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Keys to Success to Installing the M802

For the typical cruiser the keys to success when installing an Icom M802 are simple. Utilize all the information found in "Icom IC M802 Starting from Scratch" plus:

1. Install the AT140 Tuner as close to the Antenna as possible for a vertical run to the antenna.
    a. Unless you are a technical person, do not use a 3rd party products as it can make operation later more difficult and limit help from other cruisers.
    b. Selected only one type of RF ground and let it be the only connection to the AT140 antenna tuner's ground lug.

2. Install the Transceiver
    a. As close to the battery as possible.
    b. Install the transceiver as far from the AT140 tuner as possible.
    c. Make sure the transceiver has air flow possible.
    d. If using the supplied power cable, install a MDL 30 fuse within 7 inches of the battery connection. Keep the 30 amp fast blow fuse that is in-line with the supplied cable at the transceiver.
    e. If the distance is greater than 10 feet to the battery: Use number 6 wire and connect to short piece of the supplied cable (within a foot). Install a 40 amp fuse within 7 inches of the battery.
    f. Only connect the tuner control cable green wire to the ground lug at the transceiver.
    g. DONOT CONNECT THE TRANSCEIVER TO THE BREAKER PANEL.

3. Don't forget the snap on ferrite cores listed in the book.

Note: The following slides are included from my Icom IC M802 Starting from Scratch all day presentation. They are key points that will supplement the "Icom IC M802 Starting from Scratch" book while you are installing and testing your installation.

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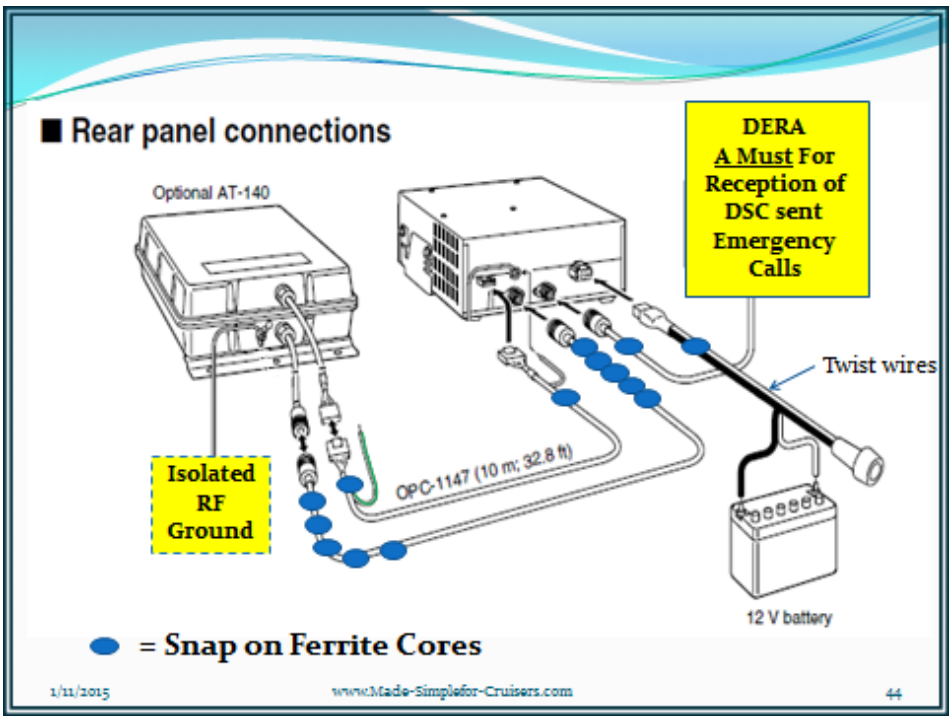
Use lots of Snap on cores to make sure the system works well.



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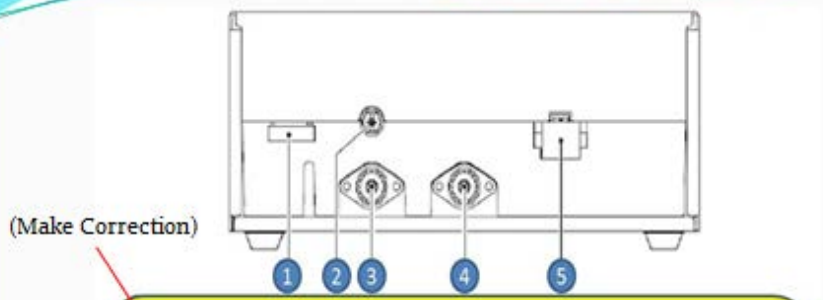

1. **TUNNER CONTROL SOCKET**
   Connect the control cable for the AT-140 antenna tuner here (OPC-1147 cable)

2. **GROUND TERMINAL**
   Important! ~~Connect the chips ground here.~~
   Control Cable Only

3. **ANTENNA CONNECTOR 1**
   Primary Antenna Connection.
   Connect the coaxial cable going to the AT-140 tuner via an RF Isolator here with a PL259 connector.

4. **ANTENNA CONNECTOR 2**
   DSC Emergency Reception Antenna Connection.
   Connect the DERA here via a PL-259 connector

5. **DC POWER SOCKET**
   Connect the battery 13.6 VDC power for the IC M802 here. (OPC 1107A cable)

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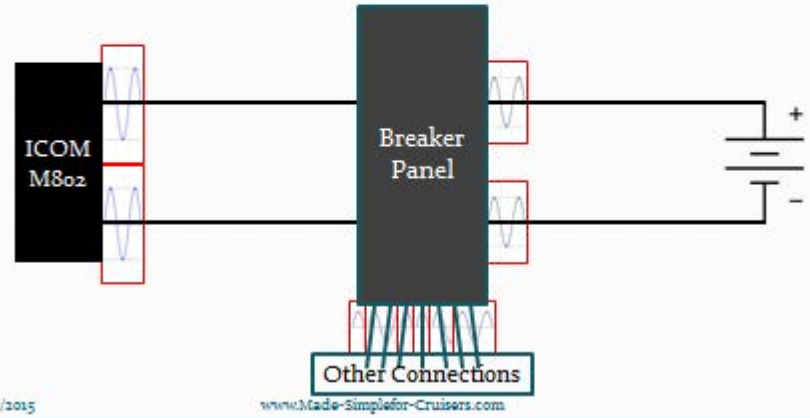
Powering the Radio

- Power the radio from the Battery and NOT the Breaker Panel!



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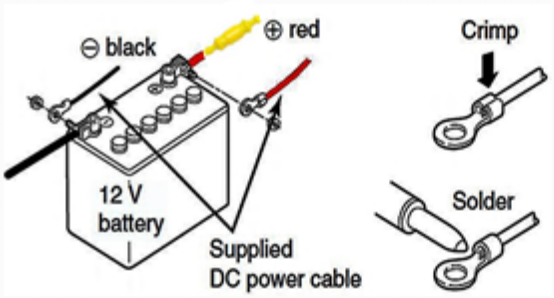
Powering the Radio

- Not to much solder, just cover the connection.
  - No solder into the insulation
- Fuse within 18 cm / 7 inches per ABYC



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GTO to Stay Antennas

3. Fold the remaining end in half to obtain a 1" 3 wire connection.

4. Apply a light coat of solder
   - Tin the connection
   - Do not let solder run under insolation

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Materials & Information Required

- Download the "Installation Checklist" and "Testing the Power and SWR"
  http://www.made-simplefor-cruisers.com/icm802

- Download "VSWR from Power Readings" at
  http://www.made-simplefor-cruisers.com/communications

Weather Fax and Voice Recorder

Types of Software: *JVCOMM32*, Weather Fax 2000
Or Sound Recorder to capture Weather Reports

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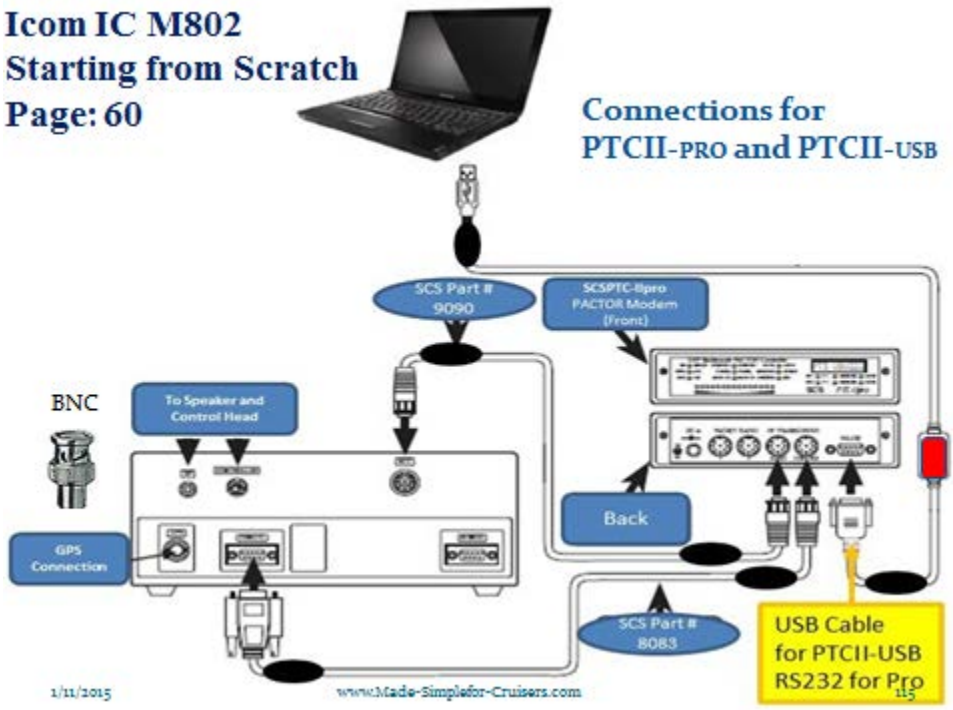

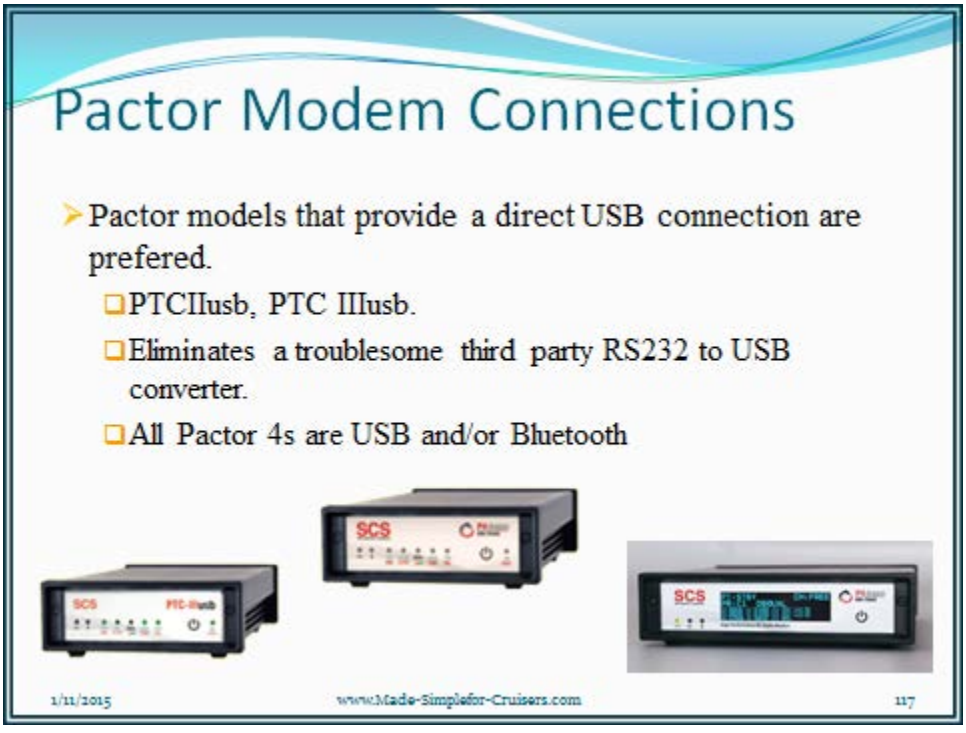

Important Note!

- When replicating **Email**, shift to **Low or Medium power!**
  - High power is not needed for email, it's digital.
  - Reduces the radiation in the boat
  - Reduces the chance of your computer locking up
- Transmitter Output: 150, 60, or 20 watts

Low Power 20W	Medium Power 60W	High Power 150W
F Then 7 Lo PRS	F Then 8 Mid TUV	F Then 9 Hi WXY

Programming Made Easy

Software /cable: Channel changes via your computer.

- You can Download what is in there now, modify or even start over, then upload the new program.
- Software works at least up to Windows 7
- One place to buy: http://www.theantennafarm.com
- CS-M802-USB is recommended ~$50

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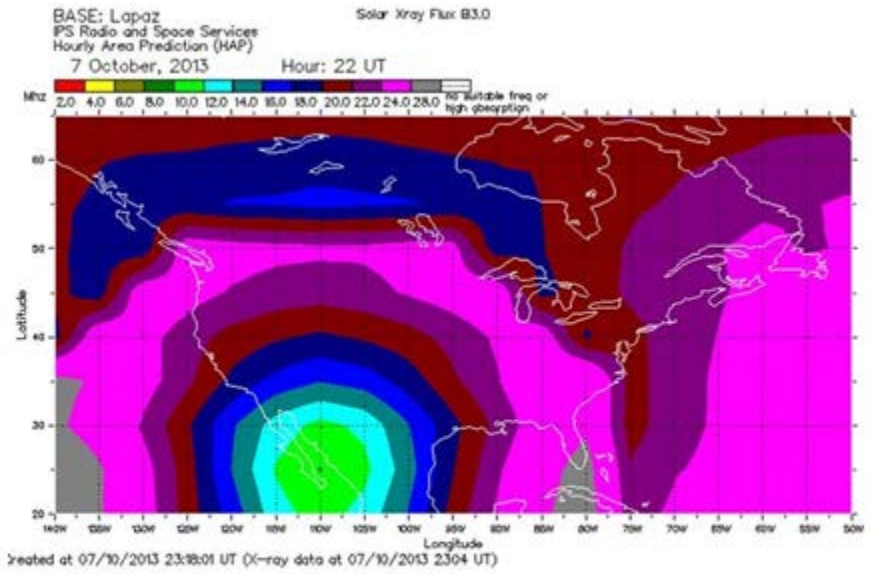
More things to do, while Ashore

- Look at some HF propagation information
- Good hourly calculated Propagation Tool
  - http://www.ips.gov.au/HF_Systems/6/6/1
    - Uses calculations and radio stations



Propagation Tool * Daylight

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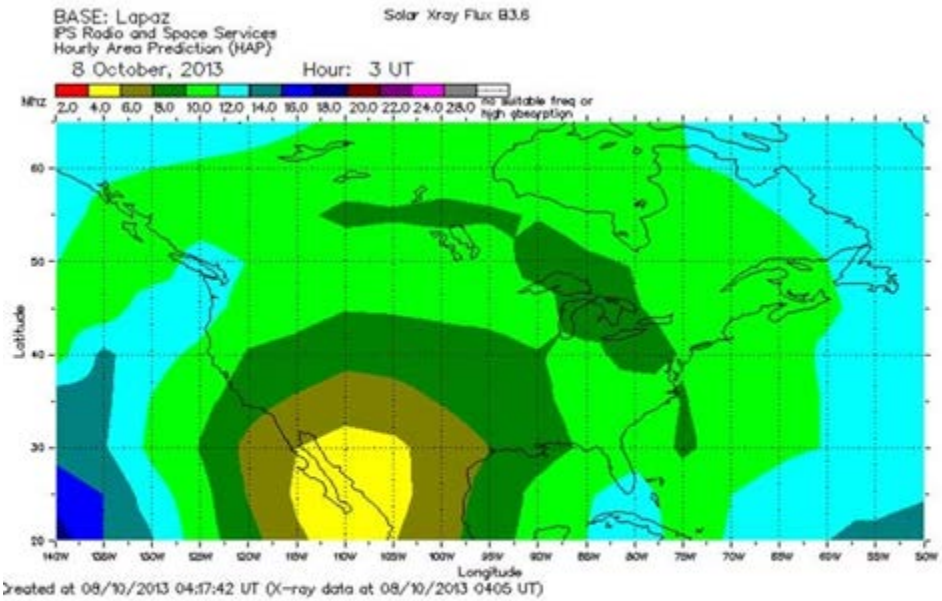

Propagation Tool * Night time

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User Channels — CS-M802 Rev.1.2

CH	RX	TX	Mode	Comment
1	1,183.0	1,183.0	USB	SaFetY1
2	4,125.0	4,125.0	USB	CG/SFTY4
3	6,215.0	6,215.0	USB	CG/SFTY6
4	8,191.0	8,191.0	USB	CG/SFTY8
5	11,190.0	11,190.0	USB	CGSFTY10
6	16,430.0	16,430.0	USB	CGSFTY16
7	4,426.0	4,134.0	USB	CG/WRK4
8	6,501.0	6,200.0	USB	CG/WRK6
9	8,784.0	8,340.0	USB	CG/WRK8
10	11,089.0	11,341.0	USB	CG/WRK10
11	17,134.0	16,431.0	USB	CG/WRK16
12	8,184.4	8,184.4	USB	MxPrtCpt
13	8,257.0	8,257.0	USB	MxNavy6
14	8,180.0	8,180.0	USB	MxNavy8
15	11,182.0	11,182.0	USB	MxNavy12
16	4,186.0	4,186.0	USB	MxMxWrk42
17	4,419.0	4,419.0	USB	MxMxWrk44
18	8,786.0	8,786.0	USB	MxMxWrk88
19	8,780.0	8,780.0	USB	MxMxWrk82
20	11,282.0	11,282.0	USB	AHrbrMC
21	2,065.0	2,065.0	USB	2A
22	2,079.0	2,079.0	USB	2B
23	2,099.0	2,099.0	USB	2C
24	2,096.5	2,096.5	USB	2D
25	2,214.0	2,214.0	USB	2E
26				
27	4,146.0	4,146.0	USB	4A
28	4,149.0	4,149.0	USB	4B
29				
30	6,234.0	6,234.0	USB	6A
31	6,237.0	6,237.0	USB	6B
32	6,240.0	6,240.0	USB	6C
33				
34	8,294.0	8,294.0	USB	8A
35	8,297.0	8,297.0	USB	8B
36	8,301.0	8,301.0	USB	8C
37	8,213.0	8,213.0	USB	8D
38				
39	11,283.0	11,283.0	USB	13A
40	11,286.0	11,286.0	USB	13B
41	11,289.0	11,289.0	USB	13C
42	11,361.0	11,361.0	USB	13D
43	11,365.0	11,365.0	USB	13E
44				
45	16,516.0	16,516.0	USB	16A
46	16,531.0	16,531.0	USB	16B
47	16,534.0	16,534.0	USB	16C
48	16,537.0	16,537.0	USB	16D
49	16,540.0	16,540.0	USB	16E
50	16,542.0	16,542.0	USB	16F
51	16,546.0	16,546.0	USB	16G
52				
53	16,625.0	16,625.0	USB	16A
54	16,628.0	16,628.0	USB	16B
55	16,631.0	16,631.0	USB	16C
56	16,634.0	16,634.0	USB	16D
57	16,637.0	16,637.0	USB	16E
58	16,640.0	16,640.0	USB	16F
59	16,643.0	16,643.0	USB	16G
60				
61	22,159.0	22,159.0	USB	22A
62	22,162.0	22,162.0	USB	22B
63	22,165.0	22,165.0	USB	22C
64	22,168.0	22,168.0	USB	22D
65	22,171.0	22,171.0	USB	22E
66	22,174.0	22,174.0	USB	22F
67	22,177.0	22,177.0	USB	22G
68				
69	25,100.0	25,100.0	USB	25A
70	25,103.0	25,103.0	USB	25B
71	25,106.0	25,106.0	USB	25C
72	25,109.0	25,109.0	USB	25D
73	25,112.0	25,112.0	USB	25E
74	25,115.0	25,115.0	USB	25F
75	25,118.0	25,118.0	USB	25G
76				
77				
78				
79				
80				

User Channels — CS-M802 Rev.1.2

CH	RX	TX	Mode	Comment
81				
82				
83				
84				
85				
86				
87				
88				
89				
90				
91				
92				
93				
94				
95	2,500.0	2,500.0	AM	WWV 2.5
96	5,000.0	5,000.0	AM	WWV 5
97	10,000.0	10,000.0	AM	WWV 10
98	15,000.0	15,000.0	AM	WWV 15
99	20,000.0	20,000.0	AM	WWV 20
101	6,212.0	6,212.0	USB	Picante
102	8,143.0	8,143.0	USB	PanPacif
103	6,227.0	6,227.0	USB	Amigo P
104	6,224.0	6,224.0	USB	Amigo S
105				
106				
107	2,958.0	2,958.0	LSB	Sonrisa
108	7,192.0	7,192.0	LSB	ChubascP
109	7,194.0	7,194.0	LSB	ChubascS
110				
111	7,232.5	7,232.5	LSB	Baja
112	14,340.0	14,340.0	USB	Manana
113	21,402.0	21,402.0	USB	PadMartm
114				
115	6,516.0	6,516.0	USB	SouthBnd
116	8,122.0	8,122.0	USB	SthBndA
117	4,149.0	4,149.0	USB	South B49
118				
119	2,958.0	2,958.0	LSB	HappyHr
120	14,300.0	14,300.0	USB	Maritime
121				
122	4,369.0	4,077.0	USB	WLO 405
123	4,396.0	4,104.0	USB	WLO 414
124	4,411.0	4,119.0	USB	WLO 419
125	6,519.0	6,218.0	USB	WLO 607
126	8,788.0	8,264.0	USB	WLO 804
127	8,809.0	8,279.0	USB	WLO 809
128	8,806.0	8,282.0	USB	WLO 810
129	13,110.0	12,269.0	USB	WLO 1212
130	13,149.0	12,302.0	USB	WLO 1225
131	13,153.0	12,305.0	USB	WLO 1226
132	17,260.0	16,387.0	USB	WLO 1607
133	17,263.0	16,490.0	USB	WLO 1641
134	17,280.0	16,498.0	USB	WLO 1647
135	22,804.0	22,108.0	USB	WLO 2207
136	4,405.0	4,113.0	USB	KLB 417
137	8,721.0	8,207.0	USB	KLB 805
138	13,101.0	12,254.0	USB	KLB 1209
139	17,311.0	16,429.0	USB	KLB 1624
140				
141	28,300.0	28,300.0	USB	10M LE
142	24,920.0	24,920.0	USB	12M LE
143	21,200.0	21,200.0	USB	15M LE
144	18,110.0	18,110.0	USB	17M LE
145	14,150.0	14,150.0	USB	20M LE
146	7,125.0	7,125.0	USB	40M LE
147	3,600.0	3,600.0	USB	80M LE
148	1,900.0	1,900.0	USB	160M LE
149				
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