VOLTCRAFT®
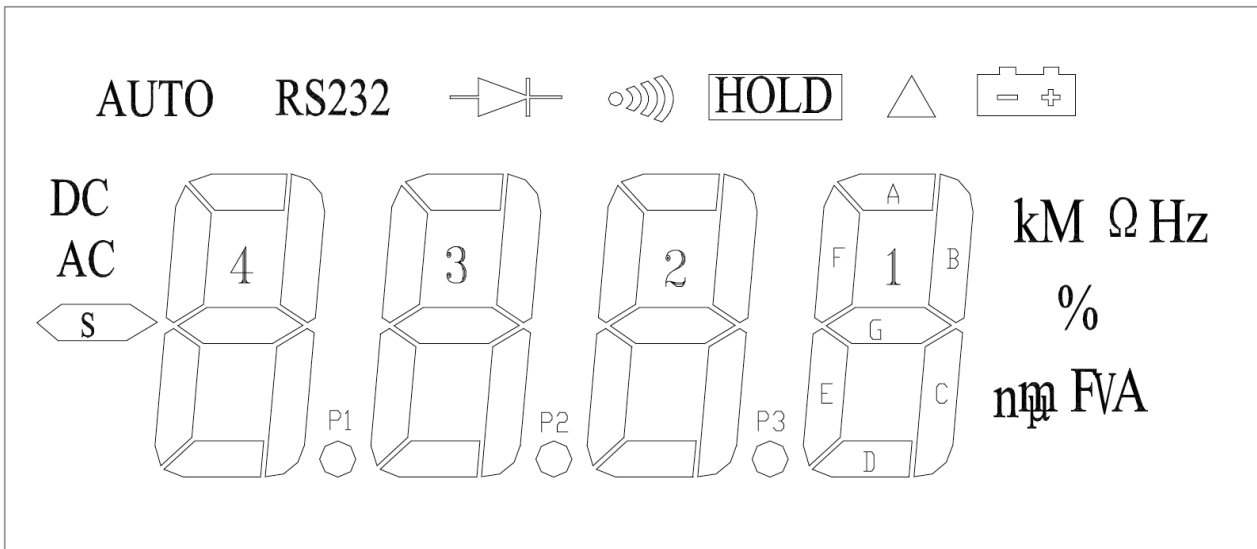
VC-840
RS232 PROTOCOL
Nº 12 11 12

CE
VERSION 05/09

GENERAL:

The output of the RS232 corresponds to the data shown on the LCD display.

TECHNICAL DATA:

Direction:	Single Direction (Output Only)
Baud Rate:	2400 bps
Data Position:	8 bit
Parity Check:	None
Data Format:	HEX
Data Length:	14 Bytes
Data Information:	LCD segments on-off
Sampling Rate:	40 kHz
ADC Output Frequency:	40 Hz
After ADC Average Value Output Frequency:	10 Hz
After Auto-Zero Output Frequency:	4 Hz
Data Format:	$1X_1$ $2X_2$ $3X_3$ $4X_4$ $5X_5$ $6X_6$ $7X_7$ $8X_8$ $9X_9$ AX_A BX_B CX_C DX_D EX_E

1st byte   → $1X_1$ (X_1 represents COM 4 → COM 1 of SEG 1)
2nd byte   → $2X_2$ (X_2 represents COM 4 → COM 1 of SEG 2)
3rd byte   → $3X_3$ (X_3 represents COM 4 → COM 1 of SEG 3)
...
14th byte   → EX_E (X_E corresponds to COM 4 → COM 1 of SEG 14)

X_n corresponds to the SEGn   (COM 4 → COM 1), active HIGH (ON = 1, OFF = 0)
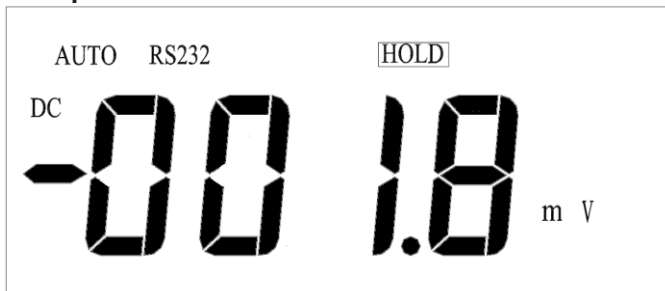
PIN / COM	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	COM4	COM3	COM2	COM1	SEG1	SEG2	SEG3	SEG4	SEG5	SEG6	SEG7	SEG8	SEG9	SEG10	SEG11	SEG12	SEG13	SEG14
COM1				COM1	RS232	A4	B4	A3	B3	A2	B2	A1	B1	⊢▷	)))	HOLD	🔋	C2_C1 0_0
COM2			COM2		AUTO	F4	G4	F3	G3	F2	G2	F1	G1	k	M	△	Hz	C2_C1 0_1
COM3		COM3			DC	E4	C4	E3	C3	E2	C2	E1	C1	n	%	Ω	V	C2_C1 1_0
COM4	COM4				AC	<S>	D4	P1	D3	P2	D2	P3	D1	μ	m	F	A	C2_C1 1_1

Remarks: SEG 14 does not contain any useful information on the RS232 output for VC-840.

Additional Information:

Symbol	Description	Symbol	Description
🔋	Low Battery Indicator	HOLD	Hold Function
AUTO	Automatic Mode	Δ	Relative Measuring Function
AC	Alternating Voltage or Current	mV, V	Units of Voltage
DC	Direct Voltage or Current	μA, mA, A	Units of Current
<S>	Negative Symbol	Ω, KΩ, MΩ	Units of Resistance
RS232	RS232 Output	nF, μF	Units of Capacitance
⊢▷	Diode Test	Hz, KHz, MHz	Units of Frequency
■)))	Continuity Buzzer	%	Duty Cycle

Example #1:

RS232 output: 17 2F 3D 47 5D 60 75 8F 9F A0 B8 C1 D4 E8

Example #2:

RS232 output: 15 25 3B 40 55 67 7D 8F 9E A0 B0 C0 D1 E1