NIXDORF
COMPUTER

LK-3070

LANGUAGE MODULE
INGLESE-ITALIANO
ITALIAN-ENGLISH
CONTENTS

CONGRATULATIONS! As the owner of an LK-3000, you hold in your hand a remarkably versatile mini-computer. Translate foreign languages, do metric conversions, figure currency exchange values, and more... with the switch of a module.

The LK-3070 module turns your LK-3000 computer into an English-Italian translator. For information on additional modules available for use with the LK-3000, see page 17 of this manual.

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BASIC FEATURES
OF THE LK-3000

The LK-3000 comes in its own vinyl carrying case with room for two extra modules and instruction booklets.

POWER SOURCE
The LK-3000 operates on a built-in rechargeable battery which provides about four hours of continuous use when fully charged. The LK-3800 Adaptor/Charger has a ten-foot cord and operates on U.S. and international current (110/220 volts, 50-60Hz). You may need a simple plug adaptor to connect the Adaptor/Charger to electrical outlets in certain countries.

OPERATION
VOLTAGE SELECTION: Before using the LK-3800 Adaptor/Charger, be sure to set the voltage. Use a pen tip or small coin to move the recessed switch to 110 volt (U.S.) or 220 volt (Europe).

AC OPERATION: Connect the AC Adaptor/Charger to a wall outlet and to the LK-3000, then turn on the power switch.

BATTERY OPERATION: Disconnect the AC Adaptor/Charger. The battery provides about four hours of continuous use when fully charged.

BATTERY CHARGING: Connect the AC Adaptor/Charger to a wall outlet and the LK-3000, but leave the power switch OFF. The battery will recharge overnight. It cannot be overcharged.
PRECAUTIONS
- Always turn the power OFF before charging the battery or removing a module.
- Always be sure to select the correct voltage before using the AC Adaptor/Charger.
Failure to follow these precautions could result in serious damage to the LK-3000 and will void your warranty.

ENERGY-SAVING MODE
If you leave your LK-3000 on for more than thirty seconds without making an entry, the display will clear and a dot will travel across the screen. This indicates that the computer has gone into its energy-saving mode. Words that were displayed are automatically transferred to the temporary memory. To recall them, simply press [del].

TECHNICAL SPECIFICATIONS
OPERATING TEMPERATURE: 0°C through 40°C.
DIMENSIONS: 95.3mm deep by 156.3mm wide by 31.8mm high.
DISPLAY: 16 character, 16 segment alphanumeric light-emitting diode with integral MOS-LSI display controller.
POWER CONSUMPTION: 0.5 watt.
POWER SOURCE: DC, 500 milliamp-hour nickel cadmium rechargeable batteries. AC Adaptor/Charger will power the unit or recharge the batteries. 110 volt, 60Hz or 220 volt, 50Hz switch selectable. Use of any other Adaptor/Charger may damage the machine.
1. Connection for the AC Adaptor/Charger.

2. ON-OFF switch.

3. Alphanumeric Display with a sixteen character visual display capacity. Longer entries are stored in the LK-3000's temporary memory and can be recalled with the touch of a key.

4. Alphanumeric Keyboard allows you to enter words or numbers, depending upon the module being used.
KEY FUNCTIONS USED WITH THE LK-3070

**clr** Clears the temporary memory. Whenever this key is pushed, the function of the module will appear on the display.

**bs** Backspaces an entry one letter at a time so that you can correct errors in spelling. When the memory is cleared, pushing this key will reverse the direction of translation being used.

**?** "Opens the dictionary" (permanent memory) of the LK-3070 module. Pressed in combination with any of the alphabetical keys, it quickly locates words and phrases. Press again and it translates them.

**stp** Enters words or phrases into the temporary memory so that you can build sentences. You may also use this key to move through the dictionary or instantly replay a translation one word or phrase at a time.

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**def** Translates constructed sentences as well as words and phrases. The words entered and their translation will read out across the display from right to left. You may replay the translation as many times as you wish.

**sp** Enters a space between words on the display.

**?** This key does not have a major function when used with this module.
USING THE LK-3070 LANGUAGE MODULE

BEFORE YOU BEGIN
The LK-3070 English-Italian module contains hundreds of words and phrases in English and their Italian translation. It is important to remember that words are programmed into the module in their simplest form. English verbs are first-person singular, present tense. Italian verbs are in their infinitive form, and most nouns are singular. For your convenience, many grammatically-correct phrases such as “What time does...” and “How much is...” are included in the program. Use these whenever possible when you are building sentences. Otherwise, you may refer to the handy Grammar and Pronunciation Guide on page 20 for tips on correct conjugation.

With the language module in place, turn on the power switch. The function of the LK-3070 will appear on the display. You can enter English and get Italian translations or vice versa. Choose the direction of translation by pressing the ( bs ) key.

REVIEWING THE DICTIONARY
You will find it very helpful to review the vocabulary included in the LK-3070 module so that you are familiar with its words and can take fullest advantage of its pre-programmed phrases.

TO REVIEW THE DICTIONARY:
1. Press any letter of the alphabet.
2. Press the ( ? ) key to “open the dictionary” (permanent memory) of the module. The first word or phrase beginning with that letter will appear.
3. Press ( sip ) to continue through the list of words.
4. If you wish to check the translation of any word without losing your place in the dictionary, press ( ? ). To continue through the dictionary, press ( sip ).
5. When all words and phrases beginning with that letter have been displayed, NOT FOUND will appear.
TRANSLATING A WORD

EXAMPLE: MONEY

1. Spell out MONEY on the keyboard. (If you should misspell a word, use \texttt{bs} key to backspace to the error and correct it.)

2. Press \texttt{?} to open the dictionary. MONEY will shift to the left on the display. This tells you the word "money" is included in the module's program.

3. Press \texttt{?} again. The Italian translation will instantly appear. Or press \texttt{def} to see the entered word and its translation.

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Special Messages

If you enter a word and get SEARCHING on the display, it simply means the LK-3000 is scanning the module's program. As soon as the words entered are found, they will replace SEARCHING on the display.

If you get NOT FOUND, it means the word entered is not included in the module's program. Try another word that has a similar meaning.

Always press \texttt{clk} before beginning a new translation.

Be aware that one given word may have different meanings in another language, depending upon the context. As you review the dictionary of this module, familiarize yourself with words that appear more than once and their respective translations.
USING THE DICTIONARY FUNCTION
The dictionary function is a great time-saver when you want to quickly locate words or phrases.
EXAMPLE: TRAVELER'S CHECKS
1. Instead of spelling out both words, enter the first two letters: TR
   
2. Press [?] . The first word found that begins with the letters TR will appear.

3. Push [stp] until "traveler's checks" flashes onto the display.


   TRAVELER'S CHECKS
   ASSEGNI TURISTICI

The more letters you enter in Step 1, the more you narrow down the list of words the dictionary will display. For instance, if you enter TRAV you will get a list of words that begin with those letters: TRAVEL, TRAVELER'S CHECKS, when all words in the program beginning with TRAV have been displayed, NOT FOUND will appear.

BUILDING A SENTENCE
Now that you are familiar with how the dictionary can work for you, it will be easy to make all kinds of sentences that will help you ask for directions, order dinner, make purchases or just communicate.

EXAMPLE: TAKE ME TO THE AIRPORT.
1. Enter TAK.
   
2. Press [?] and [stp] until TAKE ME TO appears. Once it is displayed, it is automatically entered into the temporary memory.
3. Enter THE. (For short words, it is easiest to simply spell them out.)

4. Press [stp]. This enters THE into the temporary memory.

5. Enter AIR.

6. Press [?] and [stp] until AIRPORT appears.

7. Press [def]. The sentence you entered will move across the display, followed by the Italian translation: TAKE ME TO THE AIRPORT = ME PORTA IL AEROPORTO.

You may replay the translation as many times as you wish by pressing [def]. Or you can instantly replay the translation a word or phrase at a time by pressing [slp]. This is convenient if you wish to write a translation down.

The temporary memory will hold up to eight words or pre-programmed phrases at a time. So if you have an exceptionally long sentence, you will have to translate it in sections. If you enter more than eight words or phrases SENTENCE FULL will appear on the display.

Now you know everything you need to know to translate electronically. Remember, all functions covered in this manual can be done in English or Italian. And with a little practice, you'll be translating on the LK-3000 like you've been doing it all your life.
Since the LK-3000 is basically a hand-held computer terminal, the real programming and permanent memory are included in the interchangeable modules. These modules allow you to change the function of the LK-3000 in seconds: for translation, calculation, and much more...the possibilities are endless!

When you return your warranty card, we'll put you on our mailing list of Latest Developments which will keep you informed of new modules and attachments so you can keep your LK-3000 up-to-date.

The current library of modules includes:

**BILINGUAL MODULES**—hundreds of useful words and phrases in English and its translations. Program contents help you find your way around, shop and talk to the natives. Modules available in:

- LK-3050  ENGLISH-SPANISH
- LK-3060  ENGLISH-FRENCH
- LK-3080  ENGLISH-GERMAN
- LK-3100  ENGLISH-POLISH
- LK-3110  ENGLISH-PORTUGUESE
- LK-3130  ENGLISH-GREEK

Modules soon to be available:

- LK-3090  ENGLISH-SWEDISH
- LK-3120  ENGLISH-RUSSIAN
- LK-3140  ENGLISH-ARABIC
- LK-3150  ENGLISH-HEBREW
- LK-3160  ENGLISH-JAPANESE
- LK-3170  ENGLISH-CHINESE
PERSON-TO-PERSON: A multi-lingual module that contains hundreds of words and phrases useful in casual social conversation. Translate in any combination of six languages: Spanish, French, German, Italian, Greek and English all on one module. LK-3200 PERSON-TO-PERSON

CALCULATOR MODULE—turns the LK-3000 into a five-function calculator with memory that also does metric conversions. Another special feature allows you to figure currency exchange values. Indispensable, at home or abroad. LK-3900 CALCULATOR

OLYMPIC MODULES—contains records and statistics of Olympic events for the 1980 Games in Moscow and Lake Placid. LK-0280 WINTER OLYMPICS-LAKE PLACID LK-0680 SUMMER OLYMPICS-MOSCOW

PRONUNCIATION AND GRAMMAR GUIDE

PRONUNCIATION

THE ALPHABET
There are 21 letters in the Italian alphabet: a, b, c, d, e, f, g, h, i, l, m, n, o, p, q, r, s, t, u, v, z. (j, k, w, x and y occur only in words of foreign origin). Of these, a, e, i, o, u and y are vowels, the rest consonants.

Guide to Pronunciation of Italian

<table>
<thead>
<tr>
<th>Italian Letter</th>
<th>Explanation of Sound</th>
<th>Sample Italian Word</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vowels</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a</td>
<td>'a' in father, but shorter</td>
<td>amore</td>
</tr>
<tr>
<td>e</td>
<td>'e' in met, sometimes as in where</td>
<td>festa; tela</td>
</tr>
<tr>
<td>i</td>
<td>'ee' in wheel</td>
<td>risotto</td>
</tr>
<tr>
<td>o</td>
<td>'o' in more</td>
<td>polizia</td>
</tr>
<tr>
<td>u</td>
<td>'oo' in moon</td>
<td>muro</td>
</tr>
</tbody>
</table>

Vowel Combinations:
pronounce each vowel separately

paura, continuo
### Consonants
The consonants are pronounced as in English, except:

<table>
<thead>
<tr>
<th>Italian Letter</th>
<th>Explanation of Sound</th>
<th>Sample Italian Word</th>
</tr>
</thead>
<tbody>
<tr>
<td>c</td>
<td>like 'k' before a, o, u or consonants</td>
<td>casa, colore</td>
</tr>
<tr>
<td>g</td>
<td>like 'g' in garden before a, o, u or consonants</td>
<td>gallo, quanto</td>
</tr>
<tr>
<td>h</td>
<td>is always silent</td>
<td></td>
</tr>
<tr>
<td>q</td>
<td>always occurs with u, and has the sound of 'k' (both q and u are sounded)</td>
<td>quanto</td>
</tr>
<tr>
<td>r</td>
<td>slightly trilled (let tongue rattle behind back upper teeth)</td>
<td>rico</td>
</tr>
<tr>
<td>s</td>
<td>like the 's' in soft at the beginning of a word and before certain consonants</td>
<td>spazio</td>
</tr>
<tr>
<td></td>
<td>like an 'z' between vowels and before certain consonants (b, d, g, l, m, n, r, v)</td>
<td>mese, sbadiglio</td>
</tr>
</tbody>
</table>

### Consonant Combinations:

<table>
<thead>
<tr>
<th>Italian Letter</th>
<th>Explanation of Sound</th>
<th>Sample Italian Word</th>
</tr>
</thead>
<tbody>
<tr>
<td>ch</td>
<td>has the sound of 'k' as in king</td>
<td>chiesa</td>
</tr>
<tr>
<td>sc</td>
<td>has the sound of 'sh' as in shoe</td>
<td>sciocco</td>
</tr>
<tr>
<td>sch</td>
<td>has the sound of 'sk' as in skit</td>
<td>scherzo</td>
</tr>
<tr>
<td>gn</td>
<td>has the sound of 'nio' in onion</td>
<td>ogni</td>
</tr>
</tbody>
</table>

**NOTE:** In Italian, accents do not affect the pronunciation of words, but are used to indicate stress or sometimes to distinguish two words which are spelled alike (dà—he gives, da—from)

### Accent and Stress
Words in Italian are stressed on either the last syllable, the second last (mostly), or the third last. When a word is to be pronounced on the last syllable, usually an accent is used: città, caffè. Otherwise, you will have to learn word stress from experience and listening.
GRAMMAR
Articles and Nouns
Every noun in Italian is preceded by an article. Those which have "i" ("i a" if the word begins with a vowel or an 's' followed by a consonant) are masculine, those which have "la" are feminine, but there is no strict logical reason for the breakdown. (Don't try to figure out why the Italian word for month is masculine, while the word for week is feminine!) Words beginning with vowels, whether masculine or feminine, are preceded by the article "i." Plurals are "i" for the masculine ("gli" if lo is used) and "le" for the feminine.
The indefinite article a or an is "un" for masculine nouns ("uno" before a vowel or 's' followed by a consonant) and "una" for feminine nouns. The article often combines with prepositions. For example: "to the station" becomes not "a la stazione," but alla stazione; "of the mirrors" is not "di gli specchi," but degli specchi; and "in the park" is not "in el parco," but nel parco.

Adjectives
Most adjectives in Italian follow the noun they modify, but a few, including the ordinals, new, old, etc., precede the noun. All adjust their spelling according to whether the noun is masculine or feminine, singular or plural:
  il cane nero—la casa nera
  il vecchio cavallo—la vecchia donna

Adverbs
Most Italian adverbs are formed by adding 'mente' to the feminine form of the adjective:
  falsamente, immediatamente.
Prepositions
As in English, the prepositions by, with, for, to, etc., precede the noun and introduce a phrase: *per il padre* (for the father); *di due case* (of two houses).

*NOTE:* As mentioned above, certain prepositions combine with the article: *a + la* is “alla;” *di + il* is “del.”

Pronouns
Italian pronouns can be used as the subject: *io* (I); *voi* (you), *noi* (we); *egli* (he); *ella* (she); *loro* (they). They can also be used as the object (direct or indirect): *me, mi (me); te, ti (you); ve, vi (you); le (her); lui, gli (him).

Verbs
Italian has many verb forms. Here are a few general points that apply to all verbs:

- The verbs “avere” (to have) and “essere” (to be) are used as auxiliary verbs to form compound tenses (I have worked, I have arrived).

- Most Italian verb forms are recognized only by the endings:
  - *io viaggio* is the present tense
    - (I travel, I am travelling)
  - *io viaggiavo* is the imperfect tense
    - (I was travelling)
  - *io viaggerò* is the future
    - (I will travel)

It is advisable to get a verb wheel or verb table and learn the forms.
Questions and Negative statements:
The usual way to ask a question in Italian is to use a question word and invert the usual word order of verb and subject. The most common question words are: che (what), chi (who), come (how), quando (when), dove (where) and quale (which). Example:
   Dove sono i ragazzi? Sono nella casa.
   (Where are the children? They are in the house.)
To make a statement negative, put “non” in front of the verb:
   Giorgio viene domani, ma Carlo non viene.
   (Giorgio is coming tomorrow, but Carlo is not coming.)

The participles:
Most Italian past participles end in ‘-ato,’ ‘-uto’ or ‘-ito,’ depending on the class of verb. These forms are used in compound tenses and as adjectives. (In this case, the endings change as do other adjectives.)
VERB:
   Io ho parlato con Maria.
   (I have spoken with Maria.)
ADJECTIVE:
   La nuova macchina è stata installata.
   (The new machine has been installed.)
The gerund form ends in ‘-ando’ or ‘-endo,’ depending on the class of verb. This form is used generally as in English. It can also be used with the verb “stare” to express progressive action:
   Egli stava correndo.
   (He was running.)