

**Description:**

The OWS system is intended to broadcast information (voice announcements for emergency purposes, alert signals, evacuate signals, visual and tactile warning devices) to provide warning to the occupants within one or more specified areas in an emergency, to effect a rapid and orderly mobilisation of occupants in an indoor or outdoor area.

The Amplifier Kits consists of;

- 1 x 25W or 50W Amplifier
- 4 x 8mm Hex Spacers
- 4 x M3x6mm Screws
- 1 x Yellow Cat5 cable

The Indicator and Control kit consists of;

- 1 x Indicator and Control Module
- 1 x 350mm RS485 Comms Cable
- 1 x 500mm Yellow CAT5 cable for SP1
- 1 x 1000mm yellow CAT5 cable for SP8

**Installation:**

**Observe anti-static precautions at all times**

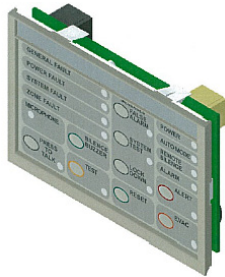


Figure 1: Control Module

1. Power down the FACP.
2. Carefully unclip the Control module PCB Assembly from the plastic housing
3. Mount the plastic housing in the next free ancillary cutout in the Fire Alarm Control Panel.
4. Clip the PCB assembly back into the plastic housing
5. Using the spacers and M3 screws mount the Amplifier board into an available space in the rear of the FACP cabinet.
6. Using 0.75mm<sup>2</sup> cable wire 27Vdc power from one of the FACP's AUX outputs to TB6 on the amplifier board
7. Connect the applicable yellow CAT5 cable from the yellow connector CN1 of the control module to the yellow CN1 connector on the Amplifier
8. For Loopsense and Firefinder Plus panels only, connect the RS485 Comms cable from the FACP to the black connector CN3 of the OWS Control Module
9. For Zonesense Plus and FireFinder panels wire digital Input 1 (+ & - terminals) to the FACP's Warning System O/P terminals (Note Monitoring

resistor is not required to be connected as the amplifier has the resistor on board)

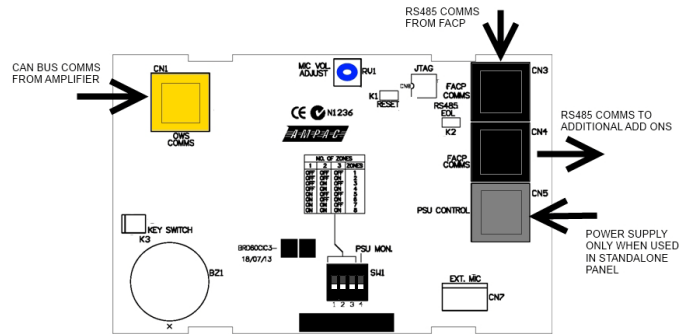


Figure 2: OWS Control Module PCB Layout

10. If used, connect Strobes to the Strobe Output ensuring the EOL resistor is fitted at last strobe. (Max 8 x Ampac Xenon Strobes or 40 x Ampac LED strobes).
11. Connect Speaker load to the 100V line output ensuring 100V line monitoring EOL resistor is fitted at the last speaker.
12. Ensure a Jumper Link is fitted on K3 Access keyswitch connector or an actual keyswitch is fitted.
13. Set the Control module and amplifier DIP switches to suit your Region and configuration (see page 2)
14. Power up the FACP and ensure the OWS powers up.
15. For Loopsense and Firefinder Plus upload the new config with the OWS module.

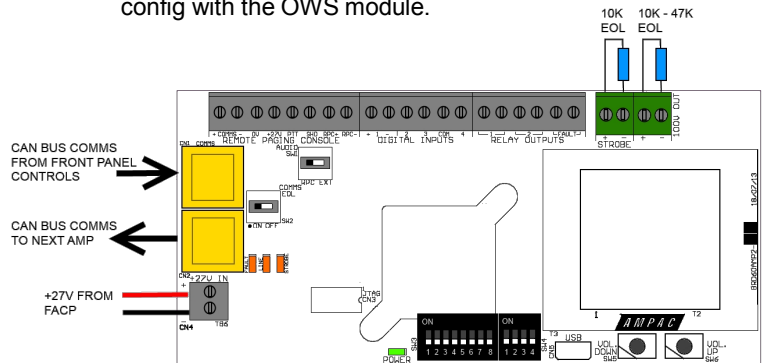


Figure 3: Amplifier PCB Layout

16. Perform message or tone test and ensure Audio levels are set to desired level. To adjust, set DIP switch 1 of SW3 on the amplifier board to ON, adjust volume using SW5 and/or SW6. Once desired level is achieved return DIP switch 1 of SW3 to OFF to store audio level.

Refer to MAN3072 OWS Technical Manual for any further details and how to configure the OWS using Loopmaster on Configmanager Plus.


### Amplifier DIP Switches

The Configuration DIP switch (SW3) is 8-way and has the following options for customisation:

Switch 1	Commissioning Mode <i>*(Dynamic)</i>	Set to On (1) for Commissioning Mode; Off (0) for Operation Mode Default is On (1)
Switch 2 & 3	Country Standard <i>*(Start Up)</i>	2 Off (0) & 3 Off (0) – AUS 2 Off (0) & 3 On (1) – NZ 2 On (1) & 3 Off (0) – EN 2 On (1) & 3 On (1) – Custom
Switch 4	Background Music Mode <i>*(Dynamic)</i>	Set to On (1) for Background music mode
Switch 5, 6 & 7	Alert/Evac Timeout <i>*(Start Up)</i>	Minimum time that the Alert signal plays before changing to the Evacuation signal; Changes at the end of sequence; Default is 0; For example, for a setting with 180s (option #4), set switch 5 to On, switch 6 to Off and switch 7 to Off. Option 5,6,7 Timeout 0. (000) 0s timeout - no Alert , just Evac 1. (001) 60s (1 minute) 2. (010) 90s (1 ½ minutes) 3. (011) 120s (2 minutes) 4. (100) 180s (3 minutes) 5. (101) 300s (5 minutes) 6. (110) 0s timeout - no Evac, just Alert 7. (111) Custom Configuration. Changes the Digital inputs to their secondary function
Switch 8	Earth Fault detection (Standalone OWS only) <i>*(Dynamic)</i>	Set to On (1) for Detect Earth Fault; Off (0) to Disable Default is Off (0)

The Address DIP switch (SW4) is 4-way and has the following options for customisation:

Switch 1,2 & 3	Communication Address <i>*(Start Up)</i>	Local Amplifier Address (valid range is 0 to 7); Set to a unique valid address for each OWS connected to the Local Bus (CAN). Address 1 2 3 0. (0 0 0) 1. (0 0 1) 2. (0 1 0) 3. (0 1 1) 4. (1 0 0) 5. (1 0 1) 6. (1 1 0) 7. (1 1 1)  Default is 0;
Switch 4	Communication Monitoring <i>*(Dynamic)</i>	Set to On (1) to enable monitoring of the communications path between the amplifier and an associated front panel.

 **Note:** The statuses of some switches are only read at system *startup*, while others are *dynamically* updated throughout the execution of the application code. In order for the switches marked as *\*(Start Up)* to have changes in their state acknowledged, the system must be restarted, either through a valid power cycle or software/hardware reset.

### Control Module DIP Switches

The DIP switch (SW1) is 4-way and has the following options:

Switch 1, 2 & 3	Used for the number of Amplifier Zones	ZONES	SW1	SW2	SW3
		1	OFF	OFF	OFF
		2	OFF	OFF	ON
		3	OFF	ON	OFF
		4	OFF	ON	ON
		5	ON	OFF	OFF
		6	ON	OFF	ON
		7	ON	ON	OFF
		8	ON	ON	ON
Switch 4	PSU Monitoring in Stand-alone OWS panels	Set On for PSU monitoring			