

## 1. Crestron Module Information

Partner: Neutrik AG

Model: NA2-IO-DPRO

Device Type: DANTE I/O Interface

## 2. General Information

SIMPL Windows Name: NA2-IO-DPRO\_V.2.0

Category: Device Interface

Summary: This module controls a Neutrik NA2-IO-DPRO via Ethernet connection.

## 3. General Notes:

This module is designed to control a Yamaha MRX7-D via a Crestron Control System. It can use either serial or Ethernet connection although we strongly recommend using Ethernet.

**Because the core routines are written in SIMPL# it only runs on Crestron System3 devices!**

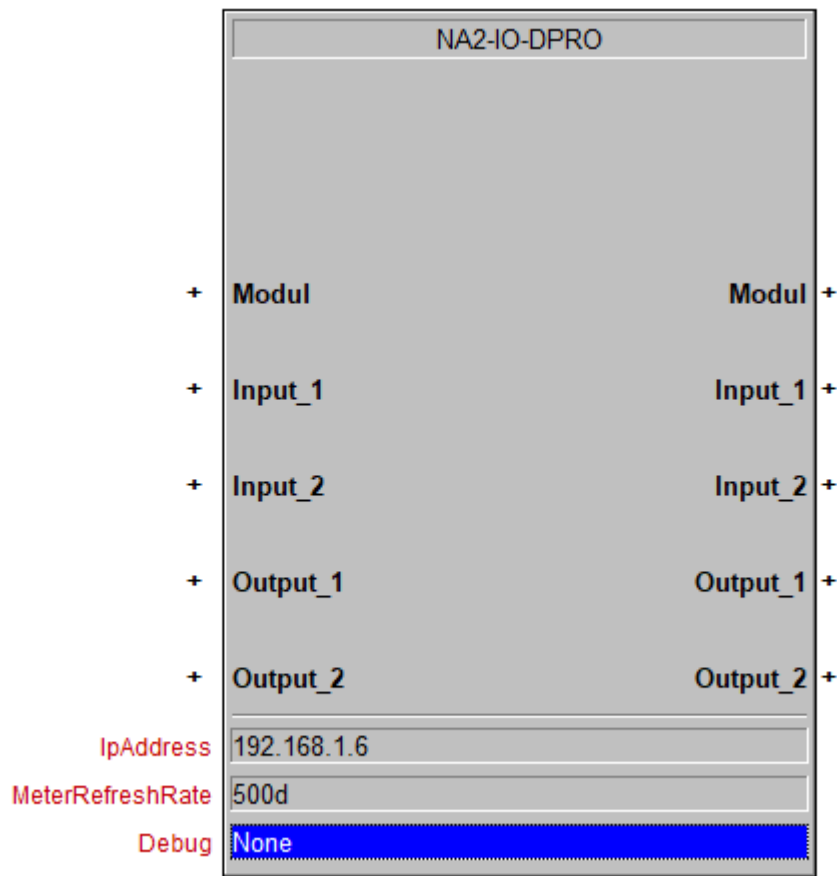
The archive contains the following files:

NA2-IO-DPRO_V.2.0.umc	The SIMPL Macro as w wrapper for the SIMPL+ module
NA2-IO-DPRO-V2.0.usp	The SIMPL+ module as a wrapper for the SIMPL# module
NA2_IO_DPRO_V.2.0.clz	The SIMPL# module as an interface for NA2-IO-DPRO
NA2-IO-DPRO-Demo_V2.smw	Sample Application for controlling NA2-IO-DPRO
NA2-IO-DPRO-Demo_V2.vtp	XPanel UI for NA2-IO-DPRO Sample
SignalPresent.umc	Helper Macro
ToggleWithFeedback.umc	Helper Macro

## 4. Tested software versions

- Crestron SIMPL Windows 4.20
- Crestron SIMPL+ 4.06
- Crestron Cross Compiler 1.3
- Crestron Database 212.05
- Crestron Device Database 200.190
- Crestron VT-Pro-e 6.2.02
- Crestron Smart Graphics Controls 2.17.01.01
- Neutrik NA2-IO-DPRO Firmware 9.15

### 5. Wiring:



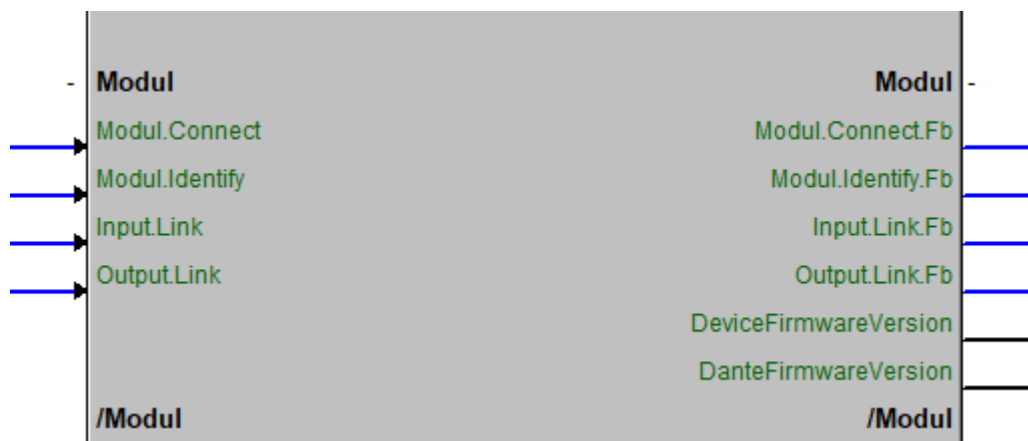
The Macro NA2-IO-DPRO\_V.2.0.umc is a wrapper for the Simpl+ Modul NA2-IO-DPRO-V2.0.usp

You can also use the Simpl+ Module directly, but the Macro is more clearly arranged and therefore easier to use

## 6. Signals:

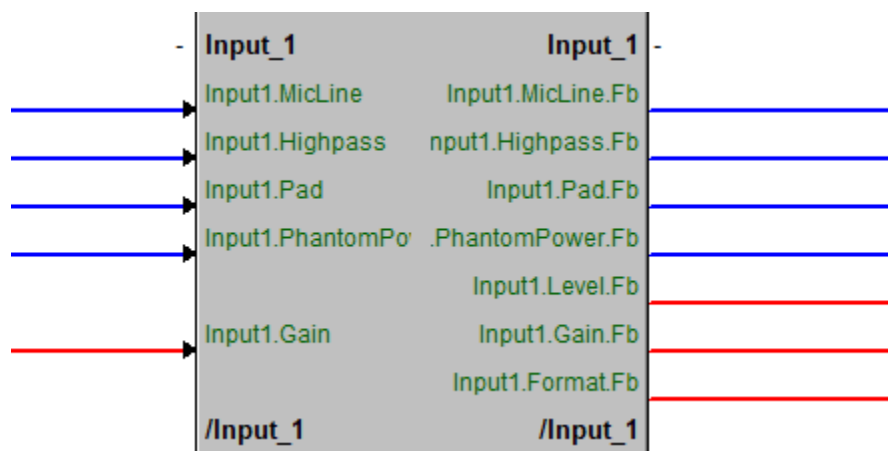
The following pictures show the different parts of the module:

### 6.1 Part – Module



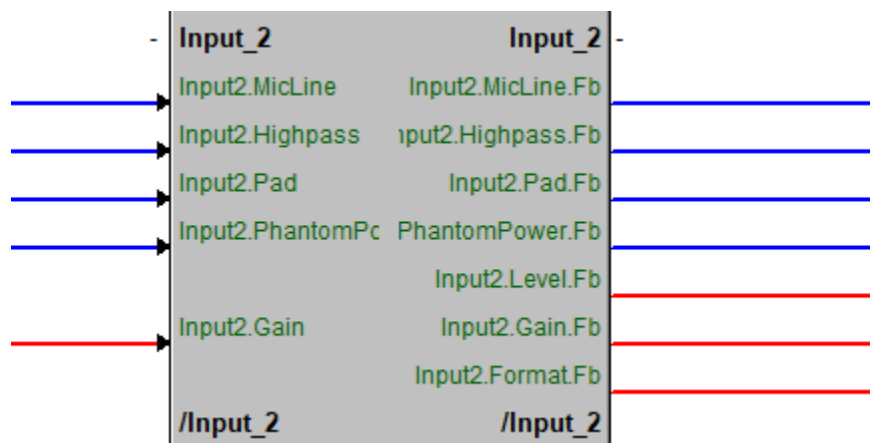
<b>Controls</b>		
Module.Connect	digital	1: causes the module to connect to the <b>NA2-IO-DPRO</b> 0: causes disconnect
Module.Identify	digital	1: switches the Identify mode on (all Led's blinking) 0: Identify mode off
Input.Link	digital	1: input link on – all controls for input channel 1 also work for channel 2 0: input link off
Output.Link	digital	1: output link on – all controls for output channel 1 also work for channel 2 0: output link off
<b>Feedback</b>		
Module.Connect.Fb	digital	"1" if the module is successfully connected to the NA2-IO-PRO
Module.Identify.Fb	digital	"1" if identify mode is on
Input.Link.Fb	digital	"1" if input link is active
Output.Link.Fb	digital	"1" if output link is active
DeviceFirmwareVersion	serial	Shows the device firmware version after connect
DanteFirmrwareVersion	serial	Shows the dante firmware version after connect

### 6.2 Part - Input 1



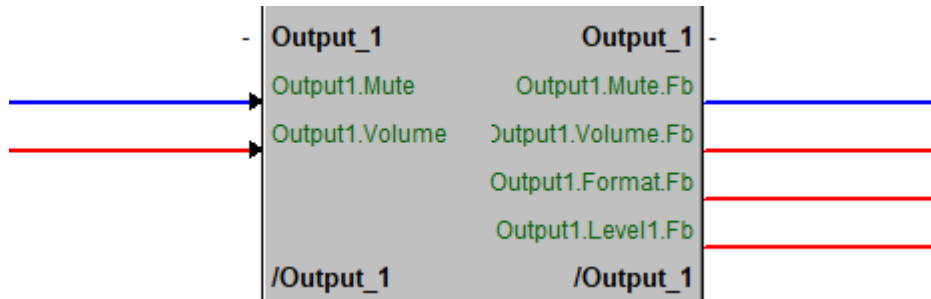
Controls		
Input1.MicLine	digital	1: causes Input1 to Line mode 0: causes Input1 to Mic mode No function if AES Input is used!
Input1.Highpass	digital	1: causes Input1 Highpass On 0: causes Input1 Highpass Off No function if AES Input is used
Input1.Pad	digital	1: causes Input1 Pad On (16 dB attenuation) 0: causes Input1 Pad Off No function if AES Input is used ! Works only in Line mode !
Input1.PhantomPower	digital	1: causes Input1 Phantom Power On (+48V) 0: causes Input1 Phantom Power Off No function if AES Input is used ! Works only in Mic mode !
Input1.Gain	analog	Analog value for Input Gain (0 ... -66dB, 3dB steps) Works only in Mic mode !
Feedback		
Input1.MicLine.Fb	digital	"1" if Mic Mode is active
Input1.Highpass.Fb	digital	"1" if Highpass
Input1.Pad.Fb	digital	"1" if Pad is active
Input1.PhantomPower.Fb	digital	"1" if PhantomPower is active
Input1.Level.Fb	analog	Feedback for level (-127 ... 0 db)
Input1.Gain.Fb	analog	Feedback for input gain (0 ... -66dB, 3dB steps)
Input1.Format.Fb	analog	0: no input 1: Analog input 2: AES Input

## 6.3 Part - Input 2



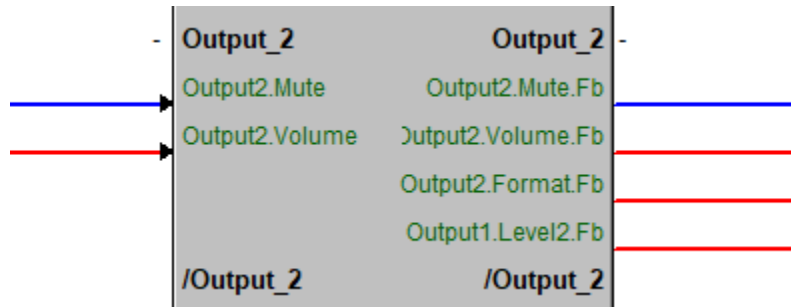
Controls		
Input2.MicLine	digital	1: causes Input2 to Line mode 0: causes Input2 to Mic mode No function if AES Input is used!
Input2.Highpass	digital	1: causes Input2 Highpass On 0: causes Input2 Highpass Off No function if AES Input is used
Input2.Pad	digital	1: causes Input2 Pad On (16 dB attenuation) 0: causes Input2 Pad Off No function if AES Input is used ! Works only in Line mode !
Input2.PhantomPower	digital	1: causes Input2 Phantom Power On (+48V) 0: causes Input2 Phantom Power Off No function if AES Input is used ! Works only in Mic mode !
Input2.Gain	analog	Analog value for Input Gain (0 ... -66dB, 3dB steps) Works only in Mic mode !
Feedback		
Input2.MicLine.Fb	digital	"1" if Mic Mode is active
Input2.Highpass.Fb	digital	"1" if Highpass
Input2.Pad.Fb	digital	"1" if Pad is active
Input2.PhantomPower.Fb	digital	"1" if PhantomPower is active
Input2.Level.Fb	analog	Feedback for level (-127 ... 0 db)
Input2.Gain.Fb	analog	Feedback for input gain (0 ... -66dB, 3dB steps)
Input2.Format.Fb	analog	0: no input 1: Analog input 2: AES Input

## 6.4 Section Output 1



<b>Controls</b>		
Output1.Mute	digital	1: Mute On 0: Mute Off
Output1.Volume	analog	Analog value for Output Volume (0 ... -128dB, 1dB steps) No function if AES Output is used!
<b>Feedback</b>		
Output1.Mute.Fb	digital	"1" if Mute is active
Output1.Level.Fb	digital	Feedback for level (-127 ... 0 db)
Output1.Volume.Fb	analog	Feedback for Output Volume (0 ... -128dB, 1dB steps)
Output1.Format.Fb	analog	0: no Output 1: Analog Output 2: AES Output

## 6.5 Section Output 2



<b>Controls</b>		
Output2.Mute	digital	1: Mute On 0: Mute Off
Output2.Volume	analog	Analog value for Output Volume (0 ... -128dB, 1dB steps) No function if AES Output is used!
<b>Feedback</b>		
Output2.Mute.Fb	digital	"1" if Mute is active
Output2.Level.Fb	digital	Feedback for level (-127 ... 0 db)
Output2.Volume.Fb	analog	Feedback for Output Volume (0 ... -128dB, 1dB steps)
Output2.Format.Fb	analog	0: no output 1: Analog output 2: AES Output

## 6.6 Section Parameter

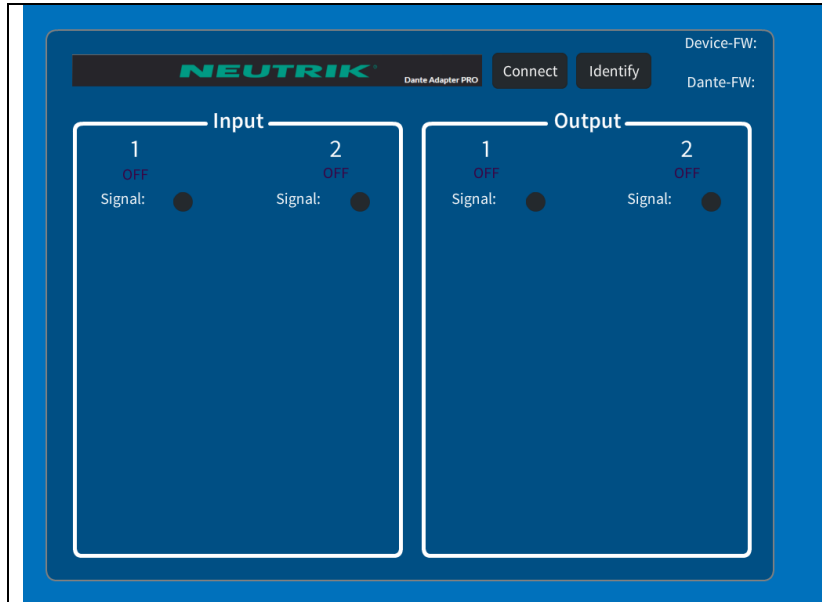
IpAddress	192.168.1.6
MeterRefreshRate	500d
Debug	None

Controls		
IpAddress	String	IP-Address of the NA2-IO-PRO (maybe you have to setup the Ip-Address of your NA2-IO-DPRO with the Controller software first)
MeterRefreshRate	Decimal	Refresh Rate of metering in ms (100ms ... 10000ms) Default: 500ms
Debug	Enum	Debug Level (None, Error, Warning, Info, Debug) (for support purposes only) Default: None

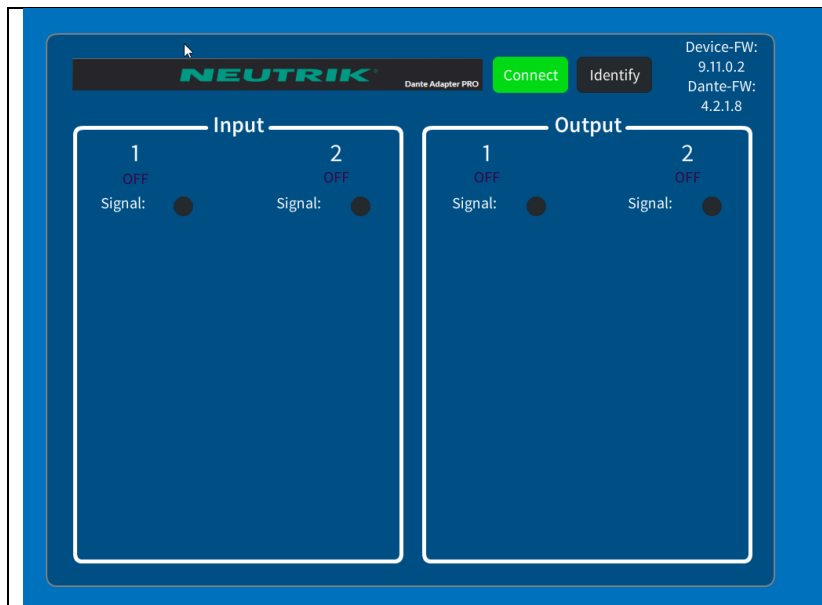


### 7.0 The Sample App

In the Sample App we show you how to use the module and how to use the feedbacks for Mode, Link, Mic/Line to arrange the views in the UI using the Crestron “Visible” properties.



Module is not connected. You have to press “Connect” first.



Module is connected, but no inputs or outputs are active

The screenshot shows the software interface for the Neutrik Dante Adapter PRO. At the top, there are 'Connect' and 'Identify' buttons. The device information is: Device-FW: 9.11.0.2, Dante-FW: 4.2.1.8. The interface is divided into 'Input' and 'Output' sections. The 'Input' section has two channels: Channel 1 is active (Signal: green dot) and set to 'Line' mode with a gain of -9 dB(Fs). Channel 2 is inactive (Signal: black dot) and set to 'Line' mode with a gain of -9 dB(Fs). The 'Output' section has two channels, both inactive (Signal: black dot). Channel 1 is set to 'OFF' and Channel 2 is set to 'OFF'.

Inputs are active (recognized by connectors).  
Input 1 is in Line-mode,  
Input 2 is in Mic-mode

The screenshot shows the software interface for the Neutrik Dante Adapter PRO. At the top, there are 'Connect' and 'Identify' buttons. The device information is: Device-FW: 9.11.0.2, Dante-FW: 4.2.1.8. The interface is divided into 'Input' and 'Output' sections. The 'Input' section is identical to the previous screenshot. The 'Output' section has two channels, both active (Signal: green dot). Channel 1 is set to 'Analog' mode with a gain of -26 dB(Fs). Channel 2 is set to 'Analog' mode with a gain of -63 dB(Fs). Both channels have 'MUTE' buttons and up/down arrows for gain adjustment.

Outputs are connected too....

## *8. Other Documents*

please also note the following documents:

- latest release notes
- NA2-IO-DPRO User Manual
- NA2-IO-DPRO Update instructions