# B26 Solar Panel Kit for Bangalore Broadside Type A Installation Instructions



# Michael Williams Engineering Ltd.

Queens Business Park, Wilbraham Road, Fulbourn, Cambridge CB21 5ET Tel 01223 88 22 22 Fax 01223 88 25 98 www.birdscaring.co.uk

# 1 Unpack & Check Parts.

Please unpack and check the items carefully as listed below.

Contents		
Quantity	Part No	Description
2	B126	20mm foam washer
2	F26	M6 Nylock Nuts
2	F41	M6 x 25 bolt
4	F48	M6 Washers
1	B110	Battery strap
1	B19	Battery
1	B65	Solar Panel with sleeved lead & red
		terminals fitted.
1	B54	Small Battery Lead
1	B130	4 way Plug
1	B64	Sleeved Grommet
6	V49	Cable Ties

# 2 Tool List

The following tools will be required to fit the solar panel kit.

Tools needed			
10mm spanners	For bolting up the solar panel		
13mm Spanners	To remove the bolt holding the lid in place.		
Drill with 6.5mm drill bit	For drilling holes in the lid to mount the solar panel		
10mm drill bit			
No 2 posidrive screwdriver	To remove the lid of the control box		
3.5mm flat blade screwdriver	To attach the wires to the 4 way plug.		
Wire cutters	To trim the cable ties		
Tape measure and pencil	To mark out where the holes need to be drilled		
17mm spanners	May be required depending upon which type of lid has been fitted to the birdscarer.		

### 3 Lid Preparation

#### 3.1 Check the lid

Some models of Bangalore Broadside have been fitted with a plain lid with no holes. Other versions have been fitted with a lid which has the solar panel mounting holes already cut in it but have been blanked off with bolts.

If you have a lid with blanking bolts, these can be removed with the 10mm and 17mm spanners and the bolts discarded. You can now carry on to section 4 and fit the solar panel.

If you have a plain lid, carry on with sections 3.2 to remove the lid and section 3.3 to drill the holes necessary to fit the solar panel.

#### 3.2 Remove the lid

Using the 13mm spanners undo the long bolt that holds the lid in place at the back of the gun.

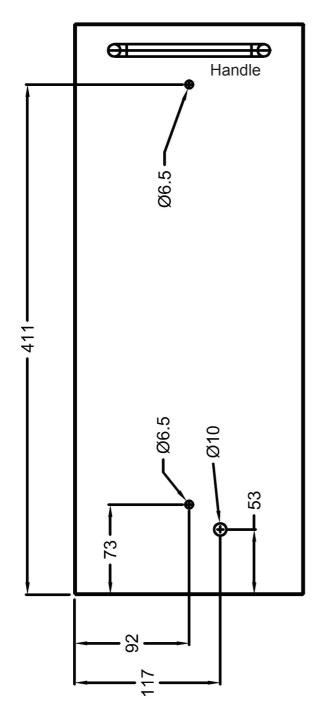
Withdraw the bolt and remove the lid.

Place the lid on a firm surface or workbench so the holes can be more easily marked and drilled.

#### 3.3 Drill the holes

Mark out the holes as detailed on the next page.

Offer up the solar panel and check that the bolt holes line up and the wire is close to the large hole. If everything is ok, drill the holes.



#### 4 Fit the Solar Panel

Fit the panel using the fittings as shown on the next page.

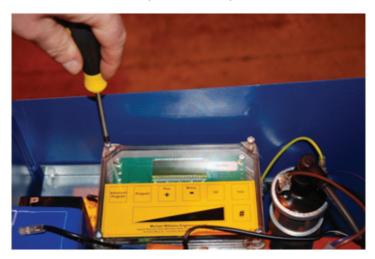
Tighten up the bolts so that the panel is held firmly and the foam washers seal the holes to prevent water leaking through.

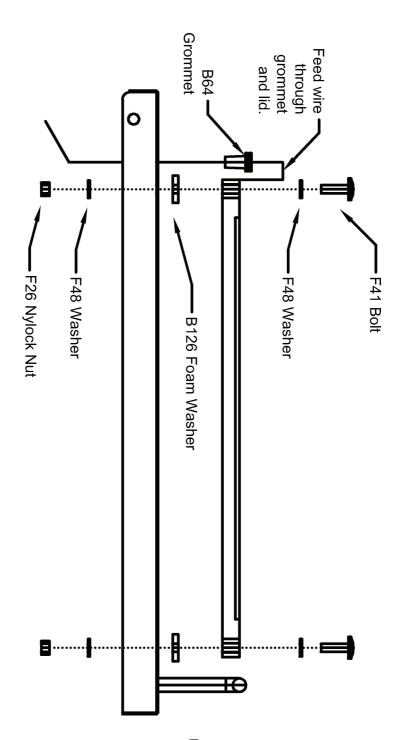
Do not over tighten the bolts as the ends of the panel can be crushed.

The lid can now be refitted to the gun using the long bolt.

## 5 Wiring up the panel

Using a Posi-drive screwdriver, unscrew and retain the four screws at each corner of the control box panel. See picture below.





Carefully open the lid of the control box from left to right. See picture below.

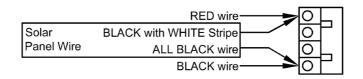


Damage may occur if you touch any of the components on the circuit board.

Carefully feed the solar panel wire and the small battery lead through one of the spare grommets in the side of the control box and fit them to the green plug as shown below.

Carefully tighten the terminals using the 3.5mm flat screwdriver.

Warning - Damage will occur if the wiring is incorrect.



All plugs are shown with the screw terminals facing up

Tidy up the wires using 3 of the cable ties and cut off the excess cable ties with cutters.

The 4 way plug can then be fitted to the circuit board.



Ensure all three green plugs are properly in place before refitting the lid. Each connection block will only fit one way onto the connector – you won't be able to connect them up incorrectly.

Note - It is possible that for the cables to become pulled away from the connectors when the lid is screwed back in place. Ensure that the wires do not bunch up inside the box before refitting the lid.

# 6 Fitting the small battery

The battery strap is fitted through the two slots in the control box mounting plate.



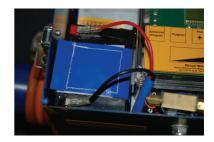
Note the orientation of the velcro strips.



Firmly fasten battery in place and connect the battery lead.

Red wire - Red terminal marked +

Black wire - Black terminal marked =



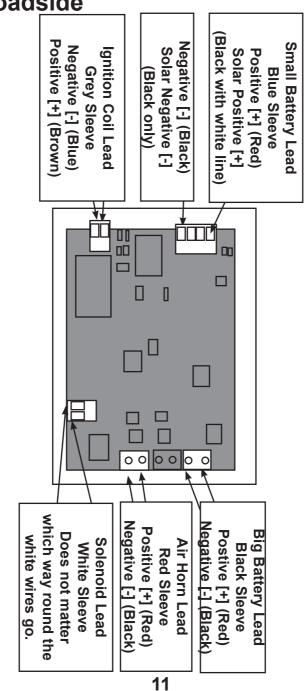
# 7 Tidy up the wires

Using the last three cable ties, tidy up the solar panel wire alongside the gas pipe.

Ensure there is enough slack to allow the lid to open and close without straining the cable.



# 8 Full Wiring Diagram for Bangalore Broadside \_\_\_\_\_



Michael Williams Engineering Ltd.
Queen's Business Park, Wilbraham Road
Fulbourn, Cambridge CB21 5ET
Tel 01223 88 22 22
Fax 01223 88 25 98

www.birdscaring.co.uk