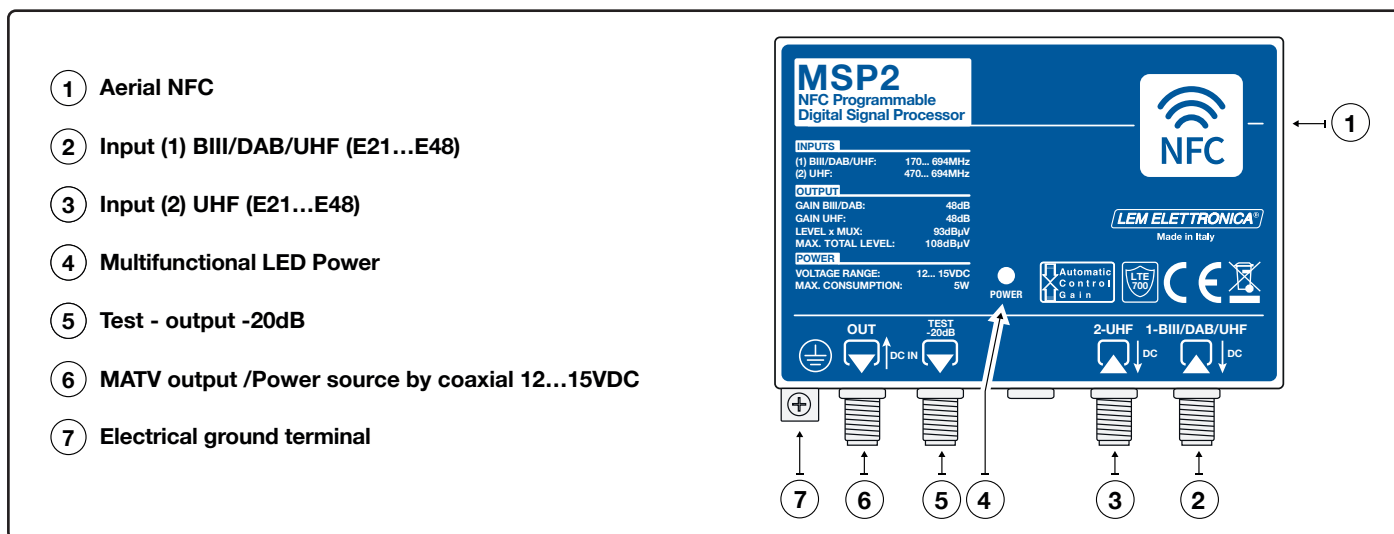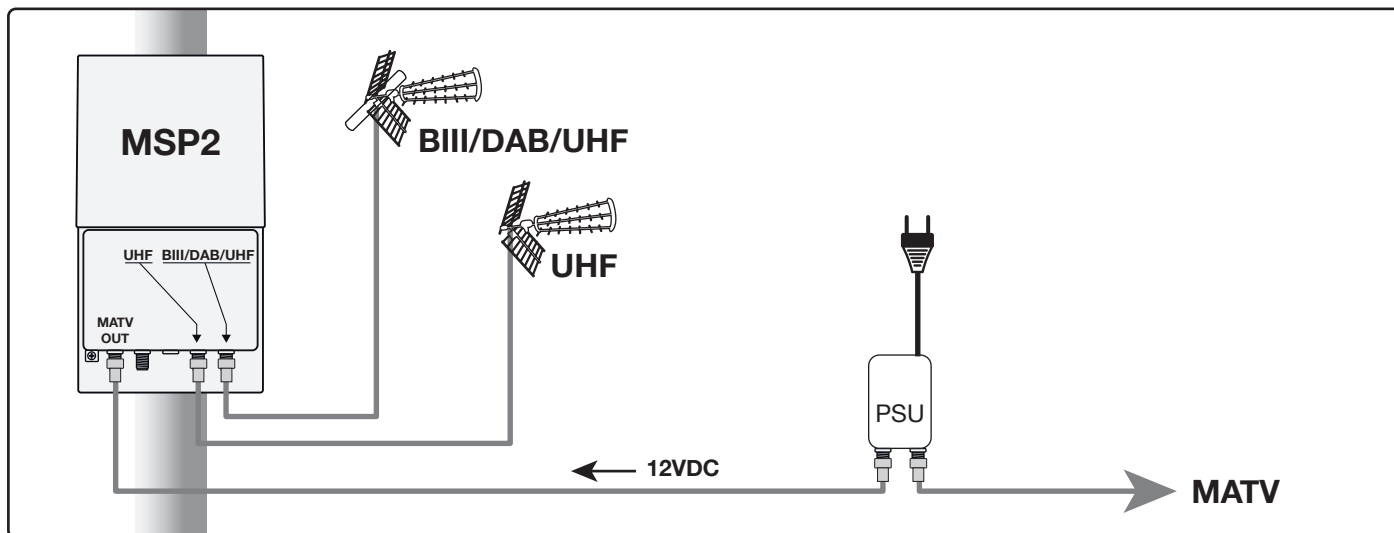# MSP2

Programmable amplifier
Programmable via smart phone Apple or Android

Connection and activation

1_Connect the coaxial input to the aerials systems.

2_Connect the correct power supply to the output connector.

3_Verify the correct amplifier ignition marked by the green **Led Power** lighting.

Remote power source fault

The fixed red colour by **LED POWER** ignition stands for short circuit presence or excess load at least over one aerial connection.
To reactivate the correct functioning remove short circuit or the excess load cause.

① **Aerial NFC**

② **Input (1) BIII/DAB/UHF (E21…E48)**

③ **Input (2) UHF (E21…E48)**

④ **Multifunctional LED Power**

⑤ **Test - output -20dB**

⑥ **MATV output /Power source by coaxial 12…15VDC**

⑦ **Electrical ground terminal**

MSP2
NFC Programmable
Digital Signal Processor

INPUTS	
(1) BIII/DAB/UHF:	170... 694MHz
(2) UHF:	470... 694MHz

OUTPUT	
GAIN BIII/DAB:	48dB
GAIN UHF:	48dB
LEVEL x MUX:	93dBµV
MAX. TOTAL LEVEL:	108dBµV

POWER	
VOLTAGE RANGE:	12... 15VDC
MAX. CONSUMPTION:	5W

LEM ELETTRONICA®
Made in Italy

Automatic Control Gain — LTE 700 — CE

POWER

OUT   TEST -20dB   2-UHF   1-BIII/DAB/UHF

Installation warning

• Always use the product with the supplied standard rain protection.

• The products must not come into contact with water or be wet by liquid.

• Do not put the product near source of heat.

• By closet or compartment installation provide for a proper ventilation.

Icon descriptions and electrical safety

CE CE the equipment complies with 2014/53/UE, 2011/65/UE requirements.

RoHS 2002 95 EC The equipment is compliant with RoHS 2011/65EU.

⏚ Equipment grounding terminal.

🗑 Dispose according your local authority's recycling processes.

Programming

All the TV **MSP2** control unit parameters are configurable via **LEM NFC** app available for each smart phone with transceiver **NFC** (Near Field Communication) data qualification.

NFC technology allows a contactless bidirectional communication between two devices by a close distance..

Requirement for SmartPhone Apple
IOS 13 or higher
iPhone 7 or highter

Requirement for SmartPhone Android
At least Android 5 (Lollipop)
Recommended Android 11 or higher

LEM NFC

Download **LEM NFC** from Apple Store or frame the below QR code with smart phone camera

Download **LEM NFC** from Google Play or frame the below QR code with smart phone camera

LEM NFC for iOS

LEM NFC for Android

Or in our download area from our website:
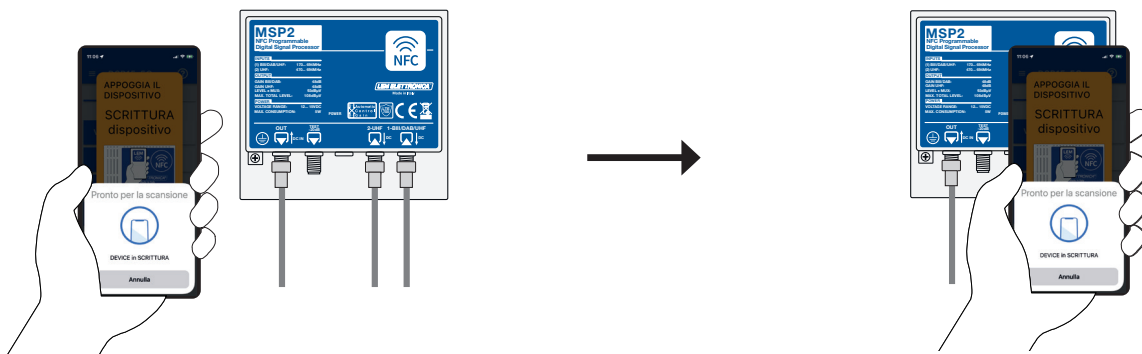https:// lemelettronica.it/download-it/

Configuration transfer from smart phone to MSP2

Once the parameters and settings have been defined in the **LEM NFC** app select the **WRITE ICON** 📶 set your smart phone in correspondence of NFC sign applied to **MSP2** control unit and wait for transmission completion (about 5 sec).

Configuration tranfer from MSP2 to smart phone

If you wish to get an already stored configuration, select the **READ ICON** 📶, set your smart phone in correspondence of NFC sign and wait for reading completion (about 1 sec).

Technical specifications

INPUT NUMBERS		2
INPUT (1)	MHz	BIII /DAB (170... 240) + UHF (470... 694)
INPUT (2)	MHz	UHF (470... 694)
LTE PROTECTION		LTE 700
LEVEL ADJUSTER RANGE		45... 100
C.A.G. INPUT DYNAMICS	dB	40 dB
DIGITAL FILTERS SELECTIVITY	dB	≥50 (Adjacent Channels)
BIII-DAB GAIN	dB	48
UHF GAIN	dB	48
OUTPUT LEVEL	dBµV	73... 93 (adjustable)
MAX TOTAL OUTPUT LEVEL	dBµV	108 (IM3 DIN 45004B - 60 dBc)
RETURN LOSS IN/OUT	dB	>10
TELE-POWER SOURCE		50mA
SUPPLY VOLTAGE	VDC	12... 15
MAXIMUM CONSUMPTION		5W @12V
OPERATING TEMPERATURE	°C	-15... 40
DIMENSIONS	mm	129 x 128,5 x 51,5