

**Partner: Crestron**  
**Model: CI-KNX**  
**Device Type: (Logic)**



### GENERAL INFORMATION:

<b>SIMPLWINDOWS NAME:</b>	"Crestron CI-KNX EIS5_To_Analog v1.6.umd"
<b>CATEGORY:</b>	System Control
<b>VERSION:</b>	V1.6
<b>SUMMARY:</b>	This macro contains logic for converting a EIS5 value to an Analog value.
<b>GENERAL NOTES:</b>	<p><b>PLEASE CAREFULLY READ THE CI-KNX MANUAL BEFORE PROGRAMMING.</b></p> <p>This macro contains logic for converting a EIS5 value to an Analog value. The macro will output the Mantissa, the exponent (base 2) and the sign. The macro will also output an analog signal that contains the absolute result of the formula: Mantissa x 2<sup>Power Exponent</sup>. Every value greater than 65535 will be set to 65535.</p> <p>The Analog input of this macro should be connected with the analog output "Value_Analog" of the "Crestron CI-KNX 2 Byte v1.6" symbol.</p>
<b>CRESTRON HARDWARE REQUIRED:</b>	2/3-Series processor with Ethernet card
<b>SETUP OF CRESTRON HARDWARE:</b>	<p>The demo program was written for a PRO2/MC3.</p> <p>The CI-KNX is controlled over TCP/IP.</p>
<b>VENDOR FIRMWARE:</b>	V1.0
<b>VENDOR SETUP:</b>	CI-KNX connected to the KNX bus
<b>CABLE DIAGRAM:</b>	Standard CAT5 cable

### CONTROL:

<b>Analog_Value</b>	A	Analog signal that has to be connected with the analog output "Value_Analog" of the "Crestron CI-KNX 2 Byte v1.6" symbol.
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### FEEDBACK:

<b>Mantisse</b>	A	Analog signal representing the mantisse.(precision: 0.01)
<b>Exponent</b>	A	Analog signal representing the Exponent.(Base: 2)
<b>Sign</b>	D	High when the EIS5 value is negative.
<b>Absolute_Result</b>	A	<p>Analog signal that contains the absolute value of the data. Every value greater than 65535 will be set to 65535.</p> <p>For Example: When a value for 25.50°C is received, the Absolute_Result signal will output 2550. This result is calculated by multiplying the Mantissa output with 2<sup>Exponent</sup>. In this case the mantissa will be 1275 and the exponent 1, which results in</p>

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		1275 x 2 <sup>1</sup> = 2550 => 25.50°C.
Absolute_Value_Text	S	Serial signal containing the absolute value of the data. This output can display values that bigger than 65536.

## TESTING:

OPS USED FOR TESTING:	PRO2: V. 4.007.0004 MC3: V. 1.008.0040
SIMPL WINDOWS USED FOR TESTING:	V. 4.02.38
CRESTRON DB USED FOR TESTING:	V. 44.00.002.00
DEVICE DB USED FOR TESTING:	V. 54.05.004.00
SAMPLE PROGRAM:	"Crestron CI-KNX v1.6 PRO2 Demo.smw" "Crestron CI-KNX v1.6 MC3 Demo.smw"
REVISION HISTORY:	V. 1.6