



## PUBLIC ADDRESS SERIES

### ANTILARSEN



# *Owner's Manual*



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### ANTILARSEN AL 2024

#### INTRODUCTION

This processor is designed to reduce the *LARSEN EFFECT* phenomenon, which happens when speaker signal re-enters in the microphone creating a feedback. Working principle is based on frequency slipping between the input signal and the output one, avoiding the feedback between microphone and speaker. It is possible to increase the output power of a system reducing of about 10 dB the *LARSEN EFFECT* action.

#### POSSIBLE USES

- Places of worship
- Conferences
- Auditorium

#### CONNECTION INSTRUCTIONS

Unit should be connected between *PRE* and an amplifier or in the right *IN/OUT* sockets, if available. To optimise working, be sure that signal level in which it is inserted is included between 0 and +6 dBm. Connection is made with the shielded monophonic cable, equipped with 6,3 mm mono JACK pin. On the back pannel there is ground lift selector to disconnect electrical mass to chassis for cancel possibles hums of mass loop. Turn Mass lift if there are hums only

#### CALIBRATION

Being the *LARSEN EFFECT* influenced by different environment conditions and by system features, a calibration should be found for getting the best possible result.

Available controls are:

- shift frequency adjustment, that could change from 2 Hz to  $\pm 20$  Hz.
- addition/subtraction selection of shift frequency to input signal.
- output level adjustment from 0 dB to - 12 dB.
- Activation/deactivation selection of ANTILARSEN process.

Set maximum output exit, 2 Hz of shift frequency, button in + position, and exclude processor by pushing *BYPASS* button. Turn on the system and adjust volume until singing limit of *LARSEN EFFECT*. At this point insert processor with *BYPASS* button, and *process on* luminous switch should be turned on.

Increase system volume and adjust frequency to obtain the possible maximum volume. Frequency value changes from case to case, so it is necessary to find the one giving best results in the examined environment. Alternatively passing from *bypass* condition to *process on* condition it is possible to feel the processor effectiveness.

## SPECIFICATIONS

Input impedance	47K Ohm
Input sensitivity	0dBm
Output level	-12dB÷0dBm
Frequency movement	2Hz÷20Hz
Larsen effect gain	10dB
Frequency response	85Hz÷15KHz
Signal/noise ratio	72dB
Power supply	230Vac 50÷60Hz
Dimensions (WxHxD)	436(Rack482)x44x154
Weight (Kg)	1

## CONTROLS AND FUNCTIONS (As per Fig.1)

1. FREQUENCY – Addition/subtraction selection of shift frequency.
2. FREQUENCY – Shift frequency adjustment
3. OUT LEVEL – Output level adjustment
4. BY-PASS – Activation/deactivation selection of ANTILARSEN process.
5. POWER – ON/OFF switch.
6. MAINS – 230Vac supply mains socket.
7. INPUT – Jack signal input.
8. PROCESS ON – ANTILARSEN process activation led indicator.
9. ON – Power ON led indicator.
10. OUTPUT – Jack processing signal output.

**Fig.1**

