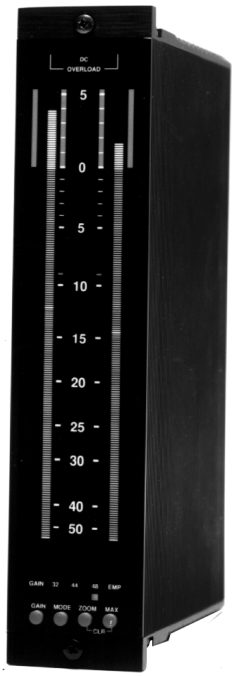
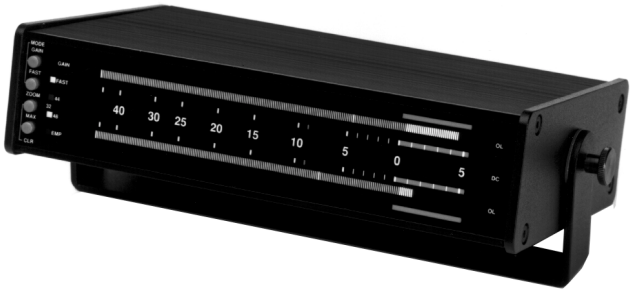
Stereo Digital
Peak Programme Meter
The 477-family



Features:

- Peak Program Meter for Digital Audio.
- Advanced Dual-Mode Display, combining:
  - BAR: Reading similar to traditional Analog PPMs
    Referring to a "normal operating level"
    10 msec integration time
  - SPOT: True digital peak-reading
    "Zero" integration time
- Built-in three color LED compatibility meter. (option)
- Reference level selectable from 0 to 31 dB below max. digital code by DIP switch.
- Selectable "freezing" of Spot for peak-hold indication.
- Built-in 0.3 Hz Highpass filter for DC-blocking and LED DC warning indication for LF-component levels of more than -30 dB FS.
- Individual overload indicators with selectable trigger criterias: 1, 4, 8 and 16 consecutive samples.
- Additional gain function for monitoring of low level signals.
- Resetable memory for storing of maximum reading.
- 32/44.1/48 kHz sampling-rate and pre-emphasis indicators.



General Description.

These instruments combine both the "absolute" (digital zero) and ”analogue PPM” scales in one unit, which adheres to IEC 268-10 standards. This enables a sound engineer, working in a mixed analogue and digital evironment, to make a direct comparision between signals. Various functions are available including peak hold, memory, zoom, fast integration time, and a compatibility / phasemeter.

Technical Specifications:

Supply voltage ..... 20-32 V DC

Current consumption, @ 24V supply ..... 140 mA typ. (max. 200 mA)

Signal input:

Input type ..... Serial digital audio interface (IEC 958)
Input impedance ..... High impedance, floating, (Zi > 1 kΩ))
Minimum input signal ..... Vmin = 200 mV, Tmin = 0.5 x Tnom (IEC 958)
Sampling rates ..... 48 kHz, 44.1 kHz and 32 kHz

Measuring characteristics:

Main reading (bargraph):
Integration time ..... 5/10 ms (IEC 268-10, 1991-03)
Return time ..... 1.7 s (0 to - 20 dB) (IEC 268-10, 1991-03)
Reference level ..... selectable 0 to 31 dB below max. digital code.
Overload indication ..... The bar intensity is increased within overload range.
Low frequency cut-off ..... DC-blocking; Cut-off frequency <0.3 Hz
Secondary reading (spot):
Integration time ..... "zero"
Return time ..... 1.7 s (0 to - 20 dB) (IEC 268-10, 1991-03).
Scale max. ..... Scale max. equals the lower limit of intensified bar range.
Reference level ..... Scale max. corresponds to max. digital code level.

Phase indication:(optional) ..... 0 to 180°. - Resolution: 18°.

Stereo Digital Peak Programme Meter

Additional functions:

Gain: Additional 20 dB gain selectable on front.
Mode The Bar-Graph display can be operated in various modes.
Memory: A peak memory is provided. Reset is controlled from a push-button on the front.
Zoom: To enable extremely accurate reading around "0 dB", the scale may be expanded by a factor of 10.

LED Indicators:

Flashing LEDs on top of each bar for instantaneous digital overload.
Excessive DC-content in either channel.
Gain, when selected.
Sampling rate and preemphasis, if present.

Select the PPM which fits your needs:

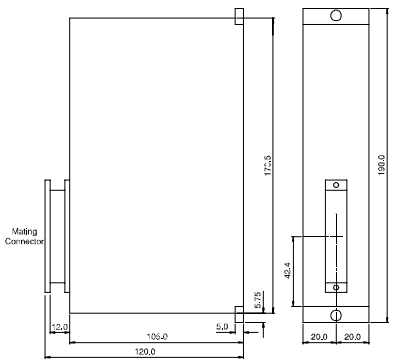
Type	Panel-mount	Table Top	Tuchel[1]	XLR[2]	Phase meter
477-400	√		√		√
477-420	√			√	√
477-450		√		√	√
477-500	√		√		
477-520	√			√	
477-550		√		√	

Notes:

1) The types equipped with Tuchel connector has been designed with high input impedance to allow for parallelled (daisy-chain) connection. If used without other line termination a termination resistor (75 Ω or 110 Ω) must be mounted on the mating connector.
2) External Mains adapter included.

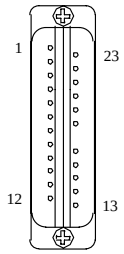
All types are available in both horizontal and vertical

Mechanical outline, for the panel-mount version with Tuchel connector:



Terminal connections (Tuchel connector):

Connections is done via a 23 pole Amphenol Tuchel type T-2700 connector, male. The mating part is T-2701, and is not included with the instrument.

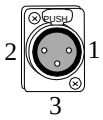


Seen from rear side

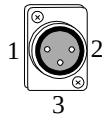
Not to be used	1	23	+Vcc
Not to be used	2	22	N.C.
N.C.	3	21	Not to be used
N.C.	4	20	N.C.
Ref. level	5	19	MAX, remote control
Ref. level	6	18	CLR, remote control
Ref. level	7	¤	
Ref. level	8	17	ZOOM, remote control
Input Screen	9	16	GAIN, remote control
Input Screen	10	15	MODE, remote control
Digital Input Signal -	11	14	Digital Input Signal +
-Vcc	12	13	Chassis

Terminal connections (XLR-connectors):

Connection is via one XLR A3F connector and one XLR A3M connector for loop-through.



Chassis/screen	1
Input (a)	2
Input (b)	3



Chassis/screen	1
Output (a)	2
Outputput (b)	3

Your local Distributor:

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