HDL-BUS control and operate code

1. Scene controller

Operate code	**Function**	**Targets address**	**Additional data format**(every 9 data)
0x0002	Scene control	Designated address	Area number(1B); Scene number(1B)
0x0003	Scene control answerback	Broadcast address	Area number(1B); Scene number(1B); channels total number(1B); status of channel switch(n Bit),n-means how many channels
0x000C	Read scene status	Designated address	Area number(1B)
0x000D	Scene status answerback	Designated address	Area number(1B); Running scene number(1B)
0xEFFF	Scene status broadcast	Broadcast address	Total area number(1B); Running scene number in each area(n1 B); Total channel number(1B); Switch number in each channel(n2 B) n 1-means areas number; n2-means channels number

Operate code	**Function**	**Targets address**	**Additional data format**(every 9 data)
0x001A	Sequence control	Designated address	Area number(1B); Sequence number(1B)
0x001B	Sequence control answerback	Broadcast address	Area number(1B); Sequence number(1B)
0xE014	Read sequence status	Designated address	Area number(1B)
0xE015	Sequence status answerback	Designated address	Area number(1B); Running sequence number(1B)
0xF036	Sequence status broadcast	Broadcast address	Running sequence number in each area(n B) n --means how many areas

Operate code	**Function**	**Targets address**	**Additional data format**(every 9 data)
0x0031	Single channel regulate	Designated address	Channel number(1B);Switch value(1B);
0x0032	Single channel regulate answerback	Broadcast address	Channel number(1B);0XF8/0XF5(1B);Switch value(1B); Channel total number(1B);Switch status of each channel(n bytes) n: channel total number,0XF8:success, 0XF5: fail
0x0033	Read status of single channel targets	Designated address	
0x0034	Single channel targets status answerback	Designated address	Channel total number(1B); Switch value of each channel(n B); n: channel total number
0x0038	Read actual status of single	Designated address	

	channel		
0x0039	Single channel targets actual status answerback	Designated address	Channel total number(1B); Switch value of each channel(n B); n: channel total number

2. Timer

Operate code	**Function**	**Targets address**	**Additional data format**(every 9 data)
0xF116	Timer switch	Designated address	Channel number(1B); Status of switch(1B)(0XFF,ON;0,OFF)
0xF117	Timer switch answerback	Broadcast address	Channel number(1B); Status of switch(1B)(1,ON;0,OFF)
0xF112	Read status of timer switch	Designated address	Channel number(1B)
0xF113	Timer status answerback	Designated address	Channel number(1B); Status of switch(1B)(1,ON;0,OFF)
0xF12F	Timer status broadcast	Broadcast address	Switch status of each channel(n B),(1,ON;0,OFF) n: means how many channels

3. Universal switch

Operate code	**Function**	**Targets address**	**Additional data format**(every 9 data)
0xE01C	Universal switch	Designated address	Switch number(1B); Status of switch(1B)(0XFF,ON;0,OFF)
0xE01D	Universal switch answerback	Broadcast address	Switch number(1B);Status of switch(1B)(1,ON;0,OFF)
0xE018	Read status of universal switch	Designated address	Switch number(1B)
0xE019	Universal switch answerback	Designated address	Switch number(1B);Status of switch(1B)(1,ON;0,OFF)
0xE017	Universal switch Broadcast	Broadcast address	Status of each switch(n B),(1,ON;0,OFF) n: means how many switches

4. Curtain switch

Operate code	**Function**	**Targets address**	**Additional data format**(every 9 data)
0xE3E0	Curtain switch	Designated address	Curtain number(1B);Curtain status(1B) 0: stop; 1: on; 2: off
0xE3E1	Curtain switch answerback	Broadcast address	Curtain number(1B);Curtain status(1B) 0: stop; 1: on; 2: off
0xE3E2	Read status of Curtain switch	Designated address	Curtain number(1B)

0xE3E3	Curtain switch status answerback	Designated address	Curtain number(1B);Curtain status(1B) 0: stop; 1: on; 2: off
0xE3E4	Curtain switch broadcast	Broadcast address	Status of each curtain(n B); 0: stop; 1: on; 2: off n: means ow many curtains

5. GPRS control

Operate code	**Function**	**Targets address**	**Additional data format**(every 9 data)
0xE3E4	GPRS control	Designated address	Type(1B): { 0: invalid ; 1: message} Number(1B) { 1 ~ 254}
0xE3E5	GPRS control answerback	Designated address	Type(1B): { 0: invalid ; 1: message} Number(1B) { 1 ~ 254}

6. Panel control

Operate code	**Function**	**Targets address**	**Additional data format**(every 9 data)
0xE3E8 E3**D**8	Panel control	Designated address	Type(1B): { 0: invalid ; 1: IR function 2:Lock key of panel 3:AC power 4:Cooling Temp 5:Fan speed 6:AC Mode 7:Heating Temp 8:Auto Temp 9:Rise Temp 10:Decrese temp 11:LCD backlight status 12:Lock AC 13:Backlight 14:Status light 15:Shield Button 16:Shield Page 17:Control button Status 18:Control button 19:Dry Temp 20: Floor heat: 0 : off ; 1 on 21:heating mode 22 Rise Temp 23 Decrease temp 24:Setup page lock Status(1B) { 1-----0 : off ; 1 on 2-----0 : off ; 1 on

			3-----0 : off ; 1 on 4-----0 ~ 84 5---- 0: auto ; 1: high ;2:medium 3:low 6----0:cooling ; 1:Heating; 2:Fan ; 3:auto ; Dehumidfy 7----0 ~ 84 8----0 ~ 84 9----0-10 10---0-10 11---0 : off ; 1 on 12---0 : off ; 1 on 13---0 ~100 14---0 ~100 15---1~16 16---1~4 17---0 : off ; 1 on 18---1~16 21--- 5 timer; 4 away; 3 night; 2 day; 1 normal; 25--- Floor heat setpoint }
0xE3E9 E3**D**9	Panel control answerback	Broadcast address	Type(1B): { 0: invalid ; 1: IR function 2:Lock key of panel 3:AC power 4:Cooling Temp 5:Fan speed 6:AC Mode 7:Heating Temp 8:Auto Temp 9:Rise Temp 10:Decrese temp 11:LCD backlight status 12:Lock AC 13:Backlight 14:Status light 15:Shield Button 16:Shield Page 17:Control button Status 18:Control button 19:0-84 20: Floor heat: 0 : off ; 1 on

			21: 5 timer; 4 away; 3 night; 2 day; 1 normal;
			22:1-5
			23:1-5
			24: 0 : off ; 1 on
			25:normal setpoint
			26: ? setpoint
			27: night setpoint
			28: away setpoint
			
			Status(1B)
			{
			1-----0 : off ; 1 on
			2-----0 : off ; 1 on
			3-----0 : off ; 1 on
			4-----0 ~ 84
			5---- 0: auto ; 1: high ;2:medium 3:low
			6----0:cooling ; 1:Heating; 2:Fan ; 3:auto ; Dehumidfy
			7----0 ~ 84
			8----0 ~ 84
			9----0-10
			10---0-10
			11---0 : off ; 1 on
			12---0 : off ; 1 on
			13---0 ~100
			14---0 ~100
			15---1~16
			16---1~4
			17---0 : off ; 1 on
			18---1~16
			}

0xE3DA	Read status of Panel control		Type(1B): { 0: invalid ; 1: IR function 2:Lock key of panel 3:AC power 4:Cooling Temp 5:Fan speed 6:AC Mode 7:Heating Temp 8:Auto Temp 9:Rise Temp

			10:Decrese temp 11:LCD backlight status 12:Lock AC 13:Backlight 14:Status light 15:Shield Button 16:Shield Page 17:Control button Status 18:Control button 19:Dry Temp 20:floor heating status 21:heating mode 22 Rise Temp 23 Decrease temp 24:Setup page lock 25:normal setpoint 26: ? setpoint 27: night setpoint 28: away setpoint }
0xE3DB	Read status of Panel control answerback		Type(1B): { 0: invalid ; 1: IR function 2:Lock key of panel 3:AC power 4:Cooling Temp 5:Fan speed 6:AC Mode 7:Heating Temp 8:Auto Temp 9:Rise Temp 10:Decrese temp 11:LCD backlight status 12:Lock AC 13:Backlight 14:Status light 15:Shield Button 16:Shield Page 17:Control button Status 18:Control button 19:Dry Temp 20:floor heating status 21:heating mode

			22 Rise Temp
			23 Decrease temp
			24:Setup page lock
			}
			
			Status(1B)
			{
			1-----0 : off ; 1 on
			2-----0 : off ; 1 on
			3-----0 : off ; 1 on
			4-----0 ~ 84
			5---- 0: auto ; 1: high ;2:medium
			3:low
			6----0:cooling ; 1:Heating;
			2:Fan ; 3:auto ; Dehumidfy
			7----0 ~ 84
			8----0 ~ 84
			9----0-10
			10---0-10
			11---0 : off ; 1 on
			12---0 : off ; 1 on
			13---0 ~100
			14---0 ~100
			15---1~16
			16---1~4
			17---0 : off ; 1 on
			18---1~16
			19:0-84
			20: 0 : off ; 1 on
			21: 5 timer; 4 away; 3 night;
			2 day; 1 normal;
			22:-5
			23:1-5
			24: 0 : off ; 1 on

7. AC control

★AC status			
Operate code	**Function**	**Targets address**	**Additional data format**(every 9 data)
0x1938	Read AC status	Designated address	AC No.（1B）
0x1939	Read status of AC answerback	Designated address	1 AC No. (1-128) 2 Temperature type （ Celsius:0 ，Fahrenheit:1) 3 Now (C:0-40，F:32-99) 4 Cooling(C:0-30，F:32-86) 5 Heating(C:0-30，F:32-86)

			6 Auto(C:0-30，F:32-86) 7 Dry(C:0-30，F:32-86) 8 Mode and Fan, High 4bit Mode(0 cooling，1 heating，2 Fan，3 Auto，4 Dry) Low 4 bit Fan(0 Auto，1 High，2 Medium，3 Low) 9 AC status (1 ON, 0 OFF) 10 Setup Mode 0 cooling，1 heating，2 Fan，3 Auto，4 Dry 11 Setup Speed: 0 Auto，1 High，2 Medium，3 Low 12 Current Mode (C:0-30，F:32-86) 13 Sweep：high 4bit(0 No，1 Yes)，Low 4bit(0 No，1 Yes)
0x193A	Control AC	Designated address	1 AC No. (1-128) 2 Temperature type （Celsius:0，Fahrenheit:1) 3 Now (C:0-40，F:32-99) 4 Cooling(C:0-30，F:32-86) 5 Heating(C:0-30，F:32-86) 6 Auto(C:0-30，F:32-86) 7 Dry(C:0-30，F:32-86) 8 Mode and Fan, High 4bit Mode(0 cooling，1 heating，2 Fan，3 Auto，4 Dry) Low 4 bit Fan(0 Auto，1 High，2 Medium，3 Low) 9 AC status (1 ON, 0 OFF) 10 Setup Mode 0 cooling，1 heating，2 Fan，3 Auto，4 Dry 11 Setup Speed: 0 Auto，1 High，2 Medium，3 Low 12 Current Mode (C:0-30，F:32-86) 13 Sweep：high 4bit(0 No，1 Yes)，Low 4bit(0 No，1 Yes)
0x193B	Control AC feedback	Designated address	1 AC No. (1-128) 2 Temperature type （Celsius:0，Fahrenheit:1) 3 Now (C:0-40，F:32-99) 4 Cooling(C:0-30，F:32-86) 5 Heating(C:0-30，F:32-86) 6 Auto(C:0-30，F:32-86) 7 Dry(C:0-30，F:32-86) 8 Mode and Fan, High 4bit Mode(0 cooling，1 heating，2 Fan，3 Auto，4 Dry)

			Low 4 bit Fan(0 Auto，1 High，2 Medium，3 Low) 9 AC status (1 ON, 0 OFF) 10 Setup Mode 0 cooling，1 heating，2 Fan，3 Auto，4 Dry 11 Setup Speed: 0 Auto，1 High，2 Medium，3 Low 12 Current Mode (C:0-30，F:32-86) 13 Sweep：high 4bit(0 No，1 Yes)，Low 4bit(0 No，1 Yes)

（6）Floor heating

★Floor heating ： status of floor heating			
Operate code	**Function**	**Targets address**	**Additional data format**(every 9 data)
0x1944	Read Status	Designated address	none
0x1945	Read status feedback	Designated address	1 Temperature type（Celsius:0，Fahrenheit:1) (1B) 2 Temperature (high bit:0 Positive, 1: Negative, the rest 7bit is temperature) (1B) 3 Status : 0 OFF,1 ON, (1B) 4 Mode：1:Normal,2:Day, 3:Night, 4:Away, 5:Timer (1-5) (1B) 5 Normal temperature (C:5-35，F:41-95) (1B) 6 Day temperature (C:5-35，F:41-95) (1B) 7 Night temperature(C:5-35，F:41-95) (1B) 8 Away temperature(C:5-35，F:41-95) (1B) 9 Time (0：Day，1：night) (1B)
0x1946	Control Floor heating	Designated address	1 Temperature type（Celsius:0，Fahrenheit:1) (1B) 2 Status : 0 OFF,1 ON, (1B) 3 Mode：1:Normal,2:Day, 3:Night, 4:Away, 5:Timer (1-5) (1B) 4 Normal temperature (C:5-35，F:41-95) (1B) 5 Day temperature (C:5-35，F:41-95) (1B) 6 Night temperature(C:5-35，F:41-95) (1B) 7 Away temperature(C:5-35，F:41-95) (1B)
0x1947	Control Floor heating feedback	Designated address	1 0XF8/0XF5(1B) (1B) 2 Temperature type（Celsius:0，Fahrenheit:1) (1B) 3 Status : 0 OFF,1 ON,

			(1B) 4 Mode：1:Normal,2:Day, 3:Night, 4:Away, 5:Timer (1-5) (1B) 5 Normal temperature (C:5-35，F:41-95) (1B) 6 Day temperature (C:5-35，F:41-95) (1B) 7 Night temperature(C:5-35，F:41-95) (1B) 8 Away temperature(C:5-35，F:41-95) (1B)
0x1948	Read Temperature	Designated address	1, channel no, (1-6)
0x1949	Read Temperature feedback	Designated address	1, channel no, (1-6) 2,3,4,5: temperature (4 bytes) float type

（9）8in1(Device Type 315)

★8in1： Read status			
Operate code	**Function**	**Targets address**	**Additional data format**(every 8 data)
0xdb00	Read status	Designated address	Logic No
0xdb01	Read status feedback	Designated address	1 Dry contract(0 OFF，1 ON) 2 Dry contract(0 OFF，1 ON) 3 In LUX range(0 NO，1 Yes) 4 0 No-movement，1 Movement) 5 UV switch: 0:no command,1: OFF,2：ON 6 UV switch: 0:no command,1: OFF,2：ON 7 Delay High byte 8 Delay Low byte (0-3600s)

（10）8in1(Device Type 314)

★8in1： Read status			
Operate code	**Function**	**Targets address**	**Additional data format**(every 7 data)
0x1645	Read status	Designated address	
0x1646	Read status feedback	Designated address	1 F8 success F5 fail(1B) 2 Temperature (0-80 : -20 C-60 C)(1B) 3 Brightness (0-5000lux) (2B) 4 PIR (0:nomovement,1:movement) 5 Dry_NO1(0: OFF; 1: ON) 6 Dry_NO2(0: OFF; 1: ON)

（11）12in1

★12in1： Read status			
Operate code	**Function**	**Targets address**	**Additional data format**(every 8 data)
0x1645	Read status	Designated address	
0x1646	Read status feedback	Designated address	1 F8 success F5 fail (1B) 2 Temperature (0-80 : -20 C-60 C)(1B) 3 Brightness (0-5000lux) (2B)

			4 PIR (0:nomovement,1:movement) 5 Sonic(0:nomovement,1:movement) 6 Dry_NO1(0: OFF; 1: ON) 7 Dry_NO2(0: OFF; 1: ON)

（11）Sensors in One

★Sensors in One： Read current status			
Operate code	**Function**	**Targets address**	**Additional data format**(every 9 data)
0x1604	Read status	Designated address	
0x1605	Read status feedback	Designated address	1 0XF8/0XF5(1B) (1B) 2 Temperature-20-60"C (1B) 3 LUX 0-5000lux (2B) 4 Humidity 20-95%RH (1B) 5 AIR 0-3(clean/Mild/moderate/severe) (1B) 6 Gas 0-100% (1B) 7 Movement(0 Nomovement/1 Movement) (1B) 8 Dry contract(0 OFF，1 ON) (1B) 9 Dry contract(0 OFF，1 ON) (1B) 10 UV switch: 0: OFF,1：ON (1B) 11 UV switch: 0: OFF,1：ON (1B)
0x1630	Broadcast status	Broadcast address	1 0XF8/0XF5(1B) (1B) 2 Temperature-20-60"C (1B) 3 LUX 0-5000lux (2B) 4 Humidity 20-95%RH (1B) 5 AIR 0-3(clean/Mild/moderate/ severe) (1B) 6 Gas 0-100% (1B) 7 Movement(0 Nomovement/1 Movement) (1B) 8 Dry contract(0 OFF，1 ON) (1B) 9 Dry contract(0 OFF，1 ON) (1B) 10 UV switch: 0: OFF,1：ON (1B) 11 UV switch: 0: OFF,1：ON (1B)

（12）Read temperature

★Read temperature			
Operate code	**Function**	**Targets address**	**Additional data format**(every 9 data)
0xE3E7	Read temperature	Designated address	Channel No.
0xE3E8	Read temperature feedback	Designated address	1 Channel No. (1B) 2 Temperature (high bit:0 Positive, 1: Negative)
0xE3E5	Broadcast temperature	Broadcast address	1 Channel No. (1B)

			2 temperature float 1 (1B) 3 temperature float 2 (1B) 4 temperature float 3 (1B) 5 temperature float 4 (1B)

（13）Security control code

★ Security control code: status of security module to arm and disarm

Code	function	Targets address	Additional data format
0x011E	Reading present arm type	Designated address	Area No(1B)
0x011F	Reading present arm type and feedback	Designated address	1 area No (1B) 2type (bit：1 alarm or arm；0：Normal stauts (2B)

7bit	6bit	5bit	4bit	3bit	2bit	1bit	0bit
0	-	-	current	Emergency	Panic	Gas	Fire
7bit	6bit	5bit	4bit	3bit	2bit	1bit	0bit
Temperature	Power	Silent	Day	N Guest	Night	Away	Vacation

Code	function	Targets address	Additional data format
0x0104	arm	Designated address	1 area no (1B) 2 type (bit：1 arm；0：normal status) (1B),5bits：4 Day; 3 Night with Guest; 2 Night; 1 Away; 0 Vacation.
0x0105	return to arm	Broadcast return	1area (1B) 2 type(bit：1 arm；0：normal status) (1B),5bits：4 Day; 3 Night with Guest; 2 Night; 1 Away; 0 Vacation.
0x010C	alarm	Designated address	1area (1B) 2type (bit：1 arm；0：normal status (1B)

7bit	6bit	5bit	4bit	3bit	2bit	1bit	0bit
0	-	-	current	Emergency	Panic	Gas	Fire
7bit	6bit	5bit	4bit	3bit	2bit	1bit	0bit
Temperature	Power	Silent	-	-	-	-	-

Code	function	Targets address	Additional data format
0x010D	alarm return	Broadcast return	1area (1B) 2 type (bit：1 arm；0：normal status (1B)

7bit	6bit	5bit	4bit	3bit	2bit	1bit	0bit
0	-	-	current	Emergency	Panic	Gas	Fire
7bit	6bit	5bit	4bit	3bit	2bit	1bit	0bit
Temperature	Power	Silent	-	-	-	-	-

（14）music control code

Code	**function**	**Targets address**	**Additional data format**			
0x0218	Music play control	Designated	Refer to following table			
0x0219	Music play control return	Designated	Refer to following table			
0x021A	Reading	Designated	Refer to following table			
0x021B	return	Designated	Refer to following table			
Additional data first byte	1 audio choose	2 play mode	3 list/Channel	4 play control	5volume	6 play
Additional data second byte	1 SD Card 2 external input 3 FTP server 4 Radio FM	1single play 2 Single cycle 3 list order 4 list cycle	1 previous list 2 next list 3 list choose 4 previous Ch 5 next ch 6 Ch Choose	1 previous 2 next 3 play 4 stop	1 volume adjust 2 + 3 -	List No“0~255”
Additional data third byte	-	-	3- list No“1~255” 6-CH“1~25”	-	1,2,3: 1 - 1,2,3: 2 + 1: 3 value of volume choose	Song No H(Song No H+L“1～999”)
Additional data 4th byte	-	-	-	-	1- 3: value of volume 0-79	Song No H(Song No H+L“1～999”)

（15）dry contact

★dry contact command change: report to status change of dry contact			
Code	**function**	**Targets address**	**Additional data format**
0x15 D0	Broadcast present status	Designated	1 area No(1B) 2 Ch No(1B) 3 status(1B)（0：on ； 1：off）
0x15 D1	Security return	Designated	1 area No(1B) 2 Ch No(1B) 3 status(1B)（0：on ； 1：off）

（16）Music play control code X

1、 Operation code：

#define HDL_AUDIO_CONTROL_OR_READ （Execution） 0x192E

// additional content not over 67Byte
#define HDL_AUDIO_CONTROL_OR_READ_ACK（Return） 0x192F // additional content not over 67Byte

2、 Additional code explain：

Data：<STX>????<ETX> and <ETX> is Unicode Double-byte data, the other for the ASC single-byte data.

<STX>: 0x02（ASC）， **<ETX>: 0x0003（unicode）**

<CR>: 0x0D（ASC） **<LF>: 0x0A（ASC）**

- ***ZzSTATUS?<CR>** z is area No(from 1-24)
  //reading status after panel on
  Return to present working status
- ***SsPLAYSTOP<CR>** //play/stop s is source No
  Return #SsDISPINFO,DUR1945,POS0,STATUS2 <CR><LF> s is source No
  DUR After numerical：total playing time （Second×10，10 times of real time）
  POS After numerical：total played time （Second×10，10 times of real time）
  STATUS After numerical：1 stop, 2 play, 3 pause
- ***SsPLAY<CR>** //play //s is source No //
  Return #SsDISPINFO,DUR1945,POS0,STATUS2 <CR><LF> s is source No
  DUR After numerical：total playing time （Second×10，10 times of real time）
  POS After numerical：total played time （Second×10，10 times of real time）
  STATUS After numerical：1 stop, 2 play, 3 pause
- ***SsSTOP<CR>** //stop // s is source No
  Return #SsDISPINFO,DUR1945,POS0,STATUS2 <CR><LF> s is source No
  DUR After numerical：total playing time （Second×10，10 times of real time）
  POS After numerical：total playing time （Second×10，10 times of real time）
  STATUS After numerical：1 stop, 2 play, 3 pause
- ***ZzSRCs<CR>** //Source z is area No(From1-24) ， s is area No(from1-7)，do not use panel
- ***ZzSRC+<CR>** //Source z is area No(From1-24)
  Return #Zz,ON,SRC1,VOL38<CR><LF> （ON）
  Returns the current audio source other information.

Source explain：

1----------SD-CARD
2----------NAS-HDD
3----------SERVER
4----------WEB-RADIO
5----------RADIO
6----------AUDIO-IN
7----------INTERCOM

- ***SsPREVLIST<CR>** //pre list s is sourse No
  ***SsNEXTLIST<CR>** //next list s is sourse No

Return #SsDISPLINE1, <STX>L:??? / ???<ETX> <CR><LF> // list N/ List the total number //<STX><ETX> maximum 20bytes //s is source No

Return#SsDISPLINE2, <STX> ? ? ? ….<ETX> <CR><LF> //list name //<STX><ETX> maximum 50bytes，if over 50 <ETX> <CR><LF>, panel deal with maximum 52bytes // s is sourse No

Return #SsDISPLINE3, <STX>S:001 / ???<ETX> <CR><LF> //Song no/total song //<STX><ETX> s is sourse No //s is source No

Or //FM Radio No C：??? / total chan //<STX><ETX> maximum 20bytes // s is source No

Return #SsDISPLINE4, <STX> ? ? ? ….<ETX> <CR><LF> // song name //<STX><ETX> maximum 50bytes，if over 50 <ETX> <CR><LF> panel deal with maximum 52bytes // s is sourse No\

Return #SsDISPINFO,DUR1945,POS0,STATUS2<CR><LF>

- ***SsPREV<CR>** Previous s is sourse No

***SsNEXT<CR>** Next s is sourse No

Return #SsDISPLINE3, <STX>S:??? / ???<ETX> <CR><LF> //song No/total songs //<STX><ETX> maximum 20bytes // s is sourse No

Return #SsDISPLINE4, <STX> ? ? ? ….<ETX> <CR><LF> // song name //<STX><ETX> maximum 50bytes，if over 50 <ETX> <CR><LF> panel deal with maximum 52bytes // s is sourse No\

Return #SsDISPINFO,DUR1945,POS0,STATUS2<CR><LF>

- ***ZzVOLx <CR>** //volume adjust z is area No(from1-24) x value of volume(79 small-----0 big)

Return #Zz,ON,SRC1,VOL38<CR><LF>

Adjust the volume using the following: changes in unit value of continuous adjustment panel 1, to adjust the volume changes slowly did not adopt, while the use of the above assignment

//ZzVOL+

//ZzVOL-

- *** ZzMUTEON<CR>** //Mute z is area No(From1-24)

Return # Zz,ON,SRC1,MUTE<CR><LF>

- ***SsPREVCHADJ<CR>** // Adjusted upwards channel s is sourse No

***SsNEXTCHADJ<CR>** // Down-regulation channel s is sourse No

***SsPREVCHANNELSCAN<CR>** // Search forward channel s is sourse No

***SsNEXTCHANNELSCAN<CR>** // Search backward channel s is sourse No

Return #SsDISPLINE1, <STX> FM<ETX> <CR><LF> //FM//<STX><ETX> maximum 20bytese// s is sourse No

Return #SsDISPLINE2, <STX> ????<ETX><CR><LF> //channel Value ， //<STX><ETX> maximum 50bytese if over 50 <ETX> <CR><LF> panel deal with maximum 52bytes // s is sourse No\

***SsPREVCHANNEL<CR>** // choose previous channel s is sourse No

***SsNEXTCHANNEL<CR>** //choose next channel s is sourse No

Return #SsDISPLINE1, <STX> FM?<ETX> <CR><LF> // FM //<STX><ETX> maximum 20bytese // s is sourse No

Return #SsDISPLINE2, <STX> ???<ETX><CR><LF> // chanel value //<STX><ETX> maximum 50bytese if over 50 <ETX> <CR><LF> panel deal with maximum 52bytes // s is sourse No\

Return #SsDISPLINE3, <STX> CHANNEL6<ETX> <CR><LF> //channel no //<STX><ETX> maximum 20bytese // s is sourse No

Return #SsDISPLINE4, <STX> ???????????<ETX> <CR><LF> // channel value //<STX><ETX> maximum 50bytese if over 50 <ETX> <CR><LF> panel deal with maximum 52bytes // s is sourse No\

***SsSAVE<CR>** // This channel value stored in the

current channel number s is sourse No

Return #SsDISPLINE3, <STX> CHANNEL6<ETX> <CR><LF> // chan No //<STX><ETX> maximum 20bytese // s is sourse No

Return #SsDISPLINE4, <STX> ???????????<ETX> <CR><LF> //Chan No //<STX><ETX> maximum 50bytese if over 50 50 <ETX> <CR><LF> panel deal with maximum 52bytes // s is sourse No\

***SsTALK<CR>** //talk status s is sourse No

***SsMONITOR<CR>** //monitor status s is sourse No

Return #SsDISPTALK,MODE1, KEY1<CR><LF> // s is sourse No

MODE? Talk mode: 1 (MONITOR), 2 (TALK)

KEY? Speech key state: 0 (stop), 1 (press the key to talk), 2 (click the key to talk)

- ***SsPREVOBJECT<CR>** //pre target s is sourse No

***SsNEXTOBJECT<CR>** //next target s is sourse No

Return #SsDISPLINE3, <STX>OBJECT<ETX><CR><LF> // title // <STX><ETX> maximum 20bytese, and now fix OBJECT // s is sourse No

//previous cannot be returned

Return #SsDISPLINE4, <STX> ALL<ETX><CR><LF> // Call target name //<STX><ETX> maximum 50bytese // s is sourse No

- ***SsLATCH<CR>** // lock switch to talk (on- talk, off-disable to talk) s is sourse No

***SsPRESS<CR>** //press to talk s is sourse No

***SsUnPRESS<CR>** //press to release s is sourse No

//*SsPRESS 和*SsUnPRESS is a combined code

//*SsLATCH 和*SsPRESS (*SsUnPRESS)

Return #SsDISPTALK,MODE1, KEY1<CR><LF> // s is sourse No

MODE? Talk mode: 1 (MONITOR), 2 (TALK)

KEY? Speech key state: 0 (stop), 1 (press the key to talk), 2 (click the key to talk)

***ZzTONE?<CR>** //read volume z is area no(from1-24)

***ZzBASS+<CR>** // bass+ z is area no(from1-24)

***ZzBASS-<CR>** //bass - z is area no(from1-24)

***ZzTREBLE+<CR>** // treble + z is area no(from1-24)

*** ZzTREBLE-<CR>** // treble - z is area no(from1-24)

Return #Ss DISPTONE,BASS-1,TREB+1<CR><LF> // s is sourse No //

BASS? : bass value (0 +0, from -9~-9)

TREB? : treble value (0 +0, 高音升-9~-9)

- ***SsUPDATESTATUS?<CR>** //reading update // s is sourse No

***SsUPDATELIST<CR>** //renew list // s is sourse No

Return 1 #SsDISPUPDATE, STATUS1<CR><LF>

STATUS? : 0 NULL,1updating ,2finish

Return 2 #SsDISPLINE1, <STX> updating <ETX> <CR><LF> //<STX><ETX>maximum 20bytes // s is sourse No

After finished

Return 3 #SsDISPLINE1, <STX>finished ! <ETX> <CR><LF> //<STX><ETX> maximum 20bytes // s is sourse No

And then recovery

- ***SsPLAYMODE?<CR>** //read play mode //s is

sourse No

***SsMODE+<CR>** //mode + // s is sourse No

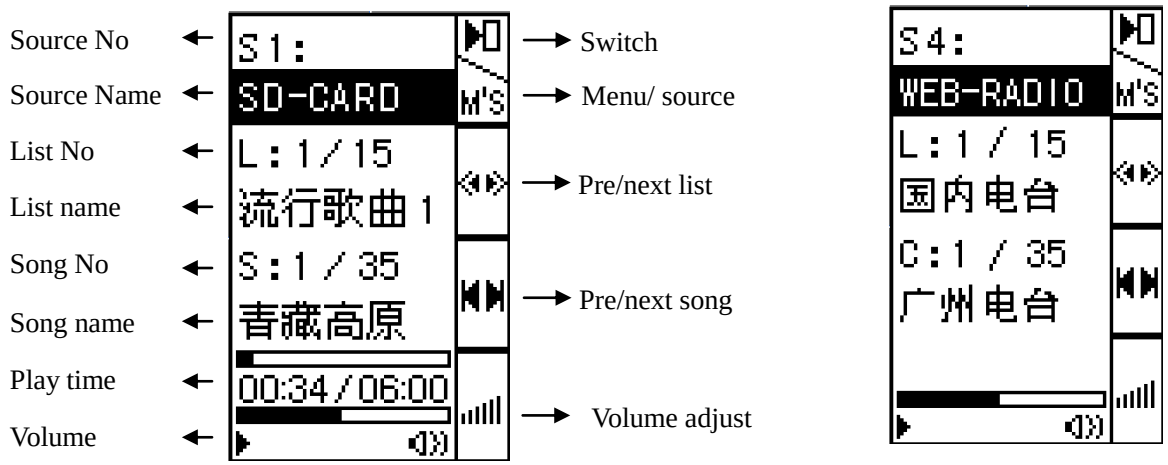
***SsMODE-<CR>** // mode- // s is sourse No

Return #SsDISPMODE, STATUS1<CR><LF>

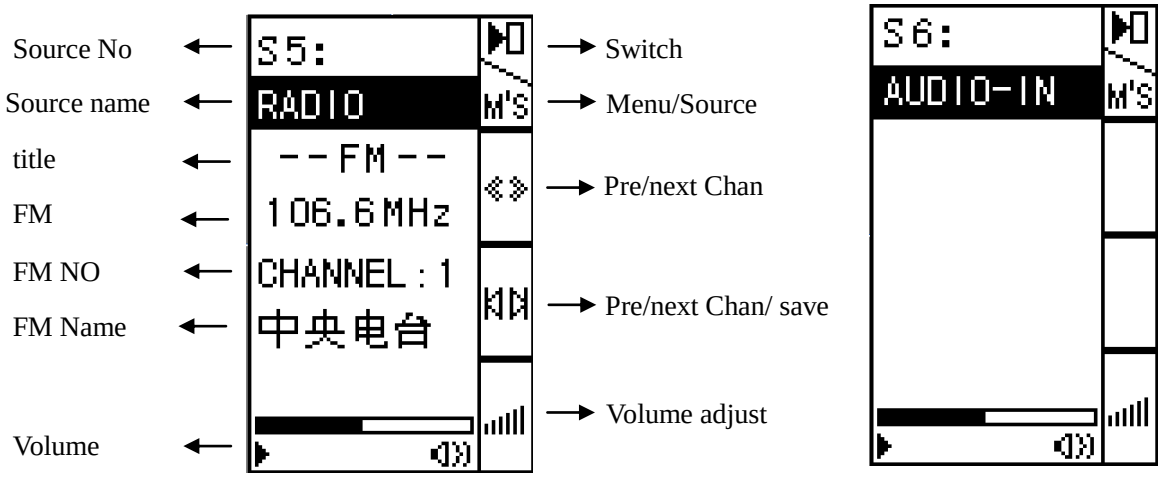
STATUS？： 0NULL,1single play,2single cycle,3order ,4cycle

Refer to panel

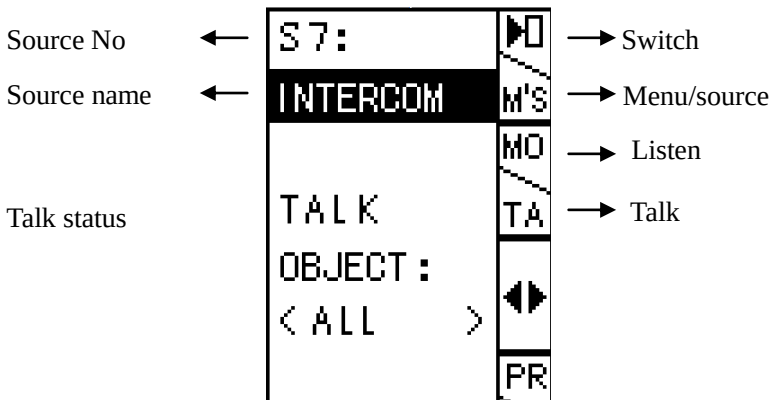
1.



2.



3.




Title
Target
Select target
Press to talk
Click status
Click to talk