

Instruction Manual

SUNJE
Electrostatic

SXN-10UL 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 ← SXN-10UL												
Byte	0	1	2	3	4	5	6	7	8	9	10	11	12	13
Code	\$	P	M	,	C	M	D	,	A	*	Checksum	CR	LF	

1. Data Request		통신장비 → SXN-10UL												
Byte	0	1	2	3	4	5	6	7	8	9	10	11	12	13
Code	\$	P	M	,	R	E	Q	,	A	*	Checksum	CR	LF	

Byte	Information	Byte	Comment	Remarks
0	Start Code	1		
1	Product Type	1	Photo Type Ionizer	A : Photo
2	Ionizer Model	1	K : SXN-10UL	
1, 2	Broadcasting	2	ZB	제품군, 제품명 상관없이 응답
4, 5, 6	Command	3	REQ / RUN / STP / ADR	Request / Run / Stop / Address
8	Address	1	Photo : 1 ~ 16	1,2,3,4,5,6,7,8,9,A,B,C,D,E,F,G
9	End Code	1		
10, 11	Check Sum	2	Check Sum	
12, 13	Carriage Return, Line Feed	2		

1. Data Receive		통신장비 ← SXN-10UL												
Byte	0	1	2	3	4	5	6	7	8	9	10	11	12	13
ASCII	\$	P	M	,	A	,	H/C	,	H/O	,	H/A	,	Head	
Byte	14	15	16	17	18	19	20	21	22	23	24	25	26	27
ASCII	Run Time				I/S	,	R/S	,	P/S	,	A/S	,	R/S	*
Byte	28	29	30	31										
ASCII	Checksum		CR	LF										

Byte	Information	Byte	Comment	Remarks
0	Start Code	1		
1	Product Type	1	Photo Type Ionizer	A : Photo
2	Ionizer Model	1	K : SXN-10UL	
4	Address	1	Photo : 1 ~ 16	1,2,3,4,5,6,7,8,9,A,B,C,D,E,F,G
6	Head Connect	1	Normal : 1	1: Head Con(상시)
8	Head Over Time	1	Normal : 0, Abnormal : 1	Over Time 시 Abnormal
10	Head Alarm	1	Normal : 0, H/V Abnormal : 1 Out Current : 2	0 이외 Abnormal
12 ~ 16	Head Run Time	5	00000 ~ 99999 Hour	
18	Controller Interlock State	1	Normal : 1, Abnormal : 0	0: Interlock Off, 1: Interlock On
20	Controller Remote State	1	On : 1, Off : 0	0: Remote Off, 1: Remote On
22	Controller Power State	1	Normal : 1, Abnormal : 0	0: Power Off, 1: Power On
24	Controller Alarm State	1	Normal : 0, H/V Abnormal : 1 Out Current : 2	Head Alarm 발생 시 Abnormal
26	Controller Run/Stop State	1	Run : 1, Stop : 0	
27	End Code	1		
28, 29	Check Sum	2	Check Sum	
30, 31	Carriage Return, Line Feed	2		

2. Control [Run]		통신장비 → SXN-10UL												
Byte	0	1	2	3	4	5	6	7	8	9	10	11	12	13
Code	\$	P	M	,	R	U	N	,	A	*	Checksum	CR	LF	

2. No Receive	통신장비 ← SXN-10UL												
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3. Control [Stop]		통신장비 → SXN-10UL												
Byte	0	1	2	3	4	5	6	7	8	9	10	11	12	13
Code	\$	P	M	,	S	T	P	,	A	*	Checksum	CR	LF	

3. No Receive	통신장비 ← SXN-10UL												
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4. Control [Address Set]		통신장비 → SXN-10UL												
Byte	0	1	2	3	4	5	6	7	8	9	10	11	12	13
Code	\$	P	M	,	A	D	R	,	A	,	A	*	Checksum	CR
														LF

Byte	Information	Byte	Comment	Remarks
0	Start Code	1		
1	Product Type	1	Photo Type Ionizer	A : Photo
2	Ionizer Model	1	K : SXN-10UL	
1, 2	Broadcasting	2	ZB	제품군, 제품명 상관없이 응답
4, 5, 6	Command	3	REQ / RUN / STP / ADR	Request / Run / Stop / Address
8	Address	1	현재 Address	1,2,3,4,5,6,7,8,9,A,B,C,D,E,F,G
10	Address	1	변경 Address	
11	End Code	1		
12, 13	Check Sum	2	Check Sum	
14, 15	Carriage Return, Line Feed	2		

4. No Receive	통신장비 ← SXN-10UL												
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Checksum Calculation	
\$ ~ * Calculation	
#include<stdio.h>	
void main()	
{	
char packet[] = "AK,REQ,1", 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("Request : AK,REQ,1*%.2X",cksum); //Checksum character send by ASCII.	
}	

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