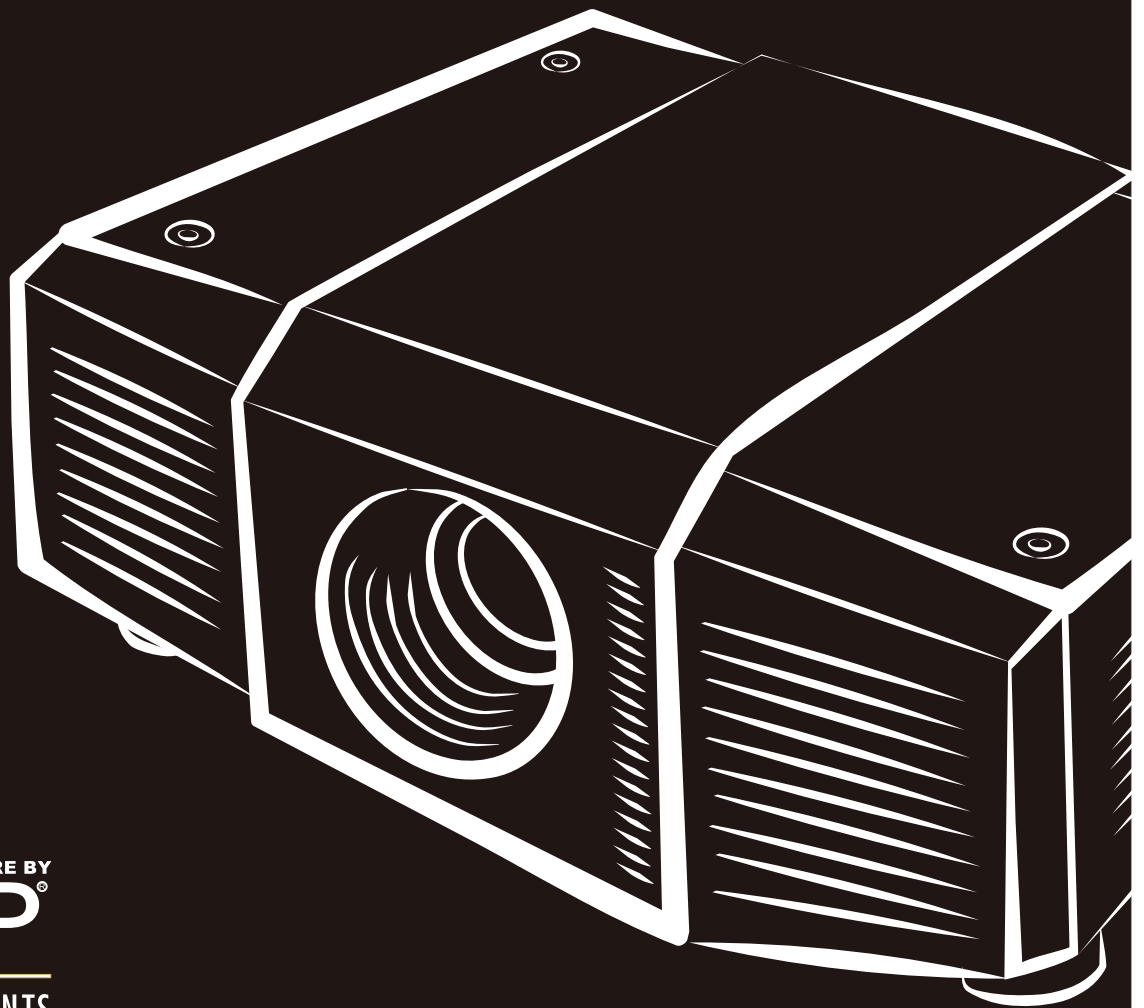


vivitek[®]
Vivid Color, Vivid Life

RS-232

D8800 Series



PICTURE BY
DLP[®]
TEXAS INSTRUMENTS

SERIAL INTERFACE SPECIFICATIONS

TRANSFER SPECIFICATIONS

Item	Specifications
Transmission Speed	38400 bps
Data Length	8 bit
Parity	None
Stop Bit	1
Flow Control	None

RS-232 COMMANDS

There are 2 types of commands:

- Key commands
- Operation commands

All commands start with 2 letters as shown in the following:

- “ky” for key commands.
- “op” for operations commands.
- Key Commands The following example is the syntax for key commands: ky <keyname> [CR]

IR CODES AND KEY NAMES

Key	Code	RS232 Key name	Key Wording	Description
1	0x90	power.on	ON	Turn power on.
2	0x91	power.off	OFF	Turn power off.
3	0xB6	NA	FOCUS+	
4	0xB7	NA	ZOOM+	Zoom in.
5	0xB8	testpattern	TEST PATTERN	Enter test pattern menu.
6	0xB9	NA	FOCUS-	
7	0xBA	NA	ZOOM-	Zoom out.
8	0xBB	lensshift	LENS SHIFT	Shift control of the lens.
9	0xC1	up	▲	Keypad up arrow.
10	0xC3	left	◀	Keypad left arrow.
11	0xC4	right	▶	Keypad right arrow.
12	0xC5	enter	ENTER	Keypad enter.
13	0xC2	down	▼	Keypad down arrow.
14	0x87	menu	MENU	Show or hide the OSD menu.
15	0xBC	exit	EXIT	Exit the OSD menu.
16	0x83	input	INPUT	Switch the active source.
17	0x98	picture	PICTURE	Open PICTURE menu.
18	0x8C	network	NETWORK	
19	0x86	autosync	AUTO SYNC	
20	0x9F	aspect	ASPECT	Switch to the next aspect ratio.
21	0x8F	pip	PIP	
22	0xBD	overscan	OVERSCAN	
23	0x8E	freeze	FREEZE	
24	0x8b	lampmode	LAMP MODE	
25	0xBE	NA	3D MODE	Not available.
26	0xBF	Info	INFO	Open SERVICE menu.

Key	Code	RS232 Key name	Key Wording	Description
27	0x9E	NA	LIGHT	
28	0x9A	NA	CLEAR	Not available.
29	0x9B	shutter	SHUTTER	Turn on or off the shutter.
30	0x9C	idset	ID SET	Not available.

OPERATIONS COMMANDS

The following example is the syntax for operations commands:
 op <operation> <command> [CR]

No.	Function	Command	Action on unit
1	Set	=<value>	Makes the unit take that value.
2	Get	?	Asks what the current value is.
3	Increment	+	Adds 1 to the current value.
4	Decrement	-	Subtracts 1 from the current value.
5	Execute	(none)	Performs an action.

Operation	Command	Values
1. INPUT		
input.sel	= ?	0 = HDMI 1 = DVI 2 = VGA 3 = Component / BNC 4 = Composite 5 = S-Video 6 = 3G-SDI 7 = Option Board (Reserved)
pip	= ?	0 = Off 1 = On
pip.sel	= ?	1 = HDMI 2 = DVI 3 = VGA 4 = Component / BNC 5 = Composite 6 = S-Video 7 = 3G-SDI 8 = Option Board (Reserved)
pip.swap	(execute)	Swap main and PIP source
pip.pos	= ?	0 = Top Left 1 = Top Right 2 = Bottom Left 3 = Bottom Right 4 = Split L-R
pattern	= ?	0 = Color Bar 1 = Cross Hatch 2 = Burst 3 = Red 4 = Green 5 = Blue 6 = White 7 = Black 8 = Red (TI) 9 = Green (TI) 10 = Blue (TI) 11 = HRamp (TI) 12 = Off

Operation	Command	Values
color.space	= ?	0 = Auto 1 = YCbCr 2 = YPbPr 3 = RGB-PC (0-255) 4 = RGB-Video (16-235)
input.lock	= ?	0 = Auto 1 = 48 Hz 2 = 50 Hz 3 = 60 Hz
no.signal	= ?	0 = Logo 1 = Blue 2 = Black 3 = White
vid.std	= ?	0 = Auto 1 = PAL 2 = SECAM 3 = NTSC
auto.imgadj	= ?	0 = Off 1 = Auto 2 = Always
2. PICTURE		
pic.mode	= ?	0 = High Bright 1 = Presentation 2 = Video
contrast	= ? +-	0 - 200
dyna.cont	= ?	0 = Off 1 = On
bright	= ? +-	0 - 200
saturat	= ? +-	0 - 200
tint	= ? +-	0 - 200
gamma	= ?	0 = Film 1 = Graphics 2 = Video 3 = Linear
color.temp (pic.mode is "High Bright" or "Presentation")	= ?	0 = Default 1 = Native
color.temp (pic.mode is "Video")	= ?	0 = 5000K 1 = 6500K 2 = 7800K 3 = 9300K 4 = Native
red.offset	= ? +-	0-200
green.offset	= ? +-	0-200
blue.offset	= ? +-	0-200
red.gain	= ? +-	0-200
green.gain	= ? +-	0-200
blue.gain	= ? +-	0-200
sharp	= ? +-	0-200
nr	= ? +-	0-200 (Noise Reduction)
aspect	= ?	0 = 5:4 1 = 4:3 2 = 16:10 3 = 16:9 4 = 1.88 5 = 2.35 6 = Letterbox 7 = Native 8 =Unscaled

Operation	Command	Values
zoom (Overscan)	= ?	0 = 5:4 1 = 4:3 2 = 16:10 3 = 16:9 4 = 1.88 5 = 2.35 6 = Letterbox 7 = Native 8 = Unscaled
h.total	= ? +-	0-200
h.pos	= ? +-	0-200
h.phase	= ? +-	0-200
v.pos	= ? +-	0-200
auto.img (Auto Sync)	(execute)	
3. LAMP		
lamps	= ?	0 = Single 1 = Dual
lamp.mode (Drive)	= ?	0 = Economy 1 = Standard 2 = Dimming
lamp.pwr altitude (High Altitude)	= ?	0-25 (80.4 % ~100.0 %)
	= ?	0 = Off 1 = On
lamp1.stat	?	0 = Off 1 = On
lamp2.stat	?	0 = Off 1 = On
4. ALIGNMENT		
proj.mode	= ?	0 = Front 1 = Rear 2 = Ceiling + Front 3 = Ceiling + Rear
fan.pos	= ?	0 = Normal 1 = Vertical 2 = Down
zoomio	+ -	+ => Zoom out - => Zoom in
focus	+ -	+ => Focus Near - => Focus Far
vert.offset	+ -	+ => Up - => Down
horiz.offset	+ -	+ => Right - => Left
lens.load	=	1-10 set of lens memory (Load)
lens.save	=	1-10 set of lens memory (Save)
lens.center	(execute)	Midposition shift
h.keystone	= ? +-	-350~+350
v.keystone	= ? +-	-200~+200
warp.rotat	= ? +-	-20 ~ +20 (in fb 1/4 unit)
warp.pinbrl	= ? +-	-100 ~ +100
warp.tlc.x	= ? +-	'x: -192 ~ +192
warp.tlc.y	= ? +-	'y: -120 ~ +120
warp.trc.x	= ? +-	'x: -192 ~ +192
warp.trc.y	= ? +-	'y: -120 ~ +120
warp.blc.x	= ? +-	'x: -192 ~ +192
warp.blc.y	= ? +-	'y: -120 ~ +120
warp.brc.x	= ? +-	'x: -192 ~ +192
warp.brc.y	= ? +-	'y: -120 ~ +120
warp.cust	= ?	0 = Off 1 = On

Operation	Command	Values
warp.reset	(execute)	
blank.top	= ? +-	0 ~ 360
blank.btm	= ? +-	0 ~ 360
blank.left	= ? +-	0 ~ 534
blank.right	= ? +-	0 ~ 534
blank.rst	(execute)	
eb.stat (Edge Blend)	= ?	
eb.wht.top	= ? +-	0, 200 ~ 500
eb.wht.btm	= ? +-	0, 200 ~ 500
eb.wht.left	= ? +-	0, 200 ~ 800
eb.wht.right	= ? +-	0, 200 ~ 800
eb.blk.top	= ? +-	0, 8, 16, 24, 32
eb.blk.btm	= ? +-	0, 8, 16, 24, 32
eb.blk.left	= ? +-	0, 4, 8, 12, 16, 20, 24, 28, 32
eb.blk.right	= ? +-	0, 4, 8, 12, 16, 20, 24, 28, 32
eb.all	= ? +-	0 ~ 32
eb.red	= ? +-	0 ~ 32
eb.green	= ? +-	0 ~ 32
eb.blue	= ? +-	0 ~ 32
eb.reset	(execute)	
w2.recover	(execute)	
eb.adl (Align Pattern)		0 = Off 1 = On
5. CONTROL		
eco.net.pow	= ?	0 = Off (ECO Standby Mode) 1 = On (Standard Standby Mode)
auto.powoff	= ?	0 = Off 1 = On
auto.powon	= ?	0 = Off 1 = On
proj.ctrl	= ?	0 = rs232 1 = network
net.ipaddr	= ?	<string>
net.subnet	= ?	<string>
net.gateway	= ?	<string>
net.dhcp	= ?	0 = Off 1 = On
startup.logo	= ?	0 = Off 1 = On
trig.1	= ?	0 = 5:4 1 = 4:3 2 = 16:10 3 = 16:9 4 = 1.88 5 = 2.35 6 = Letterbox 7 = Native 8 = Unscaled 9 = Auto
auto.src (Auto Search)	= ?	0 = Off 1 = On
dblack	= ?	0 = Off 1 = On
lang	= ?	0 = English 1 = French 2 = Spanish 3 = German 4 = Portuguese 5 = Chinese Simplified 6 = Chinese Traditional 7 = Japanese 8 = Korean

Operation	Command	Values
6. SERVICE		
model	?	<string>
ser.no	?	<string>
sw.ver	?	<string>
act.src	?	0 = HDMI 1 = DVI 2 = VGA 3 = Component / BNC 4 = Composite 5 = S-Video 6 = 3G-SDI 7 = Option Board (Reserved)
pip.src	?	0 = PIP OFF 1 = HDMI 2 = DVI 3 = VGA 4 = Component / BNC 5 = Composite 6 = S-Video 7 = 3G-SDI 8 = Option Board (Reserved)
pixel.clock	?	<string>
signal	?	<string>
h.refresh	?	<string>
v.refresh	?	<string>
lamp1.hours	?	<string>
lamp2.hours	?	<string>
proj.runtime	?	<string>
blue.only	= ?	0 = Off 1 = On
fact.reset	(execute)	

A. Others		
power.on	(execute)	
power.off	(execute)	
picture.mute	= ?	0 = Off 1 = On
status	?	0 = standby 1 = warm up 2 = imaging 3 = cooling 4 = warning
errcode	?	0=ErrMsgOverTempInlet 1=ErrMsgOverTempDMD 2=ErrMsgOverTempLamp1 3=ErrMsgOverTempLamp2 4=Reserved 5=Reserved 6=ErrMsgOverTempBallast1 7=ErrMsgOverTempBallast2 8=Reserved 9=Reserved 10=ErrMsgFanInitError 11=ErrMsgFan1RotateError 12=ErrMsgFan2RotateError 13=ErrMsgFan3RotateError 14=ErrMsgFan4RotateError 15=ErrMsgFan5RotateError 16=ErrMsgFan6RotateError 17=ErrMsgFan7RotateError 18=ErrMsgFan8RotateError 19=ErrMsgFan9RotateError 20=ErrMsgFan10RotateError 21=ErrMsgFan11RotateError 22=ErrMsgFan12RotateError 23=ErrMsgFan13RotateError 24=Reserved 25=Reserved 26=Reserved 27=ErrMsgDMDInitFail 28=ErrMsgLampInitFail 29=ErrMsgLampLitFail 30=ErrMsgBallastUart1Error 31=ErrMsgExGpioFail 32=ErrMsgInterLockOpen 33=ErrMsgGF9450NoResponse 34=ErrMsgSystemI2cFail 35=ErrMsgSoftwareI2cFail 36=ErrMsgEepromFail 37=ErrMsgEidFail 38=ErrMsgEepVersionFail 39=ErrMsgRstGennum 40= ErrMsgLamp2LitFail 41= ErrMsgBallast2UartError 42=ErrMsgGtinletTp 43=ErrMsgGtdmdTp 44=ErrMsgInletTempSensorFail 45=ErrMsgDMDTempSensorFail 46=ErrMsgGeoSystemFail 47=ErrMsgLampDoor1Open 48=ErrMsgLampDoor2Open 49= ErrMsgLCUFail, 50= ErrMsgLCUVerFail 51= ErrMsgLowTempStart 52= ErrMsgDDP3021ASICErr 53= ErrMsgDDP3021MainRLDRam 54= ErrMsgDDP3021SlaveRLDRam 55= ErrMsgColorWheelSpin 56= ErrMsgFETempSensorFail 57= ErrMsgOverTempFE 58=ErrMsgColorWheelCover 59=ErrMsgAllBallastUartError 60= ErrMsgHDMIDecoderFail 61= ErrMsgVideoDecoderFail 62= ErrMsgAD9984Fail
remote.set	= ?	1 ~ 10 : Set Projector ID 255 : Clear Projector ID (No ID)
mot.ver	?	Get firmware version of motor board
hw.ver	?	Get hardware version of main PCB

