

COMP-U-DIFF

Differential Cell Counter & Morphology Data Entry Workstation



COMP-U-DIFF (model 10-329) is a 12 channel differential cell counter and RBC Morphology data entry workstation that provides efficient, direct computer entry of differential counts, RBC morphology, comments, specimen and technician identification. COMP-U-DIFF guides the operator through the data entry procedures via a series of English-text prompts displayed on a large bright backlit LCD. After data entry information may be sent to a laboratory computer and/or ticket printer or saved for later transmission. With its 127 location batch memory, COMP-U-DIFF may be used in a stand-alone or autonomous operation should the laboratory computer be unavailable.

KEY FEATURES

- **Display.** All 12 channels are displayed simultaneously with large digits on a bright backlit LCD display.
- **Hermetically sealed switches.** Prevent counting anomalies that may result from contaminants.
- **Memory.** COMP-U-DIFF has sufficient memory to store information from up to 127 specimens.
- **Search.** High speed search facilitates quick access to information stored in the batch memory.
- **Hemogram Recall.** A bidirectional feature that enables the user to query the LIS host and to view associated hemogram data on the COMP-U-DIFF screen.

- **RBC Morphology.** The unit provides for direct entry of up to 24 RBC morphology and platelet evaluation comments, each displayed as four character mnemonics (e.g., P01K, HYPO, etc.) with up to six levels of quantification.
- **Comment.** The units provides for entry of four 3 digit comments.
- **Count Correction.** Permits the operator to selectively decrement channel counts.
- **Percent Calculation.** Provides continuous update with every count.
- **Alarm actuation.** Signals every 100 counts
- **Non-total channels.** Provides for optional counting of NRBC or other abnormal cells independent of the cell counts.
- **Computer/Printer ports.** Two separate ports allow for easy interfacing to both the lab computer and printer.
- **Formats.** Two output report formats provided.
 - Computer-horizontal orientation
 - Printer-vertical orientation with titles.
- **Status screen.** All internal setting such as baud rates, parity, etc. can be viewed on the screen.
- **Data transmit modes.** The operator may select individual specimen for transmission to the computer; or, alternatively, sent in batches of up to 127 specimens
- **Small Footprint.** COMP-U-DIFF is small (6"x9") and designed to fit next to your microscope.

Ordering Information

Part Number	Description
10-216	UR-O-COMP manual entry
10-223	UR-O-COMP Clinitek-200 interface
10-233	UR-O-COMP Clinitek-100+ interlace
10-243	UR-O-COMP Clinitek 200+ interface
10-240	CYTO-COMP Cytological workstation
10-329	COMP-U DIFF Differential data workstation for computer entry
10-250	TICKET PRINTER

Supplied By:

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HOW IT WORKS

COMP-U-DIFF provides efficient, direct entry to computer of differential counts, RBC morphology, specimen identification, tech identification and general comments.

Examples of screen prompts are shown below:

- Enter the Specimen Identification, et al.

```
SPECIMEN #0123545 <STORE>
DATE 07/10/94 TECH ID: 07
```
- Query LIS host for Hemogram data.

```
WBC RBC HCT HGB
12.1 3.34 22.9 10.5
```
- Press any count key to start counting

```
01 00 00 00 00 00 TOTAL
01 01 08 06 12 71 100
```
- Press Morph key to select RBC morphology and to enter quantities.

```
ACAN 1+ _____ ANISO _____ BASO _____
BURR _____ CABT _____ CREN 2+ _____
```

Other Morphologies and comments can be selected directly by repeatedly pressing the Morph key.

(Note: The screen presents six morphs at a time).

```
ACAN ANISO BASO BURR CABT CREN
H-JB HINZ HYPO MACR MAP MICRO
OVAL PAPP PLAT POIK POLY SCHS
SICL SIDR SPHR STOM TARG TEAR
```

To quantify the Morphology use the lower 6 data keys (designated as keys 0 to 5).

0=NEG, 1=1+ or slight, 2=2+ or moderate, etc.

FUNCTION KEYS

Six function keys select entry and operating modes

- * MODE: Selects Store, Recall or Batch mode.
- * EXEC: Writes data to batch memory
- * MORPH: Selects one of the four categories of six morphologies listed above (one of the 4 rows). Six morphologies are displayed per screen. To enter a quantity select the a morphology title by pressing one of the cursor keys. Depressing the MORPH key a fifth time will display four comment prompts on the screen. The user may then select one of the four comments fields to enter a three digit comment.
- * COUNT: Enables 12 data keys for counting.
- * CLEAR: Clears all channels and all data; leaving only the date which can be changed by reentry or by powering off the terminal.
- * SEND: Initiates data transmission to the host computer and printer.

COMPUTER DATA FORMAT

CHARACTER POSITION	PARAMETER NAME	CHARACTER POSITION	PARAMETER NAME
1-6	SPECIMEN IDENT	67	SICKLE CELL
7	/	68	BASOPHILIC
8-9	TECH IDENT	69	SIDEROCYTE
10	/	70	MICROANGIO
11-13	CHANNEL 1 [COUNTS]	71	HEINZ BODIES
14-16	CHANNEL 2	72	/
17-19	CHANNEL 3	73	TEARDROP
20-22	CHANNEL 4	74	SCHISTOCYTE
23-25	CHANNEL 5	75	CRENATED
26-28	CHANNEL 6	76	BURR CELLS
29-31	CHANNEL 7	77	PAPPENHEIMER
32-34	CHANNEL 8	78	STOMATOCYTE
35-37	CHANNEL 9	79	/
38-40	CHANNEL 10	80-82	COMMENT #1
41-43	CHANNEL 11	83-85	COMMENT #2
44-46	CHANNEL 12	86-88	COMMENT #3
47-49	TOTAL CELL COUNT	89-91	COMMENT #4
50-51	/	92	/
52	POIKILOCYTOSIS	93-94	CHANNEL #1 [%]
53	POLYCHROMASIA	95-96	CHANNEL #2 [%]
54	HYPOCHROMASIA	97-98	CHANNEL #3 [%]
55	ANISOCYTOSIS	99-100	CHANNEL #4 [%]
56	MICROCYTOSIS	101-102	CHANNEL #5 [%]
57	PLATELET SUFFICIENCY	103-104	CHANNEL #6 [%]
58	/	105-106	CHANNEL #7 [%]
59	TARGET CELLS	107-108	CHANNEL #8 [%]
60	OVALOCYTES	109-110	CHANNEL #9 [%]
61	SPHEROCYTES	111-112	CHANNEL #10 [%]
62	ACANTHACYTES	113-114	CHANNEL #11 [%]
63	MACROCYTOSIS	115-116	CHANNEL #12 [%]
64	HOWELL-JOLLY	117	/
65	/	118-123	DATE FIELD
66	CABOT RINGS	124	<>INQUIRY
		125	CARRAIGE RET
		126	LINE FEED

COMMUNICATIONS - RS 232

- * Selectable Baud Rates: 1200, 2400, 4800, 9600
- * Protocol: Unidirectional, or Bidirectional with ACK/NACK.
- * Data Word Formats: 7 or 8 Data Bits
- * Parity: Odd, Even or Disabled
- * Signal Levels: EIA-compatible
- * Data Format: US ASCII
- * Transmitted Data Formats: Horizontal and Vertical (titles)

PHYSICAL FEATURES

- * Dimensions:
W=6 inches (15cm)
H=2.25 inches (6cm)
D=9 inches (23cm)
- * Weight: 1.8 lbs.
- * Electrical:
110-125 VAC, 50/60 Hz, 5 watts max, or
220-250 VAC, 50/60 Hz, 5 watts max.
- * Operating Temperature:
degrees F OR 0-49 degrees C

WARRANTY

Parts and workmanship guaranteed for 12 months from date of purchase.

