

## Engel PRO Programmable Amplifier

*The smart amplifier*

### BLUETOOTH PROGRAMMING

from android smartphone or tablet

### SETUP IN JUST 2 STEPS

- 1 Select received channels (not clusters)
- 2 Desired output level



#### TECHNICAL CHARACTERISTICS:

- Very quick installation programmable head-end amplifier
- Very easy programming from smartphones or tablets via bluetooth and Android application
- Automatic clusters setup system (Autocluster and Autolevel)
- 3 Terrestrial TV inputs (BD I, FM, Bd III, DAB, V/UHF y 2 UHF)
- 6 UHF clusters adjustable gain and bandwidth (1 - 7 channels)
- High selectivity, flatness and regularity in all UHF Band for analog and/or digital channels combined amplification
- High output level even with low gains on individual clusters (usual problem with other programmable head-ends)
- 12v/24V supply for mast amplifiers. Adjustable via menu and commutable (on/off) to each antenna input.
- Programmer lockable by a user password code
- RF Test signal output: -30 dB

### PROGRAMMING FROM BLUETOOTH DEVICES



**CONTROL AM1000**

Seleccione la opción de configuración deseada entre automática y manual

ajustes auto  
manual status

**AUTOMATIC PROGRAMMING**

**A AUTO-CLUSTER**

Escoja los canales deseados para cada antena

ANTENA 1 ANTENA 2

21 22 23 24 25  
26 27 28 29 30  
31 32 33 34 35  
36 37 38 39 40  
22 22 22 22 22  
22 22 22 22 22

DVB-T PRE-SELECT

**A AUTO-LEVEL**

Escoja el nivel de salida deseado

115 dB $\mu$ V

START

**A LEVEL-STATUS**

GANANCIA GENERAL: 115 dB $\mu$ V

10 dB 10 dB 10 dB 10 dB 10 dB

PREAMP ANTENA 1: ON  
PREAMP ANTENA 2: OFF

**MANUAL PROGRAMMING**

**M UHF SPLIT**

Asigne filtros-clusters a cada antena

ANTENA 1 ANTENA 2

CLUSTERS

3 - 3  
4 - 2  
6 - 0

**M START-STOP**

Asigne canales a cada cluster

CLUSTERS

21 22 23 24 25  
26 27 28 29 30  
31 32 33 34 35  
36 37 38 39 40  
36 36 36 36 36  
36 36 36 36 36

MANUAL LEVEL AUTOLEVEL

**M AUTO-LEVEL**

Escoja el nivel de salida deseado

115 dB $\mu$ V

START

**M GAIN STATUS**

GANANCIA GENERAL: 10 dB

10 dB 10 dB 10 dB 10 dB 10 dB

PREAMP ANTENA 1: ON  
PREAMP ANTENA 2: OFF

### SPECIFICATIONS:

Inputs	BI/FM/BIII	VHF / UHF		UHF1	UHF2
Frequency range (MHz)	47-300	110-270 / 470-862		470-862	470-862
Configuration of clusters	-	-		6	0
				4	2
				3	3
No. channels per clusters	-	-	-	0 to 7 programmable adjustment	
Gain (dB)	55	50	55	55	
Input attenuation (dB)	0 - 20	0 - 20		0 / 5 / 10 / 15 / 20	
Cluster attenuation (dB)	-	-	-	0 - 20	
Master attenuation (dB)	-	-	0 - 20	0 - 20	
Noise figure (dB)	7	7	6	6	
Max. input level (dBuV)	80	80	85	105	
Max. output level (dBuV) *					
(DIN45004B /IMD3 -60dB)	115	115	120	120	
(DIN45004B /IMD3 -54dB)	118	118	123	123	
LTE filter **	-	Selectable ON/OFF			
Selectivity	-	-		15dB (± 16MHz)	
Return loss (dB)	>10	>10		>10	>10
Selectable remote power	-	12 / 24 Vdc, 200mA in total			
Outputs	RF output & RF test: -30dB				
Data transfer	Bluetooth				
Power supply	12Vdc/3.0A				
Operating temperature °C	0-50				
Dimensions (mm)	197 x 220 x 35				

\* The output level depends on the number of channels

\*\* LTE (4G protected) filter, Passband (470-790)MHz