

**Wagner Titanus PRO•SENS®
Apollo Protocol Interface Device (APID)**

Item Number: 7010-1000 & 7010-1100

Installation guide

Installation

Please observe anti-static precautions at all times.

To complete installation you will need at least:

- A PRO•SENS® Unit
One or two Detector Heads
An Air Filter Box per Detector Head
- A Balanced Pipe System
Refer to the PRO•SENS® Technical Manual MAN3046, and the “TranspTimeTITANUS” Pipe Transport Time Calculator.
- A 27V Power Feed
Wiring from an Apollo Detection Loop
- Slave CPU version 5.0 or greater
ConfigManager V6.0.9.11 or later
FireFinder™ Application V6.0.70.6 or later

Setup PRO•SENS® Detector Head(s) & Base Board:

1. Ensure power is not connected to the PRO•SENS®.
2. Set the Detector Head DIP switches as required (see the PRO•SENS® Technical Manual Section 4.3.1.1)

Sensitivity (%/m)		Standard-Setting:													
DM-Tx	Nominal-sensitivity	50	10	01	0	1	2	3	4	5	6	7	8	9	10
1x	0.50	0.10	0.015	O	O										
2x	1.0	0.20	0.03	X	O										
4x	--	0.40	0.06	O	X										
8x	--	0.80	0.12	X	X										
Alarm delay				3		4									
0 s				O		O									
10 s				X		O									
30 s				O		X									
60 s				X		X									
Air flow range				5		6									
small				X		O									
medium => DM-Tx-01/10/50				O		X									
large				O		O									
very large				X		X									
Fault delay				7		8									
30 s				O		X									
2 min				X		O									
15 min				X		X									
60 min				O		O									
Fault latched				9											
Off				O											
On				X											
LOGIC•SENS				10											
Off				O											
On				X											

XXXX Standard-setting
O = OFF
X = ON

General recommended Detector Head settings are:

Sensitivity: As required for the installation.

Alarm Delay: As required to suit the installation. Air

Flow Range: Medium.

Fault Delay: 30 Seconds.

Fault Latched: Off, fault is recorded at the FireFinder™.

LOGIC•SENS: Off for Transit Time testing.

Note: Before selecting suitable settings consult applicable local standards, regulations and job specifications requirements.

3. Install the of the Detector Head(s):

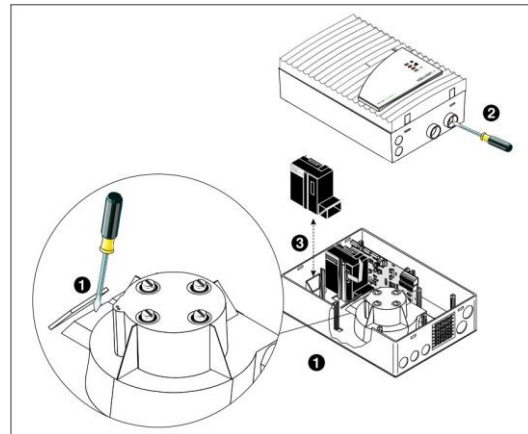


Figure 2: Detector Head Installation

- a. With a flat blade screwdriver, carefully undo the snap-in housing closures by simultaneously pressing in the clips located on the top or bottom of the unit. Carefully lift the housing lid. Pull the cable from the display board and remove the lid.
- b. If fitting the 2nd detector carefully remove the plastic self-adhesive cover(s) on the aspirator chamber to allow air flow to the detector head. If necessary use a screwdriver to assist. (The 1st position ventilator cover is already removed).

NOTE: The right hand side location is for when only one detector is fitted. The left is for a second detector.

- c. Carefully break the corresponding knockouts for the pipe system(s) required, again using a screwdriver if required. (Marked as “I” and “II” on the enclosure).
- d. Note the correct detector head orientation (figure 2) and install the detector by spreading the support clamps and placing the detector head between them. Both clamps should fit tightly against the module and snap in audibly. Press the support clamps together.
- e. If two detector heads are being fitted, remove the jumper JU4 from the base board (see Fig 4).

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- f. Connect the detector module to the base board via the supplied ribbon cable. Connection: X1 for the 1st detector. X3 for the 2nd detector.
- g. Set the ventilator voltage (See Fig 4) as specified by the TranspTimeTITANUS calculation. Remove the jumper for higher 9V operation and leave in for 6.9V (default).

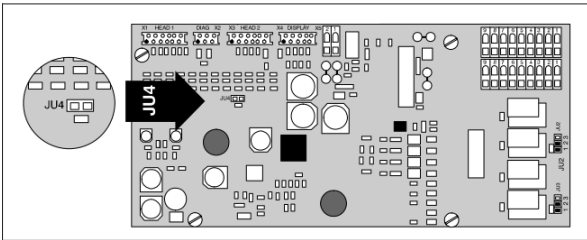


Figure 3: Jumper Setting: Two Detector Operation

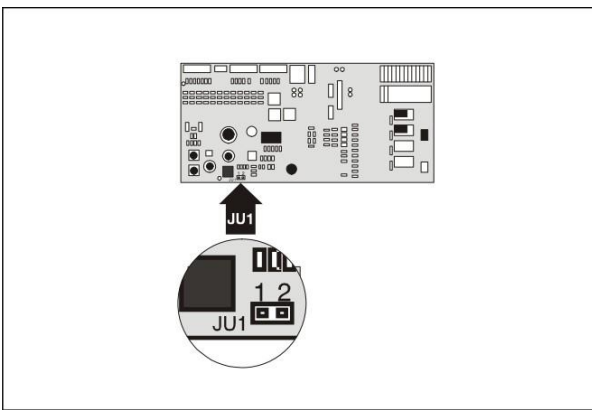


Figure 4: Ventilator Voltage Setting

Mount the PRO•SENS® Unit:

See Figure 5 for hole locations on the PRO•SENS® box. Cylinder or flat head screws should be used with a:

- Diameter of thread: max. 6 mm
- Diameter of head: 10 mm

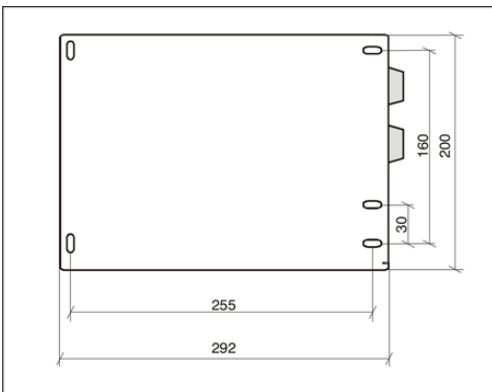


Figure 5: Back Box Mounting Hole Positions

When selecting a position for the unit, make sure that the air outlet of the PRO•SENS® and adjacent objects is at least 10 cm. Please refer to Section 5.5 of the PRO•SENS® Technical Manual.

The middle inlet in Fig 2 is for the first pipe (1st detector) and the outer for the 2nd detector if fitted.

Note: Do not glue the Pipe connection to the PRO•SENS® Unit. See Section 5.5.2 of the PRO•SENS® Technical Manual.

Ensure there is room for the filter box (the filter box contains a mounting template) and then connect through to the air sampling pipe network.

Wiring

Bring the field cabling in through a suitable knockout and terminate Loop cabling to the APID (See Fig 6) and Power to the PRO•SENS® Main Board (See Fig 7).

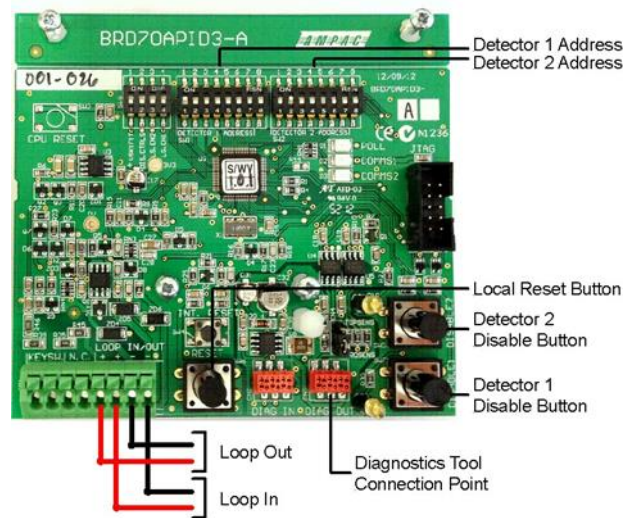


Figure 6: APID External Connections and Settings

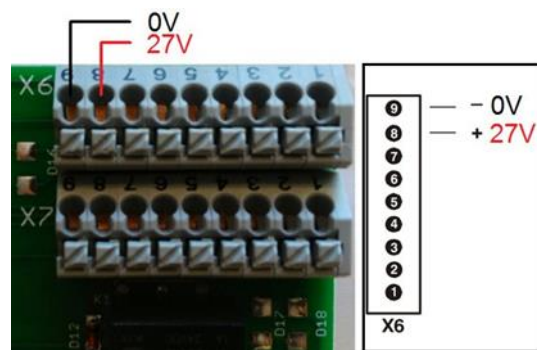


Figure 7: PRO•SENS® Power Connection'

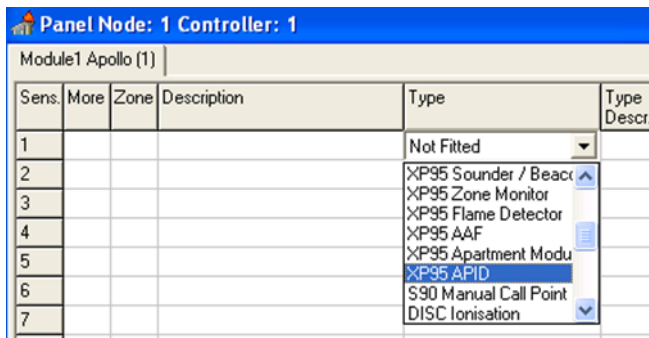
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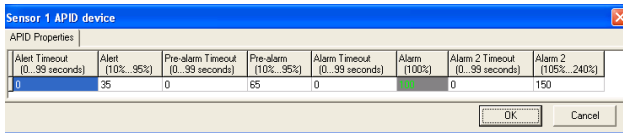
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FireFinder Programming

1. Configure using the ConfigManager Tool for FireFinder Series II (please refer to ConfigManager V6 AS4428 manual-MAN2599)
2. Select the detector type "XP95 APID" for the Wagner Apollo Protocol Interface Device:



3. Click the "More" column for access to the device settings. Adjust the Alarm Thresholds and Alarm Delays as required and press "OK":

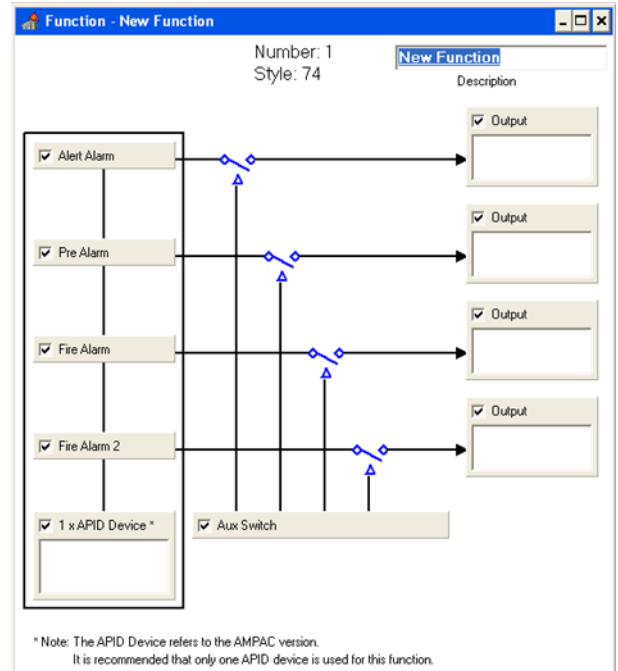


Note 1: Changing the "Alarm Timeout" level from 0 secs is not recommended as it will only delay response to the alarm state determined at the Detector Head. The alarm delay should be set at the Detector Head only. Please see Installation Point 2. above.

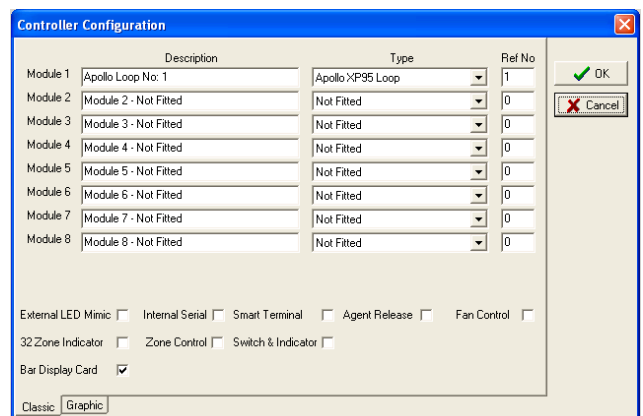
Note 2: When the Detector Head reports Alarm Level state, the Alert and Pre-Alarm levels below are also automatically triggered. No other levels auto-trigger levels below them.

Note 3: Level timeouts should generally be equal to or larger than the timeouts of levels below them. For example: Alert 6s, Pre-Alarm 8s, Alarm 10s (set at the Detector Head DIP switches, 0s in ConfigManager) and Alarm2 12s. Another example could be 10s for all levels.

4. If required, add a style 74 function for driving outputs or chaining to other FireFinder functions:



5. If Bar Graph Display Cards are fitted to the FireFinder right click on the controller they are fitted to, select "Edit Module Types" and select the "Bar Display Card" checkbox. Press "OK".

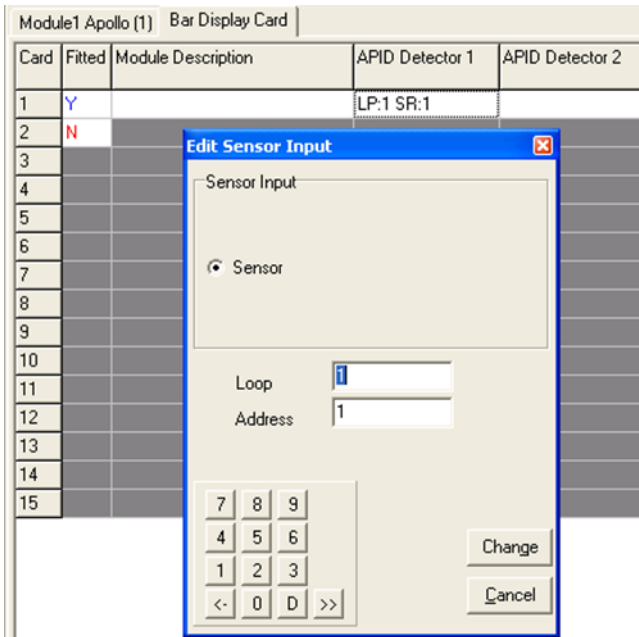


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6. Open the controller configuration (Double Click on it) and select the “Bar Card Display” tab. Double click on the “Fitted” entry to change it to a “Y”, then double click on the APID entry to enter the detector Address reference.



Note: The “APID Detector 2” box can be set to display a 2nd fitted detector head, or another PRO•SENS® unit’s 1st detector.

Please refer to MAN2599-ConfigManager V6 AS4428 manual for how to upload the configuration to the panel.

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Operation:

Check the installation over, and then apply power.

The Wagner Titanus Diagnostics Tool can be connected to the APID Diagnostics Port (See Fig 6) for display of detailed system information.

Go to Section 7 of the *PRO•SENS®* Technical Manual for the Commissioning Procedure, ensuring that the signals tested transmit through to the Main Fire Panel system.

Once the unit is commissioned fit the front lid cover, ensuring that the front lid ribbon cable does not clash with the APID buttons. Carefully route the cable to the right hand side of the APID board.

Finally, check the button operations. The Disable buttons flash yellow when pressed until the APID receives confirmation from the Main Panel that the address is Disabled. Once the Disable is confirmed it turns steady yellow. If the isolate is not confirmed it times out and stops flashing after 15 seconds.

The Reset button resets the local *PRO•SENS®* alarm. It does not reset latched alarms registered at the Main Panel. This can be used for local testing. A reset at the Main Panel performs a reset at the panel and the *PRO•SENS®* device.

Flash Code Fault Reference:

The status of a detector head can be determined by a flash code of the LED to the side of the DIP switches on a detector head.

Detector Head Flash Code Reference:

Flashes:	Meaning:
Steady Lit	Hardware defect in the Detector Head
2 Flashes	Air Flow Too Small (Blockage)
3 Flashes	Air Flow Too Large (Fracture)
4 Flashes	Stabilising after Power On

Fault Diagnosis:

1. An APID Reset or Disable button is not operating.

Remove the front cover, check for free operation of buttons. Route cables away from the switches before replacing cover. Check that the XP95 Loop is supplying power.

The APID obtains its power to operate from the XP95 Loop.

2. The Bar Graph Indication is responding slowly.

Check if LogicSens is enabled. This can delay response. Check the flow rate for low flow/pipe system air leaks.

3. A Detector Head is reporting low flow.

Check the detectors aspirator cover guard is cleanly removed. Check for any blocks in the pipe system or aspiration holes.

4. A Detector Head is reporting high flow.

Check the detector module is seated properly. Check for any breaks in the pipe system.

5. A Detector Head is in Hardware Fault.

Power down, check all cables are firmly connected, repower.

6. A Disable Button command times out after 15 seconds.

The Disable buttons flash yellow when pressed until the APID receives MFIP confirmation that the address is Disabled. Once the Disable is confirmed it turns steady yellow. If it isn't confirmed it times out and stops flashing after 15 secs.

Check that the corresponding address is programmed as an XP95 APID in the FireFinder config.

Check that a detector head is fitted and communicating (Comms1 or Comms 2 LED is flashing).

For further information please refer to the *PRO•SENS®* Technical Manual MAN3046 section 8 "Maintenance" or contact your local Ampac branch for technical assistance.