

Operating Instructions



**ACM2150
Dual Channel
Power Amplifier**




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ACM2150

150 + 150 Watt Power Amplifier

Product Description

The ACM2150 is a dual channel 150 + 150 watt power amplifier in a two rack unit (2RU) chassis suitable for table or direct 19" rack mounting. The ACM2150 has outputs for 100 volt line or 4 - 8 ohms and has an active balanced input of 10K ohms. The ACM2150 will operate from 240 VAC @ 50 Hz or 110 VAC @ 60 Hz (not user selectable, internal factory adjustment only, specify at the time of ordering). The ACM2150 also features auto-sensing fan cooling and over temperature protection. The maximum recommended load for the ACM2150 is 65 ohms per channel for 100 volt line operation and 4 ohms per channel for low impedance operation.

Front Panel Controls

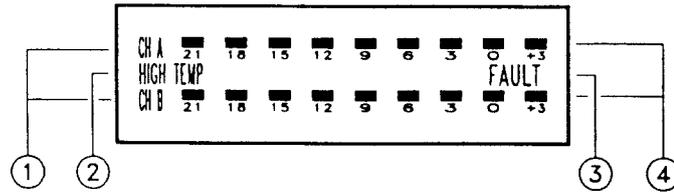
Output Level: The input level controls are unlabelled, recessed (screwdriver adjustable) and are located in the centre of the front panel. Turning a control clockwise will increase the output of the particular channel of the ACM2150 towards its maximum output level while turning the control counter-clockwise will decrease the output level. Adjust this control for the desired output level depending on the level of the input signal (from a mixer or other signal source). The factory default setting for this control is 1 volt input will supply full load into 4 ohms.

Power Switch: The rocker switch located in the front centre of the panel turns AC power on to the ACM2150. Rocking the power switch to the right turns the AC power 'on'. When the AC power is 'on', the "CH A" and "CH B" LED's will glow in the amplifier status display window.

Cooling Fans (Air Intake): The cooling fan is temperature sensitive and will only switch on when the temperature of the ACM2150 had reached a pre-determined range. The fan will stay on and only switch off again once the temperature of the amplifier has fallen below a pre-determined level. So, the fact that the fan is not operating at any time (and most noticeably to the operator at turn-on) does not mean that the amplifier is faulty in any way, just that it is operating within a temperature range that does not need fan cooling for adequate heat dissipation. If the ACM2150 is operating continually at conservative levels and proper load conditions, it is possible that the cooling fan will not switch on at any time during normal operation. When operating, the fans cause air flow from the front to the rear of the amplifier.

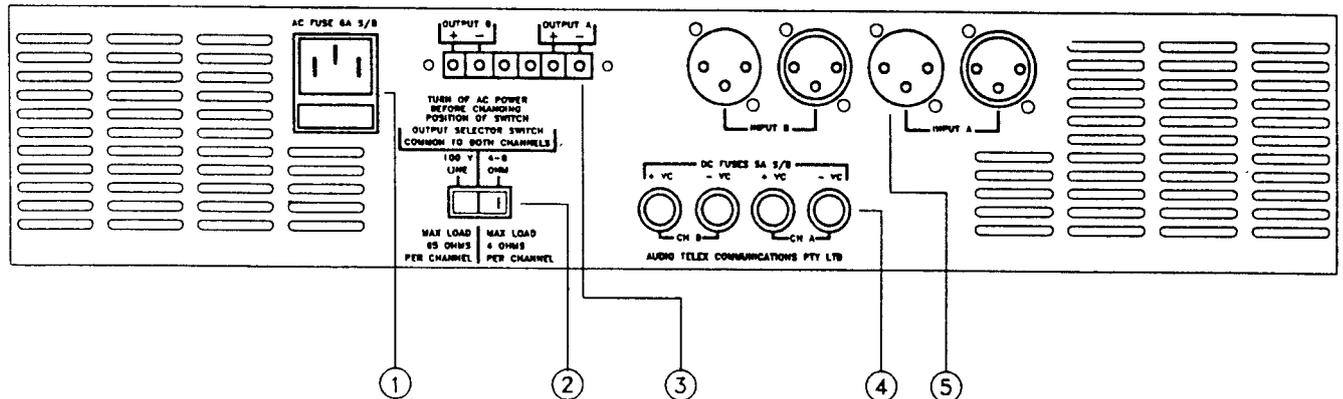
Amplifier Status Display Window

The status display window highlights the operating conditions of the ACM2150.



1. **Channel A / Channel B:** These LED's glow green if AC power is switched on to the ACM2150.
2. **High Temperature:** This red LED glows if the fans have failed and the amplifier has been shut down by its temperature control circuitry. If this LED is glowing and the fans have not failed, it means that the amplifier is operating in an ambient environment that is naturally too hot for fan cooling to make any difference to the temperature of the amplifier.
3. **Fault:** This LED glows red if there is DC present on the output (speaker lines) in which case the speakers will be internally disconnected from the amplifier stage.
4. **Output Level VU Meter:** Two 9 segment LED VU meters are provided to give an indication of the output signal levels of each channel of the ACM2150 from -21 to +3 dB. For normal operation the LED's should oscillate in and out of the red zone. If the LED's in the red zone are lit continually, then the output level control (or the level of the input signal to the ACM2150) should be adjusted to reduce the output level. Too much output level can cause distortion and possible damage to the connected speaker system.

Rear Panel Connections



1. **3 Pin IEC, AC Mains Power Inlet:** The operating voltage is 240 VAC @ 50 Hz or 110 VAC @ 60 Hz. The AC power voltage level is **not** externally user selectable but is factory pre-set (via transformer selection). The inlet is equipped with an inbuilt AC fuse holder fitted with a 6 Amp slow blow fuse plus one spare fuse. Power consumption is 300 VA. **Please ensure that the mains power cord is disconnected before attempting to check or replace this fuse.**

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2. **Output Selector Switch:** This selector slide switch is used to select the output level desired. Before adjusting this switch in any way please make sure that the AC power switch is in the "off" position. Any selection made is common to both channels and they cannot be selected independently of each other. To select an output of 100 volts RMS (100 volt line level or high impedance) move the switch to the left position when looking directly at the rear of the amplifier. To select an output of 4-8 ohms (low impedance) move the switch to the right position when looking directly at the rear of the amplifier.
Note: If the incorrect setting is used this may cause serious damage to the amplifier and/or speakers and void any warranty claim. Refer to your authorised dealer or Audio Telex for further information.

3. **Output Terminal Strip:** Reading from left to right these connections are as follows:

Positive connection for channel B output
Negative connection for channel B output
Spare
Spare
Positive connection for channel A output
Negative connection for channel A output

Note: These outputs (channels A & B) cannot be selected or wired for bridged mode mono operation.

4. **DC Low Voltage Fuse Receptacles:** Access the DC fuses by turning the caps half a turn counter-clockwise with a screwdriver. The value of the fuses is 5 Amps slow blow. **Please ensure that the AC power switch is in the 'off' position and that the mains power cord is disconnected before attempting to check or replace any of these fuses.**

5. **Input (& Parallel Output) XLR Signal Connections:** The inputs (A & B) to the ACM2150 are active balanced @ 10K ohms. The pin configuration of all sockets is as follows: pin #1-earth; pin #2-active (high, +); pin #3-active (low, -). The output socket is to allow the original input signal to be fed on to another amplifier. As these two sockets are wired in passive parallel for each channel, the failure of any one amplifier will not affect the signal flowing through that amplifier to another amplifier.

Fuse Sizes ACM2150 Amplifier

Mains 240 VAC: 6 Amperes Slow Blow

DC: 5 Amperes Slow Blow

Looking for something worthy to connect to the inputs and outputs of your new ACM2150? Well, please call your nearest Audio Telex Communications office for referral to your closest authorised Dealer or for more information on the full selection of our compatible sound system products.