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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.

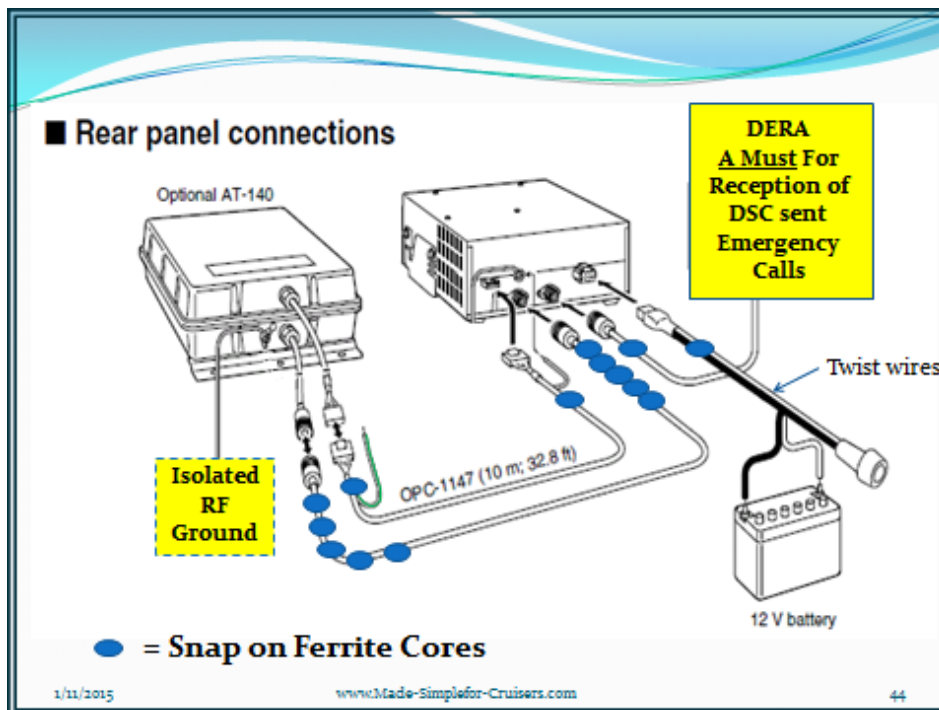
2. Install the Transceiver
 - a. As close to the battery as possible.
 - b. Install the transceiver as far from the AT140 tuner as possible.
 - c. Make sure the transceiver has air flow possible.
 - d. If using the supplied power cable, install a MDL 30 fuse within 7 inches of the battery connection. 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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(Make Correction)

- 1. TUNER CONTROL SOCKET**
Connect the control cable for the AT-140 antenna tuner here (OPC-1147 cable)
- 2. GROUND TERMINAL**
Important! ~~Connect the ship 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!

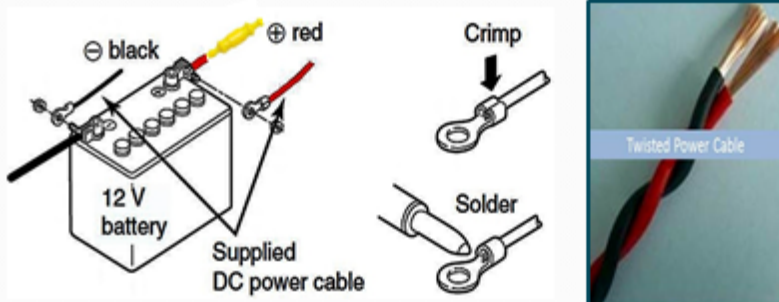
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Powering the Radio

- > 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 insulation



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Materials & Information Required

- Download the “Installation Checklist” and “Testing the Power and SWR”

<http://www.made-simple-for-cruisers.com/icm802>

- Download “VSWR from Power Readings” at

<http://www.made-simple-for-cruisers.com/communications>

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Weather Fax and Voice Recorder



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

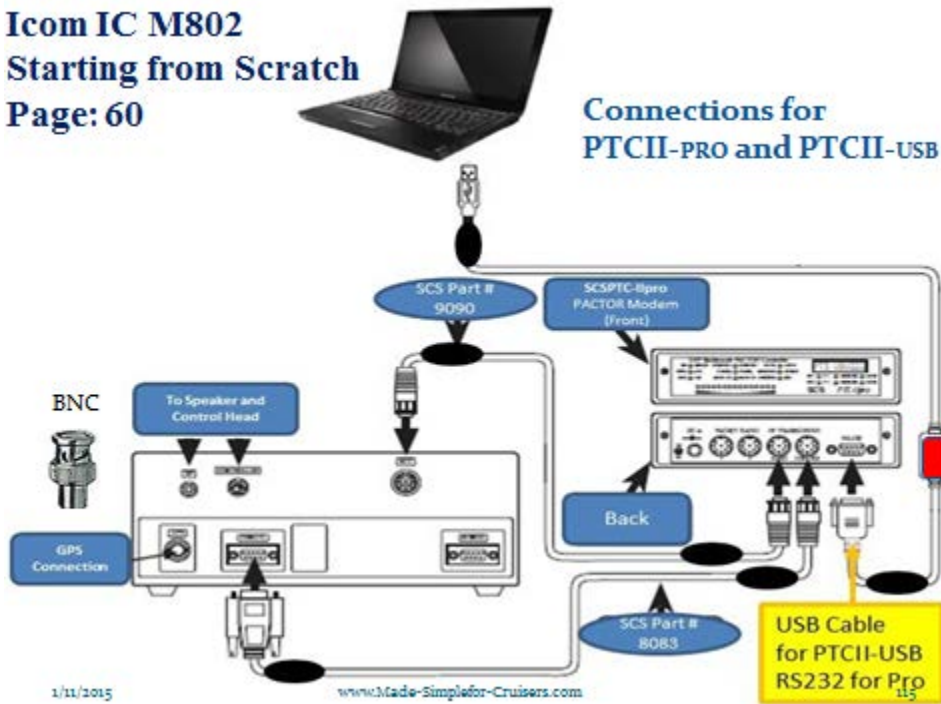
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Pactor Modem Connections

- Pactor models that provide a direct USB connection are preferred.
 - ❑ PTCIIusb, PTC IIIusb.
 - ❑ Eliminates a troublesome third party RS232 to USB converter.
 - ❑ All Pactor 4s are USB and/or Bluetooth



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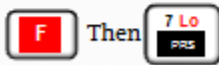
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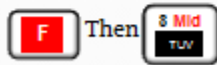
Important Note!

- 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

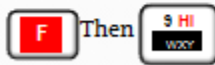
Low Power 20W



Medium Power 60W



High Power 150W



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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

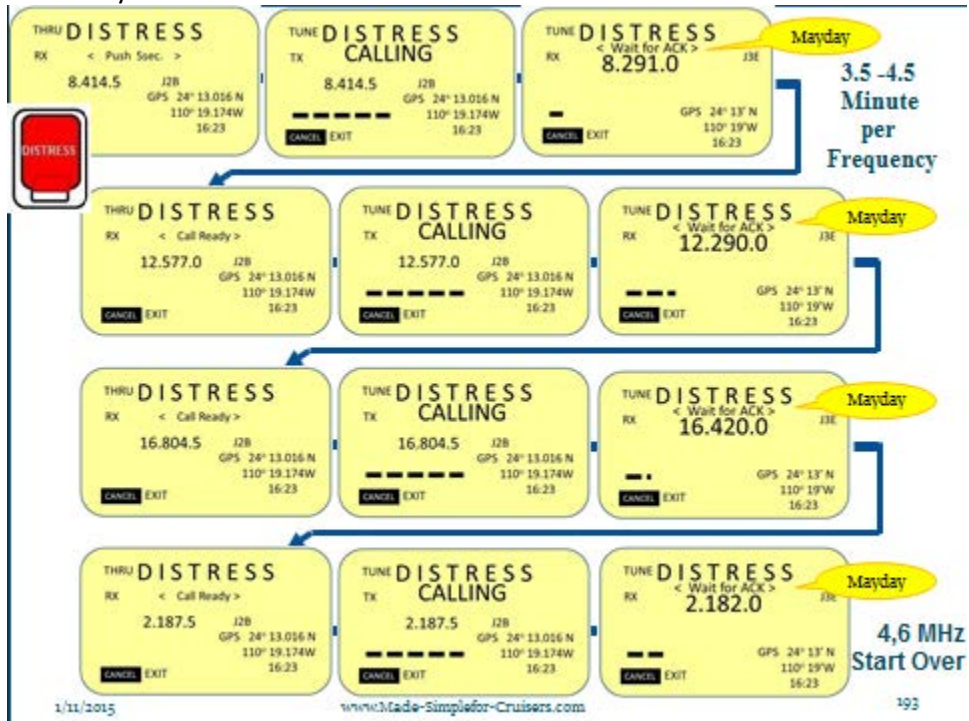


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Important Address /MMSIs

US Coast Guard Group Number

- Ships: 036699999
- Shore: 003669999

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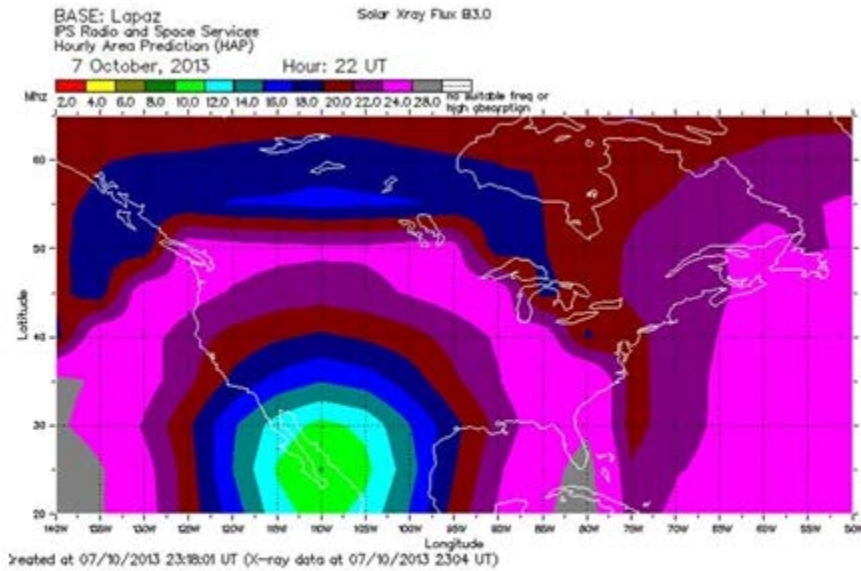
More things to do, while Ashore

- 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

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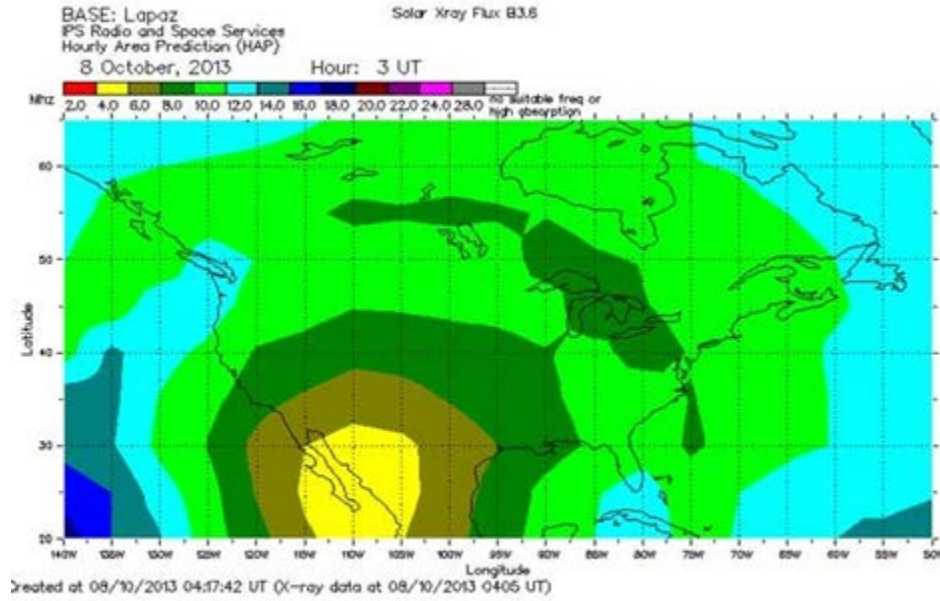
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Propagation Tool

* Daylight

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Propagation Tool

* Night time



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User Channels					CS-M802 Rev.1.2					User Channels					CS-M802 Rev.1.2				
CU	BU	TV	MoSt	Comment	CU	BU	TV	MoSt	Comment	CU	BU	TV	MoSt	Comment	CU	BU	TV	MoSt	Comment
1	3,180.0	3,280.0	USA	SafeH1	41	11,280.0	11,280.0	USA	12C	91					121				
2	4,120.0	4,220.0	USA	CG/STH4	42	11,280.0	11,280.0	USA	12D	92					122	4,280.0	4,077.0	USA	NLO 405
3	8,120.0	8,210.0	USA	CG/STH8	43	11,280.0	11,280.0	USA	12E	93					123	4,295.0	4,104.0	USA	NLO 404
4	8,220.0	8,310.0	USA	CG/STH8	44					94					124	4,411.0	4,119.0	USA	NLO 409
5	12,220.0	12,300.0	USA	CG/STH12	45	16,540.0	16,540.0	USA	18A	95					125	8,519.0	8,218.0	USA	NLO 807
6	16,420.0	16,400.0	USA	CG/STH16	46	16,540.0	16,540.0	USA	18B	96					126	8,788.0	8,264.0	USA	NLO 804
7	4,420.0	4,240.0	USA	CG/WRH4	47	16,540.0	16,540.0	USA	18C	97					127	8,923.0	8,279.0	USA	NLO 809
8	8,520.0	8,200.0	USA	CG/WRH8	48	16,540.0	16,540.0	USA	18D	98					128	8,906.0	8,291.0	USA	NLO 810
9	8,780.0	8,340.0	USA	CG/WRH8	49	16,540.0	16,540.0	USA	18E	99					129	12,110.0	12,269.0	USA	NLO 1213
10	12,280.0	12,340.0	USA	CG/WRH12	50	16,540.0	16,540.0	USA	18F	90					130	12,149.0	12,302.0	USA	NLO 1215
11	17,220.0	16,400.0	USA	CG/WRH16	51	16,540.0	16,540.0	USA	18G	91					131	12,192.0	12,308.0	USA	NLO 1216
12	8,284.4	8,284.4	USA	MtPrCp	52					92					132	17,260.0	16,267.0	USA	NLO 1607
13	8,297.2	8,297.2	USA	MtNars8	53	18,825.0	18,825.0	USA	18A	93					133	17,262.0	16,480.0	USA	NLO 1641
14	8,280.0	8,280.0	USA	MtNars8	54	18,825.0	18,825.0	USA	18B	94					134	17,280.0	16,498.0	USA	NLO 1647
15	12,280.0	12,280.0	USA	MtNars12	55	18,810.0	18,810.0	USA	18C	95	2,500.0	2,500.0	AM	WWW 25	135	22,804.0	22,108.0	USA	NLO 1637
16	4,280.0	4,280.0	USA	MtNars4	56	18,810.0	18,810.0	USA	18D	96	5,000.0	5,000.0	AM	WWW 5	136	4,405.0	4,112.0	USA	KL9 437
17	4,420.0	4,420.0	USA	MtNars4	57	18,810.0	18,810.0	USA	18E	97	10,000.0	10,000.0	AM	WWW 10	137	8,721.0	8,207.0	USA	KL9 825
18	8,780.0	8,780.0	USA	MtNars8	58	18,810.0	18,810.0	USA	18F	98	15,000.0	15,000.0	AM	WWW 15	138	12,101.0	12,254.0	USA	KL9 1209
19	8,780.0	8,780.0	USA	MtNars8	59	18,810.0	18,810.0	USA	18G	99	20,000.0	20,000.0	AM	WWW 20	139	17,211.0	16,429.0	USA	KL9 1624
20	11,280.0	11,280.0	USA	ArlineC	60										140				
21	2,080.0	2,080.0	USA	1A	61	21,280.0	21,280.0	USA	12A	101	6,212.0	6,212.0	USA	Picant	141	28,200.0	28,200.0	USA	10MLE
22	2,070.0	2,070.0	USA	1B	62	21,280.0	21,280.0	USA	12B	102	8,142.0	8,142.0	USA	PanPadr	142	24,920.0	24,920.0	USA	12MLE
23	2,080.0	2,080.0	USA	1C	63	21,280.0	21,280.0	USA	12C	103	6,227.0	6,227.0	USA	Amigo P	143	21,200.0	21,200.0	USA	15MLE
24	2,080.0	2,080.0	USA	1D	64	21,280.0	21,280.0	USA	12D	104	6,224.0	6,224.0	USA	Amigo S	144	18,110.0	18,110.0	USA	17MLE
25	2,210.0	2,210.0	USA	1E	65	21,270.0	21,270.0	USA	12E	105					145	14,190.0	14,190.0	USA	20MLE
26					66	21,274.0	21,274.0	USA	12F	106					146	7,125.0	7,125.0	USA	40MLE
27	4,140.0	4,140.0	USA	4A	67	21,270.0	21,270.0	USA	12G	107	2,968.0	2,968.0	USA	Sonria	147	2,600.0	2,600.0	USA	80MLE
28	4,140.0	4,140.0	USA	4B	68					108	7,192.0	7,192.0	USA	ChubacP	148	1,800.0	1,800.0	USA	160MLE
29					69	25,200.0	25,200.0	USA	15A	109	7,194.0	7,194.0	USA	ChubacS	149				
30	8,230.0	8,230.0	USA	8A	70	25,200.0	25,200.0	USA	15B	110					150				
31	8,227.0	8,227.0	USA	8B	71	25,200.0	25,200.0	USA	15C	111	7,222.5	7,222.5	USA	Raja	151				
32	8,220.0	8,220.0	USA	8C	72	25,200.0	25,200.0	USA	15D	112	14,240.0	14,240.0	USA	Manana	152				
33					73	25,112.0	25,112.0	USA	15E	113	21,402.0	21,402.0	USA	PadVantm	153				
34	8,230.0	8,230.0	USA	8A	74	25,115.0	25,115.0	USA	15F	114					154				
35	8,227.0	8,227.0	USA	8B	75	25,118.0	25,118.0	USA	15G	115	6,516.0	6,516.0	USA	South Bnd	155				
36	8,201.0	8,201.0	USA	8C	76					116	8,122.0	8,122.0	USA	Stn Bnd A	156				
37	8,210.0	8,210.0	USA	8D	77					117	4,149.0	4,149.0	USA	South B4B	157				
38					78					118					158				
39	11,280.0	11,280.0	USA	13A	79					119	2,988.0	2,988.0	USA	HappyHr	159				
40	11,280.0	11,280.0	USA	13B	80					120	14,200.0	14,200.0	USA	Maritime	160				