Last Update: Jun. 30. 2015

Denon AVR control protocol

Ver.02

Application terminal: Ethernet/RS-232C

Model	Terminal	Beacon No
AVR-X1200W	Ethernet	12.4.0
AVR-X2200W	Ethernet/	12.5.0
AVR-X3200W	Ethernet/RS-232C	12.6.0
AVR-X4200W	Ethernet/RS-232C	12.7.0

Connector specification

Ⅰ. RS-232C

Connector type: DB-9pin female type, slave straight connection (DCE type)
(1pin : GND , 2pin : TxD , 3pin : RxD , 5pin : Common(GND) , 4,6,7,8,9pin : NC)

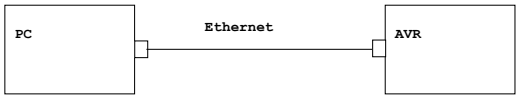
Communication format:

Synchronous system	: Tone step synchronization
Communication system	: A half duplex
Communication speed	: 9600bps
Character length	: 8 bits
Parity control	: None
Start bit	: 1 bit
Stop bit	: 1 bit
Communication procedure	: Non procedural
Communication data length	: 135 bytes (maximum)

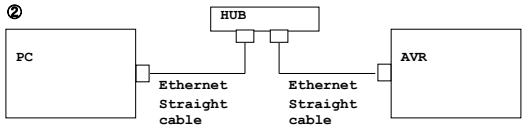
Ⅱ. Ethernet

Connector type : RJ-45(10BASE-T/100BASE-TX)

Example ①



Example ②



Communication format :

Communication system	: A half duplex
Communication speed	: 10Mbps/100Mbps
Communication port	: TCP port 23 (telnet)
Communication data length	: 135bytes (maximum)

NETWORK SETUP of AV Receiver

>Procedure of Network Setup mode.

(1)Press **SETUP** button, then Menu appears on FL-display(and GUI)
(2)Select “Network > Settings > ” .
(3)Set parameters described below.

<DHCP>	"ON"---Use this setting when DHCP server is on the local network.
<IP Address>	When <DHCP> sets "Off", please set IP address.
<Subnet Mask>	When <DHCP> sets "Off", please set Subnet Mask.
<Gateway>	Set the address of Gateway when Gateway is on the local network.
<Primary DNS>	Do not set this parameter.
<Second DNS>	Do not set this parameter.
<Proxy>	Set this parameter "Off".

<Network Option: Network Standby Mode>
(1)Press **SETUP** button, then Menu appears on FL-display (and GUI)
(2)Select “Network > Network Control” (except for X6200)
Select “Network > IP Control”(X6200)
(3)Set this parameter "Always On".
“Always On”---Use this setting when using the AV Receiver Connected in a network.
Always respond to network commands.
“Off In Standby”--- Use this setting when not using the AV Receiver connected in a network.
Ignores network commands during standby to sabe power.

Protocol specification
The following three data forms are defined.

COMMAND : The message sent to a system(AVR) from a controller(Touch Panel etc.)
A command to a system is given from a controller.
Send the COMMAND in 50ms or more intervals.

EVENT : The message sent to a controller (Touch Panel etc.) from a system (AVR)
The result is sent, when a system is operated directly and a state changes.
The EVENT should be sent within 5 seconds after the state of the system (AVR) is changed.
*The form of EVENT presupposes that it is the same as that of COMMAND.
**Refer to the following table for the contents of COMMAND and EVENT.

RESPONSE : The message sent to a controller (Touch Panel etc.) from a system (AVR)
if the 'request command' (COMMAND+? +CR (0x0D)) has came from a controller.
The RESPONSE should be sent within 200ms of receiving the request COMMAND.
*The form of RESPONSE presupposes that it is the same as that of EVENT.

Basic specification: The command by ASCII CODE, parameter expression
*ASCII CODE which can be used is from 0x20 to 0x7F:
the alphabet and the number of 0-9, and space (0x20), some signs,
AND carriage return (0x0D) --- It is used only as a pause sign.

Command structure: COMMAND + PARAMETER + CR (0x0D)
COMMAND: ASCII CODE of 2 characters
Ex. SI : Select Input source
MS : surround Mode Setting
MV : Master Volume setting
PW : system Power setting
PARAMETER : ASCII CODE (up to 25 characters)
Ex. DVD : function name
STEREO : surround mode name
*Special Parameter--- ? : for request command

The example of a command * <CR> is the meaning of 0x0D.
SIDVD<CR> : Select Input source DVD
MSSTEREO<CR> : surround Mode Set to STEREO
MVUP<CR> : Master Volume UP
PWON<CR> : system Power ON
PWSTANDBY<CR> : system Power STANDBY
SI?<CR> : Request command for now playing input source >> Return RESPONSE 'SI***<CR>'

Others

A) COMMAND is receivable also during transmission of EVENT.

B) Since CHANNEL VOLUME changes simultaneously when the input source changes, the value of the channel volume of used channels returns as EVENT.

C) Since SURROUND MODE or CHANNEL VOLUME changes simultaneously when the INPUT source changes, the SURROUND MODEor CHANNEL VOLUME returns as EVENT.

D) When SURROUND MODE or CHANNEL VOLUME is the same in between INPUT source change before and after, EVENT of SURROUND MODE and CHANNEL VOLUME does NOT return.

E) Although EVENT of SURROUND MODE returns when the present SURROUND MODE is set up again, CHANNEL VOLUME does NOT return.

F) When SURROUND MODE is changed, before returning SURROUND MODE after change as EVENT, the present SURROUND MODE is returned.

G) The RESPONSE should be sent as opposed to the request command by all the commands with which an EVENT exists , not need to the another request commands(ex. SV command).

H) The PARAMETER (with COMMAND and RESPONSE, EVENT) of minimum level of MASTER VOLUME defines "00".

I) If the MASTER VOLUME & CHANNEL VOLUME set with 0.5dB step, the PARAMETER (with COMMAND and RESPONSE, EVENT) defines three ASCII characters as bellows.

Ex. MASTER VOLUME =
+18.0dB : MV98<CR>
+1.0dB : MV81<CR>
+0.5dB : MV805<CR>
0dB : MV80<CR>
-0.5dB : MV795<CR>
-1.0dB : MV79<CR>
| |
-79.5dB : MV005<CR>
--- : MV00<CR>

* At the **.0dB step, only uses two ASCII characters as PARAMETER, same as usual.

J) 1 second later, please transmit the next COMMAND after transmitting a power on COMMAND（PWON）.

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COMMAND and RESPONSE PARAMETER list

						AVR-X4200W				AVR-X3200W			AVR-X2200W				AVR-X1200W			
	COMMAND	***PARAMETER***	function	example	***RESPONSE(example)***	NA	EU	CH	JP	NA	EU	CH	NA	EU/AP	CH	JP	NA	EU/AP	CH	JP
	PW	ON	POWER ON/STANDBY change	PWON<CR>	<-	✓	✓	✓	✓	✓	✓	✓	X	✓	✓	✓	✓	✓	✓	✓
		STANDBY		PWSTANDBY<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		?	Return PW Status	PW?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MAIN ZONE Control	MV	UP	MASTER VOLUME UP/DOWN , direct change to **dB	MVUP<CR>	MV80<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		DOWN		MVDOWN<CR>	MV80<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		**	**:00 to 98 by ASCII , 80=80(0dB), 00=0(---dB)(MIN) Refer to "Volume_CMD"sheet	MV80<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		?	Return MV Status	MV?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	CV	FL UP	CHANNEL VOLUME UP/DOWN , direct change to **dB	CVFL UP<CR>	CVFL 50<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		FL DOWN	---FRONT Lch	CVFL DOWN<CR>	CVFL 50<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		FL **	**:38 to 62 by ASCII , 50=0dB	CVFL 50<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		FR UP		CVFR UP<CR>	CVFR 50<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		FR DOWN	---FRONT Rch	CVFR DOWN<CR>	CVFR 50<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		FR **	**:38 to 62 by ASCII , 50=0dB	CVFR 50<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		C UP		CVC UP<CR>	CVC 50<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		C DOWN	---CENTERch	CVC DOWN<CR>	CVC 50<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		C **	**:38 to 62 by ASCII , 50=0dB	CVC 50<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SW UP		CVSW UP<CR>	CVSW 50<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SW DOWN	---SUBWOOFER ch	CVSW DOWN<CR>	CVSW 50<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SW **	**:00,38 to 62 by ASCII , 50=0dB,~~00=OFF~~	CVSW 50<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SW2 UP		CVSW2 UP<CR>	CVSW2 50<CR>	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		SW2 DOWN	--SUBWOOFER 2 ch	CVSW2 DOWN<CR>	CVSW2 50<CR>	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		SW2 **	**:00,38 to 62 by ASCII , 50=0dB,~~00=OFF~~	CVSW2 50<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		SL UP		CVSL UP<CR>	CVSL 50<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SL DOWN	---SURROUND Lch	CVSL DOWN<CR>	CVSL 50<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SL **	**:38 to 62 by ASCII , 50=0dB	CVSL 50<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SR UP		CVSR UP<CR>	CVSR 50<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SR DOWN	---SURROUND Rch	CVSR DOWN<CR>	CVSR 50<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SR **	**:38 to 62 by ASCII , 50=0dB	CVSR 50<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SBL UP	---SURROUND BACK Lch (SBch 2SP)	CVSBL UP<CR>	CVSBL 50<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SBL DOWN		CVSBL DOWN<CR>	CVSBL 50<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SBL **	**:38 to 62 by ASCII , 50=0dB	CVSBL 50<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SBR UP	---SURROUND BACK Rch (SBch 2SP)	CVSBR UP<CR>	CVSBR 50<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SBR DOWN		CVSBR DOWN<CR>	CVSBR 50<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SBR **	**:38 to 62 by ASCII , 50=0dB	CVSBR 50<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SB UP	---SURROUND BACK ch (SBch 1SP)	CVSB UP<CR>	CVSB 50<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SB DOWN		CVSB DOWN<CR>	CVSB 50<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SB **	**:38 to 62 by ASCII , 50=0dB	CVSB 50<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		FHL UP	---FRONT HEIGHT Lch	CVFHL UP<CR>	CVFHL 50	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		FHL DOWN		CVFHL DOWN<CR>	CVFHL 50	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		FHL **	**:38 to 62 by ASCII , 50=0dB	CVFHL 50<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		FHR UP	---FRONT HEIGHT Rch	CVFHR UP<CR>	CVFHR 50	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		FHR DOWN		CVFHR DOWN<CR>	CVFHR 50	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		FHR **	**:38 to 62 by ASCII , 50=0dB	CVFHR 50<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		FWL UP	---FRONT WIDE Lch	CVFWL UP<CR>	CVFWL 50	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		FWL DOWN		CVFWL DOWN<CR>	CVFWL 50	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		FWL **	**:38 to 62 by ASCII , 50=0dB	CVFWL 50<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		FWR UP	---FRONT WIDE Rch	CVFWR UP<CR>	CVFWR 50	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		FWR DOWN		CVFWR DOWN<CR>	CVFWR 50	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		FWR **	**:38 to 62 by ASCII , 50=0dB	CVFWR 50<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		TFL UP	---TOP FRONT Lch	CVTFL UP<CR>	CVTFL 50	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		TFL DOWN		CVTFL DOWN<CR>	CVTFL 50	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		TFL **	**:38 to 62 by ASCII , 50=0dB	CVTFL 50<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		TFR UP	---TOP FRONT Rch	CVTFR UP<CR>	CVTFR 50	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		TFR DOWN		CVTFR DOWN<CR>	CVTFR 50	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		TFR **	**:38 to 62 by ASCII , 50=0dB	CVTFR 50<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		TML UP	---TOP MIDDLE Lch	CVTML UP<CR>	CVTML 50	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		TML DOWN		CVTML DOWN<CR>	CVTML 50	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		TML **	**:38 to 62 by ASCII , 50=0dB	CVTML 50<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		TMR UP	---TOP MIDDLE Rch	CVTMR UP<CR>	CVTMR 50	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		TMR DOWN		CVTMR DOWN<CR>	CVTMR 50	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		TMR **	**:38 to 62 by ASCII , 50=0dB	CVTMR 50<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		TRL UP	---TOP REAR Lch	CVTRL UP<CR>	CVTRL 50	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		TRL DOWN		CVTRL DOWN<CR>	CVTRL 50	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		TRL **	**:38 to 62 by ASCII , 50=0dB	CVTRL 50<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		TRR UP	---TOP REAR Rch	CVTRR UP<CR>	CVTRR 50	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		TRR DOWN		CVTRR DOWN<CR>	CVTRR 50	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		TRR **	**:38 to 62 by ASCII , 50=0dB	CVTRR 50<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		RHL UP	---REAR HEIGHT Lch	CVRHL UP<CR>	CVRHL 50	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		RHL DOWN		CVRHL DOWN<CR>	CVRHL 50	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		RHL **	**:38 to 62 by ASCII , 50=0dB	CVRHL 50<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		RHR UP	---REAR HEIGHT Rch	CVRHR UP<CR>	CVRHR 50	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		RHR DOWN		CVRHR DOWN<CR>	CVRHR 50	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		RHR **	**:38 to 62 by ASCII , 50=0dB	CVRHR 50<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		FDL UP	---FRONT DOLBY Lch	CVFDL UP<CR>	CVFDL 50	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		FDL DOWN		CVFDL DOWN<CR>	CVFDL 50	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		FDL **	**:38 to 62 by ASCII , 50=0dB	CVFDL 50<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		FDR UP	---FRONT DOLBY Rch	CVFDR UP<CR>	CVFDR 50	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		FDR DOWN		CVFDR DOWN<CR>	CVFDR 50	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		FDR **	**:38 to 62 by ASCII , 50=0dB	CVFDR 50<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SDL UP	---SURROUND DOLBY Lch	CVSDL UP<CR>	CVSDL 50	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SDL DOWN		CVSDL DOWN<CR>	CVSDL 50	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SDL **	**:38 to 62 by ASCII , 50=0dB	CVSDL 50<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SDR UP	---SURROUND DOLBY Rch	CVSDR UP<CR>	CVSDR 50	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SDR DOWN		CVSDR DOWN<CR>	CVSDR 50	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SDR **	**:38 to 62 by ASCII , 50=0dB	CVSDR 50<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		BDL UP	---BACK DOLBY Lch	CVBDL UP<CR>	CVBDL 50	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		BDL DOWN		CVBDL DOWN<CR>	CVBDL 50	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		BDL **	**:38 to 62 by ASCII , 50=0dB	CVBDL 50<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		BDR UP	---BACK DOLBY Rch	CVBDR UP<CR>	CVBDR 50	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		BDR DOWN		CVBDR DOWN<CR>	CVBDR 50	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		BDR **	**:38 to 62 by ASCII , 50=0dB	CVBDR 50<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		SHL UP	---SURROUND HEIGHT Lch (Auro-3D Upgrade only)	CVSHL UP<CR>	CVSHL 50	✓	✓	-	-	-	-	-	-	-	-	-	-	-	-	-
		SHL DOWN		CVSHL DOWN<CR>	CVSHL 50	✓	✓	-	-	-	-	-	-	-	-	-	-	-	-	-
		SHL **	**:38 to 62 by ASCII , 50=0dB	CVSHL **<CR>	<-	✓	✓	-	-	-	-	-	-	-	-	-	-	-	-	-
		SHR UP	---SURROUND HEIGHT Rch (Auro-3D Upgrade only)	CVSHR UP<CR>	CVSHR 50	✓	✓	-	-	-	-	-	-	-	-	-	-	-	-	-
		SHR DOWN		CVSHR DOWN<CR>	CVSHR 50	✓	✓	-	-	-	-	-	-	-	-	-	-	-	-	-
		SHR **	**:38 to 62 by ASCII , 50=0dB	CVSHR **<CR>	<-	✓	✓	-	-	-	-	-	-	-	-	-	-	-	-	-
		TS UP	--TOP SURROUND (Auro-3D Upgrade only)	CVTS UP<CR>	CVTS 50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		TS DOWN		CVTS DOWN<CR>	CVTS 50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		TS **	**:38 to 62 by ASCII , 50=0dB	CVTS **<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ZRL	Reset all channel level to the factory defaults	CVZRL<CR>	CVFL 50<CR> : : CVEND<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		?	Return CV Status	CV?<CR>	※Only the speaker which there is on the speaker configration replies (e.g.) CVFL 62<CR> : : **CVEND<CR>**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	MU	ON	OUTPUT MUTE ON/OFF change	MUON<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		OFF		MUOFF<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		?	Return MU Status	MU?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	SI	PHONO		SIPHONO<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		CD	Select INPUT source	SICD<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		TUNER		SITUNER<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		DVD	* X1200,S710:DVD/Blu-ray is selected	SIDVD<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		BD	---Blu-ray	SIBD<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		TV	---TV AUDIO	SITV<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SAT/CBL	---CBL/SAT	SISAT/CBL<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		MPLAY	---MEDIA PLAYER	SIMPLAY<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		GAME		SIGAME<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		HDRADIO	(North America model Only)	SIHDRADIO<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		NET	* 2014 AVR: Online Music is selected	SINET<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		PANDORA	(North America model Only)	SIPANDORA<CR>	<-	✓	-	-	-	✓	-	-	✓	-	-	-	✓	-	-	-
		SIRIUSXM	(North America model Only)	SISIRIUSXM<CR>	<-	✓	-	-	-	✓	-	-	✓	-	-	-	✓	-	-	-
		SPOTIFY	(North America &Europe model Only)	SISPOTIFY<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		LASTFM	(Europe model Only)	SILASTFM<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		FLICKR		SIFLICKR<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		IRADIO		SIIRADIO<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SERVER		SISERVER<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		FAVORITES		SIFAVORITES<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		AUX1	* X1100,S700:AUX , Other:AUX1 is selected	SIAUX1<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		AUX2		SIAUX2<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		AUX3	(when Additional Source is set to On)	SIAUX3<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		AUX4	(when Additional Source is set to On)	SIAUX4<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		AUX5	(when Additional Source is set to On)	SIAUX5<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		AUX6	(when Additional Source is set to On)	SIAUX6<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		AUX7	(when Additional Source is set to On)	SIAUX7<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

		BT	---Bluetooth	SIBT<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		USB/IPOD		SIUSB/IPOD<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		USB	Select INPUT source iPod/USB and Start Playback	SIUSB<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		IPD	Select INPUT source iPod/USB and iPod DIRECT Start Playback	SIIPD<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		IRP	Select INPUT source Online Music and iRadio Recent Play	SIIRP<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		FVP	Select INPUT source Online Music and Favorites Play	SIFVP<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		?	Return SI Status	SI?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	ZM	ON	MAIN-ZONE ON/OFF change	ZMON<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		OFF		ZMOFF<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		?	Return ZM Status	ZM?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	SD	AUTO	set AUTO mode (Priority:HDMI>>DIGITAL>>ANALOG)	SDAUTO<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		HDMI	set force HDMI INPUT mode	SDHDMI<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		DIGITAL	set force DIGITAL INPUT mode (Optical,Coaxial)	SDDIGITAL<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		ANALOG	set force ANALOG INPUT mode	SDANALOG<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		7.1IN	---Set 7.1CH IN mode	SD7.1IN<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		NO	---When no input	SDNO<CR>	<-															
		?	Return SD Status	SD?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					SDARC<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					SDNO<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	DC	AUTO	set DIGITAL INPUT AUTO mode	DCAUTO<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		PCM	set DIGITAL INPUT force PCM mode	DCPCM<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		DTS	set DIGITAL INPUT force DTS mode	DCDTS<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		?	Return DC Status	DC?		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	SV	DVD	VIDEO SELECT mode set to ON, and select source * X1200,S710:DVD/Blu-ray is selected	SVDVD<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		BD		SVBD<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		TV		SVTV<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SAT/CBL		SVSAT/CBL<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		MPLAY		SVMPLAY<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		GAME		SVGAME<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		AUX1		SVAUX1<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		AUX2		SVAUX2<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
		AUX3	(when Additional Source is set to On)	SVAUX3<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		AUX4	(when Additional Source is set to On)	SVAUX4<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		AUX5	(when Additional Source is set to On)	SVAUX5<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		AUX6	(when Additional Source is set to On)	SVAUX6<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		AUX7	(when Additional Source is set to On)	SVAUX7<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		CD		SVCD<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		ON	VIDEO SELECT ON	SVON<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		OFF	VIDEO SELECT OFF	SVOFF<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		?	Return SV Status	SV?<CR>	SVDVD<CR> SVON<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	SLP	OFF	MAIN ZONE SLEEP　TIMER setting	SLPOFF<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		***	***:001 to 120 by ASCII , 010=10min	SLP120<CR>	SLP120<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		?	Return SLP Status	SLP?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	STBY	15M	MAIN ZONE Auto Standby setting	STBY15M<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		30M		STBY30M<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		60M		STBY60M<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		OFF		STBYOFF<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		?	Return STBY Status	STBY?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	ECO	ON	MAIN ZONE ECO mode setting	ECOON<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		AUTO		ECOAUTO<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		OFF		ECOOFF<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		?	Return ECO Status	ECO?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	MS	MOVIE		MSMOVIE<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		MUSIC		MSMUSIC<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		GAME		MSGAME<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		DIRECT	Select SURROUND mode	MSDIRECT<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDIRECT<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDSD DIRECT<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		PURE DIRECT		MSPURE DIRECT<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
					MSPURE DIRECT<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
					MSDSD PURE DIRECT<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
		STEREO		MSSTEREO<CR>	MSSTEREO<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		AUTO		MSAUTO<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		DOLBY DIGITAL		MSDOLBY DIGITAL<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDOLBY PRO LOGIC<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY PL2 C<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY PL2 M<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY PL2 G<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY PL2X C<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY PL2X M<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY PL2X G<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY PL2Z H<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY SURROUND<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDOLBY ATMOS<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDOLBY DIGITAL<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDOLBY D EX<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY D+PL2X C<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY D+PL2X M<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY D+PL2Z H<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY D+DS<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDOLBY D+NEO:X C<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY D+NEO:X M<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY D+NEO:X G<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDTS SURROUND<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDTS ES DSCRT6.1<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDTS ES MTRX6.1<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDTS+PL2X C<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDTS+PL2X M<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDTS+PL2Z H<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDTS+DS<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDTS96/24<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDTS96 ES MTRX<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDTS+NEO:6<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDTS+NEO:X C<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDTS+NEO:X M<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDTS+NEO:X G<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDTS+NEURAL:X	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDTS ES MTRX+NEURAL:X<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDTS ES DSCRT+NEURAL:X<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSMULTI CH IN<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSM CH IN+DOLBY EX<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSM CH IN+PL2X C<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSM CH IN+PL2X M<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSM CH IN+PL2Z H<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSM CH IN+DS<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSMULTI CH IN 7.1<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSM CH IN+NEO:X C<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSM CH IN+NEO:X M<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSM CH IN+NEO:X G<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSM CH IN+NEURAL:X<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDOLBY D+<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDOLBY D+ +EX<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY D+ +PL2X C<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY D+ +PL2X M<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY D+ +PL2Z H<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY D+ +DS<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDOLBY D+ +NEO:X C<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY D+ +NEO:X M<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY D+ +NEO:X G<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY HD<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDOLBY HD+EX<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY HD+PL2X C<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY HD+PL2X M<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY HD+PL2Z H<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY HD+DS<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDOLBY HD+NEO:X C<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY HD+NEO:X M<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY HD+NEO:X G<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDTS HD<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDTS HD MSTR<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDTS HD+PL2X C<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDTS HD+PL2X M<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDTS HD+PL2Z H<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDTS HD+DS<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDTS HD+NEO:6<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDTS HD+NEO:X C<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDTS HD+NEO:X M<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDTS HD+NEO:X G<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDTS HD+NEURAL:X<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDTS:X<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDTS:X MSTR<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDTS EXPRESS<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDTS ES 8CH DSCRT<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSMPEG2 AAC<CR>	-	-	-	✓	-	-	-	-	-	-	✓	-	-	-	✓
					MSAAC+DOLBY EX<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSAAC+PL2X C<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSAAC+PL2X M<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSAAC+PL2Z H<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSAAC+DS<CR>	-	-	-	✓	-	-	-	-	-	-	✓	-	-	-	✓
					MSAAC+NEO:X C<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSAAC+NEO:X M<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSAAC+NEO:X G<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSAAC+NEURAL:X<CR>	-	-	-	✓	-	-	-	-	-	-	✓	-	-	-	✓
					MSPL DSX<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSPL2 C DSX<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSPL2 M DSX<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSPL2 G DSX<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSPL2X C DSX<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSPL2X M DSX<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSPL2X G DSX<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSAUDYSSEY DSX<CR>	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-

		DTS SURROUND		MSDTS SURROUND<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDTS NEO:6 C<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDTS NEO:6 M<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDTS NEO:X C<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDTS NEO:X M<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDTS NEO:X G<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSNEURAL:X<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDTS SURROUND<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDTS ES DSCRT6.1<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDTS ES MTRX6.1<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDTS+PL2X C<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDTS+PL2X M<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDTS+PL2Z H<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDTS+DS<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDTS96/24<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDTS96 ES MTRX<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDTS+NEO:6<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDTS+NEO:X C<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDTS+NEO:X M<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDTS+NEO:X G<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDTS+NEURAL:X<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDTS ES MTRX+NEURAL:X<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
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					MSDOLBY ATMOS<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDOLBY DIGITAL<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDOLBY D EX<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY D+PL2X C<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY D+PL2X M<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY D+PL2Z H<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY D+DS<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDOLBY D+NEO:X C<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY D+NEO:X M<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY D+NEO:X G<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSMULTI CH IN<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSM CH IN+DOLBY EX<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSM CH IN+PL2X C<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSM CH IN+PL2X M<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSM CH IN+PL2Z H<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSM CH IN+DS<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSMULTI CH IN 7.1<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSM CH IN+NEO:X C<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSM CH IN+NEO:X M<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSM CH IN+NEO:X G<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSM CH IN+NEURAL:X<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDOLBY D+<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDOLBY D+ +EX<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY D+ +PL2X C<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY D+ +PL2X M<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY D+ +PLZ H<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY D+ +DS<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDOLBY D+ +NEO:X C<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY D+ +NEO:X M<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY D+ +NEO:X G<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY HD<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDOLBY HD+EX<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY HD+PL2X C<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY HD+PL2X M<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY HD+PL2Z H<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY HD+DS<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDOLBY HD+NEO:X C<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY HD+NEO:X M<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDOLBY HD+NEO:X G<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDTS HD<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDTS HD MSTR<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDTS HD+PL2X C<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDTS HD+PL2X M<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDTS HD+PL2Z H<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDTS HD+DS<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDTS HD+NEO:6<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDTS HD+NEO:X C<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDTS HD+NEO:X M<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDTS HD+NEO:X G<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSDTS HD+NEURAL:X<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDTS:X<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDTS:X MSTR<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDTS EXPRESS<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSDTS ES 8CH DSCRT<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MSMPEG2 AAC<CR>	-	-	-	✓	-	-	-	-	-	-	✓	-	-	-	-
					MSAAC+DOLBY EX<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSAAC+PL2X C<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSAAC+PL2X M<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSAAC+PL2Z H<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSAAC+DS<CR>	-	-	-	✓	-	-	-	-	-	-	✓	-	-	-	✓
					MSAAC+NEO:X C<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSAAC+NEO:X M<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSAAC+NEO:X G<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSAAC+NEURAL:X<CR>	-	-	-	✓	-	-	-	-	-	-	✓	-	-	-	✓
					MSNEO:6 C DSX<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSNEO:6 M DSX<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					MSAUDYSSEY DSX<CR>	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		AURO3D	(Auro-3D Upgrade only)	MSAURO3D<CR>	<-	✓	✓	-	-	-	-	-	-	-	-	-	-	-	-	-
		AURO2DSURR	(Auro-3D Upgrade only)	MSAURO2DSURR<CR>	<-	✓	✓	-	-	-	-	-	-	-	-	-	-	-	-	-
		MCH STEREO		MSMCH STEREO<CR>	MSMCH STEREO<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		WIDE SCREEN		MSWIDE SCREEN<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		SUPER STADIUM		MSSUPER STADIUM<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ROCK ARENA		MSROCK ARENA<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		JAZZ CLUB		MSJAZZ CLUB<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		CLASSIC CONCERT		MSCLASSIC CONCERT<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		MONO MOVIE		MSMONO MOVIE<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		MATRIX		MSMATRIX<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		VIDEO GAME		MSVIDEO GAME<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		VIRTUAL		MSVIRTUAL<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		LEFT		MSLEFT<CR>	MSSTEREO<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		RIGHT		MSRIGHT<CR>	MSSTEREO<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		-	during "All Zone Stereo" mode	-	MSALL ZONE STEREO<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-		-	MS7.1IN<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-		-	MSPURE DIRECT EXT<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		?	Return MS Status	MS?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		QUICK1	QUICK SELECT 1-5 MODE SELECT	MSQUICK1<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		QUICK2		MSQUICK2<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		QUICK3		MSQUICK3<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		QUICK4		MSQUICK4<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		QUICK5		MSQUICK5<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		-			MSQUICK0<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		QUICK1 MEMORY	QUICK SELECT 1-5 MODE MEMORY	MSQUICK1 MEMORY<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		QUICK2 MEMORY		MSQUICK2 MEMORY<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		QUICK3 MEMORY		MSQUICK3 MEMORY<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		QUICK4 MEMORY		MSQUICK4 MEMORY<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		QUICK5 MEMORY		MSQUICK5 MEMORY<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		QUICK ?	Return MSQUICK Status	MSQUICK ?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	VS	ASPNRM	Set Aspect Ratio to 4:3 mode	VSASPNRM<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		ASPFUL	Set Aspect Ratio to 16:9 mode	VSASPFUL<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		ASP ?	Return VSASPECT Status	VSASP ?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		MONIAUTO	Set HDMI MONITOR automatic detection	VSMONIAUTO<CR>	<-	✓	✓	✓	✓	-	-	-	✓	✓	✓	✓	-	-	-	-
		MONI1	Set HDMI MONITOR OUT-1	VSMONI1<CR>	<-	✓	✓	✓	✓	-	-	-	✓	✓	✓	✓	-	-	-	-
		MONI2	Set HDMI MONITOR OUT-2	VSMONI2<CR>	<-	✓	✓	✓	✓	-	-	-	✓	✓	✓	✓	-	-	-	-
		MONI ?	Return VSMONI Status	VSMONI ?<CR>		✓	✓	✓	✓	-	-	-	✓	✓	✓	✓	-	-	-	-
		SC48P	Set Resolution to 480p/576p	VSSC48P<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		SC10I	Set Resolution to 1080i	VSSC10I<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		SC72P	Set Resolution to 720p	VSSC72P<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		SC10P	Set Resolution to 1080p	VSSC10P<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		SC10P24	Set Resolution to 1080p:24Hz	VSSC10P24<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		SC4K	Set Resolution to 4K	VSSC4K<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		SC4KF	Set Resolution to 4K(60/50)	VSSC4KF<CR>	<-	✓	✓	✓	✓	✓	✓	✓	-	-	-	-	-	-	-	-
		SCAUTO	Set Resolution to AUTO	VSSCAUTO<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		SC ?	Return VSSC Status	VSSC ?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		SCH48P	Set Resolution to 480p/576p (HDMI)	VSSCH48P<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		SCH10I	Set Resolution to 1080i(HDMI)	VSSCH10I<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		SCH72P	Set Resolution to 720p(HDMI)	VSSCH72P<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		SCH10P	Set Resolution to 1080p(HDMI)	VSSCH10P<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		SCH10P24	Set Resolution to 1080p:24Hz(HDMI)	VSSCH10P24<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		SCH4K	Set Resolution to 4K(HDMI)	VSSCH4K<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		SCH4KF	Set Resolution to 4K(60/50) (HDMI)	VSSCH4KF<CR>	<-	✓	✓	✓	✓	✓	✓	✓	-	-	-	-	-	-	-	-
		SCHAUTO	Set Resolution to AUTO(HDMI)	VSSCHAUTO<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		SCH ?	Return VSSCH Status(HDMI)	VSSCH ?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		AUDIO AMP	Set HDMI AUDIO Output to AMP	VSAUDIO AMP<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		AUDIO TV	Set HDMI AUDIO Output to TV	VSAUDIO TV<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		AUDIO ?	Return VSAUDIO Status	VSAUDIO ?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		VPMAUTO	Set Video Processing Mode to AUTO	VSVPMAUTO<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		VPMGAME	Set Video Processing Mode to GAME	VSVPMGAME<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		VPMMOVI	Set Video Processing Mode to MOVIE	VSVPMMOVI<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		VPM ?	Return VSVPM Status	VSVPM ?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		VST ON	Vertical Stretch = ON	VSVST ON<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		VST OFF	Vertical Stretch = OFF	VSVST OFF<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		VST ?	Return VSVST Status	VSVST ?<CR>		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	PS	TONE CTRL ON	PARAMETER setting	PSTONE CTRL ON<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		TONE CTRL OFF	TONE CONTROL ON/OFF	PSTONE CTRL OFF<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		TONE CTRL ?	Return PSTONE CONTROL Status	PSTONE CTRL ?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		BAS UP	BASS UP/DOWN , direct change to **dB	PSBAS UP<CR>	PSBAS 50<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		BAS DOWN	**:00 to 99 by ASCII , 50=0dB	PSBAS DOWN<CR>	PSBAS 50<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		BAS **	---AVR can be operated from -6 to +6(44 to 56)	PSBAS 50<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		BAS ?	Return PSBAS Status	PSBAS ?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		TRE UP	TREBLE UP/DOWN , direct change to **dB	PSTRE UP<CR>	PSTRE 50<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		TRE DOWN	**:00 to 99 by ASCII , 50=0dB	PSTRE DOWN<CR>	PSTRE 50<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		TRE **	---AVR can be operated from -6 to +6(44 to 56)	PSTRE 50<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		TRE ?	Return PSTRE Status	PSTRE ?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		DIL ON	Dialog Level Adjust = ON	PSDIL ON<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		DIL OFF	Dialog Level Adjust = OFF	PSDIL OFF<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		DIL UP		PSDIL UP<CR>	PSDIL 50<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		DIL DOWN	---Dialog Level Adjust	PSDIL DOWN<CR>	PSDIL 50<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		DIL **	**:38 to 62 by ASCII , 50=0dB	PSDIL 50<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		DIL ?	Return DIL Status	PSDIL ?<CR>	PSDIL?<CR> PSDIL ON<CR> PSDIL 50<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SWL ON	Subwoofer Level Adjust = ON	PSSWL ON<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SWL OFF	Subwoofer Level Adjust = OFF	PSSWL OFF<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SWL UP		PSSWL UP<CR>	PSSWL 50<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SWL DOWN	---SUBWOOFER(1) Level Adjust	PSSWL DOWN<CR>	PSSWL 50<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SWL **	**:00,38 to 62 by ASCII , 50=0dB	PSSWL 50<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SWL2 UP		PSSWL2 UP<CR>	PSSWL2 50<CR>	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		SWL2 DOWN	---SUBWOOFER(2) Level Adjust	PSSWL2 DOWN<CR>	PSSWL2 50<CR>	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		SWL2 **	**:00,38 to 62 by ASCII , 50=0dB	PSSWL2 50<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		SWL ?	Return SWL Status	PSSWL ?<CR>	PSSWL ?<CR> PSSWL ON<CR> PSSWL 50<CR> PSSWL2 50<CR> ※If SW2 is none,"PSSWL2" command is not output	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

		CINEMA EQ.ON	CINEMA EQ. ON/OFF	PSCINEMA EQ.ON<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		CINEMA EQ.OFF		PSCINEMA EQ.OFF<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		CINEMA EQ. ?	Return PSCINEMA EQ.Status	PSCINEMA EQ. ?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		MODE:MUSIC	CINEMA / MUSIC / GAME / PL mode change	PSMODE:MUSIC<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		MODE:CINEMA	(This parameter can change DOLBY PL2,PL2x,NEO:6 mode.)	PSMODE:CINEMA<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		MODE:GAME	---SB=ON：PL2x mode / SB=OFF：PL2 mode	PSMODE:GAME<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		MODE:PRO LOGIC	--- GAME can change DOLBY PL2 & PL2x mode #NAME?	PSMODE:PRO LOGIC<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			--- *PL2z HEIGHT mode (EVENT only)*		PSMODE:HEIGHT<CR>	-	-	-	-	✓	✓	✓	-	-	-	-	-	-	-	-
		MODE: ?	Return PSMODE: Status	PSMODE: ?<CR>		✓	✓	✓	✓	✓	✓	✓	-	-	-	-	-	-	-	-
		PSLOM ON	Loudness Management: ON	PSLOM ON<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		PSLOM OFF	Loudness Management: OFF	PSLOM OFF<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		PSLOM ?	Return PSLOM Status	PSLOM ?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SP:FW	Speaker Output set(F.Height/F.Wide/S.Back)	PSSP:FW<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		SP:FH		PSSP:FH<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		SP:SB		PSSP:SB<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		SP:HW	Front Height & Front Wide	PSSP:HW<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		SP:BH	Surround back & Front Height	PSSP:BH<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		SP:BW	Surround back & Front Wide	PSSP:BW<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		SP:FL	Floor	PSSP:FL<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		SP:HF	Height & Floor	PSSP:HF<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		SP:FR	Front	PSSP:FR<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		SP: ?	Return PSSP: Status	PSSP: ?<CR>		✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		PHG LOW	PL2z HEIGHT GAIN direct change	PSPHG LOW<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		PHG MID		PSPHG MID<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		PHG HI		PSPHG HI<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		PHG ?	Return PSPHG Status	PSPHG ?<CR>		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		MULTEQ:AUDYSSEY	MultEQ/MultEQ XT/MultEQ XT32 mode direct change	PSMULTEQ:AUDYSSEY<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		MULTEQ:BYP.LR	AUDYSSEY= Reference	PSMULTEQ:BYP.LR<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		MULTEQ:FLAT	BYP.LR= L/R Bypass	PSMULTEQ:FLAT<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		MULTEQ:MANUAL		PSMULTEQ:MANUAL<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		MULTEQ:OFF		PSMULTEQ:OFF<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		MULTEQ ?	Return PSMULTEQ: Status	PSMULTEQ: ?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		DYNEQ ON	Dynamic EQ = ON	PSDYNEQ ON<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		DYNEQ OFF	Dynamic EQ = OFF	PSDYNEQ OFF<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		DYNEQ ?	Return PSDYNEQ Status	PSDYNEQ ?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		REFLEV 0	Reference Level Offset=0dB	PSREFLEV 0<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		REFLEV 5	Reference Level Offset=5dB	PSREFLEV 5<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		REFLEV 10	Reference Level Offset=10dB	PSREFLEV 10<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		REFLEV 15	Reference Level Offset=15dB	PSREFLEV 15<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		REFREV ?	Return PSREFLEV Status	PSREFLEV ?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		DYNVOL HEV	Dynamic Volume = Heavy	PSDYNVOL HEV<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		DYNVOL MED	Dynamic Volume = Medium	PSDYNVOL MED<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		DYNVOL LIT	Dynamic Volume = Light	PSDYNVOL LIT<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		DYNVOL OFF	Dynamic Volume = OFF	PSDYNVOL OFF<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		DYNVOL ?	Return PSDYNVOL Status	PSDYNVOL ?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		LFC ON	Audyssey LFC = ON	PSLFC ON<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		LFC OFF	Audyssey LFC = OFF	PSLFC OFF<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		LFC ?	Return Audyssey LFC Status	PSLFC ?<CR>		✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		CNTAMT UP	Containment Amount UP/DOWN , direct change to **	PSCNTAMT UP<CR>	PSCNTAMT 01<CR>	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		CNTAMT DOWN	**:00 to 99 by ASCII , 00=0,	PSCNTAMT DOWN<CR>	PSCNTAMT 01<CR>	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		CNTAMT **	---AVR can be operated from 1 to 7 (01 to 07)	PSCNTAMT 01<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		CNTAMT ?	Return Cotainment Amount Status	PSCNTAMT ?<CR>		✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		DSX ONHW	Audyssey DSX ON(Height＆Wide)	PSDSX ONHW<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		DSX ONH	Audyssey DSX ON(Height)	PSDSX ONH<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		DSX ONW	Audyssey DSX ON(Width)	PSDSX ONW<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		DSX OFF	Audyssey DSX OFF	PSDSX OFF<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		DSX ?	Return PSDSX Status	PSDSX ?<CR>		✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		STW UP	STAGE WIDTH UP/DOWN , direct change to **dB	PSSTW UP<CR>	PSSTW 50<CR>	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		STW DOWN	**:00 to 99 by ASCII , 50=0dB	PSSTW DOWN<CR>	PSSTW 50<CR>	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		STW **	---AVR can be operated from -10 to +10(40 to 60)	PSSTW 50<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		STW ?	Return PSSTW Status	PSSTW ?<CR>		✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		STH UP	STAGE HEIGHT UP/DOWN , direct change to **dB	PSSTH UP<CR>	PSSTH 50<CR>	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		STH DOWN	**:00 to 99 by ASCII , 50=0dB	PSSTH DOWN<CR>	PSSTH 50<CR>	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		STH **	---AVR can be operated from -10 to +10(40 to 60)	PSSTH 50<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		STH ?	Return PSSTH Status	PSSTH ?<CR>		✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		GEQ ON	Graphic EQ = ON	PSGEQ ON<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		GEQ OFF	Graphic EQ = OFF	PSGEQ OFF<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		GEQ ?	Return Graphic EQ Status	PSGEQ ?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		HEQ ON	Headphone EQ = ON	PSHEQ ON<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		HEQ OFF	Headphone EQ = OFF	PSHEQ OFF<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		HEQ ?	Return Headphone EQ Status	PSHEQ ?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		DRC AUTO	Dynamic Compression direct change	PSDRC AUTO<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		DRC LOW		PSDRC LOW<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		DRC MID		PSDRC MID<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		DRC HI		PSDRC HI<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		DRC OFF		PSDRC OFF<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		DRC ?	Return PSDRC Status	PSDRC ?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		DIC UP	Dialog Control UP/DOWN , direct change to **dB	PSDIC UP<CR>	PSDIC 03<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		DIC DOWN	**:00 to 99 by ASCII , 00=0	PSDIC DOWN<CR>	PSDIC 03<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		DIC **	---AVR can be operated from 0 to 6	PSDIC 03<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		DIC ?	Return PSDIC Status	PSDIC ?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		BSC UP	Bass Sync UP/DOWN , direct change to **dB	PSBSC UP<CR>	PSBSC 10<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		BSC DOWN	**:00 to 99 by ASCII , 00=0	PSBSC DOWN<CR>	PSBSC 10<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		BSC **	---AVR can be operated from 0 to 16	PSBSC 10<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		BSC ?	Return PSBSC Status	PSBSC ?<CR>		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		DEH OFF	Dialogue Enhancer	PSDEH OFF<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		DEH LOW		PSDEH LOW<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		DEH MED		PSDEH MED<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		DEH HIGH		PSDEH HIGH<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		DEH ?	Return PSDEH Status	PSDEH ?<CR>		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		LFE UP	LFE UP/DOWN , direct change to **dB	PSLEE UP<CR>	PSLFE 10<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		LFE DOWN	**:00 to 99 by ASCII , 00=0dB, 10=-10dB	PSLFE DOWN<CR>	PSLFE 10<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		LFE **	---AVR can be operated from 0 to -10	PSLFE 10<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		LFE ?	Return PSLFE Status	PSLFE ?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		LFL 00	LFE Level direct change(When EXT.IN/7.1CH IN)	PSLFL 00<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		LFL 05		PSLFL 05<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		LFL 10		PSLFL 10<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		LFL 15		PSLFL 15<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		LFL ?	Return PSLFL Status	PSLFL ?<CR>		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		EFF ON	EFFECT ON/OFF direct change	PSEFF ON<CR>	PSEFF ON<CR> PSEFF 10<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		EFF OFF		PSEFF OFF<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		EFF UP	EFFECT LEVEL direct change to **dB	PSEFF UP<CR>	PSEFF 10<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		EFF DOWN	**:00 to 99 by ASCII , 00=0dB, 10=10dB	PSEFF DOWN<CR>	PSEFF 10<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		EFF **	---AVR can be operated from 1 to 15	PSEFF 10<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		EFF ?	Return PSEFF Status	PSEFF ?<CR>	ex1（WIDE SCREEN mode) PSEFF ON<CR> PSEFF 10<CR> ex2（except WIDE SCREEN mode) PSEFF 10<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		DEL UP	DELAY UP/DOWN , direct change to ***dB	PSDEL UP<CR>	PSDEL 000<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		DEL DOWN	***:000 to 999 by ASCII , 000=0ms, 300=300ms	PSDEL DOWN<CR>	PSDEL 000<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		DEL ***	---AVR can be operated from 0 to 300 0-60ms:3ms/Step　Over 60ms:10ms/Step	PSDEL 000<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		DEL ?	Return PSDEL Status	PSDEL ?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		PAN ON	PANORAMA ON/OFF	PSPAN ON<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		PAN OFF		PSPAN OFF<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		PAN ?	Return PSPAN Status	PSPAN ?<CR>		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		DIM UP	DIMENSION UP/DOWN , direct change to **dB	PSDIM UP<CR>	PSDIM 00<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		DIM DOWN	**:00 to 99 by ASCII , 00=0,	PSDIM DOWN<CR>	PSDIM 00<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		DIM **	---AVR can be operated from 0 to 6	PSDIM 00<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		DIM ?	Return PSDIM Status	PSDIM ?<CR>		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		CEN UP	CENTER WIDTH UP/DOWN , direct change to **dB	PSCEN UP<CR>	PSCEN 07<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		CEN DOWN	**:00 to 99 by ASCII , 00=0	PSCEN DOWN<CR>	PSCEN 07<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		CEN **	---AVR can be operated from 0 to 7	PSCEN 07<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		CEN ?	Return PSCEN Status	PSCEN ?<CR>		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		CEI UP	CENTER IMAGE UP/DOWN , direct change to **dB	PSCEI UP<CR>	PSCEI 10<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		CEI DOWN	**:00 to 99 by ASCII , 00=0.0	PSCEI DOWN<CR>	PSCEI 10<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		CEI **	---AVR can be operated from 0.0 to 1.0	PSCEI 10<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		CEI?	Return PSCEI Status	PSCEI ?<CR>		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		CEG UP	CENTER GAIN UP/DOWN , direct change to **dB	PSCEG UP<CR>	PSCEG 10<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		CEG DOWN	**:00 to 99 by ASCII , 00=0.0	PSCEG DOWN<CR>	PSCEG 10<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		CEG **	---AVR can be operated from 0.0 to 1.0	PSCEG 10<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		CEG ?	Return PSCEG Status	PSCEG ?<CR>		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		CES ON	CENTER SPREAD ON/OFF	PSCES ON<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		CES OFF		PSCES OFF<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		CES ?	Return PSCES Status	PSCES ?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		NEURAL ON	Neural:X ON/OFF	PSNEURAL ON<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		NEURAL OFF		PSNEURAL OFF<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		NEURAL ?	Return PSNEURAL Status	PSNEURAL ?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SWR ON	SW ON/OFF	PSSWR ON<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SWR OFF	**※DIRECT,STEREO(2ch) mode**	PSSWR OFF<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SWR ?	Return PSSWR Status	PSSWR ?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		RSZ S	ROOM SIZE direct change	PSRSZ S<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		RSZ MS		PSRSZ MS<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		RSZ M		PSRSZ M<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		RSZ ML		PSRSZ ML<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		RSZ L		PSRSZ L<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		RSZ ?	Return PSRSZ Status	PSRSZ ?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		DELAY UP	AUDIO DELAY UP/DOWN , direct change to ***dB	PSDELAY UP<CR>	PSDELAY 200<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		DELAY DOWN	***:000 to 999 by ASCII , 000=0ms, 200=200ms	PSDELAY DOWN<CR>	PSDELAY 200<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		DELAY ***	---AVR can be operated from 0 to 200	PSDELAY 200<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		DELAY?	Return PSDELAY Status	PSDELAY ?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		RSTR OFF	AUDIO RESTORER direct change	PSRSTR OFF<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		RSTR LOW	RSTR LOW=MODE3	PSRSTR LOW<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		RSTR MED	RSTR MID=MODE2	PSRSTR MED<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		RSTR HI	RSTR HI=MODE1	PSRSTR HI<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		RSTR ?	Return PSRSTR Status	PSRSTR ?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		FRONT SPA	FRONT SPEAKER direct change	PSFRONT SPA<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		FRONT SPB		PSFRONT SPB<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		FRONT A+B		PSFRONT A+B<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		FRONT?	Return PSFRONT Status	PSFRONT?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		AUROPR SMA	Auro-Matic 3D Preset direct change (Auro-3D Upgrade only)	PSAUROPR SMA<CR>	<-	✓	✓	-	-	-	-	-	-	-	-	-	-	-	-	-
		AUROPR MED		PSAUROPR MED<CR>	<-	✓	✓	-	-	-	-	-	-	-	-	-	-	-	-	-
		AUROPR LAR		PSAUROPR LAR<CR>	<-	✓	✓	-	-	-	-	-	-	-	-	-	-	-	-	-
		AUROPR SPE		PSAUROPR SPE<CR>	<-	✓	✓	-	-	-	-	-	-	-	-	-	-	-	-	-
		AUROPR ?	Return PSAUROPR Status	PSAUROPR ?<CR>		✓	✓	-	-	-	-	-	-	-	-	-	-	-	-	-
		AUROST UP	Auro-Matic 3D Strength UP/DOWN , direct change to ** (Auro-3D Upgrade only)	PSAUROST UP<CR>	<-	✓	✓	-	-	-	-	-	-	-	-	-	-	-	-	-
		AUROST DOWN	**:00 to 99 by ASCII , 01=1, 10=10	PSAUROST DOWN<CR>	<-	✓	✓	-	-	-	-	-	-	-	-	-	-	-	-	-
		AUROST **	---AVR can be operated from 1 to 16	PSAUROST **	PSAUROST 10<CR>	✓	✓	-	-	-	-	-	-	-	-	-	-	-	-	-
		AUROST ?	Return PSAUROST Status	PSAUROST ?<CR>		✓	✓	-	-	-	-	-	-	-	-	-	-	-	-	-
	PV	OFF	Picture Mode direct change^ -Off	PVOFF<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		STD	-Standard	PVSTD<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		MOV	-Movie	PVMOV<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		VVD	-Vivid	PVVVD<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		STM	-Stream	PVSTM<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		CTM	-Costom	PVCTM<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		DAY	-ISF Day	PVDAY<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		NGT	-ISF Night	PVNGT<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		?	Return PSPV Status	PV?		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		CN UP	CONTRAST UP/DOWN , direct change to **dB	PVCN UP<CR>	PVCN 050<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		CN DOWN		PVCN DOWN<CR>	PVCN 050<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		CN ***	***:000 to 100 by ASCII , 050=0 ---AVR can be operated from -50 to +50(000 to 100)	PVCN 050<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		CN ?	Return PSCN Status	PVCN ?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		BR UP	BRIGHTNESS UP/DOWN , direct change to **dB	PVBR UP<CR>	PVBR 050<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		BR DOWN		PVBR DOWN<CR>	PVBR 050<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		BR ***	***:000 to 100 by ASCII , 050=0 ---AVR can be operated from -50 to +50(000 to 100)	PVBR 050<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		BR ?	Return PSBR Status	PVBR ?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		ST UP	~~CHROMA LEVEL~~ Saturation UP/DOWN , direct change to **dB	PVST UP<CR>	PVST 050<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		ST DOWN		PVST DOWN<CR>	PVST 050<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		ST ***	***:000 to 100 by ASCII , 050=0 ---AVR can be operated from -50 to +50(000 to 100)	PVST 050<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		ST ?	Return PSST Status	PVST ?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-

		HUE UP	HUE UP/DOWN , direct change to **dB	PVHUE UP<CR>	PVHUE 50<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		HUE DOWN	**:44 to 56 by ASCII , 50=0	PVHUE DOWN<CR>	PVHUE 50<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		HUE **	---AVR can be operated from -6 to +6(44 to 56)	PVHUE 50<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		HUE ?	Return PSHUE Status	PVHUE ?<CR>		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		DNR OFF	DNR direct change	PVDNR OFF<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		DNR LOW		PVDNR LOW<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		DNR MID		PVDNR MID<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		DNR HI		PVDNR HI<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		DNR ?	Return PVDNR Status	PVDNR ?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		ENH UP	ENHANCER UP/DOWN, direct change to **dB	PVENH UP<CR>	PVENH 12<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		ENH DOWN	**:00 to 12 by ASCII, 00=0	PVENH DOWN<CR>	PVENH 12<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		ENH ***	---AVR can be operated from 0 to 12	PVENH 12<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		ENH ?	Return PVENH Status	PVENH ?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
ZONE2 Control	Z2	SOURCE	ZONE2 mode cancel (ZONE2 source is same as MAIN ZONE)	Z2SOURCE<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		PHONO	ZONE2 mode set , and select source	Z2PHONO<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		CD		Z2CD<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		TUNER		Z2TUNER<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		DVD	*X1200,S710:DVD/Blu-ray is selected	Z2DVD<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		BD		Z2BD<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		TV		Z2TV<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SAT/CBL		Z2SAT/CBL<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		MPLAY		Z2MPLAY<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		GAME		Z2GAME<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		HDRADIO	(North America model Only)	Z2HDRADIO<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		NET	* 2014 AVR: Online Music is selected	Z2NET<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		PANDORA	(North America model Only)	Z2PANDORA<CR>	<-	✓	-	-	-	✓	-	-	✓	-	-	-	✓	-	-	-
		SIRIUSXM	(North America model Only)	Z2SIRIUSXM<CR>	<-	✓	-	-	-	✓	-	-	✓	-	-	-	✓	-	-	-
		SPOTIFY	(North America &Europe model Only)	Z2SPOTIFY<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		LASTFM	(Europe model Only)	Z2LASTFM<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		FLICKR		Z2FLICKR<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		IRADIO		Z2IRADIO<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SERVER		Z2SERVER<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		FAVORITES		Z2FAVORITES<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		AUX1	*X1100,S700:AUX , Other:AUX1 is selected	Z2AUX1<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		AUX2		Z2AUX2<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		AUX3	(when Additional Source is set to On)	Z2AUX3<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		AUX4	(when Additional Source is set to On)	Z2AUX4<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		AUX5	(when Additional Source is set to On)	Z2AUX5<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		AUX6	(when Additional Source is set to On)	Z2AUX6<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		AUX7	(when Additional Source is set to On)	Z2AUX7<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		BT	---Bluetooth	Z2BT<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		USB/IPOD		Z2USB/IPOD<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		USB	Select INPUT source iPod/USB and Start Playback	Z2USB<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		IPD	Select INPUT source iPod/USB and iPod DIRECT Start Playback	Z2IPD<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		IRP	Select INPUT source Online Music and iRadio Recent Play	Z2IRP<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		FVP	Select INPUT source Online Music and Favorites Play	Z2FVP<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		QUICK1	Z2 QUICK SELECT 1-5 MODE SELECT	Z2QUICK1<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		QUICK2		Z2QUICK2<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		QUICK3		Z2QUICK3<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		QUICK4		Z2QUICK4<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		QUICK5		Z2QUICK5<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		-		-	Z2QUICK0<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		QUICK1 MEMORY	Z2 QUICK SELECT 1-5 MODE MEMORY	Z2QUICK1 MEMORY<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		QUICK2 MEMORY		Z2QUICK2 MEMORY<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		QUICK3 MEMORY		Z2QUICK3 MEMORY<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		QUCIK4 MEMORY		Z2QUICK4 MEMORY<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		QUICK5 MEMORY		Z2QUICK5 MEMORY<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		QUICK ?	Return Z2QUICK Status	Z2QUICK ?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		UP	ZONE2 VOLUME UP/DOWN , direct change to **dB	Z2UP<CR>	Z280<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		DOWN		Z2DOWN<CR>	Z280<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		**	**:00 to 98 by ASCII , 80=0dB, 00=---(MIN) Refer to Volume CMD sheet	Z280<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓ ✓	✓ ✓	✓ ✓
		ON	ZONE2 ON/OFF change	Z2ON<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		OFF		Z2OFF<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		?	Return Z2 Status	Z2?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
			※If ZONE2 mode is selected, "Z2" status returns		SRCD<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
			※If REC mode is selected, "SR" status returns		|	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					SRUSB DIRECT<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					SRIPOD DIRECT<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					SRSOURCE<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Z2MU	ON	ZONE2 OUTPUT MUTE ON/OFF change	Z2MUON<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		OFF		Z2MUOFF<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		?	Return Z2MU Status	Z2MU?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Z2CS	ST	ZONE2 Channel setting	Z2CSST<CR>	<-	✓	✓	✓	✓	✓	✓	✓	-	-	-	-	-	-	-	-
		MONO		Z2CSMONO<CR>	<-	✓	✓	✓	✓	✓	✓	✓	-	-	-	-	-	-	-	-
		?	Return Z2CS Status	Z2CS?<CR>		✓	✓	✓	✓	✓	✓	✓	-	-	-	-	-	-	-	-
	Z2CV	FL UP	ZONE2 CHANNEL VOLUME UP/DOWN , direct change to **dB	Z2CVFL UP<CR>	Z2CVFL 50<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		FL DOWN	---FRONT Lch	Z2CVFL DOWN<CR>	Z2CVFL 50<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		FL **	**:38 to 62 by ASCII , 50=0dB	Z2CVFL 50<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		FR UP	ZONE2 CHANNEL VOLUME UP/DOWN , direct change to **dB	Z2CVFR UP<CR>	Z2CVFR 50<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		FR DOWN	---FRONT Rch	Z2CVFR DOWN<CR>	Z2CVFR 50<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		FR **	**:38 to 62 by ASCII , 50=0dB	Z2CVFR 50<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
		?	Return Z2CV Status	Z2CV?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
	Z2HPF	ON	ZONE2 HPF ON/OFF	Z2HPFON<CR>	<-	✓	✓	✓	✓	✓	✓	✓	-	-	-	-	-	-	-	-
		OFF		Z2HPFOFF<CR>	<-	✓	✓	✓	✓	✓	✓	✓	-	-	-	-	-	-	-	-
		?	Return Z2HPF Status	Z2HPF?<CR>		✓	✓	✓	✓	✓	✓	✓	-	-	-	-	-	-	-	-
	Z2PS	BAS UP	ZONE2 BASS UP/DOWN , direct change to **dB	Z2PSBAS UP<CR>	Z2PSBAS 50<CR>	✓	✓	✓	✓	✓	✓	✓	-	-	-	-	-	-	-	-
		BAS DOWN	**:00 to 99 by ASCII , 00=0dB from -10 to +10(40 to 60)	Z2PSBAS DOWN<CR>	Z2PSBAS 50<CR>	✓	✓	✓	✓	✓	✓	✓	-	-	-	-	-	-	-	-
		BAS **	from -14 to +14 /2dBstep (36 to 64) ※X4100 only	Z2PSBAS 50<CR>	<-	✓	✓	✓	✓	✓	✓	✓	-	-	-	-	-	-	-	-
		BAS ?	Return Z2PSBAS Status	Z2PSBAS ?<CR>		✓	✓	✓	✓	✓	✓	✓	-	-	-	-	-	-	-	-
		TRE UP	ZONE2 TREBLE UP/DOWN , direct change to **dB	Z2PSTRE UP<CR>	Z2PSTRE 50<CR>	✓	✓	✓	✓	✓	✓	✓	-	-	-	-	-	-	-	-
		TRE DOWN	**:00 to 99 by ASCII , 00=0dB from -10 to +10(40 to 60)	Z2PSTRE DOWN<CR>	Z2PSTRE 50<CR>	✓	✓	✓	✓	✓	✓	✓	-	-	-	-	-	-	-	-
		TRE **	from -14 to +14 /2dBstep (36 to 64) ※X4100 only	Z2PSTRE 50<CR>	<-	✓	✓	✓	✓	✓	✓	✓	-	-	-	-	-	-	-	-
		TRE ?	Return Z2PSTRE Status	Z2PSTRE ?<CR>		✓	✓	✓	✓	✓	✓	✓	-	-	-	-	-	-	-	-
	Z2HDA	THR	ZONE2MDMI Out=Through	Z2HDA THR<CR>	<-	✓	✓	✓	✓	✓	✓	✓	-	-	-	-	-	-	-	-
		PCM	ZONE2MDMI Out=PCM	Z2HDA PCM<CR>	<-	✓	✓	✓	✓	✓	✓	✓	-	-	-	-	-	-	-	-
		?	Return Z2HPA Status	Z2HDA?<CR>		✓	✓	✓	✓	✓	✓	✓	-	-	-	-	-	-	-	-
	Z2SLP	OFF	ZONE2 SLEEP TIMER setting	Z2SLPOFF<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		***	***:001 to 120 by ASCII , 010=10min	Z2SLP120<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		?	Return SLP Status	Z2SLP?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Z2STBY	2H	ZONE2 Auto Standby setting	Z2STBY2H<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		4H		Z2STBY4H<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		8H		Z2STBY8H<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		OFF		Z2STBYOFF<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		?	Return Z2STBY Status	Z2STBY?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ZONE3 Control		SOURCE	ZONE3 mode cancel (ZONE3 source is same as MAIN ZONE)	Z3SOURCE<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		PHONO	ZONE3 mode set , and select source	Z3PHONO<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		CD		Z3CD<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		TUNER		Z3TUNER<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		DVD		Z3DVD<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		BD		Z3BD<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		TV		Z3TV<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		SAT/CBL		Z3SAT/CBL<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		MPLAY		Z3MPLAY<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		GAME		Z3GAME<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		HDRADIO	(North America model Only)	Z3HDRADIO<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		NET	*2014 AVR : Online Music is selected	Z3NET<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		PANDORA	(North America model Only)	Z3PANDORA<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		SIRIUSXM	(North America model Only)	Z3SIRIUSXM<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		SPOTIFY	(North America &Europe model Only)	Z3SPOTIFY<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		LASTFM	(Europe model Only)	Z3LASTFM<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		FLICKR		Z3FLICKR<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		IRADIO		Z3IRADIO<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		SERVER		Z3SERVER<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		FAVORITES		Z3FAVORITES<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		AUX1		Z3AUX1<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		AUX2		Z3AUX2<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		AUX3	(when Additional Source is set to On)	Z3AUX3<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		AUX4	(when Additional Source is set to On)	Z3AUX4<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		AUX5	(when Additional Source is set to On)	Z3AUX5<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		AUX6	(when Additional Source is set to On)	Z3AUX6<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		AUX7	(when Additional Source is set to On)	Z3AUX7<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		BT	---Bluetooth	Z3BT<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		USB/IPOD		Z3USB/IPOD<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		USB	Select INPUT source USB and USB Start Playback	Z3USB<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		IPD	Select INPUT source USB and iPod DIRECT Start Playback	Z3IPD<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		IRP	Select INPUT source NET/USB and iRadio Recent Play	Z3IRP<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		FVP	Select INPUT source NET/USB and Favorites Play	Z3FVP<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		QUICK1	Z3 QUICK SELECT 1-5 MODE SELECT	Z3QUICK1<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		QUICK2		Z3QUICK2<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		QUICK3		Z3QUICK3<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		QUICK4		Z3QUICK4<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		QUICK5		Z3QUICK5<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		-		-	Z3QUICK0<CR>	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		QUICK1 MEMORY	Z3 QUICK SELECT 1-5 MODE MEMORY	Z3QUICK1 MEMORY<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		QUICK2 MEMORY		Z3QUICK2 MEMORY<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		QUICK3 MEMORY		Z3QUICK3 MEMORY<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		QUCIK4 MEMORY		Z3QUICK4 MEMORY<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		QUICK5 MEMORY		Z3QUICK5 MEMORY<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		QUICK ?	Return MSQUICK Status	Z3QUICK ?<CR>		✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		UP	ZONE3 VOLUME UP/DOWN , direct change to **dB	Z3UP<CR>	Z380<CR>	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		DOWN		Z3DOWN<CR>	Z380<CR>	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		**	**:00 to 98 by ASCII , 80=0dB, 00=---(MIN) Refer to Volume CMD sheet	Z380<CR>	<-	✓ ✓	✓ ✓	✓ ✓	✓ ✓	-	-	-	-	-	-	-	-	-	-	-
		ON	ZONE3 ON/OFF change	Z3ON<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		OFF		Z3OFF<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		?	Return Z3 Status	Z3?<CR>		✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
	Z3MU	ON	ZONE3 OUTPUT MUTE ON/OFF change	Z3MUON<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		OFF		Z3MUOFF<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		?	Return Z3MU Status	Z3MU?<CR>		✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
	Z3CS	ST	ZONE3 Channel setting	Z3CSST<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		MONO		Z3CSMONO<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		?	Return Z3CS Status	Z3CS?<CR>		✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
	Z3CV	FL UP	ZONE3 CHANNEL VOLUME UP/DOWN , direct change to **dB	Z3CVFL UP<CR>	Z3CVFL 50<CR>	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		FL DOWN	---FRONT Lch	Z3CVFL DOWN<CR>	Z3CVFL 50<CR>	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		FL **	**:38 to 62 by ASCII , 50=0dB	Z3CVFL 50<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		FR UP	ZONE3 CHANNEL VOLUME UP/DOWN , direct change to **dB	Z3CVFR UP<CR>	Z3CVFR 50<CR>	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		FR DOWN	---FRONT Rch	Z3CVFR DOWN<CR>	Z3CVFR 50<CR>	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		FR **	**:38 to 62 by ASCII , 50=0dB	Z3CVFR 50<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		?	Return Z3CV Status	Z3CV?<CR>	Z3CVFR 50<CR>	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
	Z3HPF	ON	ZONE3 HPF ON/OFF	Z3HPFON<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		OFF		Z3HPFOFF<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		?	Return Z3HPF Status	Z3HPF?<CR>		✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
	Z3PS	BAS UP	ZONE3 BASS UP/DOWN , direct change to **dB	Z3PSBAS UP<CR>	Z3PSBAS 50<CR>	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		BAS DOWN	**:00 to 99 by ASCII , 00=0dB from -10 to +10(40 to 60)	Z3PSBAS DOWN<CR>	Z3PSBAS 50<CR>	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		BAS **	from -14 to +14 /2dBstep (36 to 64) ※X4100 only	Z3PSBAS 50<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		BAS ?	Return Z3PSBAS Status	Z3PSBAS ?<CR>		✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		TRE UP	ZONE3 TREBLE UP/DOWN , direct change to **dB	Z3PSTRE UP<CR>	Z3PSTRE 50<CR>	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		TRE DOWN	**:00 to 99 by ASCII , 00=0dB from -10 to +10(40 to 60)	Z3PSTRE DOWN<CR>	Z3PSTRE 50<CR>	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		TRE **	from -14 to +14 /2dBstep (36 to 64) ※X4100 only	Z3PSTRE 50<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		TRE ?	Return Z3PSTRE Status	Z3PSTRE ?<CR>		✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
	Z3SLP	OFF	ZONE3 SLEEP TIMER setting	Z3SLPOFF<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		***	***:001 to 120 by ASCII , 010=10min	Z3SLP120<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		?	Return SLP Status	Z3SLP?<CR>		✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
	Z3STBY	2H	ZONE3 Auto Standby setting	Z3STBY2H<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		4H		Z3STBY4H<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		8H		Z3STBY8H<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		OFF		Z3STBYOFF<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		?	Return Z3STBY Status	Z3STBY?<CR>		✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-

Tuner Control	TF	ANUP	TUNER Frequency UP/DOWN	TFANUP<CR>	TFAN105000<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		ANDOWN		TFANDOWN<CR>	TFAN105000<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		AN***** (6 digits)	--- ****.** kHz at AM band (>050000 is AM.) ****.** MHz at FM band (<050000 is FM.)	TFAN105000<CR> (1050.00kHz at AM)	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		AN?	Return TF Status	TFAN?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		ANNAME?	Return RDS Station Name (EU,AP Only)	TFANNAME?<CR>	TFANNAME123456878<CR> (Station Name"12345678") If station name is NULL: TFANNAME <CR>(" "is space)	-	✓	-	-	-	✓	-	-	✓	-	-	-	✓	-	-
	TP	ANUP	TUNER PRESET CH UP/DOWN , direct change to No.**	TPANUP<CR>	TPAN01<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		ANDOWN		TPANDOWN<CR>	TPAN01<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		AN**(PRESET No.)	** : 01-56 01=CH01,56=CH56	TPAN01<CR> (PRESET No."01")	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		AN?	Return TP Status	TPAN?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					TPANOFF<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		ANMEM	TUNER PRESET MEMORY	TPANMEM<CR>	TPANMEM<CR> ↓ TPANUP<CR> or TPANDOWN<CR> or TPAN**<CR> ↓ TPANMEM<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		ANMEM**(PRESET N	TUNER PRESET MEMORY ** : 01-56 01=CH01,56=CH56	TPANMEM01<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	TM	ANAM	TUNER BAND , MODE Select ---Band set to AM	TMANAM<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		ANFM	---Band set to FM	TMANFM<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		AN?	Return TM Status	TMAN?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		ANAUTO	---Tuning mode set to AUTO mode	TMANAUTO<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		ANMANUAL	---Tuning mode set to MANUAL mode	TMANMANUAL<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
HD Radio Control	TF	HDUP	HD Channel UP/DOWN . direct change	TFHDUP<CR>	TFHD105000<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		HDDOWN		TFHDDOWN<CR>	TFHD105000<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		HD***** (6 digits)	--- ****.** kHz at AM band (>050000 is AM.) ****.** MHz at FM band (<050000 is FM.)	TFHD105000<CR> (1050.00kHz at AM)	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		HDMC*(1 digit)	---HD Multi Cast CH Select (* : Multi Cast 1~8, Analog 0)	TFHDMC2<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		HD******MC*	---Frequency and HD Multi Cast CH Select	TFHD000750MC5<CR>	※command only	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		HD?	Return TFHD Status	TFHD?<CR>		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	TP	HDUP	HD PRESET CH UP/DOWN , direct change to No.**	TPHDUP<CR>	TPHD01<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		HDDOWN		TPHDDOWN<CR>	TPHD01<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		HD** (PRESET No.)	** : 01-56 01=CH01,56=CH56	TPHD01<CR> (PRESET No."01")	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		HD?	Return TPHD Status	TPHD?<CR>		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					TPHDOFF<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		HDMEM	HD PRESET MEMORY	TPHDMEM<CR>	TPHDMEM<CR> ↓ TPHDUP<CR> or TPHDDOWN<CR> or TPHD**<CR> ↓ TPHDMEM<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		HDMEM**(PRESET N	HD PRESET MEMORY ** : 01-56 01=CH01,56=CH56	TPHDMEM01<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	TM	HDAM	HD RADIO BAND . MODE Select ---Band set to AM	TMHDAM<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		HDFM	---Band set to FM	TMHDFM<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		HDAUTOHD	---Tuning mode set to AUTO-HD mode	TMHDAUTOHD<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		HDAUTO	---Tuning mode set to AUTO mode	TMHDAUTO<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		HDMANUAL	---Tuning mode set to MANUAL mode	TMHDMANUAL<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		HDANAAUTO	---Tuning mode set to ANALOG AUTO mode	TMHDANAAUTO<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		HDANAMANU	---Tuning mode set to ANALOGMANUAL mode	TMHDANAMANU<CR>	<-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		HD?	Return TMHD Status	TMHD?<CR>		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	HD	?	Return HD Status ---BAND, STATION NAME, MULTI CAST CURRENT CHANNEL, MULTI CAST NUMBER, SIGNAL LEVEL, ARTIST, TITLE, ALBUM, GENRE, PROGRAM TYPE,	HD?<CR>		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					HDST NAME ********<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					HDSIG LEV 0<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					HDSIG LEV 1<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					HDSIG LEV 2<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					HDSIG LEV 3<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					HDSIG LEV 4<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					HDSIG LEV 5<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					HDSIG LEV 6<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					HDMLT CURRCH *<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					HDMLT CAST CH *<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					HDPTY (18 digits)<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					HDARTIST (40 digits)<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					HDTITLE (40 digits)<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					HDALBUM (40 digits)<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					HDGENRE (23 digits)<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					HDMODE DIGITAL<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					HDMODE ANALOG<CR>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Online Music Control *USB/iPod Control* *Bluetooth Control*	NS	90	"Cursor Up" Control	NS90<CR>	※command only	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		91	"Cursor Down" Control	NS91<CR>	※command only	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		92	"Cursor Left" Control	NS92<CR>	※command only	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		93	"Cursor Right" Control	NS93<CR>	※command only	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		94	"Enter (Play/Pause)" Control	NS94<CR>	※command only	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		9A	"Play" Control	NS9A<CR>	※command only	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		9B	"Pause" Control	NS9B<CR>	※command only	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		9C	"Stop" Control	NS9C<CR>	※command only	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		9D	"Skip Plus" Control	NS9D<CR>	※command only	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		9E	"Skip Minus" Control	NS9E<CR>	※command only	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		9F	"Manual Search Plus" Control(USB/iPod,Media Server,**Bluetooth**)	NS9F<CR>	※command only	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		9G	"Manual Search Minus" Control(USB/iPod,Media Server,**Bluetooth**)	NS9G<CR>	※command only	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		9H	"Repeat One" (Media Server,USB,iPod Direct,**Bluetooth**)	NS9H<CR>	※command only	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		9I	"Repeat All" (Media Server,USB,iPod Direct,**Bluetooth**)	NS9I<CR>	※command only	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		9J	"Repeat Off" (Media Server,USB,iPod Direct,**Bluetooth**)	NS9J<CR>	※command only	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		9K	"Random On"(Media Server,USB,**Bluetooth)** "Shuffle Songs" Control (iPod Direct Only)	NS9K<CR>	※command only	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		9M	"Random Off" (Media Server,USB,,**Bluetooth)** "Shuffle Off" Control (iPod Direct)	NS9M<CR>	※command only	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		9W	Toggle Switch "From iPod Mode/On Screen Mode" Control (iPod Direct only)	NS9W<CR>	※command only	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		9X	"Page Next" Control (except **Bluetooth**, AirPlay, Spotify remote)	NS9X<CR>	※command only	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		9Y	"Page Previous" Control (except **Bluetooth**, AirPlay, Spotify remote)	NS9Y<CR>	※command only	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		9Z	"Manual Search STOP" Control(USB/iPod,Media Server,**Bluetooth**)	NS9Z<CR>	※command only	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

		RPT	"Repeat(toggle)" (Media Server,USB,iPod Direct,Spotify,AirPlay,**Bluetooth**)	NSRPT<CR>	※command only	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		RND	"Random(toggle)" (Media Server,USB,iPod Direct,Spotify,AirPlay,**Bluetooth**)	NSRND<CR>	※command only	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		B** (PRESET No.)	Preset Call (**except Bluetooth, USB/iPod**) ** : ~~**00-55**~~ → **00-35(2014 AVR)**	NSB00<CR>	※command only	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		C** (PRESET No.)	Preset Memory (**except Bluetooth, USB/iPod**) ** : ~~**00-55**~~ → **00-35(2014 AVR)**	NSC00<CR>	NSC00<CR> NSCOK<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		H	Net Audio Preset Name status（UTF-8）**(except Bluetooth, USB/iPod)**	NSH<CR>	NSH<CR> (Return) NSH00**********(20 digits)<CR>(Preset Name：01) NSH01**********(20 digits)<CR>(Preset Name：02) ～ **NSH35**********(20 digits)<CR>(Preset Name：36)**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		FV MEM	Add Favorites folder	NSFV MEM<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	NSA		Return Onscreen Display Information List (ASCII CODE Character) *ASCII Character(MAX96byte) _:Null ?: Don't Care (The character after Null should be disregarded) ※:Cursor&Playable Information Data(1byte) Bit1:Playable Music =1 Bit2:Directory Bit3:Don't Care Bit4:CURSOR SELECT=1 Bit7:Picture Bit5,6,8:Don't Care **********_???:MAX 96byte	NSA<CR> (Return NSA0-NSA8)	NSA0<CR> (Return) NSA0**********_???(96byte)<CR> NSA1※(Flag1byte)*********_???(95byte)<CR> NSA2※(Flag1byte)*********_???(95byte)<CR> NSA3※(Flag1byte)*********_???(95byte)<CR> NSA4※(Flag1byte)*********_???(95byte)<CR> NSA5※(Flag1byte)*********_???(95byte)<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
				(example)	NSA0Now Playing_USB_??????<CR> NSA1※Song_???????????????<CR> NSA2※/Artist_????????????????<CR> NSA3※bitrate_????????????????<CR> NSA4※Album_????????????????<CR> NSA5※ 00:11 100%_???<CR> NSA6_????????????????????????<CR> NSA7_????????????????????????<CR> NSA8 [1/10]_??????<CR> **BT playback** **NSANow Playing_???????<CR>** **NSA1※Title_????????????????????<CR>** **NSA2※Artist_????????????????????<CR>** **NSA3※????????????????????????<CR>** **NSA4※Album_????????????????????<CR>** **NSA5_????????????????????????????<CR>** **NSA6_????????????????????????????<CR>**												
	NSE		Request Onscreen Display Information List (UTF-8 CODE Character) *UTF-8 Character(MAX96byte) _:Null ?: Don't Care (The character after Null should be disregarded) ※:Cursor&Playable Information Data(1byte) Bit1:Playable Music =1 Bit2:Directory Bit3:Don't Care Bit4:CURSOR SELECT=1 Bit7:Picture Bit5,6,8:Don't Care	NSE<CR> (Return NSE0-NSE8)	NSE0<CR> (Return) NSE0**********_???(96byte)<CR> NSE1※(Flag1byte)*********_???(95byte)<CR> NSE2※(Flag1byte)*********_???(95byte)<CR> NSE3※(Flag1byte)*********_???(95byte)<CR> NSE4※(Flag1byte)*********_???(95byte)<CR> NSE5※(Flag1byte)*********_???(95byte)<C	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
				(example)	NSE0Now Playing_USB_??????<CR> NSE1※Song_???????????????<CR> NSE2※Artist_????????????????<CR> NSE3※_????????????????????<CR> NSE4※Album_????????????????<CR> NSE5※ 00:11 100%_???<CR> NSE6_????????????????????????<CR> NSE7_????????????????????????<CR> NSE8 [1/10]_??????<CR> **Bluetooth playback** **NSENow Playing_???????<CR>** **NSE1※Title_????????????????????<CR>** **NSE2※Artist_????????????????????<CR>** **NSE3※????????????????????????????<CR>** **NSE4※Album_????????????????????<CR>** **NSE5_????????????????????????????<CR>**												
System Control	MN	CUP	"Cursor Up" Control	MNCUP<CR>	※command only	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		CDN	"Cursor Down" Control	MNCDN<CR>	※command only	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		CLT	"Cursor Left" Control	MNCLT<CR>	※command only	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		CRT	"Cursor Right" Control	MNCRT<CR>	※command only	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		ENT	"Enter" Control	MNENT<CR>	※command only	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		RTN	"RETURN" Control	MNRTN<CR>	※command only	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		OPT	"OPTION" Control	MNOPT<CR>	※command only	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		INF	"INFO"Control	MNINF<CR>	※command only	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		CHL	"Channel Level Adjust"menu on/offControl	MNCHL<CR>	※command only	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		MEN ON	"Setup Menu ON" Control	MNMEN ON<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		MEN OFF	"Setup Menu OFF" Control	MNMEN OFF<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		MEN?	Return MNMEN(Menu) status	MNMEN?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MNMEN ON<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MNMEN OFF<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		ZST ON	"All Zone Stereo" direct Control	MNZST ON<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		ZST OFF	"All Zone Stereo" direct Control	MNZST OFF<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		ZST?<CR>	Return MNZST status	MNZST?<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MNZST ON<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					MNZST OFF<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	SY	REMOTE LOCK ON REMOTE LOCK OFF	REMOTE CONTROL LOCK ON/OFF	SYREMOTE LOCK ON<CR> SYREMOTE LOCK OFF<CR>	<- <-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		PANEL LOCK ON	PANEL BUTTON(Except MASTER VOL.)CONTROL LOCK ON	SYPANEL LOCK ON<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		PANEL+V LOCK ON	PANEL BUTTON & MASTER VOL. CONTROL LOCK ON	SYPANEL+V LOCK ON<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		PANEL LOCK OFF	PANEL BUTTON & MASTER VOL. CONTROL LOCK OFF	SYPANEL LOCK OFF<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	TR	1 ON	Trigger 1 ON/OFF Control	TR1 ON<CR>	<-	✓	✓	✓	✓	✓	✓	✓	-	-	-	-	-	-	-	-
		1 OFF		TR1 OFF<CR>	<-	✓	✓	✓	✓	✓	✓	✓	-	-	-	-	-	-	-	-
		2 ON	Trigger 2 ON/OFF Control	TR2 ON<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		2 OFF		TR2 OFF<CR>	<-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-
		?	Return TR Status	TR?<CR>	TR1 ON<CR> TR2 ON<CR>	✓	✓	✓	✓	✓	✓	✓	-	-	-	-	-	-	-	-
	UG	IDN	ID Number for UPGRADE is displayed on FL Display **********:12-digit ID Number	UGIDN<CR>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					UGIDN **********<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					UGIDN NG<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	RM	STA	REMOTE MAINTENANCE Mode Start	RM STA<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
		END	REMOTE MAINTENANCE Mode End	RM END<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
		?	Return RM Status	RM ?<CR>	RM ON<CR> RM OFF<CR>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
	DIM	BRI	Dimmer = Bright	DIM BRI<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		DIM	Dimmer = Dim	DIM DIM<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		DAR	Dimmer = Dark	DIM DAR<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		OFF	Dimmer = Off	DIM OFF<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SEL	Dimmer setting select(Toggle) Bright→Dim→Dark→Off	DIM SEL<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		?	Return DIM Status	DIM ?<CR>	<-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Revision

FY15V01 4/23/2015 *Added X1200/X2200*

FY15V02 6/30/2015 *Added X3200/X4200*

Volume_CMD"MV**""Z2**""Z3**"

Relative(dB)	Absolute
---	**0**
-79.5	0.5
-79	1
-78.5	1.5
-78	2
-77.5	2.5
-77	3
-76.5	3.5
-76	4
-75.5	4.5
-75	5
-74.5	5.5
-74	6
-73.5	6.5
-73	7
-72.5	7.5
-72	8
-71.5	8.5
-71	9
-70.5	9.5
-70	**10**
-69.5	10.5
-69	11
-68.5	11.5
-68	12
-67.5	12.5
-67	13
-66.5	13.5
-66	14
-65.5	14.5
-65	15
-64.5	15.5
-64	16
-63.5	16.5
-63	17
-62.5	17.5
-62	18
-61.5	18.5
-61	19
-60.5	19.5
-60	**20**
-59.5	20.5
-59	21
-58.5	21.5
-58	22
-57.5	22.5
-57	23
-56.5	23.5
-56	24
-55.5	24.5
-55	25
-54.5	25.5
-54	26
-53.5	26.5
-53	27
-52.5	27.5
-52	28
-51.5	28.5
-51	29
-50.5	29.5
-50	**30**
-49.5	30.5
-49	31
-48.5	31.5
-48	32
-47.5	32.5
-47	33
-46.5	33.5
-46	34
-45.5	34.5
-45	35
-44.5	35.5
-44	36
-43.5	36.5
-43	37
-42.5	37.5
-42	38
-41.5	38.5
-41	39
-40.5	39.5
-40	**40**
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1.5	81.5
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2.5	82.5
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3.5	83.5
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4.5	84.5
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5.5	85.5
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6.5	86.5
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7.5	87.5
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8.5	88.5
9	89
9.5	89.5
10	**90**
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11.5	91.5
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13.5	93.5
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14.5	94.5
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15.5	95.5
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16.5	96.5
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17.5	97.5
18	98