

Appendix

Using the TI-73 and the CBL 2

Transferring DATAMATE to the TI-73

The DATAMATE software comes already loaded on your CBL 2™. Before you use the CBL 2 for the first time, you must transfer the DATAMATE software to the TI-73.

To transfer DATAMATE to a TI-73, follow these steps:

1. Connect the TI-73 to the CBL 2 with the unit-to-unit link cable.
2. Put the TI-73 in RECEIVE mode.
 - a. Press **[APPS]**.
 - b. Press **[↓]** to select **RECEIVE**.
 - c. Press **[ENTER]**.
3. On the CBL 2, press **TRANSFER**. The program or APP is transferred and appears in the TI-73's program list or application list.
4. When the transfer is complete, press **[2nd] [QUIT]** on the TI-73.

Starting the DATAMATE Software

The DATAMATE software currently runs as a program on the TI-73. For versions through Version 1.11, you must run DATAMATE by pressing the **[PRGM]** key.

To start DATAMATE using the **[PRGM]** key:

1. Be sure that the TI-73 is connected to the CBL 2 with the unit-to-unit link cable.

2. Press **[PRGM]**.

```

PRGM EDIT NEW
1: DATAMATE
2: DATCOLLC
3: DATGRAPH
4: DATKEYS1
5: DATKEYS2
6: DATKEYS3
7: DATKEYS4
  
```

3. Select 1:DATAMATE.

```

PRGM:DATAMATE
  
```

4. Press **[ENTER]** to start the program.

```

VERNIER SOFTWARE
  DATAMATE
  (VER 1.11)

ROM:1.12      (C) 2000
  
```

The Main Screen appears. If you have a sensor connected, the top line of the screen will list that sensor.

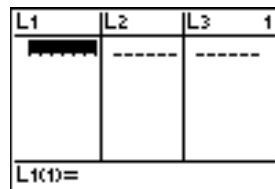
```

NODE: TIME GRAPH-20
-----
1:SETUP      4:ANALYZE
2:START      5:TOOLS
3:GRAPH      6:QUIT
  
```

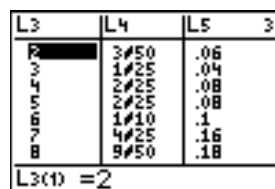
Working with Lists

On the TI-73, a set of numerical or text data is called a list. To access the list editor, press **[LIST]**. There are six pre-named lists (L1 through L6), but you can only see three on the screen at one time.

In this screen, the 1 in the upper right corner means that the cursor is located in the first list, L1. The L1 at the bottom left corner indicates that the cursor is in the first space in column L1. At this position you can enter numerical (real numbers) or text data.



In this screen, the first element in L3 is the number 2 and the 3 in the upper right corner means that the cursor is located in L3.



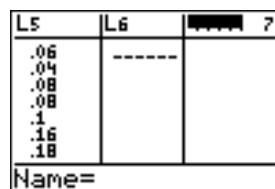
Entering Data into Lists

To enter the data into a list, type the number or character and press **[ENTER]**. This enters the value into the list and moves the cursor down to the next position.

Naming Lists

There are six pre-named lists (L1 through L6) that you cannot rename, but you can create a new list and name it anything you want. A list name can be one to five characters long.

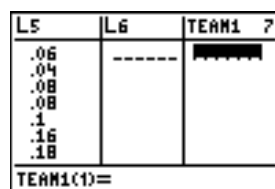
1. Press **[▲]** and **[▶]** to move to the first unnamed list.



2. Press **[2nd]** **[TEXT]** and use text, numbers, or a combination to create and name the list.
3. Select **Done** and press **[ENTER]**. The name will appear at the bottom of the screen at the Name prompt.



4. Press **[ENTER]** to place the name at the top of the list. The cursor moves to the first position in the list.



Defining Categorical Lists

In this screen, there are two named lists. The list named **COLOR** is called a *categorical* list and includes the subscripted *c* after the name **COLOR**. The list named **CLASS** is a *data* list since there is not a subscripted *c*. The **8** indicates the cursor is in list 8 of the List editor.

L6	COLOR c	CLASS	8
-----	GREEN	60	
	BLUE	31	
	ORANGE	44	
	RED	110	
	BROWN	150	
	YELLOW	106	

CLASS = {60, 31, 44, ...}			

Data lists are used for scatter plots, line graphs, histograms and both box plots. Categorical lists are used for bar graphs, circle graphs and pictographs.

To define a list as a categorical list:

1. Press **[LIST]**.
2. Press **[2nd]** **[TEXT]** to display the text editor.
3. Enter the first element by selecting characters from the Text editor. Press **[ENTER]** after selecting each character. When you have selected all the characters needed, move to **Done**, and press **[ENTER]**.

XXX

A	B	C	D	E	F	G	H	I	J
K	L	M	N	O	P	Q	R	S	T
U	V	W	X	Y	Z	{	}	"	_
=	≠	>	≥	<	≤	and	or		
Done									
"SF"									

L5	L6	HITTY c ?
.06	-----	SF
.04		
.08		
.08		
.1		
.16		
.18		
HITTY(2) =		

Note: For categorical lists, enter the first element of the list in quotes. The remaining elements do not have to contain quotes. (The quotation marks are found in the Text editor.)

Deleting and Retrieving Lists

There are six pre-named lists (L1 through 6) that you cannot rename. You can, however, delete them temporarily from the List editor. They are always retrievable after you delete them.

To delete a list:

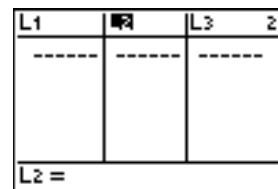
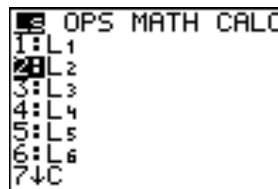
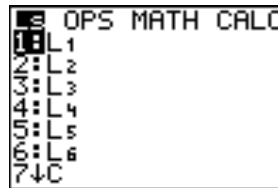
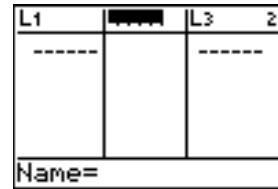
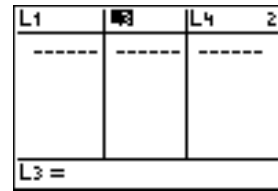
1. Highlight the list name (L2 in this example).
2. Press **[DEL]**. L2 is deleted from the List editor.

L1	L2	L3	2
-----	-----	-----	
L2 =			

L1	L3	L4	2
-----	-----	-----	
L3 =			

To retrieve the list:

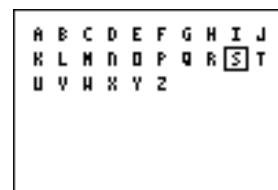
1. Highlight the list that is at the right of the column you want to insert the named list (L2) in front of.
2. Press **2nd** **[INS]**.
3. Press **2nd** **[STAT]**.
4. Press **↓** to select 2: L2.
5. Press **ENTER** to reinsert the list.



Restoring Default Lists

To return the List editor to its original configuration (L1 through L6), run the Setup Editor.

1. Press **2nd** **[CATALOG]** to access the Catalog.
2. To get to the S's in the Catalog quickly, press **2nd** **[TEXT]** and select S.
3. Press **ENTER**.



4. Scroll down to **SetUpEditor**.

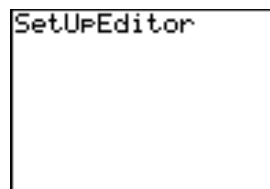


```

CATALOG
▶SetUpEditor
Shade(
▶Simp
sin(
sin⁻¹(
SingleConst
SortA(

```

5. Press **ENTER** to paste the command to the home screen.

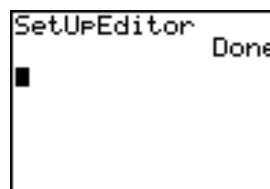


```

SetUpEditor

```

6. Press **ENTER** to execute the command.



```

SetUpEditor Done
█

```

Linking two calculators

You can transfer data from one TI-73 to another using the unit-to-unit cable.

To connect the TI-73 to another device using the unit-to-unit cable, use the link port located at the center of the bottom edge of the TI-73.

1. Insert either end of the unit-to-unit cable into the TI-73 port very *firmly*.
2. Insert the other end of the cable into the port of the other TI-73.

Next, set up the TI-73 to receive data:

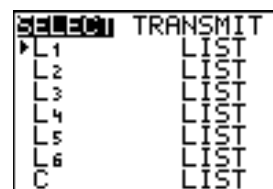
1. Press **APPS** to display the APPLICATIONS menu.
2. Select **1:Link** and press **▶** to display the Link RECEIVE menu.
3. Select **1:Receive**. The message **Waiting...** and the busy indicator are displayed. The receiving unit is ready to receive transmitted items.

To exit the receive mode without receiving items, press **ON**, and then select **1:Quit** from the **Error in Xmit** menu.

To select data items to send from the sending unit to another TI-73:

1. Press **APPS** to display the APPLICATIONS menu.
2. Select **1:Link** to display the Link SEND menu.
3. Press **▼** to select the type of data you want to send. The corresponding **SELECT** screen is displayed. Each **SELECT** screen, except the one for **All+**, is displayed initially with no data items selected.
4. Press **▲** and **▼** to move the selection cursor (▶) to an item you want to select or deselect.

- Press **[ENTER]** to select or deselect an item. Selected names are marked with a black box (■). To exit a **SELECT** screen without transmitting any items, press **[2nd] [QUIT]**.



- Repeat steps 4 and 5 to select or deselect additional items.
- Press **[▶]** to select **TRANSMIT**.
- Press **[ENTER]**.

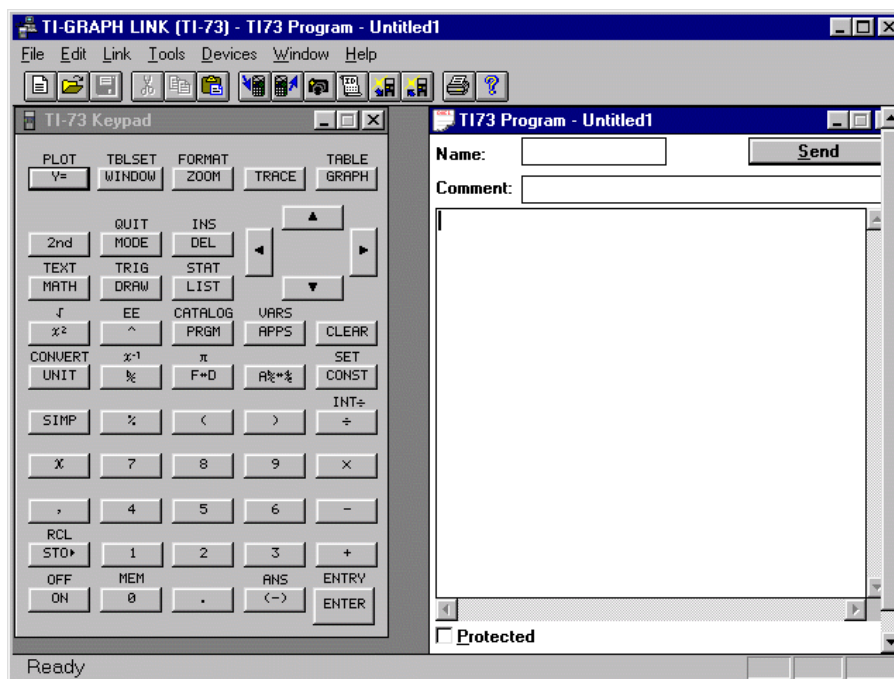
When transmission is complete, the receiving unit will still be in the receive mode. Press **[2nd] [QUIT]** to exit the receive mode.

Linking a TI-73 and a computer using TI-GRAPH LINK™

TI-GRAPH LINK allows you to transfer information from the TI-73 to a computer or from a computer to a TI-73. The software comes in Windows® and Macintosh® versions.

To use TI-GRAPH LINK:

- Connect the TI-GRAPH LINK cable to an open port on the back of your computer. You will need to know the name of this port (for example, COM1) for the software configuration.
- Start TI-GRAPH LINK and connect the TI-73 to the cable. When transferring files (programs, lists, and so forth) from the TI-73 using TI-GRAPH LINK, the TI-73 should be turned on and at the home screen. (If you place the TI-73 in Link mode, you will get an error.) When collecting screen images from the TI-73, the TI-73 can be at any screen.



3. To use any of the options, click on a button or select the option from the **Link** menu.



To capture a screen displayed on the TI-73

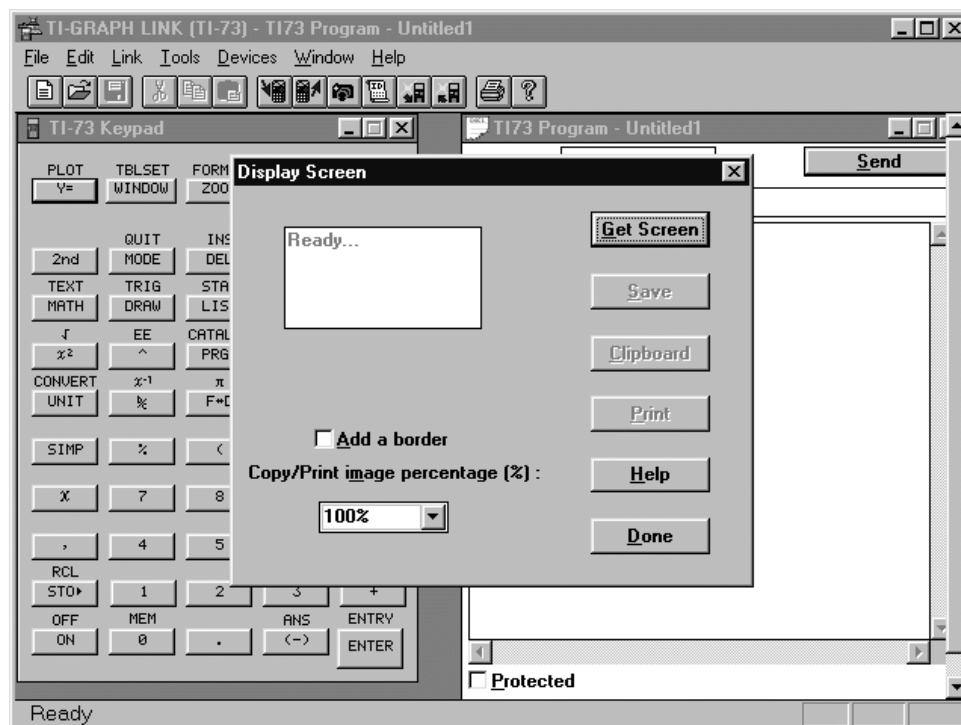


To send files to the TI-73

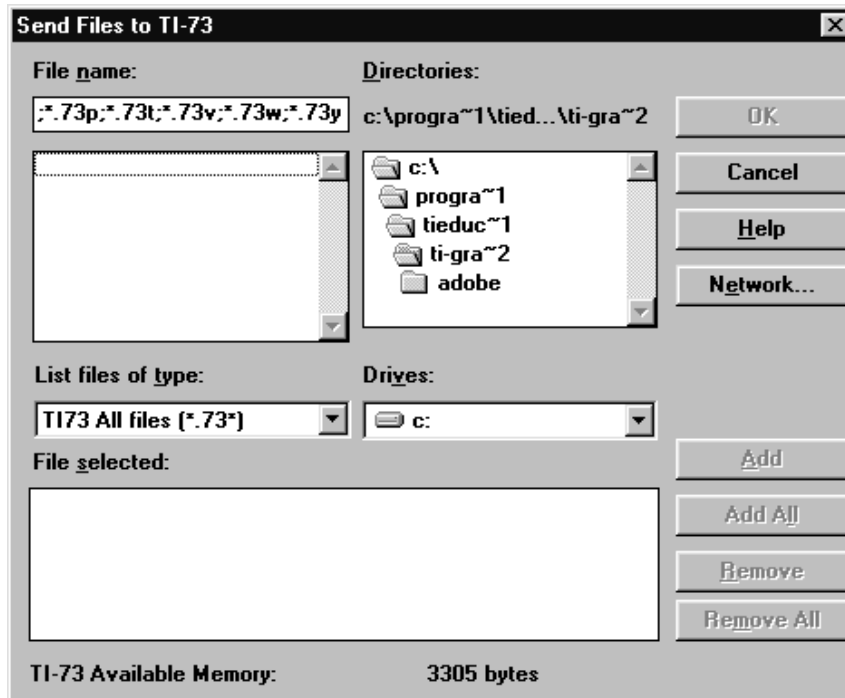


To receive files from the TI-73

- To capture a screen, display the screen on the TI-73, and click **Link**, **Get Screen** or click the **Get Screen** button. Select the appropriate option (save or print), and then select **Done**.



- To transfer files from the computer to the TI-73, select **Link, Send File** or click the **Send File** button, and select the files needed to send to the TI-73.



- To transfer files from the TI-73 to the computer, select **Link, Get Files** or click the **Get Files** button, select (by double-clicking) the files to transfer, and then click on **OK**. Make sure you note the directory in which you placed the files. Note also that you can group files if needed.

