This Is How I Have Wired Up My Overhead To Work With Prosim.

I have used 3 x BU0836X Boards for the inputs – Why?   Not because I think they are better than anything else, but because I have 7 and I just had to use them.   But that being said, I find them to be reliable, robust and virtually bombproof.
And of course using the BU0836X cards means that these cards have a 'common' Ground, so switches could be wired up in groups which meant less wires.

This is not a definitive document, it is purely an indication of what switches I used to faithfully replicate the action of the real switches and is meant as a guide to help you go forward with your project.

All switches were assigned in the Prosim Configuration Menu.   You only need to assign one side of an On/Off switch or the both on positions of a 3 position switch because Prosim will default to the position that is not assigned if it does not see a command from the other switch position or positions.

Item	Input#	Type	Switch Position	Note .
1. Landing Lights	1	SPST	Closed In On Position	* See Note 1
2. Runway Turnoff		SPST	Closed In On Position	* See Note 2
3. Taxi Lights	2	SPST	Closed In On Position	
4. APU	3 & 4	SPDTCO(ON)	Closed In Up & Down	* See Note 3
5. Starter 1	5	Rotary	Closed in Pos 1 GND	* See Note 4
6. Ignition	6 & 7	SPDTCO	Closed In Pos L & R	
7. Starter 2	8	Rotary	Closed in Pos 1 GND	* See Note 3
8. Logo		SPST	Closed In On Position	* See Note 5
9. Strobe	9	SPST	Closed In On Position	
10. Position	10	SPST	Closed In On Position	
11. Anti Collision	11	SPST	Closed In On Position	
12. Wing	12	SPST	Closed In On Position	
13. Wheel Well		SPST	Closed In On Position	* See Note 6
14. L Aft Fuel Pump	13	SPST	Closed In On Position	
15. L Fwd Fuel Pump	14	SPST	Closed In On Position	
16. R Fwd Fuel Pump	15	SPST	Closed In On Position	
17. R Aft Fuel Pump	16	SPST	Closed In On Position	
18. Ctr L Fuel Pump	17	SPST	Closed In On Position	
19. Ctr R Fuel Pump	18	SPST	Closed In On Position	
20. Cross-Feed	19	SPST	Closed In On Position	
21. Display Source	20 & 21	SPDTCO	Closed in L & R Position	
22. Display Control	22 & 23	SPDTCO	Closed in L & R Position	
23. Navigation FMC	24 & 25	SPDTCO	Closed in L & R Position	
24. Navigation IRS	26 & 27	SPDTCO	Closed in L & R Position	
25. Navigation VHF	Not Simulated			

26. Yaw Damper	28	SPST	Closed In On Position
27. Spoilers A	29	SPDT	Closed In On Position
28. Spoilers B	30	SPDT	Closed In On Position
29. Flt Controls	31	SPDT	Closed In On Position
30. Flt Controls	32	SPDT	Closed In On Position

+ 3 inputs for Landing Lights if you want individual control – See Note 1.
+ Alt Flaps Not Connected At This Time Because The TQ Flaps Control In SIOC Over-rides it.

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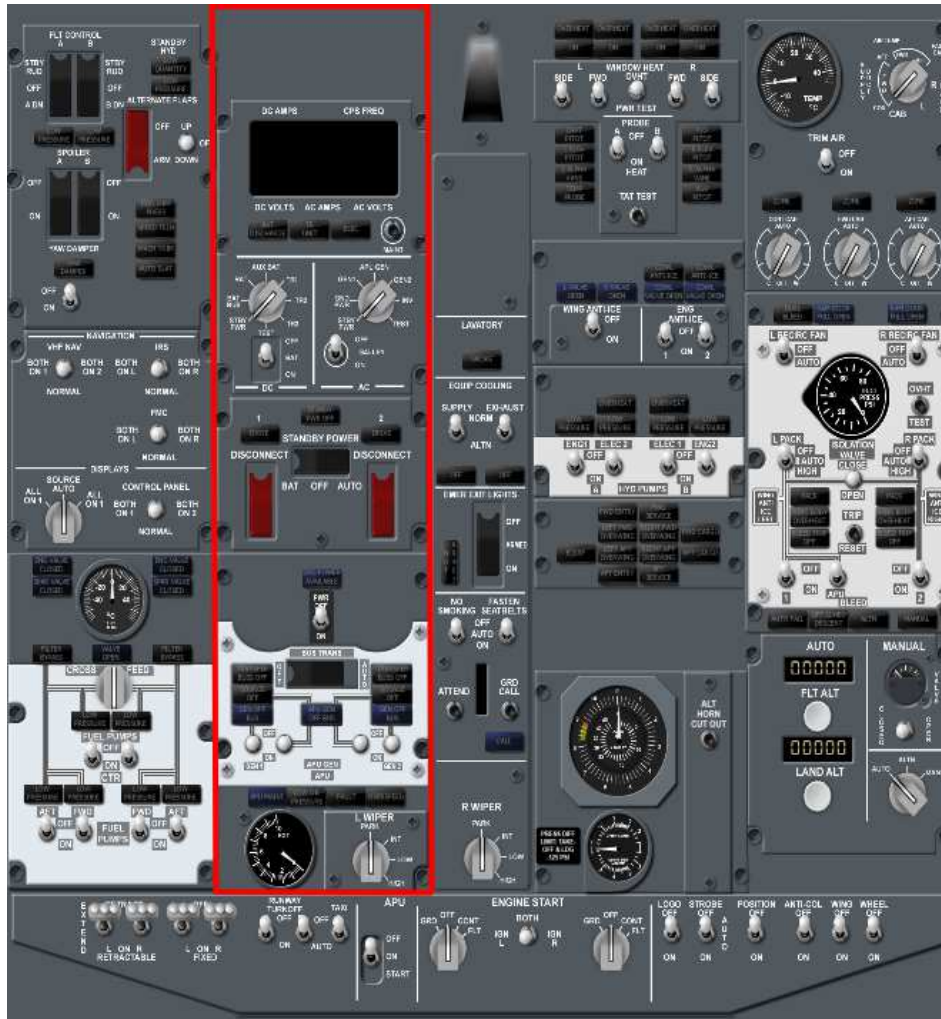
31. Eng Gen 1	33 & 34	(On)/OFF/(On)	Closed In Up & Down Position
32. APU Gen 1	35 & 36	(On)/OFF/(On)	Closed In Up & Down Position
33. APU Gen 2	37 & 38	(On)/OFF/(On)	Closed In Up & Down Position
34. Eng Gen 2	39 & 40	(On)/OFF/(On)	Closed In Up & Down Position
35. GND OWR	41 & 42	(On)/OFF/(On)	Closed In Up & Down Position
36. Eng 1 Drive	43	SPST	Closed In UP Position
37. Eng 2 Drive	44	SPST	Closed In Up Position
38. Standby Power	45	SPST	Closed In Left Position
39. Battery	46	SPST	Closed In Down Position
40. Galley Power	Optional		* See Note 7.
41. Left Wiper	Not Simulated		
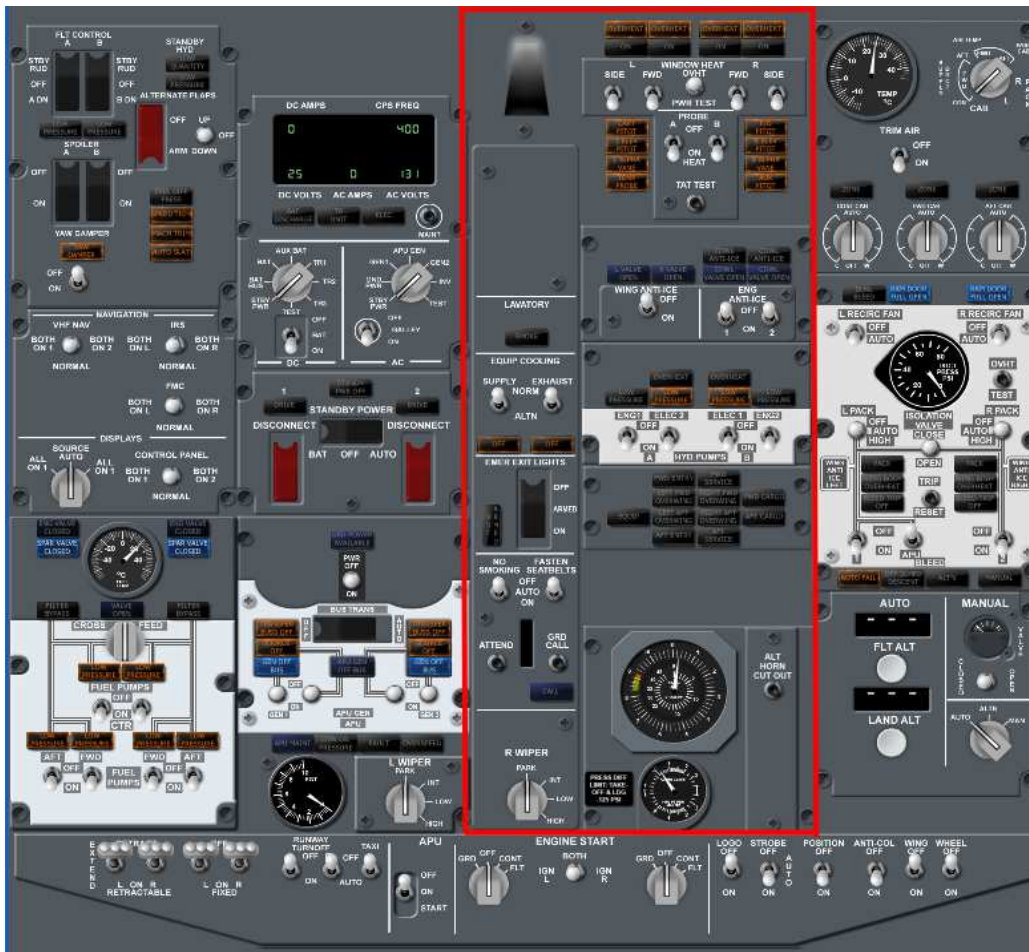
42. Right Wiper	Not Simulated		
43. Attendant	47	Push To Make	Closed in Pushed Position
44. Ground Call	48	Push To Make	Closed in Pushed Position
45. No Smoke	49 & 50	SPDT On/Off/On	Closed in Up and Down
46. Seatbelts	51 & 52	SPDT On/Off/On	Closed in Up and Down
47. Emerg.Exit	53 & 54	SPDT On/Off/On	Closed in Up and Down
48. Cooling Supply	55	SPST	Closed in Down Position
49. Cooling Exhaust	56	SPST	Closed in Down Position
50. Hyd.Pumps	57,58,59 & 60	SPST	Closed in Up Position
51. Ani Ice	61, 62 & 63	SPST	Closed in Down Position
52. TAT Test	Not Simulated		
53 Probe Heat A & B	64 & 65	SPST	Closed in Up Position
54. Window Heat	66, 67, 68 & 69	SPST	Closed in Up Position
55. Overheat Test	70	SPDT (On)/OFF/(On)	Closed In Up Pos. * Note 8
56. Alt Horn Cutout	71	Push To Make	Closed In Pushed Position

57. Land Alt.	72 & 73	Encoder	Card Input Set As Buttons
58. Flt Alt.	74 & 75	Encoder	Card Input Set As Buttons
59. Pressurisation	76 & 77	3 Position Rotary	Alt & Man Wired
60. Eng 1 Bleed	78	SPST On/Off	Closed In Up Position
61. APU Bleed	79	SPST On/Off	Closed In Down Position
62. Eng 2 Bleed	80	SPST On/Off	Closed In Up Position
63. Trip Reset		Push To Make	Closed In Pushed * Note 9
64. Left Pack	81 & 82	SPDTCO On/Off/On	Closed In Up & Down Pos.
65. Right Pack	83 & 84	SPDTCO On/Off/On	Closed In Up & Down Pos.
66. Isol Valve	85	SPDTCO On/Off/On	Closed In Up & Down Pos.
67. Overheat Test		Push To Make	Closed In Pushed * Note 10
68. Recirc Fans	86 & 87	SPST On/Off	Closed In Down Position.
69. Zone Temp	Analog Inputs	100kohm Pot	
70. Trim Air	88	SPST On/Off	Closed In Down Position.

So Where Do You Hide The Boards

You have to careful where the boards are situated so that:
   A. The wiring can be kept tidy (I hate Wires & Cables)
   B. Wiring does not block backlighting
   C. You have room to work and group all the wires.

This is where I placed the boards.   All wiring runs up the edges of the Overhead to the nearest card. The top card will just only fit above the meter panel, so I cheated and placed it in the rear overhead.

This still very much a 'work in progress', but I am satisfied at this point with the operation and functionality of the overhead panel.

<u>NOTES</u>

1. To Save Inputs, I have Assigned all Landing Lights to Button 1 so when that switch is closed (turned on), all 4 Software Landing Light Switches Operate. If you want all the switches to work individually, you will require 3 more inputs.
2. Runway Turnoff Not Connected at this time (In Hand, short of inputs).
3. APU needs an ON/OFF/(ON) switch to mimic the operation of the real switch.
4. GND Start Only Connected at this time (In Hand, short of inputs). Defaults to OFF.
5. Logo Light Not Connected at this time.
6. Wheel Well Not Simulated Or Connected.
7. Galley Power is an Optional Switch
8. Power Test Not Connected At This Time
9. Trip Reset Not Connected At This Time.
10. Overheat Test Not Connected At This Time.

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