



RS232 Command Guide for W3202MH/W3706MH DAO

1. Introduction

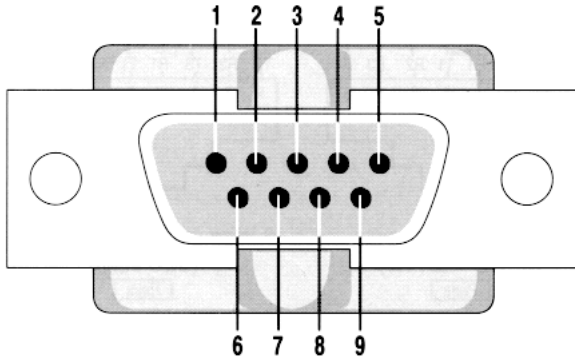
W3202MH and W3706MH are designed with control by wire capability via RS232. This document describes the RS232 command protocol and command list.

2. RS232 Protocol

2.1 Communication Settings

Connection Settings	Value
Baud Rate	19200
Data Bits	8
Parity	None
Stop Bits	1

RS232 pin out DB-9 pin



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

NOTE: DELL generally use common RS232 connector,So you just plug in connector from PC to DTV.

2.2 Protocol structure

Command structure is used to pop up the OSD menu and adjust the settings. The control command syntax(From PC to DTV) is

16bit	8bit	16bit	16bit	16bit	16bit	8bit
wID	eType	wPayloadSize	wCRCPacket	wMsgID	wMsgSize	Byte
EF BE	010	0003	XX/XX	1111	0001	XX

Make sure that All value is Hex.

- Header -> Fixed like wID – EFBE.
- EType -> Fixed like 010.
- wPayloadSize -> Fixed like 0003.
- wCRCPacker – value depending on data sent.
- wMsgID -> Fixed 1111.
- Byte – predefined command. (See section 4. Command List)

2.3 Status code

	RETURN VALUE	REMARKS
SUCCESS	0X00	If success
INVAILDID	0X15	If failed
INVAILDTYPE	0X15	If failed
INVAILDPAYLOAD	0X01	If failed
INVAILDCRC	0X15	If failed
INVAILDMSGID	0X01	If failed
INVAILDMSGSIZE	0X01	If failed
INVAILDBYTE	0X01	If failed

3. Using Omnivex tool

Omnivex Control 4 allows you to manage device functions right from a PC without the need for any proprietary hardware or complicated programming. You could get more information from www.omnivex.com.

You could test Omnivex tool using its trial version. Simply install it and copy the OCPlayer.dat into the installed directory.

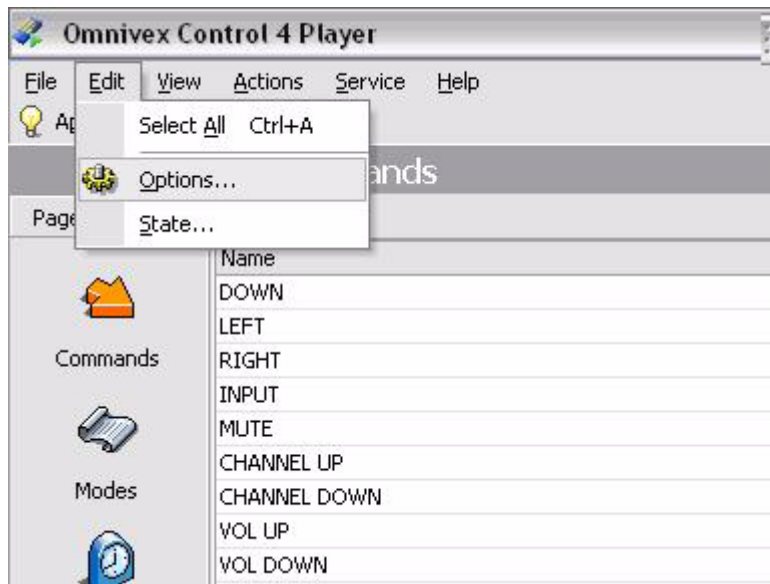


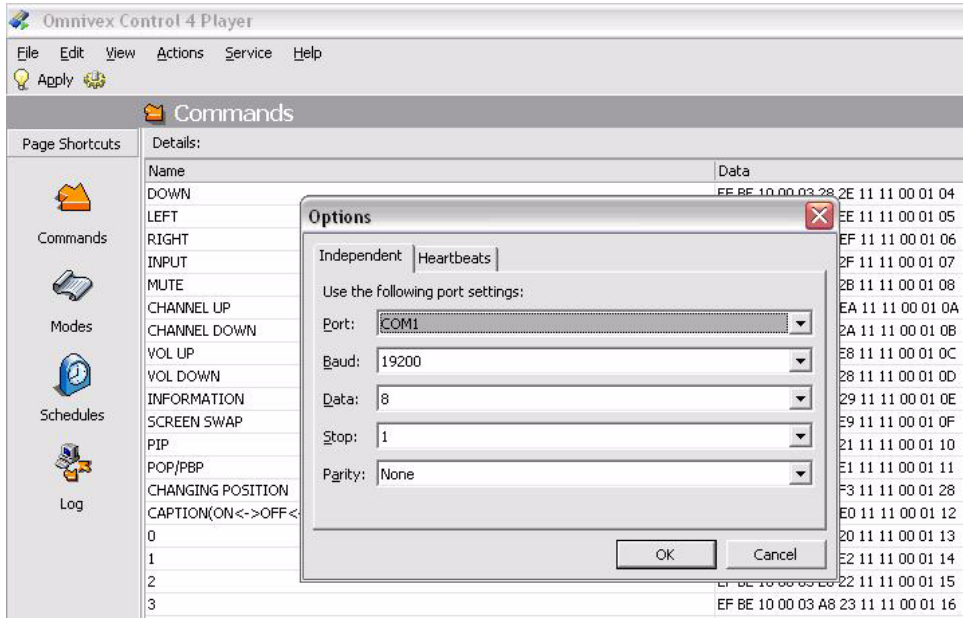
: Omnivex Control 4 Player Setup.exe



: Ocplayer.dat

NOTE: You need to setup the serial communication port before using the tool.





NOTE: Port depends on your environments.

4. Command List

s/n	Command	Description	Protocol
1	POWER ON	POWER ON	EFBE10000329ED1111000100
2	POWER OFF	POWER OFF	EFBE100003E82D1111000101
3	UP		EFBE10000369EC1111000103
4	DOWN		EFBE100003282E1111000104
5	LEFT		EFBE100003E9EE1111000105
6	RIGHT		EFBE100003A9EF1111000106
7	MUTE	TURN ON / OFF AUDIO	EFBE100003282B1111000108
8	CH UP	CHANNEL UP	EFBE100003A9EA111100010A
9	CH DOWN	CHANNEL DOWN	EFBE100003682A111100010B
10	VOL UP	VOLUME UP	EFBE10000329E8111100010C
11	VOL DOWN	VOLUME DOWN	EFBE100003E828111100010D
12	SWAP	CHANGE SCREEN IF YOU SEE TWO WINDOW ON DTV	EFBE10000369E9111100010F
13	PIP	PICTURE IN PICTURE	EFBE10000328211111000110
14	POP/PBP	PICTURE ON PICTURE / PICTURE BY PICTUER	EFBE100003E9E11111000111
15	PIP POS	CHANGE POSITION (1/4,2/4,3/4,4/4)	EFBE10000329F31111000128
16	ASPECT	CHANGE MODE LIKE 4:3,WIDE,FULL,STD	EFBE100003E9E4111100011D
17	GUIDE	SHOW EPG(ELECTRIC PROGRAM GUIDE) ONLY DTV	EFBE100003A9E5111100011E
18	INFO	SHOW INFORMATION WHERE YOU EXIST LOCATION	EFBE100003A829111100010E
19	SLEEP	CHANGE TIME ABOUT SLEEPING TIME	EFBE100003E8331111000129
20	CC_ON	TURN ON CC	EFBE100003E8391111000131
21	CC_OFF	TURN OFF CC	EFBE100003A8381111000132
22	CAPTION	TURN ON / OFF CAPTION (ON<- > OFF<-> MUTE)	EFBE100003A9E01111000112
23	0	KEY	EFBE10000368201111000113
24	1		EFBE10000329E21111000114
25	2		EFBE100003E8221111000115
26	3		EFBE100003A8231111000116
27	4		EFBE10000369E31111000117

28	5		EFBE10000329E71111000118
29	6		EFBE100003E8271111000119
30	7		EFBE100003A826111100011A
31	8		EFBE10000369E6111100011B
32	9		EFBE1000032824111100011C
33	INPUT	INPUT SELECT KEY	EFBE100003682F1111000107
34	SVIDEO		EFBE100003E9F51111000121
35	COMPOENENT		EFBE1000036825111100011F
36	COMPOSITE		EFBE10000328351111000120
37	VGA		EFBE100003A9F41111000122
38	HDMI		EFBE10000368341111000123
39	DTV		EFBE10000329F61111000124
40	SOURCE ACTIVE	SHOW ONLY ACTIVED SOURCE	EFBE100003A9F1111100012E
41	SOURCE ALL	SHOW ALL SOURCE (SUCH AS SVIDEO,COMPONENT ETC)	EFBE1000036831111100012F
42	PICT	CHANGE DTV MODE ABOUT MOVIES,SPORTS,WEAK SIGNAL,MULTIMEDIA AND PERSONAL	EFBE100003A832111100012A
43	AUDIO	CHANGE AUDIO ABOUT MUSIC,THEATER,VOICE AND PERSONAL	EFBE10000369F2111100012B
44	FACTORY RESET	RESET ALL	EFBE1000032830111100012C
45	RESYNC(ONLY VGA)	AUTO ADJUST SIZE IN VGA	EFBE100003E9F0111100012D
46	F/W VERSION	SHOW F/W VERSION ON RIGHT SIDE UPPER	EFBE10000329F91111000130

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