

USER MANUAL

NOVUS MAST 071022

DIGITAL PROGRAMMABLE MAST AMPLIFIER

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INTRODUCTION:

Description:

The NOVUS MAST digital programmable mast amplifier, part of EK's new NOVUS range, is a state-of-the-art device designed with advanced digital filtering technology. Its innovative system incorporates 32 ultra-selective digital filters, allowing individual filtering and amplification of each digital multiplex, ensuring an optimal output level for any type of installation, whether individual or collective, and offering exceptional signal quality.

One of its most outstanding features is VISUAL MODE, a technology patented by EK that allows individual adjustment of filters without the need for an integrated screen. This technology makes the NOVUS MAST the only amplifier in its class to offer this functionality. Thanks to VISUAL MODE, it is possible to modify the level of each filter, change the output frequency and create or delete filters.

Finally, the NOVUS MAST integrates an automatic search system that facilitates quick and efficient self-installation of the DTT multiplexes from the UHF inputs, with just one press.

Key features

- 3 inputs (2 x UHF, 1 x FM/ DAB / BIII).
- 1 main output.
- 1 secondary output at -6dB (Usable as a TEST output).
- 32 ultra-selective digital filters.
- U1 input gain >50dB autoreg.
- U2 input gain >40dB autoreg.
- DTT output level 94dBuV (DIN45004B); 86dBuV (10MUX).
- Automatic search for digital multiplexes.
- Programming by joystick and field meter (VISUAL MODE patented by EK).
- Processing functionality for channel conversion.
- Automatic real-time gain control.
- Preamplifier power supply available on U2 input (12V/100mA).
- Mast mounting aid via EasyMagnek system
- Typical consumption 12V/300mA.

Packaging Contents:

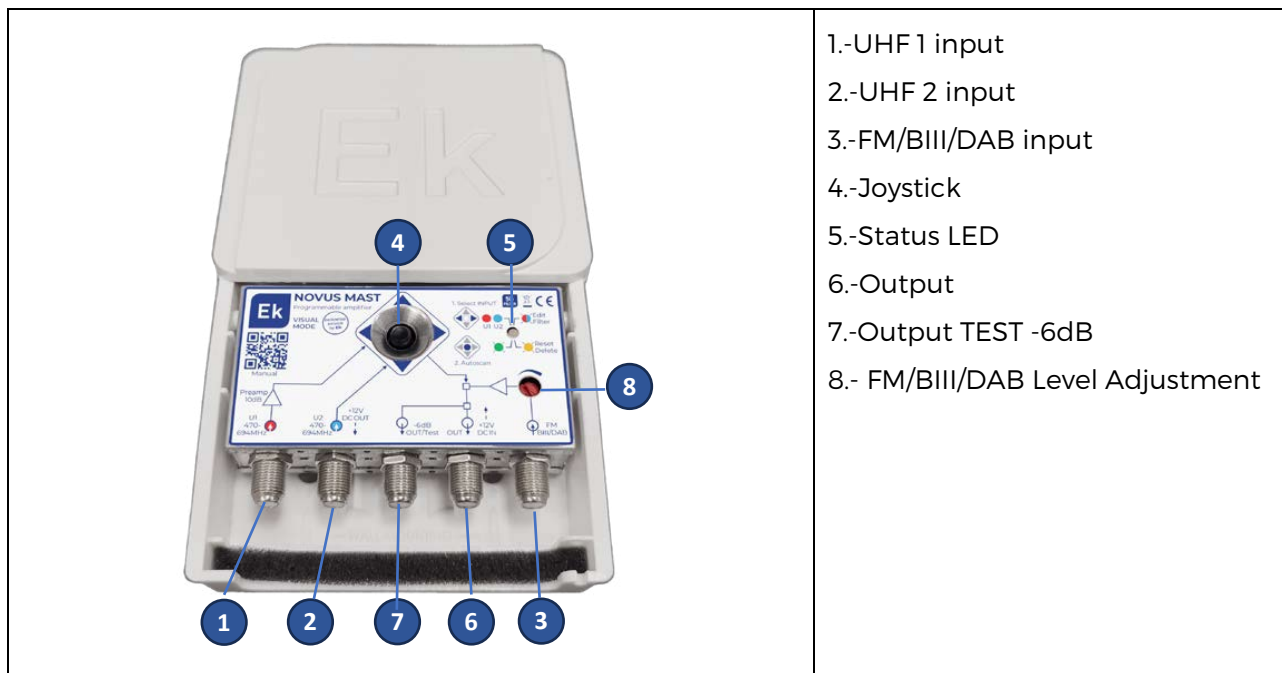
1.- Novus Mast, code 071022.

2.- Cable tie.

3.- Quick guide.

NOTE: FA 12S 500 power supply sold separately

CONNECTIONS AND INTERFACES:

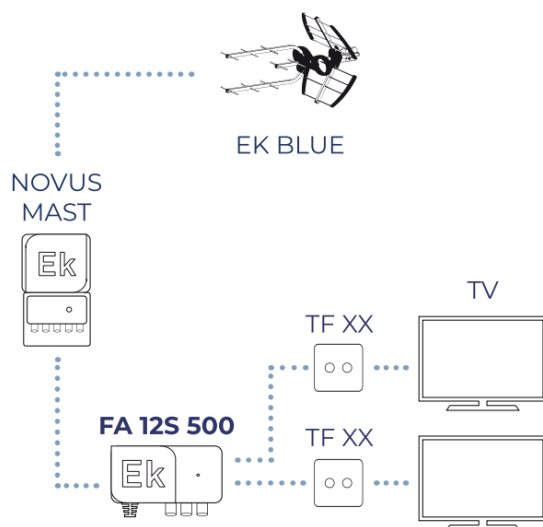


ASSEMBLY RECOMMENDATIONS:

- 1.- Assemble the equipment like any conventional mast amplifier (NOVUS MAST also allows wall mounting).
- 2.- Connect the input and output cables.
- 3.- Configure the equipment according to the needs of the installation.

Note: The typical consumption of NOVUS MAST is 300mA for 10 filters and may vary slightly depending on how many filters are configured. Use a suitable power supply, such as the FA 12S 500 (sold separately).

Basic installation example:

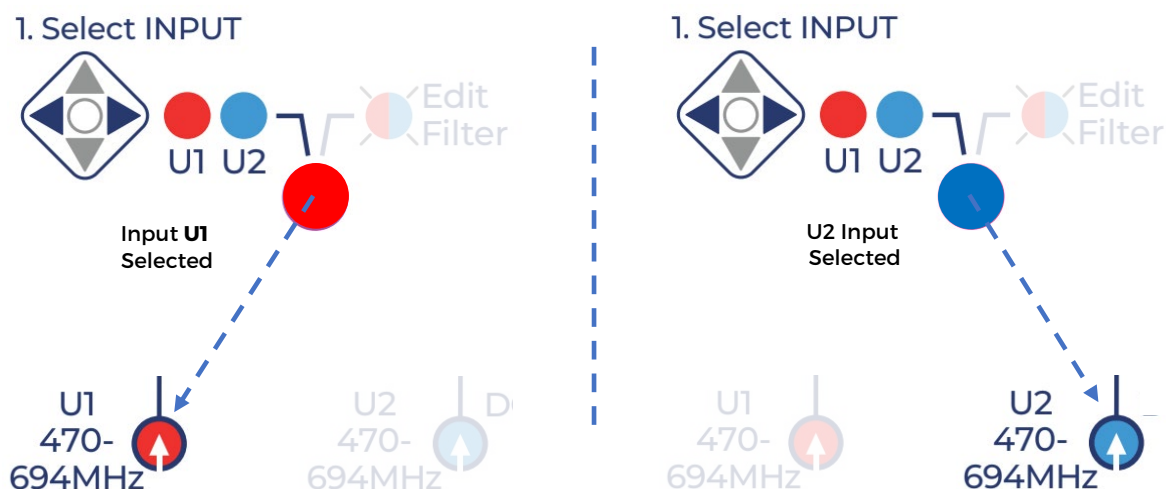


NOVUS MAST SETUP:

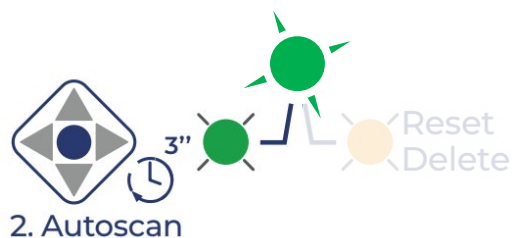
1.-QUICK INSTALLATION:

In most situations, the setup will be automatic and consists of two steps.

1.1.-Step 1. Select the input using the side keys on the joystick. The U1 and U2 inputs are identified by the colors red and blue, respectively. The status LED will indicate the color of the selected input



1.2.-Step 2. Press and hold the centre of the joystick for 3 seconds. The amplifier will scan all the channels of the input selected in step 1. During the process, the status LED will flash green.

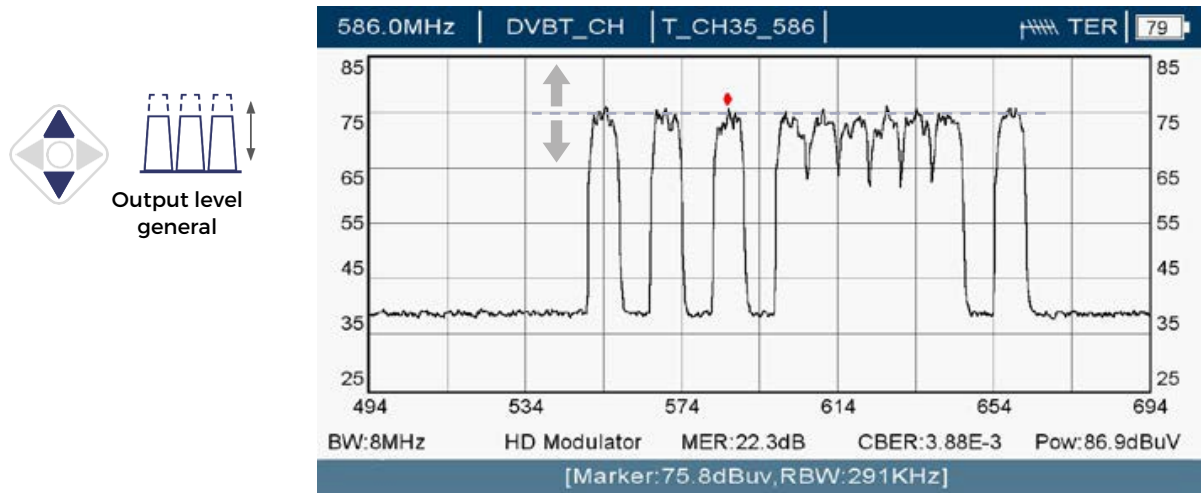


Within a few seconds, all detected channels will appear in the output perfectly equalized. In most cases, **the installation will be completed** without the need for additional adjustments.

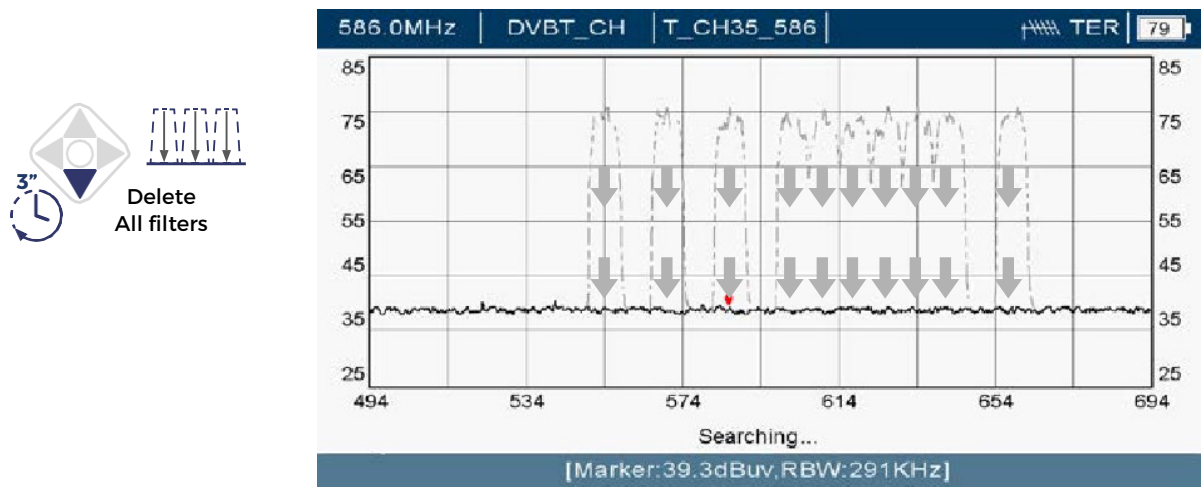
2.-GENERAL CONFIGURATION OF THE FILTERS

In some installations, it may be necessary to make additional adjustments to all filters simultaneously:

2.1.-General output level adjustment: Using the upper and lower keys of the joystick, the output level of all programmed filters can be adjusted in increments of 1 dB per press.



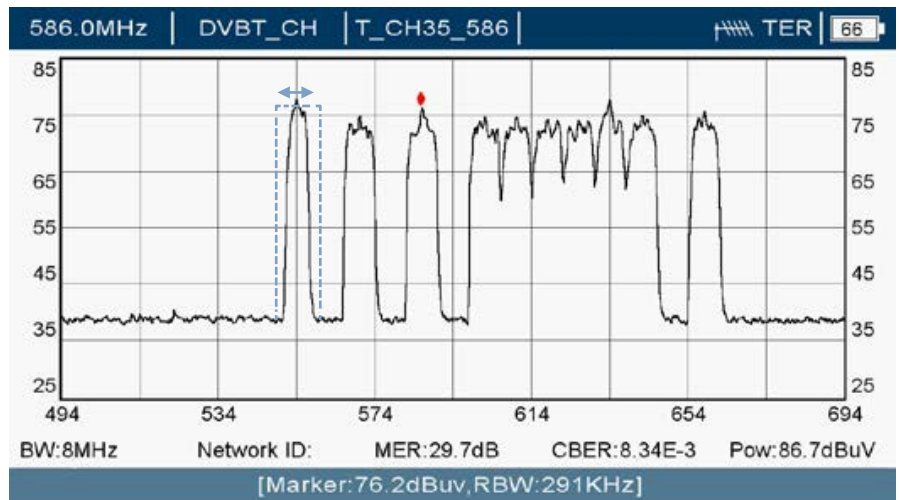
2.2.-Deleting all filters: Press and hold the bottom key of the joystick for 3 seconds to clear all programmed filters.



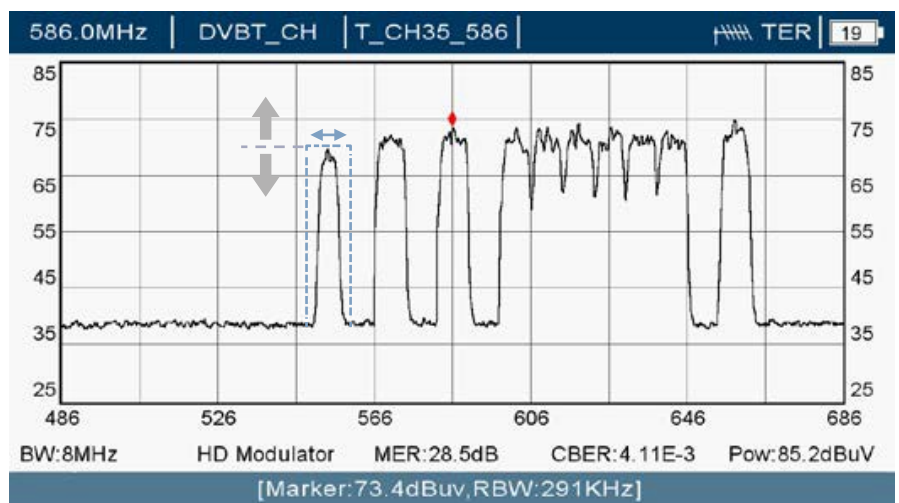
3.-INDIVIDUAL CONFIGURATION OF THE FILTERS (VISUAL MODE)

VISUAL MODE is an exclusive feature of the NOVUS range, patented by EK. Using a field meter as a user interface, it allows you to identify the selected filter, apply adjustments and visualize in real time the changes made to it:

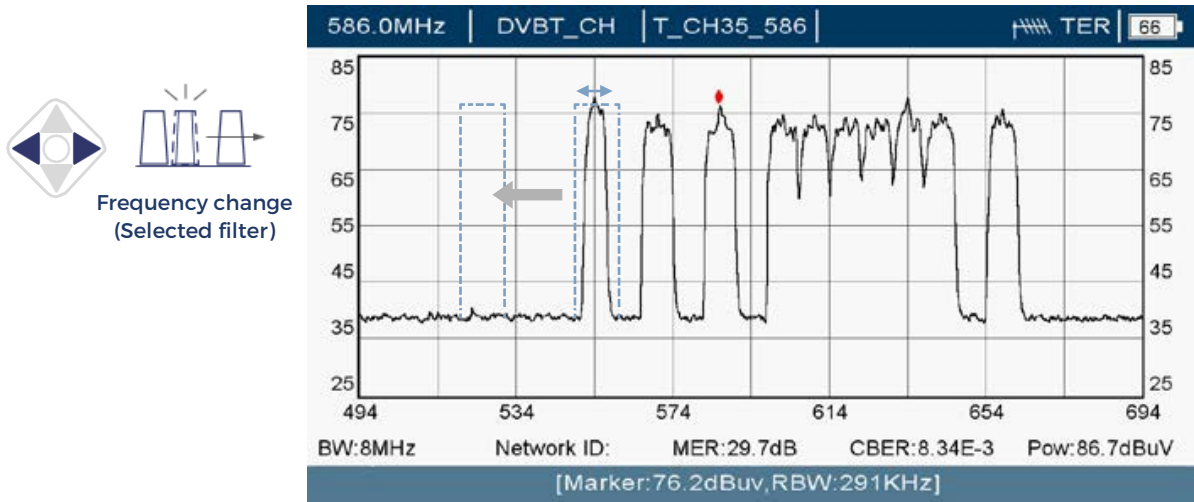
3.1-Select filter: When you press the central button on the joystick, the filter with the lowest frequency will start to change its width repeatedly, flashing, making it easier to identify among all the existing filters. While the filter is flashing, any adjustments made with the joystick will be applied to that filter.



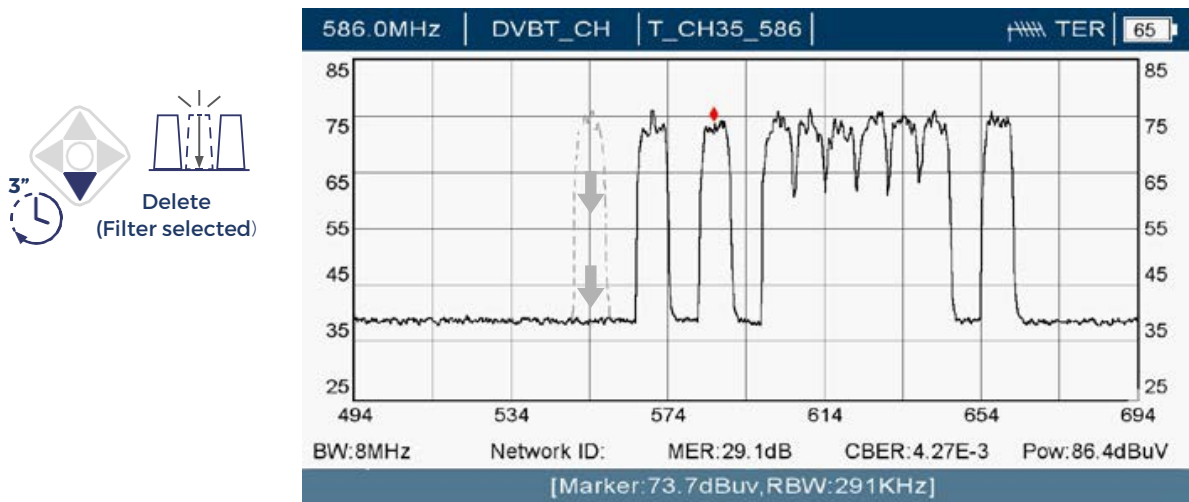
3.2.-Adjusting the output level (selected filter): Using the up and down buttons on the joystick, you can adjust the output level of the selected filter. To confirm the changes, press the center of the joystick.



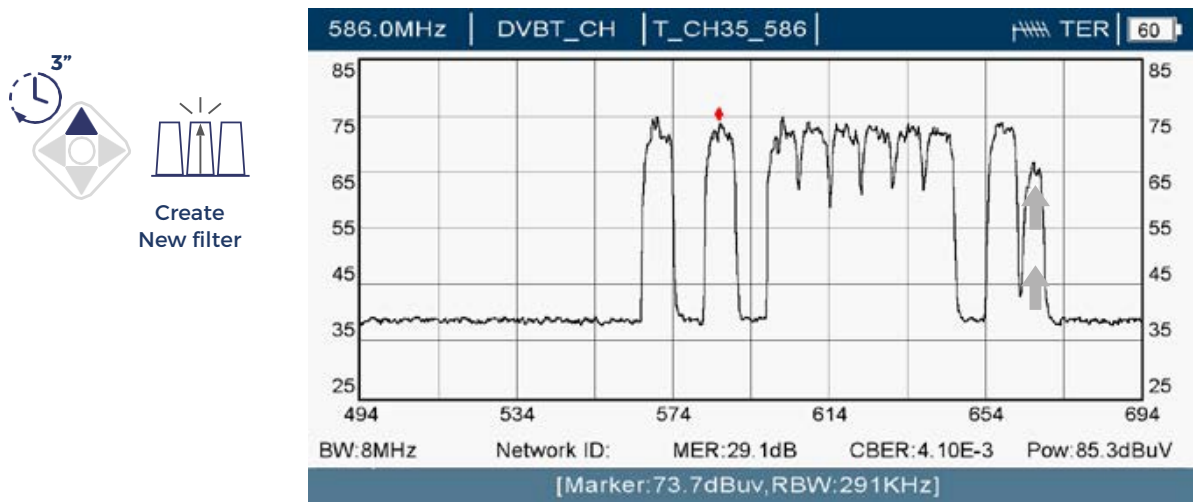
3.3.-Adjusting the output frequency (selected filter): Using the side buttons on the joystick, the installer can change the output frequency of the selected filter. To confirm the changes, press the center of the joystick.



3.4.-Deleting a filter (selected filter): Holding the down button on the joystick for 3 seconds will delete the selected filter.



3.5.-Creating a new filter: Holding down the top button on the joystick for 3 seconds will bring up a new filter flashing. With the side keys you can adjust the input and output frequency. To confirm the creation of the filter, press the center of the joystick.



3.6.-EXIT: To stop the flashing of a selected filter without saving the changes and exit VISUAL MODE, press the left button on the joystick for 3 seconds. Alternatively, if no action is taken with the joystick for one minute, the device will automatically exit VISUAL MODE without saving any changes.

