Angel-Pre User Manual

Congratulations on your purchase of the Angel-Pre preamplifier. It has been designed and manufactured to provide many years of trouble-free musical enjoyment. To get the best out of your amplifier, please read this manual carefully.
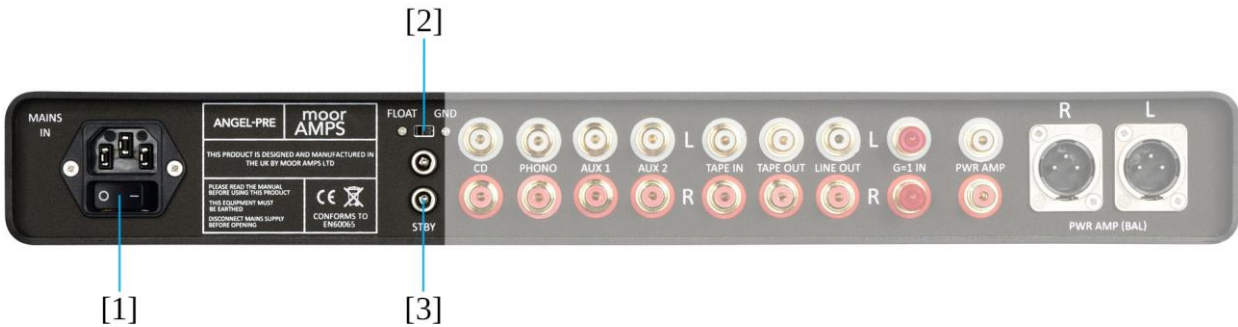
If you are in any doubt about how to connect your hi-fi components together or install your system, please contact your hi-fi dealer who supplied the amplifier for assistance.

Table of Contents

1   Installation

Power and Standby

Number	Name	Description
[1]	Mains input	230V AC IEC mains inlet – with power switch
[2]	Ground Selection	GND – Connect audio grounds to mains ground FLOAT – Leave audio grounds floating See section 'System Grounds'
[3]	Standby outputs	Outputs to put Angel Power amplifiers into standby Refer to Angel power amplifier manual

Audio inputs and outputs
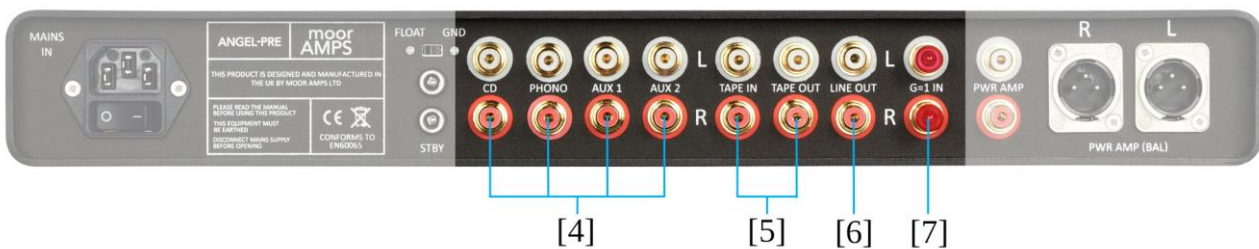
Number	Name	Description
[4]	Source inputs	Line level inputs for source components See section 'Inputs – normal'
[5]	Tape loop	Tape monitor loop input and output See section 'Tape Loop'
[6]	Line output	Line level output – See section 'Line out'
[7]	G=1 input	Unity gain (G=1) input for AV system See section 'G=1 Input'

Outputs to Power-amp
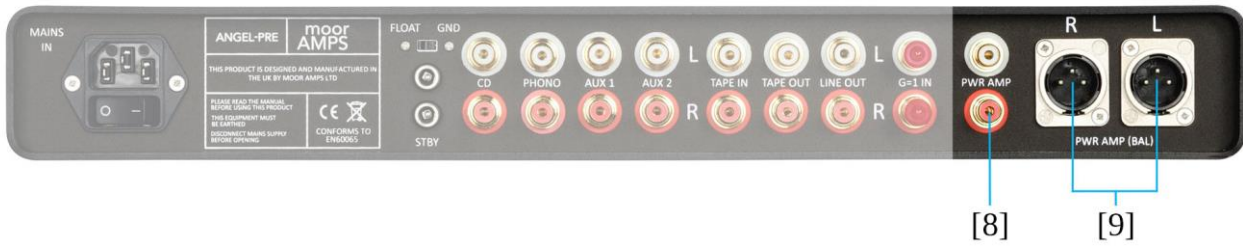
Number	Name	Description
[8]	RCA outputs	RCA (phono) outputs to power amplifier
		See section 'Power Amp RCA Outputs'
[9]	XLR outputs	XLR (balanced) outputs to power amplifier
		See section 'Power Amp XLR Outputs'

1.1 System Grounds

Your hifi system audio ground should be connected to the mains ground at one and only one point. The Angel-Pre has a ground selection switch [2] above, and you should set it as follows:

If you have a source component (CD player, DAC etc) which has a ground connected, then put this selector switch to the 'FLOAT' position.

If your system has no other components grounded, then set this selector switch to the 'GND' position.

1.2   Inputs

1.2.1 Inputs – normal

The Angel-Pre has 5 inputs for your source components. 4 of them are identical inputs which follow the 'normal' flow through the preamp – input selection → volume control → output buffers.

These 4 inputs are labelled as CD, PHONO, AUX 1 and AUX 2. You can use them for any line level input source you want, the labels are just a guide.

These 4 inputs all go through the volume control in the preamp, and they are designed to be used with music devices with line level output – that is, they don't use their own volume control, they are always at 'full' volume.

1.2.2 G=1 Input

The 5th input on the Angel-Pre is a bit different. It's called G=1, 'gain = 1' or 'unity gain', and is an input which goes straight to the output buffer at full volume.

This input does not pass through the volume control in the Angel-Pre, so it must only be used for something which has its own volume control – such as an A/V surround sound amplifier. This is useful when you have your hi-fi music speakers which double up as the front speakers of a multi-channel home movie system.

If you plug, for example, a CD player, which is always at full volume, into this input, which is also always at full volume – the result will be very loud and could quickly be terminal for your speakers.

To make sure you don't use this input accidentally, we do 2 things: First, the amplifier is shipped with 2 little red covers over the G=1 inputs; Second, the amplifier, as shipped, will not select the G=1 input until you re-program it (see the section 'Option Programming').

Before you remove the covers and reprogram the Angel-Pre to allow this input, be sure you know what you are doing. If you're in any doubt, contact your dealer for advice.

1.3   Outputs

1.3.1 Power amp RCA outputs

These are the outputs for RCA or Phono connectors to connect to amplifiers with RCA unbalanced inputs. Typically used where the cable to the power amp is relatively short; up to 5m or so.

1.3.2 Power Amp XLR outputs

These are balanced XLR outputs as used in stage and professional audio, and are designed for longer cable runs. These are usually a better choice if the power amp is further away from the preamp, but personal listening preferences rule in this department.

1.3.3 Line out

These are outputs at full line level, to connect an external headphone amplifier for example, or any other device requiring full line level signals.

Note that the G=1 input cannot be routed to the Line out.

1.4   Tape Loop

These are a pair line level outputs to a tape recorder or external recording device, along with a pair of inputs for switching to the monitor output of the tape recorder.

The tape outputs are always sending whatever input (CD, PHONO, AUX 1 or AUX 2) is selected to the tape recorder. When you select TAPE input, you swap to listening to the monitor output back from the tape recorder. It does not change which input source goes out to the tape recorder or line out outputs.

Note that the G=1 input cannot be routed to the Tape loop.

2   Operation

The front panel has a series of button press switches, and above each button is an LED to show you what is currently active.

2.1   Power On sequence

When power is applied to the Angel-Pre it will start its power-up sequence.

Initially the Moor Amps Logo panel will start to glow, and after a few seconds the selected input LED and the MUTE LED will illuminate. There will be a 2 second pause for the internal circuitry to settle, then the power amplifier outputs will be connected.

At this point the Angel-Pre will resume normal operation; in the same state it was in before the power was last removed.

Note that when the power is removed, the Angel-Pre stores the Input selection, Mute selection and Tape monitor selection. This stored information is used to resume the operation when power is applied.

Note that the Standby state is NOT stored, so if power is removed when the preamp is in Standby, it will restart in normal operation when power is restored.

2.2   Input selectors

Working from left to right, the first 5 front panel buttons select the input sources. The first 4 inputs (CD, PHONO, AUX 1 and AUX 2) are always selectable. As noted above, the G=1 input cannot be selected until the Angel-Pre is re-programmed. Read section 'Inputs – G=1' carefully before you change this input programming.

2.3   Tape selector

This button selects the tape monitoring input.

In this mode you will be listening to whatever is being fed into the tape input.

Note that only the first 4 inputs (CD, PHONO, AUX 1 and AUX 2) can be routed to the tape output. The G=1 input cannot be routed to the tape output.

In normal tape monitoring operation, the selected input goes out on the 'tape out' and is connected to a tape recorder. This is recorded on the tape with the first recording head. A second playback tape head plays the recording back (with a short delay), and this monitoring output is fed back to the 'tape in' on the Angel-Pre so you can hear the recorded version.

The Tape selector does not change the Input selection, so whichever of the first 5 buttons is currently active will stay active. Press the tape selector again to return to directly listening to the selected input.

2.4 Mute / Standby

A short press of this button will mute the amplifier outputs. It will not change the tape or line out outputs level. A further short press will clear the mute. See the section 'Mute operation' for a full description.

A long press and hold of this button will put the preamp into standby. When the amplifier is in standby, a short press of this button will return to normal operation. See the section 'Standby operation' for a full description.

3   Remote control operation

3.1   Input selectors

The remote control IN + and IN – buttons will loop through the inputs. By default, these buttons will loop through the 4 inputs, CD, PHONO, AUX 1 and AUX 2.

If G=1 input has been programmed to be active, these buttons will loop through all 5 inputs, CD, PHONO, AUX 1, AUX 2 and G=1.

3.2   Volume control

The VOL + and VOL – buttons drive the motorised volume control on the Angel-Pre up and down.

3.3   Mute

The Mute button on the remote control only controls the mute function – a short or long press will do the same. This differs from the preamp front panel button where Mute shares the same button as Standby. See the section 'Mute operation' for a full description.

3.4   Tape

The Tape button controls the tape monitoring input (see 'Tape Selector' section for more detail).

3.5   PWR

Pressing the PWR button will put the Angel-Pre into Standby. Pressing the button again will return the Angel-Pre back to normal operation. See the section 'Standby operation' for a full description.

4   Mute operation

There are two options for the mute on the Angel-Pre, quiet mute or silent mute.

The default quiet mute is a soft mute which quickly ramps down the volume to a low background level which is almost independent of the volume control setting. This mode is useful because you can still hear that the system is operational and playing – without being intrusive.

If you prefer a fully silent mute, this can be selected – see 'Option Programming' section.

The silent mute is similar to the quiet mute, in that it uses the soft mute and ramps down to a low level, but it then goes silent. When cancelling silent mute, it comes on quietly then ramps up with soft mute to normal volume.

With quiet mute, the tape and line outputs will NOT be muted.

With silent mute, the tape and line outputs will be muted.

The G=1 input is not effected by mute.

Note: Please be aware that the volume controls work differently when the Angel-Pre is muted. The volume down button will move the volume control down as normal. The volume up button will cancel the mute and then work as normal.

5   Standby Operation

5.1   Entering Standby

Standby mode can be selected by the front panel STANDBY button or the remote control PWR button.

Entering Standby will disconnect all the outputs to the power amplifier, then shut down the majority of the internal circuitry in order to reduce the power consumption of the Angel-Pre to less than 0.5W.

In Standby, the Angel-Pre illuminated logo will continue to be dimly lit, and all of the LEDs above the front panel switches will go off. This is a good indication of Standby mode, as in normal operation at least one of the front panel LEDs will always be illuminated.

In Standby mode the Angel-Pre will not respond to most front panel or remote control button presses. The front panel STANDBY button and the remote control PWR button remain active, and all other button inputs are disabled.

5.2   Exiting Standby

Pressing the front panel STANDBY button or the remote control PWR button while the Angel-Pre is in Standby will cause the preamp to exit from Standby mode and return to normal operation.

The preamp will power up the internal circuitry, and illuminate the selected input LED and the MUTE LED. There will be a 2 second pause for the internal circuitry to settle, then the power amplifier outputs will be connected.

If the preamp was Muted when Standby was entered, the preamp will remain in Mute when it starts up. Otherwise the preamp will exit from Mute, the Mute LED will turn off and the output will ramp up to the selected volume level.

Please note that the Angel-Pre will not respond to most front panel button presses or remote control button presses for 2 seconds while it is exiting standby and returning to normal operation.

6   Option Programming

There are three programmable options for the Angel-Pre preamplifier. These are:

- Logo and LED brightness – Standard (default) or Dim

- G=1 input – Disabled (default) or Enabled

- Mute – Quiet Mute (default) or Silent Mute

As the Angel-Pre is shipped, the 3 default options will be selected.

6.1   Programming method

Each programming option has 2 possible settings. The programming method described below will switch from the current setting to the alternative setting. Repeating the whole programming method will switch back to the first (default) setting.

Programming Method:

- Switch off the Angel-Pre at the mains (wall switch or back panel switch)

- Wait for the Logo panel and all illuminated button LEDs to go completely dark (this takes about 15 seconds)

- Wait a further 5 seconds

- Press and hold the desired programming button (see 'Programming Buttons' below)

- While still holding the programming button, turn on the mains

- Keep holding the programming button until the button LEDs come back on after about 3 seconds

- Release the programming button

The program option you selected will have changed, and been stored so it will continue to apply after subsequent power cycles.

6.2   Programming Buttons

 The 3 buttons which allow you to reprogram the 3 options are as follows:

- Logo and LED brightness – use the CD button

- G=1 Input selection – use the G=1 button

- Mute operation – use the MUTE button

Hint – the G=1 and Mute programming buttons are pretty obvious, to remember the CD input for brightness, it's the button nearest the illuminated Logo…