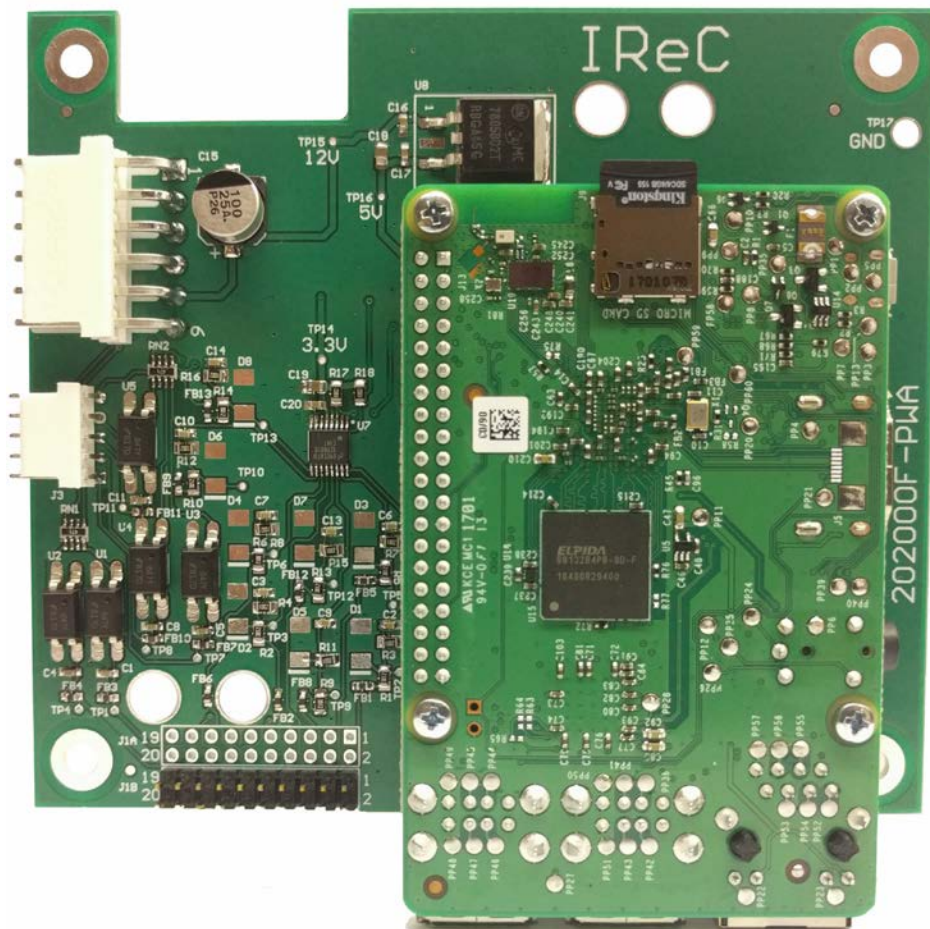




# IReC-1

## Internet Remote Control

Users' Manual and Installation Guide



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## Chapter 1.....Unpacking and getting started





## 1.1 – Board, wire assemblies, and CD

Open the package to be sure the following items are included

- A) Board – IReC-1
- B) Wire assemblies:
  - 1) Power, with extra header
  - 2) Flat ribbon cable
  - 3) RJ-45 Male to Female Ethernet cable
  - 4) Small signal cable
- C) Mounting hardware
- D) Users' Manual CD – Manual for the unit is listed as IReC-1.pdf

If any items are not included, please contact our office.

## 1.2 – Tools needed for installation

Philips screwdriver with #1 and/or #2 tip

Drill with 1/8" drill bit

Soldering tools – including iron, solder, and solder removing tool

Needle-nose pliers

Wire stripping tool

Diagonal cutter

1/4" Hex nut driver

Scissors

Vacuum

## 1.3 Identifying model of transmitter

The age of the unit will determine which portions of instructions will be necessary during the process of wiring to the motherboard. Crown Broadcast has made several different versions of motherboards over the years, so take note of the version being wired.

Most motherboards will have its part number, version and/or date along the right side or the front edge of the board. Silk-screening was also used for identification.

In some of the earlier versions, the version revision is part of the foil pattern along the front edge of the board. All versions will be able to be used. However, the earlier ones will require some modifications to the wire assemblies before installation as described in detail later.



## Chapter 2.....Installation

## 2.1 – Preparing the unit for installation

The unit will need to be disconnected from the power source and load and should be on a large flat surface.

Remove the top cover and screws and set aside.

The RJ-45 cable will need to be installed first. This will be installed in the hole for the tuner antenna connector on the back panel. It will be labeled [RECEIVER IN].

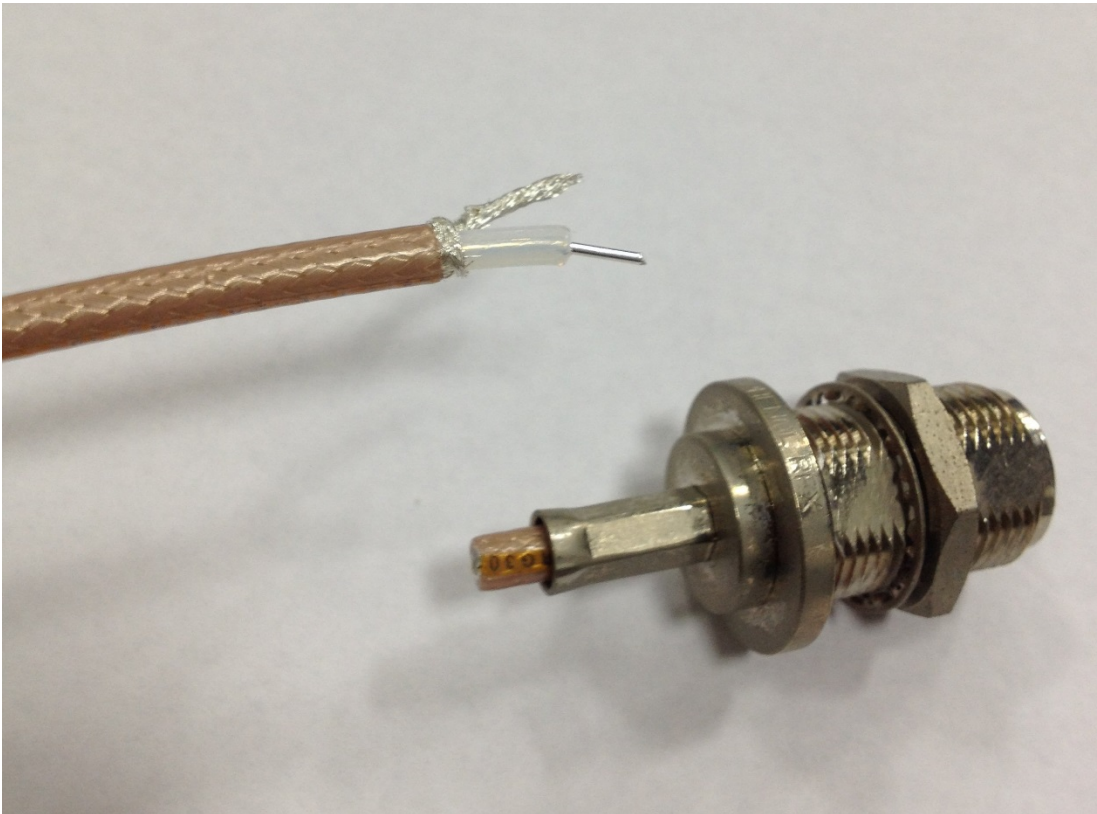


## 2.1.1 Modifying a unit with a tuner board

If the unit has a tuner, the tuner antenna connection will need to be changed to one of the unused BNC connectors that are on the back panel.

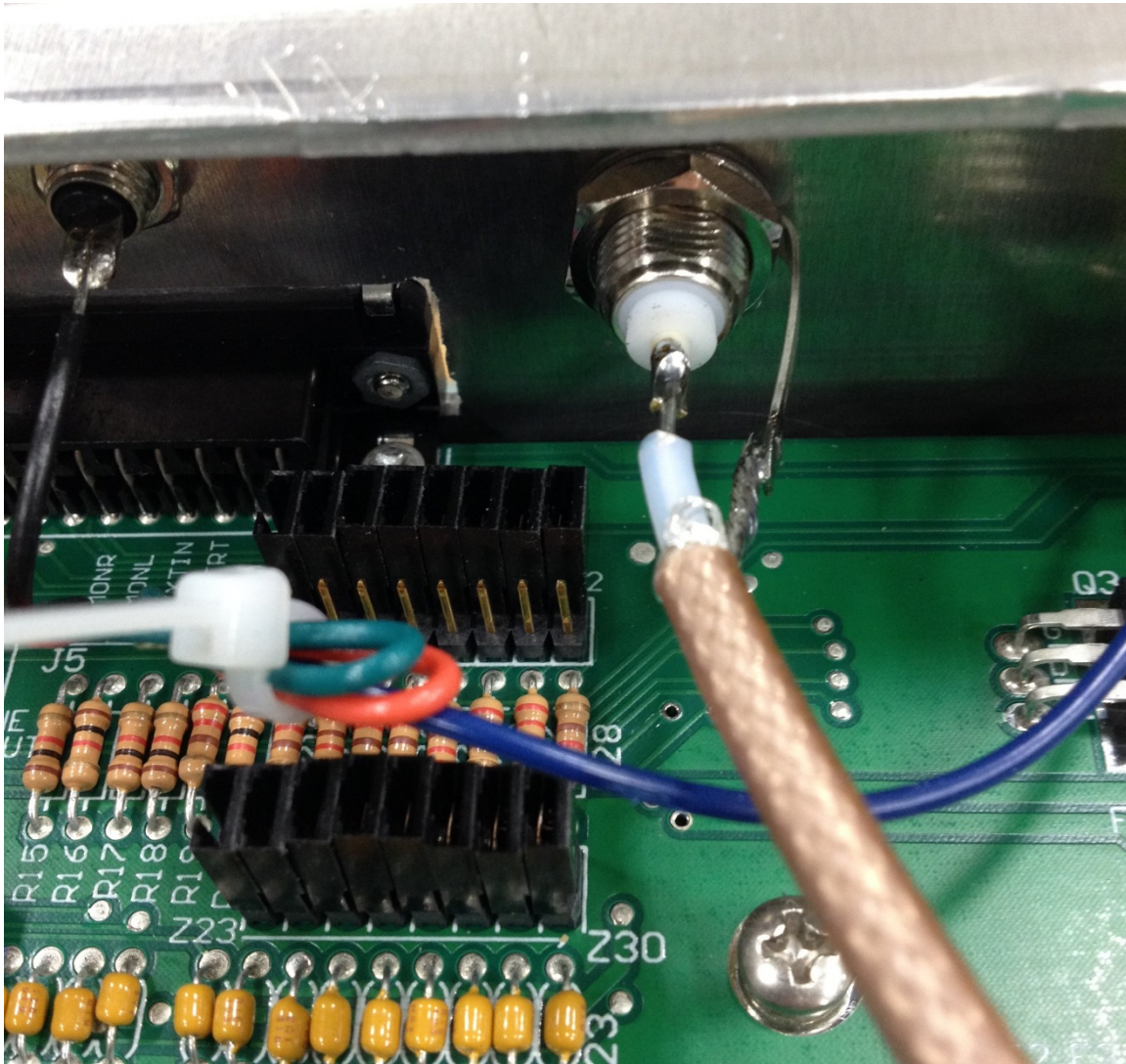
If the unit does not have a tuner, skip to section 2.2.

Carefully remove the “N” style connector from the back panel and cut the connector off. Strip back the insulation ½” and pull the braid back from one side and twist together as shown below.





If the composite connector will not be used, unsolder the wires from that connector and ty-wrap to the others as shown below. Then solder the tuner input wires that were prepared to the connector as shown below.



If the composite connector will be used, the only other choice of connectors will be one of the three used for SCA inputs. It is recommended to use the farthest one from the tuner to avoid interference with the cabling installation later. This will require that the SCA board be removed and the parts associated with this connector be removed as well. Then, the antenna input wire can be soldered directly to the board once re-installed as shown below.





## 2.2 Chassis and board mounting

### 2.2.1 Mounting the RJ-45 into the chassis

A) Locate the black colored hole plug on the back panel under the label [RECEIVER IN] and remove it.

B) Use a 1/8" drill bit and drill two holes centered exactly 0.175" from the edge of the hole to the left and right of the hole, centered vertically to the hole as shown below.



C) These two holes will match the mounting holes contained on the RJ-45 cable assembly.

D) Clean up any extra metal shavings that may have fallen into the unit with a vacuum.



The RJ-45 cable can now be installed into the chassis as shown below using the provided machine screws mounted in the cable end.

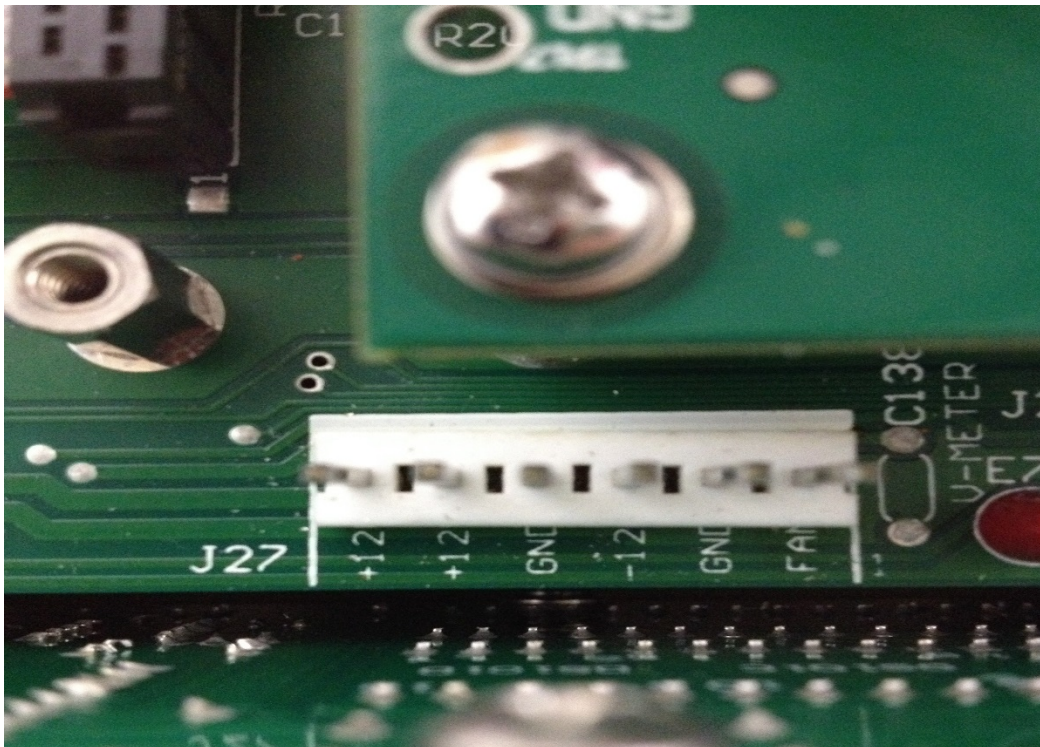


## 2.2.2 Installing the power connections

Obtain the power wire assembly with the extra header.

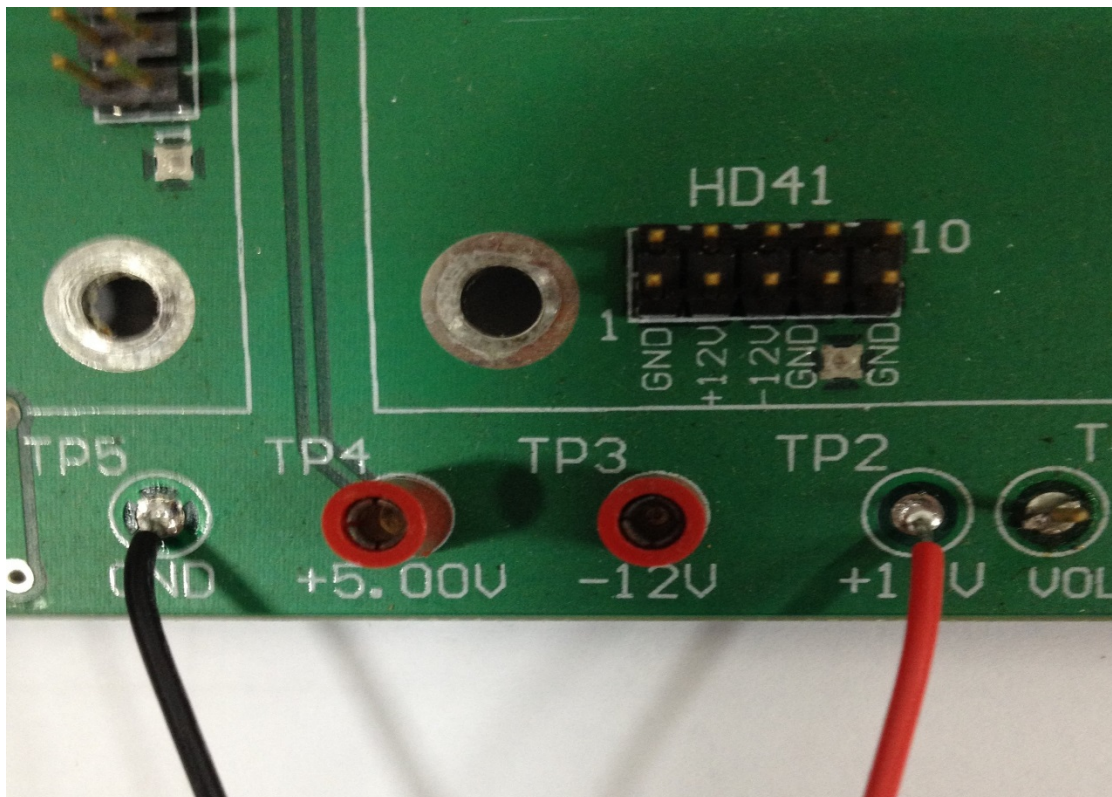
For motherboard revision level of 2007:

- A) Using solder wick (or your preferred method to remove solder), remove the solder in the holes of J27, along the front edge of the motherboard.
- B) Remove front panel assembly (two screws along top left and right corners and 4 screws along the bottom of the front panel).  
Remove the 3 cables that attach to the front panel boards. It is not necessary to disconnect the Power wires from the switches.
- C) Install the header onto the motherboard at location J27 - soldering in place.
- D) Replace front panel assembly.



For motherboard revision levels of 2005 and 2006:

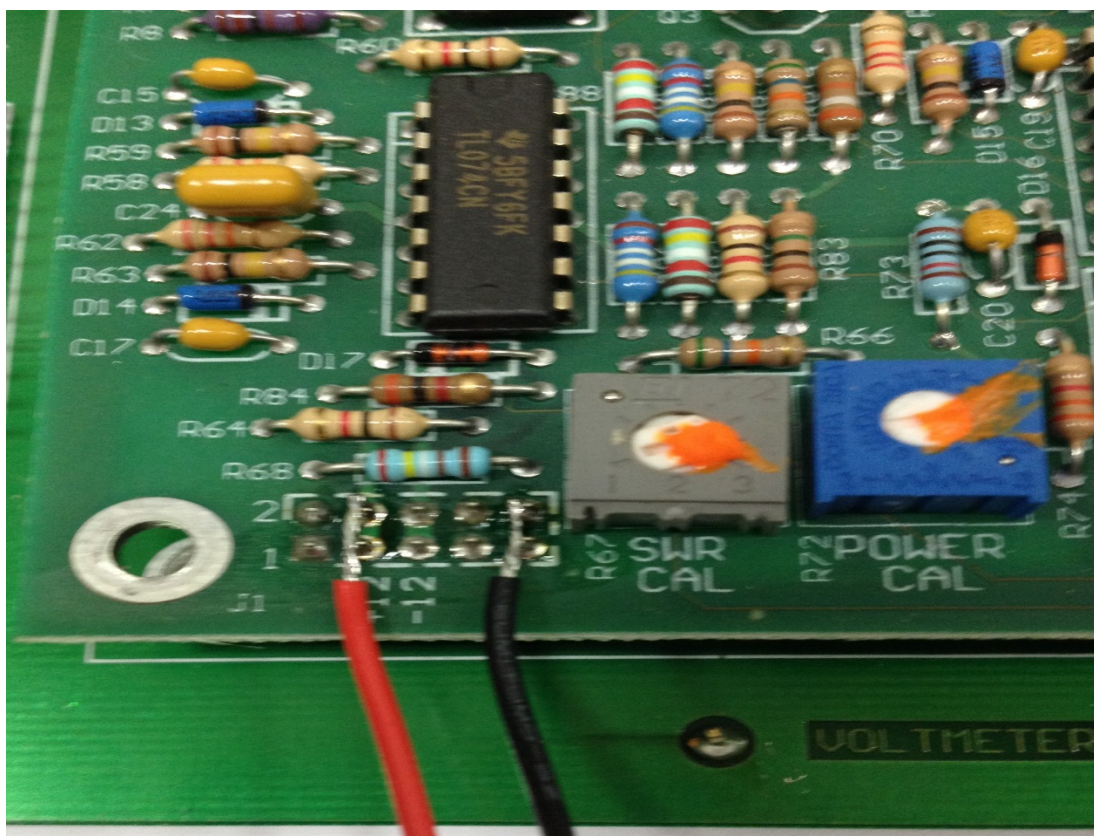
- A) Remove front panel assembly (two screws along top left and right corners and 4 screws along the bottom of the front panel). Remove the 3 cables that attach to the front panel boards. It is not necessary to disconnect the Power wires from the switches.
- B) Unsolder and remove TP2 and TP5 along the front edge of the motherboard.
- C) Remove the solder from these two points.
- D) On the power wire, cut one connector off as close to the connector as possible (black and red wires).
- E) Strip and tin the two open wires.
- F) Solder the black wire to TP5 (ground).
- G) Solder the red wire to TP2 (+12 V).
- H) Replace the front panel assembly.





For motherboard revision levels of MAR93 and 2004:

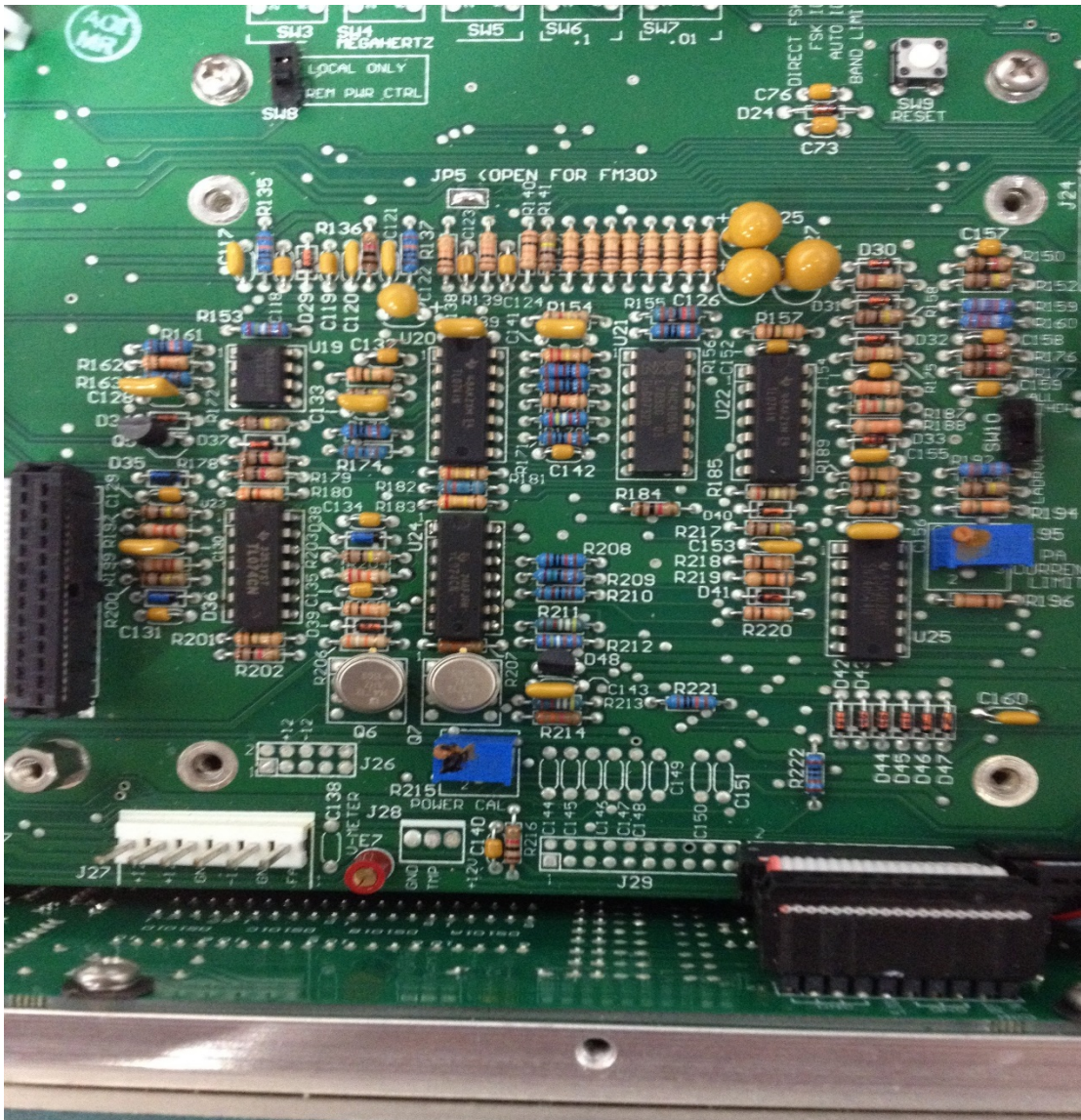
- A) On the power wire, cut one connector off as close to the connector as possible (black and red wires).
- B) Strip and tin the two open wires.
- C) Solder the black wire to the control/metering board at J1 pins 9 and 10. Care should be taken to avoid melting R67, which is next to the point of soldering.
- D) Solder the red wire to the control/metering board at J1 pins 3 and 4. Care should be taken to ensure proper soldering with no shorts to adjacent pads (pins 1 and 2 as well as pins 5 and 6).



## 2.2.3 Mounting the board into the unit

The board hardware can now be mounted.

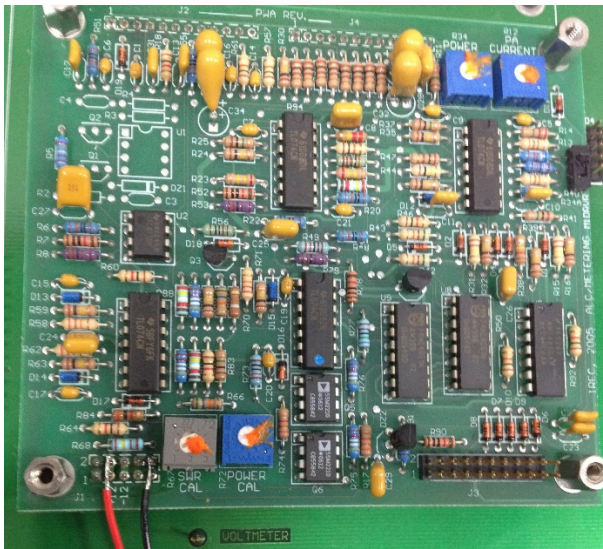
Remove the 4 screws that hold down the control/meter board. Or, if the unit has the metering circuits as part of the motherboard, remove the 4 screws surrounding that area as shown below.



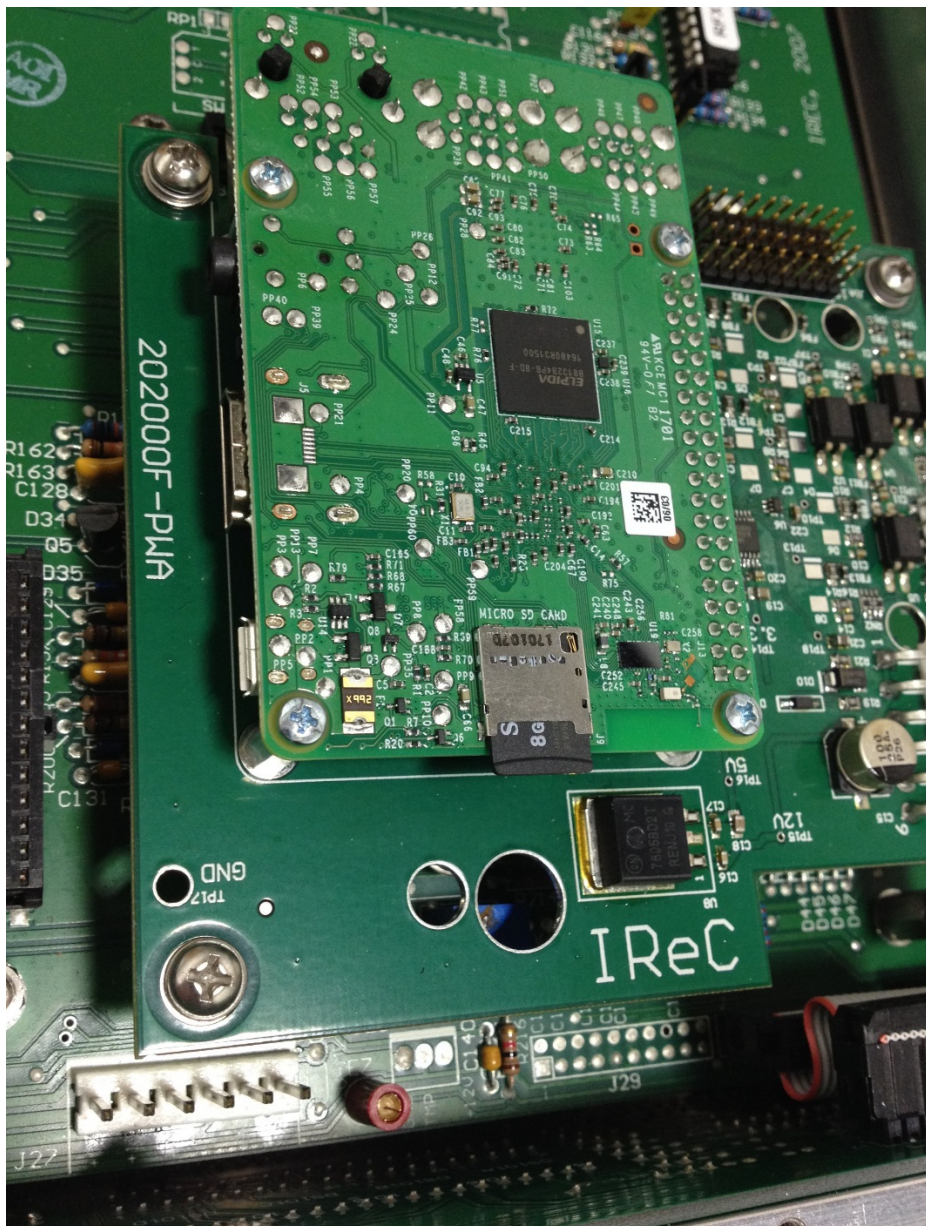


For units that have the metering board separate, install 4 hex stand-off bolts.

For units which have the metering contained on the motherboard, install all 8 hex stand-off bolts, doubling up two high for each post. Tighten at 6-8" lbs. as shown below.



Install the board on top of the stand-off bolts and use the provided hardware to secure it to the posts (6-32 x 5/16" SEMS + flat washer) as shown below. It may be necessary to fold over some of the large tantalum capacitors or ceramic capacitors for the board to mount flat.



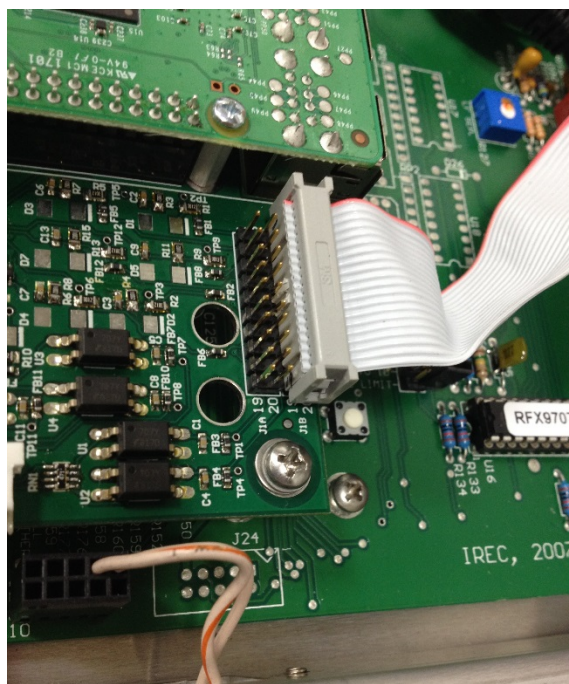
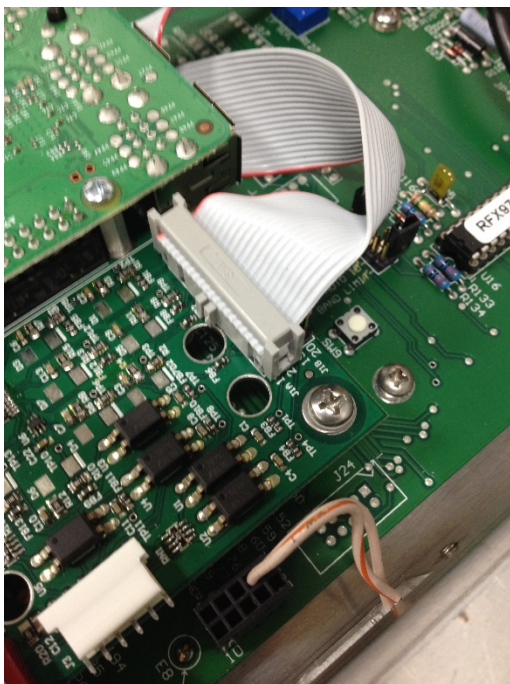


Plug the power wire assembly into the motherboard header at location J27 and into the board as shown below.





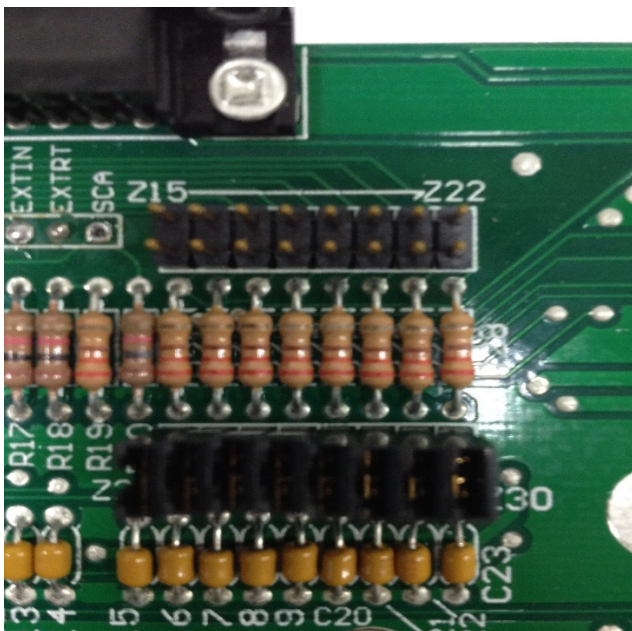
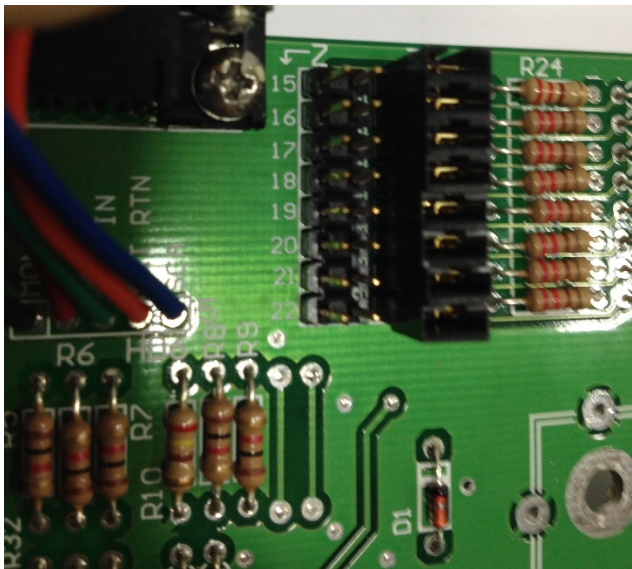
Plug the control/metering cable into the board as shown based on the revision of the motherboard. For motherboard revision of 2007, install cable on J1A with pin 1 (red stripe) toward the center of the unit. All other motherboard revision levels will install on J1B with pin 1 (red stripe) toward the center of the unit. It will also be necessary to remove the keying tab from the cable in order to install the cable onto J1B. See illustrations below.



## 2.3 Wiring the connections to the motherboard

### 2.3.1 Removing jumpers

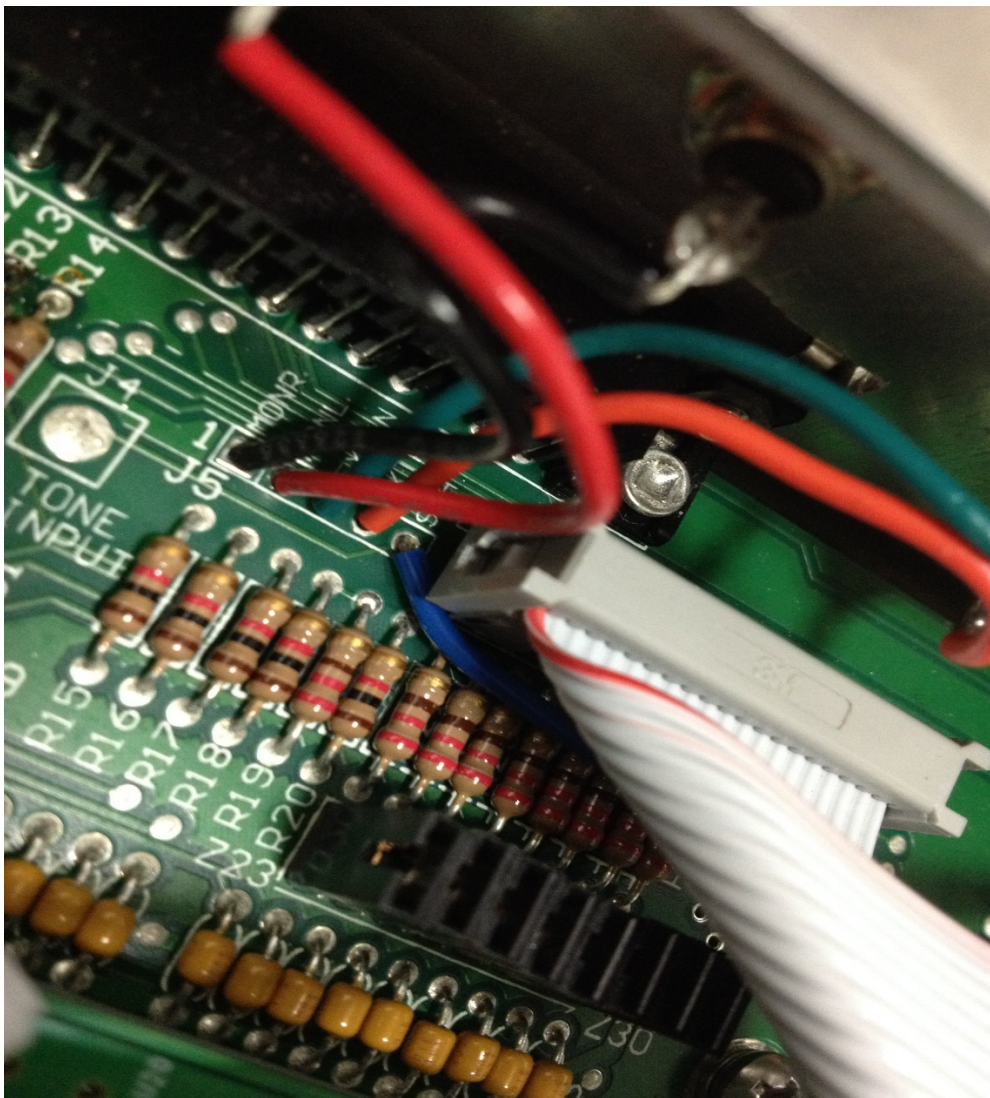
For motherboard revisions 2005, 2006, and 2007, locate and remove all header jumpers on Z15 through Z22. The jumpers will be in different locations between the revision levels. See illustrations below for locations. For revisions MAR93 and 2004, skip to step 2.3.4.





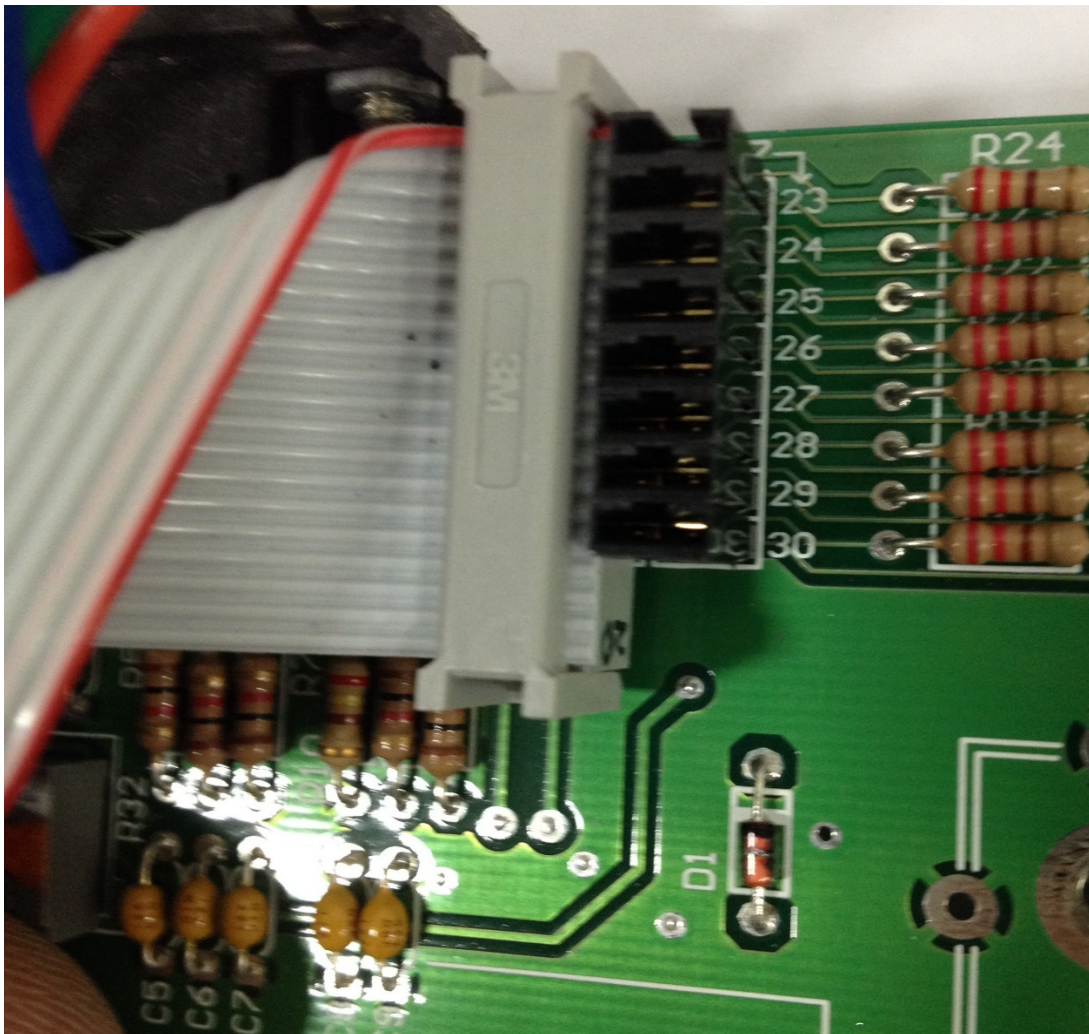
## 2.3.2 Installation of flat ribbon cable – revision 2007

For motherboard revision 2007, install the other end of the flat grey ribbon cable to the now empty dual row header with pin 1 (red stripe) on Z15 as shown below. NOTE: The flat ribbon cable has more sockets (20 pins) than the header has (16 pins). During installation, be sure pin 1 (red stripe) is on the correct end and is making proper connection. Installing incorrectly will result in improper readings and control.



## 2.3.3 Installation of flat ribbon cable – revisions 2005 and 2006

For motherboard revisions 2005 and 2006, install the other end of the flat grey ribbon cable to the now empty dual row header with pin 1 (red stripe) on Z15 as shown below. NOTE: The flat ribbon cable has more sockets (20 pins) than the header has (16 pins). During installation, be sure pin 1 (red stripe) is on the correct end and is making proper connection. Installing incorrectly will result in improper readings and control.



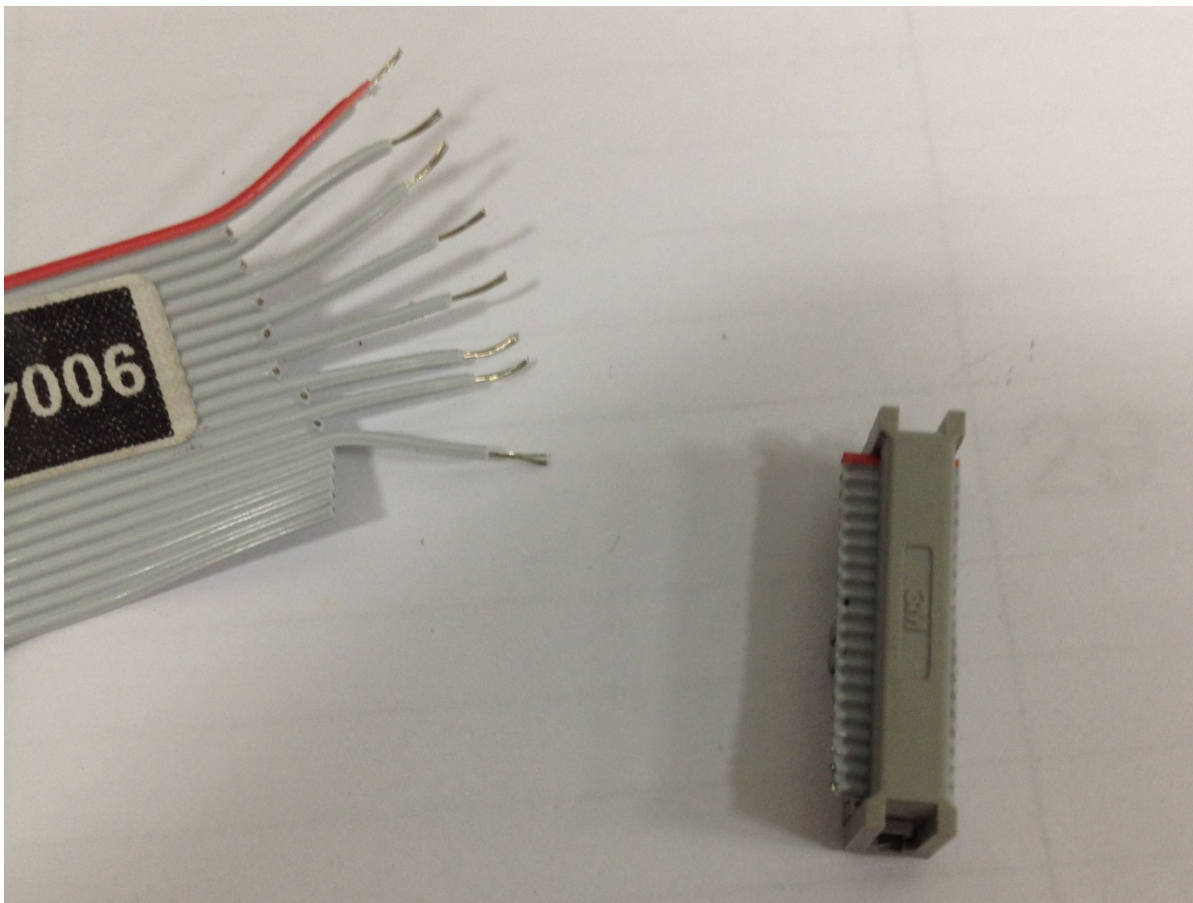


## 2.3.4 Installation of flat grey cable – revisions MAR93 and 2004

For motherboard revisions MAR93 and 2004, cut the end of the flat ribbon cable off as close as possible to the end of the connector using a pair of scissors.

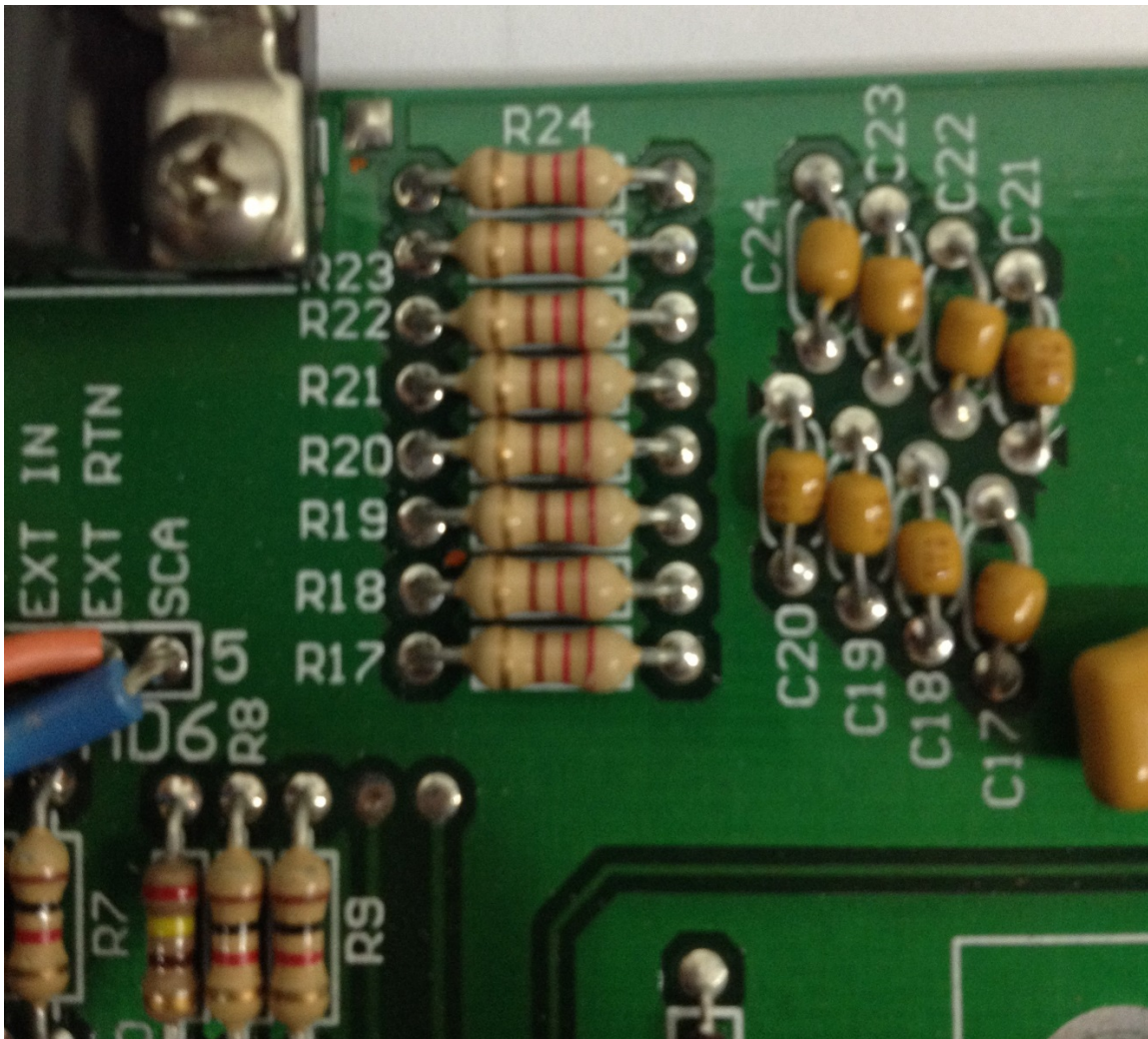
Cut, strip, and tin the following wire numbers as shown below. Pin 1 is the red stripe and increases away from the red stripe in numerical order Pin 1, 3, 5, 7, 9, 11, 13, 15.

Cut back the unused wires in the cable.



Solder the pins to the following locations on the motherboard as shown below. It is best to “J-Hook” the wire to each location to provide a good mechanical connection as well as a good electrical connection once soldered.

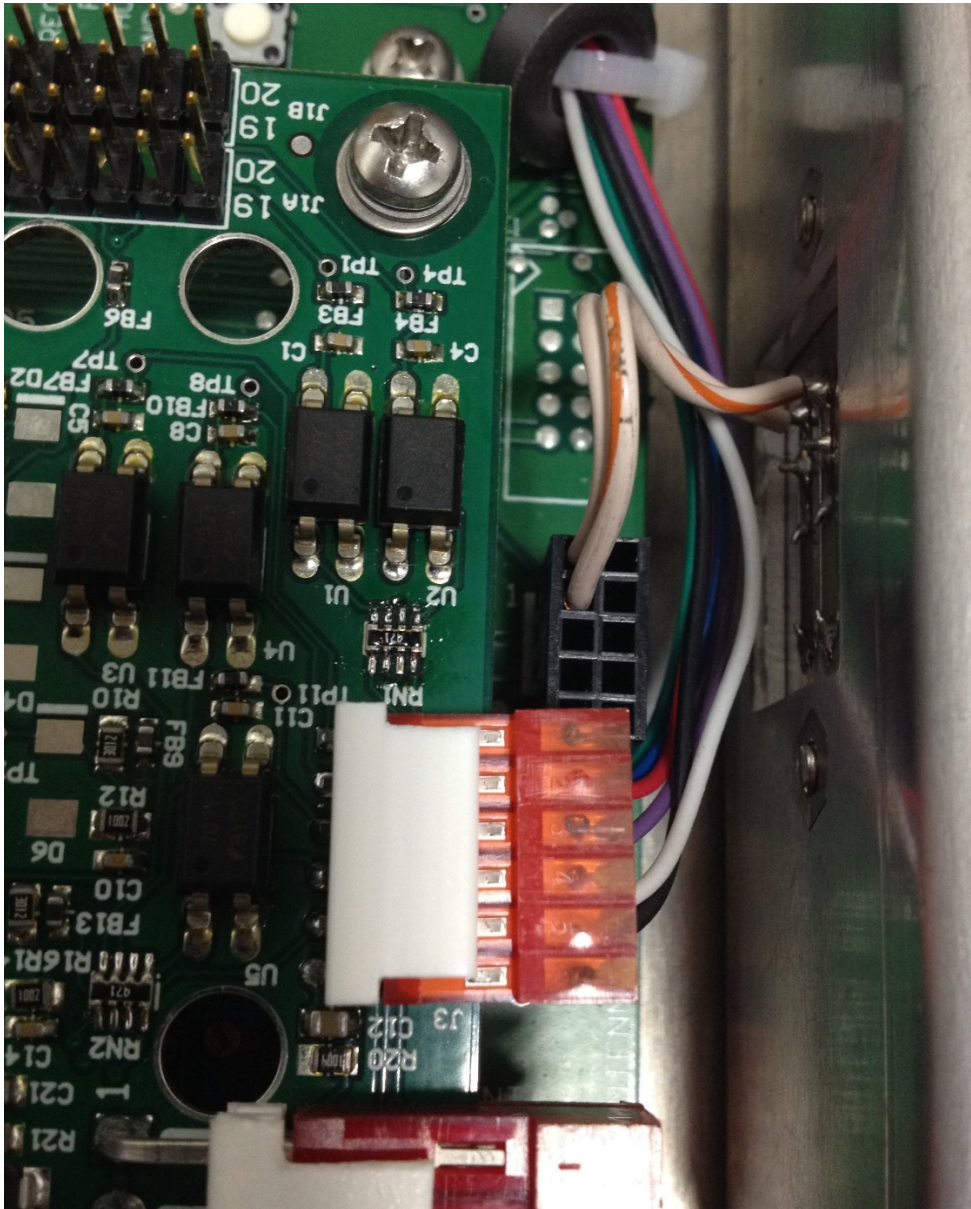
Pin 1 - left side of R24  
Pin 3 - left side of R23  
Pin 5 - left side of R22  
Pin 7 - left side of R21  
Pin 9 - left side of R20  
Pin 11 - left side of R19  
Pin 13 - left side of R18  
Pin 15 - left side of R17





## 2.3.5 Installation of small signal cable

Obtain the small signal cable (6 pin red connector with wires) and plug into board as shown below.



For motherboard revision level of 2007, it will be necessary to remove the Audio Processor / Stereo Generator board, if applicable, to attach some points onto the motherboard.

Route cable around right side of motherboard and back end of motherboard to install the wires onto the following locations – see illustrations below. Colors of cable may not match.

*(Green header as of 7/29/21 – wire colors were changed see bold text.)*

Pin 1 ( Green/WHITE ) – left side of R46

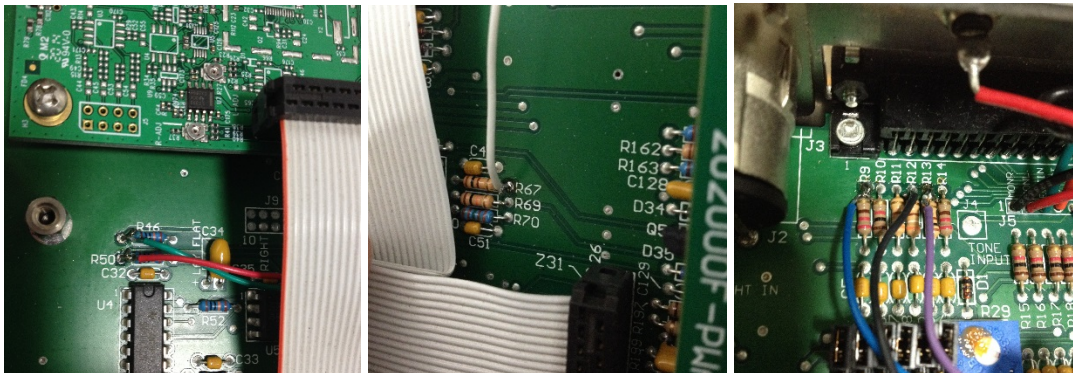
Pin 2 ( Red/YELLOW) – left side of R50

Pin 3 ( Blue/BLUE) – back side of R9

Pin 4 ( Purple/GREEN ) – back side of R13

Pin 5 (White/RED ) – right side of R67

Pin 6 ( Black/BLACK ) – back side of R12



For motherboard revision levels MAR 93 through 2006, route cable around right side of motherboard and back end of motherboard to install the wires onto the following locations – see illustration below. Colors of cable may not match.

Pin 1 – not used – cut stripped end off – if applicable

Pin 2 – not used – cut stripped end off – if applicable

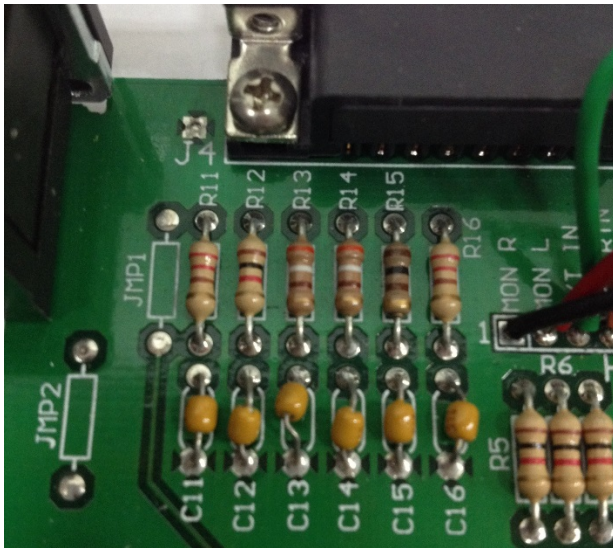
Pin 3 – back side of R11

Pin 4 – back side of R15



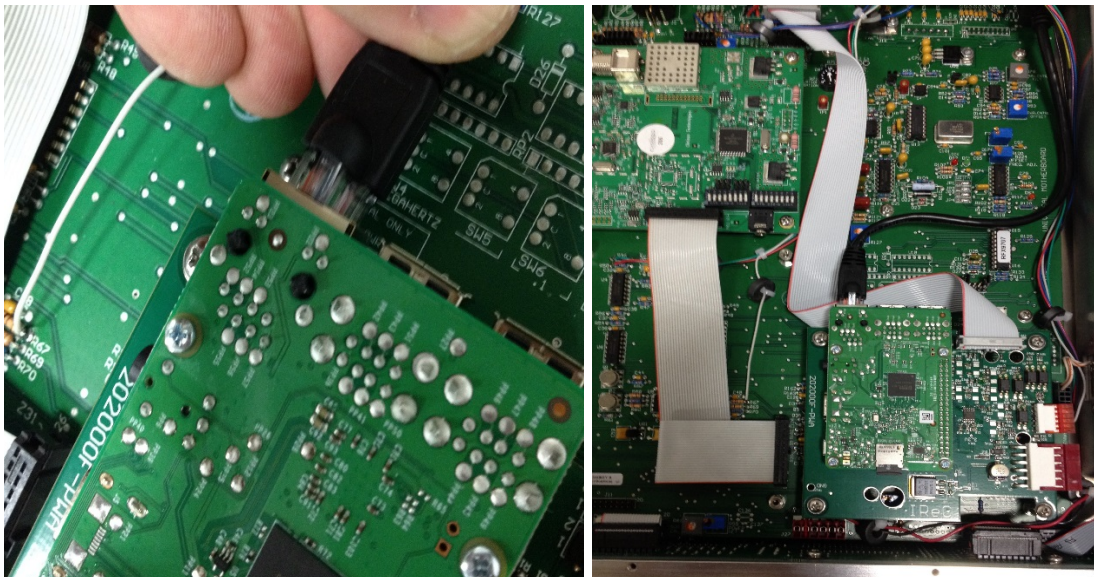
Pin 5 – not used – cut stripped end off – if applicable

Pin 6 – back side of R14



## 2.3.6 Connection to computer board with RJ-45 cable

Plug the RJ-45 cable into the receptacle on the computer board as shown below.



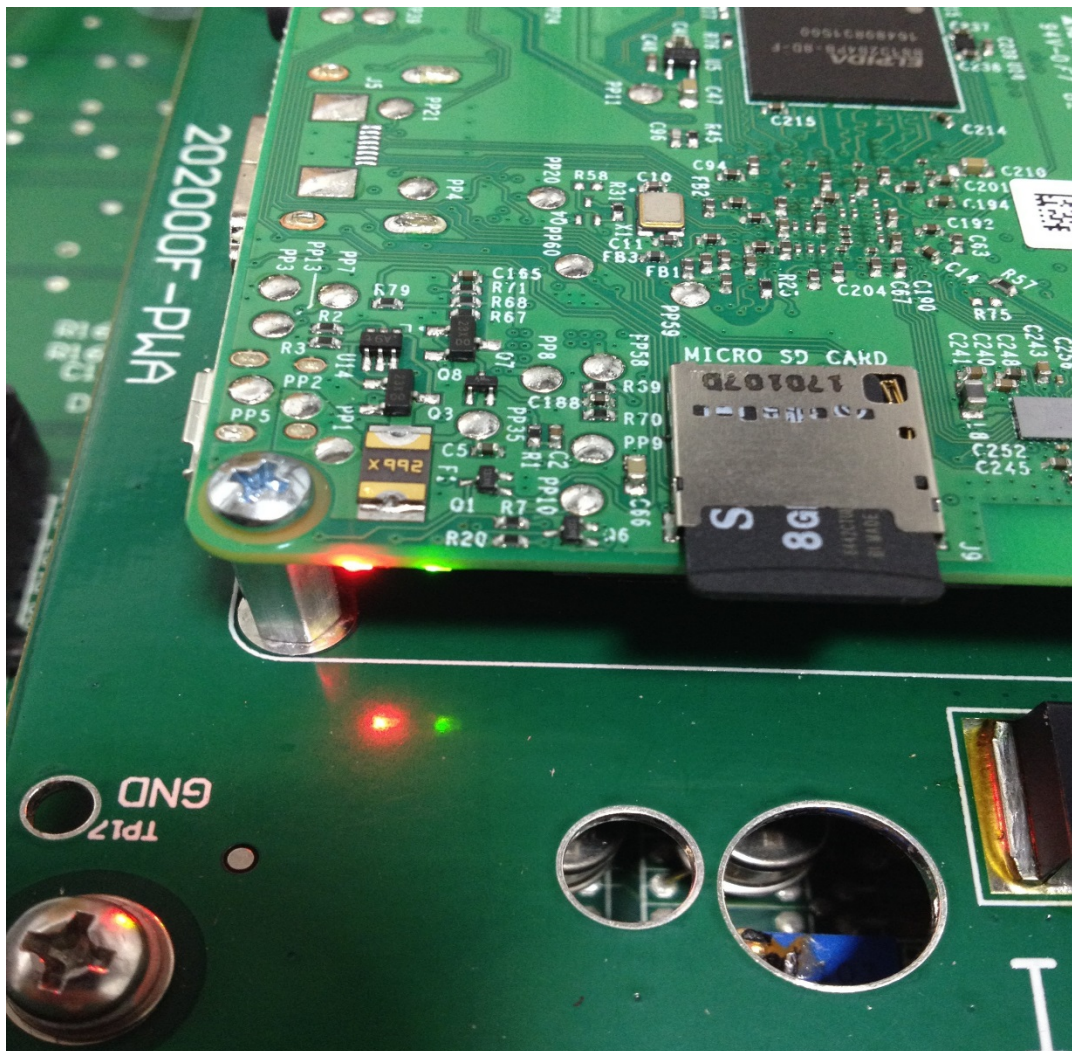
## 2.4 Initial power up

To pretest connections, install power source and power unit up without carrier.

Observe red and green LED's on the computer board. The red LED should illuminate continuously and the green should flash on and off eventually staying off with an occasional flash. This process should take about 1 minute.

Red LED indicates power.

Green LED indicates the micro SD card is being accessed.





## 2.5 Installing top cover protection label

Locate and install the cardboard piece on the inside of the top cover directly over the computer board.



The cardboard piece has one side with double sided tape on it. Use this side to attach to top cover after removing the backing (darker colored piece that is smaller in size).

Approximate dimensions are as follows (when cover is installed):

Distance from front edge of top panel to cardboard piece = 2"

Distance from left side of top panel to cardboard piece = 6"

Once installed, replace top cover and screws.



## Chapter 3..... Imbedded website

### 3.1 Imbedded website and the login screen

Crown Broadcast has set the factory defaults of the network settings for connection to the unit via the Ethernet cable to the following:

IP Address = 192.168.1.201

Subnet Mask = 255.255.255.0

Gateway = 192.168.1.1

DNS Server = 192.168.1.1

Crown Broadcast incorporates a secure server web site. The address must be listed as <https://192.168.1.201> to be directed to the secure site. This was done to protect the sensitive information contained in the SMTP and SNMP settings. We have included a security certificate on the Manual CD to be installed on the computer being used to connect to this site. Follow the computer operating system manual instructions of the computer being used to connect to the unit for installing this certificate properly.

A direct connection with a computer to the unit will need a cross-over cable. Be sure to take this into consideration before a connection to the unit is made.

As with any network connection, the computer being used to communicate with the unit must have the same Subnet Mask and the IP address will need to be 1 number different on the 4<sup>th</sup> section of the IP address. As an example, set the computer IP address and subnet mask to the following:

IP = 192.168.1.202

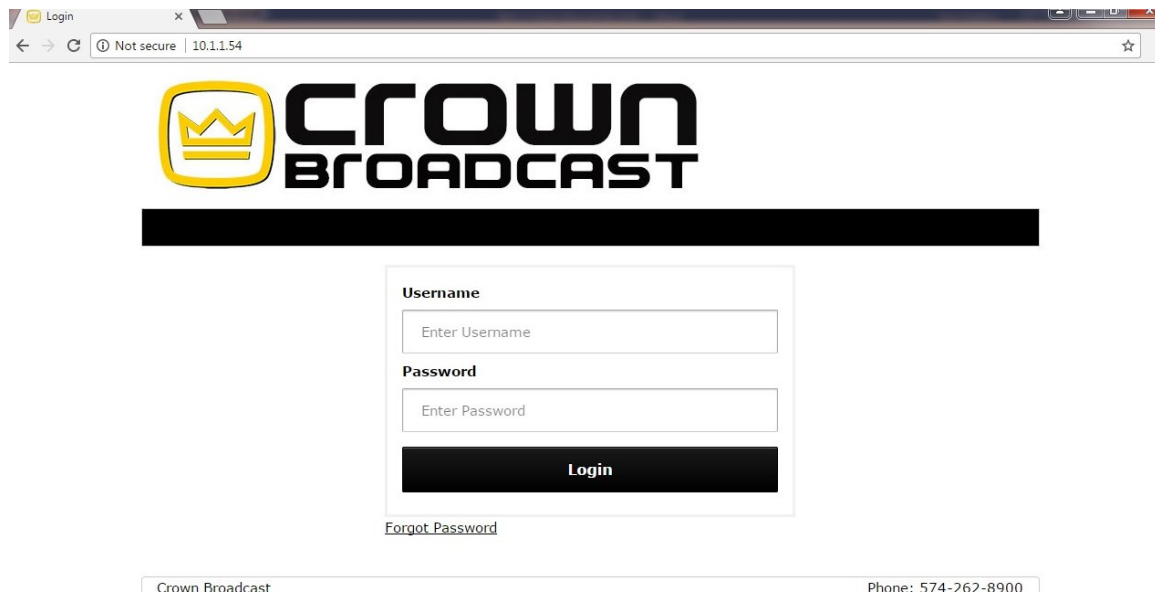
Subnet Mask = 255.255.255.0

This should allow proper connection to the unit.

Consult the computer and/or computer operating system manuals for procedures on how to change the IP address on the network port of the computer being used to connect to the unit.

If problems occur, please consult an IT professional to help resolve connection problems.

Once proper connection has been made to the unit, a log-in screen should appear as shown below.



Enter the factory default log-in credentials:

User: admin

password: admin

This will allow connection to the unit with Administrator privileges.

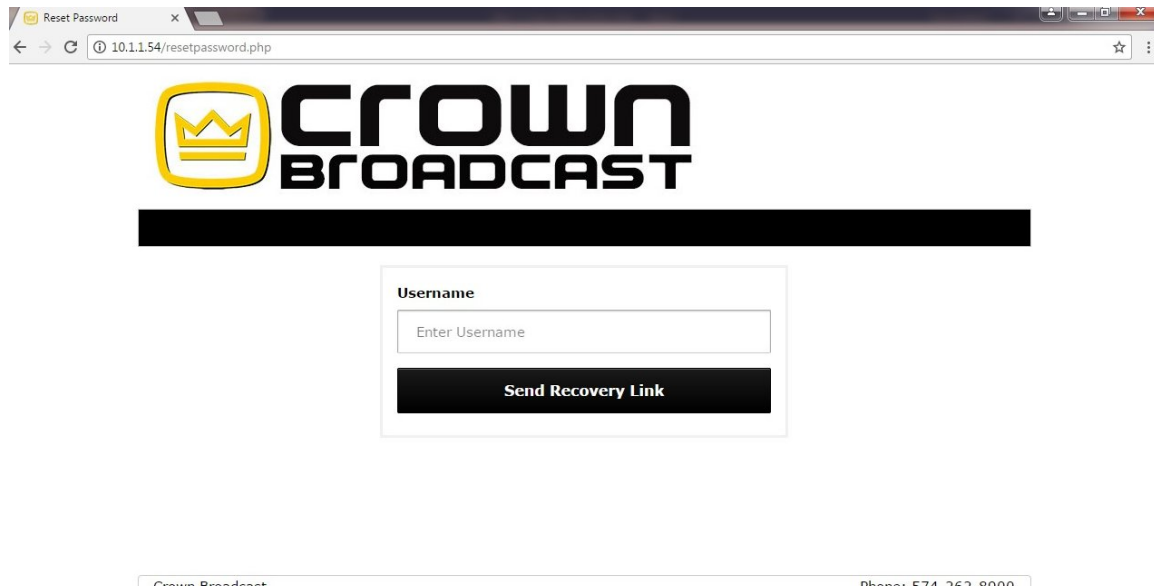
This is necessary to allow for changes needed to the log-in credentials explained later.

<<< NOTE: It is HIGHLY recommended to change the log-in credentials for the Administrator level access as soon as possible to avoid the possibility of unauthorized access to the unit. >>>

**SAVE THIS PASSWORD** – It is recommended to save your password in a “Digital Password Vault” type system to aid in recovery in case it is forgotten.

The log-in screen does have a “Forgot Password” link, but for this to work, an email address must be entered in the Administrator settings under the “Users” tab at the main panel after logging in.

When the “Forgot Password” link is chosen, the user name needs to be entered and then click on the “Send Recovery Link” button, as shown below.

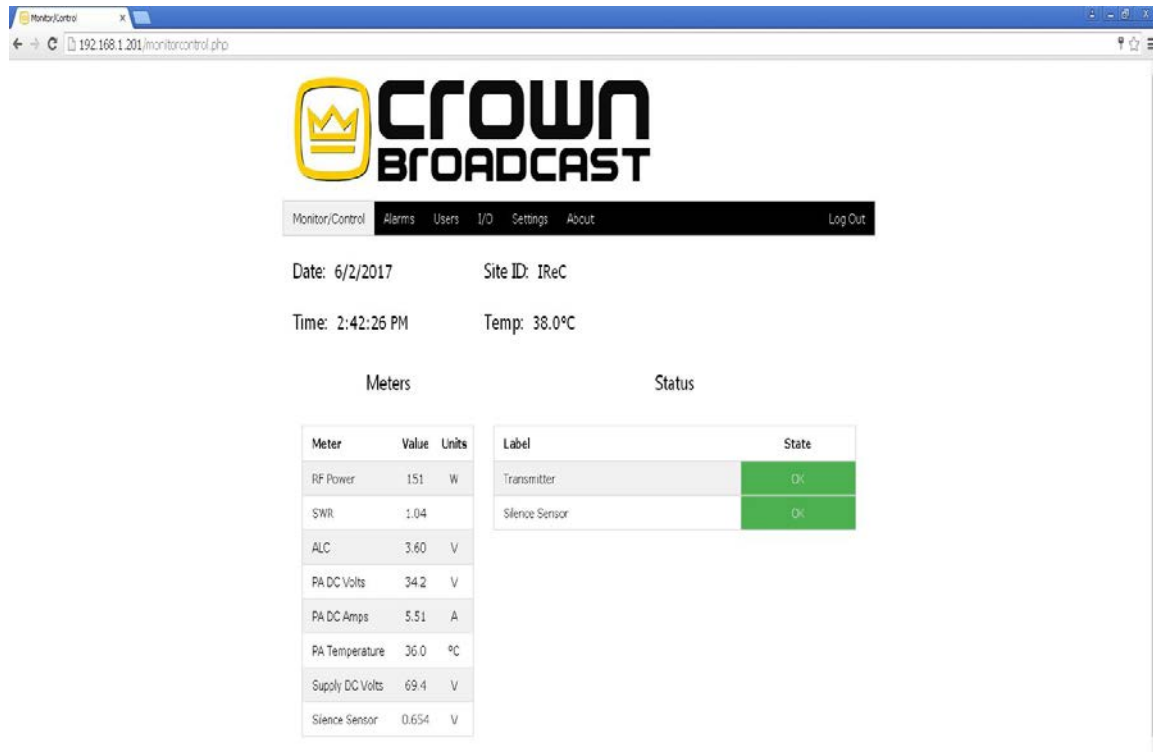


The screenshot shows a web browser window with the title 'Reset Password'. The address bar shows the URL '10.1.1.54/resetpassword.php'. The page features the 'Crown Broadcast' logo, which consists of a yellow crown icon inside a square followed by the text 'Crown BROADCAST' in a bold, black, sans-serif font. Below the logo is a thick black horizontal bar. Underneath this bar is a form with a 'Username' label. The form contains a text input field with the placeholder text 'Enter Username' and a black button with the white text 'Send Recovery Link'. At the bottom of the page, there is a thin horizontal bar containing the text 'Crown Broadcast' on the left and 'Phone: 574-262-8900' on the right.

An email will be sent to the address listed under the Administrator user. Follow the instructions contained in this email to reset the password correctly. There is a time limit that the information will remain valid for 30 minutes. After the time has expired, the information in the email will no longer work and the “Forgot Password” request will need to be repeated.

## 3.2 Main metering, status, and control page

The main control page will show current meter readings, status of the transmitter and silence detector, as well as relay controls that can be used to control the transmitter.



### 3.2.1 Metering

Metering is in the upper left section of the web site and shows the current metering channels and their levels. For the older motherboard revision levels of MAR 93 through 2006, the SWR reading will not function.

For kits, the metering channels will need to be calibrated as described in section 3.5. For units that already have come installed in the transmitter, these meter readings will have already been calibrated at the factory.

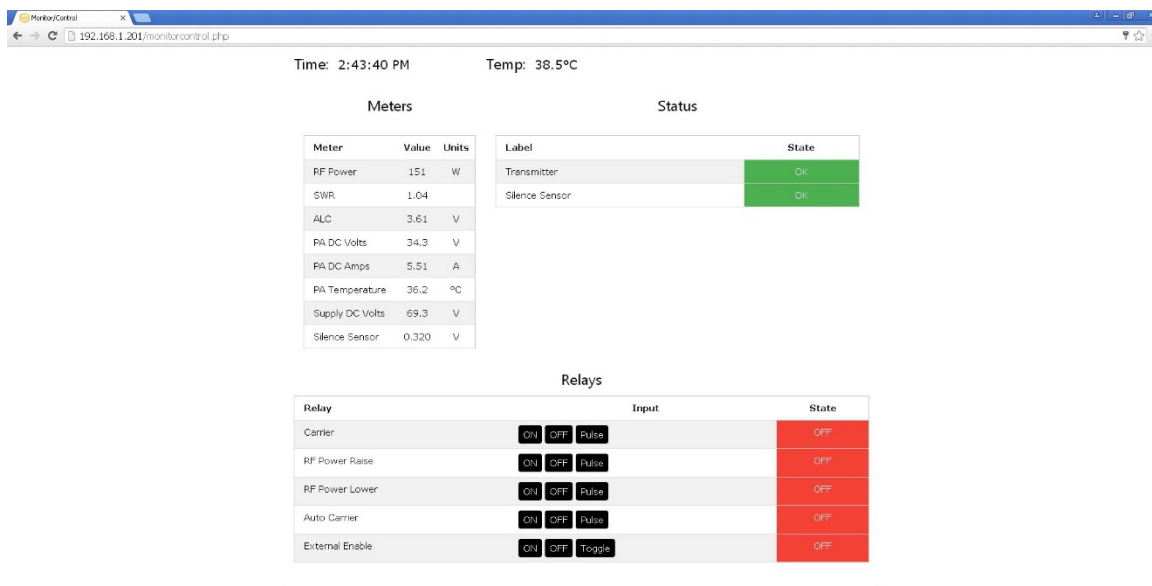


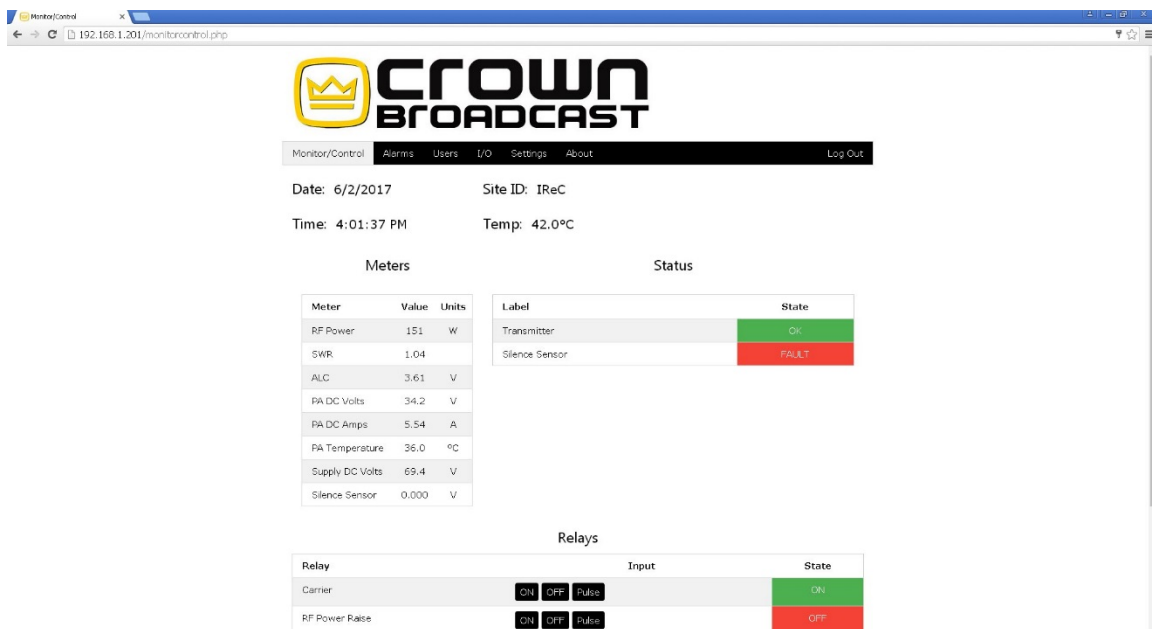
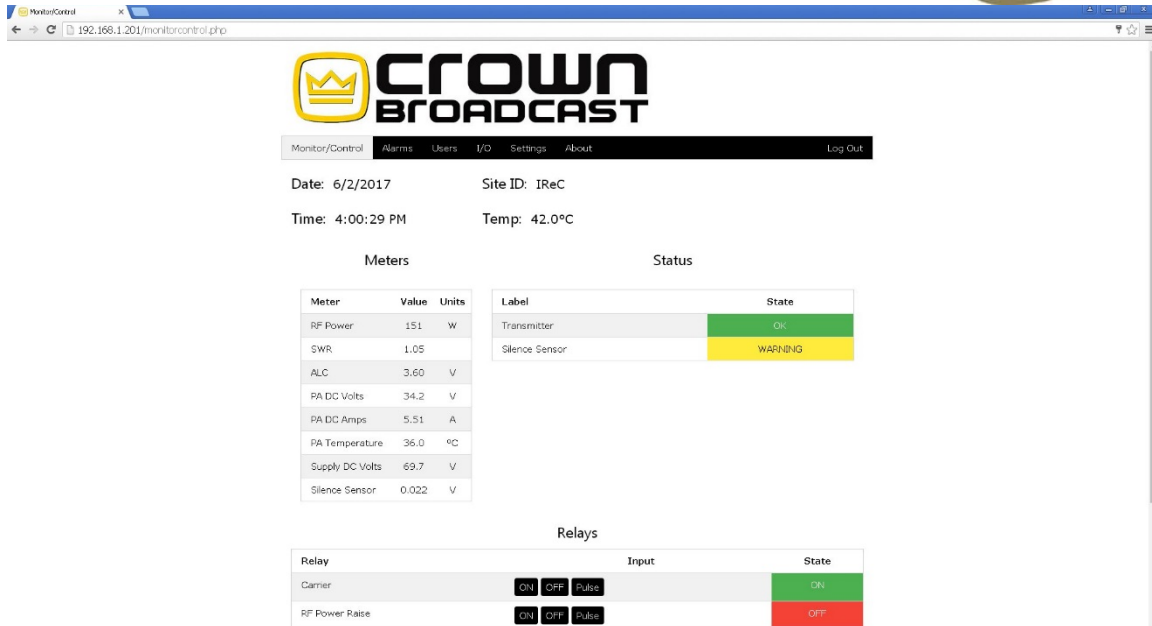
## 3.2.2 Status

The upper right section shows the status of the transmitter and silence detector. Status indicates the fault summary line status. Any flashing fault indicator on the front panel of the unit will cause the Green colored "OK" block to turn Red with the word "FAULT" in it.

The Silence Sensor indicator will be Green and will indicate "OK" during normal levels of program material. When program material ceases to be present, this block will change to Yellow with the word "WARNING" in it, then eventually change to Red with the word "FAULT" in it.

The action of this indicator reflects a typical slow VU meter with timing set by the design of the sensor. This design approach allows the user to be able to set the timing of the alarm sensor with good accuracy. This setting will be described later.





## 3.2.3 Control

The lower section shows the optically isolated controls for the transmitter. For transmitters with older motherboard revision levels of MAR 93 through 2006, the controls for raise and lower power will not be functional. Each control can be used as a latching control (ON / OFF / Toggle) or as a momentary control (Pulse – time defined) which is set up in the I/O section described later.

The factory default settings are shown.

← ↻ 🔒 Not secure | <https://192.168.1.201/monitorcontrol.php>

PA DC Amps	3.23	A
PA Temperature	36.6	°C
Supply DC Volts	71.7	V
Silence Sensor	0.479	V

Relays

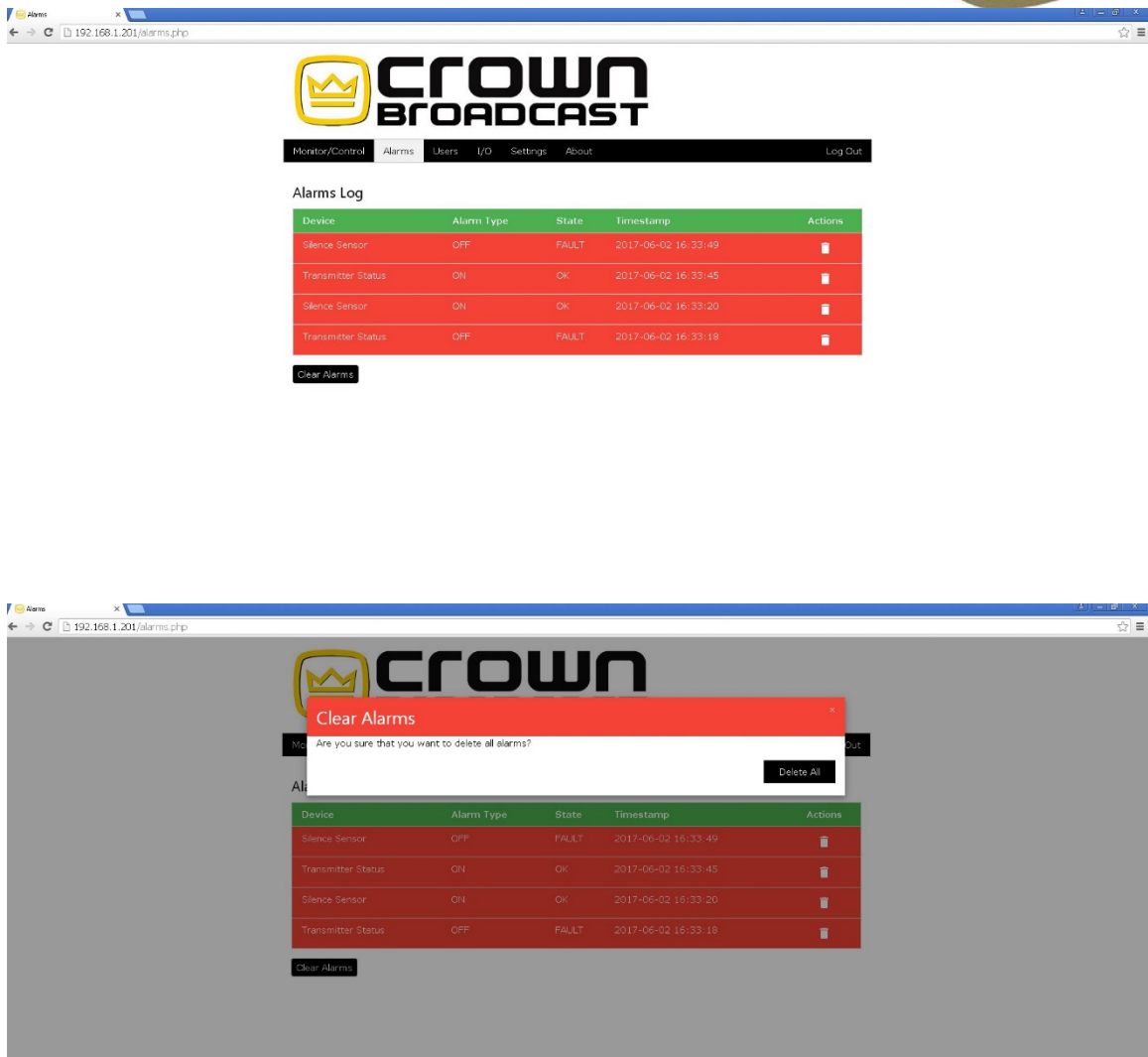
Relay	Input	State
Carrier	ON OFF Toggle	ON
RF Power Raise	ON OFF Pulse	OFF
RF Power Lower	ON OFF Pulse	OFF
Auto Carrier	ON OFF Toggle	OFF
External Enable	ON OFF Toggle	OFF

Crown Broadcast 2524 Toledo Road Elkhart, IN 46516 U.S.A.	Phone: 574-262-8900 Fax: 574-970-8909 Sales: 866-262-8972 <a href="mailto:fmsales@irec1.com">fmsales@irec1.com</a>
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## 3.3 Main Alarms page

The Alarms tab shows current saved alarms based on alarm set-up in the I/O section. Information about the alarm will be displayed. These alarms will not be cleared unless prompted by the user by clicking on the “Clear Alarms” button at the bottom of the list as shown below. A warning message will also need to be satisfied in case of an accidental selection.



## 3.4 Main user setup page

Users set up tab will have the listings and credential levels of all users. Factory default settings will show the three levels of access and each level of access.

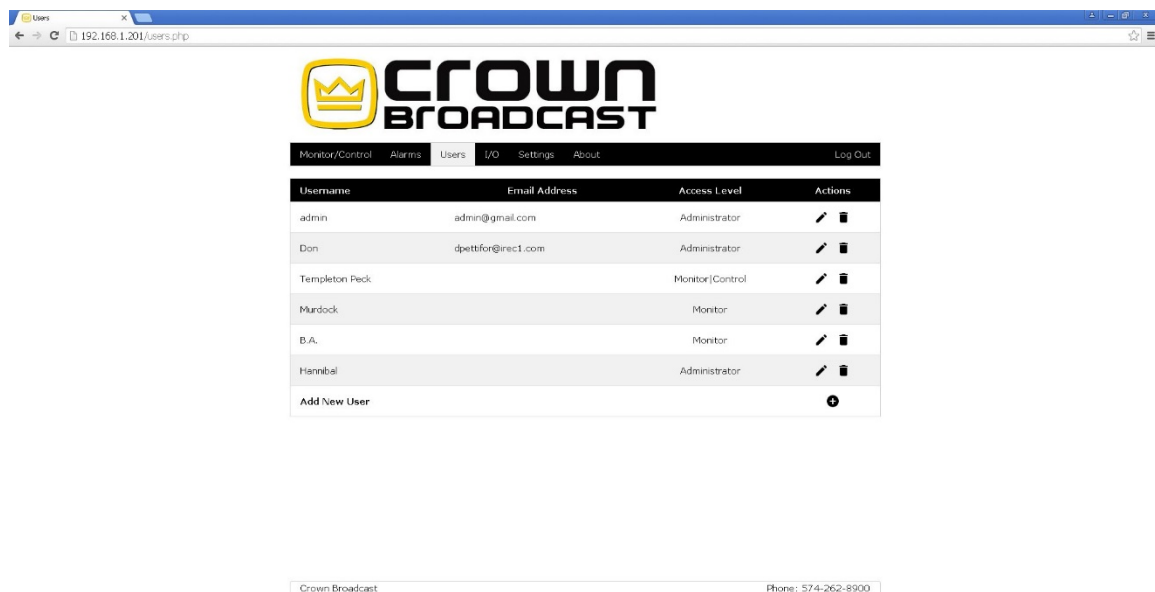
“Admin” level access will allow all access to all tabs. This level should be restricted to the engineer responsible for setting up access for all the rest of the users.

“Monitor and Control” level access will allow access to the first page and allow the user to monitor and control the transmitter.. Access to the settings and I/O tabs are restricted to viewing only. Controls and setting areas in these pages are greyed out.

“Monitor Only” will only allow monitoring of the first page. This user cannot control the transmitter. The user can view the different tabs, but like the previously described level, the settings are greyed out.

To change the settings, click on the pencil icon which will bring up another menu that can be edited with Administrator access.

At the bottom of the list is a selection for adding users. There is no limit to the number of users allowed. This will allow for flexibility of the email alarms.
















The screenshot shows a web browser window displaying the 'Users' page of the Crown Broadcast IREC system. The page has a navigation bar with tabs: Monitor/Control, Alarms, Users (selected), I/O, Settings, and About. A 'Log Out' link is also present. Below the navigation bar is a table listing existing users with columns for Username, Email Address, Access Level, and Actions. The table includes users like 'admin', 'Don', 'Templeton Peck', 'Murdock', 'B.A.', and 'Hannibal'. At the bottom of the table is a link to 'Add New User'. The footer of the page displays 'Crown Broadcast' and the phone number '574-262-8900'.

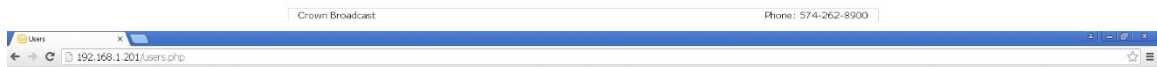
Username	Email Address	Access Level	Actions
admin	admin@gmail.com	Administrator	[Edit] [Delete]
Don	dpettfor@irec1.com	Administrator	[Edit] [Delete]
Templeton Peck		Monitor/Control	[Edit] [Delete]
Murdock		Monitor	[Edit] [Delete]
B.A.		Monitor	[Edit] [Delete]
Hannibal		Administrator	[Edit] [Delete]
Add New User			[Add]
















# IREC



Monitor/Control Alarms Users I/O Settings About Log Out			
Username	Email Address	Access Level	Actions
admin	admin@gmail.com	Administrator	 
Don	dpettfor@irec1.com	Administrator	 
Templeton Peck		Monitor/Control	 
Murdock		Monitor	 
B.A.		Monitor	 
Hannibal		Administrator	 
Add New User			



Username	Email Address	Access Level	Actions
admin	admin@gmail.com	Administrator	 
Don	dpettfor@irec1.com	Administrator	 
Templeton Peck		Monitor/Control	 
Murdock		Monitor	 
B.A.		Monitor	 
Hannibal		Administrator	 
Add New User			

Add User

Username

Password

Email Address

Access Level

☒ Admin  
☐ Monitor and Control  
☐ Monitor Only

Save

Crown Broadcast  
2524 Toledo Road  
Elkhart, IN 46516  
U.S.A.

Phone: 574-262-8900  
Fax: 574-970-8909  
Service: 866-262-8917  
[service@irec1.com](mailto:service@irec1.com)

Username	Email Address	Access Level	Actions
admin	admin@gmail.com	Administrator	[Edit] [Delete]
Don	dpettfor@irec1.com	Administrator	[Edit] [Delete]
Templeton Peck		Monitor Control	[Edit] [Delete]
Murdock		Monitor	[Edit] [Delete]
B.A.		Monitor	[Edit] [Delete]
Hannibal		Administrator	[Edit] [Delete]
Add New User			[Add]

### Add User

Username  
anyone

Password  
\*\*\*\*\*

Email Address  
Anyone@anyemail.com

Access Level  
☐ Admin  
☒ Monitor and Control  
☐ Monitor Only

Save

## 3.5 Main I/O (input / output) setup page

The I/O (input / output) setup page allows configuration for each metering, status, and control channel as well as the silence sensor and temperature alarm set points. It also has a listing of the users and check boxes available to set email addresses where alarms should be sent. The email for the different users were set up previously in the “Users” tab but will not show up in this area.

## CROWN BROADCAST

Monitor/Control / Alarms / Users / I/O / Settings / About / Log Out

Select Device  
Meter

Select Meter  
RF Watts

Calibration  
Printer Panel Reading

Live Output: 151.25

Save Calibration

### Setup Alarms

Email Alarms			
Username	High	Low	Exit
Templeton Peck	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Murdock	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
B.A.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Hannibal	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Alarms		Set Points	
High	<input checked="" type="checkbox"/>	High Point	155
Low	<input checked="" type="checkbox"/>	Low Point	135
Exit	<input checked="" type="checkbox"/>	Delay Time	10

Log Device  
☒

Save Settings

## 3.5.1 Set-points

Each parameter can set a “High” and “Low” point of the reading as well as when the reading returns to a normal state, called “Exit”. It also has a setting for a time delay before the setting is validated as an alarm. This setting is in seconds and has no time limit.

**Setup Alarms**

Username	High	Low	Exit
Templeton Peck	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Murdock	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
B.A.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Hannibal	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Alarms	Set Points
High <input checked="" type="checkbox"/>	High Point: 155
Low <input checked="" type="checkbox"/>	Low Point: 135
Exit <input checked="" type="checkbox"/>	Delay Time: 10

Log Device ☒

Save Settings

## 3.5.2 Channel reading calibration

Each channel can also be calibrated to agree with the front panel readings. A live display is shown to aid in the process of calibration. This live reading assures the operator that the calibration took place. This live reading is the same reading as what is displayed on the main metering/control page.

To calibrate the channel, first select the channel from the drop-down menu. Enter the reading desired to be displayed into the blank window directly below the “Calibration” descriptor. Once the entry is done, click on “Save Calibration” to enter the new value into the unit.



The image shows two screenshots of a web browser displaying the 'Crown Broadcast' interface. The browser's address bar shows '192.168.1.201/lo.php'.

**Top Screenshot:**

- Navigation Bar:** Monitor/Control, Alarms, Users, I/O, Settings, About, Log Out.
- Select Device:** Meter (dropdown menu).
- Select Meter:** PA Temperature (dropdown menu).
- Calibration:** Enter Panel Reading (input field).
- Live Output:** 36.10.
- Buttons:** Save Calibration.
- Setup Alarms:**
  - Email Alarms Table:**

Username	High	Low	Exit
Templeton Peck	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Murdock	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B.A.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hannibal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
  - Alarms:** High, Low, Exit (checkboxes).
  - Set Points:** High Point (0), Low Point (0), Delay Time (0) (input fields).
  - Log Device:** ☐
- Buttons:** Save Settings.

**Bottom Screenshot:**

- Navigation Bar:** Monitor/Control, Alarms, Users, I/O, Settings, About, Log Out.
- Select Device:** Meter (dropdown menu).
- Select Meter:** PA Temperature (dropdown menu).
- Calibration:** Enter Panel Reading (input field).
- Live Output:** 36.10.
- Buttons:** Save Calibration.
- Setup Alarms:**
  - Email Alarms Table:**

Username	High	Low	Exit
Templeton Peck	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Murdock	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B.A.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hannibal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
  - Alarms:** High, Low, Exit (checkboxes).
  - Set Points:** High Point (0), Low Point (0), Delay Time (0) (input fields).
  - Log Device:** ☐
- Buttons:** Save Settings.

Crown Broadcast  
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Phone: 574-262-8900  
Fax: 574-970-8909  
Service: 866-262-8917  
[service@irec1.com](mailto:service@irec1.com)

## 3.5.3 Email alarm settings

The email selection for each user can be set for “High”, “Low”, or “Exit”. Checking these boxes will send an email to the user listed when the conditions are satisfied as a valid alarm.

**Crown Broadcast**

Monitor/Control Alarms Users I/O Settings About Log Out

Select Device: Meter

Select Meter: RF Watts

Calibration: Enter Panel Reading

Live Output: 151.25

Save Calibration

Setup Alarms

Email Alarms			
Username	High	Low	Exit
Templeton Peck	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Murdock	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
B.A.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Hannibal	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Alarms: High ☒ Low ☒ Exit ☒

Set Points: High Point: 155 Low Point: 135 Delay Time: 10

Log Device: ☒

Save Settings

## 3.5.4 Logging selections

There is also an option for logging the selection near the lower right area of this window called “Log Device”. Check this box to enable logging of the parameter. Timing for the logging feature is set up in the “Settings” tab, which is described later.

## 3.6 Settings

The settings tab will have all of the network communication settings including the IP information, SMTP, SNMP, logging information, email alarm timing, time zone information, and unit identification.

### 3.6.1 IP address configuration settings

IP configuration matches typical IP equipment. Factory default will have the IP information set to “Static IP” to allow for ease in initial set up.

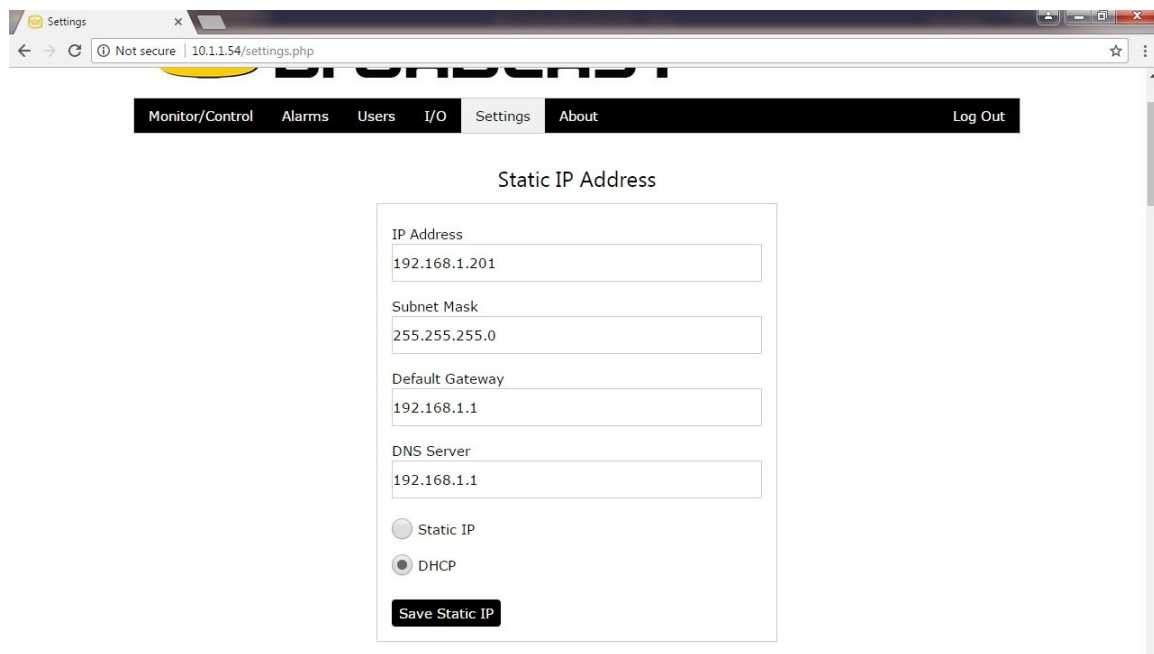
IP Address = 192.168.1.201

Subnet Mask = 255.255.255.0

Default Gateway = 192.168.1.1

DNS Server = 192.168.1.1

There is a selection to allow for “DHCP” if desired. Be sure to click on the label “Save Static IP” to save the changes.



The screenshot shows a web browser window with the address bar displaying "10.1.1.54/settings.php". The page has a navigation bar with links: Monitor/Control, Alarms, Users, I/O, Settings (active), and About. A "Log Out" button is also present. The main content area is titled "Static IP Address" and contains a form with the following fields:

- IP Address: 192.168.1.201
- Subnet Mask: 255.255.255.0
- Default Gateway: 192.168.1.1
- DNS Server: 192.168.1.1

Below the fields are two radio buttons: "Static IP" (selected) and "DHCP". At the bottom of the form is a "Save Static IP" button.



## 3.6.2 SMTP settings

The SMTP (Simple Mail Transfer Protocol) will need to have the proper information filled out to send email alerts.

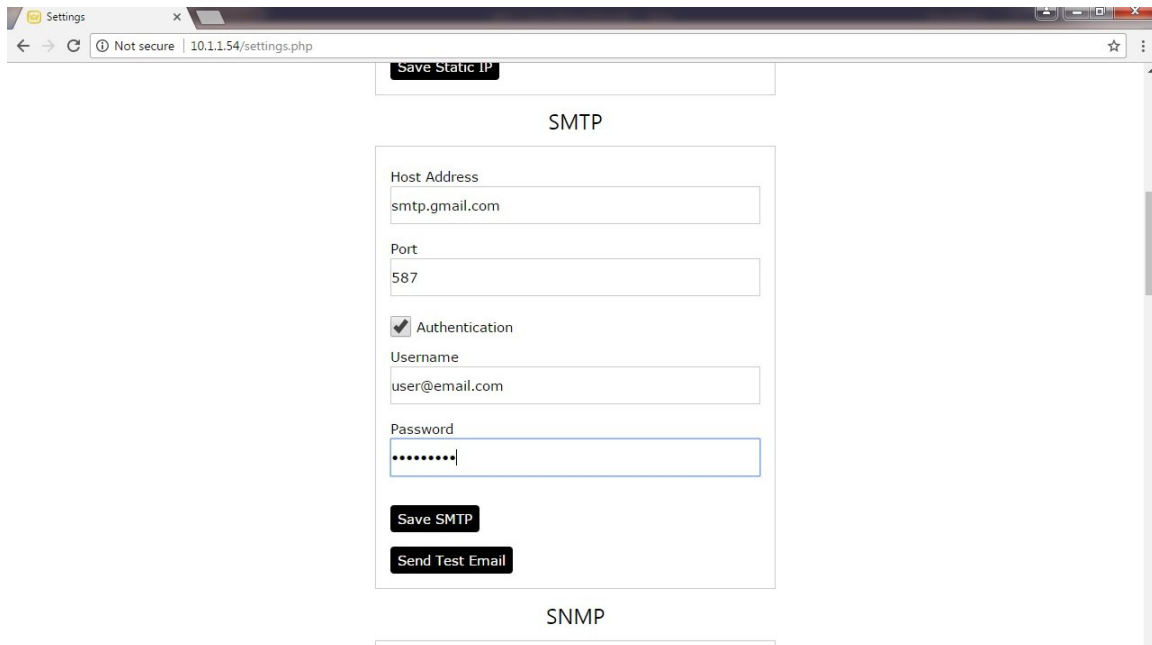
The SMTP server will need the name entered, the port required, the user name and password.

Authentication will need to be selected if the SMTP server requires it.

This sends the information encrypted using the standard decryption techniques most SMTP servers use on their receiving end.

Be sure to click “Save SMTP” to save the settings entered.

To test the email setup, click on the “Send Test Email” button at the bottom of the block.



The screenshot shows a web browser window with the address bar displaying "10.1.1.54/settings.php". The page has a "Settings" tab and a "Save Static IP" button at the top. The main content area is titled "SMTP" and contains a form with the following fields and buttons:

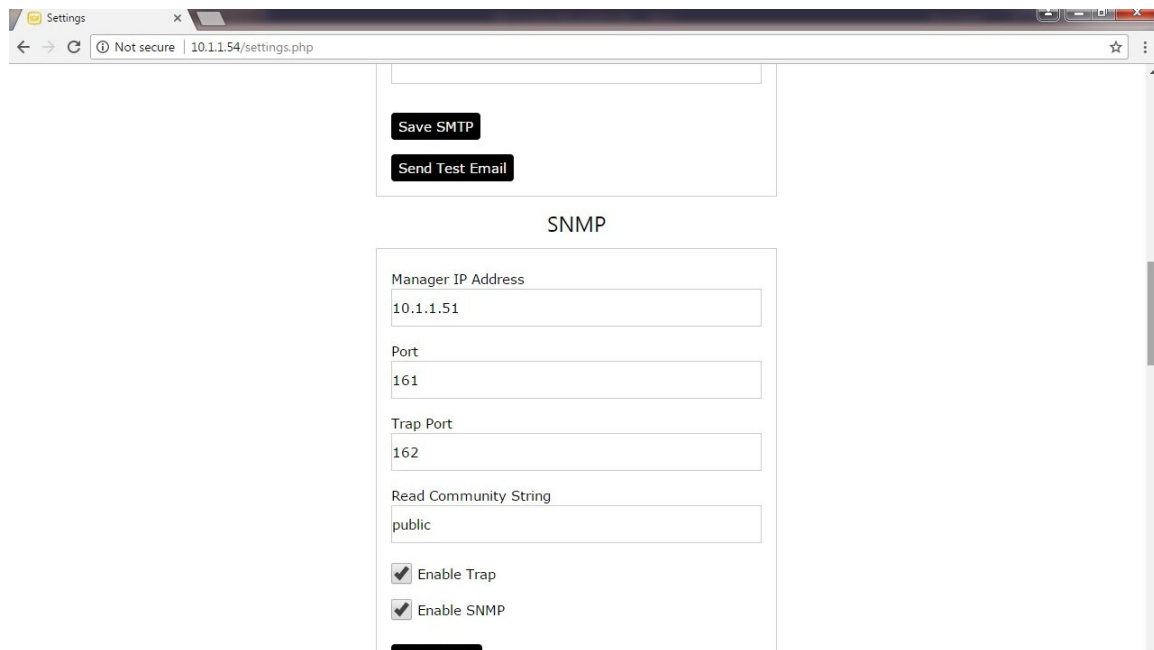
- Host Address: smtp.gmail.com
- Port: 587
- ☒ Authentication
- Username: user@email.com
- Password: [masked with dots]
- Save SMTP button
- Send Test Email button

Below the SMTP section, the "SNMP" section is partially visible.

## 3.6.3 SNMP settings

SNMP (Simple Network Management Protocol) will need to be filled out to utilize this feature. Fill in the appropriate sections to satisfy the Management tool being utilized for this feature. Be sure to enable the feature and selections desired.

Be sure to click “Save SNMP” to save the settings entered.



The screenshot shows a web browser window with the address bar displaying "10.1.1.54/settings.php". The page title is "Settings". The main content area is titled "SNMP" and contains the following fields and controls:

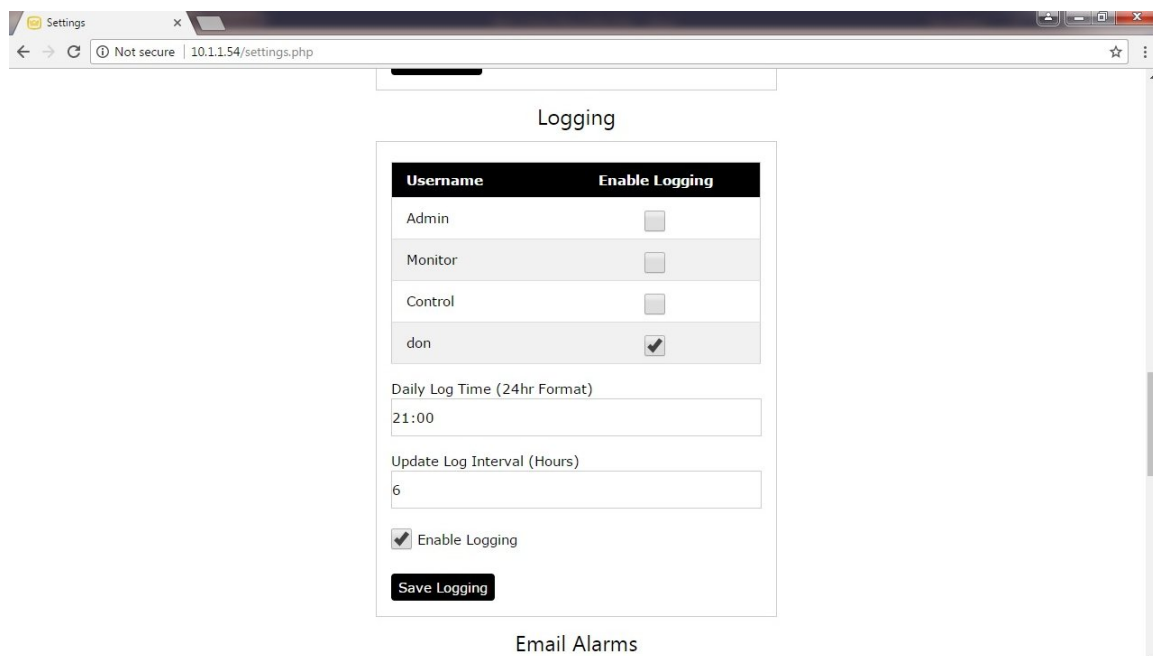
- Two buttons at the top: "Save SMTP" and "Send Test Email".
- A section titled "SNMP" containing:
  - "Manager IP Address" field with the value "10.1.1.51".
  - "Port" field with the value "161".
  - "Trap Port" field with the value "162".
  - "Read Community String" field with the value "public".
  - Two checkboxes: "Enable Trap" (checked) and "Enable SNMP" (checked).
  - A "Save SNMP" button at the bottom of the section.

## 3.6.4 Logging settings

Logging is set up per user. Check the box associated with each user who is to receive the daily logs.

Daily logs can be sent at any specified time (in a 24-hour format).

The “Update Log Interval (Hours)” describes the time between status captures of the unit. All parameters selected in the ‘I/O’ section for logging will be saved and accumulated during the 24-hour period between the “Daily Log Time” settings for the logs. At each time segment, the log will be sent. Also, once the 24-hour period has been satisfied, an email which contains the accumulated logs for the day will be sent to the designated address of the recipient. Be sure to check the “Enable Logging” checkbox to activate this feature. Be sure to click “Save Logging” to save the changes made.



The screenshot shows a web browser window with the address bar displaying "10.1.1.54/settings.php". The page title is "Settings". The main content area is titled "Logging" and contains a table with the following data:

Username	Enable Logging
Admin	<input type="checkbox"/>
Monitor	<input type="checkbox"/>
Control	<input type="checkbox"/>
don	<input checked="" type="checkbox"/>

Below the table, there are two text input fields: "Daily Log Time (24hr Format)" with the value "21:00" and "Update Log Interval (Hours)" with the value "6". At the bottom of the form, there is a checkbox labeled "Enable Logging" which is checked, and a "Save Logging" button.

### 3.6.5 Email Alarms Settings

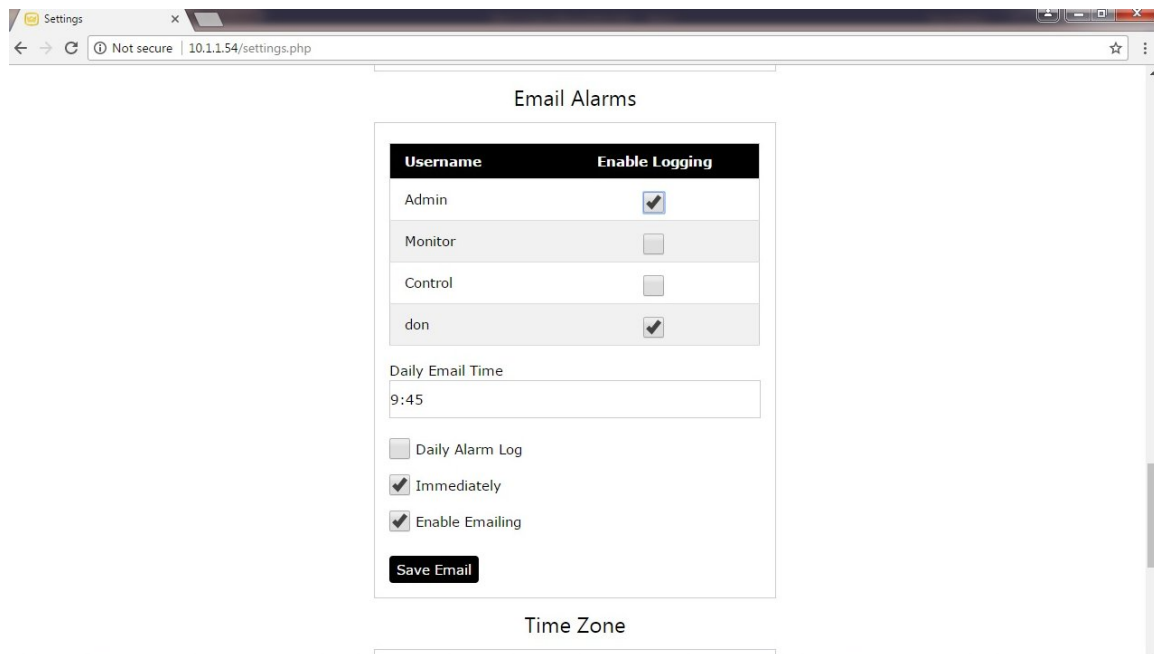
Emailing alarms are set up by user. Check the box associated with each user who is to receive the email alerts which were set up earlier in the I/O section.

There is an option to send alarms one time a day which is the collection of the day's worth at the time specified. Enter the time desired for the daily send and the checkbox to enable this feature.



There is also an option to send the email alarms immediately upon a valid alarm. This is a checkbox selection.

Be sure to select the checkbox for “Enable Emailing” for this feature to be enabled.



The screenshot shows a web browser window with the address bar displaying "10.1.1.54/settings.php". The page title is "Email Alarms". It features a table with two columns: "Username" and "Enable Logging". The table lists four users: "Admin", "Monitor", "Control", and "don". The "Enable Logging" column has checkboxes, with "Admin" and "don" checked. Below the table, there is a "Daily Email Time" field set to "9:45". There are three checkboxes: "Daily Alarm Log" (unchecked), "Immediately" (checked), and "Enable Emailing" (checked). A "Save Email" button is at the bottom of the form. Below the form, the "Time Zone" label is visible.

Username	Enable Logging
Admin	<input checked="" type="checkbox"/>
Monitor	<input type="checkbox"/>
Control	<input type="checkbox"/>
don	<input checked="" type="checkbox"/>

Daily Email Time  
9:45

☐ Daily Alarm Log  
☒ Immediately  
☒ Enable Emailing

**Save Email**

Time Zone

### 3.6.6 Time Zone settings

The time zone desired can be selected with a drop-down menu. Click on the ‘down arrow’ on the right side of the window and select the time zone desired. Multiple popular city names and areas can be selected or if desired, multiple GMT +/- settings can be chosen at the bottom of the listing.

Be sure to click on the “Save Time Zone” button to change the setting.

The screenshot shows a web browser window with the address bar displaying "10.1.1.54/settings.php". The page contains three main settings sections:

- Email Settings:** Includes checkboxes for "Immediately" and "Enable Emailing", both of which are checked. Below them is a "Save Email" button.
- Time Zone:** Features a dropdown menu currently set to "Indiana - Indianapolis" and a "Save Time Zone" button.
- Site ID:** Includes a text input field labeled "Name" containing the text "IReC", and a "Save Site ID" button.

At the bottom of the page, there is a footer with "Crown Broadcast" on the left and "Phone: 574-262-8900" on the right.

### 3.6.7 Site ID settings

The unit identifier can be changed by entering in the desired name below the “Site ID” label. There is no limit to the character length, so caution should be exercised in choosing the length of the site ID. Depending on the device used to access the unit, the long length may not display properly.

Be sure to click on the “Save Site ID” button to change the name entered.

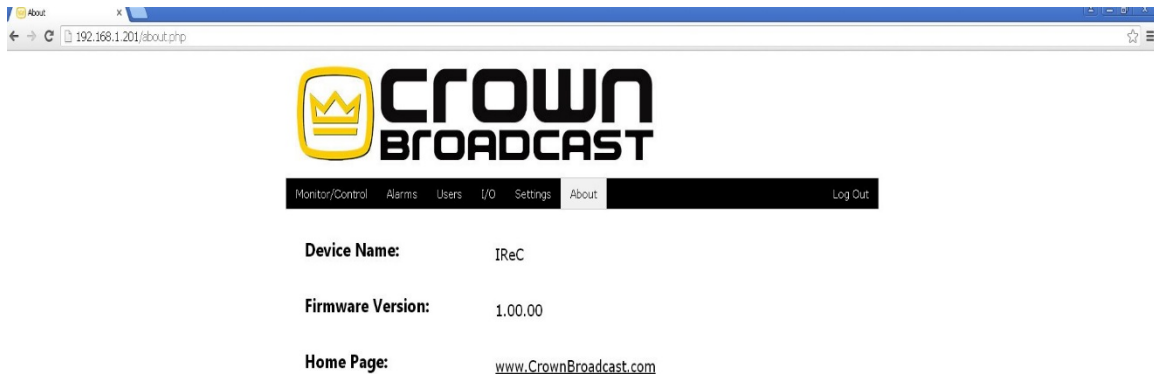
This screenshot is identical to the one above, showing the IREC settings page with the "Name" field under "Site ID" containing "IReC".

## 3.7 About the device

The device name, firmware revision level, and Crown Broadcast's home web page are listed.

The bottom of each page also has contact information listed as well as our address.

This information may be helpful should a situation arise where technical help is necessary.



As of version 1.5.6, you can do updates right from your login. The older versions have a black SD card. To get the newest version, you can send an email to [lthompson@irec1.com](mailto:lthompson@irec1.com) requesting an updated SD card. You will need the serial # that is on the IReC-1 unit itself (not the transmitter serial#). We will send at no cost to you.





## **Crown Broadcast Five Year Limited Product Warranty**

### **Summary of Warranty**

Crown Broadcast IREC warrants its broadcast products to the ORIGINAL PURCHASER of a NEW Crown Broadcast product, for a period of five (5) years after shipment from Crown Broadcast. All products are warranted to be free of defects in materials and workmanship and meet or exceed all specifications published by Crown Broadcast. Product nameplate with serial number must be intact and not altered in any way. This warranty is non - transferable. This warranty in its entirety is the only warranty offered by Crown Broadcast. No other warranties, expressed or implied, will be enforceable.

### **Exclusions**

Crown Broadcast will not warranty the product due to misuse, accident, neglect and improper installation or operation. Proper installation included A/C line surge suppression, lightning protection and proper grounding of the entire transmitter, and any other recommendations designated in the Instruction manual. This warranty does not extend to any other products other than those designed and manufactured by Crown Broadcast. This warranty does not cover any damage to any accessory such as loads, transmission line or antennas resulting from the use or failure of a Crown Broadcast transmitter.

Warranty does not cover any loss of revenue resulting from any failure of a Crown Broadcast product, act of God, or natural disaster.

### **Procedure for Obtaining Warranty Service**

Crown Broadcast will repair or service, at our discretion, any product failure because of normal intended use. Warranty repair can only be performed at our plant facility in Elkhart, Indiana USA or at a factory authorized service depot. Expenses in remedying the defect will be borne by Crown Broadcast, including ground transportation cost within the continental United States. Prior to returning any product or component to Crown Broadcast for warranty work or repair, a Return Authorization (RA) number must be obtained from the Crown Broadcast Customer Service Department.

Product must be returned in the original factory pack or equivalent. Original factory pack materials may be obtained at a nominal charge by contacting Crown Broadcast Customer Service. Resolution of the defective product will be made within a reasonable time from the date of receipt of the defective product.

### **Warranty Alterations**

No person has the authority to enlarge, amend, or modify this warranty, in whole or in part. This warranty is not extended by the length of time for which the owner was deprived the use of the product.

Repairs and replacement parts that are provided under the terms of this warranty shall carry only the unexpired portion of the warranty.

### **Product Design Changes**

Crown Broadcast reserves the right to change the design and manufacture of any product at any time without notice and without obligation to make corresponding changes in products previously manufactured.

### **Legal Remedies of Purchaser**

This written warranty is given in lieu of any oral or implied warranties not covered herein. Crown Broadcast disclaims all implied warranties including any warranties of merchantability or fitness for a purpose.

### **Crown Broadcast**

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