PLAYSTATION TECHNICAL NOTE
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Ref: Note 30
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Subject: FAQ: Regarding neGcon Specifications

ABSTRACT

In order to make the neGcon (pronunciation: nejicon) compatible with game software for PlayStation, it it is necessary to pay attention to the items described below.

ITEMS OF CONCERN
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(1) Library processing
NeGcon data cannot be read with the libetc PadInit/PadRead interface standard controller. Therefore, when using neGcon, please use the libapi controller service.

Note: The libetc controller service and libapi controller service cannot coexist. That is to say, when reading the neGcon data using libapi or when reading the standard controller data with libapi, you can never use libetc PadInit/PadRead. In connection with that, the mouse, etc. are the same, so please unify with libapi controller service.

(2) Game software compatibility processing
The analog readings from the analog button and the twist control are each converted into 1 byte of data with values in the range of 0-255. However, since production errors and use over a long period of time can cause slight numerical value differences to occur, it is necessary for the game software to absorb these individual differences. Also, it is necessary for the game software to be able to adjust the twist control idle position range [play] and central value offset settings. Please strictly observe the following numerical values. Note that when reading the ‘twist control center values’ and ‘analog button values’ in the key configuration section, the method of absorbing individual differences in neGcon is also effective.

(3) Data regarding the extent of the guarantee at time of shipment

a) Twist Control: Less than 64 is processed as minimum value
More than 192 is processed as maximum value
Valid data range: 64-192 (40H-C0H)

b) Analog button: Less than 16 is processed as minimum value
More than 192 is processed as maximum value
Valid data range: 16-192 (10H-C0H)

c) Twist Control center - idle position range [play]: 8

(4) Button location, serial data

The neGcon buttons are as follows:

Up
Left
Right
Down

Twist

Input data is transmitted as 6-byte serial data as described below:

(The ID is 23H)

1st byte	Digital	No. 1	8 bit
2nd byte	Digital	No. 2	8 bit
3rd byte	Analog	Twisting	0~255
4th byte	Analog	button	0~255
5th byte	Analog	button	0~255
6th byte	Analog	button	0~255

Assignments to Each Bit of Digital No. 1 and Digital No. 2

Digital No. 1:

b7	b6	b5	b4	b3	b2	b1	b0
Left	Down	Right	Up	S	None	None	None

Digital No. 2:

b7	b6	b5	b4	b3	b2	b1	b0
None	None	A	B	R	None	None	None