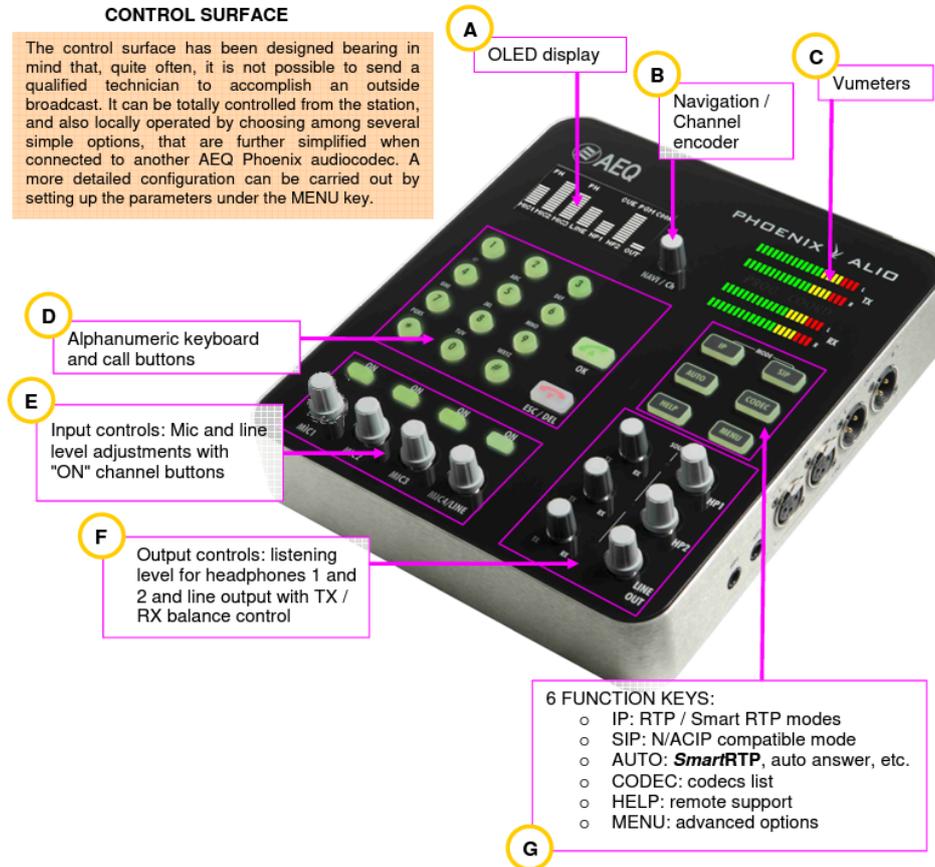# PHOENIX ALIO (IP CODEC) MANUAL

CONTROL SURFACE

The control surface has been designed bearing in mind that, quite often, it is not possible to send a qualified technician to accomplish an outside broadcast. It can be totally controlled from the station, and also locally operated by choosing among several simple options, that are further simplified when connected to another AEQ Phoenix audiocodec. A more detailed configuration can be carried out by setting up the parameters under the MENU key.

A OLED display

B Navigation / Channel encoder

C Vumeters

D Alphanumeric keyboard and call buttons

E Input controls: Mic and line level adjustments with "ON" channel buttons

F Output controls: listening level for headphones 1 and 2 and line output with TX / RX balance control

6 FUNCTION KEYS:
- IP: RTP / Smart RTP modes
- SIP: N/ACIP compatible mode
- AUTO: *SmartRTP*, auto answer, etc.
- CODEC: codecs list
- HELP: remote support
- MENU: advanced options

G

A OLED DISPLAY

High-contrast OLED screen with wide viewing angle and 128 x 24 pixels resolution in yellow and black.

When Phoenix Alio is powered-up, after approx. 15 seconds (provided no malfunction of the unit), two welcome screens will appear sequentially; the first one shows the AEQ logo and the second one displays the audiocodec model:

Detail of welcome screens

support@broadcastcomponents.com.au

After a while, the display changes to show the MAIN STATUS screen, where the configuration of the different inputs and outputs are presented:

The screen is divided into 7 columns. From left to right, the first 4 correspond to the 4 active inputs. The first three are always MIC1, MIC2, MIC 3. The Fourth can correspond to MIC4 of LINE IN. This can be selected through the MIC4/LINE menu or through the "#" shortcut key in the numeric keyboard. (The label under the level bar changes accordingly). The last three columns correspond to the outputs HP1, HP2 and OUT, as indicated under each level bar.

Each bar represents a relative mix level or output volume.

Above each output level bar there is a label showing "PGM" or "CUE". These indicate what program bus is being monitored on each of the output.

This display can also display the different operation and configuration menus that are accessed and browsed through the navigation ("NAVI/Ch") rotary encoder and the rest of the keys and encoders. The display also provides detailed information about active calls, if any.

To save power and if the unit is "idle", the intensity of the display is dimmed after a while; normal brightness will be immediately recovered when any control is touched.

B   NAVIGATION / CHANNEL ENCODER ("NAVI/CH")

This rotary encoder allows the user to browse through the different menus of the OLED multifunction screen. Turning the dial changes the selection amongst the options present, moving the highlighting up and down. When the encoder is turned clockwise, the option is moved down, and turning it anti-clockwise, the option select is moved up.

Pressing down on the rotary encoder is equivalent to ENTER, validating the highlighted selection at that moment.

support@broadcastcomponents.com.au

C VU METERS

There are two stereo Vu meters. The top two indicates the level of the TX signal and the second the level of reception, RX.

Each Vu meter consists of 2 bars of 20 LEDs each. From right to left, the first three LEDs are red followed by four orange, with the remainder are green. The presence if audio is denoted at -36dBV when the first green LED is illuminated.

| -36 | -30 | -25 | -20 | -16 | -14 | -12 | -10 | -8 | -6 | -4 | -2 | -1 | 0 | +1 | +2 | +4 | +7 | +10 | +13 |
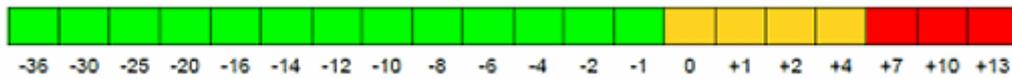
E INPUT CONTROL

Each input has an associated rotary encoder with pushbutton and an activation/routing key (ON). If the rotary encoder is turned, the mix gain to the selected bus is altered for that input, between mute (-infinity) and +18 dB. The level bar on the OLED display shows an indication of this level.

The ON button allows the user to select which bus the associated input will be sent to. When it is off, pressing it will turn the button RED-illuminated, indicating that the input is sent to PROGRAM transmission channel. Press is again once and it will turn off, and the input will only be available locally in the CUE pre-listen bus.

When several inputs have their ON button illuminated in RED, they will be mixed (each source according to the selected mix level).

support@broadcastcomponents.com.au

When the encoder button is pressed, access to the associated input's configuration menus is opened. Here you can configure the corresponding gain, equalization (bass/treble), activation of the 12V Phantom supply and panorama control. In the case of MIC4/ LINE input, the user will also be able to select which input is used; when working in line mode, panorama control changes to balance control.

WARNING: DO NOT turn Phantom power on or off for a microphone unless the microphone Gain is set to minimum. Depending on the microphone model and its specification, by not setting the gain to minimum will result in very high level and high-pitched noise that could be routed to the unit's communication buses and the headphone outputs.

The corresponding input encoder can be used to navigate within the menu, or alternatively, the "NAVI/Ch" rotary encoder can also be used. The "BACK" option in each menu or the "ESC/DEL" key can be used to cancel and go back.
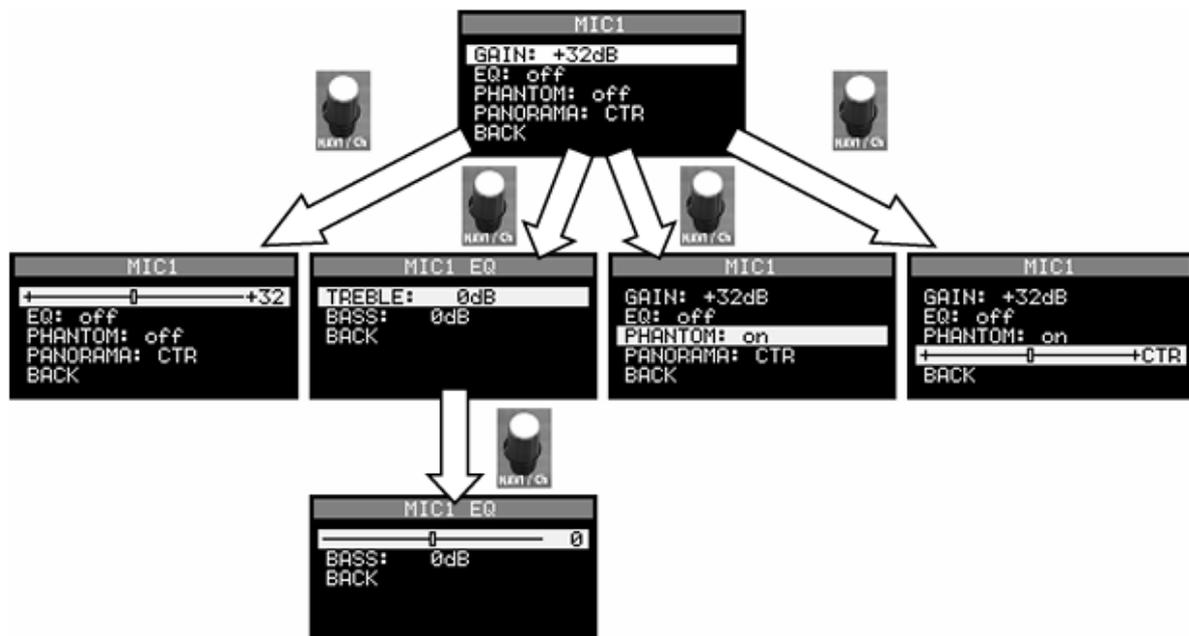

The "EQ" indication in the main screen (input name highlighted) will become active whenever a value different to 0 dB is selected for either the bass or treble controls, as previously explained. The same happens when a value different to center is selected for the panorama/balance control; the panorama/balance setting is temporary; it returns to its center value when you restart the unit.

As previously mentioned, the "MIC/LINE" input menu is slightly different, as there is an additional option to select between MIC4 and LINE IN. In the following image, the select input is the line one, so the Phantom option becomes unavailable, and "BALANCE" appears instead of "PANORAMA":

```
        MIC4/LINE
 INPUT: LINE
 EQ: off
 BALANCE: CTR
 BACK
```
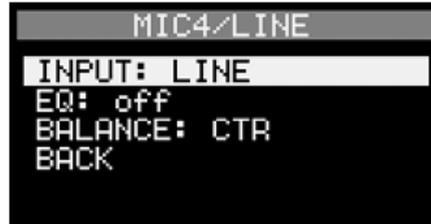
NOTE: When browsing an input menu, the user can quickly change to configure another input by simply pressing the corresponding encoder button. From now on, the modifications made correspond to the newly selected input.

F OUTPUT CONTROLS

The unit has 3 stereo outputs: 2 for headphones, able to drive both high and low impedance models with ¼" TRS jack connectors and 1 balanced line output with 2 male XLR connectors.

Each output has labelled control section ("HP1", "HP2"and "LINE OUT")

TX/ RX level balance potentiometer: Allows the user to continuously adjust which ratio of the correspondence output comes from the channel local transmission (TX, send) and what comes from the same channel reception (reception, RX). When in the central position, equal levels of RX and TX will be listening to, both with 6dB attenuation.

Output level Encoder: Adjusts the listening level of the corresponding output. It will be displayed on the OLED with level bars.

Pressing the output level encoder button cyclically selects the source bus for that output bus, between CUE (Sourced LED off), or PROG (source LED illuminated red). The display will show a label above the corresponding level bar:

The HP1 button controls headphones in 1 and 2 and HP2 controls headphones in 3 and 4.


support@broadcastcomponents.com.au

BROADCAST COMPONENTS — ENABLING STORIES

Quick Sheet
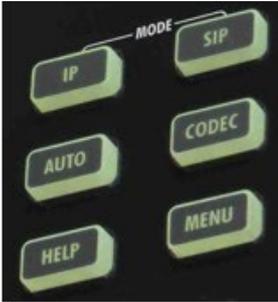
The unit's operational keys are completed by 6 illuminated functions keys located at the right area of the Alio front panel. Some of these keys ("IP", "SIP", "AUTO", "CODEC") configure parameters or operating modes for the currently active channel only. "HELP" and "MENU" keys are associated to functions that are common to the unit. Your unit is preconfigured to select the appropriate function and so you will not need to change these.
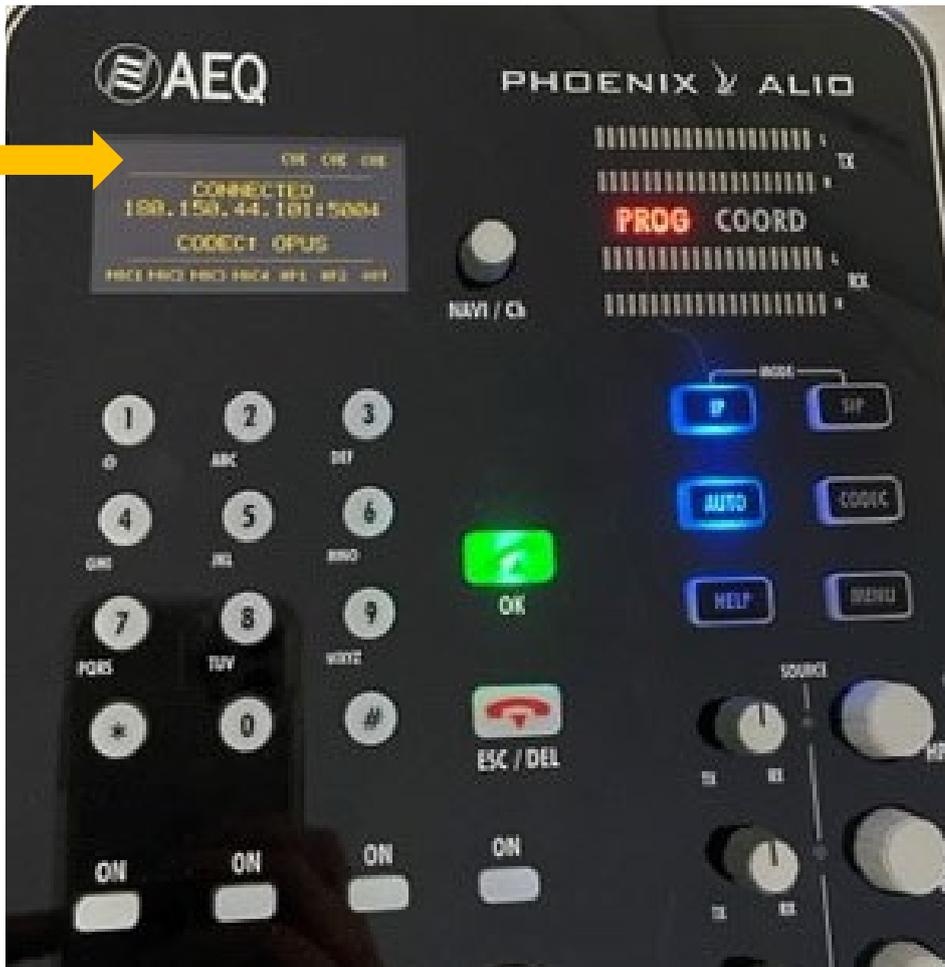
USING YOUR UNIT

TURNING IT ON:

1. Connect standard IEC power cable (supplied) to the Power switch and turn power point on
2. The Alio will go through its start-up procedure as follows (take about 4-5mins):

support@broadcastcomponents.com.au
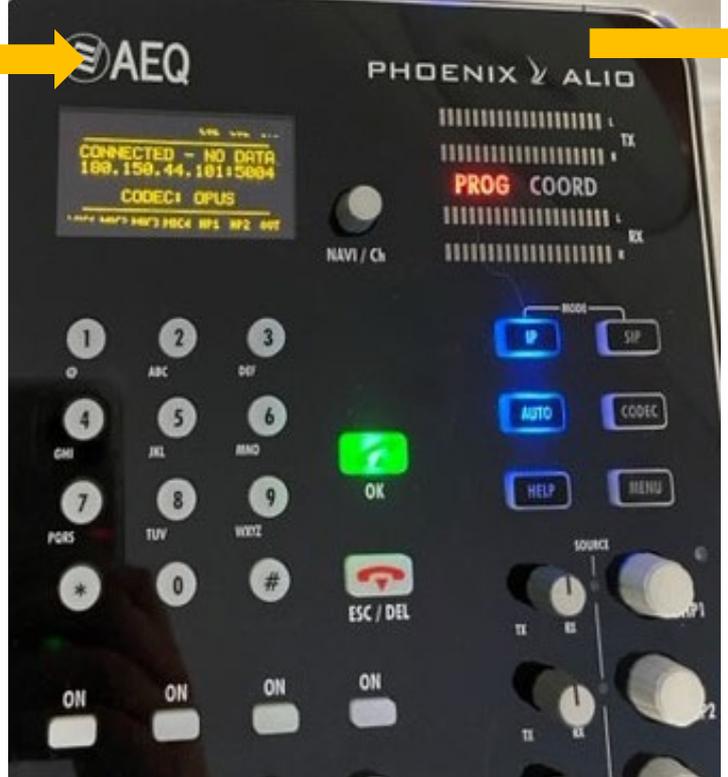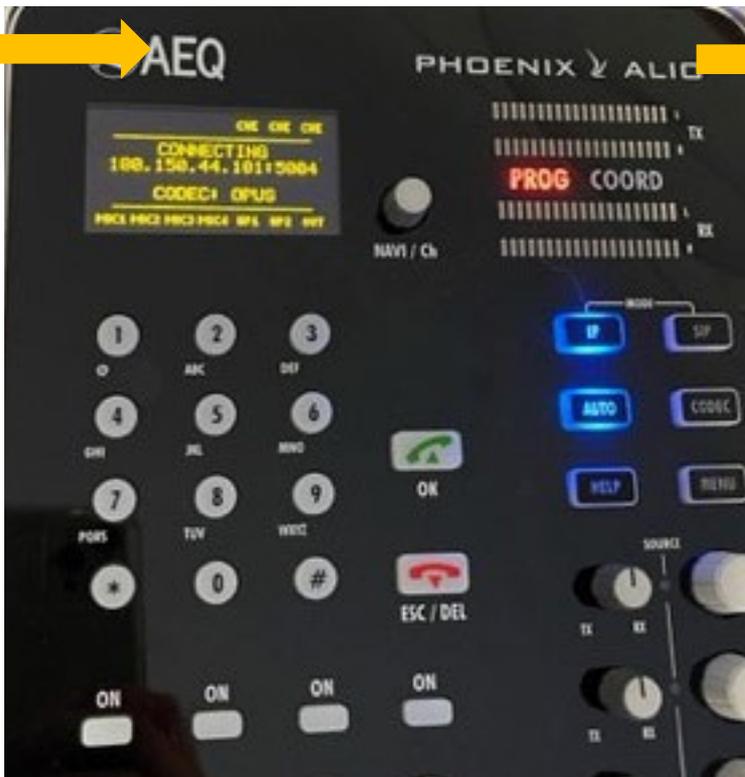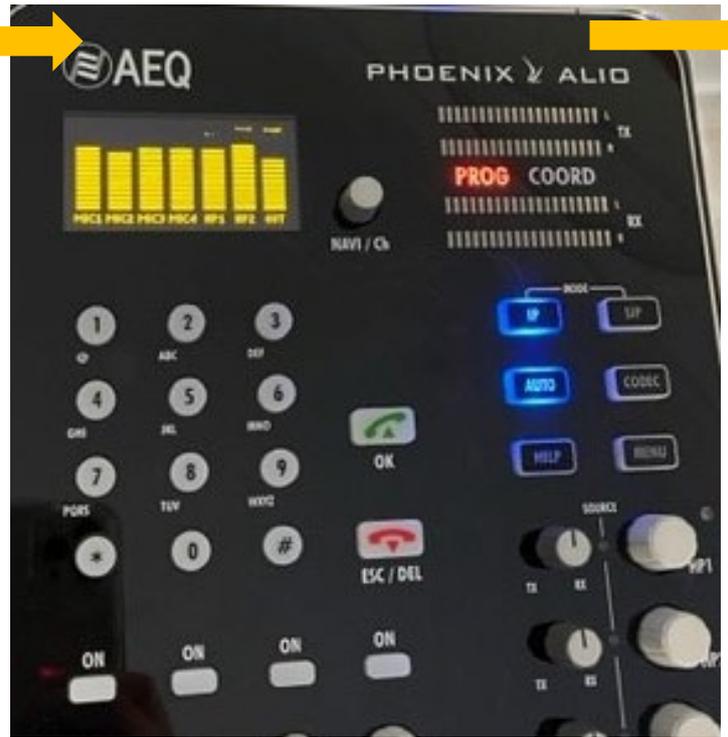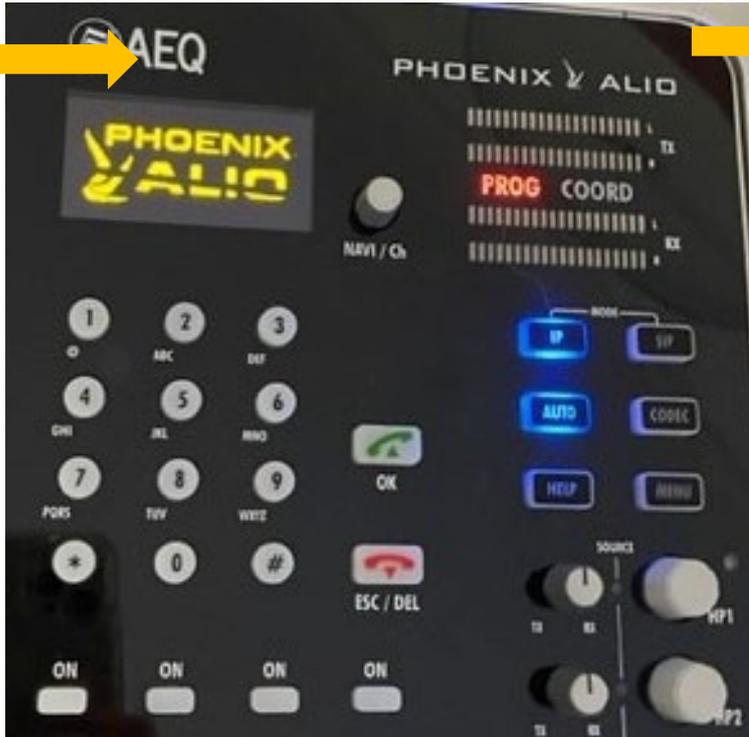
To be ready to start your outside broadcast:

- **The Alio codec OLED screen should say Connected,**
- **PROG be RED and**
- **Call button (OK) should be green.**

You can now connect your microphones/headset/computer/speakers and start your broadcast.

support@broadcastcomponents.com.au