



**PIP Adapter for  
Mitsubishi Electric  
Split  
Air-Conditioning**

Installation and User Guide

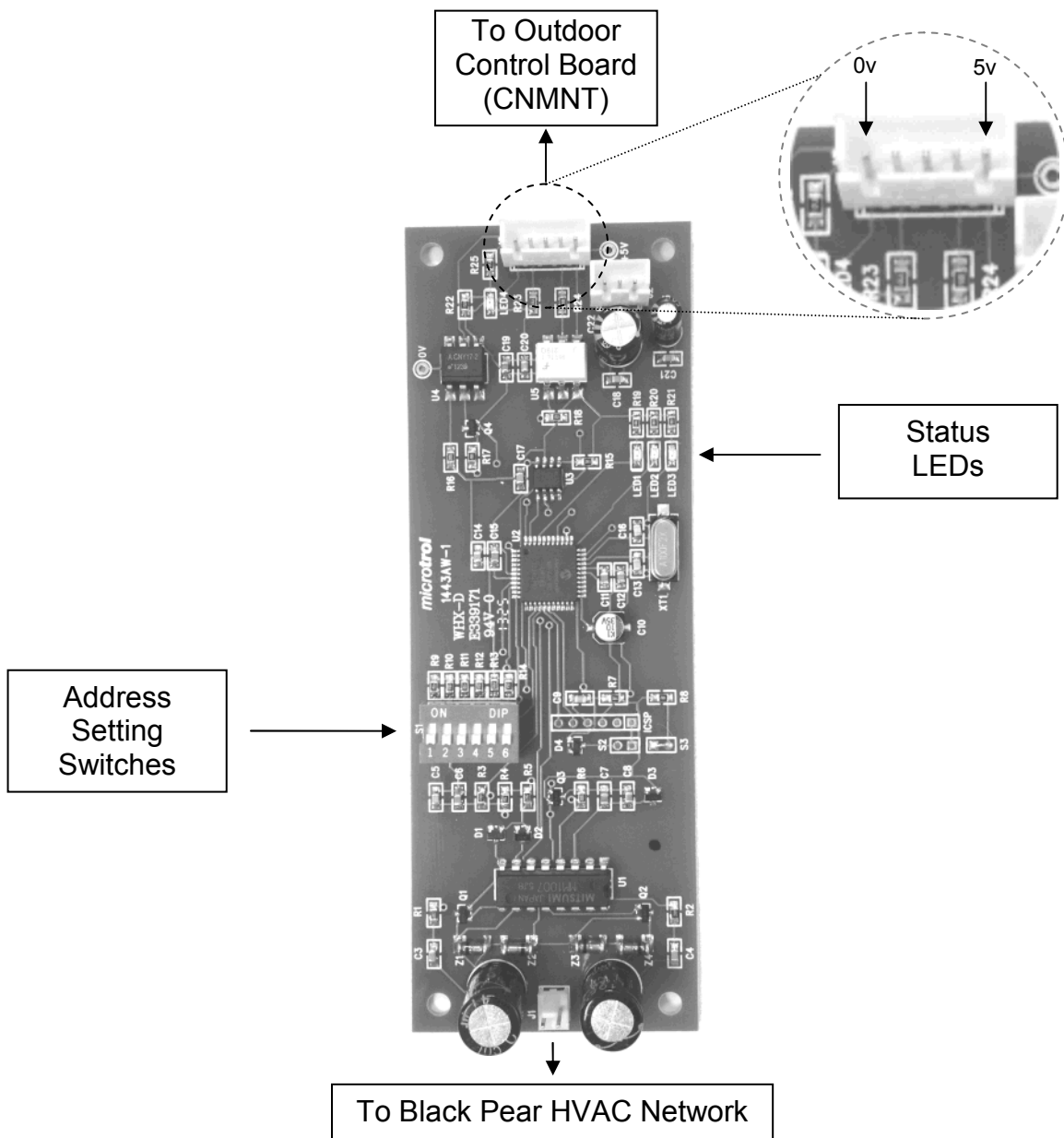
## Important Information

- This adapter is designed to be used on stand-alone Mitsubishi ‘split’ systems for control via a Black Pear interface.
- It is not designed to be used on City-Multi systems controlled via a Mitsubishi central controller.

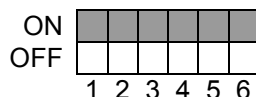
## Parts List

Item No.	Description	Quantity
1	PIP Adapter Board	1
2	Support pillars	4
3	Cable A (5 wires)	1
4	Cable B (5 wires)	1

## Adapter Board Layout



## Address Setting



The adapter board is supplied in its default state with all address switches OFF (see above). This represents address 0 which is an invalid setting.

**The board will not function correctly if connected and powered-up in this state.**

Each adapter board must have a unique address on the HVAC network.

Set the switches to match the required address using the table below:

1	ON OFF		11	ON OFF		21	ON OFF		31	ON OFF		41	ON OFF	
2	ON OFF		12	ON OFF		22	ON OFF		32	ON OFF		42	ON OFF	
3	ON OFF		13	ON OFF		23	ON OFF		33	ON OFF		43	ON OFF	
4	ON OFF		14	ON OFF		24	ON OFF		34	ON OFF		44	ON OFF	
5	ON OFF		15	ON OFF		25	ON OFF		35	ON OFF		45	ON OFF	
6	ON OFF		16	ON OFF		26	ON OFF		36	ON OFF		46	ON OFF	
7	ON OFF		17	ON OFF		27	ON OFF		37	ON OFF		47	ON OFF	
8	ON OFF		18	ON OFF		28	ON OFF		38	ON OFF		48	ON OFF	
9	ON OFF		19	ON OFF		29	ON OFF		39	ON OFF		49	ON OFF	
10	ON OFF		20	ON OFF		30	ON OFF		40	ON OFF		50	ON OFF	

## Connection to Outdoor Control Board

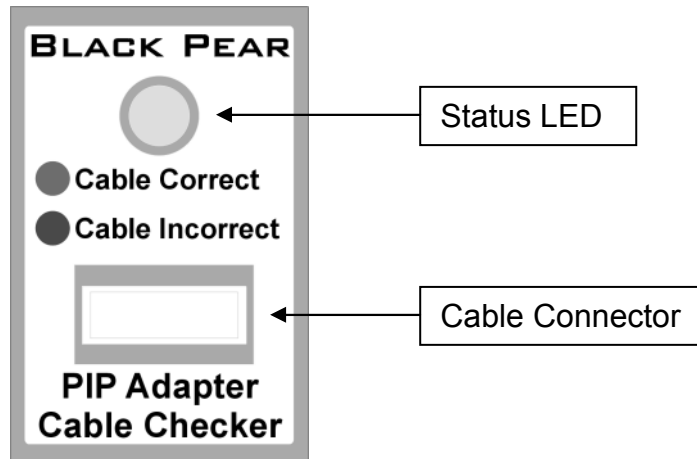
**Warning :** Using the incorrect cable could cause damage.  
If in doubt, do not connect to the outdoor unit.

The adapter board is supplied with two 5-wire cables, labelled A and B. They are designed to connect the adapter to the connector labelled CNMNT on the outdoor control board. One cable will work correctly and the other could damage the adapter board. The correct cable to use depends on the type of outdoor unit the adapter will be attached to.

A cable checker module is available (supplied separately) which will ensure that the correct cable is used.

Alternatively a volt meter may be used to check that the 0v and 5v are presented correctly to the PIP adapter (see Adapter Board Layout diagram).

## Using The Cable Checker



- 1) Power down the outdoor unit.
- 2) Attach either cable A or cable B to the outdoor unit connection (labelled CNMNT).
- 3) Attach the other end to the PIP Cable Checker.
- 4) Power up the outdoor unit.
- 5) If the status LED lights up GREEN then the cable is correct.  
If the status LED lights up RED then the cable is incorrect and the other cable must be used.

## Connection to Black Pear HVAC

The 2-way terminal block is used to attach the PIP adapter to the HVAC network. The connections are non-polarized.

## Status LEDs

Description	HVAC Comms Activity	Outdoor Comms Activity	Power
Colour	Red	Amber	Green
Label	LED1	LED2	LED3

## Confirming The Adapter Is Working

Once the adapter is connected correctly and securely fixed, power-up the outdoor unit. The green power led (LED3) should light up.

After a short delay, the amber led (LED2) should begin to pulse every 1½ seconds. This confirms that the outdoor unit is communicating with the adapter.

The red led (LED1) will pulse occasionally when the adapter is being interrogated via the HVAC network.