

RS 232

ascii supported commands
extract

PRELIMINARY



1 REVISION HISTORY

Document	Rev	Release Date	Revised	Owner
ascii supported commands extract	0.5	1/2/05	Preliminary	

SPECIFICATION

Overview

The protocol exists in parallel with the already existing 32/33-byte protocol.

The protocol has the following definition:

<ESC>	<ESC>	ADDRESS	[SEPARATOR]	MESSAGE BODY
1 byte	1 byte	1-3 bytes	1 byte	N bytes

Field	Description	Comment
<ESC>	ASCII character ':'	Required
Separator	ASCII character 'space'	Optional
Address	1-3 bytes address	Optional

Message body

The message body structure is as follows:

MNEMONIC	[SEPARA-TOR]	[MODIFIER]	[SEPARA-TOR]	MESSAGE BODY	CR
4 byte	1 byte	1 or 2 bytes	1 byte	N bytes	1 byte

Field	Description	Comment
Mnemonic	4 bytes key identifier, not case sensitive	Required
Modifer	Single char symbol	Optional
Values	1-3 bytes address	Optional
TERM	Termination char 0x0D (CR)	Required

MNEMONIC

The Mnemonic is 4 bytes key identifier, know as the ASCII command.

Example: POWR, SABS, IVGA

MODIFIER

L	Set variable to minimum allowable value. No explicit value allowed.	not impl
H	Set variable to maximum allowable value. No explicit value allowed.	not impl
D	Set variable to default value. No explicit value allowed.	not impl
R	Relative change. Value given will be relative to the existing value	implemented
I	Increase variable automatically until stopped or maximum is reached. Value gives increase rate in steps per second.	not impl
E	Decrease variable automatically until stopped or minimum is reached. Value gives decrease rate in steps per second.	not impl
S	Stop a previous I or D command. Any command related to a function where an auto increase or decrease is in progress, will stop the I or D command.	not impl
A	Request an acknowledge. This modifier is the only that might be applied together with another modifier. It can be used to read back the result of the command.	implemented
?	? – current ?M – max ?N – min	implemented

Addressing

The same address mechanisms as for the binary protocol is supported in the ASCII protocol.

Acknowledge/Response

Acknowledge is optional and ON by default. Auto acknowledge can be turned on and off with ECHO commad. Also turned activated on a per command basis using modifier A.

ACK	ADDRESS	SEP	COMMAND	SEP	VALUE	TERM.
1 byte	3 bytes	1 byte	4 bytes	1 byte	6 bytes	1 byte

Field	Description	Comment
ACK	ASCII character '%'	Always
SEP	ASCII space	Always
VALUE	6 bytes return value	Always
TERM	Termination char 0x0D (CR)	Always

POWER ON						
:	P	O	W	R	1	CR

:POWR1#0x0D

POWER OFF with address 100												
:		1	0	0		p	o	w	r		0	CR

: 100 POWR 0#0x0D

ACKNOWLEDGE LAMP REMAINING with address 98																
:	0	9	8		L	R	M	1		0	0	1	9	9	8	CR

:098 LREM 001998CR

SUPPORTED COMMANDS

Modifiers	
A	Request acknowledge
?	Get current value
?M	Get MAX value
?N	Get MIN value
R	Relative set

ASCII	Function	Operations supported	Legal modifiers
IVGA	Select VGA (1 only for F3)	Get, Set	A, ?
IBNC	Select BNC	Get, Set	A, ?
IDVI	Select DVI	Get, Set	A, ?
ISVI	Select S-video	Get, Set	A, ?
ICVI	Select Composite video	Get, Set	A, ?
IYPP	Select Component YPbPr	Get, Set	A, ?
IABS [0-12]	Set source abs value	Get, Set	A, R, ?, ?M, ?N
VRGB 0	RGB Video OFF	Get, Set	A, ?
VRGB 1	RGB Video Component	Get, Set	A, ?
SCAN 1	Source scan On	Get, Set	A, ?
SCAN 0	Source scan Off	Get, Set	A, ?
POWR 1	Power On	Get, Set	A, ?
POWR 0	Power Off	Get, Set	A, ?
S1T1	Select Scaling 1:1	Get, Set	A, ?
S169	Select Scaling 16:9	Get, Set	A, ?
SANA	Select Scaling Anamorphic	Get, Set	A, ?
SFLA	Select Scaling FillAll	Get, Set	A, ?
SFAR	Select Scaling FillAspectRatio	Get, Set	A, ?
SLET	Select Scaling Letterbox to 16:9	Get, Set	A, ?
SLST	Select Scaling Letterbox st to 16:9	Get, Set	A, ?
SZOM	Select Scaling Zoom	Get, Set	A, ?

ASCII	Function	Operations supported	Legal modifiers
SABS [0-7]	Set scaling abs value	Get, Set	A, R, ?, ?M, ?N
Gamma Computer			
GCFI 1	Select Gamma Film 1	Get, Set	A, ?
GCFI 2	Select Gamma Film 2	Get, Set	A, ?
GCVI 1	Select Gamma Video 1	Get, Set	A, ?
GCVI 2	Select Gamma Video 2	Get, Set	A, ?
GCCP 1	Select Gamma Computer 1	Get, Set	A, ?
GCCP 2	Select Gamma Computer 2	Get, Set	A, ?
GCAB [0-12]	Select Gamma abs value	Get, Set	A, R, ?, ?M, ?N
Gamma Video			
GVFI 1	Select Gamma Film 1	Get, Set	A, ?
GVFI 2	Select Gamma Film 2	Get, Set	A, ?
GVVI 1	Select Gamma Video 1	Get, Set	A, ?
GVVI 2	Select Gamma Video 2	Get, Set	A, ?
GVCP 1	Select Gamma Computer 1	Get, Set	A, ?
GVCP 2	Select Gamma Computer 2	Get, Set	A, ?
GVAB [0-12]	Select Gamma abs value	Get, Set	A, R, ?, ?M, ?N
BRIG	Brightness	Get, Set	A, R, R, ?, ?M, ?N
BRED	Red brightness	Get, Set	A, R, R, ?, ?M, ?N
BGRE	Green brightness	Get, Set	A, R, ?, ?M, ?N
BBLU	Blue brightness	Get, Set	A, R, ?, ?M, ?N
CNTR	Contrast	Get, Set	A, R, ?, ?M, ?N
CRED	Red contrast	Get, Set	A, R, ?, ?M, ?N
CGRE	Green contrast	Get, Set	A, R, ?, ?M, ?N
CBLU	Blue contrast	Get, Set	A, R, ?, ?M, ?N
CT65	Select colortemp 6500	Get, Set	A, ?
CT73	Select colortemp 7300	Get, Set	A, ?
CT93	Select colortemp 9300	Get, Set	A, ?
CTCU	Select custom color temp	Get, Set	A, ?
CTRD	Red color temperature	Get, Set	A, R, ?, ?M, ?N
CTGR	Green color temperature	Get, Set	A, R, ?, ?M, ?N
CTBL	Blue color temperature	Get, Set	A, R, ?, ?M, ?N
CSAT	Color saturation	Get, Set	A, R, ?, ?M, ?N

ASCII	Function	Operations supported	Legal modifiers
VPOS	Vertical position	Get, Set	A, R, ?, ?M, ?N
HPOS	Horizontal position	Get, Set	A, R, ?, ?M, ?N
VHUE	Hue video	Get, Set	A, R, ?, ?M, ?N
SHRP	Sharpness	Get, Set	A, R, ?, ?M, ?N
FREQ	Frequency	Get, Set	A, R, ?, ?M, ?N
PHSE	Phase	Get, Set	A, R, ?, ?M, ?N
VKEY	Vertical keystone	Get, Set	A, R, ?, ?M, ?N
HKEY	Horizontal keystone	Get, Set	A, R, ?, ?M, ?N
DESK	Select Orientation Desktop Front	Get, Set	A, ?
CEIL	Select Orientation Ceiling Front	Get, Set	A, ?
RDES	Select Orientation Desktop Rear	Get, Set	A, ?
RCEI	Select Orientation Rear Ceiling	Get, Set	A, ?
ORIE [0-3]	Select orientation abs value	Get, Set	A, R, ?, ?M, ?N
BKBK	Select Splash/Background Logo/Black	Get, Set	A, ?
LGLG	Select Splash/Background Logo	Get, Set	A, ?
LGBL	Select Splash/Background Blue	Get, Set	A, ?
LGWH	Select Splash/Background White	Get, Set	A, ?
LGBK	Select Splash/Background Black	Get, Set	A, ?
FRZE 1	Freeze Frame On	Get, Set	A, ?
FRZE 0	Freeze Frame Off	Get, Set	A, ?
VAUT	Select Video Format Auto (default)	Get, Set	A, ?
VNTC	Select Video Format NTSC	Get, Set	A, ?
VPAL	Select Video Format PAL	Get, Set	A, ?
VSEC	Select Video Format SECAM	Get, Set	A, ?
VDVD	Select Video Type DVD	Get, Set	A, ?
WCR	Select Video Type VCR	Get, Set	A, ?
TEST 1	Test Image On	Get, Set	A, ?
TEST 0	Test Image Off	Get, Set	A, ?
ECOM 1	Eco Mode On	Get, Set	A, ?
ECOM 0	Eco Mode Off	Get, Set	A, ?
RSAU	RS232 address mode auto	Get, Set	A, ?
RSFI	RS232 address mode fixed	Get, Set	A, ?
OSDC 1	OSD On	Get, Set	A, ?
OSDC 0	OSD Off	Get, Set	A, ?

ASCII	Function	Operations supported	Legal modifiers
OSDW 1	OSD Warning On	Get, Set	A, ?
OSDW 0	OSD Warning Off	Get, Set	A, ?
SWVR	Software Version Get	Get	A, ?
THRM	Thermal Monitor Get	Get	A, R, ?, ?M, ?N
AUTO	Execute auto adjust	Execute	A
ECHO 0	Turn acknowledge off	Get, Set	A, ?
ECHO 1	Turn acknowledge on	Get, Set	A, ?
LPW1	Lamp 1 Power	Get, Set	A, ?,
LPW2	Lamp 2 Power	Get, Set	A, ?
LHO1	Lamp 1 Runtime	Get	A, ?
LHO2	Lamp 2 Runtime	Get	A, ?
UTOT	Total operating time	Get	A, ?
LST1	Lamp 1 Status Get	Get	A, ?
LST2	Lamp 2 Status Get	Get	A, ?
LRM1	Lamp 1 Estimated Remaining Lamp Time	Get	A, ?
LRM2	Lamp 2 Estimated Remaining Lamp Time	Get	A, ?
SNGL	Lamp mode single	Get, Set	A, ?
DUAL	Lamp mode dual	Get, Set	A, ?
LACT	Lamp active single	Get, Set	A, ?
ZOIN 1,2,3	Zoom in speed 1-3	Set	A
ZOUT 1,2,3	Zoom out speed 1-3	Set	A
FOIN 1,2,3	Focus in speed 1-3	Set	A
FOUT 1,2,3	Focus out speed 1-3	Set	A
IROP 1,2,3	Iris open speed 1-3	Set	A
IRCL 1,2,3	Iris close speed 1-3	Set	A
SHUT 1	Shutter close	Set	A
SHUT 0	Shutter open	Set	A
LSUP 1,2,3	Lens shift up speed 1-3	Set	A
LSDW 1,2,3	Lens shift down speed 1-3	Set	A
LSLF 1,2,3	Lens shift left speed 1-3	Set	A
LSRH 1,2,3	Lens shift right speed 1-3	Set	A
LENS	Get Lens Mounted	Get	A, ?
RCID	Remote control ID	Get, Set	A, R, ?, ?M, ?N