

10AVR  
External Command for CI AMX  
Ver. 1.00.00

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作成責任者:ソフトウェア技術部 町田守康  
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本文書の内容を他の文書に引用する場合は、引用先にもこの文章を記載すること

作成		照査		承認	
所属	ソフトウェア技術部	所属	ソフトウェア技術部	所属	ソフトウェア技術部
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日付	17-Mar-10	日付	23-Mar-10	日付	23-Mar-10

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HISTORY

REV	date	p. i. c	check	approval	page	Comment
1.00.00	17-Mar-10	machida	yanoguchi		ALL	First issue.

It is assumed that a difference with the last release is in the red.

## **Beginning**

This list is common in RS232C and IPcontrol.

VSX-31 and VSX-30 correspond to RS232C only.

### About Network Standby

This setting allows the IP Control function for operating the receiver from a IP control system connected on the same LAN as the receiver to be used even when the receiver is in the standby mode.

1. Select 'Network Standby' from the Network Setup menu.
2. Then set to "ON".

## **RS232C Physical Connection**

### **Connector**

RS232C DB9 Male, Cross

Pin	AV Receiver
1	*1
2	RXD
3	TXD
4	*1
5	GND
6	*1
7	RTS (BUSY)
8	NC
9	NC

\*1 Pin 1&4&6 are shorted each other.

### **Communication**

Communication Speed : 9600bps

Character length:8bits

Parity:None

Start bit:1bits

Stop bit:1bit

## **Ethernet**

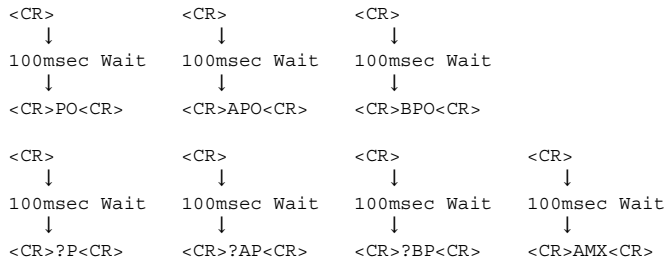
### **Communication port**

TCP Port 23

**Notice**

**Notice1**

This equipment save the power consumption (less than 1W) during the standby mode.  
To achieve this, main CPU doesn't operate during standby mode.  
For this reason, this equipment can not receive the 1st command from rs-232c port.  
But main CPU will be waked up by this 1st command.  
This equipment is using 1st command "<CR>" as only a trigger to wake up the main CPU  
and can not decode 1st command.  
Please send command as bellow.  
Please make sure to have at least 100msec. Interval between the 1st command and the second command.



**Notice2**

It may happen to take time for the set product to respond to the command from your remote controlling system.

**Notice3**

After set to PANEL LOCK or REMOTE LOCK mode,  
"PANEL LOCK" or "REMOTE LOCK" message appear on FL display  
when a front panel key or remote control button pushed.

## A/V Receiver Control Commands List

### AMX Device Discovery (for RS232C)

"AMX" command is a RS232C Control Command.

Command	Response
AMX<CR>	AMXB<-SDKClass=Receiver><-Make=Pioneer><-Model=modelname><-Revision=1.0.0><CR>

About modelname, see Table.1.

Table.1 Modelname and Response

Modelname	Response
SC-37/UXJCB	AMXB<-SDKClass=Receiver><-Make=Pioneer><-Model=SC-37><-Revision=1.0.0><CR>
SC-LX83/SYXJ5	AMXB<-SDKClass=Receiver><-Make=Pioneer><-Model=SC-LX83><-Revision=1.0.0><CR>
SC-LX83/DLPWXJ	AMXB<-SDKClass=Receiver><-Make=Pioneer><-Model=SC-LX83><-Revision=1.0.0><CR>
SC-LX83/FXJ	AMXB<-SDKClass=Receiver><-Make=Pioneer><-Model=SC-LX83><-Revision=1.0.0><CR>
SC-LX83/AXJ5	AMXB<-SDKClass=Receiver><-Make=Pioneer><-Model=SC-LX83><-Revision=1.0.0><CR>
SC-LX83/JXJ	AMXB<-SDKClass=Receiver><-Make=Pioneer><-Model=SC-LX83><-Revision=1.0.0><CR>
SC-35/UXJCB	AMXB<-SDKClass=Receiver><-Make=Pioneer><-Model=SC-35><-Revision=1.0.0><CR>
SC-1525/CUXJ	AMXB<-SDKClass=Receiver><-Make=Pioneer><-Model=SC-1525><-Revision=1.0.0><CR>
SC-LX73/SYXJ5	AMXB<-SDKClass=Receiver><-Make=Pioneer><-Model=SC-LX73><-Revision=1.0.0><CR>
SC-LX73/DLPWXJ	AMXB<-SDKClass=Receiver><-Make=Pioneer><-Model=SC-LX73><-Revision=1.0.0><CR>
SC-LX73/FXJ	AMXB<-SDKClass=Receiver><-Make=Pioneer><-Model=SC-LX73><-Revision=1.0.0><CR>
SC-LX73/AXJ5	AMXB<-SDKClass=Receiver><-Make=Pioneer><-Model=SC-LX73><-Revision=1.0.0><CR>
SC-LX73/JXJ	AMXB<-SDKClass=Receiver><-Make=Pioneer><-Model=SC-LX73><-Revision=1.0.0><CR>
VSX-33/UXJCB	AMXB<-SDKClass=Receiver><-Make=Pioneer><-Model=VSX-33><-Revision=1.0.0><CR>
VSX-1325/CUXJ	AMXB<-SDKClass=Receiver><-Make=Pioneer><-Model=VSX-1325><-Revision=1.0.0><CR>
VSX-LX53/SYXJ5	AMXB<-SDKClass=Receiver><-Make=Pioneer><-Model=VSX-LX53><-Revision=1.0.0><CR>
VSX-2020/SYXJ5	AMXB<-SDKClass=Receiver><-Make=Pioneer><-Model=VSX-2020><-Revision=1.0.0><CR>
VSX-LX53/DLPWXJ	AMXB<-SDKClass=Receiver><-Make=Pioneer><-Model=VSX-LX53><-Revision=1.0.0><CR>
VSX-LX53/FXJ	AMXB<-SDKClass=Receiver><-Make=Pioneer><-Model=VSX-LX53><-Revision=1.0.0><CR>
VSX-LX53/AXJ5	AMXB<-SDKClass=Receiver><-Make=Pioneer><-Model=VSX-LX53><-Revision=1.0.0><CR>
VSA-LX53/JXJ	AMXB<-SDKClass=Receiver><-Make=Pioneer><-Model=VSA-LX53><-Revision=1.0.0><CR>
VSX-32/UXJCB	AMXB<-SDKClass=Receiver><-Make=Pioneer><-Model=VSX-32><-Revision=1.0.0><CR>
VSX-1125/CUXJ	AMXB<-SDKClass=Receiver><-Make=Pioneer><-Model=VSX-1125><-Revision=1.0.0><CR>
VSX-1120/UXJCB	AMXB<-SDKClass=Receiver><-Make=Pioneer><-Model=VSX-1120><-Revision=1.0.0><CR>
VSX-31/UXCNCB	AMXB<-SDKClass=Receiver><-Make=Pioneer><-Model=VSX-31><-Revision=1.0.0><CR>
VSX-30/UXCNCB	AMXB<-SDKClass=Receiver><-Make=Pioneer><-Model=VSX-30><-Revision=1.0.0><CR>

### AMX Device Discovery (for IP)

```

▼IP beacon
  Protocol  UDP
  IP Address 239.255.250.250
  Port      9131
  
```

```

*SC-37, SC-LX83
  The beacon transmit cycle is about 43 sec.
*Others
  The beacon transmit cycle is about 30~60usec.
  
```

#### ▼Message

Table.2 Modelname and Message

Modelname	Message
SC-37/UXJCB	AMXB<-UID=Mac address><-SDKClass=Receiver><-Make=Pioneer><-Model=SC-37><-Revision=1.0.0><CR>
SC-LX83/SYXJ5	AMXB<-UID=Mac address><-SDKClass=Receiver><-Make=Pioneer><-Model=SC-LX83><-Revision=1.0.0><CR>
SC-LX83/DLPWXJ	AMXB<-UID=Mac address><-SDKClass=Receiver><-Make=Pioneer><-Model=SC-LX83><-Revision=1.0.0><CR>
SC-LX83/FXJ	AMXB<-UID=Mac address><-SDKClass=Receiver><-Make=Pioneer><-Model=SC-LX83><-Revision=1.0.0><CR>
SC-LX83/AXJ5	AMXB<-UID=Mac address><-SDKClass=Receiver><-Make=Pioneer><-Model=SC-LX83><-Revision=1.0.0><CR>
SC-LX83/JXJ	AMXB<-UID=Mac address><-SDKClass=Receiver><-Make=Pioneer><-Model=SC-LX83><-Revision=1.0.0><CR>
SC-35/UXJCB	AMXB<-UID=Mac address><-SDKClass=Receiver><-Make=Pioneer><-Model=SC-35><-Revision=1.0.0><CR>
SC-1525/CUXJ	AMXB<-UID=Mac address><-SDKClass=Receiver><-Make=Pioneer><-Model=SC-1525><-Revision=1.0.0><CR>
SC-LX73/SYXJ5	AMXB<-UID=Mac address><-SDKClass=Receiver><-Make=Pioneer><-Model=SC-LX73><-Revision=1.0.0><CR>
SC-LX73/DLPWXJ	AMXB<-UID=Mac address><-SDKClass=Receiver><-Make=Pioneer><-Model=SC-LX73><-Revision=1.0.0><CR>
SC-LX73/FXJ	AMXB<-UID=Mac address><-SDKClass=Receiver><-Make=Pioneer><-Model=SC-LX73><-Revision=1.0.0><CR>
SC-LX73/AXJ5	AMXB<-UID=Mac address><-SDKClass=Receiver><-Make=Pioneer><-Model=SC-LX73><-Revision=1.0.0><CR>
SC-LX73/JXJ	AMXB<-UID=Mac address><-SDKClass=Receiver><-Make=Pioneer><-Model=SC-LX73><-Revision=1.0.0><CR>
VSX-33/UXJCB	AMXB<-UID=Mac address><-SDKClass=Receiver><-Make=Pioneer><-Model=VSX-33><-Revision=1.0.0><CR>
VSX-1325/CUXJ	AMXB<-UID=Mac address><-SDKClass=Receiver><-Make=Pioneer><-Model=VSX-1325><-Revision=1.0.0><CR>
VSX-LX53/SYXJ5	AMXB<-UID=Mac address><-SDKClass=Receiver><-Make=Pioneer><-Model=VSX-LX53><-Revision=1.0.0><CR>
VSX-2020/SYXJ5	AMXB<-UID=Mac address><-SDKClass=Receiver><-Make=Pioneer><-Model=VSX-2020><-Revision=1.0.0><CR>
VSX-LX53/DLPWXJ	AMXB<-UID=Mac address><-SDKClass=Receiver><-Make=Pioneer><-Model=VSX-LX53><-Revision=1.0.0><CR>
VSX-LX53/FXJ	AMXB<-UID=Mac address><-SDKClass=Receiver><-Make=Pioneer><-Model=VSX-LX53><-Revision=1.0.0><CR>
VSX-LX53/AXJ5	AMXB<-UID=Mac address><-SDKClass=Receiver><-Make=Pioneer><-Model=VSX-LX53><-Revision=1.0.0><CR>
VSA-LX53/JXJ	AMXB<-UID=Mac address><-SDKClass=Receiver><-Make=Pioneer><-Model=VSA-LX53><-Revision=1.0.0><CR>
VSX-32/UXJCB	AMXB<-UID=Mac address><-SDKClass=Receiver><-Make=Pioneer><-Model=VSX-32><-Revision=1.0.0><CR>
VSX-1125/CUXJ	AMXB<-UID=Mac address><-SDKClass=Receiver><-Make=Pioneer><-Model=VSX-1125><-Revision=1.0.0><CR>
VSX-1120/UXJCB	AMXB<-UID=Mac address><-SDKClass=Receiver><-Make=Pioneer><-Model=VSX-1120><-Revision=1.0.0><CR>

Mac address:The number that different from each product.

A/V Receiver Control Commands List

About Automatic Feedback

When the customer changes the status using key on the front panel or the remote controller of AV receiver, AV receiver send new status automatically.  
(For ex.) The user changes function on the front panel.  
Response from AV receiver : FN\*\*<CR+LF>

Other Automatic Feedback status table.

AV Receiver status	Response
POWER	PWR*<CR+LF> (*1)
VOLUME	VOL**<CR+LF>
MUTE	MUT**<CR+LF>
INPUT SOURCE	FN**<CR+LF>
LISTENING MODE SET	SR****<CR+LF>
LISTENING MODE	LM***<CR+LF>
SPEAKERS	SPK*<CR+LF>
HDMI OUTPUT SELECT	HO*<CR+LF>
SBch PROCESSING	EX*<CR+LF>
MCACC MEMORY	MC*<CR+LF>
PHASE CONTROL	IS*<CR+LF>
ZONE 2 POWER	APR*<CR+LF>
ZONE 3 POWER	BPR*<CR+LF>
ZONE 2 VOLUME	ZV**<CR+LF>
ZONE 3 VOLUME	ZV**<CR+LF>
ZONE 2 MUTE	Z2MUT*<CR+LF>
ZONE 3 MUTE	Z3MUT*<CR+LF>
ZONE 2 INPUT	Z2F**<CR+LF>
ZONE 3 INPUT	Z3F**<CR+LF>
PQLS	PQ*<CR+LF>
CH LEVEL	CLV*****<CR+LF>
VIRTUAL SB	VSB*<CR+LF>
VIRTUAL HEIGHT	VHT*<CR+LF>
FL display information	FL*<CR+LF> (*2)
Input Name Information	RGB*<CR+LF>

(\*1)When EXTENSION or RF Remote setting is ON, "PWR1" Command is guaranteed.  
The model not have EXTENSION Setup menu, "PWR1" Command is not guaranteed.  
(\*2)Only RS232C is guaranteed.

POWER

Command	Function	Response	Parameter	Example
PO<CR>	POWER ON		0: ON	
PF<CR>	POWER OFF		1: OFF	
?P<CR>	Request POWER status.			Command:?P<CR> Response:PWR0<CR+LF> (now POWER ON)

SC-LX83 /SYXJ5	SC-LX73 /SYXJ5	VSX- LX53 /SYXJ5	VSX- 2020 /SYXJ5
○	○	○	○
○	○	○	○
○	○	○	○

VOLUME

Command	Function	Response	Parameter	Example
VU<CR>	VOLUME UP	VOL***<CR+LF>	***: 000 to 185 by ASCII code. (1step = 0.5dB)	
VD<CR>	VOLUME DOWN			
***VL<CR>	VOLUME SET		185 : +12.0dB 184 : +11.5dB 161 : 0.0dB 001 : -80.0dB 000 : ---.dB (MIN)	061VL<CR> (set to -50.0dB.)
?V<CR>	Request VOLUME LEVEL.			Command:?V<CR> Response:VOL160<CR+LF> (VOLUME is set to 0.0dB)

SC-LX83 /SYXJ5	SC-LX73 /SYXJ5	VSX- LX53 /SYXJ5	VSX- 2020 /SYXJ5
○	○	○	○
○	○	○	○
○	○	○	○
○	○	○	○

MUTE

Command	Function	Response	Parameter	Example
MO<CR>	MUTE ON		0: ON	
MF<CR>	MUTE OFF		1: OFF	
?M<CR>	Request MUTE status.			Command:?M<CR> Response:MUT1<CR+LF> (MUTE OFF)

SC-LX83 /SYXJ5	SC-LX73 /SYXJ5	VSX- LX53 /SYXJ5	VSX- 2020 /SYXJ5
○	○	○	○
○	○	○	○
○	○	○	○

INPUT

Command	Function	Response	Parameter	Example
**FN<CR>	INPUT CHANGE	FN**<CR+LF>	04: DVD 25: BD 05: TV/SAT 15: DVR/BDR 10: VIDEO 1 (VIDEO) 14: VIDEO 2 19: HDMI 1 20: HDMI 2 21: HDMI 3 22: HDMI 4 23: HDMI 5 26: HOME MEDIA GALLERY (Internet Radio)	15FN<CR> (set to DVR.)

SC-LX83 /SYXJ5	SC-LX73 /SYXJ5	VSX- LX53 /SYXJ5	VSX- 2020 /SYXJ5
○	○	○	○
○	○	○	○
○	○	○	○
○	○	○	○
○	○	○	○
○	○	○	○
○	○	○	○
○	○	○	○
○	○	○	○
○	○	○	○
○	○	○	○
○	○	○	○
○(Front)	○(Front)	○(Front)	○(Front)
○	○	○	○







			1311: THX MUSIC						
			1312: Neo:6 +THX GAMES						
			1313: ES MTRX +THX GAMES						
			1314: ES DISC +THX GAMES						
			1315: ES7.1 +THX GAMES						
			1316: [] (EX +THX GAMES						
			1317: THX ULTRA2 GAMES						
			1318: THX SELECT2 GAMES						
			1319: THX GAMES						
			131a: [] (PLIIZ +THX CINEMA						
			131b: [] (PLIIZ +THX MUSIC						
			131c: [] (PLIIZ +THX GAMES						
			0401: STEREO						
			0402: [] (PLII MOVIE						
			0403: [] (PLIIX MOVIE						
			0404: Neo:6 CINEMA						
			0405: AUTO SURROUND Straight Decode						
			0406: [] (DIGITAL EX						
			0407: [] (PLIIX MOVIE						
			0408: DTS +Neo:6						
			0409: ES MATRIX						
			040a: ES DISCRETE						
			040b: DTS-ES 7.1						
			040c: XM HD Surround						
			040d: NEURALSURR						
			040e: RETRIEVER AIR						
			0501: STEREO						
			0502: [] (PLII MOVIE						
			0503: [] (PLIIX MOVIE						
			0504: Neo:6 CINEMA						
			0505: ALC Straight Decode						
			0506: [] (DIGITAL EX						
			0507: [] (PLIIX MOVIE						
			0508: DTS +Neo:6						
			0509: ES MATRIX						
			050a: ES DISCRETE						
			050b: DTS-ES 7.1						
			050c: XM HD Surround						
			050d: NEURAL SURR						
			050e: RETRIEVER AIR						
			0601: STEREO						
			0602: [] (PLII MOVIE						
			0603: [] (PLIIX MOVIE						
			0604: Neo:6 CINEMA						
			0605: STREAM DIRECT NORMAL Straight Decode						
			0606: [] (DIGITAL EX						
			0607: [] (PLIIX MOVIE						
			0608: (nothing)						
			0609: ES MATRIX						
			060a: ES DISCRETE						
			060b: DTS-ES 7.1						
			0701: STREAM DIRECT PURE 2ch						
			0702: [] (PLII MOVIE						
			0703: [] (PLIIX MOVIE						
			0704: Neo:6 CINEMA						
			0705: STREAM DIRECT PURE Straight Decode						
			0706: [] (DIGITAL EX						
			0707: [] (PLIIX MOVIE						
			0708: (nothing)						
			0709: ES MATRIX						
			070a: ES DISCRETE						
			070b: DTS-ES 7.1						
			0881: OPTIMUM						
			0e01: HDMI THROUGH						
			0f01: MULTI CH IN						

**tone control**

Command	Function	Response	Parameter	Example	SC-LX83 /SYXJ5	SC-LX73 /SYXJ5	V5X- LX53 /SYXJ5	V5X- 2020 /SYXJ5
TO<CR>	TONE ON/BYPASS	TO*<CR+LF>	0: BYPASS					
?TO<CR>	Request TONE status		1: ON	Command:?TO<CR> Response:TO0<CR+LF> (now TONE BYPASS.)				
BI<CR>	BASS INCREMENT	BA**<CR+LF>						
BD<CR>	BASS DECREMENT		**: 00 to 12 by ASCII code. (1step=1dB)					
?BA<CR>	Request BASS status		00: +6dB 06: 0dB 12: -6dB	Command:?BA<CR> Response:BA02<CR+LF> (BASS is set to +4dB.)				
TI<CR>	TREBLE INCREMENT	TR**<CR+LF>						
TD<CR>	TREBLE DECREMENT							
?TR<CR>	Request TREBLE status			Command:?TR<CR> Response:TR10<CR+LF> (TREBLE is set to -4dB.)				

**DSP FUNCTION**

Command	Function	Response	Parameter	Example	SC-LX83 /SYXJ5	SC-LX73 /SYXJ5	V5X- LX53 /SYXJ5	V5X- 2020 /SYXJ5
*MC<CR>	MCACC MEMORY SET	MC*<CR+LF>						
?MC<CR>	Request MCACC MEMORY status		0: MCACC MEMORY (cyclic) 1: MEMORY 1 2: MEMORY 2 3: MEMORY 3 4: MEMORY 4 5: MEMORY 5 6: MEMORY 6	Command:?MC<CR> Response:MC3<CR+LF> (now MEMORY 3 is selected.)				
*IS<CR>	PHASE CONTROL	IS*<CR+LF>						

?IS<CR>	Request PHASE CONTROL status		0: PHASE CONTROL OFF 1: PHASE CONTROL ON 2: FULL BAND PHASE CONTROL ON 9: PHASE CONTROL ON/OFF	Command:?IS<CR> Response:IS1<CR+LF> (now PHASE CONTROL ON is selected.)	o	o	o	o
*VSB<CR>	VIRTUAL SB	VSB*<CR+LF>			o	o	o	o
?VSB<CR>	Request VIRTUAL SB status		0: OFF 1: ON 9: ON/OFF	Command:?VSB<CR> Response:VSB0<CR+LF> (now VIRTUAL SB OFF is selected.)	o	o	o	o
*VHT<CR>	VIRTUAL HEIGHT	VHT<CR+LF>			o	o	o	o
?VHT<CR>	Request VIRTUAL HEIGHT status		0: OFF 1: ON 9: ON/OFF	Command:?VHT<CR> Response:VHT1<CR+LF> (now VIRTUAL HEIGHT ON is selected.)	o	o	o	o

#### CHANNEL LEVEL

Command	Function	Response	Parameter	Example	SC-LX83 /SYXJ5	SC-LX73 /SYXJ5	VSX-LX53 /SYXJ5	VSX-2020 /SYXJ5
CLC<CR>	CH SELECT	CLV####<CR+LF>			o	o	o	o
CLU<CR>	CH LEVEL UP		#:3byte (CH) + *:2byte (Value)		o	o	o	o
CLD<CR>	CH LEVEL DOWN		###: (CH)		o	o	o	o
###*CLV<CR>	CH LEVEL DIRECT SET		L_: Front Left R_: Front Right C_: Center SL_: Surround Left SR_: Surround Right SBL: Surround Back Left SBR: Surround Back Right SBR: Subwoofer SW_: Front Height Left LH_: Front Height Right RH_: Front Wide Left LW_: Front Wide Right RW_:	Command:SL 48CLV<CR> Response:CLVSL_48<CR+LF> (Set to SLch -0.5dB)	o	o	o	o
?###CLV<CR>	Request CH LEVEL		**:(Value) 26 to 74 by ASCII code. 74: (1step=0.5dB) 52: +12.0dB (MAX) 51: +1.0dB 50: -0.5dB 49: 0.0dB 48: -0.5dB 26: -1.0dB (MIN) -12.0dB (MIN)	Command:?C__CLV<CR> Response:CLVC__72<CR+LF> (now Cch +11.0dB)	o	o	o	o

#### AMP FUNCTION

Command	Function	Response	Parameter	Example	SC-LX83 /SYXJ5	SC-LX73 /SYXJ5	VSX-LX53 /SYXJ5	VSX-2020 /SYXJ5
*SPK<CR>	SPEAKERS	SPK*<CR+LF>			o	o	o	o
?SPK<CR>	Request SPEAKERS status		0: SPEAKER OFF 1: SPEAKER A ON 2: SPEAKER B ON 3: SPEAKER A+B ON 9: SPEAKERS (cyclic)	Command:?SPK<CR> Response:SPK1<CR+LF> (now SPEAKER A ON.)	o	o	o	o
*HO<CR>	HDMI OUTPUT SELECT	HO*<CR+LF>			o	o	o	o
?HO<CR>	Request HDMI OUTPUT status		0: HDMI OUT ALL 1: HDMI OUT 1 2: HDMI OUT 2 9: HDMI OUT (cyclic)	Command:?HO<CR> Response:HO0<CR+LF> (now HDMI OUT ALL is selected.)	o	o	o	o
*HA<CR>	HDMI AUDIO	HA*<CR+LF>			o	o	o	o
?HA<CR>	Request HDMI AUDIO status		0: AMP 1: THROUGH 9: AMP/THROUGH (cyclic)	Command:?HA<CR> Response:HA0<CR+LF> (now AMP is selected.)	o	o	o	o
*PQ<CR>	PQLS	PQ*<CR+LF>			o	o	o	o
?PQ<CR>	Request PQLS setting status		0: OFF 1: AUTO 9: AUTO/OFF (cyclic)	Command:?PQ<CR> Response:PQ0<CR+LF> (now PQLS setting OFF is selected.)	o	o	o	o

#### KEY LOCK

Command	Function	Response	Parameter	Example	SC-LX83 /SYXJ5	SC-LX73 /SYXJ5	VSX-LX53 /SYXJ5	VSX-2020 /SYXJ5
*PKL<CR>	PANEL KEY LOCK	PKL*<CR+LF>		*PKL<CR>	o	o	o	o
?PKL<CR>	Request PANEL KEY LOCK status		0: PANEL KEY LOCK (& VOLUME) OFF 1: PANEL KEY LOCK ON 2: PANEL KEY & VOLUME LOCK ON	Command:?PKL<CR> Response:PKL1<CR+LF> (now PANEL KEY LOCK ON.)	o	o	o	o
*RML<CR>	REMOTE LOCK	RML*<CR+LF>		*RML<CR>	o	o	o	o
?RML<CR>	Request REMOTE LOCK status		0: REMOTE LOCK OFF 1: REMOTE LOCK ON	Command:?RML<CR> Response:PKL1<CR+LF> (now REMOTE LOCK ON.)	o	o	o	o

#### CURSOR OPERATION

Command	Function	Response	Parameter	Example	SC-LX83 /SYXJ5	SC-LX73 /SYXJ5	VSX-LX53 /SYXJ5	VSX-2020 /SYXJ5
STS<CR>	STATUS DISPLAY	R<CR+LF>			o	o	o	o
CUP<CR>	AMP CURSOR UP	R<CR+LF>			o	o	o	o
CDN<CR>	AMP CURSOR DOWN	R<CR+LF>			o	o	o	o
CRI<CR>	AMP CURSOR RIGHT	R<CR+LF>			o	o	o	o
CLE<CR>	AMP CURSOR LEFT	R<CR+LF>			o	o	o	o
CEN<CR>	AMP CURSOR ENTER	R<CR+LF>			o	o	o	o
CRT<CR>	AMP RETURN	R<CR+LF>			o	o	o	o
APA<CR>	AUDIO PARAMETER	R<CR+LF>			o	o	o	o
VPA<CR>	VIDEO PARAMETER	R<CR+LF>			o	o	o	o
HM<CR>	HOME MENU	R<CR+LF>			o	o	o	o

KOF<CR>	KEY OFF (for iPod, NETWORK)	R<CR+LF>	When this equipment continue command mode after sending the operation command, it needs to send "KOF" command.	
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**ZONE POWER**

Command	Function	Response	Parameter	Example
APO<CR>	ZONE 2 POWER ON	APR*<CR+LF>	0: ON	
APF<CR>	ZONE 2 POWER OFF		1: OFF	
?AP<CR>	Request ZONE 2 POWER status			Command: ?AP<CR> Response: APR0<CR+LF> (ZONE 2 POWER ON)
BPO<CR>	ZONE 3 POWER ON	BPR*<CR+LF>		
BPF<CR>	ZONE 3 POWER OFF			
?BP<CR>	Request ZONE 3 POWER status			Command: ?BP<CR> Response: BPR1<CR+LF> (ZONE 3 POWER OFF)

SC-LX83 /SYXJ5	SC-LX73 /SYXJ5	VSX-LX53 /SYXJ5	VSX-2020 /SYXJ5
o	o	o	o
o	o	o	o
o	o	o	o
o	o	o	o
o	o	o	o

**ZONE INPUT**

Command	Function	Response	Parameter	Example
**ZS<CR>	ZONE 2 INPUT CHANGE	Z2F**<CR+LF>	04: DVD 05: TV/SAT  15: DVR/BDR 10: VIDEO 1(VIDEO) 14: VIDEO 2 26: HOME MEDIA GALLERY(Internet Radio) 17: iPod/USB 18: XM RADIO 01: CD 03: CD-R/TAPE 02: TUNER 33: ADAPTER PORT 27: SIRIUS	02ZS<CR> (change to TUNER INPUT.)
?ZS<CR>	Request ZONE 2 INPUT			Command: ?ZS<CR> Response: Z2F04<CR+LF> (DVD is selected.)
**ZT<CR>	ZONE 3 INPUT CHANGE	Z3F**<CR+LF>	04: DVD 05: TV/SAT  15: DVR/BDR 10: VIDEO 1(VIDEO) 14: VIDEO 2 26: HOME MEDIA GALLERY(Internet Radio) 17: iPod/USB 18: XM RADIO 01: CD 03: CD-R/TAPE 02: TUNER 33: ADAPTER PORT 27: SIRIUS	03ZT<CR> (change to CD-R)
?ZT<CR>	Request ZONE 3 INPUT			Command: ?ZT<CR> Response: Z2F01<CR+LF> (CD is selected.)

SC-LX83 /SYXJ5	SC-LX73 /SYXJ5	VSX-LX53 /SYXJ5	VSX-2020 /SYXJ5
o	o	o	o
o	o	o	o
o	o	o	o
o	o	o	o
x	x	x	x
o	o	o	o
o	o	o	o
x	x	x	x
o	o	o	o
o	o	o	o
o	o	o	o
o	o	o	o
o	o	o	o
o	o	o	o
x	x	x	x
o	o	o	o

**ZONE VOLUME**

Command	Function	Response	Parameter	Example
ZU<CR>	ZONE 2 VOLUME UP	ZV**<CR+LF>		
ZD<CR>	ZONE 2 VOLUME DOWN		**: 00 to 81 by ASCII code. ( 1step=1dB)	
**ZV<CR>	ZONE 2 VOLUME SET			14ZV<CR> (set ZONE 2 VOLUME to -67.0dB)
?ZV<CR>	Request ZONE 2 VOLUME LEVEL.		81: 0.0dB 01: -80.0dB 00: ---dB(MIN)	Command: ?ZV<CR> Response: ZV14<CR+LF> (ZONE 2 VOLUME is set to -67.0dB)
YU<CR>	ZONE 3 VOLUME UP	YV**<CR+LF>		
YD<CR>	ZONE 3 VOLUME DOWN			
**YV<CR>	ZONE 3 VOLUME SET			25YV<CR> (set ZONE 3 VOLUME -56.0dB)
?YV<CR>	Request ZONE 3 VOLUME LEVEL.			Command: ?YV<CR> Response: YV25<CR+LF> (ZONE 3 VOLUME is set to -56.0dB)

SC-LX83 /SYXJ5	SC-LX73 /SYXJ5	VSX-LX53 /SYXJ5	VSX-2020 /SYXJ5
o	o	o	o
o	o	o	o
o	o	o	o
o	o	o	o
x	x	x	x
x	x	x	x
x	x	x	x
x	x	x	x
x	x	x	x
x	x	x	x
x	x	x	x
x	x	x	x
x	x	x	x
x	x	x	x
x	x	x	x
x	x	x	x

**ZONE MUTE**

Command	Function	Response	Parameter	Example
Z2MO<CR>	ZONE 2 MUTE ON	Z2MUT*<CR+LF>	0: ON	
Z2MF<CR>	ZONE 2 MUTE OFF		1: OFF	
?Z2M<CR>	Request ZONE 2 MUTE status			Command: ?Z2M<CR> Response: Z2MUT1<CR+LF> (now ZONE 2 MUTE OFF)
Z3MO<CR>	ZONE 3 MUTE ON	Z3MUT*<CR+LF>		
Z3MF<CR>	ZONE 3 MUTE OFF			
?Z3M<CR>	Request ZONE 3 MUTE status			Command: ?Z3M<CR> Response: Z3MUT0<CR+LF> (now ZONE 3 MUTE ON)

SC-LX83 /SYXJ5	SC-LX73 /SYXJ5	VSX-LX53 /SYXJ5	VSX-2020 /SYXJ5
o	o	o	o
o	o	o	o
o	o	o	o
x	x	x	x
x	x	x	x
x	x	x	x

**TUNER**

Command	Function	Response	Parameter	Example
TPI<CR>	TUNER FREQ INCREMENT	FR*****<CR+LF>		
TFD<CR>	TUNER FREQ DECREMENT			

SC-LX83 /SYXJ5	SC-LX73 /SYXJ5	VSX-LX53 /SYXJ5	VSX-2020 /SYXJ5
o	o	o	o
o	o	o	o
o	o	o	o

?FR<CR>	Request TUNER FREQUENCY		A: AM F: FM FREQUENCY: 0 to 9 by ASCII code A00530=AM 530kHz A01700=AM 1700kHz F08750=FM 87.50MHz F10800=FM 108.00MHz	Command:?FR<CR> Response:FR08800<CR+LF> (now FM 88.00MHz)				
TB<CR>	TUNER BAND							
*TP<CR>	TUNER PRESET (DIGIT key)	PR***<CR+LF>	*: 0 to 9 by ASCII code.	8TP<CR> (set to preset number 8.)				
TC<CR>	TUNER CLASS change		A01: CLASS "A",NUMBER 1					
TPI<CR>	TUNER PRESET INCREMENT		... ..					
TPD<CR>	TUNER PRESET DECREMENT		G09: CLASS "G",NUMBER 9					
?PR<CR>	Request TUNER PRESET No.		( CLASS = A to G, NUMBER = 01 to 09	Command:?PR<CR> Response:PRB04<CR+LF> (now tuner preset No. is B4)				
TAC<CR>	DIRECT ACCESS	R<CR+LF>		Command: TAC<CR>8TP<CR>7TP<CR>5 TP<CR>0TP<CR> (87.50MHz direct set)				

### XM radio Operation (USA model only)

Command	Function	Response	Parameter	Example	SC-LX83 /SYXJ5	SC-LX73 /SYXJ5	2015 LX53 /SYXJ5	2020 LX53 /SYXJ5
00XM<CR>	0 (number key)	XM***<CR+LF>	***: Channel number by ASCII code.		x	x	x	x
01XM<CR>	1 (number key)	(↑when change channel)			x	x	x	x
02XM<CR>	2 (number key)				x	x	x	x
03XM<CR>	3 (number key)				x	x	x	x
04XM<CR>	4 (number key)				x	x	x	x
05XM<CR>	5 (number key)				x	x	x	x
06XM<CR>	6 (number key)				x	x	x	x
07XM<CR>	7 (number key)				x	x	x	x
08XM<CR>	8 (number key)				x	x	x	x
09XM<CR>	9 (number key)				x	x	x	x
10XM<CR>	CH + / Cursol DOWN ↓				x	x	x	x
11XM<CR>	CH - / Cursol UP ↑				x	x	x	x
12XM<CR>	PRESET ST + (→)				x	x	x	x
13XM<CR>	PRESET ST - (←)				x	x	x	x
14XM<CR>	DISPLAY				x	x	x	x
15XM<CR>	PRESET				x	x	x	x
16XM<CR>	CLASS				x	x	x	x
17XM<CR>	DIRECT ACCESS (CH)				x	x	x	x
18XM<CR>	MEMORY (EDIT)				x	x	x	x
19XM<CR>	MENU				x	x	x	x
21XM<CR>	ENTER				x	x	x	x
22XM<CR>	RETURN				x	x	x	x
23XM<CR>	CATEGORY				x	x	x	x
?XM<CR>	Request XM channel No.			Command:?XM<CR> Response:XM025<CR+LF> (now channel 25 is selected.)	x	x	x	x

### Sirius Operation (USA model only)

Command	Function	Response	Parameter	Example	SC-LX83 /SYXJ5	SC-LX73 /SYXJ5	2015 LX53 /SYXJ5	2020 LX53 /SYXJ5
00SI<CR>	0 (number key)	SIR***<CR+LF>	***: Channel number by ASCII code.		x	x	x	x
01SI<CR>	1 (number key)	(↑when change channel)			x	x	x	x
02SI<CR>	2 (number key)				x	x	x	x
03SI<CR>	3 (number key)				x	x	x	x
04SI<CR>	4 (number key)				x	x	x	x
05SI<CR>	5 (number key)				x	x	x	x
06SI<CR>	6 (number key)				x	x	x	x
07SI<CR>	7 (number key)				x	x	x	x
08SI<CR>	8 (number key)				x	x	x	x
09SI<CR>	9 (number key)				x	x	x	x
10SI<CR>	CH + / Cursol DOWN ↓				x	x	x	x
11SI<CR>	CH - / Cursol UP ↑				x	x	x	x
12SI<CR>	PRESET ST + (→)				x	x	x	x
13SI<CR>	PRESET ST - (←)				x	x	x	x
14SI<CR>	DISPLAY				x	x	x	x
15SI<CR>	PRESET				x	x	x	x
16SI<CR>	CLASS				x	x	x	x
17SI<CR>	DIRECT ACCESS (CH)				x	x	x	x
18SI<CR>	MEMORY (EDIT)				x	x	x	x
19SI<CR>	MENU				x	x	x	x
21SI<CR>	ENTER				x	x	x	x
22SI<CR>	RETURN				x	x	x	x
23SI<CR>	CATEGORY				x	x	x	x
?SIR<CR>	Request SIRIUS channel No.			Command:?SIR<CR> Response:SIR019<CR+LF> (now channel 19 is selected.)	x	x	x	x

### iPod Operation

Command	Function	Response	Parameter	Example	SC-LX83 /SYXJ5	SC-LX73 /SYXJ5	2015 LX53 /SYXJ5	2020 LX53 /SYXJ5
00IP<CR>	PLAY	R<CR+LF>			o	o	o	o
01IP<CR>	PAUSE				o	o	o	o
02IP<CR>	STOP⌘				o	o	o	o
03IP<CR>	PREVIOUS ( < < )				o	o	o	o
04IP<CR>	NEXT ( > > )				o	o	o	o
05IP<CR>	REV (< < )			05IP<CR> (start REV) KOF<CR> (stop REV)	o	o	o	o
06IP<CR>	FWD ( > > )			06IP<CR> (start FWD) KOF<CR> (stop FWD)	o	o	o	o
07IP<CR>	REPEAT				o	o	o	o
08IP<CR>	SHUFFLE				o	o	o	o
09IP<CR>	DISPLAY				o	o	o	o
10IP<CR>	iPod CONTROL				o	o	o	o
13IP<CR>	Cursor UP				o	o	o	o
14IP<CR>	Cursor DOWN				o	o	o	o

15IP<CR>	Cursor RIGHT			o	o	o	o
16IP<CR>	Cursor LEFT			o	o	o	o
17IP<CR>	ENTER			o	o	o	o
18IP<CR>	RETURN			o	o	o	o
19IP<CR>	TOP MENU			o	o	o	o

### Home Media Gallery Operation

Command	Function	Response	Parameter	Example	SC-LX83 /SYXJ5	SC-LX73 /SYXJ5	VSX- LX53 /SVYJ5	VSX- 2020 /SVYJ5
00NW<CR>	0 (number key)	R<CR+LF>			o	o	o	o
01NW<CR>	1 (number key)				o	o	o	o
02NW<CR>	2 (number key)				o	o	o	o
03NW<CR>	3 (number key)				o	o	o	o
04NW<CR>	4 (number key)				o	o	o	o
05NW<CR>	5 (number key)				o	o	o	o
06NW<CR>	6 (number key)				o	o	o	o
07NW<CR>	7 (number key)				o	o	o	o
08NW<CR>	8 (number key)				o	o	o	o
09NW<CR>	9 (number key)				o	o	o	o
10NW<CR>	PLAY				o	o	o	o
11NW<CR>	PAUSE				o	o	o	o
12NW<CR>	PREVIOUS ( < < )				o	o	o	o
13NW<CR>	NEXT ( > > )				o	o	o	o
18NW<CR>	DISPLAY				o	o	o	o
20NW<CR>	STOP				o	o	o	o
26NW<CR>	UP				o	o	o	o
27NW<CR>	DOWN				o	o	o	o
28NW<CR>	RIGHT				o	o	o	o
29NW<CR>	LEFT				o	o	o	o
30NW<CR>	ENTER				o	o	o	o
31NW<CR>	RETURN				o	o	o	o
32NW<CR>	PROGRAM				o	o	o	o
33NW<CR>	CLEAR				o	o	o	o
34NW<CR>	REPEAT				o	o	o	o
35NW<CR>	RANDOM				o	o	o	o
36NW<CR>	MENU				o	o	o	o
37NW<CR>	EDIT				o	o	o	o
38NW<CR>	CLASS				o	o	o	o

### ADAPTER PORT Operation

Command	Function	Response	Parameter	Example	SC-LX83 /SYXJ5	SC-LX73 /SYXJ5	VSX- LX53 /SVYJ5	VSX- 2020 /SVYJ5
20BT<CR>	PLAY/PAUSE	R<CR+LF>			x	x	x	x
10BT<CR>	PLAY				o	o	o	o
11BT<CR>	PAUSE				o	o	o	o
12BT<CR>	STOP				o	o	o	o
13BT<CR>	PREVIOUS ( < < )				o	o	o	o
14BT<CR>	NEXT ( > > )				o	o	o	o
15BT<CR>	REV (< < )				o	o	o	o
16BT<CR>	FWD ( > > )				o	o	o	o

### Error message

Error Message	Error Name	Meaning	Example	SC-LX83 /SYXJ5	SC-LX73 /SYXJ5	VSX- LX53 /SVYJ5	VSX- 2020 /SVYJ5
E04<CR+LF>	COMMAND ERROR	Detect inappropriate Command line.	Command: ABCD<CR> Response: E04<CR+LF> (unknown "ABCD" Command.)	o	o	o	o
E06<CR+LF>	PARAMETER ERROR	Detect inappropriate Parameter.	Command: 99FN<CR> Response: E06<CR+LF> (unknown "99" Parameter.)	o	o	o	o
B00<CR+LF>	BUSY	Now AV Receiver is Busy. Please wait few seconds.		o	o	o	o

### KEYBOARD Operation

Command	Function	Response	Parameter	Example	SC-LX83 /SYXJ5	SC-LX73 /SYXJ5	VSX- LX53 /SVYJ5	VSX- 2020 /SVYJ5
FG20<CR>	SP (space)	R<CR+LF>	only used keyboard input function		o	o	o	o
FG21<CR>	!				o	o	o	o
FG22<CR>	"				o	o	o	o
FG23<CR>	#				o	o	o	o
FG24<CR>	\$				o	o	o	o
FG25<CR>	%				o	o	o	o
FG26<CR>	&				o	o	o	o
FG27<CR>	'				o	o	o	o
FG28<CR>	(				o	o	o	o
FG29<CR>	)				o	o	o	o
FG2A<CR>	*				o	o	o	o
FG2B<CR>	+				o	o	o	o
FG2C<CR>	,				o	o	o	o
FG2D<CR>	-				o	o	o	o
FG2E<CR>	.				o	o	o	o
FG2F<CR>	/				o	o	o	o
FG30<CR>	0				o	o	o	o
FG31<CR>	1				o	o	o	o
FG32<CR>	2				o	o	o	o
FG33<CR>	3				o	o	o	o
FG34<CR>	4				o	o	o	o
FG35<CR>	5				o	o	o	o
FG36<CR>	6				o	o	o	o
FG37<CR>	7				o	o	o	o
FG38<CR>	8				o	o	o	o
FG39<CR>	9				o	o	o	o
FG3A<CR>	:				o	o	o	o
FG3B<CR>	;				o	o	o	o
FG3C<CR>	<				o	o	o	o
FG3D<CR>	=				o	o	o	o
FG3E<CR>	>				o	o	o	o
FG3F<CR>	?				o	o	o	o
FG40<CR>	@				o	o	o	o
FG41<CR>	A				o	o	o	o
FG42<CR>	B				o	o	o	o
FG43<CR>	C				o	o	o	o
FG44<CR>	D				o	o	o	o





**Request AUDIO information Parameter by ASCII code**

?AST<CR>

AST(data1)(data2).....(data32)(data33)<CR+LF>

ex\DOLBY DIGITAL 3/2/.1 in PRO LOGIC2 MOVIE playing, SP setting 7.1ch(SBch\*2),

AST050211111000100000001111110110000<CR+LF>

**data1~data2:Audio Input Signal**

Data	Parameter	Signal
(data1)(data2)	00	ANALOG
	01	ANALOG
	02	ANALOG
	03	PCM
	04	PCM
	05	DOLBY DIGITAL
	06	DTS
	07	DTS-ES Matrix
	08	DTS-ES Discrete
	09	DTS 96/24
	10	DTS 96/24 ES Matrix
	11	DTS 96/24 ES Discrete
	12	MPEG-2 AAC
	13	WMA9 Pro
	14	DSD->PCM
	15	HDMI THROUGH
	16	DOLBY DIGITAL PLUS
	17	DOLBY TrueHD
	18	DTS EXPRESS
	19	DTS-HD Master Audio
	20	DTS-HD High Resolution
	21	DTS-HD High Resolution
	22	DTS-HD High Resolution
	23	DTS-HD High Resolution
	24	DTS-HD High Resolution
	25	DTS-HD High Resolution
	26	DTS-HD High Resolution
	27	DTS-HD Master Audio

**data3~data4:Audio Input Frequency**

Data	Parameter	Frequency
(data3)(data4)	00	32kHz
	01	44.1kHz
	02	48kHz
	03	88.2kHz
	04	96kHz
	05	176.4kHz
	06	192kHz

**data5~data20:Audio Input Channel Format**

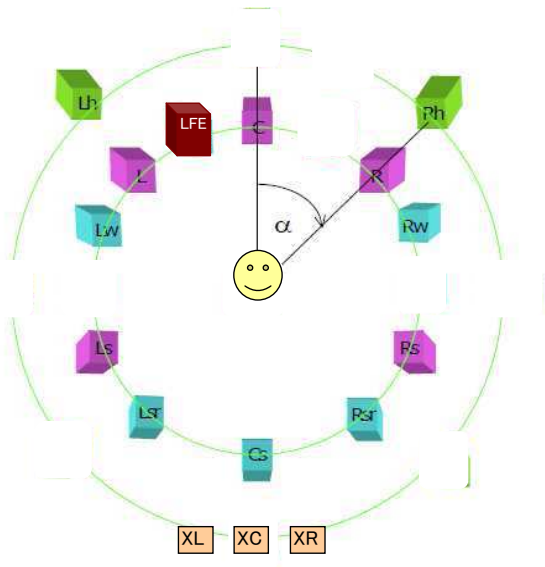
Data	Parameter	Channel Format info
(data5)	0 or 1	L : L
(data6)	0 or 1	C : C
(data7)	0 or 1	R : R
(data8)	0 or 1	SL : Ls
(data9)	0 or 1	SR : Rs
(data10)	0 or 1	SBL : Lsr, Lrs, Lb
(data11)	0 or 1	S : Cs, ES, EX, LtRt
(data12)	0 or 1	SBR : Rsr, Rrs, Rb
(data13)	0 or 1	LFE : LFE
(data14)	0 or 1	FHL : Lh, Lvh
(data15)	0 or 1	FHR : Rh, Rvh
(data16)	0 or 1	FWL : Lw
(data17)	0 or 1	FWR : Rw
(data18)	0 or 1	XL : Lhs, Lhr, Lss, Lc, Lsd,
(data19)	0 or 1	XC : Ts, Oh, Ch, Chr, LFE2, Cvh
(data20)	0 or 1	XR : Rhs, Rhr, Rss, Rc, Rsd,

**data21~data33:Audio Output Channel**

Data	Parameter	Output Channel
(data21)	0 or 1	L
(data22)	0 or 1	C
(data23)	0 or 1	R



(data24)	0 or 1	SL
(data25)	0 or 1	SR
(data26)	0 or 1	SBL
(data27)	0 or 1	SB
(data28)	0 or 1	SBR
(data29)	0 or 1	SW
(data30)	0 or 1	FHL
(data31)	0 or 1	FHR
(data32)	0 or 1	FWL
(data33)	0 or 1	FWR



**Request VIDEO information Parameter by ASCII code**

?VST<CR>  
VST(data1) (data2).....(data24) (data25) <CR+LF>

**data1:Input Terminal**

Data	Parameter	Signal from below
(data1)	0	---
	1	VIDEO
	2	S-VIDEO
	3	COMPONENT
	4	HDMI
	5	Self OSD/JPEG

**data2~3:Input Resolution**

Data	Parameter	Signal Format
(data2) (data3)	00	---
	01	480/60i
	02	576/50i
	03	480/60p
	04	576/50p
	05	720/60p
	06	720/50p
	07	1080/60i
	08	1080/50i
	09	1080/60p
	10	1080/50p
	11	1080/24p

**data4:Input aspect**

Data	Parameter	Signal Format
(data4)	0	---
	1	4:3
	2	16:9
	3	14:9

data5:Input color format (HDMI only)

Data	Parameter	Signal Format
(data5)	0	---
	1	RGB Limit
	2	RGB Full
	3	YcbCr444
	4	YcbCr422

data6:Input bit(HDMI only)

Data	Parameter	Signal Format
(data7)	0	---
	1	24bit (8bit*3)
	2	30bit (10bit*3)
	3	36bit (12bit*3)
	4	48bit (16bit*3)

data7:Input extend color space(HDMI only)

Data	Parameter	Signal Format
(data7)	0	---
	1	Standard
	2	xvYCC601
	3	xvYCC709
	4	sYCC
	5	AdobeYCC601
	6	AdobeRGB

data8~9:Output Resolution

Data	Parameter	Signal Format
(data8) (data9)	00	---
	01	480/60i
	02	576/50i
	03	480/60p
	04	576/50p
	05	720/60p
	06	720/50p
	07	1080/60i
	08	1080/50i
	09	1080/60p
	10	1080/50p
	11	1080/24p

data10:Output aspect

Data	Parameter	Signal Format
(data10)	0	---
	1	4:3
	2	16:9
	3	14:9

data11:Output color format(HDMI only)

Data	Parameter	Signal Format
(data11)	0	---
	1	RGB Limit
	2	RGB Full
	3	YcbCr444
	4	YcbCr422

data12:Output bit(HDMI only)

Data	Parameter	Signal Format
(data12)	0	---
	1	24bit (8bit*3)
	2	30bit (10bit*3)
	3	36bit (12bit*3)
	4	48bit (16bit*3)

data13:Output extend color space(HDMI only)

Data	Parameter	Signal Format
(data13)	0	---
	1	Standard
	2	xvYCC601
	3	xvYCC709
	4	sYCC
	5	AdobeYCC601
	6	AdobeRGB

data14~15:HDMI 1 Monitor Recommend Resolution Information

Data	Parameter	Recommend Signal Format
------	-----------	-------------------------

(data14)	(data15)	00	---
		01	480/60i
		02	576/50i
		03	480/60p
		04	576/50p
		05	720/60p
		06	720/50p
		07	1080/60i
		08	1080/50i
		09	1080/60p
		10	1080/50p
		11	1080/24p

data16:HDMI 1 Monitor DeepColor

Data	Parameter	Signal Format
(data16)	0	---
	1	24bit (8bit*3)
	2	30bit (10bit*3)
	3	36bit (12bit*3)
	4	48bit (16bit*3)

data17~21:HDMI 1 Monitor Extend Color Space

Data	Parameter	Correspondence Format
(data17)	0 or 1	xvYCC601
(data18)	0 or 1	xvYCC709
(data19)	0 or 1	sYCC
(data20)	0 or 1	AdobeYCC601
(data21)	0 or 1	AdobeRGB

data22~23:HDMI 2 Monitor Recommend Resolution Information

Data	Parameter	Signal Format	
(data22)	(data23)	00	---
		01	480/60i
		02	576/50i
		03	480/60p
		04	576/50p
		05	720/60p
		06	720/50p
		07	1080/60i
		08	1080/50i
		09	1080/60p
		10	1080/50p
		11	1080/24p

data24:HDMI 2 Monitor DeepColor

Data	Parameter	Signal Format
(data24)	0	---
	1	24bit (8bit*3)
	2	30bit (10bit*3)
	3	36bit (12bit*3)
	4	48bit (16bit*3)

data25~29:HDMI 2 Monitor Extend Color Space

Data	Parameter	Correspondence Format
(data25)	0 or 1	xvYCC601
(data26)	0 or 1	xvYCC709
(data27)	0 or 1	sYCC
(data28)	0 or 1	AdobeYCC601
(data29)	0 or 1	AdobeRGB

### About Request FL display information

?FL<CR> (Only RS232C is guaranteed.)

FL(data1)(data2).....(data29)(data30)<CR+LF>

ex) When " [ ] (DIGITAL EX " is displayed, a response command are,

FL000005064449474954414C00455800<CR+LF>

Data	Parameter
(data1)(data2)	The value that made FL action information ASCII Code.
	bit7(MSB) Reserved
	bit6 Reserved
	bit5 Reserved
	bit4 Reserved
	bit3 Reserved
	bit2 Reserved
	bit1 Information of VOLUME display 1:light, 0:OFF
	bit0(LSB) Information of Guid icon 1:light, 0:OFF
(data3)(data4)	The 1st character data of FL (left side) .
(data5)(data6)	The 2nd character data of FL.
(data7)(data8)	The 3rd character data of FL.
(data9)(data10)	The 4th character data of FL.
(data11)(data12)	The 5th character data of FL.
(data13)(data14)	The 6th character data of FL.
(data15)(data16)	The 7th character data of FL.
(data17)(data18)	The 8th character data of FL.
(data19)(data20)	The 9th character data of FL.
(data21)(data22)	The 10th character data of FL.
(data23)(data24)	The 11th character data of FL.
(data25)(data26)	The 12th character data of FL.
(data27)(data28)	The 13th character data of FL.
(data29)(data30)	The 14th character data of FL(right side).

### About Request Input Name information

?RGB\*\*<CR>

ex) AT the case of DVD input name is renamed "PIONEER GT",

?RGB04<CR>

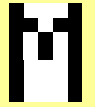
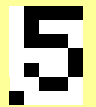
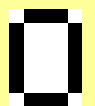
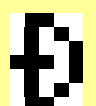
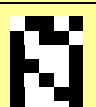
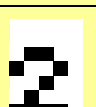

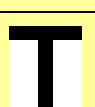

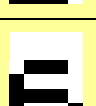
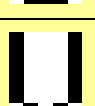
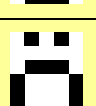
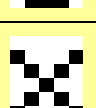
RGB041PIONEER GT<CR+LF>

Input	Command	Response
DVD	? RGB 0 4 <CR>	RGB 0 4 * (Rename data MAX14 character) <CR+LF>
BD	? RGB 2 5 <CR>	RGB 2 5 * (Rename data MAX14 character) <CR+LF>
TV/SAT	? RGB 0 5 <CR>	RGB 0 5 * (Rename data MAX14 character) <CR+LF>
DVR/BDR	? RGB 1 5 <CR>	RGB 1 5 * (Rename data MAX14 character) <CR+LF>
VIDEO 1(VIDEO)	? RGB 1 0 <CR>	RGB 1 0 * (Rename data MAX14 character) <CR+LF>
VIDEO 2	? RGB 1 4 <CR>	RGB 1 4 * (Rename data MAX14 character) <CR+LF>
HDMI 1	? RGB 1 9 <CR>	RGB 1 9 * (Rename data MAX14 character) <CR+LF>
HDMI 2	? RGB 2 0 <CR>	RGB 2 0 * (Rename data MAX14 character) <CR+LF>
HDMI 3	? RGB 2 1 <CR>	RGB 2 1 * (Rename data MAX14 character) <CR+LF>
HDMI 4	? RGB 2 2 <CR>	RGB 2 2 * (Rename data MAX14 character) <CR+LF>
HDMI 5	? RGB 2 3 <CR>	RGB 2 3 * (Rename data MAX14 character) <CR+LF>
HOME MEDIA GALLERY(Internet Rad	? RGB 2 6 <CR>	RGB 2 6 * (Rename data MAX14 character) <CR+LF>
iPod/USB	? RGB 1 7 <CR>	RGB 1 7 * (Rename data MAX14 character) <CR+LF>
XM RADIO	? RGB 1 8 <CR>	RGB 1 8 * (Rename data MAX14 character) <CR+LF>
CD	? RGB 0 1 <CR>	RGB 0 1 * (Rename data MAX14 character) <CR+LF>
CD-R/TAPE	? RGB 0 3 <CR>	RGB 0 3 * (Rename data MAX14 character) <CR+LF>
TUNER	? RGB 0 2 <CR>	RGB 0 2 * (Rename data MAX14 character) <CR+LF>
PHONO	? RGB 0 0 <CR>	RGB 0 0 * (Rename data MAX14 character) <CR+LF>
MULTI CH IN	? RGB 1 2 <CR>	RGB 1 2 * (Rename data MAX14 character) <CR+LF>
ADAPTER PORT	? RGB 3 3 <CR>	RGB 3 3 * (Rename data MAX14 character) <CR+LF>
SIRIUS	? RGB 2 7 <CR>	RGB 2 7 * (Rename data MAX14 character) <CR+LF>

↓  
0:Default name, 1:Rename

About FL Font

No.	Data Code	5x7 FL Font	Character	No.	Data Code	5x7 FL Font	Character	No.	Data Code	5x7 FL Font	Character	No.	Data Code	5x7 FL Font	Character
0	0x00			64	0x40	@	@	128	0x80	Œ	Œ	192	0xC0	À	À
1	0x01	↻	↻	65	0x41	A	A	129	0x81	œ	œ	193	0xC1	Á	Á
2	0x02	↻	↻	66	0x42	B	B	130	0x82	Û	Û	194	0xC2	Â	Â
3	0x03	↻	↻	67	0x43	C	C	131	0x83	ü	ü	195	0xC3	Ã	Ã
4	0x04	↕	↕	68	0x44	D	D	132	0x84	π	π	196	0xC4	Ä	Ä
5	0x05	◐	◐	69	0x45	E	E	133	0x85	〒	〒	197	0xC5	Å	Å
6	0x06	◑	◑	70	0x46	F	F	134	0x86			198	0xC6	Æ	Æ
7	0x07	I	I	71	0x47	G	G	135	0x87			199	0xC7	Ç	Ç
8	0x08	II	II	72	0x48	H	H	136	0x88			200	0xC8	È	È
9	0x09	◀	◀	73	0x49	I	I	137	0x89			201	0xC9	É	É
10	0x0A	▶	▶	74	0x4A	J	J	138	0x8A			202	0xCA	Ê	Ê
11	0x0B	♡	♡	75	0x4B	K	K	139	0x8B			203	0xCB	Ë	Ë
12	0x0C	.	.	76	0x4C	L	L	140	0x8C	←	←	204	0xCC	Ì	Ì


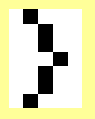
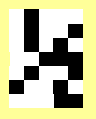
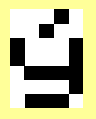
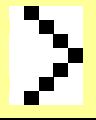

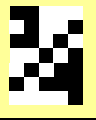
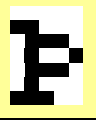
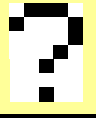
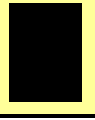
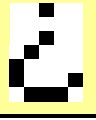
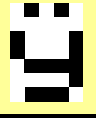
13	0x0D		.0	77	0x4D		M	141	0x8D		↑	205	0xCD		í
14	0x0E		.5	78	0x4E		N	142	0x8E		→	206	0xCE		î
15	0x0F		Ω	79	0x4F		O	143	0x8F		↓	207	0xCF		ï
16	0x10		0	80	0x50		P	144	0x90		+	208	0xD0		Đ
17	0x11		1	81	0x51		Q	145	0x91		♪	209	0xD1		Ñ
18	0x12		2	82	0x52		R	146	0x92			210	0xD2		Ò
19	0x13		3	83	0x53		S	147	0x93			211	0xD3		Ó
20	0x14		4	84	0x54		T	148	0x94			212	0xD4		Ô
21	0x15		5	85	0x55		U	149	0x95			213	0xD5		Õ
22	0x16		6	86	0x56		V	150	0x96			214	0xD6		Ö
23	0x17		7	87	0x57		W	151	0x97			215	0xD7		×
24	0x18		8	88	0x58		X	152	0x98			216	0xD8		Ø

25	0x19		9	89	0x59		Y	153	0x99			217	0xD9		Ù
26	0x1A		A	90	0x5A		Z	154	0x9A			218	0xDA		Ú
27	0x1B		B	91	0x5B		[	155	0x9B			219	0xDB		Û
28	0x1C		C	92	0x5C		\	156	0x9C			220	0xDC		Ü
29	0x1D		F	93	0x5D		]	157	0x9D			221	0xDD		Ý
30	0x1E		M	94	0x5E		^	158	0x9E			222	0xDE		Þ
31	0x1F		-	95	0x5F		_	159	0x9F			223	0xDF		ß
32	0x20			96	0x60			160	0xA0			224	0xE0		à
33	0x21		!	97	0x61		a	161	0xA1		i	225	0xE1		á
34	0x22		"	98	0x62		b	162	0xA2		ç	226	0xE2		â
35	0x23		#	99	0x63		c	163	0xA3		£	227	0xE3		ã
36	0x24		\$	100	0x64		d	164	0xA4		α	228	0xE4		ä

37	0x25		%	101	0x65		e	165	0xA5		¥	229	0xE5		å
38	0x26		&	102	0x66		f	166	0xA6		¡	230	0xE6		æ
39	0x27		'	103	0x67		g	167	0xA7		§	231	0xE7		ç
40	0x28		(	104	0x68		h	168	0xA8		¨	232	0xE8		è
41	0x29		)	105	0x69		i	169	0xA9		©	233	0xE9		é
42	0x2A		*	106	0x6A		j	170	0xAA		a	234	0xEA		ê
43	0x2B		+	107	0x6B		k	171	0xAB		«	235	0xEB		ë
44	0x2C		,	108	0x6C		l	172	0xAC		¬	236	0xEC		ì
45	0x2D		-	109	0x6D		m	173	0xAD		¯	237	0xED		í
46	0x2E		.	110	0x6E		n	174	0xAE		®	238	0xEE		î
47	0x2F		/	111	0x6F		o	175	0xAF		¯	239	0xEF		ï
48	0x30		0	112	0x70		p	176	0xB0		°	240	0xF0		ð



49	0x31		1	113	0x71		q	177	0xB1		±	241	0xF1		ñ
50	0x32		2	114	0x72		r	178	0xB2		2	242	0xF2		ò
51	0x33		3	115	0x73		s	179	0xB3		3	243	0xF3		ó
52	0x34		4	116	0x74		t	180	0xB4		'	244	0xF4		ô
53	0x35		5	117	0x75		u	181	0xB5		μ	245	0xF5		õ
54	0x36		6	118	0x76		v	182	0xB6		¶	246	0xF6		ö
55	0x37		7	119	0x77		w	183	0xB7		.	247	0xF7		÷
56	0x38		8	120	0x78		x	184	0xB8		,	248	0xF8		∅
57	0x39		9	121	0x79		y	185	0xB9		1	249	0xF9		ù
58	0x3A		:	122	0x7A		z	186	0xBA		o	250	0xFA		ú
59	0x3B		;	123	0x7B		{	187	0xBB		»	251	0xFB		û
60	0x3C		<	124	0x7C		l	188	0xBC		¼	252	0xFC		ü

61	0x3D		=	125	0x7D		}	189	0xBD		1/2	253	0xFD		ý
62	0x3E		>	126	0x7E		~	190	0xBE		3/4	254	0xFE		þ
63	0x3F		?	127	0x7F		■	191	0xBF		¿	255	0xFF		ÿ