6000-count Digital Multimeter 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 turn the "Rotary 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 15 RXD buffers
5. Clear RXD buffers
6. Check & read RXD buffers
7. Decode 15 RXD buffers (see Figure 1 & Table 1)
8. Repeat 5~7 to get next reading

Figure 1
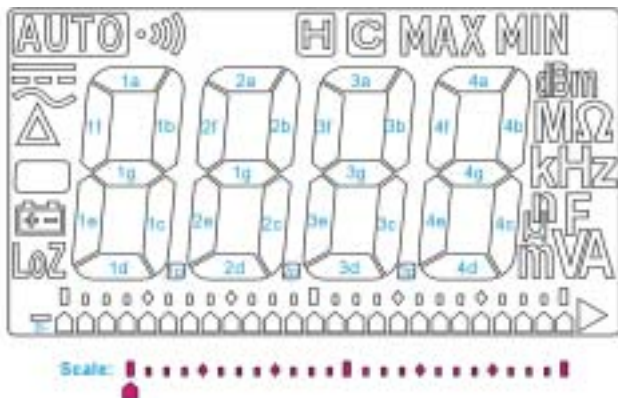
Table 1. LCD Map (15 bytes)				
No.	bit7:4	bit3	bit2	bit1	bit0
1	0000	0	0	1	0
2	0001	AUTO	▬▬▬	~	⚠
3	0010	•)))	🔋	LoZ	B-
4	0011	1a	1f	1e	-
5	0100	1b	1g	1c	1d
6	0101	2a	2f	2e	1p
7	0110	2b	2g	2c	2d
8	0111	3a	3f	3e	2p
9	1000	3b	3g	3c	3d
10	1001	4a	4f	4e	3p
11	1010	4b	4g	4c	4d
12	1011	H	dBm	M	k
13	1100	C	Ω	Hz	n
14	1101	MAX	F	u	m
15	1110	MIN	V	A	Scale

Example: *While LCD reading is "AC 513.6V", 15 data bytes are "02H, 1AH, 20H, 3CH, 47H, 50H, 6AH, 78H, 8FH, 9FH, A7H, B0H, C0H, D0H, E5H"*
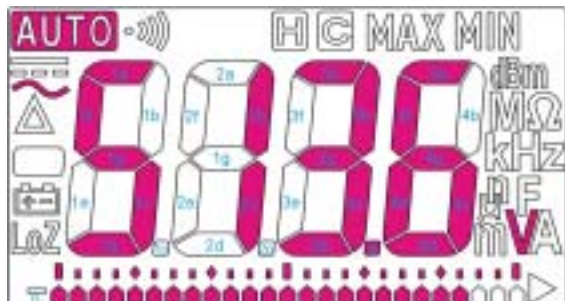
Table 1. LCD Map (15 bytes)					HEX format
No.	bit7:4	bit3	bit2	bit1	bit0	
1	0000	0	0	1	0	02H
2	0001	1	0	1	0	1AH
3	0010	0	0	0	0	20H
4	0011	1	1	0	0	3CH
5	0100	0	1	1	1	47H
6	0101	0	0	0	0	50H
7	0110	1	0	1	0	6AH
8	0111	1	0	0	0	78H
9	1000	1	1	1	1	8FH
10	1001	1	1	1	1	9FH
11	1010	0	1	1	1	A7H
12	1011	0	0	0	0	B0H
13	1100	0	0	0	0	C0H
14	1101	0	0	0	0	D0H
15	1110	0	1	0	1	E5H

bit3	bit2	bit1	bit0
0	0	1	0
AUTO	▬▬▬	~	⚠
•)))	🔋	LoZ	B-
1a	1f	1e	-
1b	1g	1c	1d
2a	2f	2e	1p
2b	2g	2c	2d
3a	3f	3e	2p
3b	3g	3c	3d
4a	4f	4e	3p
4b	4g	4c	4d
H	dBm	M	k
C	Ω	Hz	n
MAX	F	u	m
MIN	V	A	Scale