Peripheral Interface Board Installation (AND-PIA-2 / 2D)

AND-PIA-2　　　　**AND-PIA-2D**

OVERVIEW

The peripheral interface board (AND-PIA-2 / AND-PIA-2D) makes any combination of the following AND device signals available via two "poke-home" connectors on the board:

- Line-Level Audio In
- Line-Level Audio Out
- 2 General Purpose Inputs
- General Purpose Output Relay
  (N.O. or N.C; dry or 12 or 15 VDC, 1A max)

DEVICE REQUIREMENTS

- Compatible with AND devices of MAC address 20:46:F9:03:00:00 or higher.
- Recommended PoE+ power source for all display models if using the 12 or 15 VDC output (see *Programming* section).
- Test any connected peripheral before deployment (see *Programming* section).
- IPSIGNL-RWB and IPCDS-RWB require the AND-PIA-2D. Contact AND sales for details.
- IPSCM and ZONEC2 models do not support this peripheral interface board.

BOARD INSTALLATION

Warning: Remove power prior to installation to avoid possible damage of components.

1. Select a dry or 12V or 15V DC output contact using the 2-pin jumper on J1. Set the jumper across pins 1 and 2 for a 12VDC contact, or across pins 2 and 3 for a 15VDC contact. Set the jumper vertically on pin 2 for a dry contact, or in the case of not using the output contact. If configured for switched 12 or 15 VDC, please make sure not to leave the output in a manner that could result in 12 or 15 VDC shorted to ground.
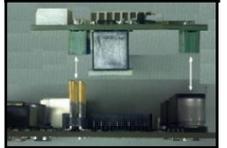

2. For AND-PIA-2, if a display cable is connected to J9 of the main controller board in the AND device, move the cable up to J10.

3. Remove the backing from the mounting tape on the underside of the board.
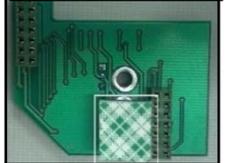
4. Line up the two 14-pin connectors with headers J9 and J13 of the main controller board. Press the peripheral board down until the mounting tape makes contact with the main board.

Note: On controller boards in the MAC address range 20:46:F9:**03:00:00**-**03:24:40**, the J13 header has an extended height that will cause the peripheral board to sit at an angle with respect to the main board. The board can function in this position, or you can trim the J13 header pins with wire cutters to the height of the J9 header to make it level.

5. For the AND-PIA-2D board, reconnect bottom display cable to the 14-pin header.

WIRING

Use 18 - 22 AWG stranded or solid core wire for connection to the peripheral board.

Line-Level Audio In
Connect the line-level audio signal into the "IN L" port and the ground to the adjacent "GND" port. Note that the firmware does not currently support the right channel "IN R" function.
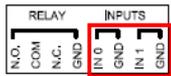
Line-Level Audio Out
Connect the signal side of the line-level audio connector to the "OUT R" or "OUT L" port, and ground to the adjacent "GND" port.
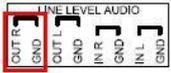
General Purpose Input
Connect one side of the input circuit to "IN 0" or "IN 1" and the other side of the input circuit to the respective adjacent "GND". To trigger the input sensing, short the two wires together (e.g., via a push button, etc.)

General Purpose Output
Dry Contact: Connect one side of the output circuit to "COM" and the other side of the output circuit to "N.O." (normally open) or "N.C." (normally closed) depending on the desired operation. The connection between the two points will either short (N.O.) or open (N.C.) when the AND device triggers the output.

12 or 15 VDC Contact: Connect one side of the load circuit to "GND" and the other side of the load circuit to "N.O." (normally open) or "N.C." (normally closed), depending on the desired operation. The circuit will either receive 12 or 15VDC (N.O.) or remove 12 or 15VDC (N.C.) when the AND device triggers the output.

PROGRAMMING

General Purpose Output (GPO) Settings
When using the 12 or 15 VDC output, the device firmware must account for the power consumption of the external load. Choose this power budget level carefully to provide sufficient current to the external load, while allowing enough power for proper operation of the main device. For loads requiring more than 1500 mW, we recommend a PoE+ power source, which can provide up to 12000 mW (12 W) to the external load.

Go to **Device Settings → Peripherals** to set *GPIO 0 Peripheral Power* (output power budget in mW).

If a configuration file is used, add the power budget to the *GPIO* tag, for example:

```
<GPIO
peripheral_power_mw_output_gpio0="2700" />
```

ADDITIONAL RESOURCES

Support Site with User Guides & Help:
http://www.anetdsupport.com/
Additional App Notes:
http://www.anetdsupport.com/AppNotes
AND Legal Disclaimer:
http://www.anetd.com/legal