

AudionET

MAP

Multi Channel Audio/Video Pre - Amplifier

User's Manual

V1.1

Placement and connection

Please make sure that your Audionet MAP is installed at a place that is sufficiently ventilated to allow the heat to leave.

The mains input [23](#)^{*)} is located at the back panel of the MAP. Please use the provided power cord to connect the MAP to mains. If you want to use a different power cord make sure that it meets the specifications for your home country.

WARNING:

The electrical specifications at the back must meet the specifications of your home country.

The mains switch at the back panel has to be switched off before connecting the MAP to mains. The MAP is a Class I device and must be earthed. Please ensure a stable earth connection. 'Phase'/'Hot pin' is marked at the back panel ('Phase') [23](#).

The MAP is a stand by device. Please use the mains switch [23](#) at the back panel to switch on the MAP. After a short time the display reads 'Audionet' to show that the unit is in stand by mode.

Only in case of extended absence (like vacations) or if massive trouble on mains power is to be expected you should disconnect the unit from mains. Switch off the MAP with the mains switch at the back panel [23](#). The display will go out.

WARNING:

Before switching off the mains switch of the MAP, please make sure that all units connected to the outputs of the MAP are switched off, too.

*) see numbers on page 'Overview of connections'

Additional earth connection

Optionally, there is a special cord available for an additional earth connection to be used with earth connector [21](#). Use the screw of earth connector [21](#) to connect the additional ground cord to the MAP. Put the plug of the ground cord into a mains socket near your power cord. The sound will be improved.

We strongly recommend using the additional earth connection!

Audionet Link

In connection with other Audionet devices like AMP I, AMP II, AMP II MAX, AMP III, AMP IV etc your MAP is able to switch on/off the complete system. Please connect a Toslink glasfibre cable from the Audionet-Link Output [20](#) at the back of the MAP to the Audionet-Link inputs of other Audionet devices. For further instructions please read the user's manual of the other Audionet devices.

Polarisation of mains plug

The correct polarizing of mains is important for reasons of audio clarity and stability.

Therefore the Audionet MAP indicates a wrong polarisation of the mains lead. While powering up the MAP checks the mains polarisation. If you read 'Attention: Mains Phase incorrect!' switch off the MAP and then flip the plug in your wall outlet.

Connecting the external power supply EPS

Use the provided special cord to connect the optionally available EPS to the EPS-Input [22](#) at the back panel of the MAP. Connect both (!!) units (MAP and EPS) with mains. Switch on **first** the EPS then the MAP. The unit is now in stand by mode.

To disconnect both units from mains please switch off **first** the MAP, then the EPS. Before switching off the MAP make sure it is in stand by mode by pressing the POWER key at the front panel or remote control.

Audio/Video-Connections

Analog Inputs:

Connect 2-channel analog sources to one of the 6 analog inputs [16]. If you are using a recording device (tape deck, MD recorder, VCR etc) connect it to IN5 [15]. The signal on this input is not routed through to the 'Rec Out' output [17] in order to prevent feedback loops. Analog input IN 2 is setup for Dolby* Pro Logic II decoding by default (the user can change that in the setup menu!). So please connect the analog 2-channel outputs of your DVD-Player, LaserDisc-Player, VCR or other analog sources, that playback Dolby Surround coded material, to input IN 2.

If you have the optional phono card installed, plug in the MM- or MC pickup of your turn table into input IN 6 [14] and connect the chassis of the turn table to the ground screw 'GND' [13]. The phono card offers independent selection of gain, input capacity and input resistance for optimal adjustments to all kinds of available pickup systems. For further details please refer to the user's manual of the phono card.

Digital Inputs:

Connect your digital sources to digital inputs 1 to 5 [10]. By factory default digital inputs 2,3 and 5 are setup for multi channel decoding (Dolby Digital and DTS). Digital inputs 1 and 4 are setup for 2.channel PCM signals (all default setting can be changed by the user in the setup menus!). If you have the optional RF-Demodulator card installed, connect the 'RF AC-3' output of your LaserDisc-Player to digital input 4 [9].

Note: Do not forget to set the option 'Set RF-Demod.' to 'available' in the 'Set Options' menu. You also have to remove the blue jumper on the input PCB.

External 8-Channel Analog Inputs:

Plug in analog multi channel sources (external decoder, DVD-Player with internal decoder, SACD-Player etc.) into the 8-channel analog input [11] of the MAP. Alternatively, you can use this input for MultiRoom mode (see chapter 'MultiRoom feature').

Analog Outputs:

The output of the front channels L/R [19] (Cinch and XLR) are marked 'Main Line out' or 'Main Right/Main Left' and are located in the lower left part of the back panel. All other analog outputs [12] are located in the section 'Analog Outputs' in the upper right part of the back panel. For Center and Subwoofer channel are 2 outputs available each carrying the same signal.

Digital Outputs:

Select which digital input 2 bis 5 [10] is routed to the digital outputs [8] in the setup menu 'Digital Rec Sel'. Both formats (optical and coaxial) are always available. The digital inputs work independently, therefore you can use digital out for recording while listening to a different source.

Video Inputs:

Plug in your cinch/composite video sources into video inputs 'IN 1' to 'IN 4' [3]. S-Video sources are to be connected to video inputs 'S-VIDEO 1' to 'S-VIDEO 4' [4]. Use the video

inputs in any order as every one of the 8 video inputs can be assigned to every audio input (see menu 'Video Setup'). Even multiple assignments are allowed, i.e. one and the same video input can be assigned to more than one audio input.

Video Outputs:

The video signal assigned to the current audio input is available at the 'Video Out' jacks; cinch video at 'OUT 1' or 'OUT 2' [7] and S-Video at 'S-VIDEO 1' or 'S-VIDEO 2' [6]. If the internal 'Cinch Video to S-Video'-converter is active, all video signals at the cinch video inputs are converted to S-Video format and available at the 'S-VIDEO 1' output. The On Screen Displays (OSD) is only available at video outputs 'OUT 1' and 'S-VIDEO 1' [5]. In order to prevent unintentional recording of the OSD picture, please connect your video recording device to video outputs 'OUT 2' or 'S-VIDEO 2' as they never carry the OSD signal.

Further Video In-/Outputs:

A video signal at video output 'VGA OUT' [1] is only available, if you have installed the optional Line Doubler card. Without Line-Doubler card video inputs 'Y/R', 'Cr/G' and 'Cb/B' [2] are decoupled from the corresponding outputs by 0dB-gain video amplifiers. Connect your DVD-Player and projector to the corresponding in-/outputs.

Setup

Setup at front panel:

There are 4 keys at the front panel to control the MAP. Most of the setup can be done using those keys. For more comfort please use the provided remote control COM.

The 'POWER' key is used to switch on/off the MAP. To change volume or any settings in the setup menus please press the UP and DOWN keys. With the SET key you skip through the menu items of the setup menus. If you press and hold the SET key for more than 2 seconds, it will get you to the next setup menu (only exception: see 'Edit Channel Name'). Please have a look at chapter 'Overview of setup menus'. You will notice that there are 6 menus with several menu items.

All menu items are described in the following. For access to the setup menu by remote control COM see section 'Remote Control'.

After a time out of 12 seconds MAP will leave any menu to return to normal Run mode. Any changes made during setup are saved automatically.

Overview setup menus:

RUN mode → Select Input → Listening Mode

↓

Sub Offset → Center Offset → Left Surround Offset → Right Surround Offset → Left Aux Offset → Right Aux Offset → LFE Mix Offset → Bal. Front

↓

('Setup' key on remote control)

Internal Decoder → Dolby PL Mode → Dolby PL II Mode → Center Width → Dimension Control → Panorama Mode → Set Dual Mono → Offset Adjust → Edit Channel Name

↓

/←

key 'PL II Mode' on remote control

→/

('Video setup' key on remote control)

Assign Video In → Set TV System → Cinch to S-Video

↓

('Speakers Setup' key on remote control)

Front Speakers → Center Speaker → Sur Speaker → Is Subwoofer available? → Set Sub X-Over Freq. → Set Location Front → Set Location Center → Set Location Sur L/R → Set Dist. Unit

↓

('Set Options' key on remote control)

Center EQ → Low Band → Mid Band → High Band → Set Digital Monitor → Output Phase → Ex.8ch. Input Is → Set RF-Demod. → Set AutoStart → Set OFF-Text
/← *key 'Center EQ' on remote control* →/ *key 'Digital Rec Sel' on remote control*

Navigation:

→ press SET key **shortly**

↓ press SET key **longer** than 2 seconds

Description of all menu items

RUN mode:

This is the normal operation mode if no menu is selected. Use UP and DOWN keys to adjust the master volume. The display shows name and number of selected input channel in the first line. The second line shows the current volume (see section 'Display').

Select Input:

Use UP and DOWN keys to select desired input channel. The input channels are aligned in the following order: Analog In 1 to 6 [16], Digital In 1 to 5 [10], External 8ch In [11], MultiRoom A to D [11].

Listening Mode:

Use UP and DOWN keys to select the Listening Mode for Dolby Digital, Dolby Pro Logic II oder DTS** decoding.

'Mono': all program material is downmixed to mono

'Stereo': reproduces 2-channel source material as 2-ch Stereo, turns off Pro Logic II decoding, any other multichannel material is downmixed to 2/0 Lo/Ro Stereo output

'Phantom': information on the Center channel is rerouted to Front L/R channels

'3Stereo': reproduces audio programs using only the three front channels (L,C,R)

'Surround': reproduces all available channels of the program material (default Listening Mode, for Pro Logic II decoding see 'Dolby PL Mode')

'Lt/Rt out': all program material is downmixed to 2-ch Lt/Rt Stereo output for later Dolby Pro Logic/Pro Logic II decoding (recommended for recording Dolby Digital programs on 2-channel recording devices like VCRs)

Note: This menu is only available, if 'Internal Decoder' is set to 'active'.

Sub Offset:

Use UP and DOWN keys to trim level of Subwoofer channel (+10...-20dB).

Note: This menu is only available, if 'Internal Decoder' is set to 'active' or 'External 8ch In' is selected.

Center Offset:

Use UP and DOWN keys to trim level of the Center channel (+10...-10dB).

Note: This menu is only available, if 'Internal Decoder' is set to 'active' or 'External 8ch In' is selected.

Left/Right Surround Offset:

Use UP and DOWN keys to trim the level of the Surround channels (+10...-10dB).

Note: These menus are only available, if 'Internal Decoder' is set to 'active' or 'External 8ch In' is selected.

Left/Right Aux Offset:

Use UP and DOWN keys to trim level of the Aux channels(+10...-10dB).

Note: These menus are only available, if 'Internal Decoder' is set to 'active' or 'External 8ch In' is selected.

LFE Mix Offset:

Use UP and DOWN keys to trim level of LFE channel (0...-10dB).

Note: This menu is only available, if 'Internal Decoder' is set to 'active'.

Balance Front:

Trim the balance between Front L and R channels (+0...-9dB). Use DOWN key to attenuate the right channel R. The balance moves towards left. Use UP key to attenuate the left channel L. The balance moves towards right.

Internal Decoder:

In order to switch off the internal decoder press DOWN key (the display shows 'disabled'). All program material is downmixed to 2-ch Stereo independently from the original program format. Bass manager, Pro Logic II decoding and delay settings are off in this mode. It is strongly recommended to use this mode for 2-ch PCM or 2-ch analog sources only.

Press UP to activate the internal decoder ('active'). All incoming program formats (PCM or bitstream) are detected and decoded automatically (see also section 'PCM direct').

Dolby PL Mode:

The selection within this menu decides which 2-ch audio programs are decoded automatically using Dolby Pro Logic II. Use UP and DOWN keys to select preferred mode.

'Auto 1': Dolby Pro Logic II decoding is automatically activated only for 2/0 Dolby Digital programs with the Pro Logic flag set. For all other 2-channel programs Dolby Pro Logic II decoding is deactivated

'Auto 2': Dolby Pro Logic II decoding is automatically turned on for all PCM (**except: 96kHz PCM**) and all 2/0 Dolby Digital programs with the Pro Logic flag set. It will be turned off for 2/0 Dolby Digital programs with the Pro Logic flag NOT set

'All': All 2-ch programs (PCM or 2/0 Dolby Digital) are used for Dolby Pro Logic II decoding (**except: 96kHz PCM**)

Note: This menu is only available, if 'Internal Decoder' is set to 'active'.

Dolby PL II Mode:

Dolby Pro Logic II offers 3 different modes for decoding. Select your preferred mode with the UP and DOWN keys.

'Movie': The Movie mode is for use with stereo TV shows and all Dolby Surround encoded programs. The result is enhanced soundfield directionality that approaches the quality of discrete 5.1-channel sound.

'Music': The Music mode is for use with any stereo music recordings, and provides a wide and deep sound space. The Music mode includes controls (CenterWidth,

DimensionControl and Panorama) that allow the sound to be tailored to your listening tastes. All three of these controls may be used alone or in any combination. After you experiment with them on a few programs, you will easily understand their effect and which setting you may prefer.

'Pro Logic': Original Dolby Pro Logic mode.

Note: This menu is only available, if 'Internal Decoder' is set to 'active'.

Center Width:

This control allows center channel sounds to be positioned between the Center speaker and the Left/Right speakers over a range of 8 steps. Setp '3' uses a combination of all three front speakers to give the best vocal imaging and most seamless soundstage presentation, and is recommended for most recordings. Step '0' places all center sound in the Center speaker. Step '7' places all center sound equally in the Left/Right speakers, just as in conventional stereo. The Center Width control is automatically preset to '0' in the Movie mode.

Note: This menu is only available, if 'Internal Decoder' is set to 'active' and PL II Mode 'Music' is selected.

Dimension Control:

This control allows the user to gradually adjust the soundfield either towards the front or towards the rear. This can be useful to help achieve the desired balance from all the speakers with certain recordings that may contain either too much or too little spatial effect. Step '0' is the recommended setting, which has no effect on the sound. Steps 1, 2 and 3 gradually move the sound forward, and steps -1, -2, -3 move the sound towards the surrounds. The Dimension control is automatically preset to '0' in the Movie mode.

Note: This menu is only available, if 'Internal Decoder' is set to 'active' and PL II Mode 'Music' is selected.

Panorama:

This control extends the front stereo image to include the surround speakers for an exciting 'wraparound' effect with side wall imaging. It is particularly effective for recordings which have strong left or righth channel elements in the mix, as these are detected and accentuated by the Panorama process. The Panorama control is automatically turned off in Movie mode.

Note: This menu is only available, if 'Internal Decoder' is set to 'active' and PL II Mode 'Music' is selected.

Set Dual Mono:

Select the preferred mode with the UP and DOWN keys.

'CH1+CH2': Both Dual Mono channels are reproduced

'CH1 only': Only Dual Mono channel 1 is reproduced

'CH2 only': Only Dual Mono channel 2 is reproduced

Note: This menu is only available, if 'Internal Decoder' is set to 'active'.

Offset Adjust:

Use UP and DOWN keys to adjust the input channel offset. You can add gain or attenuate each input channel indenpentely within a range of +9...-9dB in order to compensate different output levels of sources connected to the MAP.

Edit Channel Name:

For each input channel you can choose a name up to 14 characters in length (exception: the name for the Monitor/Effects loop is up to 12 characters in length). A cursor (^) marks the current character to be changed by pressing UP and DOWN keys. Press and hold the SET key for longer than 2 seconds to move the cursor to the right onto the next character position. At the end of the character string the cursor jumps back to the first position after pressing the SET key.

Note: If using the remote control to edit the channel name, use the 'mute/ENTER' key on the remote control to move the cursor.

Assign Video In:

You can assign one of 8 video inputs (4 cinch video inputs , 4 S-Video inputs) to each input channel independently. Even multiple assingements are allowed (e.g. a DVD player has more than one audio output). If no video input is needed for an audio input, please select 'No Video Input'.

Set TV System:

For correct conversion from cinch video to S-Video please select the corresponding TV System. Press DOWN key for NTSC. Press UP for PAL.

Cinch to S-Video:

In order to activate the integrated 'Cinch-Video to S-Video' converter, press UP key. To deactivate it press DOWN key. If the converter is active, every video signal feeded to the cinch video inputs (Video IN 1 to IN 4) is converted and output at video out S-VIDEO 1 (it is **not** output at S-VIDEO 2!).

Front Speakers:

Use UP and DOWN keys to select size of Front speakers.

'small': Bass below subwoofer crossover frequency (Sub X-Over Freq) is redirected to subwoofer channel. Please use this option for small Front speakers that are not capable of reproducing frequencies below subwoofer crossover frequency. If Front speakers are selected as 'small', the subwoofer is automatically activated ('Is Subwoofer available?' = 'Yes') and all other speakers are also set to 'small'.

'large': Front speakers reproduce the full frequency range.

Note: Only if Front speakers are 'large', the subwoofer channel can be switched off ('Is Subwoofer available?' = 'No').

Center Speaker:

Use UP and DOWN keys to select size of Center speaker.

'none': No Center speaker is available. Center channel information is redirected to Front speakers L/R.

'small': Bass below subwoofer crossover frequency (Sub X-Over Freq) is redirected to Front L/R or subwoofer channel depending on the settings for Front speakers. Select this option for a small Center speaker that is not capable of reproducing bass below subwoofer crossover frequency.

'large': Center speaker reproduces full frequency range.

Note: Center speaker can only be selected 'large' if Front and Surround speakers are selected 'large'.

Surround Speaker:

Use UP and DOWN keys to select size of Surround speakers.

'none': No Surround speakers are available. Surround channel information is redirected to Front speakers L/R.

'small': Bass below subwoofer crossover frequency (Sub X-Over Freq) is redirected to Front L/R or subwoofer channel depending on the settings for Front speakers. Select this option for Surround speakers that are not capable of reproducing bass below subwoofer crossover frequency.

'large': Surround speakers reproduce full frequency range

Note: Surround speakers can only be selected 'large' if Front speakers are 'large'.

Is Subwoofer available?:

If a subwoofer is available in your speaker configuration, press UP key to activate it ('Yes').

If a subwoofer is not available, press DOWN key to deactivate the subwoofer channel ('No').

Note: You can only switch off the subwoofer, if Front speakers are set to 'large'. Otherwise the display shows 'n/a' if you press DOWN key.

Set Sub X-Over Frequency:

Use UP and DOWN keys to adjust crossover frequency for all speakers selected 'small' and the subwoofer channel. The setup range is from 60Hz to 220Hz in steps of 10Hz. Default is 80Hz.

Set Location Front:

Use UP and DOWN keys to enter distance between your preferred listening position and Front speakers. The range is from 100cm to 1500cm or 40in to 590in with a step size of 5cm or 2in.

Set Location Center:

Use UP and DOWN keys to enter distance between your preferred listening position and Center speaker. The range is from 100cm to 1500cm or 40in to 590in with a step size of 5cm or 2in.

Note: The distance to the Center speaker may be up to 25cm/10in greater than the distance to the Front speakers. The adjustable range will be limited automatically.

Set Location Sur L/R:

Use UP and DOWN keys to enter distance between your preferred listening position and Surround speakers. The range is from 100cm to 1500cm or 40in to 590in with a step size of 5cm or 2in. The distances for both Surround speakers are adjustable separately.

Note: The distance to Surround speakers must not exceed distance to the Front speakers. The adjustable range will be limited automatically.

Set Distance Unit:


Press UP key to set unit for measuring distances to 'Centimeter'.

Press DOWN key to set unit for measuring distances to 'Inches'.

Set Center EQ:

To activate the equalizer for the Center channel press UP key. Use DOWN key to deactivate it. If center equalizer is active, 3 further options are available by pressing SET. Use options 'Low Band', 'Mid Band' and 'High Band' to adjust level of corresponding frequency bands using UP and DOWN keys. Range is +6...- 6dB in steps of 1dB.

Set Dig Rec Out:

Use UP and DOWN keys to select which digital input is output at the digital output jacks  ('DIGITAL OUT') **independently** from current input channel. The digital signal is always available in both formats coax and optical! To switch off digital outputs please select 'No Digital In'.

Use option 'Tied to Dig. In' to route the current selected digital input to the digital outputs.

Output Phase:

Press UP key to invert the phase of all output channels. Use this option for CDs that were recorded with inverted phase. Press DOWN key to set phase 'normal'.

Output Phase:


Use UP- and DOWN key to specify, if signals input to the 8-ch. analog input are buffered or fed in directly to the volume control circuit. Press key UP for direct input. The display will show 'direct'. Press key down for buffered input. The display will show 'buffered'.

Use buffered input if the output impedance of sources connected to the 8-ch. analog input is greater than 100 Ohms.

Note: If you connect Audionet devices to the 8-ch. analog input, the input signals do not need to be buffered. In this case use option 'direct'.

Set RF-Demodulator:

If the optional RF-Demodulator-Card is installed, make sure this option is activated by pressing the UP key ('available'). Otherwise press DOWN key to have this option disabled ('missing').

Note: The RF-Demodulator-Card is optional and used to receive an AC-3 signal from a LaserDisc-Player (connect the RF-output of your LaserDisc-Players to Digital In 4 ).

Set AutoStart:

To enable the AutoStart option press UP key ('On'), to disable press DOWN key ('Off').

If AutoStart option is active, MAP will start up automatically when connected to mains. Use this option if you want to start up the MAP by timer.

Set OFF-Text:

Press UP key to have shown '♪♪' in the display when the MAP is in stand by mode. Press DOWN key and 'AUDIONET' is displayed in stand by mode.

Remote control

All functions described above can also be controlled by the remote control COM. For detailed information about usage and programming of remote control COM please refer to the separate manual for COM. All keys on COM relevant for using the MAP are described in the following.

While in RUN mode please use key 'Vol+' to increase volume. Use key 'Vol-' to decrease volume. While in RUN mode use 'Ch+' and 'Ch-' keys to skip forward and backward through the input channels. For direct access of inputs see below.

Press 'mute/ENTER' key to toggle muting. Muting and de-muting is done softly, i.e. volume will decrease/increase slowly.

Note: To use these keys you **must** have entered sub-menu 'MAP' or 'MAP Setup' on remote control COM!

Press 'menu' key on remote control to get into the main menu. There you will find 2 keys named 'MAP' and 'MAP Setup'. If you want to change any setup options of the MAP, press key 'MAP Setup'. You get into the 'MAP Setup' sub-menu. All keys relevant while listening you will find in the sub-menu 'MAP'. Just press 'MAP' button to enter.

Sub-menu 'MAP Setup':

Sub-menu 'MAP Setup' consists of 6 menu keys on 2 screens. Please refer to section 'Overview setup menus'. Pressing one of those keys will enter the corresponding menu option. To navigate through the menu items use keys 'CH+' and 'CH-'. To select an option use 'Vol+' and 'Vol-' keys. 'Vol+' works like the UP key at the front panel, 'Vol-' works like the DOWN key. There are three ways to leave a menu:

1. Press the same menu key again to get back to RUN mode
2. Press any of the other menu keys to enter a new mode

3. Wait for approx. 12 seconds. After this time out MAP gets back to RUN mode automatically

The keys in detail:

'Setup' enters 'Setup Menu' (see 'Overview setup menus'). In contrast to front panel usage (with 'SET' key) the menu does not offer the items for controlling Dolby Pro Logic II mode. These functions are available through a separate key ('PL II Mode') in menu 'MAP', screen 2.

'Video Setup' enters the 'Video Menu' (see 'Overview setup menus').

'Speakers Setup' enters the 'Speakers Menu' (see 'Overview setup menus').

'Set Options' enters the 'Options Menu' (see 'Overview setup menus'). In contrast to front panel usage (with 'SET' key) the menu does not offer the items to control Center Equalizer and Digital Record Out. Both functions are available through separate keys in menu 'MAP Setup', screen 2.

Use key 'Center EQ' to setup the Center Equalizer. Operation by remote control works analogous to front panel usage. Select frequency band with keys 'CH+' and 'CH-', adjust level with 'Vol+' and 'Vol-' (range: +6...- 6dB).

Press key 'Digital Rec Sel' to select which signal is routed to digital out (see 'Set Dig Rec Out').

Sub-menu 'MAP':

Sub-menu 'MAP' comprises 4 screens. In the following all keys are explained. Use arrow keys at the bottom of the touch screen to flip through screens. The current screen number is displayed between the arrow keys.

Screen 1:

Use keys 'An1' to 'An 6' to directly access analog inputs 1 to 6 [16]. Use keys 'D1' to 'D5' directly access digital inputs 1 to 5 [10]. See back panel layout to find corresponding input jacks.

Screen 2:

Use keys 'A' to 'D' to directly access MultiRoom inputs A to D [11]. See section 'MultiRoom mode' for further details.

Press key 'Ex' to directly select 8-channel analog input 'External 8ch Input' [11]. See back panel layout to find corresponding input jacks.

Press key 'Mon' to toggle monitor/effects loop [18]. This loop works for Front channels L/R only. It enables you to listen to a recorder without interrupting the signal source being recorded or inserting effects processors like equalizers etc. Connect 'Monitor Out' to processor inputs and 'Monitor In' to processor outputs.

Use key 'PL II Mode' to select desired Dolby Pro Logic II mode (see above). In 'Music Mode' the additional options Center Width, Dimension Control and Panorama are available through keys 'CH+' and 'CH-'.

Press key 'DynRng' to enter Dynamic Range menu. Use keys 'Vol+' and 'Vol-' to select desired dynamic range.

'Max': full dynamic range, no compression at all

'Std': medium dynamic range, moderate compression

'Min': minimal dynamic range, full compression

Note: This menu is only available, if 'Internal Decoder' is set to 'active'.

Press key 'Listening Mode' to select desired Listening Mode. See section 'Description of all menu items', 'Listening Mode' for further details.

Screen 3:

Press key 'Cntr' to adjust Center channel trim level using keys 'VOL+' and 'VOL-' (+10...-10dB).

Press key 'Sub' to adjust subwoofer channel trim level using keys 'VOL+' and 'VOL-' (+10...-20dB).

Press key 'Sur' to adjust Surround channel trim levels using keys 'VOL+' and 'VOL-' (+...-10dB). While in this mode adjustments are made to both Surround channels simultaneously. Press key 'CH+' to adjust trim level of left Surround channel LS separately. Press 'CH+' again to adjust trim level of right Surround channel RS separately. Press 'CH+' again to get back to adjusting trim level of both Surround channels LS/RS simultaneously.

Press key 'Aux' to adjust Aux channel trim levels using keys 'VOL+' and 'VOL-' (+...-10dB). While in this mode adjustments are made to both Aux channels simultaneously. Press key 'CH+' to adjust trim level of left Aux channel LA separately. Press 'CH+' again to adjust trim level of right Aux channel RA separately. Press 'CH+' again to get back to adjusting trim level of both Aux channels LA/RA simultaneously.

Press key 'LFE' to adjust level of LFE channel using keys 'VOL+' and 'VOL-' (+0...-10dB).

Press key 'Bal' to adjust balance between Front channels L/R. See 'Description of all menu items', 'Balance Front' for details.

Press key 'Loudness' to enter Loudness menu. 'Vol+' activates Loudness, 'Vol-' deactivates it. If Loudness is active, select frequency band you want to add gain with keys 'CH+' and 'CH-' ('Bass' or 'Treble'). You can adjust each band separately within a range of 0dB to 12dB (step size 6dB).

Press key 'TestTone' to start internal test tone generator. The generator is now in 'Auto Mode'. The noise signal moves from channel to channel automatically. In this mode only keys for adjusting trim levels are available. Use keys 'VOL+' and 'VOL-' to adjust master volume. To adjust trim level for channels separately use corresponding trim level keys ('Cntr', 'Sur' und 'Bal') as described above. **Note:** in 'Auto Mode' trim level adjustment for Front or Surround channels works on both channels simultaneously. Use 'Bal' key to adjust balance between Front L/R.

Press key 'CH-' to enter 'Manual Mode'. In 'Manual Mode' the noise signal stays at the current channel until you press key 'CH+' to skip to next channel. To adjust the trim level of current channel use 'VOL+' and 'VOL-' keys.

While test tone is at Front channels L or R 'VOL' keys control master volume. To adjust balance between Front L and R use key 'Bal'.

Use key 'CH-' to toggle between 'Auto Mode' and 'Manual Mode'. Press key 'TestTone' again to quit test tone mode and get back to normal operating mode.

Screen 4:

Press key 'Dim' to adjust brightness of display. While adjusting the display stays at 100% brightness. The new brightness will be set after returning to RUN mode by pressing 'Dim' again or waiting approx. 12 seconds. If display brightness is set to 'off' the display is only activated while making adjustments. It will be switched off automatically some seconds after last change of settings.

Press key 'Show' to display information about current program format, output and speaker configuration. For further information see sections 'Display' and 'On Screen Display'. If On Screen Display is switched off, it will be switched on while displaying the information after pressing 'Show'.

Use key 'OSD' to switch on/off the On Screen Display (OSD). **Note:** OSD is only available at video output 'Video Out 1' (as cinch video and S-Video signal).

Press key 'DigiFilt' to select the digital filter. Use keys 'Vol+' and 'Vol-' to choose between 4 different digital oversampling filters for Front channels L/R.

'Audionet': Special digital oversampling filter with short pre-ringing

'Lagrange': short Lagrange filter

'Blackman': digital filter by Blackman

'Kaiser': digital filter by Kaiser.

Note: This option is only available if the internal decoder is switched off ('Internal Decoder' = 'disabled') or, if the internal decoder is active, mode 'PCM direct' is selected.

Press key 'Load' to re-load previously saved user settings. Select the user setting you want to load by using keys 'VOL+' and 'VOL-'. Press 'mute/ENTER' to load user setting. All current settings are overwritten during load.

You can choose a name up to 14 characters in length for each of the 16 user settings. To change a name press key 'CH+'. A cursor marks the character to be changed by pressing 'VOL+' or 'VOL-' (see 'Edit Channel Name'). Move cursor one position to the right by

pressing 'mute/ENTER' key. While cursor is active get to the names of the other user setting with keys 'CH+' and 'CH-'. To leave edit mode press 'Load' again.

To save the current setting as user setting press key 'Save' and choose one of the 16 memory spaces with 'VOL+' and 'VOL-' keys. All data at the corresponding memory location is overwritten by the current settings after pressing 'mute/ENTER' key.

You can simply assign the current setting to only one input channel or to every input channel. Press 'CH+' and select the input channel with 'VOL+' or 'VOL-'. Then press 'mute/ENTER' to transfer the current settings to that input channel.

Press 'CH+' to enter the mode to assign current settings to **all** input channels. Press 'mute/ENTER' to start the data transfer.

A user setting comprises: Trim and balance levels of all channels, 'PCM direct' mode, dynamic range, PL Mode, PL II Mode, Listening Mode and Digital Filter. 16 memory locations for storing a user setting are available to the user. The user can assign a name of up to 14 characters in length to each user setting. Additionally each of the 16 input channels saves automatically all current settings independently. The 16 memory locations can only be accessed by the user when using the 'Save' function. So they are independent from the channel settings.

Note: Current master volume, speaker settings, state of internal decoder, video options etc are saved automatically and independently.

Press key 'PCM direct' to enter PCM Direct Mode. In the display the input channel name is replaced by '-PCM direct-'. **Note:** You can only activate PCM Direct Mode if a 2-channel PCM signal is available at the current input. While in PCM Direct Mode the internal decoder (and therefore Bass Manager, Pro Logic II decoding etc.) is deactivated temporarily in order to playback 2-channel PCM material purely and without any changes. To leave PCM Direct Mode press 'PCM direct' again. If a signal different to 2-channel PCM is detected at the current input PCM Direct Mode is switched off automatically. The display informs the user about that ('PCM direct off').

Display

While in RUN mode the first line of the display provides the number of the input channel ('1' to '6' for Analog In 1 bis 6, '1' to '5' for Digital In 1 to 5, 'E' for 8ch External Input, 'A' to 'D' for MultiRoom In 'A' to 'D') followed by the (user definable) channel name (14 characters long). If the monitor/effects loop is active its name is only 12 characters long. To inform the user of the activated monitor/effects loop an 'M' is printed in the upper right corner of the display.

If Front L/R balance is set off center position, in the lower left corner of the display '>' or '<' indicates the balance setting.

If internal decoder is inactive ('Internal Decoder' = 'disabled'), the volume is displayed in the second line as 'LEVEL -xx+y dB' with xx = current volume and y = offset adjust for current input channel. If internal decoder is active, the second line changes to 'MASTER -xx dB' with xx = current master volume of all channels. So the user can easily see, if the internal decoder is active or disabled.

If using a digital input, the second line of the display will show 'Out of lock' while there is no valid digital signal at the current input. If a valid signal is detected by the digital receiver, the second line changes to 'Receiver locked' for a moment. If the internal jitterkiller is active, the display shows 'Jitterkiller engaged'. After that information about program format, output and speaker configuration follows. Press 'Show' key at any time to force the display to show this information. After some seconds the display returns to showing volume information.

All input program material is detected and decoded automatically.

The first line shows information about the current decoding mode:

'PCM xx kHz': for all 2-ch PCM program material (xx = detected sample rate)

'Dolby D': for Dolby Digital bitstreams

'Dolby D+PL II': for 2/0 Dolby Digital bitstreams with Dolby Pro Logic II decoding

'Dolby Pro Logic II': for 2-ch PCM program material with Dolby Pro Logic II decoding

'DTS' xx k: for DTS bitstreams (xx = detected sample rate)

'Test Tone on!': for test tone generator is active

For all multi channel program material (Dolby Digital or DTS) the program format is displayed by 'm/n.x' with m = number of front channels, n = number of surround channels and x = 1, if LFE channel (Low Effects Frequency channel) available or x = 0, if LFE is not available.

If a CD recorded with Emphasis 'Emph' is displayed after 'PCM 44kHz'.

The second line of the display provides information about the output and speaker configuration. If a speaker is available in the current speaker configuration and is it supported by the current Listening Mode, the corresponding letter is printed in the display:

'L' = Left Front

'C' = Center

'R' = Right Front

'LS' = Left Surround

'RS' = Right Surround

'S' = Surround, if there is only mono information on the surround channels (Dolby Pro Logic or m/1.x material)

If a speaker is used by the program material, the corresponding letter is printed inversely in the display.

If the subwoofer is active, it is displayed by an inverse 'SUB'. Otherwise this symbol is not printed.

On Screen Display (OSD)

Activate the On Screen Display by pressing the key 'OSD' on the remote control COM. The signal of the OSD is available at the video outputs 'Video Out 1' in cinch video and S-Video format and replaces the current video image. Press 'OSD' again to switch the On Screen Display off. Now the current video image is output at 'Video Out 1'.

In RUN mode OSD shows the following information:

The first line displays the current decoding mode:

'Dolby Digital'	for Dolby Digital bitstreams
Dolby Pro Logic II	for Dolby Pro Logic II decoding of 2-ch PCM material
Dolby Digital + Pro Logic II	for 2/0 Dolby Digital bitstreams with Pro Logic II Decoding
DTS Digital Surround	for DTS bitstreams
PCM 2-Channel Stereo	for 2-ch PCM program material
2-Channel Analog Input	for 2-ch analog material

The second line (xxkHz m/n.x <Listening Mode>) provides information about detected sample rate, program format as m/n.x (see section 'Display' for further explanation) and listening mode. For analog inputs sample rate and program format are not displayed. If the internal decoder is active for analog inputs, the second line shows 'A/D converted'. If a CD is recorded with Emphasis, the program format information (2/0.0) is exchanged by 'Emph'.

In the middle of the screen output and speaker configuration is presented following the rules for the front panel display (see section 'Display').

Below that two lines tell you the current input channel for audio with its user definable name and the assigned video input.

The last line offers information about the current volume level (see section 'Display').

Help pages

All setup menus and most of the function menus provide help pages for the user. Is a help page available the last line of the OSD reads: 'Mute' = Help. Press key 'mute/Enter' on the remote control to display the help page.

While showing a help page the last line reads: 'Mute' = Exit. Press 'mute/Enter' key again to get back to the current menu. Is no key pressed the unit jumps back automatically after some time.

MultiRoom feature

Alternatively, you can use the 8-channel analog input 'External 8ch Input' **11** to connect 4 separate 2-channel analog sources simultaneously to the MAP. The multi channel outputs are then to be connected (following the assignment listed beneath) to 4 separate stereo amplifiers driving speakers in 4 different rooms. Volume can be adjusted independently for each room. Select one of the inputs 'MultiRoom A to D' to change volume for this room.

Assignment/Routing:

	Input 11 <i>Analog 8 channel Inputs</i>	Output 12 & 19 <i>Analog Outputs</i>
MultiRoom A	Main Left / Main Right	Main Left / Main Right
MultiRoom B	Center (<i>left</i>) / Sub (<i>right</i>)	Center (<i>left</i>) / Sub (<i>right</i>)
MultiRoom C	L Sur / R Sur	L Sur / R Sur
MultiRoom D	L Effect / R Effect	L Aux / R Aux

Security advice

- ◆ Avoid packaging material, especially plastic bags, to come into children's hands.

- ◆ Store and operate the unit in a dry room at a reasonable room temperature

- ◆ Avoid moisture or any liquid to get into the unit

- ◆ Set up the unit in a sufficiently ventilated

- ◆ **Do not cover**, e.g. with a blanket

- ◆ **Do not open** the case. Unauthorised opening will cause loss of guarantee.

- ◆ Use a dry cloth for cleaning

We would like to wish you many exciting listening experiences with your new Audionet product!

If you still have any questions, don't hesitate to ask your competent Audionet dealer.

Technical Data

Microprocessor controlled high end audio/video pre-amplifier with multi-channel / multi-room options

Audio analog inputs	5 stereo analog inputs (cinch, goldplated) 1 balanced XLR stereo analog input 8-channel analog input (cinch) configurable as external multi-channel decoder input (Front L/R, Center, LFE, Surround L/R, Aux L/R) or as 4 stereo multi-room inputs Effect/Monitor Loop in (stereo, cinch)
Audio analog outputs	Front left/right (cinch, gold plated) Front left/right (balanced XLR) 2 Center (cinch) 2 LFE (cinch) Surround left/right (cinch) Aux left/right Effect/Monitor Loop out (stereo, cinch) Rec out (stereo, cinch)
Audio digital inputs	2 digital SPDIF inputs (cinch, gold plated) 1 digital SPDIF input (BNC) 1 digital SPDIF input (optical) 1 digital AES/EBU input
Audio digital outputs	1 digital SPDIF Monitor out (cinch, gold plated) 1 digital SPDIF Monitor out (optical)
Video inputs	4 CVBS video in (cinch) 4 S-video in (Hoside) 1 YUV/RBG video in (cinch)
Video outputs	2 CVBS video out (cinch) 2 S-video out (Hoside) 1 YUV/RGB video out (cinch) 1 VGA video out (SubD15HD)
Outputs	1 "Audionet-Link" (optical)
Inputs	1 7-pin jack for Audionet EPS (external power supply) 1 jack for additional ground connection
Options	line doubler video board MC/MM phono preamplifier external power Supply "Audionet EPS" RF-Demodulator for Laserdisc players
Display	2x16 characters VF-Display (blue or red) On Screen Display

Features

programmable infrared remote control with LCD-Touch-Screen
selectable internal or external multi-channel decoder (Dolby Digital, DTS)
8-channel input configurable as 4 separate stereo inputs for multi-room usage
On Screen Display
Y/C-Separator with digital comb filter for CBVS-video-in to S-video-out conversion
optional line doubler plug-in card for interlace-free video out
selectable digital oversampling filters
sampling rate/resolution for digital inputs 32kHz to 96kHz/24bit
ready for 192kHz/24bit (DVD-Audio)
multi-channel ADCs/DACs 24bit/96kHz ready
multi-channel/multi-room pure analog volume control
Dolby Pro Logic II
ready for Dolby Surround EX 6.1
ready for DTS ES 6.1 discrete
video input user assignable to each analog/digital input
digital Loudness
Center Equalizer

Measurements

Analog inputs IN 1..6

Bandwidth	1 Hz .. 3MHz (+/- 3dB)
THD+N	>105dB (20Hz .. 20kHz)
SNR	>110dB @ 5Vrms
Crosstalk	
Left->Right	>100dB @ 1kHz
Input -> Input	>103dB @ 1kHz
Source -> monitor	>100dB @ 1kHz
Volume linearity	typ. 0.03dB
Output impedance	22 Ohms
Output voltage	max. 7 Vrms
Output current	max. 30mA
Input voltage	max 5Vrms

8-channel analog inputs

Bandwidth	1 – 60kHz (+/-3dB)
THD+N	>100dB
SNR	>110dB @ 3.5 Vrms
Crosstalk	
Front -> Front	>108 dB (A)
Front -> Center	>110 dB (A)
Front -> Surround	>112 dB (A)
Center -> Surround	>108 dB (A)
Input voltage	max 3.5 Vrms

Analog in -> ADC/DAC -> Analog out

Samplefrequency	48kHz
THD+N	>94 dB @ 1kHz/1.8Vrms
SNR	>96dB @ 1kHz/1.8Vrms
Input voltage	1.8 Vrms

Digital inputs

Sample frequency 32 to 96 kHz (ready for 192kHz)

"PCM-Direct"-Mode, 48kHz/96kHz

THD+N >104 dB / >110 dB (A) @ 1kHz, -60dB

SNR >106 dB / >110 dB (a) @ 1kHz

PCM-Mode (Dolby Config 1), 48kHz

THD+N @ 1kHz, -60dBFS

Front >100dB

>108dB (A)

Dolby Digital (Config 1)

THD+N @ 1kHz, -60dBFS

Front >98dB (A)

Center >97dB (A)

Surround >94dB (A)

Crosstalk @ 1kHz, 0dBFS

Front->Front >104dB(A)

Front->Center > 99dB(A)

Front ->Sur > 98dB(A)

SNR

Front >110 dB (A)

Center >105 dB (A)

Surround >105 dB (A)

DTS (Config 1)

THD+N @ 1kHz, -60 dBFS

Front >100 dB (A)

Center > 99 dB (A)

Surround > 97 dB (A)

Crosstalk @ 1kHz, 0dBFS

Front->Front >104dB(A)

Front->Center > 99dB(A)

Front ->Sur > 98dB(A)

SNR

Front >110 dB (A)

Center >105 dB (A)

Surround >106 dB (A)

Video section

Bandwidth 20 MHz (S-Video)

Input impedance 75 Ohms

Input voltage max. 2 Vpp

Output impedance 75 Ohms

Output voltage max. 2 Vpp

Power consumption

max. 65 VA

Stand-By: 15 VA

Dimensions

430 mm x 110 mm x 360 mm (BxHxT)

Weight

10 kg

Finish

Chassis: steel, black

Front: 10mm aluminium natural or black anodised.

Side plates: 8 mm aluminium black anodised.

Decoder-Setup

Setup listening position (Delay-setup):

Distance listening pos. -> Front	1m to 15m	or	40" to 590"
Distance listening pos. -> Center	1m to Front (max. 15m)	or	40" to Front (max. 590")
Distance listening pos. -> Sur	1m to Front (max. 15m)	or	40" to Front (max. 590")
Unit for distance	Centimeters or Inches (")		
Step size for distance	5 cm or 2"		

Level setup

Center	+/- 10dB in 1dB steps
Surround	+/- 10dB in 1dB steps
Subwoofer	+/- 10dB in 1dB steps
LFE Mix	+0/-10dB in 1dB steps

Balance setup

Front	+/- 9dB in 1dB steps
Surround	+/- 9dB in 1dB steps

Speaker configuration (Bass-Management)

Front	small, large
Center	none, small, large
Surround	none, small, large
Subwoofer	on, off

Loudness

Bass	0..+12dB (fg=250Hz)	in 6dB steps
Treble	0..+12dB (fg=6900Hz)	in 6dB steps

** Manufactured under license from Dolby Laboratories. "Dolby", "Pro Logic" and the double-D symbol are trademarks of Dolby Laboratories.*

*** Manufactured under license from Digital Theater Systems, Inc. US Pat.No. 5,451,942, 5,956,674, 5,974,380, 5,978,762 and other worldwide patents issued and pending. "DTS" and "DTS Digital Surround" are registered trademarks of Digital Theater Systems, Inc. Copyright 1996, 2000 Digital Theater Systems, Inc. All rights reserved.*

Engineered and produced by:
Idektron GmbH & Co. KG, Herner Str. 299, Gebäude 6, 44809 Bochum
www.audionet.de
contact@audionet.de