



AF 31 · AF 32 · AF 33  
AF 34 · AF 36

Special components

eller  
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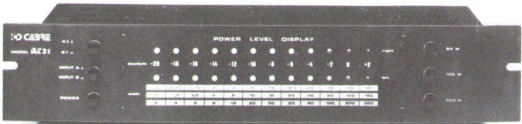
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## AF. 31 Power level display

AF. 31 was conceived for professional or amateur applications, to indicate the output power of main amplifiers, integrated amplifiers or receivers. Because of its versatility it can be used also by itself, or with the aid of a test record, for the following purposes:

- as a level display during recordings
- to check the environmental acoustics
- to check the performances of an amplifier (power output, overmodulation and sensitivity of inputs, frequency response, effect of filters, tone controls etc.)

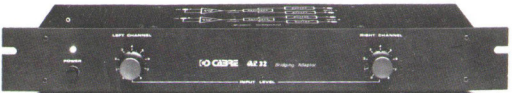


### Technical data

Inputs: 2 STEREO  
Display scales: 6 - in Watt (0.05 to 8; 0.1 to 16; 0.2 to 32; 0.5 to 80; 1 to 160; 2 to 320), one decibel scale with the 0 dB at 5, 10, 20, 50, 100, 200 W at 4 and 8 ohm impedance. LED employed, 2x12 each channel.  
Accuracy: between two LED's 0.3 dB  
between two scales 0.5 dB

## AF. 32 Bridging Adaptor

AF. 32 is a sophisticated universal bridging adaptor with low distortion, great linearity and extremely low noise (\*). In general, a bridging adaptor is a special equipment by which means the output power supplied by two mono main amplifiers of similar power can be conveyed to one load system (loudspeaker), thus doubling the available power. The new power figure (on 8 ohm) will result from the sum of the powers available from each amplifier on a charge of 4 ohm. AF. 32 is a STEREO Bridging Adaptor, that let to couple TWO STEREO POWER AMPLIFIERS in order to obtain a stereo system. E.g. the CABRE AF. 25 stereo power amplifier supplies



- to check channel separation and frequency response of a pick-up cartridge
- to check the presence of radiofrequencies in the output of the amplifier
- as a voltmeter etc.

AF. 31 works with amplifiers with load impedance of 4 or 8 ohm (switchable). It has two switchable inputs, six scales calibrated in W and one dB scale. It must be connected to the output of the amplifier like a couple of speakers, its high impedance does not affect the output voltage. Its high accuracy makes it a true measurement instrument. It is protected against improper use and it can receive up to 1000 W without damage.

## Technical data

Harmonic distortion: less than 0.02% at 1V for any frequency between 20 and 20,000 Hz  
Intermodulation distortion: less than 0.02% 1V out (60 Hz - 7 KHz 4:1 SMPTE)  
Frequency response: 5 Hz -> 150 KHz - 3 dB  
Channel separation: 70 dB (1 KHz)  
Sensitivity: 0.5 V input for 1V out (gain: 6 dB with continuous regulation)

## AF 33 Full speakers protection unit (Pat.)

The AF. 33 is a new exclusive full speakers protection unit. It is set between amplifier and speakers, and it interrupts the connection when a dangerous signal is coming. Its reliability comes from the various functions it can achieve: delay in the connection, interruption of the connection, in presence of strong subsonic currents or in case of main amplifier damage. Its chief sophisticated function is the one achieved by the Integrating Module PTFI, which, by integrating the three factors of Power, Time and Frequency of a signal it controls the intervention of the protection in any dangerous situation. Thus you can be sure that your speakers will not be damaged even if you listen at a high volume and when you use the tone controls in "increase" positions. This intervention is particularly



### Technical data

Nominal values for threshold power: (W RMS) for speakers with 8 ohm impedance: 20 - 40 - 50 - 60 - 80 - 100 - 150 - 200 - 250; for speakers with 4 ohm impedance: 40 - 80 - 100 - 120 - 160 - 200 - 300 - 400 - 500.  
Intervention times: (delay at min.)  
- Weighted  
I) with maximum integration (power, frequency and time) max. 15 msec  
II) with minimum integration: max. 80 msec  
- Linear  
I) with maximum integration: max. 25 msec  
II) with minimum integration: max. 80 msec  
Delay: increase of intervention times: max. 300 msec (continuous regulation)  
Restoration: automatic, when the circumstances of intervention cease.

Maximum levels: input: 4V RMS, output: 5V RMS  
Impedance: input: 50 Kohm; output: less than 50 ohm.  
(\* Signal-to-noise ratio: better than 90 dB, IEC/A; better than 100 dB  
Power voltage: 220V AC 50/60 Hz  
Size: rack size (482x60x120 mm.)  
Weight: Kg. 2,200.

useful when listening to pop-rock music, where the ordinary ratios among the various frequencies have been deeply altered with compressions and equalizations during the recordings. At the intervention of the protection one or two LED's light up (left or right) on the front panel and the re-connection is automatic (as soon as the danger ends) after a span of 0.5 up to 4 seconds, depending on the amount of impulsive energy resulting from the integration. You can choose the power of intervention on 4 or 8 ohm among nine standard values (power-selector keys) and finely control the intervention threshold by operating on time (delay knob), in order to fit the protection to any speaker system even depending on the programme you are listening to. For particular uses the power and/or the frequency integration can be excluded ("linear" and "∞" keys). The unit does not affect the signal because it only runs through the contacts of a relay. The AF. 33 is equipped with an exhaustive instruction manual.

Restoration time: variable between 0.5 and 4 seconds depending on the amount of energy which has determined the intervention.  
Precision of intervention: in function of frequency: 20Hz to 300KHz ± 0.5 dB.  
Frequency response, harmonic and intermodulation distortion: no alteration of the input signal.  
Other interventions:  
The protection also works:  
- at the turning on of the equipment (delayed 4 seconds)  
- in presence of strong subsonic currents  
- in presence of radiofrequency  
- in case of damage of the amplifier.  
Power voltage: 220V AC 50/60 Hz  
Absorption: max. 1.5 W  
Size: rack size (482x62x140 mm)  
Weight: Kg. 2,350

## AF. 34 Stereo equalizer

Thanks to the modern technologies employed and to the project, the Stereo equalizer AF. 34 offers excellent technical features compared to his price. The AF. 34 corrects the main faults of the listening room with great simplicity and without expensive measuring equipments. A thorough research has driven the choice of the frequencies of intervention, and particular attention has been paid to the low ones, where irregularities are more frequent in a normal listening room (60 Hz and 240 Hz), while the other controls restore the tonal balance influenced by the shape of furniture. Due to separate controls for the two channels, a different equalization for each one of the speakers is possible, in order to suit their positions. It also corrects the faults of the back section: speakers with low bass responses are considerably improved and particularly in those bands where frequency response curves begin to fall down, the coupling of particularly brilliant speakers



### Technical data

Total harmonic distortion (1V out):  
- typical: less than 0.002%  
- maximum: less than 0.01%  
Intermodulation distortion (1V out): (60 Hz - 7 KHz 4:1 SMPTE)  
- typical: less than 0.002%  
- maximum: less than 0.008%  
Frequency response: 20 Hz - 20 KHz ± 0.5 dB  
Signal-to-noise ratio: (input closing according to IEC 268 and at 1 V)  
- linear: 90 dB  
- "A" weighed: 100 dB  
Channel separation: 1 KHz better than 60 dB

## AF. 36 Power line distributor and visualizer

The AF. 36 is a new exclusive power line control unit. It has a twin function: - the distribution of mains power supply through two separately controlled groups of four sockets each. - mains voltage control through digital display voltmeter. The distribution of power supplies allows to control

and cartridges is made even better by the 10,000 Hz control: with the AF. 34 you can reduce the faults of the listening programme - wireless stations broadcasting with their own equalizations, records and tapes with audible noise etc., you can make alterations following your own taste: you can put in evidence some instruments rather than others without altering other bands, in spite of what happens with the ordinary tone controls; you can alter programmes during recordings or change tape characteristics by recording equalized signals. This equipment will be extremely useful in live recordings for it helps to correct resonances in the recording room. In order to exploit completely and successfully the excellent qualities of the AF. 34 you can either connect it between preamplifier and main amplifier or in the "tape monitor" position. This last configuration is most useful in recordings and in excluding the unit, thus making no change during the recording. A series of high-grade step-type potentiometers increase or decrease the various frequencies (intermediate position between steps is also possible), so that it will be easy to repeat the same results.

Impedances:  
- input: 50 Kohm  
- output: 200 ohm  
Maximum output voltage: 8 V on 50 Kohm  
Filters' centre: 60 Hz - 240 Hz 1 KHz - 4 KHz - 10 KHz  
NOTE: in FLAT position the circuits are completely excluded, in this case there is direct connection between input and output  
Power voltage: 220 V AC 50/60 Hz  
Size: rack size (482x60x140 mm.)  
Weight: Kg. 2,800.

the switching on and off of eight or more units by depressing two keys only. This is particularly useful when the system consists of several units, or when the switched AC outlets available on the amplifier are not enough to meet your requirements. Such distribution also consists to dispose rationally power wires in order to prevent alternating current frequency from inducing noise on wires taking signals from a unit to another. Voltage control allows to check working condition of the units

of the system. The AF. 36 also incorporates a main line filter that attenuates symmetrical noises that enter the amplification system through the power line. These functions, besides the great utilizable power, (1.2 KW) make of the AF. 36 an extremely useful unit for professional use (disco's, radio stations, etc.), where several units are used and where a control of power supply condition is necessary.



### Specifications

Nominal utilizable power: 1.2 KW.  
Impulsive power: 2.5 KW.  
Main line noise attenuation: 40 dB (symmetrical type - 10 MHz)  
Line voltage display precision: ± 0.5%  
Main line voltage controlled through 3 seven-segments displays  
-6 EUROPEAN-AMERICAN (Japanese) standard sockets

It also may prove useful in sophisticated and versatile amateur systems where installation, use and global performances are to be rationalized. Due to its measurement precision, to the use of high grade components and to its extremely compact size, the AF. 36 proves to be a special sophisticated and reliable unit which can be used with any top-class equipment.

-2 sockets with central ground connection  
-2 control lines separately controlled (4 sockets for each line) with visualizer.  
Power voltage: 220/240 V AC 50/60 Hz.  
Size: rack size (482x60x140 mm.)  
Weight: 2.6 Kg.

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The CABRE has right to change specifications and design in order to improve characteristics at any time and without notice.



Special components

left right  
protection  
CABRE  
Full speakers protection unit  
energy pulse integration / auto reset

SENSITIVITY  
normal  
-10 dB

POWER SELECTOR  
CABRE  
POWER flat tape eq tape monitor

21.8  
LINE VOLTAGE

pre out INPUT L R AF 32  
OUT 1 L R main in POWER UNIT L R  
OUT 2 L R main in POWER UNIT L R  
left channel right channel

SICURY  
VIMAR

40 Hz 1 KHz 4 KHz  
0 1.5 4.5 7 11 15  
-dB +

decibels -20 -18 -16  
watts 0,5 0,75 1,25  
1 1,5 2,5  
2 3 5

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