

Instruction Manual

SUNJE
Electrostatic

SBL-20W Communication



1 RS-485 Communication

1. Pin

- 1번 Pin : RS-485(+)
- 2번 Pin : RS-485(-)

2. Communication Spec.

- Baud : 9600
- Parity Bit : None
- Data Bit : 8
- Stop Bit : 1

2 Communication Protocol

Command Format		통신장비 → SBL-20W												
Byte	0	1	2	3	4	5	6	7	8	9	10	11	12	13
ASCII	\$	P	M	,	C	M	D	,	A	*	Checksum	CR	LF	

1. Data Request		통신장비 → SBL-20W												
Byte	0	1	2	3	4	5	6	7	8	9	10	11	12	13
ASCII	\$	C	6	,	R	E	Q	,	A	*	Checksum	CR	LF	

Byte	Information	Byte	Comment	Remarks
0	Start Code	1		
1	Product Type	1	C	A: Photo, B: Bar, C: Blower
2	Ionizer Model	1	6	6 : SBL-20W
4, 5, 6	Data Request	3	REQ	Command (REQ, RUN, STP, CLN, UPF, DNF)
8	Address	1	1, 2, 3, 4, 5, 6, 7, 8	
9	End Code	1		
10, 11	Check Sum	2	Checksum	
12, 13	Line Feed, New Line	2		

1. Data Receive		통신장비 ← SBL-20W												
Byte	0	1	2	3	4	5	6	7	8	9	10	11	12	13
Code	\$	C	6	,	A	,	0	,	0	,	0	,	0	,
Byte	14	15	16	17	18	19	20	21	22	23	24	25		
Code	FS	,	TS	,	AS	,	RS	*	h	h	Wr	Wn		

Byte	Information	Byte	Comment	Remarks
0	Start Code	1		
1	Product Type	1	C	A: Photo, B: Bar, C: Blower
2	Ionizer Model	1	6	6 : SBL-20W
4	Address	1	1, 2, 3, 4, 5, 6, 7, 8	
6	Reserved	1	0	
8	Reserved	1	0	
10	Reserved	1	0	
12	Reserved	1	0	
14	Fan Speed	1	0 ~ 4	0 : 정지, Fan Speed : 1~4단계
16	Tip Clean State	1	0 : Normal / 1 : Tip Cleaning	
18	Alarm State	1	0 : Normal / 1: HV / 2 : Fan	
20	Run/Stop State	1	1 : Run / 0 : Stop	
21	End Code	1		
22, 23	Check Sum	2	Checksum	
24, 25	Line Feed, New Line	2		

1. Comm Sample					
Request	\$C6,REQ,8*0BWrWn	Receive	\$C6,8,0,0,0,0,0,0,1*60WrWn		

2. Control [Run]		통신장비 → SBL-20W												
Byte	0	1	2	3	4	5	6	7	8	9	10	11	12	13
Code	\$	C	6	,	R	U	N	,	A	*	h	h	Wr	Wn

2. No Receive		통신장비 ← SBL-20W												
---------------	--	----------------	--	--	--	--	--	--	--	--	--	--	--	--

3. Control [Stop]		통신장비 → SBL-20W												
Byte	0	1	2	3	4	5	6	7	8	9	10	11	12	13
Code	\$	C	6	,	S	T	P	,	A	*	h	h	Wr	Wn

3. No Receive		통신장비 ← SBL-20W												
---------------	--	----------------	--	--	--	--	--	--	--	--	--	--	--	--

4. Control [Tip Clean]		통신장비 → SBL-20W												
Byte	0	1	2	3	4	5	6	7	8	9	10	11	12	13
Code	\$	C	6	,	C	L	N	,	A	*	h	h	Wr	Wn

4. No Receive		통신장비 ← SBL-20W												
---------------	--	----------------	--	--	--	--	--	--	--	--	--	--	--	--

5. Control [Fan Speed]		통신장비 → SBL-20W												
Byte	0	1	2	3	4	5	6	7	8	9	10	11	12	13
Code	\$	C	6	,	U/D	P/N	F	,	A	*	h	h	Wr	Wn

Byte	Information	Byte	Comment	Remarks
4, 5, 6	Data Request	3	UPF / DNF	UPF : Up Fan Speed, DNF : Down Fan Speed

5. No Receive		통신장비 ← SBL-20W												
---------------	--	----------------	--	--	--	--	--	--	--	--	--	--	--	--

Checksum Calculation	
\$ ~ * Calculation	
<pre>#include<stdio.h> void main() { char packet[] = "C6,REQ,8", cksum = 0; int i, size = 0; while(packet[size] != '\0') size++; for(i = 0 ; i < size ; i++) { if(i == 0) cksum = packet[i]; else cksum ^= packet[i]; printf("packet[%d] = %c, checksum = %x\n", i, packet[i], cksum); } printf("Request message : \$C6,REQ,8*%.2X", cksum); //Checksum character send by ASCII. }</pre>	

※ Checksum 검사는 \$표시 이후부터 *표시 전까지의 모든 데이터를 Exclusive-or 연산한 것입니다.