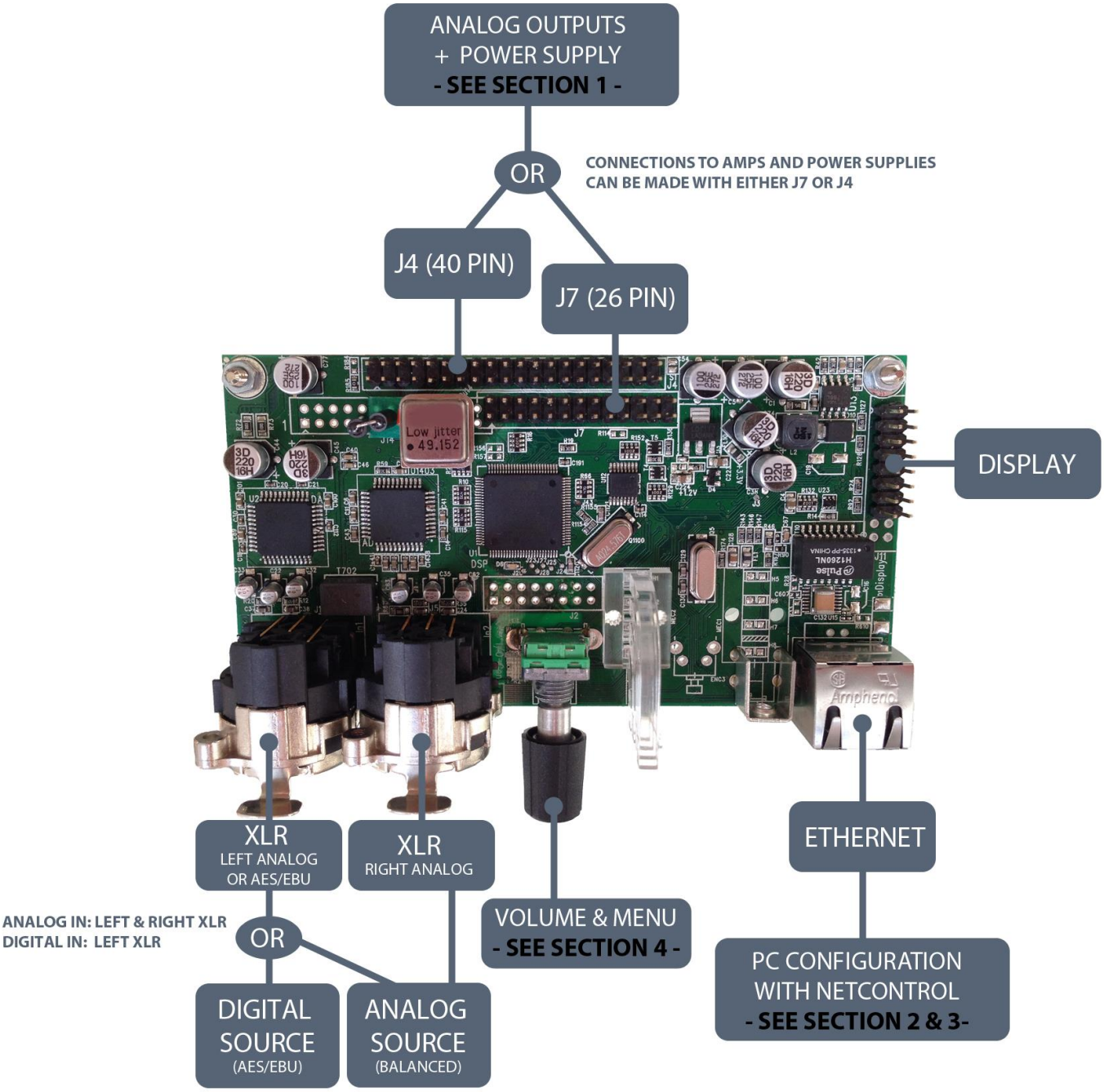
Connections

DSP192-4-111 to peripherals, please follow sections 1 – 3



Startup procedure

Please follow sections 1 – 3 for proper installation.

Section 1:

Connecting Amps and power supplies via J7 or J4

Connect the DSP192-4-111 to your amplifier and power supply via connectors J7 or J4.

For PASCAL amplifiers, use J7 with S-PRO modules or J4 with M-PRO / X-PRO modules. These modules already provide the power supplies for the DSP192-4-111.

For all other amplifiers and supplies, please refer to the pinout tables for J7 and J4.

- Please check connections and supply voltages carefully, before you power-up -

J4			
PIN	**PIN**	**DESCRIPTION**	**DESCRIPTION**
1	2	ANALOG OUT CH. 4	AGND
3	4	ANALOG OUT CH. 1	GND
5	6	AGND	ANALOG OUT CH. 2
7	8	GND	AGND
9	10	ANALOG OUT CH. 3	GND
11	12	UOUT 1	UOUT 2
13	14	UOUT 3	IOUT 1
15	16	IOUT 2	IOUT 3
17	18	TEMP_MONITOR	GND
19	20	GND	CLIP 1
21	22	CLIP2	CLIP 3
23	24	GND	DIS_READ/PROTECT
25	26	GND	MUTE_DIS
27	28	CLIP_OFF	SMPS_LIMIT
29	30	TEMP_REDUCT_OFF	STANDBY
31	32	+V_DIGITAL: 6.5 - 12V	+V_DIGITAL: 6.5 - 12V
33	34	GND	GND
35	36	+V_ANALOG: +15V	+V_ANALOG: +15V
37	38	GND	GND
39	40	-V_ANALOG: -15V	-V_ANALOG: -15V

J7			
PIN	**PIN**	**DESCRIPTION**	**DESCRIPTION**
1	2	GND	ANALOG OUT CH.1
3	4	AGND	AGND
5	6	ANALOG OUT CH. 2	TEMP_MONITOR
7	8	NOT CONNECTED	NOT CONNECTED
9	10	CLIP 1	CLIP 2
11	12	DIS_READ/PROTECT	NOT CONNECTED
13	14	MUTE_DIS	NOT CONNECTED
15	16	NOT CONNECTED	STANDBY
17	18	+V_DIGITAL: 6.5 - 12V	+V_DIGITAL: 6.5 - 12V
19	20	GND	GND
21	22	+V_ANALOG: +15V	+V_ANALOG: +15V
23	24	GND	GND
25	26	-V_ANALOG: -15V	-V_ANALOG: -15V

Section 2:

Connecting the DSP192-4-111 to a PC via Ethernet

There are two differrent ways to connect the DSP192-4-111 to a PC via Ethernet:

1. Direct LAN connection DSP <-> PC
2. Internet LAN connection DSP <-> LAN-Router <-> PC

NOTE: The IP-adresses of DSP and PC shall only differ in the last 3 digits, e.g. [192.168.010.XXX]

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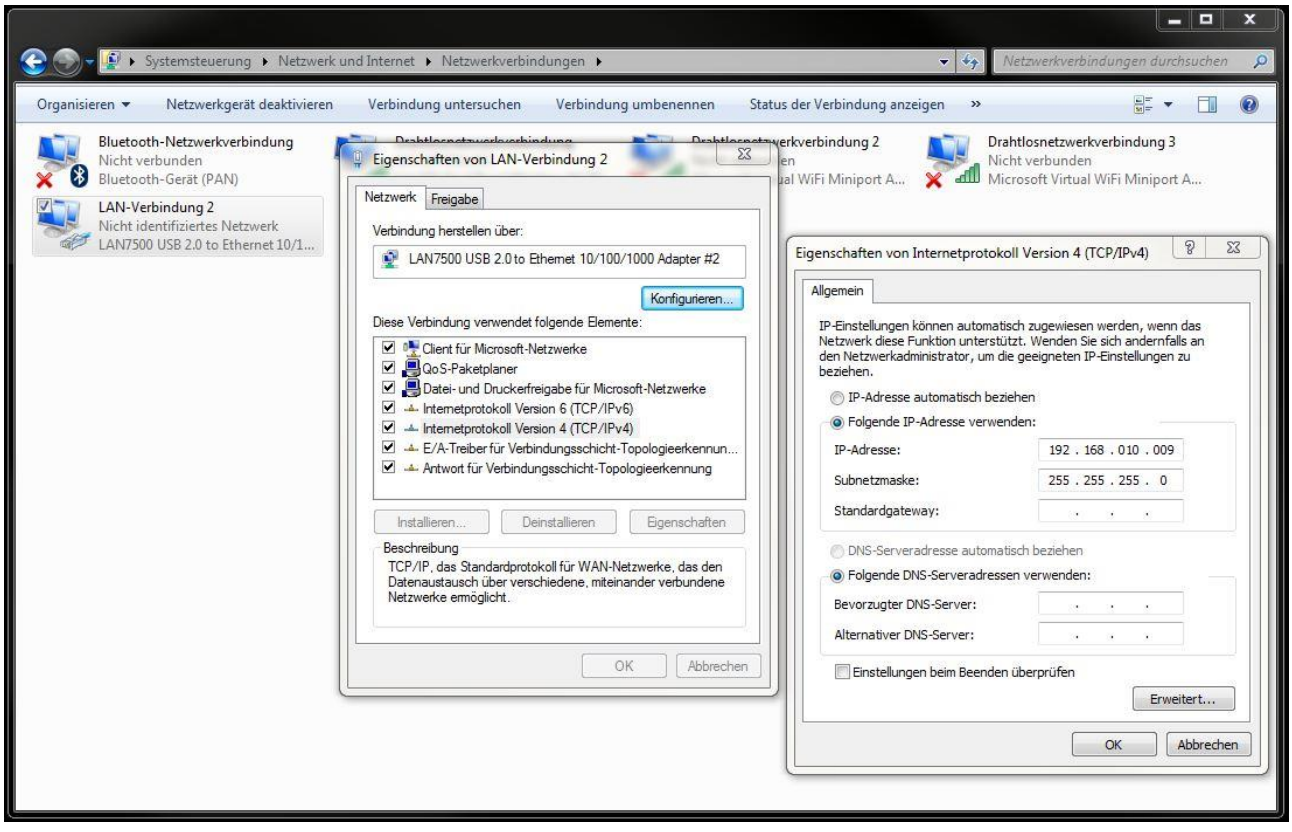
1. Direct LAN connection:

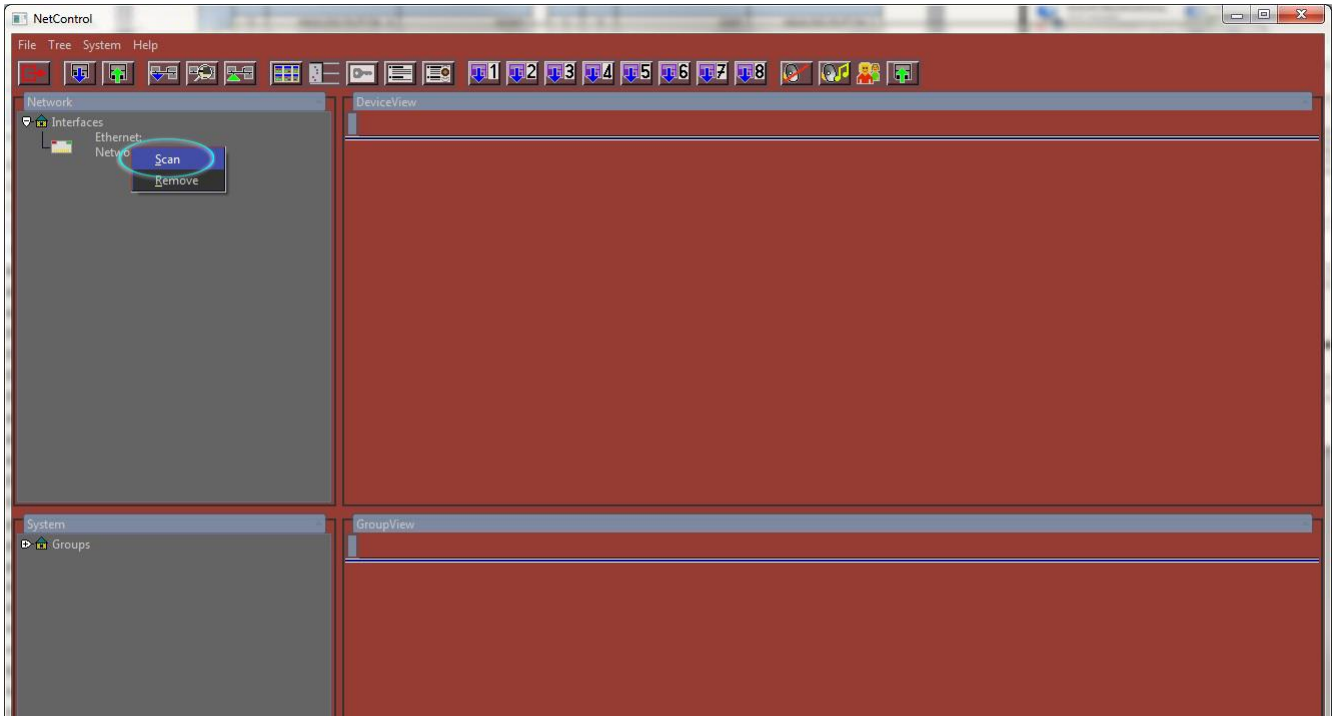
Switch on the power supply of the DSP and connect your PC to the DSP with an Ethernet cable.

Change the IP-adress of your Computer. (The DSP IP-adress is [192.168.010.010] by default.)
Go to: *LAN-connections and right-click on the LAN-connection with the DSP.*
Open ´properties´ of TCP/IPv4.
Choose "Use the following IP-adress", type in 192.168.010.009, subnetmask 255.255.255.000

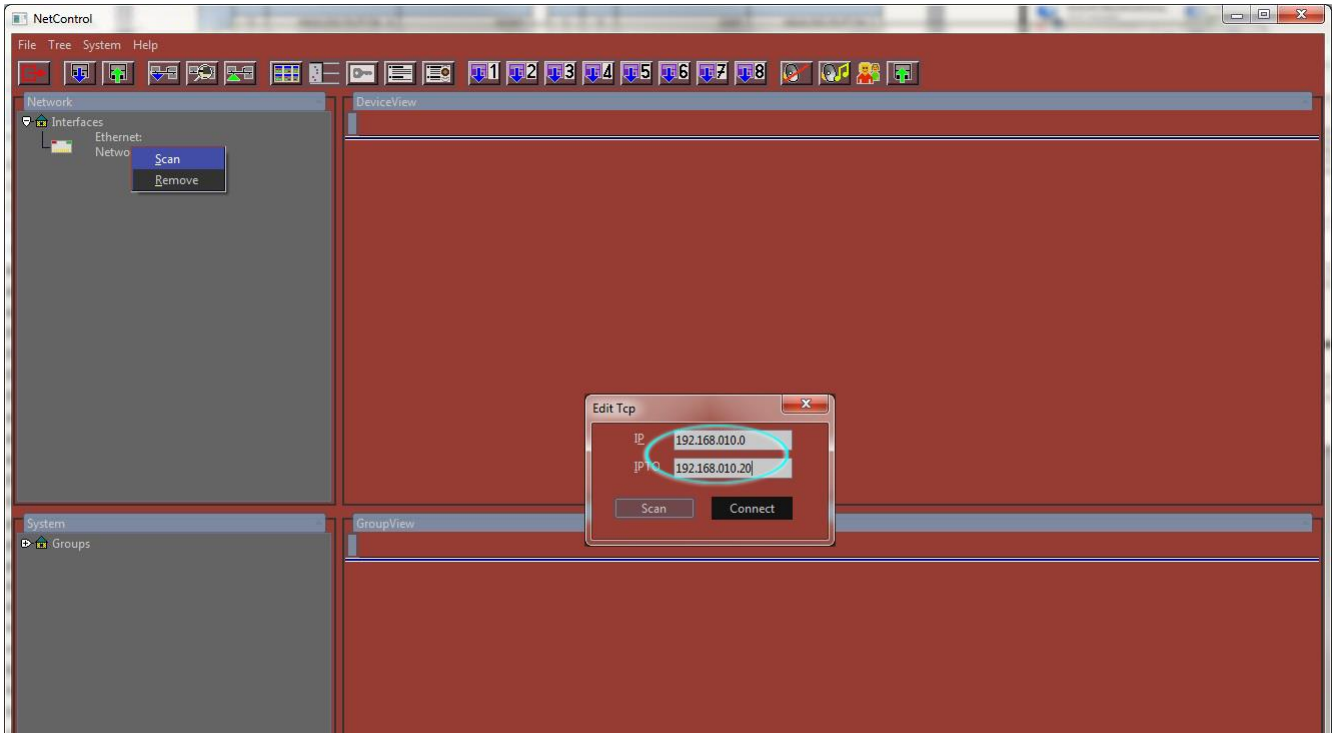


Open NetControl.exe in the ´accuton DSP192-4-111´ folder on your Computer (sent by email).

Go to: Interfaces -> Add Ethernet -> Ethernet Network0 and right-click -> scan

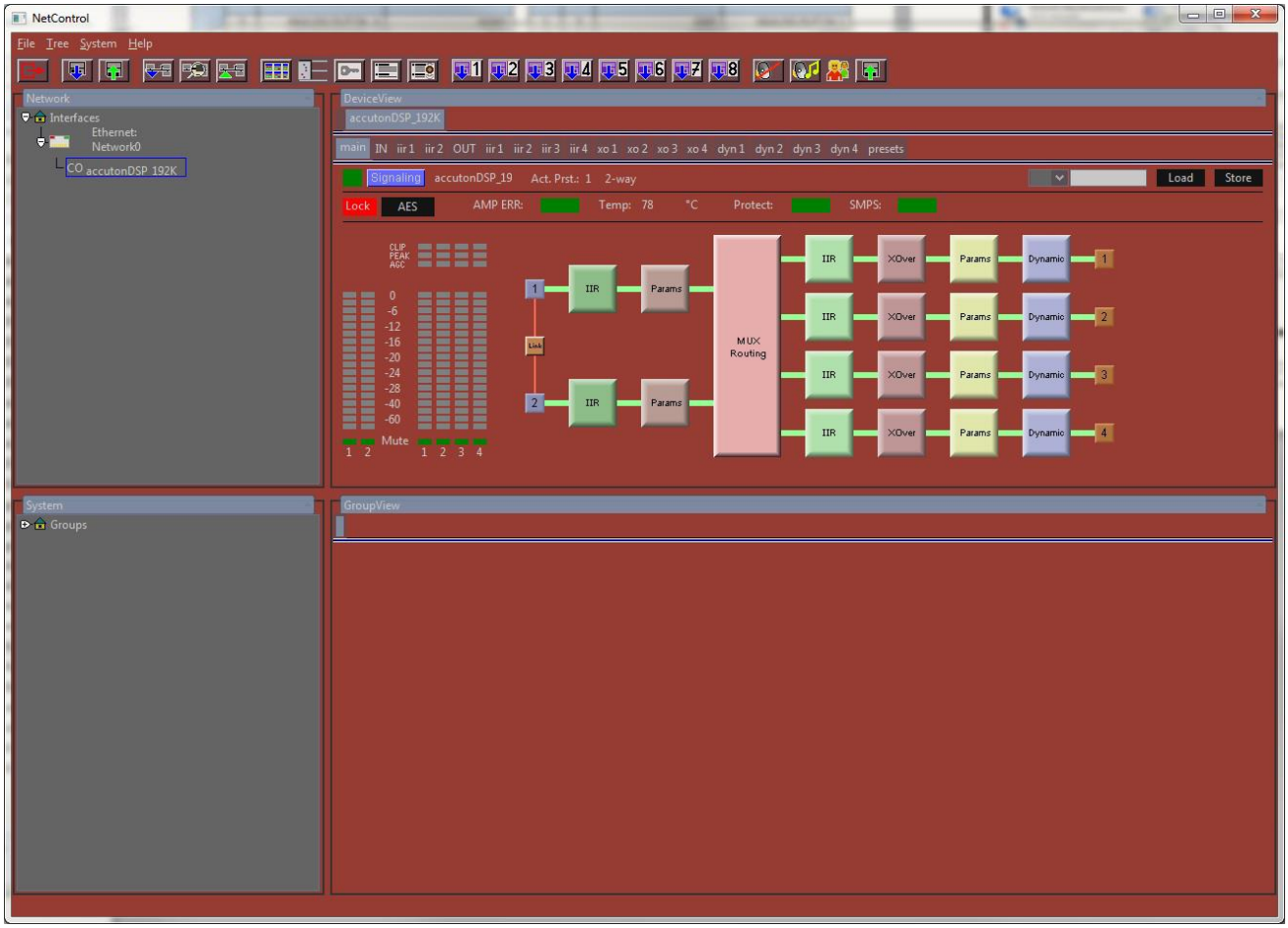


Type in a range of IP-adresses around the IP-adress of the DSP (default: 192.168.010.010).



Click on Scan. The Software searches now for DSPs that are within the range of IP-adresses.

After checking, you should see the following window:



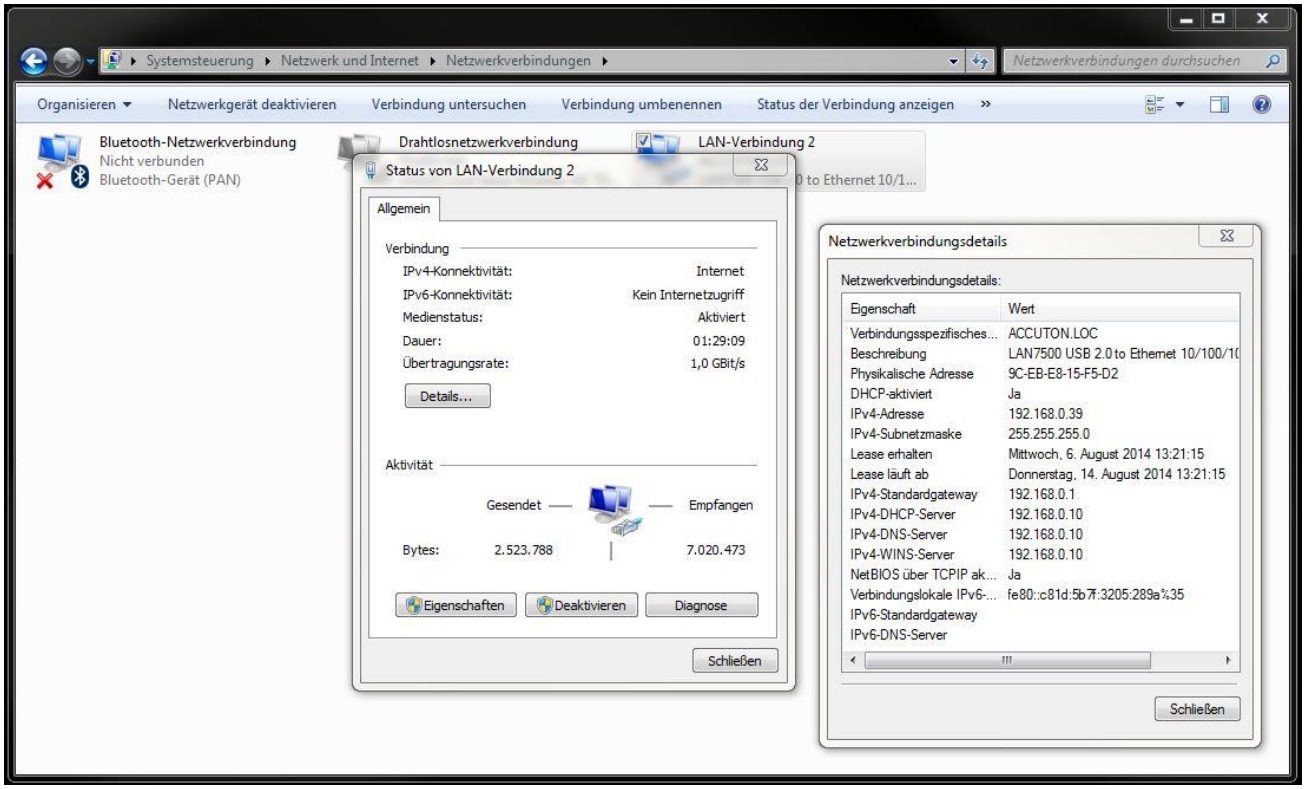
The status LED “Signaling” shows the connection status, being green when connected properly.

Further functionality of the software will be described in **section 3**.

2. Internet LAN connection:

Connect the DSP to your LAN-router with an Ethernet cable.
Your PC must be connected to the same Network.

Look up the IP-adress of your Computer.
Go to: *LAN-connections and right-click on the LAN-connection.*
Click on ´status´and look up the IPv4-adress



The DSP IP-adress needs to be set into the same range now, only the last 3 digits shall differ.

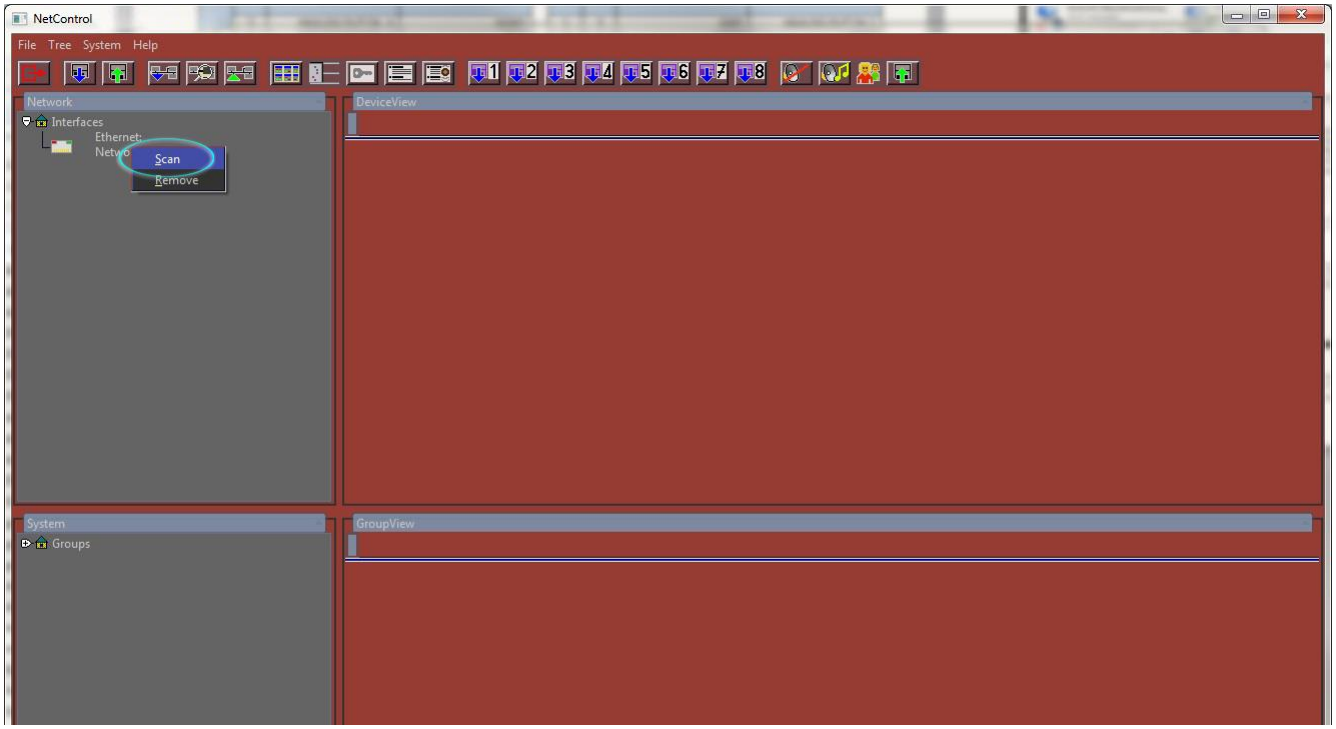
Example: PC IP: 192.168.0.39 -> DSP IP 192.168.0.201

Change the IP-adress of the DSP.
*Push on the Volume / Menu knob on the DSP board. (See **section 4** for all DSP knob functions.)*
Turn the knob to point ´3: SET IP´.
Push the knob and set the new IP-adress.
Press the knob for 3 seconds after setting to safe the new IP-adress.
Please check it was safed by entering point ´3: SET IP´ again and see if it shows the new IP.

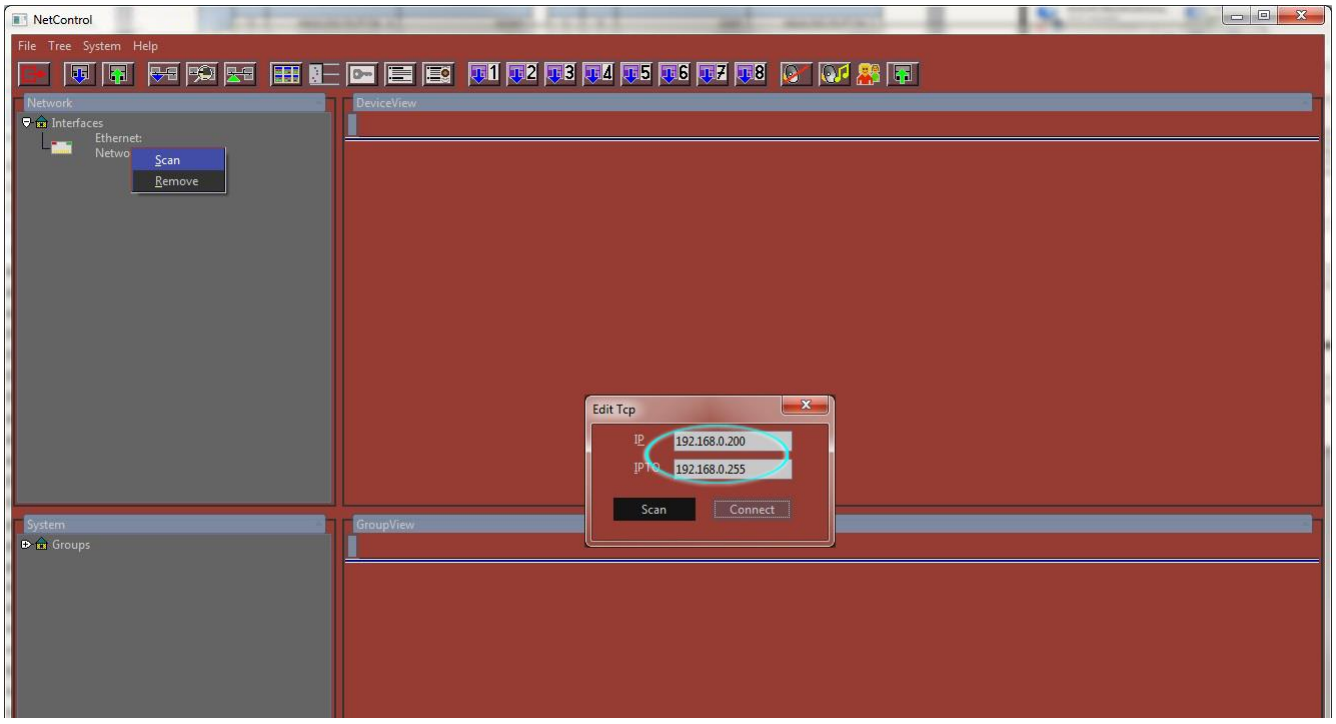
NOTE: It is recommended to set the last 3 digits to > 200 (255 is always the maximum value). LAN-Routers always reserve a range of IP-adresses for DHCP. The DHCP range can be found in the configuration of your LAN-router. The DSP IP-adress needs to be out of this range, which is most likely the case, if you set it to 200

Open NetControl.exe in the ´accuton DSP192-4-111´ folder on your Computer (sent by email).

Go to: Interfaces -> Add Ethernet -> Ethernet Network0 and right-click -> scan

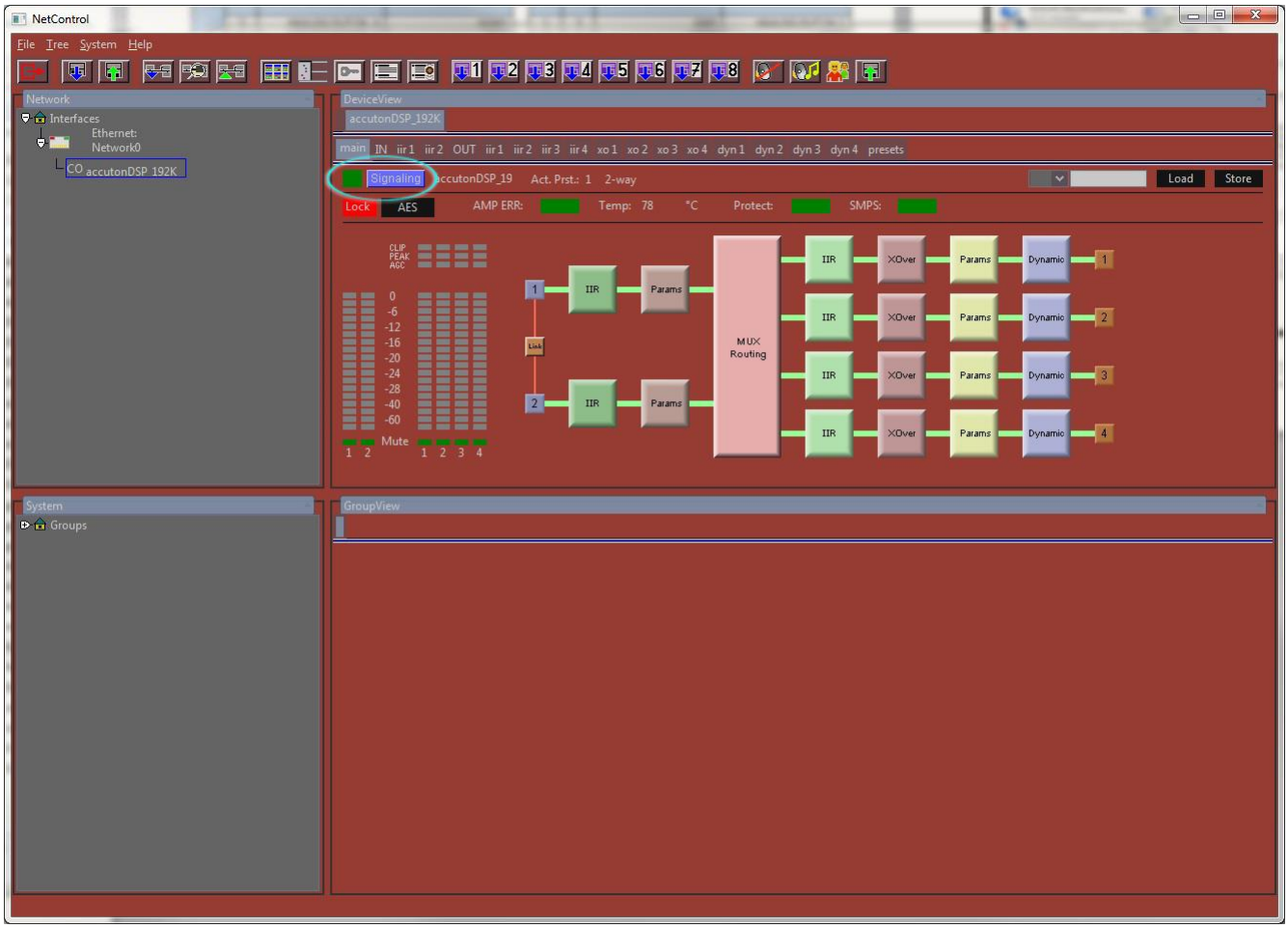


Type in a range of IP-adresses around the IP-adress of the DSP.



Click on Scan. The Software searches now for DSPs that are within the range of IP-adresses.

After checking, you should see the following window:



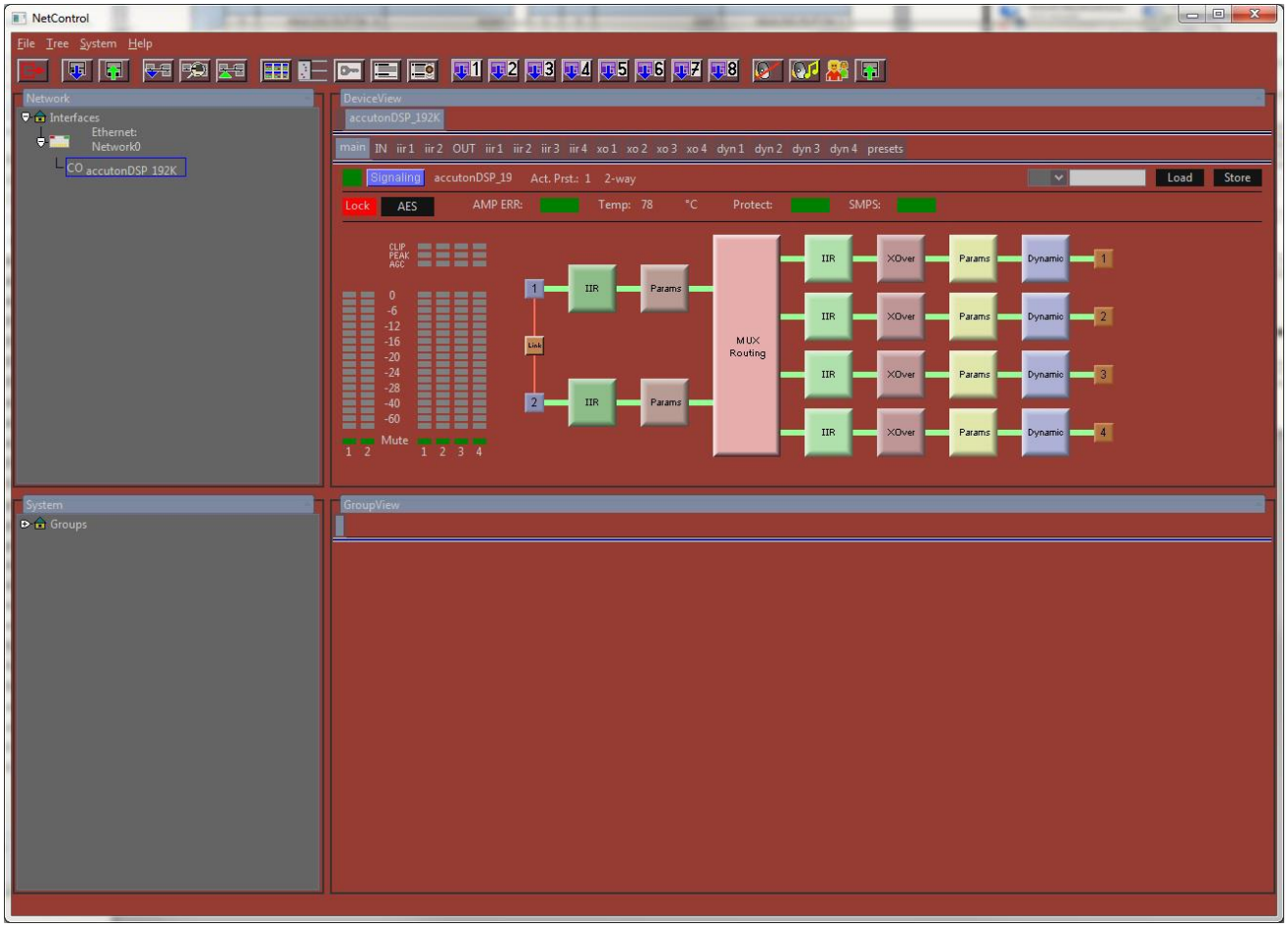
The status LED “Signaling” shows the connection status, being green when connected properly.

Further functionality of the software will be described in **section 3**.

Section 3:

Configuring the DSP192-4-111 with NetControl

After connecting the DSP with the Software, you see the main screen as shown before:



The upper window shows connected DSPs, the lower window shows groups that you can built.

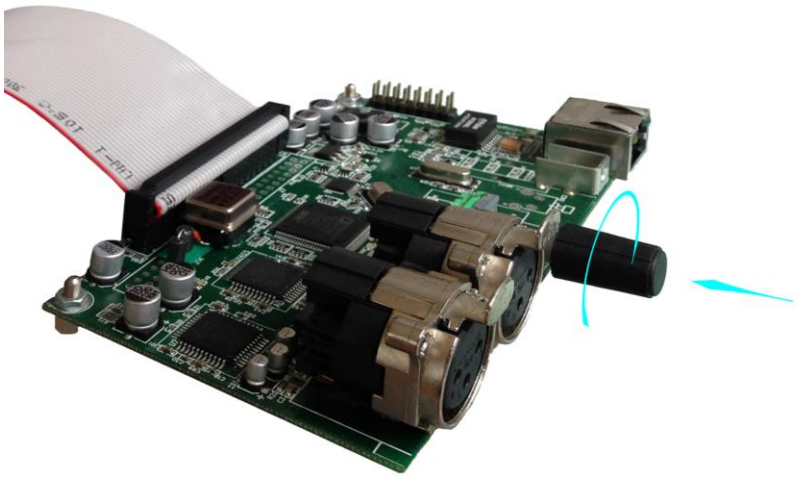
A working connection.
You can click on the signal-flow blocks or menu tabs to control the following functions:

BLOCK	DESCRIPTION	FUNCTION
1/2 (INPUTS)	INPUT CHANNELS	MUTE / UNMUTE INPUT CHANNELS
IIR (INPUT)	IIR FILTERS INPUT	SET IIR FILTERS FOR INPUT CHANNELS (E.G. FOR ROOM CORRECTION)
PARAMS (INPUTS)	PARAMETERS INPUT	SET GAIN,DELAY AND PHASE FOR INPUT CHANNELS
MUX ROUTING	ROUTING	ASSIGN INPUT CHANNELS TO OUTPUT CHANNELS
IIR (OUTPUTS)	IIR FILTERS OUTPUT	SET IIR FILTERS FOR OUTPUT CHANNELS (E.G. FOR DRIVER LINEARIZATION)
XOVER	XOVER FUNCTIONS	SET XOVER FUNCTIONS FOR EACH OUTPUT CHANNEL
PARAMS (OUTPUTS)	PARAMETERS OUTPUT	SET GAIN,DELAY AND PHASE FOR OUTPUT CHANNELS
DYNAMIC (OUTPUTS)	DYNAMIC LIMITERS	SET PEAK AND RMS LIMITERS FOR EACH OUTPUT CHANNEL
1/2/3/4 (OUTPUTS)	OUTPUT CHANNELS	MUTE / UNMUTE OUTPUT CHANNELS

For more detailed information, please read the NetControl manual.

Section 4:

Rotary-push encoder functions of the DSP192-4-111



The rotary-push encoder on the DSP board has the following functions:

	ACTION	FUNCTION
VOLUME	ROTATE	VOLUME IN STEPS OF 0.1 dB
	ROTATE 1x, PUSH, ROTATE	VOLUME IN STEPS OF 1.0 dB
MENU	PUSH, ROTATE 1x	MENU POINT 1: VOLUME CONTROL
	PUSH, ROTATE 2x	MENU POINT 2: LOAD PRESET
	PUSH, ROTATE 3x	MENU POINT 3: SET IP
	PUSH, ROTATE 4x	MENU POINT 4: SELECT INPUT
	PUSH, ROTATE 5x	MENU POINT 5: SYSTEM TEMP
	PUSH, ROTATE 6x	MENU POINT 6: BACKLIGHT
	PUSH, ROTATE 7x	MENU POINT 7: INFO

Changes in the menu must be safed by pushing the knob for 2 sec. until the display jumps back.