



RS232 Command Guide for W3202MH/W3706MH DAO

1. Introduction

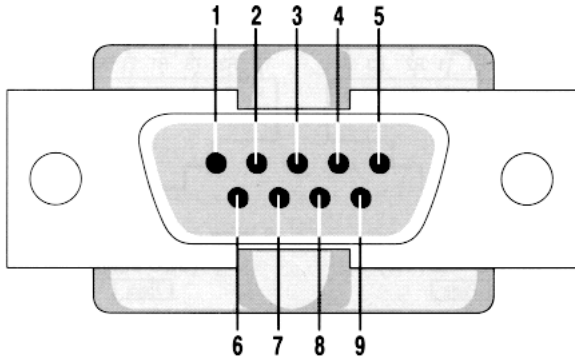
W3202MH and W3706MH are designed with control by wire capability via RS232. This document describes the RS232 command protocol and command list.

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.

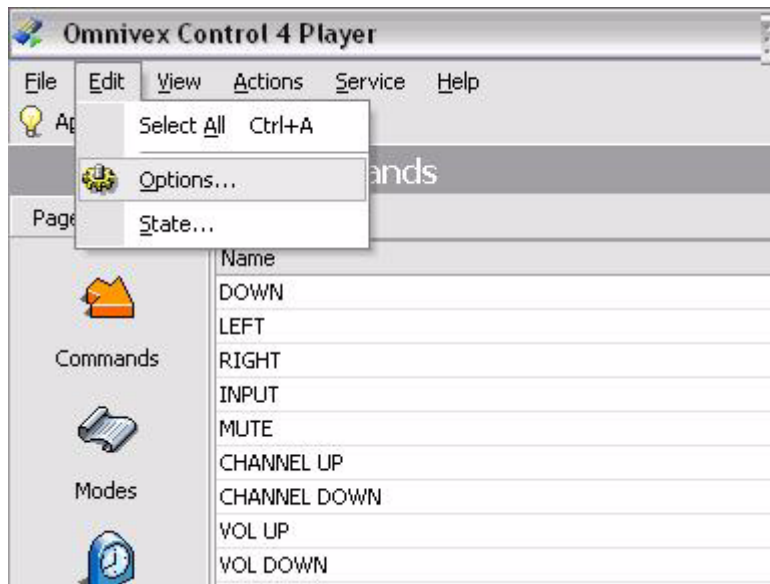


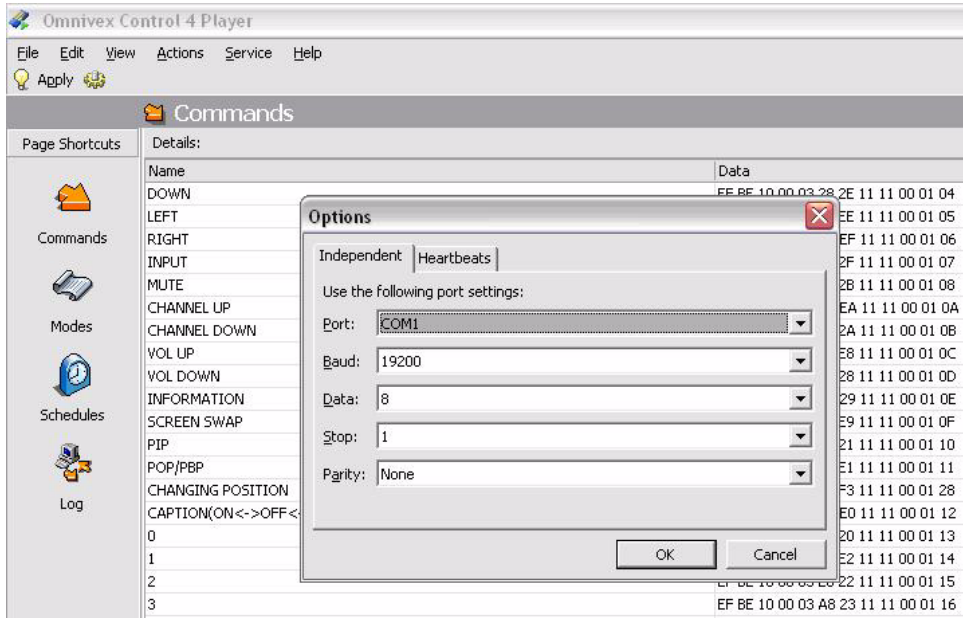
: Omnivex Control 4 Player Setup.exe



: 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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