

## Introduction

The general purpose input output port has many uses including the following operating options, all programmable via ICORE:

A general purpose input which may be programmed to:

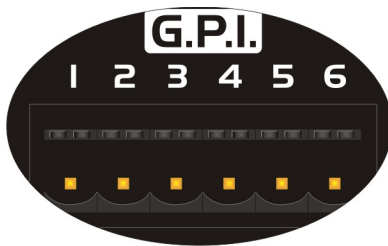
- ✓ Control the amplifier's standby/active state (logic level)
- ✓ Mute both channels (logic level)
- ✓ Bypass the power on delay (logic level)
- ✓ Variable VCA level control of both channels (analogue voltage)
- ✓ Bypass the VCA sections (logic level)

A general purpose output which may be programmed to:

- ✓ Indicate A/P state
- ✓ Indicate excessive limiting on either channel (15 minutes continuous)
- ✓ Indicate a load range error
- ✓ Indicate your birthday
- ✓ Indicate an excessively high temperature state (before shutdown)
- ✓ Logical combinations of the above

An isolated changeover relay is also brought out to this port. This may be programmed to:

- ✓ Follow the GPO output state
- ✓ Follow the opposite of the GPO output state (invert its logic)
- ✓ Do nothing (disabled)



The connections on this port also include a 3V3 output for use with all logic or analogue level inputs. For ground (0V) connections, this must be derived from the RS485 "Phoenix" connector.

The pin-out of this port is:-

- Pin1: Isolated relay normally open contact (ON state)
- Pin2: Isolated relay common contact
- Pin3: Isolated relay normally closed contact (OFF state)
- Pin4: 3V3 Output
- Pin5: GP Input (maximum input voltage 24V, useable range 0V – 3V3)
- Pin6: GP Output (OFF state = 0V, ON State = 3V3)

## Automatic muting of single or multiple amplifiers

The GPI input line can be configured to automatically mute the amplifier, or multiple amplifiers, in the event of a fire alarm system needing to take precedence for voice evacuation purposes. Note that local muting takes precedence over remote muting though ICORE.

In ICORE, select the amplifier and open its properties window (View ⇒ Device Properties)



Set the GPIO Config "Input" property to "Mute Enable".

A 3v3 signal on the GPI input line would now force both channels of the amplifier to mute. Grounding this input will unmute the amplifier channels.

As this is being used as input control system, all amplifiers that are to be controlled can simply be connected in parallel to the control signal, as shown below:

