



# W6000

## Software/RS-232 Programming Guide

Revision 1

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## Communication Settings

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The default settings for the RS-232 COM port are as follows:

Baud Rate:	115,200
Parity:	None
Data bits:	8
Stop bits:	1
Flow Control:	None

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## RS-232 Connector Information

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The pin-out for the RS-232 control port is as follows:

Pin	Description
1	No Connection
2	Receive Data
3	Transmit Data
4	No Connection
5	Ground
6	No Connection
7	RTS (Not needed if Flow Control set to None)
8	CTS (Not needed if Flow Control set to None)
9	No Connection

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## Controlling the Projector Basics

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To turn on the projector via RS-232, you will need to connect to the projector and send the following ASCII code:

X001X

To turn the projector off send the following ASCII code string:

X002X

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## Common Operational Functions

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ASCII Code	Function	Acknowledgement
X000X	RS232 Communication Test	X000XRS232_OKX0_0X
X001X	Power ON	X0_1X
X002X	Power OFF	X002XX0_2X
X131X	Input Source -- Video	X131XX0_131X
X132X	Input Source -- S-Video	X132XX0_132X
X133X	Input Source -- PC Source	X133XX0_133X
X135X	Input Source -- Component 1	X135XX0_135X
X139X	Input Source -- HDMI 1	X139XX0_139X
X140X	Input Source -- Component 2	X140XX0_140X
X149X	Input Source -- HDMI 2	X149XX0_149X
X003X	Menu	X003XX0_3X
X004X	Enter	X004XX0_4X
X005X	Exit	X005XX0_5X
X006X	Up	X006XX0_6X
X007X	Down	X007XX0_7X
X008X	Left	X008XX0_8X
X009X	Right	X009XX0_9X
X093X	Auto Source Searching OFF	X093XX0_93X

## Advanced Operational Functions

ASCII Code	Function	Acknowledgement
X013X	Save DB Min/Max aperture	X013XX0_013X
X014X	Display DB calibration full white pattern(DB full off)	X014XX0_014X
X015X	Close DB calibration full white pattern	X015XX0_015X
X016X	Restore default DB max/min position	X016XX0_016X
X041X	Picture Mode -- Cinema Mode	X041XX0_41X
X044X	Picture Mode -- Dynamic Mode	X044XX0_44X
X045X	Picture Mode -- Standard Mode	X045XX0_45X
X046X	Picture Mode -- User 1 Mode	X046XX0_46X
X047X	Picture Mode -- User 2 Mode	X047XX0_47X
X048X	Picture Mode -- User 3 Mode	X048XX0_48X
X049X	Reset All Settings(User OSD)	X049XX0_49X
X052X	Disable Mode Information OSD	X052XX0_52X
X068X	RS232 baud rate -- 14400 bps	X068XX0_68X
X069X	RS232 baud rate -- 2400 bps	X069XX0_69X
X070X	RS232 baud rate -- 4800 bps	X070XX0_70X
X071X	RS232 baud rate -- 9600 bps	X071XX0_71X
X072X	RS232 baud rate -- 19200 bps	X072XX0_72X
X073X	RS232 baud rate -- 38400 bps	X073XX0_73X
X074X	RS232 baud rate -- 57600 bps	X074XX0_74X
X075X	RS232 baud rate -- 115200 bps	X075XX0_75X
X081X	Factory Mode	X081XX0_81X
X091X	Lamp Power -- Whisper Mode	X091XX0_91X
X092X	Lamp Power -- Normal Mode	X092XX0_92X
X095X	Enable Print Message	X095XX0_95X
X096X	Disable Print Message	X096XX0_96X
X099X	Reset All Settings and Timers(User OSD)	X099XX0_99X
X100X	Black Level -- 0 IRE	X100XX0_100X
X101X	Black Level -- 7.5 IRE	X101XX0_101X
X103X	Print Message -- ADC Calibration Data	X103XX0_103X
X104X	Print Message -- Color Temperature Data	X104XX0_104X
X112X	Color Temperature -- Lamp Native	X112XX0_112X
X113X	Color Temperature -- Warm	X113XX0_113X
X114X	Color Temperature -- Normal	X114XX0_114X
X115X	Color Temperature -- Cool	X115XX0_115X
X116X	Color Temperature -- User 1	X116XX0_116X
X117X	Color Temperature -- User 2	X117XX0_117X
X118X	Color Temperature -- User 3	X118XX0_118X
X121X	Language -- English	X121XX0_121X
X122X	Language -- French	X122XX0_122X

X123X	Language -- German	X123XX0_123X
X124X	Language -- Italian	X124XX0_124X
X125X	Language -- Spanish	X125XX0_125X
X126X	Language -- Russian	X126XX0_126X
X127X	Language -- Traditional Chinese	X127XX0_127X
X128X	Language -- Simplified Chinese	X128XX0_128X
X151X	Reset Lamp Timer(User)	X151XX0_151X
X152X	Reset Lamp Timer(Factory)	X152XX0_152X
X154X	Auto Function for PC Timings	X154XX0_154X
X175X	Burn-In Mode OFF	X175XX0_175X
X182X	Burn-In Mode ON in Whisper Mode	X182XX0_182X
X183X	Burn-In Mode ON in Normal Mode	X183XX0_183X
X221X	Scaler Patterns -- 32-Gray bars	X221XX0_221X
X222X	Scaler Patterns -- 32-Red bars	X222XX0_222X
X223X	Scaler Patterns -- 32-Green bars	X223XX0_223X
X224X	Scaler Patterns -- 32-Blue bars	X224XX0_224X
X225X	Scaler Patterns -- 32-Color bars	X225XX0_225X
X226X	DLP Inspection Patterns -- ANSI C/R(Big Checkerboard)	X226XX0_226X
X227X	Scaler Patterns -- Optical 13-Points	X227XX0_227X
X229X	Scaler Patterns -- Grid	X229XX0_229X
X231X	DLP Curtains -- Red Curtain	X231XX0_231X
X232X	DLP Curtains -- Green Curtain	X232XX0_232X
X233X	DLP Curtains -- Blue Curtain	X233XX0_233X
X234X	General Inspection Patterns -- Full Black with IRIS Full Off	X234XX0_234X
X252X	General Inspection Patterns -- Full White with IRIS Full On	X252XX0_252X
X258X	IRIS Full OFF	X258XX0_258X
X260X	Turn Off Test Patterns	X260XX0_260X
X287X	IRIS Full ON	X287XX0_287X
X350X	Release Blank	X350XX0_350X
X400X	Enable Dynamic Black Function	X400XX0_400X
X401X	Disable Dynamic Black Function	X401XX0_401X
X900X	Get Power Status	0X0_900X
X997X	Print Message -- FW Revision	X0_997X

## Get Data Functions

When getting values, the values are returned in the form of the ASCII code command.

ASCII Code	Function	Acknowledgement
Z001R+0000Z	Lamp Hours (User) -- Normal Mode	Z001R+0000ZZ0_1(read data)Z
Z002R+0000Z	Lamp Hours (User) -- Whisper Mode	Z002R+0000ZZ0_2(read data)Z
Z004R+0000Z	Lamp Hours (Factory) -- Normal Mode	Z004R+0000ZZ0_4(read data)Z

Z005R+0000Z	Lamp Hours (Factory) -- Whisper Mode	Z005R+0000ZZ0_5(read data)Z
Z007R+0000Z	Dust Filter Hours	Z007R+0000ZZ0_7(read data)Z
Z017R+0000Z	Color Temperature	Z017R+0000ZZ0_17(read data)Z
Z033R+0000Z	Residual Burn-In Time (hours)	Z033R+0000ZZ0_33(read data)Z
Z034R+0000Z	Burn-In On Time (mins)	Z034R+0000ZZ0_34(read data)Z
Z035R+0000Z	Burn-In Off Time (mins)	Z035R+0000ZZ0_35(read data)Z
Z038R+0000Z	Burn On/Off Cycle	Z038R+0000ZZ0_38(read data)Z
Z041R+0000Z	ADC Calibration Data of RGBHD Source -- Red Offset	Z041R+0000ZZ0_41(read data)Z
Z042R+0000Z	ADC Calibration Data of RGBHD Source -- Green Offset	Z042R+0000ZZ0_42(read data)Z
Z043R+0000Z	ADC Calibration Data of RGBHD Source -- Blue Offset	Z043R+0000ZZ0_43(read data)Z
Z044R+0000Z	ADC Calibration Data of RGBHD Source -- Red Gain	Z044R+0000ZZ0_44(read data)Z
Z045R+0000Z	ADC Calibration Data of RGBHD Source -- Green Gain	Z045R+0000ZZ0_45(read data)Z
Z046R+0000Z	ADC Calibration Data of RGBHD Source -- Blue Gain	Z046R+0000ZZ0_46(read data)Z
Z048R+0000Z	ADC Calibration Data of Component Source -- Y Offset	Z048R+0000ZZ0_48(read data)Z
Z049R+0000Z	ADC Calibration Data of Component Source -- Y Gain	Z049R+0000ZZ0_49(read data)Z
Z050R+0000Z	ADC Calibration Data of Component Source -- Pb Gain	Z050R+0000ZZ0_50(read data)Z
Z051R+0000Z	ADC Calibration Data of Component Source -- Pr Gain	Z051R+0000ZZ0_51(read data)Z
Z052R+0000Z	ADC Calibration Data of Component Source -- Pb Offset	Z052R+0000ZZ0_52(read data)Z
Z053R+0000Z	ADC Calibration Data of Component Source -- Pr Offset	Z053R+0000ZZ0_53(read data)Z
Z054R+0000Z	ADC Calibration Data of Component 1080p -- Y Offset	Z054R+0000ZZ0_54(read data)Z
Z055R+0000Z	ADC Calibration Data of Component 1080p -- Pb Offset	Z055R+0000ZZ0_55(read data)Z
Z056R+0000Z	ADC Calibration Data of Component 1080p -- Pr Offset	Z056R+0000ZZ0_56(read data)Z
Z057R+0000Z	ADC Calibration Data of Component 1080p -- Y Gain	Z057R+0000ZZ0_57(read data)Z
Z058R+0000Z	ADC Calibration Data of Component 1080p -- Pb Gain	Z058R+0000ZZ0_58(read data)Z
Z059R+0000Z	ADC Calibration Data of Component 1080p -- Pr Gain	Z059R+0000ZZ0_59(read data)Z
Z104R+0000Z	Color Temperature -- Red Gain	Z104R+0000ZZ0_104(read data)Z
Z105R+0000Z	Color Temperature -- Green Gain	Z105R+0000ZZ0_105(read data)Z
Z106R+0000Z	Color Temperature -- Blue Gain	Z106R+0000ZZ0_106(read data)Z
Z107R+0000Z	Color Temperature -- Red Offset	Z107R+0000ZZ0_107(read data)Z
Z108R+0000Z	Color Temperature -- Green Offset	Z108R+0000ZZ0_108(read data)Z
Z109R+0000Z	Color Temperature -- Blue Offset	Z109R+0000ZZ0_109(read data)Z
Z127R+0000Z	DLP C/W Delay	Z127R+0000ZZ0_127(read data)Z
Z128R+0000Z	DLP Gamma	Z128R+0000ZZ0_128(read data)Z
Z129R+0000Z	DLP C/W Multiplier	Z129R+0000ZZ0_129(read data)Z
Z130R+0000Z	get DB aperture position	Z130R+0000ZZ0_130+0(data)Z
Z131W+00(data)Z	get DB min	Z131R+0000ZZ0_131+0(data)Z
Z132W+00(data)Z	get DB max	Z132R+0000ZZ0_132+0(data)Z
Z150R+0000Z	RS232 Baud Rate	Z150R+0000Z_(baud rate)_Z0_150(read data)Z