

Diffcount™ III

Differential Cell Counter (10-308 & 10-312)



DIFFCOUNT III microprocessor-controlled differential cell counters are designed for use in any hematology laboratory. While automated hematology instruments can differentiate to three or five parts, the DIFFCOUNT III can manually tally and store up to 12 differentials in its memory, making it an essential tool for the modern laboratory.

DIFFCOUNT III is available with either eight or twelve counting keys. Other models are designed for computer and/or printer interfaces. The product is a microprocessor controlled differential cell counter designed for use in the **Hematology** laboratory.

DIFFCOUNT III displays information on a bright backlit LCD display. Unlike most competitive products, this unit provides for **simultaneous** viewing of all channels. The product features a compact keyboard with 'soft-touch' keys. This feature results in higher speed counting than that provided by older mechanical counter and the more relaxed keying reduces fatigue.

DIFFCOUNT III includes many unique features, such as count correction, calculation of percent of total, and calculation of absolute WBC counts (for 12 channel counters only). Aural prompts include a tone generated every 100 counts and an audible click for each count entered, in addition the user may wish to set operation for 100 count lockout, where every 100 counts will result in lockout and where the user presses a key for resumption. These features are optional and can be easily disabled through internal jumper plugs.

Although both eight and twelve channel units provide for 3 digits per channel counting; i.e., 999 max., only the eight channel model displays the three digits Per channel. The twelve channel units display the least significant 2 digits and indicates overflow condition above the 99 count. Calculations of percent are still based upon the internal three digits per channel.

Power adapters accommodate the US market as well as European requirements.

Ordering Information

Part Code	Model	Description
BS00266	10-308	DIFFCOUNT III - 8 Cell Count Keys
BS00265	10-312	DIFFCOUNT III - 12 Cell Count Keys
BS02455	10-312P	DIFFCOUNT III - 12 Cell Count Keys w/ Printer I/O Port

Benefits:

- All channels are displayed simultaneously with large digits on a bright backlit LCD display
- Hermetically sealed switches prevent count anomalies that might result from powdered gloves and other environmental contaminants
- Compact keyboard with soft-touch keys to increase counting speed
- Calculates percent or absolute WBC values (12-key models only)
- Optional non-total counting key tracks abnormal cells independent of the differential count
- Alert actuated every 100 counts with an optional 100 count lockout
- Count Correction
- Versatile key overlays

Supplied By:

Burkard Scientific (Sales) Ltd,
PO Box 55, Uxbridge, Middx, UB8 2RT, UK
Tel: +44 1895 230056
Fax: +44 1895 230058
Email: sales@burkardscientific.co.uk



Diffcount™ III

Specifications

Description

Diffcount III microprocessor-controlled differential cell counters designed for use in hematology laboratories.

Keypad

- Model 10-308: Eight counting keys plus PERCENT, COUNT and CLEAR keys. Counting and total displays have 3 digits.
- Model 10-312: Twelve counting keys plus PERCENT, COUNT, WBC and CLEAR keys. Each counting channel displays 2 digits and total displays 3 digits.
- Sculptured "soft-touch" keys with audible click to acknowledge entry.
- Each unit includes one key assignment overlay which permits individualized key designation.

Key Functions

- Counting keys: Each key enters a count into a separate channel and the TOTAL channel. While viewing data in percent or absolute counts, depressing any count key will automatically return the unit to its COUNT mode.
- Optional non-total counting key(s):
- Enters count into a separate channel but not into the TOTAL channel.
 - One non-total counting key is optional in model 10-308.
 - One or two non-total counting channels are optional in model 10-312.
- Count key: Calls up display of the raw counts in each channel plus the total number of counts. At each 100 counts, additional counting is locked out (lock-out can be disabled by setting an internal jumper plug.) To resume counting press the COUNT key.
- To subtract a count or counts from any channel, hold down the COUNT key and press the key for the channel you wish to decrement.
- PERCENT key: Displays the percentage of counted cells in each channel to the total counted. Nontotalizing channels such as NRBC calculation will express NRBC cells per 100 white blood cells. Depressing any counting key or the COUNT mode will revert the unit to its count operating mode.
- WBC key: Available on the 12 channel model this key enables the user to enter the total WBC count. Once a value is entered, depressing WBC will initiate calculations and display each channel in terms of its absolute WBC count. Pressing the COUNT key or any of the counting keys will return the unit to its COUNT operating mode.
- CLEAR key: Clears (zeroes) all channels.

Display

- A backlit (LCD) liquid crystal display provides for simultaneous viewing of all channels. Each channel is positioned on the display in correspondence with the key layout. Each counting channel is incremented by one digit each time its associated key is depressed.
- A three digit total channel is increased by one count each time any one of the totalizing keys is depressed.

8-Key Counter

Each channel displays counts up to 999; i.e. 3 digits per channel.

```
002 003 001 001 TOTAL
005 020 001 067 100
```

Percentages are formatted to one decimal place.

```
02.0 03.0 01.0 01.0 %-
05.0 19.8 01.0 67.0
```

12-Key Counter

Each channel tallies up to 999; however only 2 digits are displayed per counting channel (the TOTAL channel displays to 999).

```
00 00 01 00 01 00 %-
01 02 03 21 04 67 100
```

When the actual count in a counting channel exceeds 99, the corresponding display is marked by an arrow. The last two digits of the actual count will be displayed and the actual number of counts (up to 999) will remain in memory.

```
00 00 05 00 05 00 TOTAL
05 10 15 65 10->85 500
```

Percentages are rounded to whole numbers.

```
00 00 01 00 01 00 %
01 02 03 21 04 67 100
```

The absolute WBC Count prompt is shown.

Enter WBC Value = 10.5

The calculated WBC's are displayed.

```
.00 .00 .11 .00 .11 ABS
.11 .21 .32 2.2 .42 7.1
```

Prompts

- Alert tone signals each 100 counts.
- Each count entered will cause an audible click to be made. This provides positive feedback to the technologist who is busily scanning a microscopic slide.

Physical Features

- Dimensions: 6" (15.24cm) width, 9" (22.86cm) depth, 2.25" (5.725 cm) height
- Electrical: 110-125 VAC, 50/60hz, 220-250 VAC, 50 hz (opt.), 5 watts max
- Operating temperature range: 32°F-120°F (0°C-49°C)
- Expected key life: greater than 20 million cycles per key.

Warranty

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

Ordering Information

Catalogue

Number	Item Description
10-308	DIFFCOUNT III - 8 channel unit with overlay.
10-312	DIFFCOUNT III - 12 channel unit with overlay.
10-007	SERVICE MANUAL - Specify which model.
10-008	KEY ASSIGNMENT OVERLAY - for 8 channel unit 3/pkg.
10-012	KEY ASSIGNMENT OVERLAY - for 12 channel unit 3/pkg.

Additional keypads and workstations available:

10-212	COMPU-U-DIFF keypad with computer interface. 12 count keys, 6 function keys, indent. and morphology entry. Outputs differential data to print on multiform tickets or transmit to computer. RS-232 output.
10-229	Same as 10-212 above, except with additional 31 specimen memory.
10-240	CYTO-COMP cytological keypad for computer interface. Permits entry of Pap smear results, results including Cell Categories, Maturation Index, Estrogen Effect, Class and Comments. 63 specimen batch memory. RS-323 output.
10-230	DATA-VIEW interlaces Coulter, Ortho, or Cell Dyne cell counters requiring addition of specimen identification number to permit computer compatibility. Also permits review and edit of hemogram data.
10-216	UR-O-COMP urinalysis data entry terminal. Permits all urinalysis results to print on multiform tickets or transmit to computer. 63 specimen memory. RS-232 output. Instrument interfaces available for Ames Clinitek 100 and 200.
10-204	MULTIPLEXER permits any four units to connect to a single computer I/O port.
10-218	MULTIPLEXER EXTENDER connects to the 10-204 to add four additional channels.
10-250	TICKET PRINTER for use with 10-212 and 10-216 consoles. Prints on cards and multiform tickets.

