

AMX N Command Installation and Usage Guide



Version: 1.0.0
Date: Thursday, January 22, 2026
Authors: Richard Mullins

Contents

| | |
|------------------------------|----------|
| Overview..... | 6 |
| Product Features..... | 7 |
| Comms Module..... | 8 |
| Parameters..... | 8 |
| PollTime..... | 8 |
| Port..... | 8 |
| IP Address..... | 8 |
| Digital Inputs..... | 8 |
| Connect..... | 8 |
| Digital Outputs..... | 8 |
| Connected..... | 8 |
| Analog Outputs..... | 8 |
| TotalEncoders..... | 8 |
| TotalDecoders..... | 8 |
| TotalAudio..... | 8 |
| Encoder Module..... | 9 |
| Parameters..... | 9 |
| IP Address..... | 9 |
| Digital Inputs..... | 9 |
| Live..... | 9 |
| Local..... | 9 |
| Encoder_Off..... | 9 |
| Read_Response..... | 9 |
| Audio_On..... | 9 |
| Audio_Off..... | 9 |
| Color_Correction_On..... | 9 |
| Color_Correction_Off..... | 10 |
| Color_Correction_Auto..... | 10 |
| HDMI_Audio_On..... | 10 |
| HDMI_Audio_Off..... | 10 |
| HDMI_Audio_Auto..... | 10 |

| | |
|----------------------------|-----------|
| Analog Inputs..... | 10 |
| Playlist..... | 10 |
| Send_Serial..... | 10 |
| String Inputs..... | 10 |
| Send_IR..... | 10 |
| Send_Hex..... | 10 |
| Digital Outputs..... | 11 |
| Connected..... | 11 |
| Online_FB..... | 11 |
| Live_FB..... | 11 |
| Local_FB..... | 11 |
| Off_FB..... | 11 |
| DVI_FB..... | 11 |
| Scaler_FB..... | 11 |
| Source_Detected_FB..... | 11 |
| Audio_State..... | 11 |
| Color_Space_On..... | 11 |
| Color_Space_Off..... | 12 |
| Color_Space_Auto..... | 12 |
| HMDI_Audio_Off_FB..... | 12 |
| HDMI_Audio_Auto_FB..... | 12 |
| Analog Outputs..... | 12 |
| Audio_Stream..... | 12 |
| Output_Stream_FB..... | 12 |
| Playlist_FB..... | 12 |
| String Outputs..... | 12 |
| Serial_Response..... | 12 |
| Device_Name..... | 12 |
| Resolution..... | 12 |
| Decoder Module..... | 13 |
| Parameters..... | 13 |
| IP_Address..... | 13 |
| Digital_Inputs..... | 13 |
| Analog_Inputs..... | 13 |

| | |
|--------------------------------------|-----------|
| String Inputs..... | 13 |
| Digital Outputs..... | 13 |
| Analog Outputs..... | 13 |
| String Outputs..... | 13 |
| Audio Transceiver Module..... | 14 |
| Parameters..... | 14 |
| IP Address..... | 14 |
| Digital Inputs..... | 14 |
| Volume_Up..... | 14 |
| Volume_Down..... | 14 |
| Headphone_Volume_Up..... | 14 |
| Headphone_Volume_Down..... | 14 |
| Mute_On..... | 14 |
| Mute_Off..... | 14 |
| Mute_Tx_On..... | 14 |
| Mute_Tx_Off..... | 15 |
| Relay_1_On..... | 15 |
| Relay_1_Off..... | 15 |
| Relay_2_On..... | 15 |
| Relay_2_Off..... | 15 |
| Analog Inputs..... | 15 |
| Switch_by_ID..... | 15 |
| Volume..... | 15 |
| Headphone_Volume..... | 15 |
| String Inputs..... | 15 |
| Switch_by_IP..... | 15 |
| Digital Outputs..... | 16 |
| Connected..... | 16 |
| Online_FB..... | 16 |
| RxMute..... | 16 |
| TxDisabled..... | 16 |
| TxAudioState..... | 16 |
| RxAudioState..... | 16 |
| Analog Outputs..... | 16 |

| | |
|---------------------|----|
| TxStream..... | 16 |
| RxStream..... | 16 |
| LineoutVol..... | 16 |
| HeadphoneVol..... | 16 |
| String Outputs..... | 17 |
| Device_Name..... | 17 |
| Resolution..... | 17 |

Overview

The SC-N8000 N-Command Controllers provide intuitive and powerful management of SVSI system configuration, task automation, scripting, and wall building. N-Command Control Appliances also include a simplified ASCII interface for 3rd-party control via TCP/IP.

Product Features

- Uses the N-Command to control connected
 - Encoders
 - Decoders
 - Audio Transceivers
- Simple switching using ID's or IP Addresses
- Playlist control
- Send Serial string and get responses
- Send IR codes

Comms Module

Parameters

PollTime

The Poll Time value is used to set the interval between checking for new devices that have been discovered by the N-Command device.

Port

The IP Address field must contain the Port of the N-Command device. The default is 50020.

IP Address

The IP Address field must contain the IP address of the N-Command device. You must use a four dotted IP address, hostnames are not accepted.

Digital Inputs

Connect

The Connect signal is used to open a connecting to the N-Command device. It is level triggered and needs to stay high for as long as you need to maintain the connection. Lowering this signal will disconnect.

Digital Outputs

Connected

Analog Outputs

TotalEncoders

The TotalEncoders signal will contain the total number of Encoders found by the N-Command device.

TotalDecoders

The TotalDecoders signal will contain the total number of Decoders found by the N-Command device.

TotalAudio

The TotalAudio signal will contain the total number of Audio Transceivers found by the N-Command device.

Encoder Module

Parameters

IP Address

The IP Address field must contain the IP address of the Encoder device. You must use a four dotted IP address, hostnames are not accepted.

Digital Inputs

Live

The Live input is used to set the Encoder to live mode. This signal is level triggered and will set live mode on the leading edge of this signal.

Local

The Local input is used to set the Encoder to local mode. This signal is level triggered and will set live mode on the leading edge of this signal.

Encoder_Off

The Encoder Off input is used to turn the encoder off. This signal is level triggered and turn the encoder off on the leading edge of this signal.

Read_Response

The Read Response signal is used to read the response to a serial command sent using the Send Serial signal.

Audio_On

The Audio On will turn the audio on. This signal is level triggered and will set live mode on the leading edge of this signal.

Audio_Off

The Audio Off will turn the audio off. This signal is level triggered and will set live mode on the leading edge of this signal.

Color_Correction_On

The Color Correction On will set color correction on. This signal is level triggered and will set live mode on the leading edge of this signal.

Color_Correction_Off

The Color Correction Off will set color correction off. This signal is level triggered and will set live mode on the leading edge of this signal.

Color_Correction_Auto

The Color Correction Auto will set the color correction to auto. This signal is level triggered and will set live mode on the leading edge of this signal.

HDMI_Audio_On

The HDMI Audio On will turn the HDMI audio on. This signal is level triggered and will set live mode on the leading edge of this signal.

HDMI_Audio_Off

The HDMI Audio Off will turn the HDMI audio off. This signal is level triggered and will set live mode on the leading edge of this signal.

HDMI_Audio_Auto

The HDMI Audio Auto signal will set the HDMI audio mode to Auto. This signal is level triggered and will set live mode on the leading edge of this signal.

Analog Inputs

Playlist

The Playlist input allows you set set the playlist by its numerical id.

Send_Serial

The Send Serial signal can be used to send a stored serial command. The Read Response call can be used to get a response to this call. The response is returned to the Serial Response join.

String Inputs

Send_IR

The Send IR signal can be used to send a saved IR code through. This signal is used to set the label for the saved IR code.

Send_Hex

The Send Hex signal can be used to send a Pronto Hex IR code. NOTE: most pronto codes exceed the maximum length of a string in SIMPL (255 characters) so this input uses a gather to collect the entire string

before sending. The last character in the HEX codes must be a \r for the code to be accepted. A PRESS or STEPPER symbol can be used to send the codes (just make sure the last item has the \r at the end).

Digital Outputs

Connected

The Connected signal will go high once this unit has received feedback data from the N-Command device. It will go low only if the N-Command device has its Connect signal go low.

Online_FB

The Online FB signal will be high is the encoder is currently online and communicating.

Live_FB

The Live FB signal will be high is the Encoder is currently in Live mode, and low otherwise.

Local_FB

The Live FB signal will be high is the Encoder is currently in Live mode, and low otherwise.

Off_FB

The Off FB signal will be high is the Encoder is currently in Off mode, and low otherwise.

DVI_FB

The DVI FB signal will by high is the DVI port is active, and low otherwise.

Scaler_FB

The Scaler FB signal will be high is the Scaler is active, and low otherwise.

Source_Detected_FB

The Source Detected signal will be high is a source has been detected and low otherwise.

Audio_State

The Audio State signal will be high when there is audio present, and low otherwise.

Color_Space_On

The Color Space On will be high when the Color Space is active, and low otherwise.

Color_Space_Off

The Color Space Off will be high when the Color Space is inactive, and low otherwise.

Color_Space_Auto

The Color Space Auto will be high when the Color Space is set to auto., anlow otherwise.

d ### HDMI_Audio_On_FB

The HDMI Audio On FB signal will be high when the HDMI Audio is active, and low otherwise.

HMDI_Audio_Off_FB

The HDMI Audio On FB signal will be high when the HDMI Audio is inactive, and low otherwise.

HDMI_Audio_Auto_FB

The HDMI Audio On FB signal will be high when the HDMI Audio is set to auto, and low otherwise.

Analog Outputs

Audio_Stream

The Audio Stream signal contains the currently active audio stream id.

Output_Stream_FB

The Output Stream FB signal contains the currently active output stream id.

Playlist_FB

The Playlist signal contains the currently active playlist id.

String Outputs

Serial Response

The Serial Response join is used to provide the feedback from a call to the Set Serial join. The result won't be fetched unless you use the read_response join. If you do use that join then the response will be presented on this join.

Device_Name

The Device Name join will have the name used as a reference for this device.

Resolution

The Resolution join will contain the current resolution.

Decoder Module

Parameters

IP Address

The IP Address field must contain the IP address of the Decoder device. You must use a four dotted IP address, hostnames are not accepted.

Digital Inputs

Analog Inputs

String Inputs

Digital Outputs

Analog Outputs

String Outputs

Audio Transceiver Module

Parameters

IP Address

The IP Address field must contain the IP address of the Audio Transceiver device. You must use a four dotted IP address, hostnames are not accepted.

Digital Inputs

Volume_Up

The Volume Up signal is used to raise the volume 1% on each leading edge. This signal is edge triggered and the trailing edge has no effect.

Volume_Down

The Volume Down signal is used to lower the volume 1% on each leading edge. This signal is edge triggered and the trailing edge has no effect.

Headphone_Volume_Up

The Headphone Volume Up signal is used to raise the headphone volume 1% on each leading edge. This signal is edge triggered and the trailing edge has no effect.

Headphone_Volume_Down

The Headphone Down signal is used to lower the headphone volume 1% on each leading edge. This signal is edge triggered and the trailing edge has no effect.

Mute_On

The Mute On signal is used to set the mute. This signal is edge triggered and the trailing edge has no effect.

Mute_Off

The Mute Off signal is used to unset the mute. This signal is edge triggered and the trailing edge has no effect.

Mute_Tx_On

The Mute TX On signal is used to set the mute the for all transmit data. This signal is edge triggered and the trailing edge has no effect.

Mute_Tx_Off

The Mute TX Off signal is used to unset the mute the for all transmit data. This signal is edge triggered and the trailing edge has no effect.

Relay_1_On

The Relay 1 On signal is used to turn relay 1 on. This signal is edge triggered and will send the command on the leading edge.

Relay_1_Off

The Relay 1 Off signal is used to turn relay 1 off. This signal is edge triggered and will send the command on the leading edge.

Relay_2_On

The Relay 2 On signal is used to turn relay 2 on. This signal is edge triggered and will send the command on the leading edge.

Relay_2_Off

The Relay 2 Off signal is used to turn relay 2 off. This signal is edge triggered and will send the command on the leading edge.

Analog Inputs

Switch_by_ID

The Switch By ID signal, lets you choose the device to connect to by its ID (as opposed to its IP Address, which you can do using the Switch By IP serial input).

Volume

The Volume input is used to set the volume. Valid range is 0 - 100.

Headphone_Volume

The Headphone Volume input is used to set the headphone volume. Valid range is 0 - 100.

String Inputs

Switch_by_IP

The Switch By IP signal, lets you choose the device to connect to by its IP address (as opposed to its ID, which you can do using the Switch By ID analog input).

Digital Outputs

Connected

The Connected signal will go high once this unit has received feedback data from the N-Command device. It will go low only if the N-Command device has its Connect signal go low.

Online_FB

The Online FB signal will be high is the decoder is currently online and communicating.

RxMute

The RxMute signal will be high when the Receive Mute is active, and low otherwise.

TxDisabled

The TxDisabled signal will be high when the Transmit is disabled is active, and low otherwise.

TxAudioState

The TxAudioState signal will be high when the Transmit audio is active, and low otherwise.

RxAudioState

The RxAudioState signal will be high when the Receive audio is active, and low otherwise.

Analog Outputs

TxStream

The TxStream signal contains the current Transmit Stream ID.

RxStream

The RxStream signal contains the current Receive Stream ID.

LineoutVol

The Lineout Volume output will contain the current volume in the range of 0 - 100.

HeadphoneVol

The Headphone Volume output will contain the current headphone volume in the range of 0 - 100.

String Outputs

Device_Name

The Device Name join will have the name used as a reference for this device.

Resolution

The Resolution join will contain the current resolution.