

Partner: Lab.Gruppen
Model: NLB-60E
Device Type: Multi Channel Audio Amp.

**GENERAL INFORMATION:**

| | |
|------------------------------------|--|
| SIMPLWINDOWS NAME: | "LabGruppen NLB-60E v1.0.umc" |
| CATEGORY: | Amplifier |
| VERSION: | V 1.0 |
| SUMMARY: | The "LabGruppen NLB-60E v1.0.umc" controls a Lab.Gruppen NLB-60E and offers basic functionality to control a subnet of Nomadlink enabled amplifiers. |
| GENERAL NOTES: | <p>The "LabGruppen NLB-60E v1.0.umc" controls a Lab.Gruppen NLB-60E and offers basic functionality to control a subnet of Nomadlink enabled amplifiers.</p> <p>The macro offers the power on/off and mute/Unmute commands. These commands apply to all the devices connected to the subnet of the Lab.Gruppen NLB-60E.</p> <p>It's also possible to retrieve the subnet status information. This can be done manually by pulsing the Refresh_Subnet_Status signal or automatically by setting the Enable_Status_Polling property to one.</p> |
| CRESTRON HARDWARE REQUIRED: | Pro2 processor with a Ethernet card |
| SETUP OF CRESTRON HARDWARE: | The pro2 processor is set to the same subnet range as the NLB-60E and connected on the same subnet. |
| VENDOR FIRMWARE: | V |
| VENDOR SETUP: | The amplifiers are connected with the NLB-60E using the Nomadlink in and out ports. Connecting the amplifiers creates a daisy-chain from the NLB-60E to the amplifiers. |
| CABLE DIAGRAM: | Standard CAT5 cable |

Partner: Lab.Gruppen
Model: NLB-60E
Device Type: Multi Channel Audio Amp.


CONTROL:

| | | |
|---|---|--|
| Power_All_On | D | Pulse to turn on all connected devices. |
| Power_All_Off | D | Pulse to turn off all connected devices. |
| Toggle_Power_All | D | Pulse to toggle the master power state. |
| Mute_All | D | Pulse to mute all the connected devices. |
| UnMute_All | D | Pulse to unmute all the connected devices. |
| Toggle_Mute_All | D | Pulse to toggle the mute state of all the connected devices. |
| Refresh_Subnet_Status | D | Pulse to refresh the subnet status info. |
| Enable_Status_Polling | D | Set high to refresh the subnet status info every x seconds. |
| To_Amplifier | D | Serial String containing data received from a connected Amplifier |
| {{TCP/IP_Client_>>_Connect-F}} | D | To be connected with the Connect-F signal on the TCP/IP Client symbol. |
| {{TCP/IP_Client_>>_status}} | S | To be connected with the Status signal on the TCP/IP Client symbol. |
| {{TCP/IP_Client_>>_RX\$}} | R | To be connected with the RX\$ signal on the TCP/IP Client symbol. |

FEEDBACK:

| | | |
|-----------------------------------|---|--|
| Power_All_Is_On | D | High to indicate that all the connected devices are powered on. |
| Power_All_Is_Off | D | High to indicate that connected devices are powered off. |
| Power_All_Is_Mixed | D | High to indicate that some connected devices are powered on and some connected devices are powered down. |
| Power_All_Is_In_Transition | D | High to indicate that one or more devices in the subnet are changing their power state. |
| Subnet_Power_Status_Text | S | Serial signal containing the subnet power status info. Values: On, Off, Mixed, Transition. |
| Subnet_is_Muted | D | High to indicate that all the devices in the subnet are muted. |
| Subnet_is_UnMuted | D | High to indicate that all the devices in the subnet are unMuted. |

Partner: Lab.Gruppen
Model: NLB-60E
Device Type: Multi Channel Audio Amp.



| | | |
|------------------------------|---|--|
| Subnet_Mute_Info_Text | S | Serial signal containing the subnet mute status info. Values: Mute and UnMute |
| [Subnet_Number_Analog] | A | Analog signal indicating the number of the subnet. |
| [Number_Of_Device_Analog] | A | Analog signal indicating the number of connected devices in the subnet. |
| [Subnet_Is_Open] | D | High to indicate that the subnet connection type is open. |
| [Subnet_Is_Closed] | D | High to Indicate that the subnet connection type is closed. |
| [Subnet_Type_Text] | S | Serial signal containing the type of the subnet. Values: Open or Closed. |
| [System_Is_Faulty] | D | High to indicate that a fault occurred in the subnet. |
| [System_Is_OK] | D | High to indicate that no faults are found in the subnet. |
| [Subnet_System_Info_Text] | S | Serial signal containing the general system status. Values: Faulty or OK |
| [GPI_1_Is_High] | D | High to indicate that GPI 1 is high. |
| [GPI_1_Is_Low] | D | High to indicate that GPI 1 is low. |
| [GPI_1_Text] | S | Serial signal containing the state of GPI 1. |
| [GPI_2_Is_High] | D | High to indicate that GPI 2 is high. |
| [GPI_2_Is_Low] | D | High to indicate that GPI 2 is low. |
| [GPI_2_Text] | S | Serial signal containing the state of GPI 2. |
| [GPI_3_Is_High] | D | High to indicate that GPI 3 is high. |
| [GPI_3_Is_Low] | D | High to indicate that GPI 3 is low. |
| [GPI_3_Text] | S | Serial signal containing the state of GPI 3. |
| [From_Amplifier_x] | S | Serial String to be connected with the Rx signal of Amplifier x. |
| {{Connect_>>_TCP/IP_Client}} | D | To be connected with the Connect signal on the TCP/IP Client symbol. |
| {{TX\$_>>_TCP/IP_Client}} | R | To be connected with the TX\$ signal on the TCP/IP Client symbol. |

Partner: Lab.Gruppen
Model: NLB-60E
Device Type: Multi Channel Audio Amp.

**PARAMETERS:**

| | | |
|------------------------------------|---|---|
| Port Number | A | Contains the Port Number that Systembuilder will use for TCP/IP Client. |
| Subnet Status Poll Interval | A | This parameter is used to set the time between status polling events. |
| Amplifier_x_Name | S | Serial string containing the name of Amplifier x. |

TESTING:

| | |
|--|---|
| OPS USED FOR TESTING: | v. PRO2 4.001.1012 |
| SIMPL WINDOWS USED FOR TESTING: | v. 2.11.10 |
| CRESTRON DB USED FOR TESTING: | v. 20.04.008.00 |
| DEVICE DB USED FOR TESTING: | v. 20.07.005.00 |
| SAMPLE PROGRAM: | "LabGruppen NLB-60E v1.0 PRO2 Demo.smw" |
| REVISION HISTORY: | V. 1.0 |