

# 6000-count Dual-Display ClampMeter Communication Protocol

## \*COM Port Communication Protocol:

(Baud rate, Parity, Data bits, Stop bit) = (9600, N, 8, 1)

## Operation of Activating RS232 Output:

Press and hold "HOLD" button and then slide the "Slide Switch" to power on

## Recommended program flow.

1. Initiate COM port
2. Wait for 100ms
3. Set (baud rate, parity, data bit, stop bit) = (9600, N, 8,1)
4. Locate 31 RXD buffers
5. Clear RXD buffers
6. Check & read RXD buffers
7. Decode 31 RXD buffers (see Figure 1 & Table 1)
8. Repeat 5-7 to get next reading

Figure 1

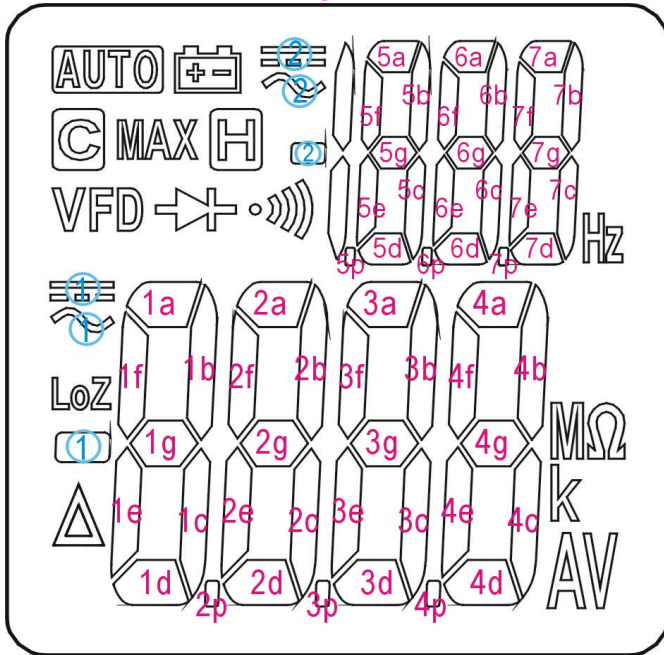


Table 1. LCD Map (31 bytes)\*

No.	bit7:3	bit2	bit1	bit0
1	00000	0	0	1
2	00001	1f	1e	(1)
3	00010	1c	1d	1a
4	00011	x	1b	1g
5	00100	2f	2e	2p
6	00101	2c	2d	2a
7	00110	x	2b	2g
8	00111	3f	3e	3p
9	01000	3c	3d	3a
10	01001	x	3b	3g
11	01010	4f	4e	4p
12	01011	4c	4d	4a
13	01100	x	4b	4g
14	01101	Hz	0	M
15	01110	Ω	V	x
16	01111	x	k	A
17	10000	5f	5e	5p
18	10001	5c	5d	5a
19	10010	x	5b	5g
20	10011	6f	6e	6p
21	10100	6c	6d	6a
22	10101	x	6b	6g
23	10110	7f	7e	7p
24	10111	7c	7d	7a
25	11000	x	7b	7g
26	11001		(2)	g
27	11010	H		
28	11011	x		MAX
29	11100	C	VFD	
30	11101			AUTO
31	11110	x	Δ	Loz

\* x: do not care, bit may be 0 or 1

**Example:** While LCD reading is "AC 531.7V/120.2Hz", 31 data bytes are "01h, 0Ch, 17h, 19h (or 1Dh), 20h, 2Fh, 33h (or 37h), 38h, 44h, 4Ah (or 4Eh), 51h, 5Dh, 62h (or 66h), 6Ch, 72h, 78h (or 7Ch), 82h, 8Bh, 93h (or 97h), 9Eh, A7h, AAh (or AEh), B3h, BBh, C3h (or C7h), C9h, D0h, D8h (or DCh), E0h, EBh, F0h (or F4h)"

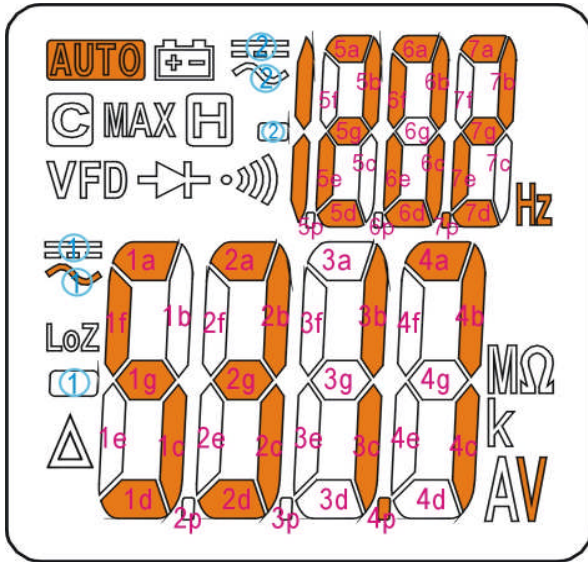


Table 1. LCD Map (31 bytes)					HEX
No.	bit7:3	bit2	bit1	bit0	
1	00000	0	0	1	01h
2	00001	1	0	0	0Ch
3	00010	1	1	1	17h
4	00011	0 or 1	0	1	19h or 1Dh
5	00100	0	0	0	20h
6	00101	1	1	1	2Fh
7	00110	0 or 1	1	1	33h or 37h
8	00111	0	0	0	38h
9	01000	1	0	0	44h
10	01001	0 or 1	1	0	4Ah or 4Eh
11	01010	0	0	1	51h
12	01011	1	0	1	5Dh
13	01100	0 or 1	1	0	62h or 66h
14	01101	1	0	0	6Ch
15	01110	0	1	0	72h
16	01111	0 or 1	0	0	78h or 7Ch
17	10000	0	1	0	82h
18	10001	0	1	1	8Bh
19	10010	0 or 1	1	1	93h or 97h
20	10011	1	1	0	9Eh
21	10100	1	1	1	A7h
22	10101	0 or 1	1	0	AAh or AEh
23	10110	0	1	1	B3h
24	10111	0	1	1	BBh
25	11000	0 or 1	1	1	C3h or C7h
26	11001	0	0	1	C9h
27	11010	0	0	0	D0h
28	11011	0 or 1	0	0	D8h or DCh
29	11100	0	0	0	E0h
30	11101	0	1	1	EBh
31	11110	0 or 1	0	0	F0h or F4h

bit2	bit1	bit0
0	0	1
1f	1e	(1)
1c	1d	1a
x	1b	1g
2f	2e	2p
2c	2d	2a
x	2b	2g
3f	3e	3p
3c	3d	3a
x	3b	3g
4f	4e	4p
4c	4d	4a
x	4b	4g
Hz	0	M
Ω	V	x
x	k	A
5f	5e	5p
5c	5d	5a
x	5b	5g
6f	6e	6p
6c	6d	6a
x	6b	6g
7f	7e	7p
7c	7d	7a
x	7b	7g
	(2)	
x	Δ	Loz