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Showcase Processor

Surround

Preamp/Processor

RS-232 Port: Sending Commands and Interpreting Data

RC-5 Remote: Commands

Developer's Reference

Showcase Processor
Surround Preamp/Processor
Developer's Reference
v 03.0

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Overview

This document is designed for application developers who want to control the Showcase Processor using an external computer-based device. The document contains four sections:

1. Connecting to the RS-232 Port, including the RS-232 connector diagram, and RS-232 Port Protocols, *on page 4*
2. RS-232 Commands, *on page 5*
3. RS-232 Status Feedback Description, *on page 9*
4. RS-232 Status Block Descriptions, showing how the Showcase Processor reports operational status, *on page 9*
5. RC-5 Commands, describing the codes used for controlling the Showcase Processor via IR, *on page 15.*

Connecting to the RS-232 Port

A 9-pin RS-232 port is located on the right-hand side of the Showcase Processor back panel. Make sure the clamping screws (or thumbscrews) securely fasten the connection cable from the external computer-based device to the RS-232 port on the Showcase Processor.

Refer to the operating manual of your external computer-based device for instructions on connecting to the Showcase Processor.

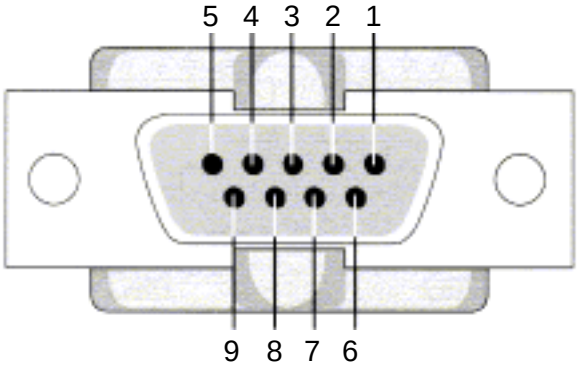
WIRING THE MALE RS-232 PORT CONNECTOR

To wire the male connector, follow these steps:

1. Locate the pin numbers on the male connector plug (not shown).
2. Locate the pinout numbers on the female connector. (See Pinout Signal list below).
3. Wire the male connector, matching the pin numbers on the connector plug to the pinout numbers on the female connector. Only three signals are necessary: 2=Received Data, 3=Transmitted Data, and 5=Signal Ground.

RS-232 PORT FEMALE CONNECTOR

(Located on the back panel of the Showcase Processor)



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

RS-232 Port Protocols

The Showcase Processor RS-232 connection port is set to the following protocols:

9600 Baud 8 Data Bits 1 Stop Bit No Parity

Showcase Processor RS-232 Commands

MENU COMMANDS

COMMAND	RS-232 CODE
Up	UPZ
Down	DWNZ
Left	LFTZ
Right	RGTZ
Menu	MENZ
Enter	ENTZ
Previous	PRVZ

AUTO-STATUS COMMANDS

Disable Auto Status	ASTDZ
Enable Auto Status	ASTEZ
Get Status	STAZ

GENERAL DEVICE SELECT COMMANDS

DVD Device Select[1]	DVDZ
LD Device Select[1]	LDZ
Satellite Device Select[1]	SATZ
VCR Device Select[1]	VCRZ
TV Device Select[1]	TVZ
CD Device Select[1]	CDZ
Tuner Device Select[1]	TUNZ
Aux1 Device Select[1]	AU1Z
Game Device Select[1]	AU2Z
Tape Monitor Select[1]	TPZ

LEVEL COMMANDS

Up		UPZ
Down		DWNZ
Speaker Volume	000 - 152	XXXMVLZ
Center Trim Select	then use UPZ and DWNZ	ICVLZ
Surround Trim Select	then use UPZ and DWNZ send twice for Back Trim Select	IRVLZ
Sub Trim Select	then use UPZ and DWNZ	ISUBZ
Center Speaker Trim	000 - 020, sets -10 to +10 dB	XXXCVLZ
Surround Speaker Trim	000 - 020, sets -10 to +10 dB	XXXSRLZ
Back Speaker Trim	000 - 020, sets -10 to +10 dB	XXXBVLZ
Subwoofer Trim	000 - 020, sets -10 to +10 dB	XXXSVLZ
Balance Select	then use UPZ and DWNZ	IBALZ
Balance	000 -026, sets right off, left +6, through right +6, left off 1/2 dB steps	XXBALZ
Mute		MUTZ
Night Compression		NTCZ
Normal Compression		NMCZ
Max Compression		MXCZ

[1] The General Device Select Command is the best choice for normal operation: It engages any configurations set through the Showcase Processor menu.

Showcase Processor RS-232 Commands, continued

GENERIC DIRECT SELECT COMMANDS

Note

It is best to use the Showcase Processor on-screen configuration menus, not the Generic Direct Select Command, to configure a particular device. Please see the Showcase Processor Owner's Reference for configuration details.

COMMAND	RS-232 CODE
7.1 Input select[2]	AMCZ
Analog Audio Input-1[2]	AS1Z
Analog Audio Input-2[2]	AS2Z
Analog Audio Input-3[2]	AS3Z
Analog Audio Input-4[2]	AS4Z
Analog Audio Input-5[2]	AS5Z
Analog Audio Input-6[2]	AS6Z
Analog Audio Input-7[2]	AS7Z
Analog Balanced Input[2]	AB1Z
Analog Tape Select[2]	ATPAZ
Analog VCR Select[2]	AVCAZ
Coax-1 Digital Audio Input Select[2]	CO1Z
Coax-2 Digital Audio Input Select[2]	CO2Z
Coax-3 Digital Audio Input Select[2]	CO3Z
Coax-4 Digital Audio Input Select[2]	CO4Z
Optical-1 Digital Audio Input Select[2]	OPT1Z
Optical-2 Digital Audio Input Select[2]	OPT2Z
Optical-3 Digital Audio Input Select[2]	OPT3Z
Optical-4 Digital Audio Input Select[2]	OPT4Z
Component Video-1[2]	CM1Z
Component Video-2[2]	CM2Z
Component Video-3[2]	CM3Z
Composite Video-1[2]	CS1Z
Composite Video-2[2]	CS2Z
Composite Video-3[2]	CS3Z
Composite Video-4[2]	CS4Z
S Video-1[2]	SV1Z
S Video-2[2]	SV2Z
S video-3[2]	SV3Z
S video-4[2]	SV4Z

POWER COMMANDS

Power On	1PWRZ
Power Off	0PWRZ

ROOM EQ COMMAND

Room EQ Select	xxx = 000-004 (000 = OFF) (001-004 selects memory 1-4)	xxxEQMZ

[2] Direct Input Selects override the configurations set through the Showcase Processor configuration menus.

Showcase Processor RS-232 Commands, continued

TRIGGER COMMANDS

COMMAND		RS-232 CODE
Trigger-1	OFF	0TR1Z
Trigger-1	ON	1TRIZ
Trigger-2	OFF	0TR2Z
Trigger-2	ON	1TR2Z
Trigger-3	OFF	0TR3Z
Trigger-3	ON	1TR3Z
Trigger-4	OFF	0TR4Z
Trigger-4	ON	1TR4Z

AUDIO DECODE MODE COMMANDS

Mode 1		MS1Z
Mode 2		MS2Z
Prologic		MVZ
Stereo		STZ
Preamp		PAZ
THX		THX
Audio Decode Set Mode	000 – 038, sets mode*	XXXMODZ

** Refer to the list of audio decode modes and corresponding codes on page 8 to set the mode. Modes that do not apply to the current input stream are ignored.*

Showcase Processor RS-232 Commands, continued

Audio decode modes and corresponding codes

AUDIO DECODE MODE	CODE
Dolby Digital 5.1	000
Dolby Digital 5.1 + THX	001
Dolby Digital 5.1 + THX EX	002
AC3 2/0 Stereo Mode (Pass Mode)	003
AC3 2/0 Pro-Logic II Movie Mode	004
AC3 2/0 Pro-Logic II Music Mode	005
AC3 2/0 Pro-Logic II Matrix Mode	006
AC3 2/0 Pro-Logic II Emulation Mode	007
AC3 2/0 Pro-Logic II Movie +THX Mode	008
AC3 2/0 Pro-Logic II Emulation+THX Mode	009
DTS 5.1 Music	010
DTS 5.1 Movie	011
DTS 5.1 Matrix	012
DTS 5.1 Movie + THX	013
DTS 5.1 Matrix + THX	014
DTS 6.1 Discrete	015
DTS 6.1 Discrete + THX	016
DTS 5.1 Force	017
Stereo Mode (Pass Mode)	018
Pro-Logic II Movie Mode	019
Pro-Logic II Music Mode	020
Pro-Logic II Matrix Mode	021
Pro-Logic II Emulation Mode	022
Pro-Logic II Movie + THX Mode	023
Pro-Logic II Emulation + THX	024
DTS Neo:6 Cinema 6 Mode	025
DTS Neo:6 Music Mode	026
DTS Neo:6 Cinema 6 + THX Mode	027
Party Mode	028
General Admission Mode	029
Front Row Mode	030
On Stage Mode	031
Enhanced Stereo Mode	032
Orchestra Mode	033
Mezzanine Mode	034
Full Range + Sub Mode	035
Monophonic Mode	036
24/96 Decode Mode	038

Showcase Processor RS-232 Status Feedback Description

The Showcase Processor reports its operational status by transmitting a block of status data via the RS-232 connector. The block is configured as eighteen 8-bit words. The first and last word always contains hexadecimal code 55 to facilitate message framing and synchronization. When the data block is sent through an RS-232 port, each 8-bit word transmitted will also have 1 stop bit associated with it. The exact RS-232 protocol settings for both status and Showcase Processor control are as follows:

9600 Baud 8 Data Bits 1 Stop Bit No Parity

The feedback system is available only through the RS-232 connector. The status can be activated in two ways. The first is to ask for status to be sent by sending the RS-232 command code "STAZ". The second is to enable auto status by sending the RS-232 command code "ASTEZ". Once the auto status command is sent, the Showcase Processor will transmit a status block whenever the status changes. Auto status is disabled by sending the RS-232 command code "ASTDZ". Auto status remains enabled until AC power is removed or turned off. When AC power is reapplied, auto status is disabled.

Showcase Processor RS-232 Status Block Descriptions

All numeric values described in the following charts are decimal values unless otherwise noted. The description of the eighteen 8-bit words follow.

The values marked Reserved must be ignored during pattern matching.

Word 1: Start of Message

Bit	7	6	5	4	3	2	1	0
Description	0	1	0	1	0	1	0	1

Bit 7 – 0: Hexadecimal 55

Word 2: General Status I

Bit	7	6	5	4	3	2	1	0
Description	System Mute	User Mute	Reserved	Reserved	Input Trigger	Reserved	Reserved	Power

Bit 7: System Mute 1 = Internal mute is active
Bit 6: Main Mute 1 = Main mute is active
Bit 5: Reserved
Bit 4: Reserved
Bit 3: Input Trigger 1 = 12V input trigger is active
Bit 2: Reserved
Bit 1: Reserved
Bit 0: Main Power 1 = Main Power is on

RS-232 Status Block Descriptions, continued

Word 3: General Status II

Bit	7	6	5	4	3	2	1	0
Description	Menu Mode	Auto Status Enabled	PLL Locked	Trigger 4 On	Trigger 3 On	Trigger 2 On	Trigger 1 On	DSP Running

Bit 7: Menu mode 1 = Menu mode is active
Bit 6: Auto Status 1 = Auto Status Enabled
Bit 5: PLL Locked 1 = PLL is locked (valid digital input signal detected)
Bit 4: Trigger 4 On 1 = Trigger 4 is on
Bit 3: Trigger 3 On 1 = Trigger 3 is on
Bit 2: Trigger 2 On 1 = Trigger 2 is on
Bit 1: Trigger 1 On 1 = Trigger 1 is on
Bit 0: DSP Running 1 = DSPs are not reset

Word 4: Current Device

Bit	7	6	5	4	3	2	1	0
Description	Reserved	Reserved	Reserved	Reserved	CD3	CD2	CD1	CD0

Bits 7 – 4: Reserved
Bits 3 – 0: Current Device

Devices

0	DVD	5	CD
1	LD	6	TUNER
2	SAT	7	AUX 1
3	VCR	8	GAME
4	TV	9	TAPE

Word 5: Volume

Bit	7	6	5	4	3	2	1	0
Description	V0L 7	V0L 6	V0L 5	V0L 4	V0L 3	V0L 2	V0L 1	V0L 0

Bit 7 – 0: Current Main Volume setting 0 – 152

Word 6: Zone 2 Volume

Bit	7	6	5	4	3	2	1	0
Description	Reserved	Reserved	Reserved	Reserved	Reserved	Reserved	Reserved	Reserved

Bit 7 – 0: Reserved

Word 7: Video Input

Bit	7	6	5	4	3	2	1	0
Description	VID IN 7	VID IN 6	VID IN 5	VID IN 4	VID IN 3	VID IN 2	VID IN 1	VID IN 0

Bit 7 – 0: Current Video Input

Video Inputs

1	S-Video 1	7	Component Video 3
2	S-Video 2	8	Composite Video 1
3	S-Video 3	9	Composite Video 2
4	S-Video 4	10	Composite Video 3
5	Component Video 1	11	Composite Video 4
6	Component Video 2		

RS-232 Status Block Descriptions, continued

Word 8: Main Zone Audio Input

Bit	7	6	5	4	3	2	1	0
Description	MN AUD IN 7	MN AUD IN 6	MN AUD IN 5	MN AUD IN 4	MN AUD IN 3	MN AUD IN 2	MN AUD IN 1	MN AUD IN 0

Bit 7 – 0: Main Zone Audio Input

Audio Inputs

1	Digital: COAX 1	10	Analog: S1
2	Digital: COAX 2	11	Analog: S2
3	Digital: COAX 3	12	Analog: S3
4	Digital: COAX 4	13	Analog: S4
5	Digital: Optical 1	14	Analog: S5
6	Digital: Optical 2	15	Analog: S6
7	Digital: Optical 3	16	Analog: S7
8	Digital: Optical 4	17	Analog: Tape
9	Analog: B1	18	Analog: VCR
		19	7.1 Input

Word 9: Zone 2 Audio Input

Bit	7	6	5	4	3	2	1	0
Description	Reserved	Reserved	Reserved	Reserved	Reserved	Reserved	Reserved	Reserved

Bit 7 – 0: Reserved

Word 10: Loudspeakers / Current Audio Stream

Bit	7	6	5	4	3	2	1	0
Description	Back Enabled	Sub Enabled	Surround Enabled	Center Enabled	Input Stream 3	Input Stream 2	Input Stream 1	Input Stream 0

Bit 7: Back Enabled 1 = Back loudspeaker(s) is(are) enabled
Bit 6: Sub Enabled 1 = Subwoofer is enabled
Bit 5: Surround Enabled 1 = Surround loudspeakers are enabled
Bit 4: Center Enabled 1 = Center loudspeaker is enabled
Bits 3–0: Current Input Stream Mode

Input Stream Modes

1	PCM	7	PCM Analog Input
2	Dolby Digital 2.0	8	Dolby Digital X/Y
3	Dolby Digital 5.1	9	7.1 (8 Channel discrete)
4	DTS 5.1	10	DTS 6.1 ES Matrix
5	24-bit, 96 KHz PCM	11	DTS 6.1 ES Discrete
6	PCM Digital Input	12	DTS 6.1 ES Matrix & Discrete

Word 11: Current Audio Decode Modes

Bit	7	6	5	4	3	2	1	0
Description	CAD 7	CAD 6	CAD 5	CAD 4	CAD 3	CAD 2	CAD 1	CAD 0

Bit 7 – 0: Current Audio Decode Modes

Analog and PCM Decode Modes
1 Stereo Mode (Pass Mode)
2 Pro-Logic II Movie Mode
3 Pro-Logic II Music Mode
4 Pro-Logic II Matrix Mode
5 Pro-Logic II Emulation Mode
6 Pro-Logic II Movie + THX Mode
7 Multichannel Input Mode
8 Pro-Logic II Emulation + THX Mode
9 DTS Neo:6 Cinema 6 Mode
11 DTS Neo:6 Music Mode
12 DTS Neo:6 Cinema 6 + THX Mode
13 Noise Mode
14 Party Mode
15 General Admission Mode
16 Front Row Mode
17 On Stage Mode
18 Enhanced Stereo Mode
19 Orchestra Mode
20 Mezzanine Mode
21 Full Range + Sub Mode
22 Monophonic Mode
23 Analog-only Preamp Mode

Dolby AC3, 2/0 Modes
24 Stereo Mode (Pass Mode)
25 Pro-Logic II Movie Mode
26 Pro-Logic II Music Mode
27 Pro-Logic II Matrix Mode
28 Pro-Logic II Emulation Mode
29 Pro-Logic II Movie + THX Mode
30 Pro-Logic II Matrix + THX Mode
31 Pro-Logic II Emulation + THX Mode
32 was DTS Neo:6 Cinema 6 Mode
33 was DTS Neo:6 Cinema 5 Mode
34 was DTS Neo:6 Music Mode
35 was DTS Neo:6 Cinema 6 + THX Mode
36 was DTS Neo:6 Cinema 5 + THX Mode
37 Classical Mode
38 General Admission Mode
39 Front Row Mode
40 On Stage Mode
41 Enhanced Stereo Mode
42 Orchestra Mode
43 Mezzanine Mode
44 Full Range + Sub Mode
45 Monophonic Mode
46 Analog-only Preamp Mode

Dolby AC3, 5/1 Modes
47 Dolby Digital 5.1
48 Dolby Digital 5.1 + THX
49 Dolby Digital 5.1 + THX EX

Dolby AC3, X/Y Modes
65 Dolby Digital 1+1
66 Dolby Digital 1/0
67 Dolby Digital 3/0
68 Dolby Digital 2/1
69 Dolby Digital 3/1
70 Dolby Digital 2/2

DTS Modes
50 DTS 5.1 Movie
51 DTS 5.1 Matrix
52 DTS 5.1 Movie + THX
53 DTS 5.1 Music
54 DTS 5.1 Matrix + THX
55 DTS 6.1 Discrete
56 DTS 6.1 Discrete + THX
57 DTS 5.1 Force

24-bit, 96 KHz Modes
10 PCM 24-bit, 96 KHz

7.1 (8 Channel Discrete Input) Modes
7 7.1

RS-232 Status Block Descriptions, continued

Word 12: Balance/Compression Mode

Bit	7	6	5	4	3	2	1	0
Description	Reserved	CMode 1	CMode 0	BAL 4	BAL 3	BAL 2	BAL 1	BAL 0

Balance Setting: 0 – 26

Bits 5 – 6: Compression Mode

Settings

0	Right	Off	9	Left	+2.0	18	Right	+2.5
1	Left	+6	10	Left	+1.5	19	Right	+3.0
2	Left	+5.5	11	Left	+1.0	20	Right	+3.5
3	Left	+5.0	12	Left	+0.5	21	Right	+4.0
4	Left	+4.5	13	Centered		22	Right	+4.5
5	Left	+4.0	14	Right	+0.5	23	Right	+5.0
6	Left	+3.5	15	Right	+1.0	24	Right	+5.5
7	Left	+3.0	16	Right	+1.5	25	Right	+6.0
8	Left	+2.5	17	Right	+2.0	26	Left	Off

Compression Modes

1 Max 2 Normal 3 Night

Word 13: Room EQ/Zone 2 Balance

Bit	7	6	5	4	3	2	1	0
Description	Room EQ 2	Room EQ 1	Room EQ 0	Reserved	Reserved	Reserved	Reserved	Reserved

Bits 7 – 5: Room EQ Setting

Room EQ Setting

0 Room EQ OFF
1 Room EQ Memory 1
2 Room EQ Memory 2
3 Room EQ Memory 3
4 Room EQ Memory 4

Bits 4 – 0: Reserved

Word 14: Center Trim

Bit	7	6	5	4	3	2	1	0
Description	Reserved	Reserved	Reserved	CT 4	CT 3	CT 2	CT 1	CT 0

Bits 4 – 0: Center Trim

Trim Settings

0	-10	dB	10	0	dB
1	-9	dB	11	+1	dB
2	-8	dB	12	+2	dB
3	-7	dB	13	+3	dB
4	-6	dB	14	+4	dB
5	-5	dB	15	+5	dB
6	-4	dB	16	+6	dB
7	-3	dB	17	+7	dB
8	-2	dB	18	+8	dB
9	-1	dB	19	+9	dB
			20	+10	dB

RS-232 Status Block Descriptions, continued

Word 15: Surround Trim

Bit	7	6	5	4	3	2	1	0
Description	Mode 1/2 LED Status	Reserved	Reserved	RT 4	RT 3	RT 2	RT 1	RT 0

Bit 7: Mode 1/2 LED Status 1 = Mode 1 LED is On, 0 = Mode 2 LED is On

Bits 4 – 0: Surround Trim

Trim Settings

0	-10	dB	7	-3	dB	14	+4	dB
1	-9	dB	8	-2	dB	15	+5	dB
2	-8	dB	9	-1	dB	16	+6	dB
3	-7	dB	10	0	dB	17	+7	dB
4	-6	dB	11	+1	dB	18	+8	dB
5	-5	dB	12	+2	dB	19	+9	dB
6	-4	dB	13	+3	dB	20	+10	dB

Word 16: Back Trim

Bit	7	6	5	4	3	2	1	0
Description	Reserved	Reserved	Reserved	BT 4	BT 3	BT 2	BT 1	BT 0

Bits 4 – 0: Back Trim

Trim Settings

0	-10	dB	7	-3	dB	14	+4	dB
1	-9	dB	8	-2	dB	15	+5	dB
2	-8	dB	9	-1	dB	16	+6	dB
3	-7	dB	10	0	dB	17	+7	dB
4	-6	dB	11	+1	dB	18	+8	dB
5	-5	dB	12	+2	dB	19	+9	dB
6	-4	dB	13	+3	dB	20	+10	dB

Word 17: Sub Trim

Bit	7	6	5	4	3	2	1	0
Description	Reserved	Reserved	Reserved	ST 4	ST 3	ST 2	ST 1	ST 0

Bits 4 – 0: Sub Trim

Trim Settings

0	-10	dB	7	-3	dB	14	+4	dB
1	-9	dB	8	-2	dB	15	+5	dB
2	-8	dB	9	-1	dB	16	+6	dB
3	-7	dB	10	0	dB	17	+7	dB
4	-6	dB	11	+1	dB	18	+8	dB
5	-5	dB	12	+2	dB	19	+9	dB
6	-4	dB	13	+3	dB	20	+10	dB

Word 18: End of Message

Bit	7	6	5	4	3	2	1	0
Description	0	1	0	1	0	1	0	1

Bit 7 – 0: Hexadecimal 55

RC-5 Commands for the Showcase Processor

The following codes are used for controlling the Showcase Processor via IR.

SYSTEM (HEX)	COMMAND (HEX)	SYSTEM (DEC)	COMMAND (DEC)	RC5 WORD (HEX)	SHOWCASE PROCESSOR
1C	0	28	0	3700	N/A
1C	1	28	1	3701	SUB
1C	2	28	2	3702	REAR
1C	3	28	3	3703	N/A
1C	4	28	4	3704	N/A
1C	5	28	5	3705	N/A
1C	6	28	6	3706	CENTER
1C	7	28	7	3707	MUTE
1C	8	28	8	3708	N/A
1C	9	28	9	3709	N/A
1C	A	28	10	370A	N/A
1C	B	28	11	370B	DOWN
1C	C	28	12	370C	MENU
1C	D	28	13	370D	RIGHT
1C	E	28	14	370E	ENTER
1C	F	28	15	370F	LEFT
1C	10	28	16	3710	TAPE
1C	11	28	17	3711	UP
1C	12	28	18	3712	PREV
1C	13	28	19	3713	N/A
1C	14	28	20	3714	EQ_SEL_MEM0
1C	15	28	21	3715	EQ_SEL_MEM1
1C	16	28	22	3716	EQ_SEL_MEM2
1C	17	28	23	3717	EQ_SEL_MEM3
1C	18	28	24	3718	EQ_SEL_MEM4
1C	19	28	25	3719	7.1 INPUT
1C	1A	28	26	371A	BALANCE
1C	1B	28	27	371B	B1
1C	1C	28	28	371C	S1
1C	1D	28	29	371D	S2
1C	1E	28	30	371E	S3
1C	1F	28	31	371F	S4
1C	20	28	32	3720	S5
1C	21	28	33	3721	COAX1
1C	22	28	34	3722	COAX2
1C	23	28	35	3723	OPT1
1C	24	28	36	3724	OPT2
1C	25	28	37	3725	S6
1C	26	28	38	3726	S7
1C	27	28	39	3727	TAPE ON
1C	28	28	40	3728	TAPE OFF
1C	29	28	41	3729	S-VIDEO1
1C	2A	28	42	372A	S-VIDEO2
1C	2B	28	43	372B	S-VIDEO3
1C	2C	28	44	372C	S-VIDEO4
1C	2D	28	45	372D	COMPOSITE1
1C	2E	28	46	372E	COMPOSITE2
1C	2F	28	47	372F	COMPOSITE3
1C	30	28	48	3730	COMPOSITE4
1C	31	28	49	3731	Z2VOLUME_PLUS_10
1C	32	28	50	3732	Z2VOLUME_MINUS_10
1C	33	28	51	3733	MUSIC1
1C	34	28	52	3734	N/A

RC-5 Commands for the Showcase Processor, continued

SYSTEM (HEX)	COMMAND (HEX)	SYSTEM (DEC)	COMMAND (DEC)	RC5 WORD (HEX)	SHOWCASE PROCESSOR
1C	35	28	53	3735	STEREO
1C	36	28	54	3736	N/A
1C	37	28	55	3737	VOL ZERO
1C	38	28	56	3738	PWR ON
1C	39	28	57	3739	PWR OFF
1C	3A	28	58	373A	MUTE ON
1C	3B	28	59	373B	MUTE OFF
1C	3C	28	60	373C	VOL +10
1C	3D	28	61	373D	VOL -10
1C	3E	28	62	373E	PROLOGIC
1C	3F	28	63	373F	N/A
19	0	25	0	3640	MUSIC2
19	1	25	1	3641	DVD
19	2	25	2	3642	LD
19	3	25	3	3643	SAT
19	4	25	4	3644	VCR
19	5	25	5	3645	TV
19	6	25	6	3646	CD
19	7	25	7	3647	TUNER
19	8	25	8	3648	AUX1
19	9	25	9	3649	AUX2
19	A	25	10	364A	N/A
19	B	25	11	364B	N/A
19	C	25	12	364C	THX
19	D	25	13	364D	VCR INPUT
19	E	25	14	364E	TAPE INPUT
19	F	25	15	364F	N/A
19	10	25	16	3650	COMPONENT1
19	11	25	17	3651	COMPONENT2
19	12	25	18	3652	COAX3
19	13	25	19	3653	COAX4
19	14	25	20	3654	OPT3
19	15	25	21	3655	OPT4
19	16	25	22	3656	TRIGGER1 ON
19	17	25	23	3657	TRIGGER1 OFF
19	18	25	24	3658	TRIGGER2 ON
19	19	25	25	3659	TRIGGER2 OFF
19	1A	25	26	365A	TRIGGER3 ON
19	1B	25	27	365B	TRIGGER3 OFF
19	1C	25	28	365C	TRIGGER4 ON
19	1D	25	29	365D	TRIGGER4 OFF
19	1E	25	30	365E	N/A
19	1F	25	31	365F	N/A
19	20	25	32	3660	N/A
19	21	25	33	3661	THX
19	22	25	34	3662	N/A
19	23	25	35	3663	PREAMP
19	24	25	36	3664	N/A
19	25	25	37	3665	N/A
19	26	25	38	3666	N/A
19	27	25	39	3667	N/A

RC-5 Commands for the Showcase Processor, continued

SYSTEM (HEX)	COMMAND (HEX)	SYSTEM (DEC)	COMMAND (DEC)	RC5 WORD (HEX)	SHOWCASE PROCESSOR
19	28	25	40	3668	MAX DYNR
19	29	25	41	3669	NIGHT DYNR
19	2A	25	42	366A	NORM DYNR
19	2B	25	43	366B	COMPONENT3
19	2C	25	44	366C	N/A
19	2D	25	45	366D	N/A
19	2E	25	46	366E	N/A
19	2F	25	47	366F	N/A
19	30	25	48	3670	DIGIT 0
19	31	25	49	3671	DIGIT 1
19	32	25	50	3672	DIGIT 2
19	33	25	51	3673	DIGIT 3
19	34	25	52	3674	DIGIT 4
19	35	25	53	3675	DIGIT 5
19	36	25	54	3676	DIGIT 6
19	37	25	55	3677	DIGIT 7
19	38	25	56	3678	DIGIT 8
19	39	25	57	3679	DIGIT 9
19	3A	25	58	367A	SET MODE**
19	3B	25	59	367B	N/A
19	3C	25	60	367C	N/A
19	3D	25	61	367D	N/A
19	3E	25	62	367E	N/A
19	3F	25	63	367F	N/A

***The SET MODE command allows the user to set a specific audio decode mode using RC 5 commands. The code is set by sending the unit the SET MODE command, then the two DIGIT commands which define the mode. These three commands must occur in sequence; any command sent after the SET MODE command, other than the DIGIT commands, causes the SET MODE sequence to be reset. Refer to the list of audio decode modes on page 18. Modes that do not apply to the current input stream are ignored.*

Showcase Processor RC-5 Commands, continued

Audio decode modes and corresponding codes

AUDIO DECODE MODE	CODE
Dolby Digital 5.1	00
Dolby Digital 5.1 + THX	01
Dolby Digital 5.1 + THX EX	02
AC3 2/0 Stereo Mode (Pass Mode)	03
AC3 2/0 Pro-Logic II Movie Mode	04
AC3 2/0 Pro-Logic II Music Mode	05
AC3 2/0 Pro-Logic II Matrix Mode	06
AC3 2/0 Pro-Logic II Emulation Mode	07
AC3 2/0 Pro-Logic II Movie +THX Mode	08
AC3 2/0 Pro-Logic II Emulation+THX Mode	09
DTS 5.1 Music	10
DTS 5.1 Movie	11
DTS 5.1 Matrix	12
DTS 5.1 Movie + THX	13
DTS 5.1 Matrix + THX	14
DTS 6.1 Discrete	15
DTS 6.1 Discrete + THX	16
DTS 5.1 Force	17
Stereo Mode (Pass Mode)	18
Pro-Logic II Movie Mode	19
Pro-Logic II Music Mode	20
Pro-Logic II Matrix Mode	21
Pro-Logic II Emulation Mode	22
Pro-Logic II Movie + THX Mode	23
Pro-Logic II Emulation + THX	24
DTS Neo:6 Cinema 6 Mode	25
DTS Neo:6 Music Mode	26
DTS Neo:6 Cinema 6 + THX Mode	27
Party Mode	28
General Admission Mode	29
Front Row Mode	30
On Stage Mode	31
Enhanced Stereo Mode	32
Orchestra Mode	33
Mezzanine Mode	34
Full Range + Sub Mode	35
Monophonic Mode	36
24/96 Decode Mode	38