



B&K Components Device Interface Protocol (BKC-DIP) Product Specific Appendices

For use with Stereo Tuner Preamplifiers:

PT 5
Reference 5 S2

Version 2.00.01

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Revision History

Version 2.00.02

1. Added Reference 5 S2 device to appendices

Version 2.00.00

1. Bumped revision to V2.0 to correspond to changes with respect to BKC-DIP V2.0. Although this device is not V2.0 compliant, the documentation was changed for consistency of the references from the main BKC-DIP document.
2. Added **Appendix P, Override Parameters** and notes. With the introduction of new B&K Components devices and BKC-DIP V2.0, Override Parameters are no longer universal among all devices. Thus each product must include an appendix indicating which Override Parameters it supports.
3. Added **Appendix Q, Status Messages** and notes. With the introduction of new B&K Components devices and BKC-DIP V2.0, Status Messages are no longer universal among all devices. Thus each product must include an appendix indicating which Status Messages it supports.

Version 1.01.00

1. This is the first release of this documentation specified by a version number. This document is to be used in conjunction with the “*B&K Components Device Interface Protocol (BKC-DIP) Specification Version 1.02.00*” document. This documentation supercedes all documentation found in “*PT 5 B&K Components Device Interface Protocol (BKC-DIP) V1.01 Protocol Specific Appendices*” (referred to as Version 1.00.xx, see below for details).
2. Addition of **Appendix L**, Executive Command Appendix.
3. Addition of **Appendix M**, Error Log Appendix.

Version 1.00.xx

1. Documentation earlier than Version 1.01.00 was not specified by a version number. This encompasses all documentation prior to 08/07/00. Specifically, the prior document entitled “*PT 5 B&K Components Device Interface Protocol (BKC-DIP) V1.01 Protocol Specific Appendices*” which referred to document “*B&K Components Device Interface Protocol (BKC-DIP) V1.01 Protocol Document*”, describing BKC-DIP Version 1.01, is referred to here as Version 1.00.xx.

Introduction

Overview

The following is a supplement to B&K Components Device Interface Protocol (BKC-DIP) Protocol Document. This document contains the specific BKC-DIP implementation details for the B&K Components' PT 5 product.

Document Conventions

All numbers are assumed to be hexadecimal. Hexadecimal (or Hex for short) characters range from 0 to F.

For example:

The number 19 is the hexadecimal number 19 which is $(1 \times 16^1) + (9 \times 16^0)$ or 25 decimal. Similarly, EA is the hexadecimal number EA which is $(14 \times 16^1) + (10 \times 16^0)$ or 234 decimal. For clarity, some descriptions regarding numbers may use the *xxh* notation to remind the reader that the number is implicitly hexadecimal where *xx* are the hexadecimal characters 0 - F. Thus the previous examples would be 19h and EAh respectively, the "h" indicating hexadecimal.

Maximum values appearing in double quotes indicate that the parameter is an ASCII string.

For example:

"D" for the Z1 Title maximum value indicates that the title is a string with a maximum length of 0Dh (13 decimal) characters.

Italics indicate a non-literal string.

For example:

(00,G, P00, 0;*cs16*)

cs16 indicates the calculated checksum and does NOT literally appear in the data stream.

Important concepts are denoted by **NOTE**:

PT 5 Single Zone and No OSD

The PT 5 is a single Zone device controller. Therefore, only $z = 1$ is valid in zone specific commands. The PT 5 also does not have an On Screen Display (OSD).

Appendix A, Preset Parameters

(0,G,P1=FF,0;cs16) Example of Get Z1 current preset title
 (0,S,P1=A,1=24;cs16) Example of Set Z1 Preset 10 volume = 0 dB

Parameter Identifier (in hex)	Description	Parameter Max Values (in hex)	Formatting Notes
00	PT 5 Title	"D"	
01	Volume	29	Note 1
03	Current Input	6	Note 3
04	Tuner Band	1	Note 4
05	Tuner AM Frequency	73, 80	Note 5, 5a
06	Tuner FM Frequency	66, CC	Note 6, 6a
07	Tuner FM Mode	1	Note 7
40	Tape Monitor	1	Note 10
41	Headphone Mode	1	Note 8
42	Tuner Balance	C	Note 2
43	V1 Balance	C	Note 12
44	V2 Balance	C	Note 12
45	TV-V3 Balance	C	Note 12
46	DVD Balance	C	Note 12
47	CD Balance	C	Note 12
49	TAPE Balance	C	Note 12
4A	Tuner Bass Level	C	Note 2
4B	V1 Bass Level	C	Note 2
4C	V2 Bass Level	C	Note 2
4D	TV-V3 Bass Level	C	Note 2
4E	DVD Bass Level	C	Note 2
4F	CD Bass Level	C	Note 2
51	TAPE Bass Level	C	Note 2
52	Tuner Treble Level	C	Note 2
53	V1 Treble Level	C	Note 2
54	V2 Treble Level	C	Note 2
55	TV-V3 Treble Level	C	Note 2
56	DVD Treble Level	C	Note 2
57	CD Treble Level	C	Note 2
59	TAPE Treble Level	C	Note 2
5A	Tuner Loudness	1	Note 9
5B	V1 Loudness	1	Note 9
5C	V2 Loudness	1	Note 9
5D	TV-V3 Loudness	1	Note 9
5E	DVD Loudness	1	Note 9
5F	CD Loudness	1	Note 9
61	TAPE Loudness	1	Note 9
62	Favorite	1	Note 10
Current Input Aliases			Note 11
FA	Current Input Balance	C	Note 2
FB	Current Input Bass Level	C	Note 2
FC	Current Input Treble Level	C	Note 2

Appendix A Preset Parameter Notes

(0,G,P1=FF,0;cs16) Example of Get Z1 current preset title
 (0,S,P1=A,1=24;cs16) Example of Set Z1 Preset 10 volume = 0 dB

(NOTE: hex values denoted by xxh convention)

Note 1: 0h = -74 MUTE dB, 1h = -72 dB ... 25h = 0 dB, ... 29h = +8 dB

Note 2: 0h = -12.0 dB, 1h = -10 dB, ... 6h = 0.0 dB, ...
 Ch = +12.0 dB

Note 3: 0h = Tuner, 1h = V1, 2h = V2, 3h = TVV3, 4h = DVD,
 5h = CD.

NOTE: Due to special internal logic, to access TAPE, use
 Tape Monitor (Preset Parameter Identifier 40h).

Setting Tape Monitor "On" leaves the Current Input
 routed to the Tape Output, but routes Tape Input to
 the Preamp Output section.

Setting Tape Monitor "Off" returns the routing of
 Current Input to both the Tape Output and the Preamp
 Output section.

**NOTE: See BKC-DIP V1.01 Errata document for further
 details.**

Note 3: 0h = Tuner, 1h = V1, 2h = V2, 3h = TVV3, 4h = DVD,
 5h = CD, 6h = TAPE

Note 4: 0h = AM, 1h = FM

Note 5: 10 kHz AM step tuning (USA)
 $((value * 10) + 520)$ kHz, or $((AM_kHz - 520) / 10)$ with
 29h = 930 KHz; FFh indicates an uninitialized frequency.
 If tuner stations programmed, last used station's frequency
 is used, else 520 kHz.

Note 5a: 9 kHz AM step tuning
 $((value * 9) + 522)$ kHz, or $((AM_kHz - 522) / 9)$ with
 2Dh = 927 KHz; FFh indicates an uninitialized station.
 If tuner stations programmed, last used station's frequency
 is used, else 522 kHz.

Note 6: 200 kHz FM step tuning (USA)
 $((value * 0.20) + 87.5)$ MHz, or $((FM_MHz - 87.5) / 0.2)$
 with
 4Bh = 102.5 MHz; FFh indicates an uninitialized frequency.
 If tuner stations programmed, last used station's frequency
 is used, else 87.5 MHz.

Note 6a: 100 kHz FM step tuning
 $((value * 0.10) + 87.5)$ MHz, or $((FM_MHz - 87.5) / 0.1)$
 with 96h = 102.5 MHz; FFh indicates an uninitialized
 frequency. If tuner stations programmed, last used
 station's frequency
 is used, else 87.5 MHz.

Note 7: 0h = Mono, 1h = Stereo

- Note 8: 0h = Normal, 1h = HeadPhone
- Note 9: 0h = off, 1h = on
- Note 10: 0h = no, 1h = yes. Favorite presets can be scrolled through using the front panel PRESET button, or the IR PRESET +/- commands.
- Note 11: Current Input aliases implicitly use the Current Input when referring to source specific parameters.
- Note 12: 0h = Left 0.0 dB Right -12.0 dB, 1h = Left 0.0 dB Right -10.0 dB, ... 6h = Centered, ... 2Fh = Left -10.0 dB Right 0.0 dB, Ch = Left -12.0 dB Right 0.0 dB.

Appendix B, System Parameters

(0,G,S,19;cs16) Example of Get V1 Level Setting
 (0,S,S,3="LASER";cs16) Example of Set DVD Title to "LASER"

Parameter Identifier (in hex)	Description	Parameter Max Values (in hex)	Formatting Notes
00	V1 Title	"5"	
01	V2 Title	"5"	
02	TVV3 Title	"5"	
03	DVD Title	"5"	
04	CD Title	"5"	
06	Tape Title	"5"	
07	Power On Title Line 1	"10"	
08	Power On Title Line 2	"10"	
18	Tuner Level	1	Note 1
19	V1 Level	1	Note 1
1A	V2 Level	1	Note 1
1B	TVV3 Level	1	Note 1
1C	DVD Level	1	Note 1
1D	CD Level	1	Note 1
1F	Tape Level	1	Note 1
24	Display Level Setting	2	Note 2
27	Max Level	29	Note 3
28	PT 5 Product ID	10	Note 4
2E	RS 232 Port Enabled	1	Note 5
2F	RS 232 Baud Rate	9	Note 6
30	RS 232 Receive ID	7F	Note 7
31	RS 232 Transmit ID	7F	Note 7
32	RS 232 Echo Enabled	1	Note 5
33	RS 232 Update Enabled	1	Note 5
34	Front Locked	1	Note 5
35	IR Locked	1	Note 5
36	Memory Locked	1	Note 5
37	Advanced Menu Visible	1	Note 5
39	Tuner Control Out 1	3	Note 8
3D	V1 Control Out 1	3	Note 8
41	V2 Control Out 1	3	Note 8
45	TVV3 Control Out 1	3	Note 8
49	DVD Control Out 1	3	Note 8
4D	CD Control Out 1	3	Note 8
55	Tape Control Out 1	3	Note 8
5A	Realtime Enable 1 register	FF	Note 9
5B	Realtime Enable 2 register	FF	Note 9
5D	Tuner RS 232 Control Out State	F	Note 10
5E	V1 RS-232 Control Out State	F	Note 10
5F	V2 RS-232 Control Out State	F	Note 10
60	TVV3 RS-232 Control Out State	F	Note 10
61	DVD RS-232 Control Out State	F	Note 10
62	CD RS-232 Control Out State	F	Note 10
64	Tape RS-232 Control Out State	F	Note 10

65	Recall Preset Volume	1	Note 11
66	Preset Auto Naming	1	Note 5

Appendix B, System Parameter Notes

(0,G,S,19;cs16) Example of Get V1 Level Setting
 (0,S,S,3="LASER";cs16) Example of Set DVD Title to "LASER"

(NOTE: hex values denoted by xxh convention)

- Note 1: 0h = -6.0 dB, 1h = 0.0 dB
 Note 2: 0h = low, 1h = medium, 2h = high
 Note 3: 0h = mute -74 dB, 1h = -72 dB, ... 24h = 0 dB, ...29h = +8 dB
 Note 4: 0h = product ID 1, ... Fh = product ID 16, 10h = Omni
 Note 5: 0h = off, 1h = on
 Note 6: 0h = 1200, 1h = 2400, 2h = 9600, 3h = 14400, 4h = 19200, 5h = 28800, 6h = 38400, 7h = 57600, 8h = 115200
 Note 7: Valid IDs are 00h to 7Fh. Receive IDs must be unique (to avoid ambiguity).
 Note 8: 0h = off, 1h = Power, 2h = Headphone, 3h = not allowed, 4h = RS-232
 Note 9: Is a bit map to enable/disable specific Realtime Status event updates. Each bit represents its corresponding Realtime Status specifier (See **Appendix D**). 0h = disabled, 1h = enabled status for that specifier. For example, Realtime Enable 1 register = 38h indicates:

Bit	Specifier	Description	Status
0 (LSB)	8h	RESERVED	disabled
1	9h	RESERVED	enabled
2	Ah	RESERVED	enabled
3	Bh	FP Display Update	enabled
4	Ch	LED Buffer 0	enabled
5	Dh	LED Buffer 1	enabled
6	Eh	RESERVED	disabled
7 (MSB)	Fh	RESERVED	disabled

- Note 10: 0h = off, 1h = on.
 For example, DVD Control Out State = Bh and input is DVD:
 Control Out 1 on (Bit 0 = 1)

NOTE: RS-232 Control Out settings are only valid if the particular Control Out Setting for that input is set to RS-232. For example, assume the following:

PT 5 power is on
 Input is DVD
 DVD Control Out 1 4h (RS-232)
 DVD RS-232 Control Out State is 1h

The control outs would be as follows:

Control Out 1 on (RS-232 active, Bit 0 = 1)

- Note 11: 0h = Use current master volume setting, 1h = Recall master volume setting from recalled preset.

Appendix C Tuner Station Parameters

Tuner stations are not supported in the PT 5.

Appendix D Realtime Status Parameter

(0,G,R,13;cs16) Example of Get Power state
 (0,S,S,5B=04;cs16) Example of Set Power state update

Parameter Identifier (in hex)	Bit/RealTime Register	Description	Parameter Max Values (in hex)	Formatting Notes
0B	3/1	Front Panel Display Update	1	Note 1
0C	4/1	LED Buffer 0	FF	Note 2
0D	5/1	LED Buffer 1	FF	Note 2
10	0/2	Front Panel Column Flashing	F	Note 3
12	2/2	Menu Mode	1	Note 4
13	3/2	Power	1	Note 5
15	5/2	Mute	1	Note 5

Appendix D, Realtime Status Parameter Notes

(0,G,R,13;cs16) Example of Get Power state
 (0,S,S,5B=04;cs16) Example of Set Power state update

(NOTE: hex values denoted by xxh convention)

- Note 1: 0h = no display update, 1h = display updated.
- Note 2: Front Panel LED indicating status is mapped into 2 LED Buffers specified as LED Buffer 0 and LED Buffer 1. This bit map represents which LEDs are currently lit. See **Appendix K** for a complete listing of LED mapping.
- Note 3: The cursor character is primarily used when editing titles. The cursor coordinates are sent every time the cursor flashes (at a rate of approximately 2 Hz, twice per second), so it can be used to for both position and timing information.
- Note 4: 0h = overlay mode, 1h = menu mode
- Note 5: 0h = off, 1h = on. To set these global parameters issue (Set) the appropriate IR commands.

Appendix E Unit Parameters

<code>(0,G,F4,0;cs16)</code>	Example of Get Unit Name
<code>(0,G,F4,1;cs16)</code>	Example of Get Version
<code>(0,G,F4,C;cs16)</code>	Example of Get BKC-DIP Version

Parameter Identifier (in hex)	Description
00	Unit name
01	Version
02	Number of Zones
08	AM steps 9kHz/10kHz
09	FM steps 100kHz/200kHz
0C	BKC-DIP Version
0D	Software Time Stamp

Appendix F IR Commands

(0,S,I,1=2;cs16)

Example of Set Zone 1 IR Save

(0,S,I,1=24;cs16)

Example of Set Zone 1 IR Volume +

IR Command (in hex)	IR Description
02	SAVE
04	(BALANCE) RIGHT
0C	ENTER
14	ALL B&K POWER OFF
15	ALL B&K POWER ON
16	ALL B&K VOL DOWN
17	ALL B&K VOL UP
19	ALL B&K 0 dB VOL
1A	ALL B&K -20 dB VOL
1B	ALL B&K -40 dB VOL
1D	ALL B&K -60 dB VOL
1E	ALL B&K MUTE
24	MASTER VOL +
38	TUNE +
40	POWER ON
45	POWER (TOGGLE)
48	FREQ
4C	2
54	20 (B)
5C	8
60	TV-V3
64	MODE (HEADPHONE)
6C	5
6E	AM
70	TUNER
71	FM
74	UP
7C	0
80	POWER OFF
8C	1
90	V2
94	+10 (A)
9C	7
9E	TREBLE FRONT -
9F	TREBLE FRONT +
A0	V1
A6	BASS FRONT -
A7	BASS FRONT +
AC	4
B0	DVD
B4	DN
BC	*
C0	MUTE
C4	MASTER VOL -
C8	BAND
CC	3
D0	TAPE (TOGGLE)
D2	PRESET +
D4	30 (C)

D7	STEREO / MONO
D8	TUNE -
DC	9
EC	6
F0	CD
F1	MUTE ON
F2	MUTE OFF
F3	LOUDNESS (TOGGLE)
F4	MENU
F8	(BALANCE) LEFT
FC	#

Appendix G, Front Panel Commands

(0,S,F,1=1;cs16) Example of Set Zone 1 FP Sleep
 (0,S,F,1=A;cs16) Example of Set Zone 1 FP Volume Down

Identifier (in hex)	Front Panel Switch	Function
01	SLEEP	Unit Sleep Toggle
02	PRESET	Increment Preset
03	ENTER	Enter
04	SAVE	Save
05	TUNE -	Down
06	TUNE +	Up
07	SOURCE	Increment Source
08	LOUDNESS	Loudness Toggle
09	LEVEL	Change Level Focus
0A	VOLUME DOWN	Volume Knob Down
0B	VOLUME UP	Volume Knob Up
0C	CHORD 0: SLEEP + DOWN + UP	Advanced Settings Visible
0D	CHORD 1: SLEEP + DOWN + SOURCE	Restore User Preference Memory
0E	CHORD 2: SLEEP + UP + SOURCE	Factory Reset Unit
0F	CHORD 3: PRESET + ENTER	Front Panel Menu

Appendix H, Valid ASCII Display Characters

ABCDEFGHIJKLMNOPQRSTUVWXYZ
0123456789 -+/?='

Appendix I, Special Display Characters

OSD not supported in PT 5.

Appendix J, ASCII Table

Decimal	Hex	ASCII	Decimal	Hex	ASCII
0	0	xx	64	40	@
1	1	xx	65	41	A
2	2	xx	66	42	B
3	3	xx	67	43	C
4	4	xx	68	44	D
5	5	xx	69	45	E
6	6	xx	70	46	F
7	7	xx	71	47	G
8	8	xx	72	48	H
9	9	xx	73	49	I
10	A	xx	74	4A	J
11	B	xx	75	4B	K
12	C	xx	76	4C	L
13	D	xx	77	4D	M
14	E	xx	78	4E	N
15	F	xx	79	4F	O
16	10	xx	80	50	P
17	11	xx	81	51	Q
18	12	xx	82	52	R
19	13	xx	83	53	S
20	14	xx	84	54	T
21	15	xx	85	55	U
22	16	xx	86	56	V
23	17	xx	87	57	W
24	18	xx	88	58	X
25	19	xx	89	59	Y
26	1A	xx	90	5A	Z
27	1B	xx	91	5B	[
28	1C	xx	92	5C	\
29	1D	xx	93	5D]
30	1E	xx	94	5E	^
31	1F	xx	95	5F	~
32	20		96	60	`
33	21	!	97	61	a
34	22	"	98	62	b
35	23	#	99	63	c
36	24	\$	100	64	d
37	25	%	101	65	e
38	26	&	102	66	f
39	27	'	103	67	g
40	28	(104	68	h
41	29)	105	69	i
42	2A	*	106	6A	j
43	2B	+	107	6B	k
44	2C	,	108	6C	l
45	2D	-	109	6D	m
46	2E	.	110	6E	n
47	2F	/	111	6F	o
48	30	0	112	70	p
49	31	1	113	71	q
50	32	2	114	72	r
51	33	3	115	73	s
52	34	4	116	74	t
53	35	5	117	75	u
54	36	6	118	76	v
55	37	7	119	77	w
56	38	8	120	78	x
57	39	9	121	79	y
58	3A	:	122	7A	z
59	3B	;	123	7B	{
60	3C	<	124	7C	
61	3D	=	125	7D	}

62	3E	>	126	7E	~
63	3F	?	127	7F	xx

NOTE: xx indicates non printable character

Appendix K, LED Mapping

LED Buffer 0
01h = TUNE +
02h = LEVEL
04h = LOUDNESS
08h = SOURCE
10h = PRESET
20h = SLEEP
40h = ENTER
80h = SAVE

LED Buffer 1
01h = TUNE -
02h = <NOT USED>
04h = <NOT USED>
08h = <NOT USED>
10h = <NOT USED>
20h = <NOT USED>
40h = <NOT USED>
80h = <NOT USED>

NOTE: Due to the front panel electronics, all LEDs are in the same electrical bank. Only one of the LEDs should be active at a time.

Appendix L, X (executive) Commands

The following is a list of the supported Executive commands and details regarding their usage:

Recall Preset Command: (receiveID, X, 0, z=nn; cs16)

Zone *z* Preset *nn* is recalled to the current preset. Similar to the "G" get and "S" set commands, *nn* can range from 00h – FDh, however it **CANNOT** be FFh for the current preset (as recalling the current preset has no meaning).

NOTE: *nn* of FE is reserved for future expansion.

(00, X, 0, 1=4;cs16)	Recall Zone 1 Preset 4 to current preset
(00, X, 0, 2=7;cs16)	Recall Zone 2 Preset 7 to current preset

Save Preset Command: (receiveID, X, 1, z=nn, autoNameMode; cs16)

The current preset is saved to Zone *z* Preset *nn*. . Similar to the "G" get and "S" set commands, *nn* can range from 00h – FDh, however it **CANNOT** be FFh for the current preset (as saving the current preset has no meaning).

NOTE: *nn* of FE is reserved for future expansion.

(00, X, 1, 1=3;cs16)	Save current preset to Zone 1 Preset 3
(00, X, 1, 2=9;cs16)	Save current preset to Zone 2 Preset 9

The *autoNameMode* specifier can take on the following values with the following meanings:

0	Auto Name Preset, based upon state of System parameter Preset Auto Naming
1	Do not Auto Name, regardless of System parameter Preset Auto Naming
2	Force Auto Name, regardless of System parameter Preset Auto Naming

(00, X, 1, 1=8, 0;cs16)	Save current preset to Zone 1 Preset 8 Auto Name based on Preset Auto Naming parameter
(00, X, 1, 1=8, 1;cs16)	Save current preset to Zone 1 Preset 8 Do not Auto Name, preserve Preset Title
(00, X, 1, 1=8, 2;cs16)	Save current preset to Zone 1 Preset 8 Force Auto Naming, overwriting Preset Title

NOTE: If Preset Auto Naming is active, the preset title will be overwritten.

NOTE: The *autoNameMode* specifier is optional. If it is omitted its value defaults to 0, so the preset title is Auto Named based on the state of the System parameter Preset Auto Naming.

Power State Command: (receiveID, X, 2, z=onOff; cs16)

Zone z's power state may be controlled using this command. The *onOff* parameter may take on the values of 1 or 0 for "on" or "off (Sleep)" respectively.

(00, X, 2, 1=1;cs16)	Turn Z1 power on (unit not in Sleep)
(00, X, 2, 2=0;cs16)	Turn Z2 power off (unit in Sleep)

NOTE: A Power State Command "on" is referred to as a "Warm Boot".

Cold Boot Command: (receiveID, X, 6; cs16)

This forces the unit to do a "Cold Boot", which is the same sequence of events that occur when the unit is turned on from the power on/off switch. This differs from a "Warm Boot" (Power State Command with onOff state of 1) in that all of the unit's hardware is re-initialized.

NOTE: After issuing a Cold Boot command, the unit's communication port is reinitialized. Communication will have to be re-established. The unit cannot receive BKC-DIP commands until the Update Unit "BKC-DIP ACTIVE" reply has been transmitted by the unit (see Update Command below for further details).

Factory Reset Command: (receiveID, X, 7; cs16)

This command executes the factory reset sequence in the unit. The factory reset returns the state of the unit to its original factory settings.

WARNING!: Issuing a Factory Reset Command will destroy all user modified data in the unit (preset, system settings, etc.).

NOTE: After issuing a Factory Reset command, the unit's communication port is reinitialized. Communication will have to be re-established. The unit cannot receive BKC-DIP commands until the Update Unit "BKC-DIP ACTIVE" reply has been transmitted by the unit (refer to the Update Command in the **BKC-DIP Specification** for further details).

Unsupported Executive Commands

The following Executive Commands are **not** supported by the PT 5:

Noise Generator State Command: (receiveID, X, 3, noiseState; cs16)
Noise Steering Command: (receiveID, X, 4, speakerIndex=onOff, ... speakerIndex=onOff; cs16)
Noise Increment Command: (receiveID, X, 5; cs16)
Reinitialize BKC-DIP State Command: (receiveID, X, 8; cs16)
Test Tone State Command: (receiveID, X, 9, level; cs16)
Mute State Command: (receiveID, X, A, z=muteState; cs16)

Appendix M, Error Logs

Error Logs are not supported in the PT 5 as it only conforms to BKC-DIP V1.01.00 (Error Logs were added in BKC-DIP V1.02.00).

Appendix P, Override Parameters

(0,G,O,0;cs16) Example of Get Override Active state
(0,S,O,4=1;cs16) Example of Set Echo Enabled

Parameter Identifier (in hex)	Description	Default Values (in hex)	Parameter Max Values (in hex)	Formatting Notes
00	Override Active	0	1	Note 1
01	RS 232 Baud Rate	3	8	Note 2
02	BKC-DIP Receive ID	00	7F	Note 3
03	BKC-DIP Transmit ID	00	7F	Note 3
04	BKC-DIP Echo Enabled	1	1	Note 4
05	BKC-DIP Update Enabled	1	1	Note 4
06	Front Locked	0	1	Note 1
07	IR Locked	0	1	Note 1
FF	Override Timeout	0	FF	Note 5

Appendix P, Override Parameters Notes

(0,G,O,0;cs16) Example of Get Override Active state
(0,S,O,4=1;cs16) Example of Set Echo Enabled

Note 1: 0h = No, 1h = Yes

Note 2: 0h = 1200, 1h = 2400, 2h = 9600, 3h = 14400, 4h = 19200, 5h = 28800, 6h = 38400, 7h = 57600, 8h = 115200

Note 3: Valid IDs are 00h to 7Fh. Receive IDs must be unique (to avoid ambiguity)

Note 4: 0h = Disabled, 1h = Enabled

Note 5: 0h = No timeout, 1h = 0.1 second timeout ... FFh = 25.5 second timeout

Appendix Q, Status Messages

(0,U,S,0="BKC-DIP ACTIVE";05FE) Example Status Message

Message Number	Message	Indication
0	(<i>receiveID</i> ,U,S,0="BKC-DIP ACTIVE"; <i>cs16</i>)	BKC-DIP interface is active Device is ready to accept BKC-DIP commands