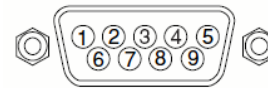


# LX-NZ3 External command

## 1. Interface

D-SUB 9pin Male terminal

Pin No.	Name	Pin No.	Name
1	NC	6	NC
2	RXD	7	NC
3	TXD	8	NC
4	NC	9	NC
5	GND		



## 2. Communication specification

Communication System	Asynchronous
Baud rate	9,600 bps
Data length	8 bits
Parity	None
Stop bit	1 bit
Flow control	None
Communication code	ASCII character code

## 3. Command list

Condition

1. Character delay=>0 ms
2. Stand by 0.5W and any baud rate don't loss command.

(.Each input upper case and lower case character should be action)

Function	Type	Operation	ASCII	Standby	Warming Up	Cooling Down
<b>Power</b>	Write	Power On	<CR>*pow=on#<CR>	Y	N	N
	Write	Power Off	<CR>*pow=off#<CR>	N	N	N
	Read	Power Status	<CR>*pow=?#<CR>	Y	Y	Y
<b>Source Selection</b>	Write	COMPUTER/YPbPr	<CR>*sour=RGB#<CR>	N	N	N
	Write	HDMI	<CR>*sour=hdmi#<CR>	N	N	N
	Write	HDMI 2	<CR>*sour=hdmi2#<CR>	N	N	N
	Read	Current source	<CR>*sour=?#<CR>	N	N	N
<b>Picture Mode</b>	Write	Dynamic	<CR>*appmod=dynamic#<CR>	N	N	N
	Write	Cinema	<CR>*appmod=cine#<CR>	N	N	N
	Write	Natural	<CR>*appmod=natural#<CR>	N	N	N
	Write	User1	<CR>*appmod=user1#<CR>	N	N	N
	Write	User2	<CR>*appmod=user2#<CR>	N	N	N

	Read	Picture Mode	<CR>*appmod=?#<CR>	N	N	N
Picture Setting	Write	Contrast +	<CR>*con=+#<CR>	N	N	N
	Write	Contrast -	<CR>*con=-#<CR>	N	N	N
	Read	Contrast value	<CR>*con=?#<CR>	N	N	N
	Write	Brightness +	<CR>*bri=+#<CR>	N	N	N
	Write	Brightness -	<CR>*bri=-#<CR>	N	N	N
	Read	Brightness value	<CR>*bri=?#<CR>	N	N	N
	Write	Color +	<CR>*color=+#<CR>	N	N	N
	Write	Color -	<CR>*color=-#<CR>	N	N	N
	Read	Color value	<CR>*color=?#<CR>	N	N	N
	Write	Tint +	<CR>*tint=+#<CR>	N	N	N
	Write	Tint -	<CR>*tint=-#<CR>	N	N	N
	Read	Tint value	<CR>*tint=?#<CR>	N	N	N
	Write	Sharpness +	<CR>*sharp=+#<CR>	N	N	N
	Write	Sharpness -	<CR>*sharp=-#<CR>	N	N	N
	Read	Sharpness value	<CR>*sharp=?#<CR>	N	N	N
	Write	Skin Tone +	<CR>*skintone=+#<CR>	N	N	N
	Write	Skin Tone -	<CR>*skintone=-#<CR>	N	N	N
	Read	Skin Tone value	<CR>*skintone=?#<CR>	N	N	N
	Write	Color Temperature-Low	<CR>*ct=low#<CR>	N	N	N
	Write	Color Temperature-Normal	<CR>*ct=normal#<CR>	N	N	N
	Write	Color Temperature-High	<CR>*ct=high#<CR>	N	N	N
	Read	Color Temperature Status	<CR>*ct=?#<CR>	N	N	N
	Write	Aspect 4:3	<CR>*asp=4:3#<CR>	N	N	N
	Write	Aspect 16:9	<CR>*asp=16:9#<CR>	N	N	N
	Write	Aspect 16:10	<CR>*asp=16:10#<CR>	N	N	N
	Write	Aspect Auto	<CR>*asp=AUTO#<CR>	N	N	N
	Read	Aspect Status	<CR>*asp=?#<CR>	N	N	N
	Write	Overscan Adjustment +	<CR>*overscan=+#<CR>	N	N	N
	Write	Overscan Adjustment -	<CR>*overscan=-#<CR>	N	N	N
	Read	Overscan Adjustment value	<CR>*overscan=?#<CR>	N	N	N
	Write	Auto	<CR>*auto#<CR>	N	N	N
	Write	Red Gain +	<CR>*RGain=+#<CR>	N	N	N
Write	Red Gain -	<CR>*RGain=-#<CR>	N	N	N	
Read	Red Gain value	<CR>*RGain=?#<CR>	N	N	N	
Write	Green Gain +	<CR>*GGain=+#<CR>	N	N	N	
Read	Red Gain value	<CR>*RGain=?#<CR>	N	N	N	
Write	Green Gain +	<CR>*GGain=+#<CR>	N	N	N	

Write	Green Gain -	<CR>*GGain=-#<CR>	N	N	N
Read	Green Gain value	<CR>*GGain=?#<CR>	N	N	N
Write	Blue Gain +	<CR>*BGain=+#<CR>	N	N	N
Write	Blue Gain -	<CR>*BGain=-#<CR>	N	N	N
Read	Blue Gain value	<CR>*BGain=?#<CR>	N	N	N
Write	Red Offset +	<CR>*ROffset=+#<CR>	N	N	N
Write	Red Offset -	<CR>*ROffset=-#<CR>	N	N	N
Read	Red Offset value	<CR>*ROffset=?#<CR>	N	N	N
Write	Green Offset +	<CR>*GOffset=+#<CR>	N	N	N
Write	Green Offset -	<CR>*GOffset=-#<CR>	N	N	N
Read	Green Offset value	<CR>*GOffset=?#<CR>	N	N	N
Write	Blue Offset +	<CR>*BOffset=+#<CR>	N	N	N
Write	Blue Offset -	<CR>*BOffset=-#<CR>	N	N	N
Read	Blue Offset value	<CR>*BOffset=?#<CR>	N	N	N
Write	Gamma Selection-1.8	<CR>*gamma=1.8#<CR>	N	N	N
Write	Gamma Selection-2.0	<CR>*gamma=2.0#<CR>	N	N	N
Write	Gamma Selection-2.1	<CR>*gamma=2.1#<CR>	N	N	N
Write	Gamma Selection-2.2	<CR>*gamma=2.2#<CR>	N	N	N
Write	Gamma Selection-2.3	<CR>*gamma=2.3#<CR>	N	N	N
Write	Gamma Selection-2.4	<CR>*gamma=2.4#<CR>	N	N	N
Write	Gamma Selection-2.6	<CR>*gamma=2.6#<CR>	N	N	N
Write	Gamma Selection-Contrast Priority	<CR>*gamma=CP#<CR>	N	N	N
Write	Gamma Selection-Brightness Priority	<CR>*gamma=BP#<CR>	N	N	N
Read	Gamma Selection Status	<CR>*gamma=?#<CR>	N	N	N
Write	HDR setting-Auto	<CR>*HDRSETTING=AUTO#<CR>	N	N	N
Write	HDR setting-HDR10	<CR>*HDRSETTING=HDR10#<CR>	N	N	N
Write	HDR setting-HLG	<CR>*HDRSETTING=HLG#<CR>	N	N	N
Write	HDR setting-SDR	<CR>*HDRSETTING=SDR#<CR>	N	N	N
Read	HDR setting status	<CR>*HDRSETTING=?#<CR>	N	N	N
Write	Picture tone =-2	<CR>*PICTURETONE=-2#<CR>	N	N	N

	Write	Picture tone =-1	<CR>* PICTURETONE =-1#<CR>	N	N	N
	Write	Picture tone =0	<CR>* PICTURETONE =0 #<CR>	N	N	N
	Write	Picture tone =1	<CR>* PICTURETONE =1#<CR>	N	N	N
	Write	Picture tone =2	<CR>* PICTURETONE =2#<CR>	N	N	N
	Read	Picture tone status	<CR>*PICTURETONE=?#<CR>	N	N	N
<b>Operation Settings</b>	Write	Splash Screen -Black	<CR>*splash=black#<CR>	N	N	N
	Write	Splash Screen -Blue	<CR>*splash=blue#<CR>	N	N	N
	Write	Splash Screen Status	<CR>*splash=?#<CR>	N	N	N
	Write	Background Color - Black	<CR>*background=black#<CR>	N	N	N
	Write	Background Color - Blue	<CR>*background=blue#<CR>	N	N	N
	Write	Background Color - Green	<CR>*background=Green#<CR> >	N	N	N
	Read	Background Color States	<CR>*background=?#<CR>	N	N	N
	Write	Projector Position-Front Table	<CR>*pp=FT#<CR>	N	N	N
	Write	Projector Position-Rear Table	<CR>*pp=RE#<CR>	N	N	N
	Write	Projector Position-Rear Ceiling	<CR>*pp=RC#<CR>	N	N	N
	Write	Projector Position-Front Ceiling	<CR>*pp=FC#<CR>	N	N	N
	Read	Projector Position Status	<CR>*pp=?#<CR>	N	N	N
	Write	Quick auto search on/Auto source search on	<CR>*QAS=on#<CR>	N	N	N
	Write	Quick auto search off/Auto source search off	<CR>*QAS=off#<CR>	N	N	N
	Read	Quick auto search status/Auto source search status	<CR>*QAS=?#<CR>	N	N	N
Write	Menu Display Time -Always On	<CR>*menutime=on#<CR>	N	N	N	
Write	Menu Display Time -5 sec	<CR>*menutime=5s#<CR>	N	N	N	

	Write	Menu Display Time -10 sec	<CR>*menutime=10s#<CR>	N	N	N
	Write	Menu Display Time -15 sec	<CR>*menutime=15s#<CR>	N	N	N
	Write	Menu Display Time -20 sec	<CR>*menutime=20s#<CR>	N	N	N
	Write	Menu Display Time -25 sec	<CR>*menutime=25s#<CR>	N	N	N
	Write	Menu Display Time -30 sec	<CR>*menutime=30s#<CR>	N	N	N
	Read	Menu Display Time Status	<CR>*menutime=?#<CR>	N	N	N
	Write	Menu Position - Center	<CR>*menuposition=center#<CR>	N	N	N
	Write	Menu Position - Top-Left	<CR>*menuposition=tl#<CR>	N	N	N
	Write	Menu Position - Top-Right	<CR>*menuposition=tr#<CR>	N	N	N
	Write	Menu Position - Bottom-Right	<CR>*menuposition=br#<CR>	N	N	N
	Write	Menu Position - Bottom-Left	<CR>*menuposition=bl#<CR>	N	N	N
	Read	Menu Position Status	<CR>*menuposition=?#<CR>	N	N	N
	Write	Reminder Message - On	<CR>*reminder=on#<CR>	N	N	N
	Write	Reminder Message - Off	<CR>*reminder=off#<CR>	N	N	N
	Read	Reminder Message Status	<CR>*reminder=?#<CR>	N	N	N
	Write	Direct Power On-on	<CR>*directpower=on#<CR>	N	N	N
	Write	Direct Power On-off	<CR>*directpower=off#<CR>	N	N	N
	Read	Direct Power On-Status	<CR>*directpower=?#<CR>	N	N	N
	Write	E-shift - on	<CR>*eshift=on#<CR>	N	N	N
	Write	E-shift - off	<CR>*eshift=off#<CR>	N	N	N
Read	E-shift - Status	<CR>*eshift=?#<CR>	N	N	N	
<b>Light Source Control</b>	Read	Light Source Hour	<CR>*ltim=?#<CR>	N	N	N
	Write	Light Source Hour Reset	<CR>*ltim=reset#<CR>	N	N	N
	Write	Normal mode	<CR>*lampm=lnor#<CR>	N	N	N
	Write	Eco mode	<CR>*lampm=eco#<CR>	N	N	N
	Write	Variable Low mode	<CR>*lampm=variablelow#<CR>	N	N	N
	Write	Variable High mode	<CR>*lampm=variablehigh#<CR>	N	N	N

	Read	Light Source Mode Status	<CR>*lampm=?#<CR>	N	N	N
Miscellaneous	Read	Model Name	<CR>*modelname=?#<CR>	N	N	N
	Write	Blank On	<CR>*blank=on#<CR>	N	N	N
	Write	Blank Off	<CR>*blank=off#<CR>	N	N	N
	Read	Blank Status	<CR>*blank=?#<CR>	N	N	N
	Write	Menu On	<CR>*menu=on#<CR>	N	N	N
	Write	Menu Off	<CR>*menu=off#<CR>	N	N	N
	Write	Up	<CR>*up#<CR>	N	N	N
	Write	Down	<CR>*down#<CR>	N	N	N
	Write	Right	<CR>*right#<CR>	N	N	N
	Write	Left	<CR>*left#<CR>	N	N	N
	Write	Enter/OK	<CR>*enter#<CR>	N	N	N
	Write	BACK	<CR>*back#<CR>	N	N	N
	Write	Language +	<CR>*lang=+#<CR>	N	N	N
	Write	Language -	<CR>*lang=-#<CR>	N	N	N
	Read	Language Status	<CR>*lang=?#<CR>	N	N	N
	Write	Auto Power off -disable	<CR>*APOFF=DIS#<CR>	N	N	N
	Write	Auto Power off - 5 min	<CR>*APOFF=5#<CR>	N	N	N
	Write	Auto Power off - 10 min	<CR>*APOFF=10#<CR>	N	N	N
	Write	Auto Power off - 15 min	<CR>*APOFF=15#<CR>	N	N	N
	Write	Auto Power off - 20 min	<CR>*APOFF=20#<CR>	N	N	N
	Write	Auto Power off - 25 min	<CR>*APOFF=25#<CR>	N	N	N
	Write	Auto Power off - 30 min	<CR>*APOFF=30#<CR>	N	N	N
	Read	Auto Power off Status	<CR>*APOFF=?#<CR>	N	N	N
	Write	High Altitude mode on	<CR>*Highaltitude=on#<CR>	N	N	N
	Write	High Altitude mode off	<CR>*Highaltitude=off#<CR>	N	N	N
	Read	High Altitude mode status	<CR>*Highaltitude=?#<CR>	N	N	N
	Write	Key Lock on	<CR>*keylock=on#<CR>	N	N	N
Write	Key Lock off	<CR>*keylock=off#<CR>	N	N	N	
Read	Key Lock status	<CR>*keylock=?#<CR>	N	N	N	

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