KOSMOS 2

KOSMOS 2 Biorythm Computer and Calculator is a uniquely designed electronic computer for rapid determination of biorythm data for any day in the past, present or future. The computer is equipped with a dual memory and will instantly compute lifetime compatibility percentages between any two people. In addition, KOSMOS 2 is one of the finest four function arithmetic calculators made. To utilize the full features of this computer, we suggest you take a few minutes with the owner’s manual to become familiar with the many abilities of KOSMOS 2.

©1979 KOSMOS INTERNATIONAL, INC.
<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>KEY FEATURES</td>
</tr>
<tr>
<td>5</td>
<td>OPERATIONAL NOTES</td>
</tr>
<tr>
<td>7</td>
<td>KEY DESCRIPTIONS</td>
</tr>
<tr>
<td>9</td>
<td>INTRODUCTION TO BIORHYTHM</td>
</tr>
<tr>
<td>12</td>
<td>BIORHYTHM REFERENCE CHART</td>
</tr>
<tr>
<td>16</td>
<td>BIORHYTHM APPLICATIONS</td>
</tr>
<tr>
<td>16</td>
<td>Determination of Personal Biorhythm Information</td>
</tr>
<tr>
<td>19</td>
<td>Determination of Biorhythm Data for Another Person</td>
</tr>
<tr>
<td>20</td>
<td>Rapid Determination of Biorhythms in the Past or Future</td>
</tr>
<tr>
<td>21</td>
<td>Determination of Average Lifetime Compatibility/Similarity Ratios</td>
</tr>
<tr>
<td>24</td>
<td>CALCULATOR APPLICATIONS</td>
</tr>
<tr>
<td>28</td>
<td>SPECIFICATIONS</td>
</tr>
<tr>
<td>29</td>
<td>OTHER PRODUCTS BY KOSMOS</td>
</tr>
</tbody>
</table>
KEY FEATURES

- Instant calculation and display of biohythrn data for any two people.
- Rapid determination of biohythrm data in the future or past with forward and reverse keys.
- Instant calculation and display of lifetime compatibility percentages between any two people.
- Four function, constant and mixed or compound calculations.

OPERATIONAL NOTES

A. GENERAL
The computer is a durable precision made instrument with recommended operating temperatures of 0°C to 40°C (32°F to 104°F).
Extreme cold, heat, humidity, dust or exposure to direct sunlight may affect the function of the computer.
Avoid computer damage from impact and shock or from unduly strong key pressing.
Do not clean the computer body with volatile liquids or harsh cleaners. Use only a soft cloth or cloth dampened with a synthetic detergent.

B. POWER SUPPLY
DISPOSABLE DRY BATTERY OPERATION
Three AA size dry battery operation alkaline dry batteries (SUM-3) give approximately 10 hours of continuous operation. When battery power decreases, the display will darken. Be sure to switch off the power when you have finished a calculation or before

4
changing batteries. Never leave dead batteries in the battery box as it may cause malfunctions.

AC OPERATION
Always use an AC adaptor designed for use with the supply voltage in that area. For example, if you are in a 117V area use a 117V AC Adaptor, in a 220V area use a 220V AC Adaptor, etc.

C. ERROR/OVERFLOW
Error and overflow are indicated by a "E" and a "O" and interrupts further calculation. To reset the error or overflow to continue operation, press CLR.

Error and Overflow occurs:
1. When an answer exceeds 8-digit integers.
2. In case the date or year is entered as a 1-digit number.
3. In case the number of the month, day, and year are outside the permissible range. (January 1, 1901 – December 31, 1999)
4. In case the abnormal key sequence is executed.
5. When incorrect operations are performed on biorythm calculations.

KEY DESCRIPTIONS

**Numeral Keys:** Used to enter numerals

0 1 2 3 4 5 6 7 8 9

Decimal Point Key:
Used in its logical sequence for decimal places.

**Arithmetic Keys:**

+ - × ÷

Used for arithmetic calculations in the same logical sequence as the formula.

**Biorythm Key:**
Used to obtain and display biorythms when a date and a birth date have been entered.

**Date Key:**
Used to enter and display the desired date (month, day, and year) after appropriate
numerals have been entered. After pressing DT, the date plus the day of the week will be visible on the display.

B1 B2 Birth Date Keys:
Used to enter and display your own birth date, B1 and the birth date of any other person.

B3 NOTE: When using B1 a "U" will appear in the upper left portion of the display. When using B2 an Inverted "U" will appear in the lower left portion of the display.

B4 Compatibility/Similarity Keys:
Used to compute and display the percentages which represent average lifetime compatibility between any two people.

F Forward/Reverse Keys:
Used to advance and reverse the date in one day units. Simultaneously, the new biohythms will be computed and will be displayed after pressing BIO.

Clear Key:
Used to clear the last entry if made in error by pressing once, or to completely clear all registers by pressing twice.

INTRODUCTION TO BIORHYTHM
(Reprinted by courtesy of Biorhythm Research, Inc.)

THERE IS NO BAD NEWS WITH BIORHYTHM, ONLY INFORMATION
Everyone experiences days when you wake up in the morning feeling terrific and other days when no matter what you do, nothing seems to go right. One explanation of these ups and downs of life comes from the science called Biorhythm. Biorhythm is the behavioral science of life-energy rhythms. It has been scientifically proven empirically that we have three energy cycles that begin at birth. The 23 day Physical cycle (P) which affects strength, endurance and resistance to infection and disease, the 28 day Emotional/Sensitivity cycle (S) which affects mood or sensitivity and the 33 day Intellectual cycle (I) which affects reasoning and creative abilities. Biorhythm is very much a "personal science." Each of us is different and, therefore may be affected differently by the position of our individual curves. Through biorhythm a person can learn how any individual will probably perform in relationship to their own normal level of self performance.
In general, the first half (upper portion) of each cycle is a period of energy release. Physical endurance (P) is at its height, cheerfulness and optimism prevail (S), and reasoning powers and creativity are increased (I). During the second half (lower portion) of each cycle, or energy recharge period, individuals tend to have less energy, be more sensitive and have difficulty concentrating. When energy cycles change from + (energy release) to - (energy recharge) there is a substantial cutback in each of our energy systems and one experiences a "Caution" day. On the biorythm graph, any day of any cycle that crosses the dividing center line is a "Caution" day. The probability is very strong that a person will have a sub-par day and be more subject to injury on these days. The peaks and valleys of each cycle are called "Mini-Caution" days and some difficulty may be experienced on these days, however they are not as potentially difficult as full "Caution" days. Combination Days are any days which are simultaneously a Caution or Mini-Caution day in any combination.
The following tables are provided as a quick reference after the biorythms for any day have been determined.

**PHYSICAL**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>2 to 11</td>
<td>Endurance and Strength at height</td>
</tr>
<tr>
<td>0</td>
<td>1 and 12, 13*</td>
<td>Caution: Accident prone</td>
</tr>
<tr>
<td>-</td>
<td>14 to 23</td>
<td>Recharge period; Reduced energy</td>
</tr>
<tr>
<td>Peak/Valley</td>
<td>7.18</td>
<td>Mini-Caution: Performance not up to par</td>
</tr>
</tbody>
</table>

*The day after a "Caution" day going down in any cycle is considered a hangover day because some letdown is often experienced on these days, but they are usually much less potentially difficult than full "Caution" days.*

**EMOTIONAL/SENSITIVITY**

<table>
<thead>
<tr>
<th></th>
<th>2 to 14</th>
<th>Cheerful, cooperative, creative</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1 and 15, 16*</td>
<td>Caution: Emotions unstable</td>
</tr>
<tr>
<td>-</td>
<td>17 to 28</td>
<td>Recharge period; Pronounced sensitivity</td>
</tr>
<tr>
<td>Peak/Valley</td>
<td>8.22</td>
<td>Mini Caution: Emotions somewhat unstable</td>
</tr>
</tbody>
</table>

**INTELLECTUAL**

<table>
<thead>
<tr>
<th></th>
<th>2 to 16</th>
<th>Keen perception and judgement</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1 and 17, 18*</td>
<td>Caution: Error prone</td>
</tr>
<tr>
<td>-</td>
<td>19 to 33</td>
<td>Recharge period; Good time for study</td>
</tr>
<tr>
<td>Peak/Valley</td>
<td>9 and 26</td>
<td>Mini Caution; Cutback in reasoning, thinking powers</td>
</tr>
</tbody>
</table>
RECENT RESEARCH INDICATES

1. That more calories are burned when individuals are in (+) position in the Physical energy cycle, and therefore diet-conscious individuals should somewhat cut caloric intake on (-) cycles.

2. That most sports injuries generally occur on biorythmic "Caution/Mini-Caution" days. "Combination" days are especially dangerous.

3. That from an accident prevention standpoint, it is generally better to be (-) physically (because of overconfidence in the +) and not on either a "Caution" or "Mini-Caution" day.

4. That "Bio-Luck" actually exists! Individuals have found that their luck is often much better when they are simultaneously (+) in both the Emotional and Intellectual cycles.

5. That people are often more irritable and tend to complain more on "Caution" and/or "Mini-Caution" days.

6. That people have a tendency to catch colds on days which are "Caution" and "Mini-Caution" in the Physical cycle. A vitamin-conscious person might wish to take extra Vitamin C doses on these days.

7. That we should avoid scheduling dental appointments on "Caution" or "Mini-Caution" days. (We are much more sensitive to pain at these times.)

8. That births usually occur on or as an immediate result of the mother’s biorythmic "Caution", "Mini-Caution" or "Combination" days.

9. That the sex of children appears to be related to the biorythmic (+)(-) condition of the mother at the moment of conception. A Physical (+) with Emotional (-) position usually coincides with a male child and vice versa.

10. That it is well known that aging is directly related to stress. Individuals may program themselves to reduce or avoid stress through biorythm.

11. The "Caution" days going up in the cycles (P;1;S;1;L;1) are usually less difficult than the "Caution" days going down in the cycles (P;12;S;15;L;17).
BIORHYTHM APPLICATIONS

A-1 Determination of Personal Biorhythm Information

Step 1. Move power switch backward to activate computer. A “D” should appear on the display.

Step 2. Enter today's date or any date on which the biorhythms are to be calculated.

EXAMPLE: For June 7, 1978, press the keys in the following order:

6 0 7 7 8
(Month) (Day) (Year)

Important: When entering the day, two digits must be entered (day 01 through 31). Only the last two digits of the year should be entered.

Step 3. Press DT key. The date displayed. The number in the extreme right of the digital display indicates the day of the week by number. (See chart on back of calculator.)

Example: December 11, 1953, press 1 2 1 1 5 3

Step 4. Enter the birth date in the same manner as today’s date (Step 2).

Example: December 11, 1953, press 1 2 1 1 5 3

Step 5. Press B1 key.

Step 6. Press BIO key. The display will change to indicate the position of the three biorhythm cycles for the person whose birth date was entered in B1.
INTERPRETATION OF BIORHYTHM DATA

When the BIO key is pressed, three sets of numbers appear on the display. The first set on the left indicates the position of the individual's Physical Cycle, symbolized on the graph of KOSMOS 2 as a red curve. The second set indicates the position of the Sensitivity (Emotional) Cycle, symbolized as a blue curve, and the third set is the Intellectual Cycle, symbolized on the graph as a green curve. Find the numbers on the graph which indicate the positions of each of your biorhythm cycles. (For complete interpretation see reference chart, page 12.)

Step 1. Enter today's date or any date on which biorhythms are to be calculated (See A-1, Steps 2 and 3), or press DT key to recall date previously entered.

Step 2. Enter the person's birth date in the same manner as today's date.

EXAMPLE: December 2, 1922: press 1 2 0 2 2 2


Step 4. Press BIO key. The display will change to indicate the positions of the person's three biorhythm cycles.

(See Reference Chart, page 12.)
A3 Rapid Determination of Biohythms in the Past or Future

Step 1. Press DT key to recall original date entered.

Step 2. Press selected birth date key, B1 or B2.

Step 3. Press F↓ key. Display will change to indicate the date immediately following the date originally entered. (NOTE: The ◄R key functions in the same way as the F↓ key but in reverse.)

Step 4. Press BIO. Display will change to indicate the individual's biohythm positions for the last date indicated on the display.

B. Determination of Average Lifetime Compatibility/ Similarity Ratios.
The KOSMOS 2 will calculate and display the average lifetime compatibility in percentages, for all three biohythm cycles, between any two people.

Step 1. Enter a selected birth date (or recall key previously entered birth dates by pressing B1 and B2, then proceed to Step 5.)

Example: December 11, 1953; press 1 2 1 1 5 3

Step 2. Press B1 key.

Step 3. Enter another birth date.

Example: December 2, 1922; press 1 2 0 2 2 2


Step 5. Press C/S key. The display will change to indicate the compatibility in percentages between B1 and B2. (See interpretation following.) 38 △ 7 4 3 21
The numbers which appear on the display are based on a percentage scale of 1 to 100%. The higher the number, the more similar are the individuals being compared. The first set of numbers indicates the percentage of time the Physical Cycles of the two individuals are similar, i.e., up together or down together. The second set of numbers indicates the similarity of the Sensitivity (Emotional) Cycles, and the third set indicates the similarity of the Intellectual Cycles. In comparing a relationship between two people, the key cycle seems to be the Sensitivity Cycle.

Individuals with a C/S (Compatibility/Similarity) factor of 36% or more in the Sensitivity (Emotional) Cycle will be naturally inclined to have a very easy and comfortable relationship. The other cycles, Physical and Intellectual, can add to the overall relationship if either has a C/S factor greater than 40%. However, if they are lower than 40%, and this factor is understood by both parties, then despite this fact the low biorythm compatibility need not detract from the relationship.

Any two people having a 100% C/S readout in any of the three cycles will usually find that several times each month both individuals will be somewhat irritable or tend to complain on the same day. This is because they will always, throughout their lifetimes, be simultaneously experiencing the same “Caution” and “Mini-Caution” days in their 100% cycles. If both individuals are aware of this, then can adjust their behavior to be more considerate of each other on these days thereby improving the relationship.
CALCULATOR APPLICATIONS

The following pages explain the proper procedures for manipulating the calculator, and provide instructions for its basic operations and methods of computing various functions. By pressing CLR once, the last entry is cleared. Press CLR twice to clear all registers and begin a new calculation.

Examples will be explained in the following format:

<table>
<thead>
<tr>
<th>EXAMPLE</th>
<th>KEY OPERATION</th>
<th>DISPLAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Addition:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 + 2 =</td>
<td>2 + 2 =</td>
<td>4</td>
</tr>
<tr>
<td>Subtraction:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 - 389 = -377</td>
<td>1 - 3 8 9 =</td>
<td>-377</td>
</tr>
</tbody>
</table>

Example

<table>
<thead>
<tr>
<th>KEY OPERATION</th>
<th>DISPLAY</th>
</tr>
</thead>
</table>

NOTE: To perform a problem which has a negative first number press CLR, then the selected numeral keys.

-1.5 + 0.5 - 4.5 × 5 =
-1.5 + 0.5 × 5 =
1.5 - 5 =
-5.5

Addition or Subtraction by a Constant:

<table>
<thead>
<tr>
<th>EXAMPLE</th>
<th>KEY OPERATION</th>
<th>DISPLAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>273 + 572 = 845</td>
<td>2 7 3 5 7 2 =</td>
<td>845</td>
</tr>
<tr>
<td>765 + 572 = 1,340</td>
<td>7 6 5 5 7 2 =</td>
<td>1,340</td>
</tr>
<tr>
<td>991 - 184 = 413</td>
<td>9 9 1 1 8 4 =</td>
<td>413</td>
</tr>
<tr>
<td>323 - 184 = 139</td>
<td>3 2 3 1 8 4 =</td>
<td>139</td>
</tr>
</tbody>
</table>

Multiplication/Division:

<table>
<thead>
<tr>
<th>EXAMPLE</th>
<th>KEY OPERATION</th>
<th>DISPLAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 x 4 x 5 = 10</td>
<td>3 4 5 1 0 =</td>
<td>10</td>
</tr>
<tr>
<td>2 x 3</td>
<td>2 3 =</td>
<td>6</td>
</tr>
</tbody>
</table>
### Example

**Mixed Calculations:**

\[
\frac{3 \times 4 - 2}{2} = 4
\]

\[
\frac{3 \times 4 + 2 \div 2 \div 3 - 4}{2} = -1.6666667
\]

**Multiplication or Division by a Constant:**

<table>
<thead>
<tr>
<th>Calculation</th>
<th>Key Operation</th>
<th>Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>123 \times 45 = 5535</td>
<td>1 2 3 \times 4 5 =</td>
<td>5535</td>
</tr>
<tr>
<td>123 \times 24 = 2952</td>
<td>2 4 =</td>
<td>2952</td>
</tr>
<tr>
<td>4980 \div 240 = 20.75</td>
<td>4 9 8 0 \div 2 4 0 =</td>
<td>20.75</td>
</tr>
<tr>
<td>6780 \div 240 = 28.25</td>
<td>6 7 8 0 \div 2 4 0 =</td>
<td>28.25</td>
</tr>
</tbody>
</table>

**Interest Calculations**

**Simple Interest:**

\[
12300 \times (1 + 0.45 \times 6) = 15621
\]

\[
0.45 \times 6 + 1 \times 12300 = 15621
\]

### Calculation Formulas

- **Compound Interest:**
  \[
  12300 \times (1 + 0.045)^{10} = 16017.796
  \]

- **Simple Interest:** \( P (1 + \% \times t) \)
- **Compound Interest:** \( P (1 + \%)^t \)

**Where:**

- \( P \): Principle
- \( \% \): Interest Rate
- \( t \): Period of deposit in years

**Display:**

\[
1 + 0.45 \times 6 = 12300 = 15621
\]
SPECIFICATIONS

Operating Temperature: 0°C - 40°C (32°F - 104°F)
Dimensions: 140 m/m (5.52") Depth x 70 m/m (2.76") Width x 27 m/m (1.06") Height.
Weight: 160 grams (.514 oz.) including batteries.
Calculation Range: Entry/Result 8 digits
Calculation Method: Algebraic method.
Decimal Point: Full floating decimal point system.
Negative Number: Indicated by minus (-) sign on the left of the digit.
Error/Overflow Check: Indicated by the "C" sign.
Main Element: MOSLSI complete IC chip.
Power Consumption: 300 mW max
Power Source: DC AA size (UM3) dry batteries - 3 pieces or by AC ADAPTOR.

OTHER PRODUCTS BY KOSMOS

KOSMOS 1: Hand-held biohym computer and calculator with unique "Caution". "Mini-Caution" lights and compatibility features.
MINIBIO: World's first pocket-sized biohym computer combined with world time features.
BIO-CLOCK: Top of the line, Programs biohrythms for six people, displays world time and includes alarm and stopwatch features.
ASTRO 1: Charts the influences of Mercury, Venus, Mars and the Sun on your personality. Goes far beyond sun sign astrology.
For more information, contact: Kosmos International, Inc., 700 Candle Building, Atlanta, Georgia. (404) 898-1475.
KOSMOS 2

La calculadora y computadora de biométricos Kosmos 2 es una máquina electrónica única en su género diseñada especialmente para determinar rápidamente datos acerca del biométrico de cualquier día pasado, presente o futuro. La computadora tiene una memoria cúbica y puede calcular instantáneamente los porcentajes de compatibilidad durante toda la vida de dos personas cualesquiera. Además, Kosmos 2 es una excelente calculadora de 4 operaciones aritméticas, una de las mejores que se fabrican actualmente. Para aprovechar al máximo todas las funciones de la computadora, le sugerimos que dedique unos minutos al estudio del manual para familiarizarse con las múltiples capacidades de Kosmos 2.