

Cary Audio Design

DVD 7 dvd player

RS-232 Protocol and Control Details

Com Port Setup:

Use standard communications settings. The default that most devices use/accept is:

Baud Rate : 9600bps
Data Bits : 8
Parity : None
Stop Bits : 1bit
Handshaking : None

Com Port Pin Configuration:

Use standard pin configuration. A configuration that allows direct connection to a PC via 9-pin straight through serial cable is best. Use of only 3 pins(Transmit, Receive, Ground)is best.

9 pin female D connector

Pin 2 = Transmit
Pin 3 = Receive
Pin 5 = Ground

Command Packets :

The Command Packets are provided for the Host Controller request the DVD 7 to perform a specific action.

Start character : '@'
COMMAND : see Data Packet 'COMMAND List'.
End character (CR) : 0Dh

Start '@'	COMMAND	End 0Dh
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Status Feedback Packets:

The DVD 7 will send to the HOST asynchronous status feedback data packets when applicable DVD 7 status changes.

Start character : '@'
Answer character : see Data Packet 'Status Answer List'.
End character (CR) : 0Dh

Start '@'	Status answer	End 0Dh
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RS232-Interface Usage Details:

The RS-232 interface has a first-in-first-out (FIFO) buffer which will allow each commands to be received in direct succession. Commands are executed in the order in which they are received with approximately a 1/2 second delay between each command. If a longer string of commands is necessary, a minimum of 1/2 second delay should be added before sending additional commands.

The DVD 7 will send a NAK Response packet if the DVD 7 has received an incorrect HOST command packet.

Start character : '@' NAK : ERR End character (CR) : 0Dh

Start '@'	NAK ERR	End 0Dh
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HOST Command List			Auto Status Answer Command list		
Command Description	RS232 Command	ASCII Command	Status Command Description	RS232 Command	ASCII Command
POWER ON/OFF	00	0x30,0x30	Power on/ off	100	0x31,0x30,0x30
POWER ON	01	0x30,0x31	Take unit out of standby	101	0x31,0x30,0x31
POWER OFF	02	0x30,0x32	Put unit in standby	102	0x31,0x30,0x32
TRAY OPEN	03	0x30,0x33	Tray open	103	0x31,0x30,0x33
TRAY CLOSE	04	0x30,0x34	Tray close	104	0x31,0x30,0x34
PLAY	05	0x30,0x35	Play	105	0x31,0x30,0x35
STOP	06	0x30,0x36	Stop	106	0x31,0x30,0x36
PAUSE	07	0x30,0x37	Pause	107	0x31,0x30,0x37
PREVIOUS	08	0x30,0x38	Previous	108	0x31,0x30,0x38
NEXT	09	0x30,0x39	Next	109	0x31,0x30,0x39
REVERSE	10	0x31,0x30	Reverse	110	0x31,0x31,0x30
FORWARD	11	0x31,0x31	Forward	111	0x31,0x31,0x31
NUMBER KEY PAD 1	12	0x31,0x32	Number 1	112	0x31,0x31,0x32
NUMBER KEY PAD 2	13	0x31,0x33	Number 2	113	0x31,0x31,0x33
NUMBER KEY PAD 3	14	0x31,0x34	Number 3	114	0x31,0x31,0x34
NUMBER KEY PAD 4	15	0x31,0x35	Number 4	115	0x31,0x31,0x35
NUMBER KEY PAD 5	16	0x31,0x36	Number 5	116	0x31,0x31,0x36
NUMBER KEY PAD 6	17	0x31,0x37	Number 6	117	0x31,0x31,0x37
NUMBER KEY PAD 7	18	0x31,0x38	Number 7	118	0x31,0x31,0x38
NUMBER KEY PAD 8	19	0x31,0x39	Number 8	119	0x31,0x31,0x39
NUMBER KEY PAD 9	20	0x32,0x30	Number 9	120	0x31,0x32,0x30
NUMBER KEY PAD 0	21	0x32,0x31	Number 0	121	0x31,0x32,0x31
NUMBER KEY PAD +10	22	0x32,0x32	Number +10	122	0x31,0x32,0x32
GOTO	23	0x32,0x33	Goto	123	0x31,0x32,0x33
REPEAT ALL	24	0x32,0x34	Repeat all	124	0x31,0x32,0x34
REPEAT ONE	25	0x32,0x35	Repeat one	125	0x31,0x32,0x35
MUTE	26	0x32,0x36	Mute	126	0x31,0x32,0x36
DVD DISC MENU	27	0x32,0x37	DVD disc menu	127	0x31,0x32,0x37
DVD DISC ANGLE	28	0x32,0x38	DVD disc angle	128	0x31,0x32,0x38
DVD DISC AUDIO	29	0x32,0x39	DVD disc audio	129	0x31,0x32,0x39
DVD DISC TITLE	30	0x33,0x30	DVD disc title	130	0x31,0x33,0x30
DVD DISC SUB-TITLE	31	0x33,0x31	DVD disc sub-title	131	0x31,0x33,0x31
DVD DISC DISPLAY (OSD)	32	0x33,0x32	DVD disc display	132	0x31,0x33,0x32
SETUP MENU	33	0x33,0x33	Setup menu	133	0x31,0x33,0x33
NAVIGATION UP	34	0x33,0x34	Navigation up	134	0x31,0x33,0x34
NAVIGATION DOWN	35	0x33,0x35	Navigation down	135	0x31,0x33,0x35
NAVIGATION ENTER	36	0x33,0x36	Navigation enter	136	0x31,0x33,0x36
NAVIGATION LEFT	37	0x33,0x37	Navigation left	137	0x31,0x33,0x37
NAVIGATION RIGHT	38	0x33,0x38	Navigation right	138	0x31,0x33,0x38
ZOOM OFF	39	0x33,0x39	Zoom off	139	0x31,0x33,0x39
ZOOM 1	40	0x34,0x30	Zoom 1	140	0x31,0x34,0x30
ZOOM 2	41	0x34,0x31	Zoom 2	141	0x31,0x34,0x31
ZOOM 3	42	0x34,0x32	Zoom 3	142	0x31,0x34,0x32

HOST Command List			Auto Status Answer Command list		
Command Description	RS232 Command	ASCII Command	Status Command Description	RS232 Command	ASCII Command
ZOOM 4	43	0x34,0x33	Zoom 4	143	0x31,0x34,0x33
ZOOM 5	44	0x34,0x34	Zoom 5	144	0x31,0x34,0x34
VOLUME OFF	45	0x34,0x35	Volume off	145	0x31,0x34,0x35
VOLUME 0	46	0x34,0x36	Volume 0	146	0x31,0x34,0x36
VOLUME 1	47	0x34,0x37	Volume 1	147	0x31,0x34,0x37
VOLUME 2	48	0x34,0x38	Volume 2	148	0x31,0x34,0x38
VOLUME 3	49	0x34,0x39	Volume 3	149	0x31,0x34,0x39
VOLUME 4	50	0x35,0x30	Volume 4	150	0x31,0x35,0x30
VOLUME 5	51	0x35,0x31	Volume 5	151	0x31,0x35,0x31
VOLUME 6	52	0x35,0x32	Volume 6	152	0x31,0x35,0x32
VOLUME 7	53	0x35,0x33	Volume 7	153	0x31,0x35,0x33
VOLUME 8	54	0x35,0x34	Volume 8	154	0x31,0x35,0x34
VOLUME 9	55	0x35,0x35	Volume 9	155	0x31,0x35,0x35
VOLUME 10	56	0x35,0x36	Volume 10	156	0x31,0x35,0x36
VOLUME 11	57	0x35,0x37	Volume 11	157	0x31,0x35,0x37
VOLUME 12	58	0x35,0x38	Volume 12	158	0x31,0x35,0x38
VOLUME 13	59	0x35,0x39	Volume 13	159	0x31,0x35,0x39
VOLUME 14	60	0x36,0x30	Volume 14	160	0x31,0x36,0x30
VOLUME 15	61	0x36,0x31	Volume 15	161	0x31,0x36,0x31
VOLUME 16	62	0x36,0x32	Volume 16	162	0x31,0x36,0x32
VOLUME 17	63	0x36,0x33	Volume 17	163	0x31,0x36,0x33
VOLUME 18	64	0x36,0x34	Volume 18	164	0x31,0x36,0x34
VOLUME 19	65	0x36,0x35	Volume 19	165	0x31,0x36,0x35
VOLUME 20	66	0x36,0x36	Volume 20	166	0x31,0x36,0x36
VOLUME 21	67	0x36,0x37	Volume 21	167	0x31,0x36,0x37
VOLUME 22	68	0x36,0x38	Volume 22	168	0x31,0x36,0x38
VOLUME 23	69	0x36,0x39	Volume 23	169	0x31,0x36,0x39
VOLUME 24	70	0x37,0x30	Volume 24	170	0x31,0x37,0x30
VOLUME 25	71	0x37,0x31	Volume 25	171	0x31,0x37,0x31
VOLUME 26	72	0x37,0x32	Volume 26	172	0x31,0x37,0x32
VOLUME 27	73	0x37,0x33	Volume 27	173	0x31,0x37,0x33
VOLUME 28	74	0x37,0x34	Volume 28	174	0x31,0x37,0x34
VOLUME 29	75	0x37,0x35	Volume 29	175	0x31,0x37,0x35
VOLUME 30	76	0x37,0x36	Volume 30	176	0x31,0x37,0x36
VOLUME 31	77	0x37,0x37	Volume 31	177	0x31,0x37,0x37
VOLUME 32	78	0x37,0x38	Volume 32	178	0x31,0x37,0x38
VOLUME 33	79	0x37,0x39	Volume 33	179	0x31,0x37,0x39
VOLUME 34	80	0x38,0x30	Volume 34	180	0x31,0x38,0x30
VOLUME 35	81	0x38,0x31	Volume 35	181	0x31,0x38,0x31
VOLUME 36	82	0x38,0x32	Volume 36	182	0x31,0x38,0x32
VOLUME 37	83	0x38,0x33	Volume 37	183	0x31,0x38,0x33
VOLUME 38	84	0x38,0x34	Volume 38	184	0x31,0x38,0x34
VOLUME 39	85	0x38,0x35	Volume 39	185	0x31,0x38,0x35

