

# Appendix B

## Serial Command Protocols

### VDCP Command Table

The server responds to the following VDCP commands. Shaded areas indicate commands slated for future implementation.

COMMAND FROM CONTROLLER    RETURN FROM CONTROLLED DISK

CMD-1	CMD-2	NAME	CMD-1	CMD-2	NAME
0X / 8X	15	Delete Protect ID		04	ACK
0X / 8X	16	Undelete Protect ID		04	ACK

CMD-1	CMD-2	NAME	CMD-1	CMD-2	NAME
1X	00	Stop		04	ACK
1X	01	Play		04	ACK
1X	02	Record		04	ACK
1X	04	Still		04	ACK
1X	05	Step		04	ACK
1X	06	Continue		04	ACK
1X	07	Jog		04	ACK
1X	08	Varispeed Play		04	ACK
1X	0A	EE Mode		04	ACK

CMD-1	CMD-2	NAME	CMD-1	CMD-2	NAME
2X / AX	1D	Rename ID		04	ACK
2X	1E	Preset Std. Time		04	ACK
2X / AX	1F	New Copy		04	ACK
2X	20	Sort Mode		04	ACK
2X	21	Close Port		04	ACK
2X	22	Select Port		04	ACK
2X / AX	23	Record Initialize		04	ACK
2X / AX	24	Play Cue		04	ACK
2X / AX	25	Cue with Data		04	ACK
2X / AX	26	Delete ID		04	ACK

2X / AX	2C	Record Init with Data		04	ACK
2X	30	Preset		04	ACK

CMD-1	CMD-2	NAME	CMD-1	CMD-2	NAME
3X	01	Open Port	3X	81	Grant/Denied
3X / BX	02	Next	3X	82	List of ID's
3X	05	Port Status Request	3X	85	State Status
3X	06	Position Request	3X	86	Position
3X / BX	07	Active ID Request	3X	87	Active ID
3X	08	Device Type Req.	3X	88	Device Type
3X	10	Syst. Status Request	3X	90	System Status
3X / BX	11	ID List	3X	91	List of ID's
3X / BX	14	ID Size Request	3X	94	ID Size
3X / BX	16	ID Request	3X	96	ID Presence
3X	17	Compression Settings Request	3X	97	Compression Settings
3X / BX	18	ID's Added List	3X	98	List ID's Added
3X / BX	19	ID's Deleted List	3X	99	List ID's Deleted

AX and BX versions are long-filename variants.

Macro commands (5X/DX in CMD-1) are not implemented.

## P2 (BVW) Serial Command Table

The server command set includes most BVW-type commands. Commands not implemented include those for DMC operations, audio split and in/out points, and those specifically related to tape as a medium.

COMMAND	DESCRIPTION	RETURN	COMMENT
00.11	DEVICE TYPE REQUEST	ACK	
00.1D	LOCAL ENABLE	ACK	
00.0c	LOCAL DISABLE	ACK	
20.00	STOP	ACK	
20.01	PLAY	ACK	
20.02	RECORD	ACK	
20.10	FAST FORWARD	ACK	
2x.11	JOG FORWARD	ACK	
2x.12	VAR FORWARD	ACK	
2x.13	SHUTTLE FORWARD	ACK	
20.20	REWIND	ACK	
2x.21	JOG REVERSE	ACK	
2x.22	VAR REVERSE	ACK	
2x.23	SHUTTLE REVERSE	ACK	
20.30	PRE-ROLL	ACK	
20.0F	EJECT	ACK	
20.05	STANDBY ON	ACK	
20.60	FULL E-E OFF	ACK	
20.61	FULL E-E ON	ACK	
24.31	CUE UP WITH DATA	ACK	
40.08	TIMER 1 RESET	ACK	
40.10	IN ENTRY	ACK	
40.11	OUT ENTRY	ACK	
40.18	IN SHIFT +	ACK	
40.19	IN SHIFT -	ACK	
40.1A	OUT SHIFT +	ACK	
40.1B	OUT SHIFT -	ACK	
40.2D	LOST LOCK RESET	ACK	
41.36	TIMER MODE SELECT	ACK	
41.37	INPUT CHECK	ACK	
44.00	TIMER 1 PRESET	ACK	
44.04	TIME CODE PRESET	ACK	
44.31	PRE-ROLL TIME PRESET	ACK	
41.33	SERVO REFERENCE SELECT	ACK	
N/A	TIMER MODE STATUS	ACK	
7x.20	STATUS DATA	7x.20	
N/A	COMMAND SPEED SENSE	71.2E	
40.48	REF VIDEO SELECT ON	ACK	
40.49	REF VIDEO SELECT OFF	ACK	
6x.0E	CURRENT TIME SENSE	ACK	

ACK= 10.01 NAK=11.12.xx

## Odetics® Protocol

Odetics serial protocol is an extension of P2 machine control protocol. Among its most significant features is the selection of a file by name rather than by time-code location, as with P2. Odetics protocol is used by many table-top controllers and some automation systems.

Note that the Odetics protocol only supports clip names up to 8 characters. Longer clip names are automatically filtered out from responses by the server.

ACK = 0X1001

COMMAND	DESCRIPTION	RETURN	COMMENT
0X1001	ACK		
0x000C	LOCAL DISABLE	ACK	
0x0011	DEVICE TYPE	0X1211	BVW-75
0x001D	LOCAL ENABLE	ACK	
0x2000	STOP	ACK	
0x2001	PLAY	ACK	
0x2002	RECORD	ACK	
0x2004	STAND BY OFF	ACK	
0x2005	STAND BY ON	ACK	
0x200D	DMC START	ACK	COMMAND HAS NO EFFECT
0x200F	EJECT	ACK	
0x2010	FAST FORWARD	ACK	
0x2X11	JOG FORWARD	ACK	
0x2X12	VAR FORWARD	ACK	
0x2X13	SHUTTLE FORWARD	ACK	
0x2020	REWIND	ACK	
0x2X21	JOG REVERSE	ACK	
0x2X22	VAR REVERSE	ACK	
0x2X23	SHUTTLE REVERSE	ACK	
0x2030	PREROLL	ACK	
0x2X31	CUE UP	ACK	
0x2X38	PROG SPEED PLAY PLUS	ACK	
0x2X39	PROG SPEED PLAY MINUS	ACK	
0x2052	TENSION RELEASE	ACK	COMMAND HAS NO EFFECT
0x2054	ANTI CLOG TIMER DISABLE	ACK	COMMAND HAS NO EFFECT
0x2055	ANTI CLOG TIMER ENABLE	ACK	COMMAND HAS NO EFFECT
0x2X5C	DMC SET FORWARD	ACK	COMMAND HAS NO EFFECT
0x2X5D	DMC SET REVERSE	ACK	COMMAND HAS NO EFFECT

0x2060	FULL EE OFF	ACK	
0x2061	FULL EE ON	ACK	
COMMAND	DESCRIPTION	RETURN	COMMENT
0x4X00	TIMER1 PRESET	ACK	
0x4X04	TIME CODE PRESET	ACK	
0x4008	TIMER1 RESET	ACK	
0x4010	IN ENTRY	ACK	
0x4011	OUT ENTRY	ACK	
0x4X14	IN PRESET	ACK	
0x4X15	OUT PRESET	ACK	
0x4018	IN SHIFT PLUS	ACK	
0x4019	IN SHIFT MINUS	ACK	
0x401A	OUT SHIFT PLUS	ACK	
0x401B	OUT SHIFT MINUS	ACK	
0x4020	IN RESET	ACK	
0x4021	OUT RESET	ACK	
0x402D	LOST LOCK RESET	ACK	
0x4X30	EDIT PRESET	ACK	COMMAND HAS NO EFFECT
0x4X31	PRE-ROLL TIME PRESET	ACK	
0x4X32	TAPE AUTO SELECT	ACK	
0x4X33	SERVO REFERENCE SELECT	ACK	
0x4X34	HEAD SELECT	ACK	COMMAND HAS NO EFFECT
0x4X35	COLOR FRAME SELECT	ACK	COMMAND HAS NO EFFECT
0x4X36	TIMER MODE SELECT	ACK	
0x4X37	INPUT CHECK	ACK	
0x4040	AUTO MODE OFF	ACK	
0x4041	AUTO MODE ON	ACK	
0x4046	VARIABLE MEMORY OFF	ACK	
0x4047	VARIABLE MEMORY ON	ACK	
0x4048	VIDEO REFERENCE DISABLE OFF	ACK	COMMAND HAS NO EFFECT
0x4049	VIDEO REFERENCE DISABLE ON	ACK	COMMAND HAS NO EFFECT
0x4X70	VIDEO INPUT SELECT	ACK	
0x4X91	OUTPUT VIDEO LEVEL	ACK	COMMAND HAS NO EFFECT
0x4X92	OUTPUT SETUP BLACK LEVEL	ACK	COMMAND HAS NO EFFECT
0x4X93	OUTPUT CHROMA LEVEL	ACK	COMMAND HAS NO EFFECT
0x4X98	OUTPUT H PHASE	ACK	COMMAND HAS NO EFFECT
0x4X99	OUTPUT SC PHASE	ACK	COMMAND HAS NO EFFECT
0x4X9A	OUTPUT VIDEO HUE	ACK	COMMAND HAS NO EFFECT
0x6X0A	TC GEN DATA SENSE		

	GEN TIME DATA	0X7408	
COMMAND	DESCRIPTION	RETURN	COMMENT
	GEN UB DATA	0X7409	
	GEN U BAND TC DATA	0X7809	
0x600C	CURRENT TIME SENSE		
	CORRECTED LTC TIME DATA	0X7414	
	VITC TIME DATA	0X7406	
	TIMER1 DATA	0X7400	
	HOLD USER BITS LTC DATA	0X7415	
	HOLD USER BITS VITC DATA	0X7416	
0x6010	IN DATA	0X7410	
0x6011	OUT DATA	0X7411	
0x6012	A IN DATA	NAK	
0x6013	A OUT DATA	NAK	
0x6020	STATUS DATA	0X7420	
0x6X23	SIGNAL CONTROL DATA	0X7423	
0x602E	COMMAND SPEED DATA	0X712E	
0x602F	VAR MEM SPEED DATA	0X712F	
0x6X30	EDIT PRESET DATA	NAK	
0x6031	PREROLL TIME DATA	0X7431	
0x6036	TIMER MODE STATUS	0X7136	
0xA001	AUTO SKIP	ACK	ODETICS COMMAND
0XA02	CUE UP TO RECORD	ACK	ODETICS COMMAND
0AX04	PREVIEW IN PRESET	ACK	ODETICS COMMAND
0XA05	PREVIEW OUT PRESET	ACK	ODETICS COMMAND
0xA006	PREVIEW IN RESET	ACK	ODETICS COMMAND
0xA007	PREVIEW OUT RESET	ACK	ODETICS COMMAND
0XA10	ERASE ID	ACK	ODETICS COMMAND
0XA014	LIST FIRST ID	0X8814	ODETICS COMMAND
0XA015	LIST NEXT ID	0X8814	ODETICS COMMAND
0AX18	ID STATUS REQUEST	0X8818	ODETICS COMMAND
0XA01C	MAXIMUM STORAGE LENGTH	0X891C	ODETICS COMMAND
0AX20	SET DEVICE ID	ACK	ODETICS COMMAND
0XA021	DEVICE ID REQUEST	0X8821	ODETICS COMMAND
0XCX01	JUMP FORWARD X FRAMES	ACK	ODETICS COMMAND
0XCX02	JUMP BACK X FRAMES	ACK	ODETICS COMMAND
0CX03	GET LOADED ID	ACK	ODETICS COMMAND