Multiple Display Control Protocol
for SyncMaster 820DX 570DX
400DX(n) 460DX(n) 320DX 46TX(n)

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1. INTERFACE

1.1. Interface Connection

1) Interface Connection

- As shown in Figure 1-1, connect a RS232-In (9Pin) cable to a PC and connect a RS232-Out (9Pin) cable to the next TV or monitor, and repeat this procedure for the remaining TVs and monitors.

- At this time, each TV and monitor is given an ID from 0 to 99.

- No ID may be duplicated.

- It is not required to give IDs sequentially according to the connection sequence.

Figure 1-1 Connecting a PC, TVs and Monitors
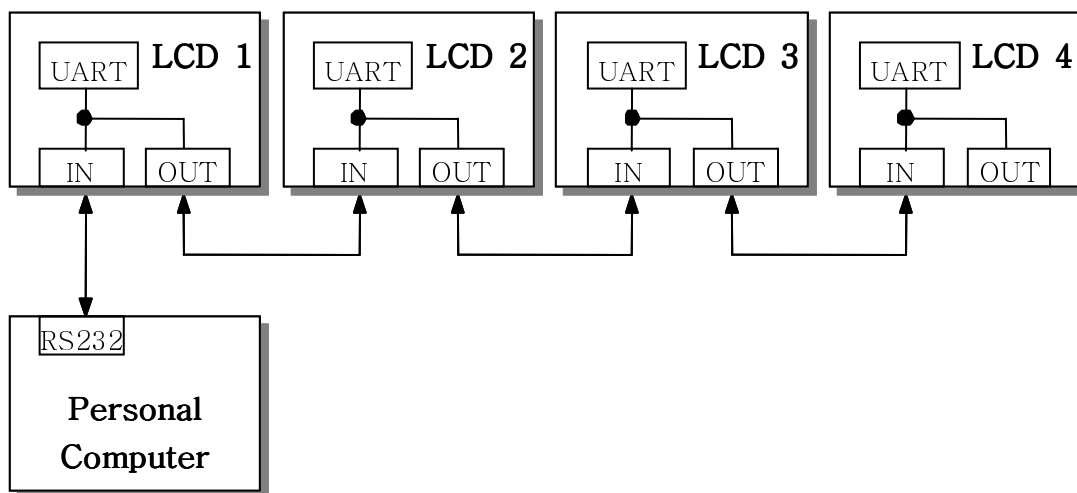
1.2. Interface Specifications

1) Interface Specifications

- Duplex communication is performed using RS232.

- The three RS232 signal lines, TxD (2), RxD (3) and GND (5) are used. → See Figure 1.

- The distance between two devices must be less than 4m.

- Presently, only pins 2, 3 and 5 of the 9 pins of the RS232 terminal are used.

- **To represent the ID, the hexadecimal code of the given ID is used. However, ID 0 is represented as 0xFF.**

- **All communications are performed with hexadecimal values and the checksum is the sum of all values except for the header.**
If a value is greater than two digits, such as in 11+FF+01+01=112, the foremost digit is discarded.
Example) Power On & ID=0

Header	Command	ID	Data Length	Data 1	Checksum
0xAA	0x11		1	**Power**	

	Header	Command	0xFF	Data Length	Data 1	**12**
→	0xAA	0x11		1	**1**	

- **If you want to control all devices connected via serial cables at the same time regardless of their IDs, set the IDs to "0xFE" before sending the command. In this case, each set or device will execute the command but will not respond with an ACK message.**

Table 2-1 RS232 Communications Specifications

Bit Rate	9600 bps
Data Bits	8 bits
Parity	None
Stop Bits	1 bit
Flow Control	None

Figure 2-1 RS-232 DB-9 Pinouts for Asynchronous Data

Pin	Signal	Pin	Signal
1	Data Carrier Detect	6	Data Set Ready
2	Received Data	7	Request to Send
3	Transmitted Data	8	Clear to Send
4	Data Terminal Ready	9	Ring Indicator
5	Signal Ground		
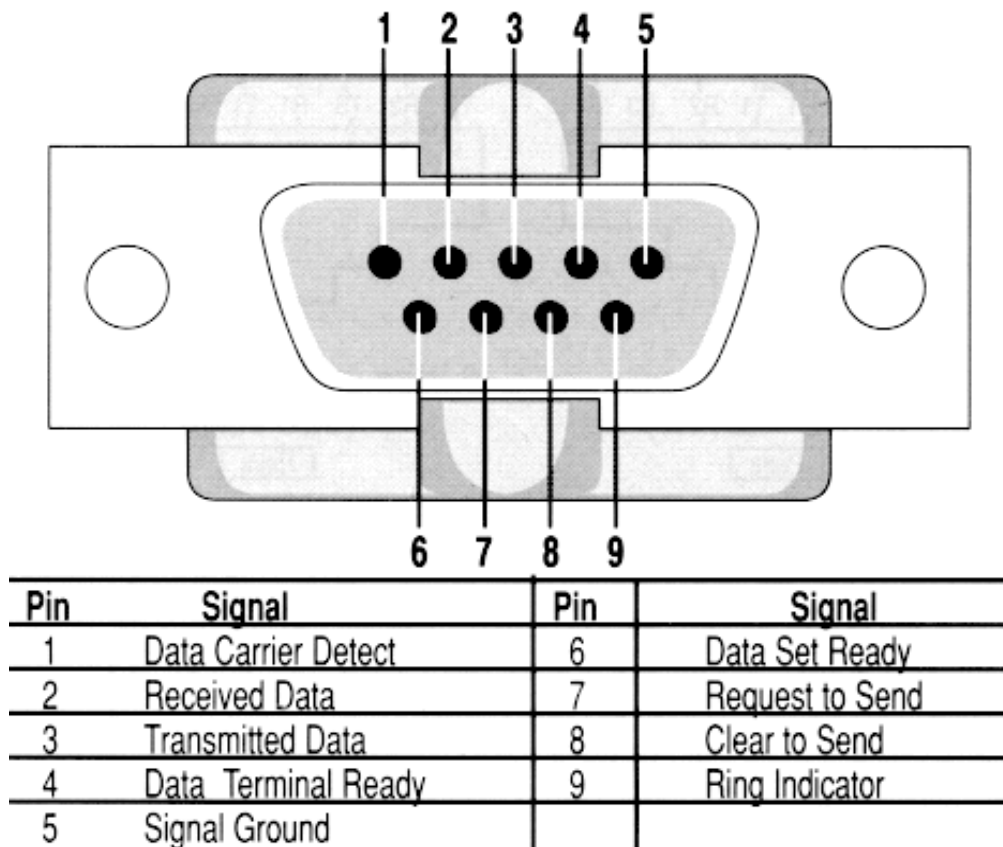
2. Commands

No	Command Type	Command	Value Range
1	Status Control	0x00	-
2	Time Control	0x01	-
3	On Time Control	0x02	-
4	Off Time Control	0x03	-
5	Video Control	0x04	-
6	Audio Control	0x05	-
7	RGB Control	0x06	-
8	PIP Status Control	0x07	-
9	Maintenance Control	0x08	-
10	Serial Number Control	0x0B	-
11	Display Status Control	0x0D	-
12	Software Version Control	0x0E	-
13	Model Number Control	0x10	-
14	Power Control	0x11	0 ~ 1
15	Volume Control	0x12	0 ~ 100
16	Mute Control	0x13	0 ~ 1
17	Input Source Control	0x14	-
18	Image Size Control	0x15	-
19	Direct Channel Control	0x16	-
20	Contrast Control	0x24	0 ~ 100
21	Brightness Control	0x25	0 ~ 100
22	Sharpness Control	0x26	0 ~ 100
23	Color Control	0x27	0 ~ 100
24	Tint Control	0x28	0 ~ 100
25	Red Gain Control	0x29	0 ~ 100
26	Green Gain Control	0x2A	0 ~ 100
27	Blue Gain Control	0x2B	0 ~ 100
28	Treble Control	0x2C	0 ~ 100
29	Bass Control	0x2D	0 ~ 100
30	Balance Control	0x2E	0 ~ 100

31	Coarse Control	0x2F	0 ~ 1
32	Fine Control	0x30	0 ~ 1
33	H-Position Control	0x31	0 ~ 1
34	V-Position Control	0x32	0 ~ 1
35	Clear Menu Control	0x34	0
36	Remote Control	0x36	0 ~ 1
37	RGB Contrast Control	0x37	0 ~ 100
38	RGB Brightness Control	0x38	0 ~ 100
39	PIP On/Off Control	0x3C	0 ~ 1
40	Auto Adjustment Control	0x3D	0
41	Color Tone Control	0x3E	0 ~ 4
42	Color Temperature Control	0x3F	0 ~ 10
43	PIP Source Control	0x40	-
44	Main-PIP Swap Control	0x41	0 ~ 1
45	PIP Size Control	0x42	-
46	PIP Locate Control	0x43	0 ~ 4
47	Sound Select Control	0x47	0 ~ 1
48	Video Wall Control	0x4F	-
49	Auto Lamp Control	0x57	-
50	Manual Lamp Control	0x58	0 ~ 100
51	Safety Screen Control	0x5B	-
52	Video Wall Mode Control	0x5C	0 ~ 1
53	Safety Lock	0x5D	0 ~ 1
54	Panel Lock	0x5F	0 ~ 1
55	OSD On/OFF	0x70	0 ~ 1
56	P. Mode Control	0x71	-
57	S. Mode Control	0x72	0 ~ 4
58	NR Mode Set	0x73	0 ~ 1
59	PC Color Tone Control	0x75	0 ~ 3
60	Auto AutoAdjustment	0x76	0 ~ 1

61	All Keys Lock	0x77	0 ~ 1
62	SRS TSXT Control	0x78	0 ~ 1
63	Film Mode	0x79	0 ~ 1
64	Signal Balance	0x7A	0 ~ 1
65	SB Gain	0x7E	0 ~ 100
66	SB Sharpness	0x7F	0 ~ 100
67	Panel On Time	0x83	-
68	Video Wall On	0x84	0 ~ 1
69	Temperature Control	0x85	0 ~ 125
70	Brightness Sensor	0x86	0 ~ 1
71	Dynamic Contrast	0x88	0 ~ 1
72	Safety Screen On	0x88	1 ~ 5
73	Video Wall User Control	0x89	-
74	Model Name	0x8A	-

"-" denotes there are multiple settings. For more details, refer to "2.1. Detailed Description of Commands".

2.1. Detailed Description of Commands

1) Status Control

● Function

The PC displays the current settings of a TV or monitor.

● Get Status

Header	Command	ID	Data Length	Checksum
0xAA	0x00		0	

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Val 2	
0xAA	0xFF		9	'A'	0x00	**Power**	**Volume**	

Val 3	Val 4	Val 5	Val 6	Val 7	Checksum
Mute	**Input**	**Aspect**	**N Time NF**	**F Time NF**	

Power: The power code to set for the TV/monitor.

Volume: The volume code to set for the TV or monitor (0 to 100).

Mute: The mute code to set for the TV or monitor.

Input: The input source code to set for the TV or monitor.

Aspect: The image size code to set for the TV or monitor.

N Time NF: The OnTime ON/OFF value to set for the TV or monitor.

F Time NF: The OffTime ON/OFF value to set for the TV or monitor.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'N'	0x00	**ERR**	

ERR: The error code indicating which error occurred.

0	Checksum Error
1	Other

2) Time Control

● Function

　The PC controls the current time of the TV or monitor.

● Get the Time Status

Header	Command	ID	Data Length	Checksum
0xAA	0x01		0	

● Set the Time

Header	Command	ID	Data Length	Data 1	Data 2	Data 3	Data 4
0xAA	0x01		5	AP Time	H Time	M Time	0

Data 5	Checksum
0	

AP Time: The AM/PM time to set for the TV or monitor.

1	AM
0	PM

H Time: The hours to set for the TV or monitor (1 to 12).
M Time: The minutes to set for the TV or monitor (0 to 59).

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Val 2
0xAA	0xFF		7	'A'	0x01	AP Time	H Time

Val 3	Val 4	Val 5	Checksum
M Time	0	0	

AP Time, H Time, M Time: Same as above

Both the H Time and the M Time have 0xFF if the time is not set for the monitor.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'N'	0x01	ERR	

ERR: The error code indicating which error occurred.

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3) On Time Control

● Function

The PC controls the time when a TV or monitor is turned on.

● Get the On Time Status

Header	Command	ID	Data Length	Checksum
0xAA	0x02		0	

● Set the On Time

Header	Command	ID	Data Length	Data 1	Data 2	Data 3	Data 4
0xAA	0x02		6	N AP Time	N H Time	N M Time	N Time VR

Data 5	Data 6	Checksum
N Time NF	N Time SC	

N AP Time: The On Time AM/PM value to set for the TV or monitor.

1	AM
0	PM

N H Time: The On Time Hour to set for the TV or monitor (1 to 12).

N M Time: The On Time Minutes to set for the TV or monitor (0 to 59).

N Time VR: The On Time Volume value to set for the TV or monitor (0 to 100).

N Time NF: The On Time ON/OFF value to set for the TV or monitor.

1	On Time ON
0	On Time OFF

N Time SC: The source value for the On Time ON/OFF Control (Refer to "*Input Source Control*").

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Val 2
0xAA	0xFF		8	'A'	0x02	N AP Time	N H Time

Val 3	Val 4	Val 5	Val 6	Checksum
N M Time	N Time VR	N Time NF	N Time SC	

N AP Time, N H Time, N M Time, N Time VR, N Time NF, N Time SC : Same as above.

Both the N H Time and N M Time have 0xFF if the On Time is not set for the monitor.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'N'	0x02	ERR	

ERR: The error code indicating which error occurred.

4) Off Time Control

● Function

The PC controls the time when a TV or monitor is turned off.

● Get the Off Time Status

Header	Command	ID	Data Length	Checksum
0xAA	0x03		0	

● Set the Off Time

Header	Command	ID	Data Length	Data 1	Data 2	Data 3	Data 4	
0xAA	0x03		6	F AP Time	F H Time	F M Time	0	

Data 5	Data 6	Checksum
F Time NF	0	

F AP Time: The Off Time AM/PM value to set for the TV or monitor.

1	AM
0	PM

F H Time: The Off Time Hour to set for the TV or monitor (1 to 12).

F M Time: The Off Time Minutes to set for the TV or monitor (0 to 59).

F Time NF: The Off Time ON/OFF value to set for the TV or monitor.

1	Off Time ON
0	Off Time OFF

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Val 2	
0xAA	0xFF		8	'A'	0x03	F AP Time	F H Time	

Val 3	Val 4	Val 5	Val 6	Checksum
F M Time	0	F Time NF		0

F AP Time, F H Time, F M Time, F Time NF : Same as above.

Both the F H Time and F M Time have 0xFF if the Off Time is not set for the monitor.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'N'	0x03	ERR	

ERR: The error code indicating which error occurred.

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5) Video Control (ATV, DTV, AV, S-Video, Component, HDMI Only)

● Function

   The PC displays the screen status of a TV or monitor.

● Get the Video Status

Header	Command	ID	Data Length	Checksum
0xAA	0x04		0	

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Val 2	
0xAA	0xFF		0x0A	'A'	0x04	Contrast	Brightness	

Val 3	Val 4	Val 5	Val 6	Val 7	Val 8	Checksum
Sharpness	Color	Tint	ColorTone	ColorTemp	0	

Contrast, Brightness, Sharpness, Color, Tint, ColorTone, ColorTemp : Same as above.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'N'	0x04	ERR	

ERR: The error code indicating which error occurred.

6) Audio Control

● Function

　The PC displays the audio status of a TV or monitor.

● Get the Audio Status

Header	Command	ID	Data Length	Checksum
0xAA	0x05		0	

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Val 2	
0xAA	0xFF		0x05	'A'	0x05	**Treble**	**Bass**	

Val 3	Checksum
Balance	

Treble, Bass, Balance : Same as above.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'N'	0x05	**ERR**	

ERR: The error code indicating which error occurred.

7) RGB Control (PC, BNC, DVI Only)

● Function

The PC displays the screen status of a TV or monitor.

● Get the Video Status

Header	Command	ID	Data Length	Checksum
0xAA	0x06		0	

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Val 2	
0xAA	0xFF		0x0A	'A'	0x06	**Contrast**	**Brightness**	

Val 3	Val 4	Val 5	Val 6	Val 7	Val 8	Checksum
ColorTone	**ColorTemp**	**0**	**Red Gain**	**Green Gain**	**Blue Gain**	

Contrast, Brightness, ColorTone, ColorTemp, Red, Green, Blue : Same as above.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'N'	0x06	**ERR**	

ERR: The error code indicating which error occurred.

8) PIP Status Control

● Function

　The PC displays the PIP settings of a TV or monitor.

● Get the PIP Status

Header	Command	ID	Data Length	Checksum
0xAA	0x07		0	

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Val 2	
0xAA	0xFF		6	'A'	0x07	**P.Size**	**P.Source**	

Val 3	Val 4	Checksum
0	**0**	

P.Size: The PIP size code set for the TV or monitor.

0x00	PIP Off
0x06	Large
0x08	Small
0x04	Double 1
0x05	Double 2
0x09	Double 3

P.Source: The PIP source code set for the TV or monitor.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'N'	0x07	**ERR**	

ERR: The error code indicating which error occurred.

9) Maintenance Control

● Function

The PC displays the maintenance status of a TV or monitor.

● Get the Maintenance Status

Header	Command	ID	Data Length	Checksum
0xAA	0x08		0	

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Val 2	
0xAA	0xFF		0x15	'A'	0x08	**Power**	**P.Size**	

Val 3	Val 4	Val 5	Val 6	Val 7	Val 8	Val 9	Val 10
P.Source	**LMax_H**	**LMax_M**	**LMax_AP**	**LMaxValue**	**LMin_H**	**LMin_M**	**LMin_AP**

Val 11	Val 12	Val 13	Val 14	Val 15	Val 16
LMinValue	**LampValue**	**ScreenInterval**	**ScreenTime**	**ScreenType**	**V.Wall**

Val17	Val 18	Val19	Check Sum
V.WallFormat	**V.WallDivid**	**V.WallSet**	

Power: The Power code set for the TV or monitor.

P.Size: The PIP size code set for the TV or monitor.

P.Source: The PIP source code set for the TV or monitor.

LMax_H: The Auto Lamp Max Time Hour set for the TV or monitor (1 to 12).

LMax_M: The Auto Lamp Max Time Minute set for the TV or monitor (0 to 59).

LMax_AP: The Auto Lamp Max Time AM/PM set for the TV or monitor.

LMaxValue: The Auto Lamp Max Value set for the TV or monitor (0 to 100).

LMin_H: The Auto Lamp Min Time Hour set for the TV or monitor (1 to 12).

LMin_M: The Auto Lamp Min Time Minute set for the TV or monitor (0 to 59).

LMin_AP: The Auto Lamp Min Time AM/PM set for the TV or monitor.

LMinValue: The Auto Lamp Min value set for the TV or monitor (0 to 100, 0xFF).

LampValue: The Manual Lamp Control value set for the TV or monitor (0 to 100, 0xFF).

ScreenInterval: The Safety Screen Interval set for the TV or monitor (Per Hour, 0(Off) to 10).

ScreenTime: The Safety Screen Time set for the TV or monitor (Per Second, 0(off) to 5)

ScreenType: The Safety Screen type to set for the TV or monitor (3 to 6).

V.Wall: The Video Wall Mode code set for the TV or monitor.

V.WallFormat: The Video Wall Format code to set for the TV or monitor.

V.WallDivid: The Video Wall Divider code to set for the TV or monitor.

V.WallSet: The Video Wall Set Number code to set for the TV or monitor.

Caution: If the LMinValue is returned to **0xFF,** it means that the Auto Lamp Control is turned off.

If the LampValue is returned to **0xFF,** it means that the Manual Lamp Control
is turned off.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'N'	0x08	**ERR**	

ERR: The error code indicating which error occurred.

10) Serial Number Control

● Function

　　The PC controls the serial number of a TV or monitor.

● Get the SerialNum Status

Header	Command	ID	Data Length	Checksum
0xAA	0x0B		0	

● Ack SerialNum

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Val 2	
0xAA	0xFF		**0x10**	'A'	0x0B	**Data1**	**Data2**	

Val 3	Val 4	Val 5	Val 6	Val 7	Val 8	Val 9	Val 10
Data3	**Data4**	**Data5**	**Data6**	**Data7**	**Data8**	**Data9**	**Data10**

Val 11	Val 12	Val 13	Val 14	Check Sum
Data11	**Data12**	**Data13**	**Data14**	

Data1 ~ Data14: The serial number set for the TV or monitor.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'N'	0x0B	**ERR**	

ERR: The error code indicating which error occurred.

11) Display Status Control

● Function

　　The PC displays the display status of a TV or monitor.

● Get the Maintenance Status

Header	Command	ID	Data Length	Checksum
0xAA	0x0D		0	

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Val 2	
0xAA	0xFF		0x08	'A'	0x0D	Lamp	Temperature	

Val 3	Val 4	Val 5	Val 6	Check Sum
Bright_Sensor	No_Sync	Cur_Temp	FAN	

Lamp: The lamp error code to set for the TV or monitor (0: Normal, 1: Error).
Temperature: The temperature error code to set for the TV or monitor (0: Normal, 1: Error).
Bright_Sensor: The Bright Sensor error code to set for the TV or monitor (0: Normal, 1: Error).
No_Sync: The Sync error code to set for the TV or monitor (0: Normal, 1: Error, No Sync).
Cur_Temp: The current temperature of the TV or monitor .
FAN: The fan error code set for the TV or monitor (0: Normal, 1: Error).

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'N'	0x0D	ERR	

ERR: The error code indicating which error occurred.

12) SW Version Control

● Function

　The PC displays the version information for a TV or monitor.

● Get the Version Status

Header	Command	ID	Data Length	Checksum
0xAA	0x0E		0	

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Val 2	
0xAA	0xFF		**0x11**	'A'	0x0E	**Version1**	**Version2**	

Val 3	Val 4	Val 5	Val 6	Val 7	Val 8	Val 9	Val 10
Version3	**Version4**	**Version5**	**Version6**	**Version7**	**Version8**	**Version9**	**Version10**

Val 11	Val 12	Val 13	Val 14	Val 15	Check Sum
Version11	**Version12**	**Version13**	**Version14**	**Version15**	

Version1 ~ Version11: The project information for the TV or monitor.

Version12 ~ Version15: The software version of the TV or monitor.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'N'	0x06	**ERR**	

ERR: The error code indicating which error occurred.

13) Model Number Control

● Function

The PC displays the model number of a TV or monitor.

● Get the Model Number Status

Header	Command	ID	Data Length	Checksum
0xAA	0x10		0	

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Val 2	Val 3	Checksum
0xAA	0xFF		0x05	'A'	0x10	Species	Model	0	0

Species: The panel type used for the TV or monitor.

0x01	PDP
0x02	LCD
0x03	DLP

Model: The model name of the TV or monitor.

0x01	PPM50H2	0x15	SyncMaster 320DX SyncMaster 820DX SyncMaster 700DX SyncMaster 400DX(n) SyncMaster 460DX(n)
0x02	PPM42S2		
0x03	PS-42P2ST		
0x04	PS-50P2HT		
0x05	SyncMaster 400T	0x16	SyncMaster 460TX(n)
0x06	SyncMaster 403T	0x17	SyncMaster400UX(n) SyncMaster460UX(n)
0x07	PPM42S3, SPD-42P3SM		
0x08	PPM50H3, SPD-50P3HM		
0x09	PPM63H3, SPD-63P3HM		
0x0A	PS-42P3ST		
0x0B	SyncMaster 323T		
0x0C	SyncMaster 403T - CT40CS(N)		
0x0D	PPMxxM5x		
0x0E	SyncMaster 460P(n) SyncMaster 400P(n) SyncMaster 320P(n)		
0x10	SyncMaster 320Px SyncMaster 400Px/400Pxn SyncMaster 460Px/460Pxn		
0x13	SyncMaster 400TX(n)		
0x14	SyncMaster 570DX		

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum

0xAA	0xFF		3	'N'	0x10	**ERR**	m

ERR: The error code indicating which error occurred.

14) Power Control

● Function

　The PC turns on/off the power of a TV or monitor.

● Get the Power ON/OFF Status

Header	Command	ID	Data Length	Checksum
0xAA	0x11		0	

● Set the Power ON/OFF

Header	Command	ID	Data Length	Data 1	Checksum
0xAA	0x11		1	**Power**	

Power: The power code to set for the TV/monitor.

1	Power ON
0	Power OFF

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'A'	0x11	**Power**	

Power: Same as above.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'N'	0x11	**ERR**	

ERR: The error code indicating which error occurred.

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15) Volume Control

● Function

　The PC changes the volume of a TV or monitor.

● Get the Volume Status

Header	Command	ID	Data Length	Checksum
0xAA	0x12		0	

● Set the Volume

Header	Command	ID	Data Length	Data 1	Checksum
0xAA	0x12		1	Volume	

Volume: The volume code to set for the TV or monitor (0 to 100).

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'A'	0x12	Volume	

Volume: Same as above.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'N'	0x12	ERR	

ERR: The error code indicating which error occurred.

16) Mute Control

● Function

　　The PC turns the mute status of a TV or monitor on/off.

● Get the Mute ON/OFF Status

Header	Command	ID	Data Length	Checksum
0xAA	0x13		0	

● Set the Mute ON/OFF

Header	Command	ID	Data Length	Data 1	Checksum
0xAA	0x13		1	**Mute**	

Mute: The mute code to set for the TV or monitor.

1	Mute ON
0	Mute OFF

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'A'	0x13	**Mute**	

Mute: Same as above.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'N'	0x13	**ERR**	

ERR: The error code indicating which error occurred.

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17) Input Source Control

● Function

　The PC changes the input source of a TV or monitor.

● Get the Input Source Status

Header	Command	ID	Data Length	Checksum
0xAA	0x14		0	

● Set the Input Source

Header	Command	ID	Data Length	Data 1	Checksum
0xAA	0x14		1	**Input**	

Input: The input source code to set for the TV or monitor.

0x14	PC
0x1E	BNC
0x18	DVI
0x0C	AV
0x04	S-Video
0x08	Component
0x20	MagicNet
0x1F	DVI_VIDEO
0x30	RF(TV)
0x40	DTV
0x21	HDMI

Caution: **DVI (HDCP) → Get Only**

For MagicNet, this is only available for models where MagicNet is included.

"RF(TV)" and "DTV" are only available for models where a TV is included.

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'A'	0x14	**Input**	

Input: Same as above.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'N'	0x14	**ERR**	

ERR: The error code indicating which error occurred.

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18) Picture Size Control

● Function

The PC changes the screen aspect ratio of a TV or monitor.

● Get the Picture Size Status

Header	Command	ID	Data Length	Checksum
0xAA	0x15		0	

● Set the Picture Size

Header	Command	ID	Data Length	Data 1	Checksum
0xAA	0x15		1	Aspect	

Aspect: The Picture Size code to set for the TV or monitor.

PC, BNC, DVI	
0x10	16 : 9
0x18	4 : 3
TV, AV, S-VIdeo, Component, DVI(HDCP)	
0x00	Auto Wide
0x01	16 : 9
0x05	Zoom 1
0x06	Zoom 2
0x0B	4 : 3

Caution: **Some image sizes may not be supported according to the input signals (720p, 1080i).**

For Auto Wide, "RF(TV)" and "DTV" are only available for models where a TV is included.

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'A'	0x15	Aspect	

Aspect: Same as above.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'N'	0x15	ERR	

ERR: The error code indicating which error occurred.

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19) Direct Channel Control (DTV)

Caution: "DTV" is only available for models where a TV is included.

● Function

The PC can adjust TV channels.

● Get the Channel

Header	Command	ID	Data Length	Checksum
0xAA	0x17		0	

● Set the Channel

Header	Command	ID	Data Length	Data 1	Data 2	Data 3	Data 4
0xAA	0x17		0x09	Country	ATV_DTV	AirCable	CH_NUM

Data 5	Data 6	Data 7	Data 8	Checksum
Sel_Minor	Minor_CH	Reserved	Reserved	

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Val 2
0xAA	0xFF		0x06	'A'	0x16	Country	ATV_DTV

Val 3	Val 4	Val 5	Val 6	Val 7	Val 8	Checksum
AirCable	CH_NUM	Sel_Minor	Minor_CH	0	0	

Country: Selects the country to set for the TV or monitor (0: Korea, 1: US, ….).
ATV_DTV: Selects the analog/digital type to set for the TV or monitor (0: Analog TV, 1: Digital TV).
AirCalbe: Selects the air/cable type to set for the TV or monitor (0: Air, 1: Cable).
CH_NUM: The TV channel number to set for the TV or monitor (Analog TV: 1 to 135, Digital TV: 0 to 999).
Sel_Minor: Selects whether to select a minor channel for the TV or monitor when the ATV_DTV parameter is set to 1 (Digital TV). (0: No minor channel is to be selected. 1: A minor channel is to be selected.)
Minor_CH: Selects a minor channel number to set for the TV or monitor when the ATV_DTV parameter is set to 1 (Digital TV) (0 to 999).

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'N'	0x17	ERR	

ERR: The error code indicating which error occurred.

20) Contrast Control (ATV, DTV, AV, S-Video, Component, HDMI Only)

● Function

The PC changes the contrast of a TV or monitor.

● Get the Contrast Status

Header	Command	ID	Data Length	Checksum
0xAA	0x24		0	

● Set the Contrast

Header	Command	ID	Data Length	Data 1	Checksum
0xAA	0x24		1	Contrast	

Contrast: The contrast code to set for the TV or monitor (0 to 100).

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'A'	0x24	Contrast	

Contrast: Same as above.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'N'	0x24	ERR	

ERR: The error code indicating which error occurred.

21) Brightness Control (ATV, DTV, AV, S-Video, Component, HDMI Only)

● Function

The PC changes the brightness of a TV or monitor.

● Get the Brightness Status

Header	Command	ID	Data Length	Checksum
0xAA	0x25		0	

● Set the Brightness

Header	Command	ID	Data Length	Data 1	Checksum
0xAA	0x25		1	**Brightness**	

Brightness: The Brightness code to set for the TV or monitor (0 to 100).

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'A'	0x25	**Brightness**	

Brightness: Same as above.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'N'	0x25	**ERR**	

ERR: The error code indicating which error occurred.

22) Sharpness Control (ATV, DTV, AV, S-Video, Component, HDMI Only)

● Function

The PC changes the sharpness of a TV or monitor.

● Get the Sharpness Status

Header	Command	ID	Data Length	Checksum
0xAA	0x26		0	

● Set the Sharpness

Header	Command	ID	Data Length	Data 1	Checksum
0xAA	0x26		1	**Sharpness**	

Sharpness : The Sharpness code to set for the TV or monitor (0 to 100).

Caution: **The sharpness can only be set to one of 50 possible steps (0, 2, 4, 6... 100).**

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'A'	0x26	**Sharpness**	

Sharpness: Same as above.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'N'	0x26	**ERR**	

ERR: The error code indicating which error occurred.

23) Color Control (ATV, DTV, AV, S-Video, Component, HDMI Only)

● Function

The PC changes the color of a TV or monitor.

● Get the Color Status

Header	Command	ID	Data Length	Checksum
0xAA	0x27		0	

● Set the Color

Header	Command	ID	Data Length	Data 1	Checksum
0xAA	0x27		1	**Color**	

Color: The Color code to set for the TV or monitor (0 to 100).

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'A'	0x27	**Color**	

Color: Same as above.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'N'	0x27	**ERR**	

ERR: The error code indicating which error occurred.

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24) Tint Control (ATV, DTV, AV, S-Video, Component, HDMI Only)

● Function

The PC changes the tint when the TV or monitor is NTSC.
This does not operate for PAL signals.

● Get the Tint Status

Header	Command	ID	Data Length	Checksum
0xAA	0x28		0	

● Set the Tint

Header	Command	ID	Data Length	Data 1	Checksum
0xAA	0x28		1	Tint	

Tint: The tint code to set for the TV or monitor (0 to 100).

R	Tint Value
G	(100 - Tint) Value

Caution: The tint can only be set to one of possible 50 steps (0, 2, 4, 6... 100).

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'A'	0x28	Tint	

Tint: Same as above.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'N'	0x28	ERR	

ERR: The error code indicating which error occurred.

25) Red Gain Control (PC, BNC Only)

● Function

The PC changes the red gain of a TV or monitor.

● Get the Red Gain Status

Header	Command	ID	Data Length	Checksum
0xAA	0x29		0	

● Set the Red Gain

Header	Command	ID	Data Length	Data 1	Checksum
0xAA	0x29		1	Red	

Red: The red gain code to set for the TV or monitor (0 to 100).

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'A'	0x29	Red	

Red: Same as above.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'N'	0x29	ERR	

ERR: The error code indicating which error occurred.

26) Green Gain Control (PC, BNC Only)

● Function

The PC changes the green gain of a TV or monitor.

● Get the Green Gain Status

Header	Command	ID	Data Length	Checksum
0xAA	0x2A		0	

● Set the Green Gain

Header	Command	ID	Data Length	Data 1	Checksum
0xAA	0x2A		1	**Green**	

Green: The green gain code to set for the TV or monitor (0 to 100).

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'A'	0x2A	**Green**	

Green: Same as above.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'N'	0x2A	**ERR**	

ERR: The error code indicating which error occurred.

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27) Blue Gain Control (PC, BNC Only)

● Function

　The PC changes the blue gain of a TV or monitor.

● Get the Blue Gain Status

Header	Command	ID	Data Length	Checksum
0xAA	0x2B		0	

● Set the Blue Gain

Header	Command	ID	Data Length	Data 1	Checksum
0xAA	0x2B		1	**Blue**	

Blue: The blue gain code to set for the TV or monitor (0 to 100).

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'A'	0x2B	**Blue**	

Blue: Same as above.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'N'	0x2B	**ERR**	

ERR: The error code indicating which error occurred.

28) Treble Control

● Function

　The PC changes the treble of a TV or monitor.

● Get the Treble Status

Header	Command	ID	Data Length	Checksum
0xAA	0x2C		0	

● Set the Treble

Header	Command	ID	Data Length	Data 1	Checksum
0xAA	0x2C		1	**Treble**	

Treble: The treble code to set for the TV or monitor (0 to 100).

Caution: **The treble can only be set to one of 40 possible steps (0, 2, 5, 7... 100).**

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'A'	0x2C	**Treble**	

Treble: Same as above.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'N'	0x2C	**ERR**	

ERR: The error code indicating which error occurred.

29) Bass Control

● Function

　The PC changes the bass of a TV or monitor.

● Get the Bass Status

Header	Command	ID	Data Length	Checksum
0xAA	0x2D		0	

● Set the Bass

Header	Command	ID	Data Length	Data 1	Checksum
0xAA	0x2D		1	**Bass**	

Bass: The bass code to set for the TV or monitor (0 to 100).

Caution: **The bass can only be set to one of 40 possible steps (0, 2, 5, 7... 100).**

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'A'	0x2D	**Bass**	

Bass: Same as above.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'N'	0x2D	**ERR**	

ERR: The error code indicating which error occurred.

30) Balance Control

● Function

　The PC changes the balance of a TV or monitor.

● Get the Balance Status

Header	Command	ID	Data Length	Checksum
0xAA	0x2E		0	

● Set the Balance

Header	Command	ID	Data Length	Data 1	Checksum
0xAA	0x2E		1	**Balance**	

Balance: The balance code to set for the TV or monitor (0 to 100)

L	(100 - **Balance**) Value
R	**Balance** Value

Caution: **The balance can only bet set to one of 22 possible steps (0, 4, 9, 13… 100).**

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'A'	0x2E	**Balance**	

Balance: Same as above.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'N'	0x2E	**ERR**	

ERR: The error code indicating which error occurred.

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31) Coarse Control (PC, BNC Only)

● Function

　The PC adjusts the coarse function of a TV or monitor.

● Get the Coarse Status

　N/A

● Set the Coarse Status

Header	Command	ID	Data Length	Data 1	Checksum
0xAA	0x2F		1	Coarse	

Coarse: The Coarse Increase and Decrease code to set for the TV or monitor.

1	Increase
0	Decrease

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'A'	0x2F	Coarse	

Coarse: Same as above.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'N'	0x2F	ERR	

ERR: The error code indicating which error occurred.

32) Fine Control (PC, BNC Only)

● Function

The PC adjusts the fine control for a TV or monitor.

● Get the Fine Status

N/A

● Set the Fine Status

Header	Command	ID	Data Length	Data 1	Checksum
0xAA	0x30		1	**Fine**	

Fine: The Phase Increase and Decrease code to set for the TV or monitor.

1	Increase
0	Decrease

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'A'	0x30	**Fine**	

Fine: Same as above.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'N'	0x30	**ERR**	

ERR: The error code indicating which error occurred.

33) H-Position Control (PC, BNC Only)

● Function

The PC adjusts the horizontal position of a TV or monitor.

● Get the H-Position Status

N/A

● Set the H-Position

Header	Command	ID	Data Length	Data 1	Checksum
0xAA	0x31		1	H-Pos	

H-Pos: The H-Position Increase and Decrease code to set for the TV or monitor.

1	Move to right
0	Move to left

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'A'	0x31	H-Pos	

H-Pos: Same as above.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'N'	0x31	ERR	

ERR: The error code indicating which error occurred.

34) V-Position Control (PC, BNC Only)

● Function

The PC adjusts the vertical position of a TV or monitor.

● Get the V-Position Status

N/A

● Set the V-Position

Header	Command	ID	Data Length	Data 1	Checksum
0xAA	0x32		1	**V-Pos**	

V-Pos: The V-Position Increase and Decrease code to set for the TV or monitor.

1	Move downward
0	Move upward

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'A'	0x32	**V-Pos**	

V-Pos: Same as above.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'N'	0x32	**ERR**	

ERR: The error code indicating which error occurred.

35) Clear Menu Control

● Function

　　The PC dismisses the OSD menu displayed on a TV or monitor.

● Get the Clear Menu Status

　　N/A

● Set the Clear Menu

Header	Command	ID	Data Length	Data 1	Checksum
0xAA	0x34		1	**Clear**	

Clear: 0x00 (Always)

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'A'	0x34	**Clear**	

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'N'	0x34	**ERR**	

ERR: The error code indicating which error occurred.

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36) Remote Control

● Function

The PC enables/disables the IR receiving function of a TV or monitor.
This can be operated regardless of the power on/off status of the TV or monitor.

● Get the Remote Status

Header	Command	ID	Data Length	Checksum
0xAA	0x36		0	

● Set the Remote to Enable/Disable

Header	Command	ID	Data Length	Data 1	Checksum
0xAA	0x36		1	RMC	

RMC: The power code to set for the TV/monitor.

1	Remocon Enable
0	Remocon Disable

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'A'	0x36	RMC	

RMC: Same as above.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'N'	0x36	ERR	

ERR: The error code indicating which error occurred.

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37) RGB Contrast Control (PC, BNC, DVI Only)

● Function

The PC changes the contrast when the input source of a TV or monitor is set to PC.

● Get the Contrast Status

Header	Command	ID	Data Length	Checksum
0xAA	0x37		0	

● Set the Contrast

Header	Command	ID	Data Length	Data 1	Checksum
0xAA	0x37		1	Contrast	

Contrast: The RGB Contrast code to set for the TV or monitor (0 to 100).

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'A'	0x37	Contrast	

Contrast: Same as above.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'N'	0x37	ERR	

ERR: The error code indicating which error occurred.

38) RGB Brightness Control (PC, BNC, DVI Only)

- Function

    The PC changes the brightness when the input source of a TV or monitor is set to PC.

- Get the Brightness Status

Header	Command	ID	Data Length	Checksum
0xAA	0x38		0	

- Set the Brightness

Header	Command	ID	Data Length	Data 1	Checksum
0xAA	0x38		1	**Brightness**	

    Brightness: The RGB Brightness code to set for the TV or monitor (0 to 100).

- Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'A'	0x38	**Brightness**	

    Brightness: Same as above.

- Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'N'	0x38	**ERR**	

    ERR: The error code indicating which error occurred.

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39) PIP On / Off Control

● Function

The PC turns the PIP function of a TV or monitor on/off.

This does not operate in MagicNet mode.

● Get the PIP ON/OFF Status

Header	Command	ID	Data Length	Checksum
0xAA	0x3C		0	

● Set the PIP ON/OFF

Header	Command	ID	Data Length	Data 1	Checksum
0xAA	0x3C		1	**PIP**	

PIP: The PIP On/Off code to set for the TV or monitor.

1	PIP ON
0	PIP OFF

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'A'	0x3C	**PIP**	

PIP: Same as above.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'N'	0x3C	**ERR**	

ERR: The error code indicating which error occurred.

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40) Auto Adjustment Control (PC, BNC Only)

● Function

The PC adjusts a PC system screen automatically.

● Get the Auto Adjustment Status

N/A

● Set the Auto Adjustment

Header	Command	ID	Data Length	Data 1	Checksum
0xAA	0x3D		1	**Auto**	

Auto: 0x00 (Always)

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'A'	0x3D	**Auto**	

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'N'	0x3D	**ERR**	

ERR: The error code indicating which error occurred.

41) Color Tone Control (ATV, DTV, AV, S-Video, Component, HDMI Only)

● Function

The PC changes the color tone of a TV or monitor.

● Get the Color Tone Status

Header	Command	ID	Data Length	Checksum
0xAA	0x3E		0	

● Set the Color Tone

Header	Command	ID	Data Length	Data 1	Checksum
0xAA	0x3E		1	**Color Tone**	

Color Tone: The color tone code to set for the TV or monitor (0 to 4).

0x00	Cool 2
0x01	Cool 1
0x02	Normal
0x03	Warm 1
0x04	Warm 2
0x50	Off

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'A'	0x3E	**Color Tone**	

Color Tone: Same as above.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'N'	0x3E	**ERR**	

ERR: The error code indicating which error occurred.

42) Color Temperature Control

● Function

The PC changes the color temperature value of a TV or monitor

This only operates if the Color Tone is set to Off.

● Get the C_Temp Status

Header	Command	ID	Data Length	Checksum
0xAA	0x3F		0	

● Set the C_Temp Status

Header	Command	ID	Data Length	Data 1	Checksum
0xAA	0x3F		1	**C_Temp**	

C_Temp: The color temperature code to set for the TV or monitor (0 to 10).

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'A'	0x3F	**C_Temp**	

C_Temp: Same as above.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'N'	0x3F	**ERR**	

ERR: The error code indicating which error occurred.

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43) PIP Source Control

● Function

The PC changes the PIP source of a TV or monitor.

This only operates for a TV or monitor where PIP is set to On.

This does not operate in MagicNet mode.

● Get the PIP Source Status

Header	Command	ID	Data Length	Checksum
0xAA	0x40		0	

● Set the PIP Source

Header	Command	ID	Data Length	Data 1	Checksum
0xAA	0x40		1	P.Source	

P.Source: The input source code to set for the TV or monitor.

Caution : The PIP source swap may not function according to the main source. Refer to the table below.

* When the model has no DTV

	PC	BNC	DVI	AV	S-Video	Comp.	HDMI
PC	X	X	X	○	○	○	X
BNC	X	X	X	○	○	○	○
DVI	X	X	X	○	○	○	○
AV	○	○	○	X	X	X	X
S-Video	○	○	○	X	X	X	X
Component	○	○	○	X	X	X	X
HDMI	○	○	○	X	X	X	X

* When the model has a DTV

	PC	DVI	TV/DTV	AV	S-Video	Comp.	HDMI
PC	X	X	X	○	○	○	X
DVI	X	X	X	○	○	○	X
TV/DTV	X	X	X	X	X	X	X
AV	○	○	X	X	X	X	X
S-Video	○	○	X	X	X	X	X
Component	○	○	X	X	X	X	X
HDMI	X	X	X	X	X	X	X

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksu

| 0xAA | 0xFF | | 3 | 'A' | 0x40 | **P.Source** | m |

P.Source: Same as above.

● Nak

Header	Command		Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF	ID	3	'N'	0x40	**ERR**	m

ERR: The error code indicating which error occurred.

44) Main-PIP Swap Control

● Function

   The PC swaps the main and PIP screens.

   This does not operate in MagicNet mode.

● Get the Main-PIP Swap Status

   N/A

● Set the Main-PIP Swap

Header	Command	ID	Data Length	Data 1	Checksum
0xAA	0x41		1	**Swap**	

Swap: 0x00 (Always)

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'A'	0x41	**Swap**	

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'N'	0x41	**ERR**	

ERR: The error code indicating which error occurred.

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45) PIP Size Control

● Function

The PC changes the PIP size of a TV or monitor.
This does not operate in MagicNet mode.

● Get the PIP Size Status

Header	Command		Data Length	Checksum
0xAA	0x42	ID	0	

● Set the PIP Size

Header	Command		Data Length	Data 1	Checksum
0xAA	0x42	ID	1	P.Size	

P.Size: The PIP size code set for the TV or monitor.

0x00	PIP Off
0x06	Large
0x08	Small
0x04	Double 1
0x05	Double 2
0x09	Double 3

● Ack

Header	Command		Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF	ID	3	'A'	0x42	P.Size	

P.Size: Same as above.

● Nak

Header	Command		Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF	ID	3	'N'	0x42	ERR	

ERR: The error code indicating which error occurred.

46) PIP Locate Control

● Function

   The PC adjusts the PIP position of a TV or monitor.

   This does not operate in MagicNet mode.

● Get the PIP Locate Status

   N/A

● Set the PIP Locate

Header	Command		Data Length	Data 1	
0xAA	0x43	ID	1	**P.Locate**	Checksum

P.Locate : The PIP Locate Increase/Decrease code to set for the TV or monitor.

0	PIP Off(Get Only)
1	Upper Left
2	Upper Right
3	Lower Right
4	Lower Left

● Ack

Header	Command		Data Length	Ack/Nak	r-CMD	Val 1	
0xAA	0xFF	ID	3	'A'	0x43	**P.Locate**	Checksum

P.Locate: Same as above

● Nak

Header	Command		Data Length	Ack/Nak	r-CMD	Val 1	
0xAA	0xFF	ID	3	'N'	0x43	**ERR**	Checksum

ERR: The error code indicating which error occurred.

47) Sound Select Control

● Function

　The PC changes the sound when the PIP of a TV or monitor is set to On.

● Get the Sound Select

Header	Command		Data Length	
0xAA	0x47	ID	0	Checksum

● Set the Sound Select

Header	Command		Data Length	Data 1	
0xAA	0x47	ID	1	S.Selct	Checksum

S.Select: The Sound Select code to set for the TV or monitor

1	Main
0	Sub

● Ack

Header	Command		Data Length	Ack/Nak	r-CMD	Val 1	
0xAA	0xFF	ID	3	'A'	0x47	S.Select	Checksum

S.Select: Same as above.

● Nak

Header	Command		Data Length	Ack/Nak	r-CMD	Val 1	
0xAA	0xFF	ID	3	'N'	0x47	ERR	Checksum

ERR: The error code indicating which error occurred.

48) Video Wall Control

● Function

　The PC turns the Video Wall function of a TV or monitor on/off.

　This does not operate in MagicNet mode.

● Get the Video Wall Status

Header	Command		Data Length	
0xAA	0x4F	ID	0	Checksum

● Set the Video Wall

Header	Command		Data Length	Data 1	
0xAA	0x4F	ID	1	V.Wall	Checksum

V.Wall: The Video Wall code set for the TV or monitor.

Set	2 X 2	3 X 3	4 X 4	1 X 5	5 X 1	1 X 2	2 X 1
OFF	0x00	0x00	0x00	0x00	0x00	0x00	0x00
No. 1	0x11	0x21	0x31	0x41	0x51	0x61	0x71
No. 2	0x12	0x22	0x32	0x42	0x52	0x62	0x72
No. 3	0x13	0x23	0x33	0x43	0x53		
No. 4	0x14	0x24	0x34	0x44	0x54		
No. 5		0x25	0x35	0x45	0x55		
...		...	...				
No. 9		0x29	0x39				
...			...				
No. 16			0x40				

● Ack

Header	Command		Data Length	Ack/Nak	r-CMD	Val 1	
0xAA	0xFF	ID	3	'A'	0x4F	V.Wall	Checksum

V.Wall: Same as above.

● Nak

Header	Command		Data Length	Ack/Nak	r-CMD	Val 1	
0xAA	0xFF	ID	3	'N'	0x4F	**ERR**	Checksum

ERR: The error code indicating which error occurred.

49) Auto Lamp Control

● Function

The PC sets the Auto Lamp function of a TV or monitor.

If the Manual Lamp Control is set to On, the Auto Lamp Control is turned off automatically.

● Get the Auto Lamp Status

Header	Command	ID	Data Length	Checksum
0xAA	0x57		0	

● Set the Auto Lamp Status

Header	Command	ID	Data Length	Data 1	Data 2	Data 3	Data 4	
0xAA	0x57		8	LMax_H	LMax_M	LMax_AP	LMaxValue	

Data 5	Data 6	Data 7	Data 8	Check Sum
LMin_H	LMin_M	LMin_AP	LMinValue	

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Val 2	
0xAA	0xFF		0x0A	'A'	0x57	LMax_H	LMax_M	

Val 3	Val 4	Val 5	Val 6	Val 7	Val 8	Check Sum
LMax_AP	LMaxValue	LMin_H	LMin_M	LMin_AP	LMinValue	

LMax_H: The Auto Lamp Max Hour set for the TV or monitor (1 to 12).

LMax_M: The Auto Lamp Max Minutes set for the TV or monitor (0 to 59).

LMax_AP: The Auto Lamp Max AM/PM set for the TV or monitor.

LMaxValue: The Auto Lamp Max Value set for the TV or monitor (0 to 100).

LMin_H: The Auto Lamp Min Time Hour set for the TV or monitor (1 to 12).

LMin_M: The Auto Lamp Min Time Minutes set for the TV or monitor (0 to 59).

LMin_AP: The Auto Lamp Min Time AM/PM set for the TV or monitor.

LMinValue: The Auto Lamp Min Value set for the TV or monitor (0 to 100).

Caution If the LMinValue is returned to **0xFF,** it means that the Auto Lamp Control is turned off.

If Dynamic Contrast is set to On, the Auto Lamp Control does not operate.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'N'	0x57	ERR	

ERR: The error code indicating which error occurred.

50) Manual Lamp Control

● Function

The PC sets the Manual Lamp function of a TV or monitor.

If Auto Lamp Control is set to On, the Manual Lamp Control is turned off automatically.

● Get the Manual Lamp Status

Header	Command	ID	Data Length	Checksum
0xAA	0x58		0	

● Set the Manual Lamp Status

Header	Command	ID	Data Length	Data 1	Checksum
0xAA	0x58		1	**LampValue**	

LampValue: The Manual Lamp value to set for the TV or monitor (0 to 100).

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'A'	0x58	**LampValue**	

LampValue: Same as above

Caution: If the LMinValue is returned to **0xFF,** it means that the Manual Lamp Control is turned off.

If Dynamic Contrast is set to On, the Manual Lamp Control does not operate.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF		3	'N'	0x58	**ERR**	

ERR: The error code indicating which error occurred.

51) Safety Screen Control

● Function

The PC sets the Type, Interval, and Seconds of the Safety Screen of a TV or monitor.

● Get the **Safety Screen** Status

Header	Command		Data Length	
0xAA	0x5B	ID	0	Checksum

● Set the **Safety Screen** Status

Header	Command		Data Length	Data 1	Data 2	Data 3	
0xAA	0x5B	ID	3	**Type**	**Interval**	**Second**	Checksum

Type: The Scroll type to set for the TV or monitor (3 to 6).

Interval: The Scroll Interval to set for the TV or monitor (0 (off) to 10).

Second: The Scroll Time to set for the TV or monitor (0 (off) to 5).

Data 1	Type
3	Scroll
4	Pixel
5	Bar
6	Eraser

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Val 2	Val 3
0xAA	0xFF		5	'A'	0x5B	**Type**	**Interval**	**Second**
Checksum								

Interval: Same as above.

Second: Same as above.

Type: Same as above.

● Nak

Header	Command		Data Length	Ack/Nak	r-CMD	Val 1	
0xAA	0xFF	ID	3	'N'	0x5B	**ERR**	Checksum

ERR: The error code indicating which error occurred.

52) Video Wall Mode Control

● Function

The PC changes the Video Wall mode of a TV or monitor when its video wall is turned on.
This is only available for a TV or monitor when its video wall is turned on.
This does not operate in MagicNet mode.

● Get the Video Wall Mode.

Header	Command		Data Length	Checksum
0xAA	0x5C	ID	0	

● Set the Video Wall Mode.

Header	Command		Data Length	Data 1	Checksum
0xAA	0x5C	ID	1	**WallMode**	

WallMode: The Video Wall mode code to set for the TV or monitor.

1	Full
0	Natural

● Ack

Header	Command		Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF	ID	3	'A'	0x5C	**WallMode**	

WallMode: Same as above.

● Nak

Header	Command		Data Length	Ack/Nak	r-CMD	Val 1	Checksum
0xAA	0xFF	ID	3	'N'	0x5C	**ERR**	

ERR: The error code indicating which error occurred.

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53) Safety Lock

● Function

The PC turns the Safety Lock function of a TV or monitor on/off.

This operates regardless of the power on/off status of the TV or monitor.

● Get the Safety Lock Status

Header	Command		Data Length	
0xAA	0x5D	ID	0	Checksum

● Set the Safety Lock Enable/Disable

Header	Command		Data Length	Data 1	
0xAA	0x5D	ID	1	**Lock**	Checksum

Lock: The Lock code to set for the TV or monitor.

1	On
0	Off

● Ack

Header	Command		Data Length	Ack/Nak	r-CMD	Val 1	
0xAA	0xFF	ID	3	'A'	0x5D	**Lock**	Checksum

Lock: Same as above.

● Nak

Header	Command		Data Length	Ack/Nak	r-CMD	Val 1	
0xAA	0xFF	ID	3	'N'	0x5D	**Lock**	Checksum

ERR: The error code indicating which error occurred.

54) Panel Lock

● Function
   The PC locks/unlocks the panel function keys of a TV or monitor.
   This operates regardless of the power on/off status of the TV or monitor.

● Get the Panel Lock Status

Header	Command		Data Length	
0xAA	0x5F	ID	0	Checksum

● Set the Panel Lock Status

Header	Command		Data Length	Data 1	
0xAA	0x5F	ID	1	**Panel Lock**	Checksum

Panel Lock: The Panel Key Lock On/Off code to set for the TV or monitor.

1	Lock
0	Unlock

● Ack

Header	Command		Data Length	Ack/Nak	r-CMD	Val 1	
0xAA	0xFF	ID	3	'A'	0x5F	**Panel Lock**	Checksum

Panel Lock: Same as above.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Check Sum
0xAA	0xFF		3	'N'	0x5F	**ERR**	

ERR: The error code indicating which error occurred.

55) OSD On/Off

● Function

The PC turns the OSD of a TV or monitor on/off.

If the OSD is set to On, OSDs are displayed on the screen.

If the OSD is set to Off, OSDs are displayed on the screen.

● Get the OSD Enable Status

Header	Command	ID	Data Length	Check Sum
0xAA	0x70		0	

● Set the OSD Enable/Disable

Header	Command	ID	Data Length	Data 1	Check Sum
0xAA	0x70		1	**OSD**	

OSD: The OSD On/Off code to set for the TV or monitor.

1	OSD On
0	OSD Off

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Check Sum
0xAA	0xFF		3	'A'	0x70	**OSD**	

OSD: Same as above.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Check Sum
0xAA	0xFF		3	'N'	0x70	**ERR**	

ERR: The error code indicating which error occurred.

56) P.Mode Control

● Function

The PC changes the Picture mode of a TV or monitor.

● Get the PMode Status

Header	Command	ID	Data Length	Check Sum
0xAA	0x71		0	

● Set the PMode Status

Header	Command	ID	Data Length	Data 1	Check Sum
0xAA	0x71		1	**PMode**	

PMode: The Picture mode code to set for the TV or monitor.

Source	Data	Mode
AV S-Video Component HDCP (TV)	0x00	Dynamic
	0x01	Standard
	0x02	Movie
	0x03	Custom
	0x50	Off
PC BNC DVI (MagicNet)	0x10	Entertain
	0x11	Internet
	0x12	Text
	0x13	Custom
	0x50	Off

Caution : In any mode other than Off mode, Dynamic Contrast does not function.

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Check Sum
0xAA	0xFF		3	'A'	0x71	**PMode**	

PMode: Same as above.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Check Sum
0xAA	0xFF		3	'N'	0x71	**ERR**	

ERR: The error code indicating which error occurred.

57) S.Mode Control

● Function

　The PC changes the Sound mode of a TV or monitor.

● Get the SMode Status

Header	Command	ID	Data Length	Check Sum
0xAA	0x72		0	

● Set the SMode

Header	Command	ID	Data Length	Data 1	Check Sum
0xAA	0x72		1	SMode	

SMode: The Sound mode code to set for the TV or monitor.

Data	Mode
0x00	Standard
0x01	Music
0x02	Movie
0x03	Speech
0x04	Custom

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Check Sum
0xAA	0xFF		3	'A'	0x72	SMode	

SMode: Same as above.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Check Sum
0xAA	0xFF		3	'N'	0x72	ERR	

ERR: The error code indicating which error occurred.

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58) NR Mode Set (ATV, DTV, AV, S-Video, Component, HDMI Only)

● Function

　The PC changes the Digital NR mode.

● Get the NR Mode Status

Header	Command	ID	Data Length	Check Sum
0xAA	0x73		0	

● Set the NR Mode

Header	Command	ID	Data Length	Data 1	Check Sum
0xAA	0x73		1	NR Mode	

NR Mode: The NR Mode On/Off code to set for the TV or monitor.

1	NR Mode On
0	NR Mode Off

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Check Sum
0xAA	0xFF		3	'A'	0x73	NR Mode	

NR Mode: Same as above.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Check Sum
0xAA	0xFF		3	'N'	0x73	ERR	

ERR: The error code indicating which error occurred.

59) PC Color Tone Control (PC, BNC, DVI Only)

● Function

　　The PC changes the Color Tone of a monitor.

● Get the Color Tone Status

Header	Command	ID	Data Length	Check Sum
0xAA	0x75		0	

● Set the Color Tone

Header	Command	ID	Data Length	Data 1	Check Sum
0xAA	0x75		1	**Color Tone**	

Color Tone: The Color Tone code to set for the TV or monitor (0 to 3).

Source	Data	Mode
PC DVI BNC	0x00	Custom
	0x01	Cool
	0x02	Normal
	0x03	Warm
	0x50	Off

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Check Sum
0xAA	0xFF		3	'A'	0x75	**Color Tone**	

Color Tone: Same as above.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Check Sum
0xAA	0xFF		3	'N'	0x75	**ERR**	

ERR: The error code indicating which error occurred.

60) Auto Auto Adjustment

● Function

The PC enables/disables the Auto Auto Adjustment function.

The Auto Auto Adjustment function only operates if the TV or monitor is turned on.

● Get the A.Adjustment Status

Header	Command	ID	Data Length	Check Sum
0xAA	0x76		0	

● Set the A.Adjustment

Header	Command	ID	Data Length	Data 1	Check Sum
0xAA	0x76		1	**A.Adjustment**	

A.Adjustment: The Auto Auto Adjustment value code to set for the TV or monitor.

1	Enable
0	Disable

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Check Sum
0xAA	0xFF		3	'A'	0x76	**A.Adjustment**	

A.Adjustment: Same as above.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Check Sum
0xAA	0xFF		3	'N'	0x76	**ERR**	

ERR: The error code indicating which error occurred.

61) All Keys Lock

● Function

The PC turns all remote control keys and the Panel Key Lock function on/off.
This operates regardless of the power on/off status of the TV or monitor.

● Get the All Key Status

Header	Command	ID	Data Length	Check Sum
0xAA	0x77		0	

● Set the All Key to Lock/Unlock

Header	Command	ID	Data Length	Data 1	Check Sum
0xAA	0x77		1	**All Key**	

All Key: The Lock On/Off code for all keys to set for the TV or monitor.

1	Lock
0	Unlock

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Check Sum
0xAA	0xFF		3	'A'	0x77	**All Key**	

All Key: Same as above.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Check Sum
0xAA	0xFF		3	'N'	0x77	**ERR**	

ERR: The error code indicating which error occurred.

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62) SRS TS XT Control

● Function

The PC turns the SRS TS XT of a TV or monitor on/off.
This is only available for a TV or monitor with the SRS TS XT function.

● Get the SRS TS XT Status

Header	Command	ID	Data Length	Check Sum
0xAA	0x78		0	

● Set the SRS TSXT

Header	Command	ID	Data Length	Data 1	Check Sum
0xAA	0x78		1	**SRS**	

SRS: The SRS TS XT code to set for the TV or monitor.

1	SRS ON
0	SRS OFF

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Check Sum
0xAA	0xFF		3	'A'	0x78	**SRS**	

SRS: Same as above.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Check Sum
0xAA	0xFF		3	'N'	0x78	**ERR**	

ERR: The error code indicating which error occurred.

63) Film Mode Control

● Function

　The PC turns the Film mode of a TV or monitor on/off.

● Get the Film Mode Status

Header	Command	ID	Data Length	Check Sum
0xAA	0x79		0	

● Set the Film Mode

Header	Command	ID	Data Length	Data 1	Check Sum
0xAA	0x79		1	**FMode**	

FMode: The Film mode code to set for the TV or monitor.

1	Film Mode ON
0	Film Mode OFF

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Check Sum
0xAA	0xFF		3	'A'	0x79	**FMode**	

FMode: Same as above.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Check Sum
0xAA	0xFF		3	'N'	0x79	**ERR**	

ERR: The error code indicating which error occurred.

64) Signal Balance (PC, BNC Only)

● Function

　The PC turns the signal balance of a TV or monitor on/off.

● Get the Signal Balance Status

Header	Command	ID	Data Length	Check Sum
0xAA	0x7A		0	

● Set the Signal Balance

Header	Command	ID	Data Length	Data 1	Check Sum
0xAA	0x7A		1	**SBalance**	

SBalance: The Signal Balance code to set for the TV or monitor

1	Signal Balance ON
0	Signal Balance OFF

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Check Sum
0xAA	0xFF		3	'A'	0x7A	**SBalance**	

SBalance: Same as above.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Check Sum
0xAA	0xFF		3	'N'	0x7A	**ERR**	

ERR: The error code indicating which error occurred.

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65) SB Gain (PC, BNC Only)

● Function

　The PC changes the gain value of the signal balance of a monitor.

● Get the SBGain Status

Header	Command	ID	Data Length	Check Sum
0xAA	0x7E		0	

● Set the SBGain

Header	Command	ID	Data Length	Data 1	Check Sum
0xAA	0x7E		1	SBGain	

SBGain: The Phase B code of the signal balance to set for the monitor (0 to 100).

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Check Sum
0xAA	0xFF		3	'A'	0x7E	SBGain	

SBGain: Same as above.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Check Sum
0xAA	0xFF		3	'N'	0x7E	ERR	

ERR: The error code indicating which error occurred.

66) SB Sharpness (PC, BNC Only)

● Function

　　The PC changes the sharpness of the signal balance of a monitor.

● Get the SBSharpness Status

Header	Command	ID	Data Length	Check Sum
0xAA	0x7F		0	

● Set the SBSharpness

Header	Command	ID	Data Length	Data 1	Check Sum
0xAA	0x7F		1	SBSharpness	

SBSharpness: The Sharpness of the signal balance to set for the monitor (0 to 100).

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Check Sum
0xAA	0xFF		3	'A'	0x7F	SBSharpness	

SBSharpness: Same as above.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Check Sum
0xAA	0xFF		3	'N'	0x7F	ERR	

ERR: The error code indicating which error occurred.

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67) Panel On Time

● Function

　The PC displays the Panel On Time of a TV or monitor.

● Get the Panel On Time Status

Header	Command	ID	Data Length	Check Sum
0xAA	0x83		0	

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Val 2	
0xAA	0xFF		0x05	'A'	0x83	**PTime_ H**	**PTime_L**	

Check Sum

PTime_H: Panel On Time High

PTime_L: Panel On Time Low

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Check Sum
0xAA	0xFF		3	'N'	0x83	**ERR**	

ERR: The error code indicating which error occurred.

68) Video Wall On

● Function

The PC turns the Video Wall of a TV or monitor on/off.
This does not operate in MagicNet mode.

● Get the Video Wall On/Off Status

Header	Command	ID	Data Length	Check Sum
0xAA	0x84		0	

● Set the Video Wall On/Off

Header	Command	ID	Data Length	Data 1	Check Sum
0xAA	0x84		1	**V.Wall_On**	

V.Wall_On: The Video Wall code to set for the TV or monitor.

1	Video Wall ON
0	Video Wall OFF

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Check Sum
0xAA	0xFF		3	'A'	0x84	**V.Wall_On**	

V.Wall_On: Same as above.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Check Sum
0xAA	0xFF		3	'N'	0x84	**ERR**	

ERR: The error code indicating which error occurred.

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69) Temperature Control

● Function

The PC sets the Max value of the temperature of a TV or monitor

This is only available for models which provide the temperature status information.

● Get the Temperature Status

Header	Command	ID	Data Length	Check Sum
0xAA	0x85		0	

● Set the Temperature Status

Header	Command	ID	Data Length	Data 1	Check Sum
0xAA	0x85		1	**Temperature**	

Temperature: The Temperature code to set for the TV or monitor.

Data	45 ~ 125(℃)

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Check Sum
0xAA	0xFF		3	'A'	0x85	**Temperature**	

Temperature: Same as above.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Check Sum
0xAA	0xFF		3	'N'	0x85	**ERR**	

ERR: The error code indicating which error occurred.

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70) Brightness Sensor

● Function

The PC turns on/off the Brightness Sensor of a TV or monitor.
This is only available for models with the Brightness Sensor function.

● Get the Brightness Sensor ON/OFF Status

Header	Command	ID	Data Length	Check Sum
0xAA	0x86		0	

● Set the Brightness Sensor ON/OFF

Header	Command	ID	Data Length	Data 1	Check Sum
0xAA	0x86		1	BR_Sensor	

BR_Sensor: The Power code to set for the TV/monitor.

1	Brightness Sensor ON
0	Brightness Sensor OFF

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Check Sum
0xAA	0xFF		3	'A'	0x86	BR_Sensor	

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Check Sum
0xAA	0xFF		3	'N'	0x86	ERR	

ERR: The error code indicating which error occurred.

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71) Dynamic Contrast (ATV, DTV, AV, S-Video, Component, HDMI Only)

● Function

The PC turns the Dynamic Contrast of a TV or monitor on/off.

This does not operate in PC, DVI, and MagicNet modes.

● Get the Dynamic Contrast ON/OFF Status

Header	Command	ID	Data Length	Check Sum
0xAA	0x87		0	

● Set the Dynamic Contrast ON/OFF

Header	Command	ID	Data Length	Data 1	Check Sum
0xAA	0x87		1	DY_Cont	

DY_Cont: The Power code to set for the TV/monitor.

1	Dynamic Contrast ON
0	Dynamic Contrast OFF

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Check Sum
0xAA	0xFF		3	'A'	0x87	DY_Cont	

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Check Sum
0xAA	0xFF		3	'N'	0x87	ERR	

ERR: The error code indicating which error occurred.

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72) Safety Screen On

● Function

　The PC operates the Safety Screen of a TV or monitor.

● Get the Safety Screen Status

　N/A

● Set the Safety Screen

Header	Command	ID	Data Length	Data 1	Check Sum
0xAA	0x88		1	**Second**	

Second: The time when the Safety Screen is to be operated for the TV or monitor (in units of seconds, 1 to 5).

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Check Sum
0xAA	0xFF		3	'A'	0x88	**Second**	

Second: Same as above.

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Check Sum
0xAA	0xFF		3	'N'	0x88	**ERR**	

ERR: The error code indicating which error occurred.

73) Video Wall User Control

● Function

The PC turns the Video Wall of a TV or monitor on/off.

This does not operate in MagicNet mode.

This does not operate while PIP is operating.

● Get the Video Wall Status

Header	Command	ID	Data Length	Check Sum
0xAA	0x89		0	

● Set the Video Wall

Header	Command	ID	Data Length	Data 1	Data 2	Check Sum
0xAA	0x89		2	Wall_Div	Wall_SNo	

Wall_Div: The Video Wall Divider code set for the TV or monitor.

H \ V	1	2	3	4	5
OFF	0x00	0x00	0x00	0x00	0x00
1	0x11	0x12	0x13	0x14	0x15
2	0x21	0x22	0x23	0x24	0x25
3	0x31	0x32	0x33	0x34	0x35
4	0x41	0x42	0x43	0x44	0x45
5	0x51	0x52	0x53	0x54	0x55

Wall_SNo: The TV/Monitor serial number code set for the TV or monitor.

Set Number	Data
1	0x01
2	0x02
...	...
24	0x18
25	0x19

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Val 2	Check Sum
0xAA	0xFF		4	'A'	0x89	Wall_Div	Wall_SNo	

● Nak

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Check Sum
0xAA	0xFF		3	'N'	0x89	ERR	

ERR: The error code indicating which error occurred.

74) Model Name Control

● Function

  The PC displays the model name of a TV or monitor.

● Get the Model Number Status

Header	Command	ID	Data Length	Check Sum
0xAA	0x8A		0	

● Ack

Header	Command	ID	Data Length	Ack/Nak	r-CMD	Val 1	Val 2	
0xAA	0xFF		**0x12**	'A'	0x8A	**M_Name1**	**M_Name2**	

Val 3	Val 4	Val 5	Val 6	Val 7	Val 8	Val 9	Val 10
M_Name3	**M_Name4**	**M_Name5**	**M_Name6**	**M_Name7**	**M_Name8**	**M_Name9**	**M_Name10**

Val 11	Val 12	Val 13	Val 14	Val 15	Val 16
M_Name11	**M_Name12**	**M_Name13**	**M_Name14**	**M_Name15**	**M_Name16**

Check Sum

M_Name1 to M_Name16: The model name of the TV or monitor.

M_Name1	'S'
M_Name2	'y'
M_Name3	'n'
M_Name4	'c'
M_Name5	'M'
M_Name6	'a'
M_Name7	's'
M_Name8	't'
M_Name9	'e'
M_Name10	'r'
M_Name11	'4'
M_Name12	'0'
M_Name13	'0'
M_Name14	'D'
M_Name15	'X'
M_Name16	'n'

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