

# DSP40pro+

## Programmable Multiband Amplifier

- ✓ High selectivity digital filter
- ✓ Advanced selectable filters per channel
- ✓ Dual-stage input pre-amplifiers
- ✓ Filter channel level adjuster (1)
- ✓ Filter OFF-SET channel adjuster (1)
- ✓ UHF inputs with Lte 700 /UHF selectable filter
- ✓ Wide band auxiliary input
- ✓ Automatic channel scanning
- ✓ Manual programming from display and APP



(1) available only on Android App **LEM USB**

Multiband amplifier with programmable digital filters for equalising and converting digital terrestrial TV channels.

Advanced tuning and programming features allow the quality of received signals to be improved.



TECHNICAL SPECIFICATIONS		
NUMBER OF INPUTS	6	1 FM; 2 UHF; 1 VHF/UHF; 1 DAB/UHF ; 1 AUX
INPUTS FREQUENCY RANGE	MHz	FM (40... 108) AUX (40... 862) BIII/DAB 170... 240 / UHF 470... 694/862
SINGLE CHANNEL FILTERS		32
NUMBER OF CHANNEL PER FILTERS		1 (With possibility of conversion)
INPUT LEVEL RANGES	dBμV	FM 35... 90 - BIII/DAB 40... 110 - UHF 50... 110
FILTERS SELECTIVITY	dB	≥50 (Adjacent channels)
AUTOMATIC CONTROL GAIN RANGE	dB	40 dB
VHF/UHF INPUTS AMPLIFIER GAIN		0 / +15 / +30
FM GAIN	dB	45 (Adjustable 0... -30dB)
AUX GAIN	dB	40 (Adjustable 0... -20dB)
VHF GAIN	dB	60
UHF GAIN	dB	75
SELECTABLE FILTERS BANDWIDTH		Standard (8MHz) / Narrow (-500KHz) / Wide (+750KHz)
OUTPUT LEVEL RANGE	dBμV	99... 119
FILTER LEVEL ADJUSTER	dB	-5... +5 (1dB steps)
FILTER OFFSET ADJUSTER	KHz	-500... +500 (125KHz steps)
UHF ADJUSTABLE SLOPE	dB	0... -5
VHF ADJUSTABLE OUTPUT	dB	0... 10 (1 dB step)
MAX TOTAL VHF-UHF OUTPUT LEVEL	dBμV	126 (DIN 45004B)
INPUTS REMOTE POWER		12V / 24V 100 mA
RETURN LOSS IN/OUT	dB	>12
TEST OUTPUT		1 (-30 dB)
AMPLIFIER POWERING		100...240VAC 50/60Hz (External power supply 15VDC / 1,25A)
MAX AMPLIFIER CONSUMPTION	W	10,50
MAX AMPLIFIER CONSUMPTION + REMOTE POWER	W	12,50
OPERATING TEMPERATURE	°C	-5... 50
DIMENSIONS	mm	192 x 217 x 37

# Special Features

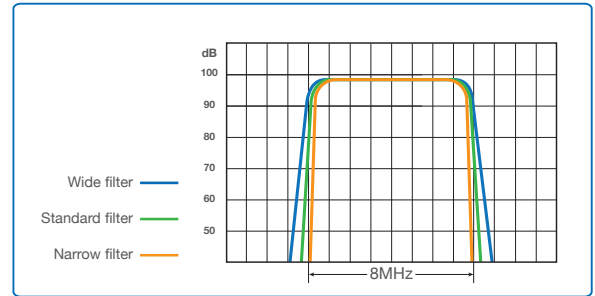
## Advanced filtering

For each individual channel, the most suitable output filter can be chosen to achieve the best output quality.

**Standard:** 8 MHz.

**Narrow:** 8MHz -500KHz.

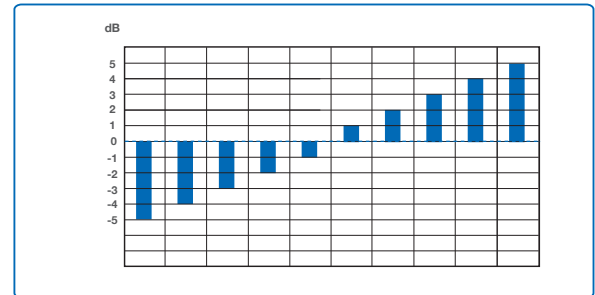
**Wide:** 8MHz +750KHz.



## Single filter level adjuster <sup>(1)</sup>

For each individual channel, the level can be adjusted in a range from **-5dB** to **+5dB** in 1dB steps.

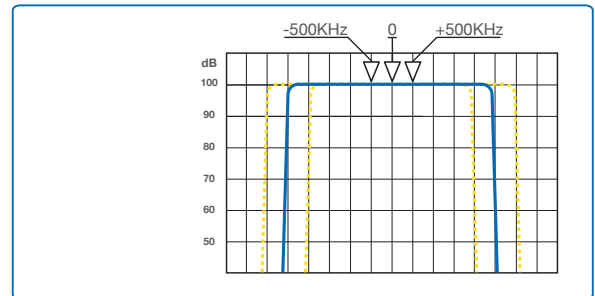
This feature can be used to obtain an output curve with customised equalisation or in combination with the general **SLOPE** to compensate for large distribution losses.



## Single filter frequency OFF-SET <sup>(1)</sup>

The output frequency OFF-SET of each filter can be corrected. The maximum range is **+/- 500KHz** in 125KHz steps.

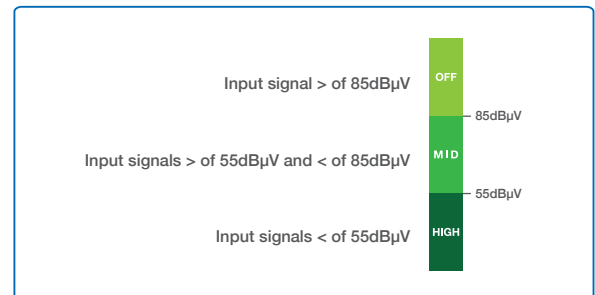
(1) available only on Android App **LEM USB**



## Dual-stage input amplifiers

All inputs dedicated to digital terrestrial signals are equipped with two-stage input amplifiers that can be configured to obtain **three different C.A.G. windows**.

This feature makes it possible to **receive signals with very low levels without the need for active antennas or external amplifiers**.



## Three Programming Options



### Direct Programming

The main parameters are directly controllable via keys and a 24-character display.



### Android smartphone programming

With the new LEM USB application, configuration and file storage operations are made even easier and more intuitive.



### AutoTuning channels scanning

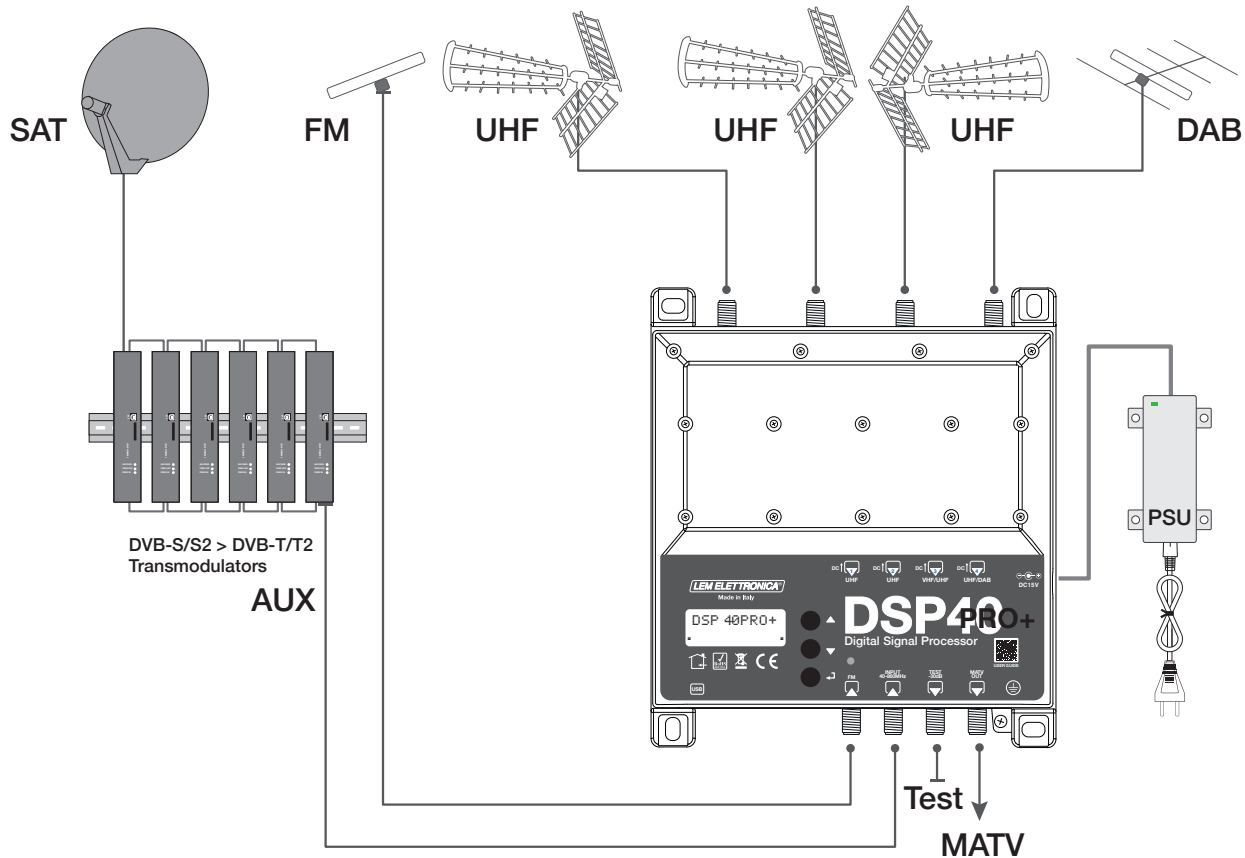
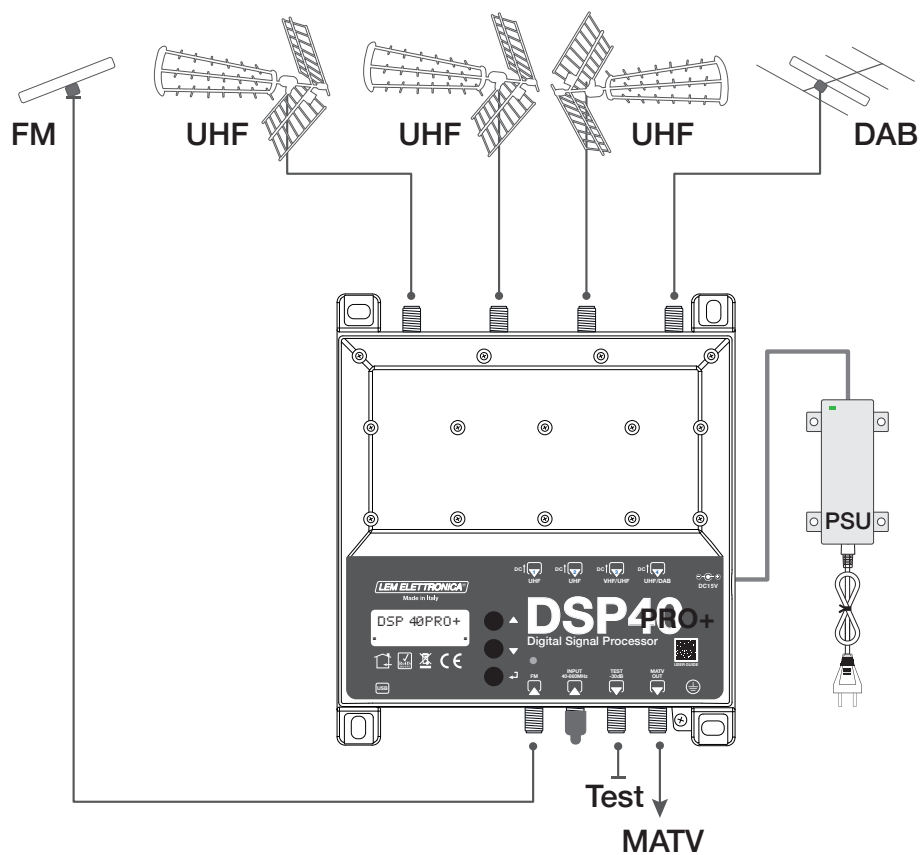
To speed up programming operations, the Auto-tuning function can be used, which automatically scans and memorises the channels received from the antennas.

01

02

03

## Application examples



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