs of
    your business.

●   UPDATE -- Allows you to enter customer and inventory
    information.

●   INVOICE WRITING and INVOICE PRINTING -- Write and print
    invoices, containing only the information you want.

●   DELETE -- Deletes unwanted records.

●   CONVERT 1 -- Converts your data to a format readable by the
    Personal Record Keeping or Statistics Command Module.

●   CONVERT 2 -- Converts your Personal Record Keeping or
    Statistics file back into a format readable by the Invoice
    Management package.

The Invoice Management package is designed to take advantage of
the file structures of the Personal Record Keeping and
Statistics Command Modules. One of these modules must be
inserted in the slot on your computer console before you load
any of the invoice programs. The program also requires a newly
initialized diskette for recording your invoice data.

With the Invoice Management package, you can set up files of
information on both your customers and your inventory. The
customer information includes the customer number, address,
active or inactive status, taxable or nontaxable status,
discount rate, and method and terms of payment. The inventory
information includes the item number, description, active or
inactive status, unit price, and taxable or nontaxable status.
In addition, the Invoice package is designed to work with the
Inventory Management package (see "Background").

The Invoice Management package lets you set up your invoice
information in one of two ways. In this manual, we refer to
these as System 1 and System 2. With either system, you need a
data diskette for storing your invoice information.

If you have only one disk drive, you will use System 1. With
this system, you store both your customer and stock item files
on the same data diskette. If you decide to add a second disk
drive and the Inventory Management package to your system later,
you can easily change to System 2. However, once your data is
converted to System 2, you cannot switch back to System 1.

Use System 2 if you have two disk drives and both the Invoice
Management and Inventory Management packages. With this system,
you need two data diskettes, one for invoice information on a
maximum of 560 customers and one for inventory information on a
maximum of 900 stock items. Each time you write an invoice with
System 2, the program automatically updates the quantity on
hand, date of the last sale, and cumulative sales totals
information on the inventory data diskette.

Note: Since the Invoice Management package requires more than
one diskette, the program diskette and one or two data
diskettes, you may want to label the data diskettes before you
begin. We suggest that you label the invoice data diskette
"Invoice Data," and the inventory data diskette, if you have
one, "Inventory Data." We also recommend that you keep an
updated backup copy of your data diskette(s) as protection
against diskette damage or loss.

IMPORTANT: To leave any program in the Invoice Management
package, choose the EXIT option from the program's selection
list. Otherwise, the files are not closed properly, and you
could lose some of the information on the diskette.

The Initialization program sets up positions for your customer
and stock item records on your Invoice data diskette. After the
initialization is complete, you specify the name of your
printing device, your company's name, the last invoice number
printed, the type of invoicing system, and the applicable
sales-tax rate. In addition, you can assign codes for up to 10
methods and 10 terms of payment. Then, if you wish, the program
prints a list of these methods and terms of payment.

The Initialization program sets up three files on your Invoice
data diskette. The first file, DSK1.COND, contains the methods
of payment, terms of payment, company name, invoice comments,
last invoice number, maximum number of customers, maximum number
of items, maximum number of invoices, printing device name,
invoicing system used, and current sales tax rate. DSK1.CUST,
the second file, contains entries for customer records. The
last file, DSK1.STOCK, contains entries for stock items.

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Before you use the Initialization program for the first
time, you must initialize your data diskette with the Disk
Manager Command Module (see the Disk Memory System owner's
manual for details). Then you must set up your records by
initializing the data diskette with the Initialization
program.

These two initialization procedures should only be
performed once. If you repeat either one of them, all the
information on your data diskette is erased.

STEP 1:   Be sure that the Personal Record Keeping or
           Statistics Command Module is inserted into
           the console. (See the owner's manual for
           instructions.)

STEP 2:   Press any key to pass the title screen.
           Then press 1 to select TI BASIC. To load
           the program, insert the Invoice Management
           diskette into Disk Drive 1, type

                OLD DSK1.INIT

           and press ENTER. When the cursor reappears,
           type RUN and press ENTER.

STEP 3:   The Initialization title screen appears
           next. Press any key to continue. The
           program now reminds you to insert the data
           diskette. Remove the Invoice Management
           diskette, and insert your Invoice data
           diskette into Disk Drive 1. Then press
           ENTER.

STEP 4:   Next, the program displays the date as
           01/01/00 and asks you to enter "today's
           date." This date appears at the top of your
           printed records. To enter the date, type
           the number of the month as two digits and
           press ENTER. Then enter the day and the
           year in the same manner.

STEP 5:   The program now displays the following
           selection list.

                1   INITIALIZE INVOICE FILES
                2   CHANGE INVOICE
                    INFORMATION
                3   END SESSION

           Type the number beside the option you want,
           and press ENTER.

OPTION 1:   INITIALIZE INVOICE FILES

Remember, this option should be selected
only when you are setting up for the first
time.

When you enter 1, the program asks whether
you are using System 1 (one disk drive and
one data diskette) or System 2 (two disk
drives and two data diskettes). Enter the
number for the system you have.

If you select System 2, the program begins
initializing 560 customer records on your
Invoice data diskette. If you select System
1 to store both the customer and stock items
on the data diskette in Disk Drive 1, enter
the number of stock-item records you want.
The computer then automatically calculates
the number of customer records that will fit
in the remaining space. As a general rule,
5 stock-item records take about as much
space as one customer record. For example,
if you specify 10 stock items, the items
would take about as much space as two
customer records. You can then have 558
(560 minus 2) customer records. With 800
stock items (equals 160 customer records),
you have room for 400 (560 minus 160)
customer files. After you enter the number
of stock items, the computer displays the
number of customer records and asks whether
the information is correct. To try a
different number, enter N for "no." If the
balance is what you want, enter Y for "yes."

When you find the correct balance, the
program asks whether this is a trial run.
If you enter Y for "yes," the program
returns to the Initialize Invoice Files
selection list. To initialize the records
on the diskette, enter N for "no."

The program now begins initializing the
records on the data diskette. Since this
process takes several minutes to complete,
each record number is displayed as it is
initialized. To stop the initialization
procedure, press BACK, and the program
returns to the Initialize Invoice Files
selection list. However, each time you
select this procedure, the program starts
over with the first record. Also, you must
initialize all records before you enter your
invoice data.

Note: The initialization process should
only be performed on a newly initialized
diskette (see "Background").

After the initialization is complete, the
program displays Initialize Invoice Files
selection.

OPTION 2:   CHANGE INVOICE INFORMATION

When you select Option 2 or complete Option
1, the program asks for the name of the
printing device which prints your invoices.
Since the Invoice Management package
requires an 80-column printer, you must use
a TI RS232 Interface and an
RS232C-compatible printer. To remind you of
this, the display shows a partial answer of
RS232.BA=. Press the right-arrow key to
position the cursor after the equals sign.
Then complete the name as explained in the
TI RS232 Interface owner's manual and press
ENTER. The device name can be a maximum of
24 characters long.

After you specify the printing device, the
Update Invoice Information selection list
appears.

1   COMPANY NAME
     COMMENTS
2   METHOD OF PAYMENT
3   TERMS OF PAYMENT
4   LAST INVOICE NUMBER
     SALES TAX RATE
     PRINTING DEVICE NAME
     INVOICING SYSTEM
5   LIST INFORMATION
6   END SESSION

Company Name, Comments

If you enter 1, the program asks for your
company name and address. The information
you enter can be up to four lines long, with
a maximum of 25 characters per line. In
addition, you may enter up to three lines of
comments, such as your company's slogan,
business hours, telephone number, or billing
policies. Then, with the Invoice Printing
program, you can specify where you want
these comments printed on your invoices.

Method of Payment

With option 2, you list the methods of
payment your customers might use. You can
enter 20-character descriptions for up to 10
methods of payment. Then, when you set up
your customer files, you include the method
of payment number; and when you print the
invoices, the program includes the
description of the payment method. For
examples of some commonly used methods of
payment, see the list at the end of this
section. To delete a payment description,
position the cursor on the beginning of the
description, and press AID. After you
complete your list of payment descriptions,
press PROC'D. The program then returns to
the Update Invoice Information selection
list.

Terms of Payment

If you choose option 3, you can list the
terms of payment your customers might use.
You can enter 20-character descriptions for
up to 10 terms of payment. Then, when you
set up your customer files, you include the
terms of payment number; and when you print
the invoices, the program includes the
description of the payment terms. For
examples of some commonly used terms of
payment, see the list at the end of this
section. To delete a description, position
the cursor on the beginning of the
description, and press AID. After you
complete your list of descriptions, press
PROC'D. The program then returns to the
Update Invoice Information selection list.

Last Invoice Number, Sales Tax Rate, Printing Device Name, Invoicing System

When you select option 4, the program asks
you to enter the number of the last invoice
issued. This number can be a maximum of
nine digits long and acts as the starting
invoice number. Then, each time you write
an invoice, the program increments the
number by one. To change your numbering
method, run the Initialization program,
select this option, and enter the new
starting number.

Next, enter the current sales-tax rate as a
percentage from 0 through 99.00. Then, when
you invoice a customer who pays sales tax,
the computer automatically calculates the
sales tax due on all taxable items. Note
that the rate should be entered with a
maximum of two decimal places. Otherwise,
you could get incorrect results to the
calculations.

Now the program gives the option to change
the name of the printing device you entered
previously. Press ENTER if the device name
is correct. To change the device name,
press ERASE to erase the previous name or
press the right-arrow key to move the cursor
to the first character you want to change.
Then enter the correct device name.

If you are using System 2, the program
automatically returns to the Update Invoice
Information selection list. If you are
using System 1, you can change to System 2.
If you choose to do so, the display turns
yellow and a message asks if you're sure you
want to change. <u>Note</u>: Once you change to
System 2, you cannot change back to System
1. For information on the two types of
systems, see the "Background" section of
this manual.

List Information

If you select the List Information option,
the program prints a copy of the information
you have entered. If no printer was named
previously, the program asks you to enter
the name of the printing device. To stop
printing and return to the Update Invoice
Information selection list; press BACK.

End Session

Select this option from the Update Invoice
Information selection list to stop the
program and return to TI BASIC. The data
files are closed and the message SESSION
COMPLETED is displayed.

OPTION 3:   END SESSION

See "End Session" above.

INITIALIZATION Example

The following lists give some sample descriptions of methods and terms of payment to help you develop the descriptions for your invoices.

Number	Method of Payment
1	Personal Check
2	Traveler's Check
3	Company Check
4	Cash Voucher
5	Cashier's Check
6	Certified Check
7	Major Credit Card
8	Company Credit Card
9	Cash

Number	Terms of Payment
1	100% OF BAL
2	25% OF BAL; $25 MIN
3	50% OF BAL; $25 MIN
4	10% OF BAL; $15 MIN

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Using the Update program, you enter your customer information,
including address, active or inactive status, sales tax,
discount, and the method and terms of payment. In addition,
with System 1 (one disk drive and one data diskette), you enter
stock item information, including the description, active or
inactive status, unit price, and taxable or nontaxable status.
After the information is entered, you can print a complete or
partial listing of the files.

The Update program requests the following information for each
customer you enter. The table also shows the types and lengths
of the customer data, plus the acceptable values for the entries.

FIELD	TYPE	LENGTH	DECIMAL	ACCEPTABLE VALUES
Customer Number	Int	3	0	1 to 560
Name (Line 1)	Char	25	0	------
Address (Line 2)	Char	25	0	------
Address (Line 3)	Char	25	0	------
Address (Line 4)	Char	25	0	------
Active	Char	1	0	Y or N
Sales Tax	Char	1	0	Y or N
Discount	Int	2	0	0 to 99
Method of Payment	Int	2	0	1 to 10
Terms of Payment	Int	2	0	1 to 10

The following table shows the information requested for stock
items, including the types, lengths, and acceptable values.

FIELD	TYPE	LENGTH	DECIMAL	ACCEPTABLE VALUES
Item Number	Int	4	0	1 to 2790
Description	Char	15	0	------
Active	Char	1	0	Y or N
Unit Price	Dec	7	2	0.00 to 99999.00
Taxable	Char	1	0	Y or N

When you are entering or changing items in your files, the
program asks for the information listed under FIELD. The answer
you enter must be the type shown on these tables, where "Int"
means integer (numbers without decimals), "Char" means character
(combination of letters and numbers), and "Dec" means decimal
(numbers with decimals). The LENGTH column tells you how many
numbers or letters you can enter in each "field," and the
DECIMAL column shows the number of places allowed after the
decimal point. ACCEPTABLE VALUES gives the range of the values
you can enter.

Note: When entering the customer and item numbers, keep in mind
that the program always searches through the data starting with
number 1, even if your first customer or item number is larger.
Therefore, the search takes less time if you start numbering
from 1. Also note that any decimal values should be entered
with a maximum of two decimal places. Otherwise, you could get
incorrect results to the calculations.

STEP 1:   Be sure that the Personal Record Keeping or
          Statistics Command Module is inserted into
          the console. (See the owner's manual for
          instructions.)

STEP 2:   Press any key to pass the title screen.
          Then press 1 to select TI BASIC. To load
          the program, insert the Invoice Management
          diskette into Disk Drive 1, type

                  OLD DSK1.UPDATE

          and press ENTER. When the cursor reappears,
          type RUN and press ENTER.

STEP 3:   The Update title screen appears next. Press
          any key to continue. The program now
          reminds you to insert your data diskette.
          Remove the Invoice Management diskette and
          insert your Invoice data diskette into Disk
          Drive 1. If you are using System 2, insert
          your Inventory data diskette into Disk Drive
          2. Then press ENTER.

STEP 4:   The program now asks you to enter the date.
          This date appears at the top of your printed
          customer and stock item listings. Type the
          month, day, and year as two digits each,
          pressing ENTER after each entry.

STEP 5:   The Update Records selection list appears
          next.

                  1   UPDATE CUSTOMERS
                  2   UPDATE ITEMS
                  3   LIST CUSTOMERS
                  4   LIST ITEMS
                  5   END SESSION

          Type the number of the option you want, and
          press ENTER.

OPTION 1: UPDATE CUSTOMERS

When you enter 1, the program asks for the customer number. To change the information on an existing customer, enter that number, and the computer displays that customer's file for correction. For a new customer, enter a number not previously used.

Next, enter the customer's name and address, using a maximum of four lines with up to 25 characters per line. Then indicate whether the customer's file is active by entering Y for "yes" or N for "no." By changing this entry, you can enter information on customers whose accounts are only active part of the year.

Now the program asks whether you charge this customer sales tax. If not, enter N for "no." If so, enter Y for "yes," and the computer automatically adds sales tax to that customer's invoices.

Next, if appropriate, enter a discount percentage which is automatically applied to that customer's invoices. Finally, enter the codes for the method and terms of payment.

After you enter all of the information, the program asks whether it's correct. Enter Y for "yes" or N for "no."

After you complete your customer information, press BACK to return to the Update Records selection list.

OPTION 2:   UPDATE ITEMS

If you select the Update Items option, the
program first checks to see if you are using
System 2 (two disk drives and two data
diskettes). If so, the computer returns to
the Update Records selection list because
all corrections to the Inventory data
diskette must be made with the Update
program in the Inventory Management
package. (See the Inventory Management
owner's manual for details.)

With a System 1 setup, you are first asked
to enter the stock item number. To change
an existing item, enter its number, and the
program displays the information on the item.

To add a new stock item, enter a number you
have not previously used. Next, enter a
maximum 15-character description or
inventory number of the item. Then indicate
whether the item is active or inactive. The
program now asks for the unit price of the
item. Finally, specify whether the item is
taxable. If so, the program automatically
calculates the tax amount for your invoices.

After you enter all of the information, the
program asks whether it's correct. Enter Y
for "yes" or N for "no."

After you complete your stock item
information, press BACK to return to the
Update Records selection list.

OPTION 3:   LIST CUSTOMERS

After you select Option 3, indicate whether
you want a printed copy of your active or
inactive customers. Enter 1 for "active" or
2 for "inactive." Next, enter the numbers
of the first and last customer files you
want printed. If you do not have the RS232
Interface and a compatible printer attached
and turned on, the program now displays the
error message, I/O ERROR OO IN XXXX. If the
RS232 Interface and printer are attached and
turned on, the computer prints the
information, using the printing device
specified previously. When the printing is
complete, the message END OF RPT is printed,
and the computer returns to the Update
Records selection list. To stop the
printout before it's finished, press BACK,
and the program displays the selection list.

OPTION 4:   LIST ITEMS

To utilize the List Items option, you must
use System 1 (one disk drive and one data
diskette). With System 2 (two drives and
two diskettes), this option is not valid.

When you select this option with System 1,
indicate first whether you want a printed
copy of your active or inactive stock
items. Enter 1 for "active" or 2 for
"inactive." Next, enter the numbers of the
first and last customer files you want
printed. The computer then prints the
information, using the printing device
specified previously. When the printing is
complete, the message END OF RPT is printed,
and the computer returns to the Update
Records selection list. To stop the
printout before it's finished, press BACK,
and the program displays the selection list.

OPTION 5:   END SESSION

              When the selection list is displayed, press
              5 to stop the program and return to TI
              BASIC. The data files are closed, and the
              message SESSION COMPLETED is displayed.

The Invoice Writing program lets you use your customer and
stock-item files to write invoices. The program automatically
calculates item subtotals, item totals, invoice subtotals,
invoice totals, sales tax, and appropriate discounts. You can
invoice up to 200 items, with a maximum of 10 items per invoice,
before you must print the invoices and start over. You can also
display information on your customers and stock items.

STEP 1:   Be sure that the Personal Record Keeping or
            Statistics Command Module is inserted into
            the console. (See the owner's manual for
            instructions.)

STEP 2:   Press any key to pass the title screen.
            Then press 1 to select TI BASIC. To load
            the program, insert the Invoice Management
            diskette into Disk Drive 1, type

                    OLD DSK1.WRITE

            and press ENTER. When the cursor reappears,
            type RUN and press ENTER.

STEP 3:   The Invoice Writing title screen appears
            next. Press any key to continue. The
            program now reminds you to insert your data
            diskette. Remove the Invoice Management
            diskette, and insert your Invoice data
            diskette into Disk Drive 1. If you are
            using System 2, you must also insert your
            Inventory data diskette into Disk Drive 2.
            Then press ENTER.

STEP 4:   The program now asks you to enter the
            invoicing date. This date appears at the
            top of all your invoices. Type the month,
            day, and year as two digits each, pressing
            ENTER after each entry.

STEP 5:   The Invoice Writing selection list appears
            next, giving you these options.

                1   INVOICE WRITING
                2   DISPLAY CUSTOMERS
                3   DISPLAY ITEMS
                4   END SESSION

            Type the number beside the option you want,
            and press ENTER.

OPTION 1:   INVOICE WRITING

When you enter 1, the computer asks if you
want to start the invoices over. Enter Y
for "yes" or N for "no." If you answer no
and do not have space for another invoice on
your diskette, the message PRINT CURRENT
INVOICES AND THEN RESTART appears. This
message also appears during the session when
the diskette does not have space for another
invoice. To continue, use the Invoice
Printing program to print the existing
invoices.

When you start a new invoice, the program
displays the next invoice number. (This
number is automatically incremented each
time you write a new invoice.) Now enter
the number of the customer being invoiced.
If you enter the number of an inactive
customer, the program displays INACTIVE and
asks you to enter another customer number.
When you enter the number of an active
customer, the computer displays the
customer's name and address. Next, enter
the item number you are invoicing. Again,
the program displays INACTIVE if the item is
inactive and asks for another item number.
When you enter the number of an active item,
the description of the item is displayed,
and you enter the quantity to be invoiced.
The computer then calculates and displays
the subtotal, tax, and total for the item.
After you enter five items, the display is
erased and you can continue with item six.
The number of items on the current invoice
appears in the lower left-hand corner of the
display.

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When an invoice is complete (after a maximum
of 10 items), press PROC'D. The program
then displays the net, tax, and gross totals
for all items on the invoice and asks if the
information is correct. Press N for "no" to
start the invoice over from the beginning,
or press Y for "yes" to start the next
invoice. After you complete the last
invoice, press BACK to return to the Invoice
Writing selection list.

OPTION 2:   DISPLAY CUSTOMERS
Select Option 2 to display information on
your customers. This option can help you
locate the number of the customer you want
to invoice.

Enter the number of the first customer file
you want displayed. The program then lists
all customers beginning with the one
specified. An asterisk appears to the left
of the name for each inactive customer
file. When the list reaches the bottom of
the display, press ENTER to display more
files or BACK to return to the Invoice
Writing selection list.

OPTION 3:   DISPLAY ITEMS
When you select the Display Items option,
the program first checks to see if you are
using System 2 (two disk drives and two data
diskettes). If so, the computer returns to
the Invoice Writing selection list. To list
the items with System 2, you must use the
Inventory Management package (see the
owner's manual for details).

If you are using System 1, you can use the
Display Items option to refer to your stock
items for help in writing your invoices.
Enter the number of the first stock item
file you want displayed. The program then
lists all items beginning with the one
specified. An asterisk appears to the left
of the description for each -inactive stock
item file. When the list reaches the bottom
of the display, press ENTER to display more
items or BACK to return to the Invoice
Writing selection list.

OPTION 4:   END SESSION
Select Option 4 to stop the program and
return to TI BASIC. The program closes the
files and displays the message SESSION
COMPLETED.

The Invoice Printing program prints the invoices you wrote with
the Invoice Writing program. You can also use the printing
program to format the invoices to suit your needs. The program
is designed for an 80-column printer. However, you can change
the column width, if necessary.

STEP 1:   Be sure that the Personal Record Keeping or
           Statistics Command Module is inserted into
           the console. (See the owner's manual for
           instructions.) Also be sure that your
           printer is properly attached and turned on.

STEP 2:   Press any key to pass the title screen.
           Then press 1 to select TI BASIC. To load
           the program, insert the Invoice Management
           diskette into Disk Drive 1, type

                    OLD DSK1.PRINT

           and press ENTER. When the cursor reappears,
           type RUN and press ENTER.

STEP 3:   The Invoice Printing title screen appears
           next. Press any key to continue. The
           program now reminds you to insert your data
           diskette. Remove the Invoice Management
           Diskette, and insert your Invoice data
           diskette into Disk Drive 1. If you are
           using System 2, you must also insert your
           Inventory data diskette into Disk Drive 2.
           Then press ENTER.

STEP 4:   The Invoice Printing selection list appears
           next, giving you three options.

           1   INVOICE PRINTING   .
           2   INVOICE ALIGNMENT
           3   END SESSION   .

           Type the number beside the option you want,
           and press ENTER.

OPTION 1: INVOICE PRINTING

           If you enter 1, the program asks whether you
           want to print all of the invoices. If so,
           enter Y for "yes." If not, enter N for
           "no," and you are asked to enter the numbers
           of the first and last invoices you want
           printed. After you specify all or part of
           the invoices, the computer prints them.
           When the printout is complete, the display
           returns to the Invoice Printing selection

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list. To stop the printout before it's
complete, press BACK, and the selection list
is displayed.

OPTION 2:   INVOICE ALIGNMENT

Option 2 enables you to properly align your
invoicing form before you print the
invoices. When you select this option, the
computer prints one page, showing the
maximum possible size of each field so that
you can check the alignment. The program
then asks if you want to check another page
for alignment. If so, enter Y for "yes."
If not, enter N for "no," and the Invoice
Printing selection list is displayed.

OPTION 3:   END SESSION

Select Option 3 to stop the program and
return to TI BASIC. The program closes the
files and displays the message SESSION
COMPLETED.

The Invoice Printing program prints out your invoices as shown
in the example at the end of this section. However, you can
change some of the statements in the program in order to change
the lengths of the items or rearrange the order of the
information.

You can change the SEG$ statements at the beginning of each
print routine to alter the lengths of the ·fields. With
character-type information, the SEG$ statement tells the
computer to start with the first character on the left and read
the next "x" characters to the right. For example, the stock
description statement in line 2950 reads SEG$(DE$,1,15). When
the computer performs the statement in this line, it starts with
the first character in DE$ and reads fifteen characters.
Therefore, if you want a 10-character description instead,
simply change the statement to SEG$(DE$,1,10).

With numeric-type data, such as quantity invoiced, unit price,
or sales-tax rate, the data is right-justified in the field.
For example, in line 2960, the quantity-invoiced statement is
SEG$(QTY$,1,5). This tells the computer to start with the first
number and read five numbers. With a quantity of 1, the data
would be formatted as "----1". Thus, if you only want three
digits on your form, change the statement to SEG$(QTY$,3,3).
The computer then starts with the third place from left and
reads three characters. For further information on the SEG$
statement, refer to the User's Reference Guide.

To rearrange the order of the information on the invoice, simply
move the lines within the program. To reset the column
positions, change the TAB instructions in the PRINT statements.

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Print Invoice Headings

```
2520 REM ***PRINT INVOICE HEADING***
2530 LINE=0
2540 REM TOP OF FORM
2550 PRINT #1:CHR$(12)
2560 REM PRINT COMPANY NAME AND COMMENTS
2570 CPY$(1)=SEG$(CPY$(1),1,25)
2580 CPY$(2)=SEG$(CPY$(1),1,25)
2590 CPY$(3)=SEG$(CPY$(3),1,25)
2600 CPY$(4)=SEG$(CPY$(4),1,25)
2610 CMT$(1)=SEG$(CMT$(1),1,25)
2620 CMT$(2)=SEG$(CMT$(2),1,25)
2630 CMT$(3)=SEG$(CMT$(3),1,25)
2640 PRINT #1:CPY$(1);TAB(48);CMT$(1)
2650 PRINT #1:CPY$(2);TAB(48);CMT$(2)
2660 PRINT #1:CPY$(3);TAB(48);CMT$(3)
2670 PRINT #1:CPY$(4)
2680 PRINT #1:" "
2690 PRINT #1:" "
2700 PRINT #1:" "
2710 PRINT #1:" "
2720 REM PRINT CUSTOMER ADDRESS, INVOICE # AND DATE
2730 AD1$=SEG$(AD1$,1,25)
2740 AD2$=SEG$(AD2$,1,25)
2750 AD3$=SEG$(AD3$,1,25)
2760 AD4$=SEG$(AD4$,1,25)
2770 IN$=SEG$(IN$,1,9)
2780 PRINT #1:"CUSTOMER:  ";AD1$;TAB(50);"DATE:  ";DAT$
2790 PRINT #1:TAB(11);AD2$
2800 PRINT #1:TAB(11);AD3$;TAB(50);"INVOICE#:  ";IN$
2810 PRINT #1:TAB(11);AD4$
2820 PRINT #1:" "
2830 PRINT #1:" "
2840 PRINT #1:" "
2850 REM PRINT COLUMN HEADINGS
2860 PRINT #1:"-----------------------------------------------
-----------"
2870 PRINT #1:"I   I ITEM    DESCRIPTION    QTY   UNIT    SALES
     SUBTOTAL  I"
2890 PRINT #1:"I   I NO.                          PRICE   TAX
     I"
2870 PRINT #1:"-----------------------------------------------
-----------"
2900 RETURN
```

Print Invoice Items

```
2910 REM ***PRINT INVOICE ITEMS***
2920 LINE=LINE+1
2930 I$=SEG$(I$,1,2)
2940 S$=SEG$(S$,1,5)
2950 DE$=SEG$(DE$,1,15)
2960 QTY$=SEG$(QTY$,1,5)
2970 PRC$=SEG$(PRC$,1,8)
2980 TAX$=SEG$(TAX$,1,8)
2990 SUB$=SEG$(SUB$,1,13)
2300 PRINT #1:"I ";I$;TAB(6);"I";S$;TAB(15);DE$;TAB(33);QTY$;
TAB(41);PRC$;TAB(51);TAX$;TAB(66);SUB$;TAB(80);"I"
2310 RETURN
```

Print Invoice Totals

```
3020 REM ***PRINT INVOICE TOTALS***
3030 REM SPACE TO BOTTOM OF PAGE
3040 LINE=LINE+1
3050 IF LINE>20 THEN 3080
3060 PRINT #1:"I    I";TAB(80);"I"
3070 GOTO 3040
3080 PRINT #1:"--------------------------------------------------
-----------"
3090 REM PRINT TOTALS
3100 TOT$=SEG$(TOT$,1,14)
3110 DIS$=SEG$(DIS$,1,14)
3120 TAX$=SEG$(TAX$,1,14)
3130 MOP$=SEG$(MOP$,1,20)
3140 TOP$=SEG$(TOP$,1,20)
3150 GTOT$=SEG$(GTOT$,1,14)
3160 PRINT #1:TAB(62);"I";TAB(65);TOT$;TAB(80);"I"
3170 PRINT #1:TAB(44);"-";STR$(DIS);"% DISCOUNT";TAB(62);"I";
TAB(65);DIS$;TAB(80);"I"
3180 PRINT #1:TAB(44);"+";STR$(SAL);"% SALES TAX";TAB(62);"I";
TAB(65);TAX$;TAB(80);"I"
3190 PRINT #1:"METHOD OF PAYMENT:  ";MOP$;TAB(62);
"-------------------"
3200 PRINT #1:TAB(62);"I";TAB(65);GTOT$;TAB(80);"I"
3210 PRINT #1:"TERMS OF PAYMENT:  ";TOP$;TAB(62);
"-------------------"
3220 RETURN
```

```
(company information)                    (comments)
XXXXXXXXXXXXXXXXXXXXXXXXXX                XXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXX                XXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXX                XXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXX


CUSTOMER: XXXXXXXXXXXXXXXXXXXXXXXXXX      DATE: XX/XX/XX
          XXXXXXXXXXXXXXXXXXXXXXXXXX
          XXXXXXXXXXXXXXXXXXXXXXXXXX      INVOICE #: XXXXXXXXX
          XXXXXXXXXXXXXXXXXXXXXXXXXX


---------------------------------------------------------------------
I   I ITEM    DESCRIPTION      QTY    UNIT      SALES         SUBTOTAL
I   I NO.                             PRICE     TAX
---------------------------------------------------------------------
I XX IXXXXX XXXXXXXXXXXXXXX XXXXX XXXXX.XX XXXXXXXXXX.XX XXXXXXXXXX.
I XX IXXXXX XXXXXXXXXXXXXXX XXXXX XXXXX.XX XXXXXXXXXX.XX XXXXXXXXXX.
I XX IXXXXX XXXXXXXXXXXXXXX XXXXX XXXXX.XX XXXXXXXXXX.XX XXXXXXXXXX.
I XX IXXXXX XXXXXXXXXXXXXXX XXXXX XXXXX.XX XXXXXXXXXX.XX XXXXXXXXXX.
I    I
I    I
I    I
I    I
I    I
I    I
I    I
I    I
I    I
I    I
I    I
I    I
I    I
I    I
---------------------------------------------------------------------
                                              I XXXXXXXXXXX.XX
                             -X% DISCOUNT      I XXXXXXXXXXX.XX
                             +X% SALES TAX     I XXXXXXXXXXX.XX
METHOD OF PAYMENT: XXXXXXXXXXXXXXXXXXX
                                              I XXXXXXXXXXX.XX
TERMS OF PAYMENT:  XXXXXXXXXXXXXXXXXXX
```

Using the Delete program, you can delete any of the items on
your data diskette to make room for new data. The deletions can
include all of your records, your inactive records, or a
selected portion of your records. The program also lists the
items you delete.

STEP 1:   Be sure that the Personal Record Keeping or
           Statistics Command Module is inserted into
           the console. (See the owner's manual for
           instructions.)

STEP 2:   Press any key to pass the title screen.
           Then press 1 to select TI BASIC. To load
           the program, insert the Invoice Management
           diskette into Disk Drive 1, type

                  OLD DSK1.DELETE

           and press ENTER. When the cursor reappears,
           type RUN and press ENTER.

STEP 3:   The Delete title screen appears next. Press
           any key to continue. The program now
           reminds you to insert the data diskette.
           Remove the Invoice Management diskette, and
           insert your Invoice data diskette into Disk
           Drive 1. Then press ENTER.

STEP 4:   The programs asks whether you want to delete
           customer records, delete item records, or
           end the session. Enter 1, 2, or 3.

STEP 5:   Now the program asks you to enter the
           starting and ending customer or item numbers
           for your review. For each, type the number,
           and press ENTER.

STEP 6:   The next display provides a selection list
           for you to choose the group of records you
           want to delete. The options are:

           1   ALL RECORDS
           2   INACTIVE RECORDS
           3   SELECTIVE

           With option 1 or 2, the items in the
           specified range will be automatically
           deleted. If you select option 3, the
           program will display each item in the
           specified range so that you can decide which
           ones to delete.

STEP 7: After choosing the group of records you wish
          to delete, the program asks you to indicate
          whether you want a listing of the items you
          delete. If so, enter the name of the
          printing device.

STEP 8: Now you are ready to delete your records.
          If you selected "All Records" or "Inactive
          Records," the program begins deleting the
          indicated items.

          If you chose "Selective" from the selection
          list, the program displays one customer or
          item at a time. Then you are asked whether
          you want to delete the information. Enter Y
          for "yes" or N for "no."

          With any of the three options, if you
          requested a list of the files you delete,
          the computer prints the information before
          deleting the file.

STEP 9: When the group of files you specified is
          completed, the display returns to the main
          selection list. To stop the deletions
          before they are completed, press BACK, and
          the selection list is displayed. (<u>Note</u>:
          This does not restore any deletions which
          have already occurred.)

STEP 10: Select option 3 from the main selection list
          to stop the program and return to TI BASIC.
          The files are closed, and the message
          SESSION COMPLETED is displayed.

The Convert 1 program lets you convert up to 100 customer files
from your data diskette into a file which can be read by the
Personal Record Keeping or Statistics Command Module.   In this
way, you can utilize the capabilities of either module to
manipulate your invoice data.

When you convert your data to a Personal Record Keeping file,
you can use the Personal Record Keeping module to perform
certain procedures, such as alphabetizing the items, sorting the
items into subsets based on a certain characteristic, or
performing mathematical calculations.   In addition, you can use
the Statistics module to perform such statistical calculations
as mean, standard deviation, correlation, linear regression,
t-tests, and analysis of variance.

The first time you use the Convert 1 program, you must copy an
additional file, called CUSTOMER, from the Invoice Management
diskette to your data diskette (see "User Instructions"). Then,
when you convert your data into a format readable by the
Personal Record Keeping and Statistics modules, the results are
stored in the CUSTOMER file. The structure of the resulting
Personal Record Keeping or Statistics file is as follows:

NUMBER	ITEM	TYPE	WIDTH	DECIMAL PLACES
1	Customer#	Int	3	0
2	Address 1	Char	15	0
3	Address 2	Char	15	0
4	Address 3	Char	15	0
5	Address 4	Char	15	0
6	Discount	Int	2	0
7	Pay Method	Int	2	0
8	Pay Terms	Int	2	0
9	Sales Tax	Int	1	0

To manipulate your data with Personal Record Keeping or
Statistics, load the CUSTOMER file into the computer's memory,
following the directions in the module owner's manual. After
you complete the procedures or calculations you want to perform
with the module, use the Convert 2 program to convert the file
back into the Invoice Management format.

STEP 1:   Before you convert an Invoice Management
          file into the Personal Record Keeping and
          Statistics format, the Personal Record
          Keeping and Statistics file structure must
          be set up on your Invoice data diskette.
          Note: You only need to perform this step
          the first time you use the Convert 1 program.

          To begin, insert the Personal Record Keeping
          or Statistics Command Module into the
          console. Press any key to pass the title
          screen. Then press 3 to select PERSONAL
          RECORDS or STATISTICS. Next, insert the
          Invoice Management diskette into Disk Drive
          1.

          To load the DSK1.CUSTOMER file from the
          Invoice Management diskette, follow the
          directions in the "Loading Data" section of
          the Personal Record Keeping or Statistics
          owner's manual. Then remove the Invoice
          Management diskette, insert the Invoice
          data diskette, and follow the directions in
          the manual for "Storing Data" to copy the
          file on your data diskette. Next, select
          the EXIT option from the module's Main Index
          to leave the module program and return to
          the master title screen.

STEP 2:   Leave the Personal Record Keeping or
          Statistics module inserted into the console.
          Press any key to pass the master title
          screen. Then press 1 to select TI BASIC. To
          load the program, insert the Invoice
          Management diskette into Disk Drive 1, type

                    CALL P(8000)

          and press ENTER. Next, type

                    OLD DSK1.CONVERT1

          and press ENTER. When the cursor reappears,
          type RUN and press ENTER.

          IMPORTANT: You must return to the master
          title screen and reselect TI BASIC before
          entering CALL P(8000).

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STEP 3:   The Convert 1 title screen appears next.
            Press any key to continue. The computer
            then asks if you entered CALL P(8000) before
            loading the program. If not, enter N for
            "no" and you are returned to TI BASIC. To
            reload the program, including the CALL
            P(8000) statement, enter BYE to leave TI
            BASIC. Next, press any key to pass the
            title screen and then press 1 to select TI
            BASIC again. Now reload the program. When
            the program asks about CALL P(8000), enter Y
            for "yes" and the program continues.

            Note: If you do not enter CALL P(8000), the
            program stops and displays the error
            message, NUMBER TOO BIG IN xxx.

STEP 4:   The program now reminds you to insert your
            data diskette. Remove the Invoice
            Management diskette and insert your Invoice
            data diskette into Disk Drive 1. Then press
            ENTER.

STEP 5:   Next, the program asks you for the numbers
            of the customer files you want to convert.
            With this program, you can convert a maximum
            of 100 items at a time. Type the starting
            and ending customer numbers, pressing ENTER
            after each.

            When you enter the second customer number,
            the program begins the conversion. The
            display shows you the number of the file
            currently being converted and asks you to
            PLEASE WAIT. The converted data is stored
            in the DSK1.CUSTOMER file. Note: You
            cannot stop the conversion process once it
            starts.

            When the conversion is completed, the
            program stops, and the files are closed.
            You are returned to TI BASIC, and the
            message SESSION COMPLETED is displayed.

Now enter BYE to leave TI BASIC. You can
then reselect the Personal Record Keeping or
Statistics module, reload the DSK1.CUSTOMER
file from your data diskette, and perform on
your file any of the functions offered by
the module.

Note that you must also enter BYE to leave
TI BASIC and then reselect BASIC before you
can load another program.

The Convert 2 program lets you convert a Personal Record Keeping or Statistics file from the Convert 1 program back into a format which can be read by the Invoice Management package.

STEP 1:   Be sure that the Personal Record Keeping or
           Statistics module is inserted into the
           console. (See the owner's manual for
           instructions.)

STEP 2:   Press any key to pass the master title
           screen. Then press 1 to select TI BASIC.
           To load the program, insert the Invoice
           Management diskette into Disk Drive 1, type

                        CALL P(8000)

           and press ENTER. Next, type

                     OLD DSK1.CONVERT2

           and press ENTER. When the cursor reappears,
           type RUN and press ENTER.

           IMPORTANT: You must return to the master
           title screen and reselect TI BASIC before
           entering CALL P(8000).

STEP 3:   The Convert 2 title screen appears next.
           Press any key to continue. The computer
           then asks if you entered CALL P(8000) before
           loading the program. If not, enter N for
           "no" and you are returned to TI BASIC. To
           reload the program, including the CALL
           P(8000) statement, enter BYE to leave TI
           BASIC. Next, press any key to pass the
           title screen and then press 1 to select TI
           BASIC again. Now reload the program. When
           the program asks about CALL P(8000), enter Y
           for "yes" and the program continues.

           Note: If you do not enter CALL P(8000), the
           program stops and displays the error
           message, NUMBER TOO BIG IN xxx.

STEP 4:   The program now reminds you to insert your
           data diskette. Remove the Invoice
           Management diskette and insert your Invoice
           data diskette into Disk Drive 1. Then press
           ENTER.

STEP 5:   Next, the program converts the Personal
Record Keeping or Statistics file into a
format readable by the Invoice Management
package. A message appears asking you to
wait, and the number of each item is
displayed as the item is converted. The
results are stored on your Invoice data
diskette. Note that since the maximum field
available in Personal Record Keeping or
Statistics is 15 characters, the customer
addresses are now shorter. If for some
reason the structure of the item has been
changed so that the two files are no longer
compatible, the item is not converted. If
this happens, you must reenter that
information with the Update program.

When the conversion is completed, the
program stops, and the files are closed.
You are returned to TI BASIC, and the
message SESSION COMPLETED is displayed.

Note that you must enter BYE to leave TI
BASIC and then reselect BASIC before you can
load another program.

The following worksheets can help you collect your customer and
stock item information, and determine your methods and terms of
payment.

CUSTOMER WORKSHEET

CUSTOMER #　　　　__ __ __

ADDRESS

— —
— —
— —
— —

ACTIVE　　　　　　__

SALES TAX　　　　__

DISCOUNT　　　　__ __

METHOD OF PAYMENT　__ __

TERMS OF PAYMENT　__ __

```
                        STOCK ITEM WORKSHEET

ITEM #              __ __ __ __

DESCRIPTION     __ __ __ __ __ __ __ __ __ __ __ __ __ __

ACTIVE              __

UNIT PRICE      __ __ __ __ __    __ __

TAXABLE             __
```

METHODS OF PAYMENT WORKSHEET

DESCRIPTION

1 _____

2 _____

3 _____

4 _____

5 _____

6 _____

7 _____

8 _____

9 _____

10 _____

TERMS OF PAYMENT WORKSHEET

DESCRIPTION

1 _

2 _

3 _

4 _

5 _

6 _

7 _

8 _

9 _

10 _

Active--Designates an item which you are currently trading in or a customer with whom you are currently doing business. Seasonal items, such as Christmas ornaments or swimsuits, may be active only part of the year.

Backup--Protecting information on a diskette by copying information on a diskette to another and putting the copy in a safe place.

Customer Number--Refers to a customer record you have stored on your data diskette.

Description--A description of a stock item which is printed on the inventory reports to help identify them.

Discount--A percentage reduction in the unit price of goods, usually based on the volume of transactions.

Inventory Number--A 12-character inventory number used by you or your supplier to identify a stock item.

Item Number--A number from 1 through 900 that references a stock item stored on your data diskette.

Quantity Invoiced--The quantity of an item you have issued (sold) by means of an invoice.

Quantity on Hand--The quantity of an item currently in stock.

Taxable--The designation of an item on which you charge sales tax or a customer to whom you must charge sales tax.

Unit Price--The selling price of one unit of a stock item.