

Black Rock City Participant Emergency Reporting

Cellular coverage is very limited in Black Rock City. Even if you do manage to connect a 9-1-1 call from within the event site, the off-site dispatch center you would eventually reach doesn't manage the available resources on playa. It's far faster to flag down a Ranger or send someone to fetch help at a Ranger Outpost or Emergency Services Department (ESD) Station. That said, there is also a way to directly call for help wirelessly since ESD monitors a designated emergency channel. Keep reading for more information.

How do I report an emergency on the radio?

- You can purchase your own radio to contact BRC 911. Large camps or villages might choose to make a radio part of their planning efforts and store it in a public place for emergency use. You might also be able to rent a radio.
- Program your radio to **451.9000 MHz with a PL tone of 91.5 and 12.5 kHz spacing** to reach ESD. This is limited to 4-watt power output (typical limit of most handheld radios). Below is a generic programming guide and of course, our wonderful Burning Man community is full of people with a desire to help.
- FOR ALL RADIO USERS: you are responsible for following FCC rules regarding programming. Not all radios meet FCC regulations for this specific frequency. This channel is licensed to Burning Man and you are being granted access to use this channel as an emergency reporting channel only. Unauthorized use could face fines imposed by the FCC.

“BRC 911 Alt” Usage guide

Licensed Radio Channel

Burning Man Project (BMP) licenses many private radio channels for use on playa. One of those channels, called “BRC 911 Alt,” is available for use by anyone inside Black Rock City to report emergencies. This channel will be monitored by the Emergency Services Department (ESD). The “BRC 911 Alt” channel is a private channel licensed to BMP. Any use other than reporting an emergency, as described here, is not permitted by BMP, and unauthorized use is a violation of FCC rules which could result in fines.

Limitations:

BMP is providing this method as a courtesy for our community, but makes no guarantees. Proper programming and maintenance of the radio is an individual responsibility. Your ability to contact ESD might vary given the many different factors such as make and model of radio you have purchased, programming, antenna quality, distance from ESD's tower, etc.

Test Your Radio

We recommend that you test your radio before you need it in an emergency. You can test it as follows:

1. This channel is only licensed for use on playa, so you'll need to wait until you arrive on playa to test it.
2. Select the "BRC 911 Alt" channel and listen for a few seconds to see if anyone is currently using the channel.
3. When the channel is clear, make a test transmission:
 - a. Press and hold your radio's PTT button.
 - b. Say "Black Rock, Black Rock, <your name> testing 911 Alt."
 - c. Release the PTT button.
4. Wait to see if you can hear an acknowledgment of your test call on the radio.
 - a. If you do hear an acknowledgment, you're good to go!
 - b. If you don't hear an acknowledgment, wait 15 minutes, then try *one more* test call.
 - c. If you don't get a reply to this second test, **don't keep trying.**
It's possible that you are successfully transmitting (and potentially interfering with other users), but that you simply can't hear the reply.
 - d. Find a Placer, an ARtery contact, or a Black Rock Ranger (or anyone else with an Org radio) and ask them to monitor "BRC 911 Alt" on their Org radio while you make one last test call on your radio.
 - If they can't hear you on their radio, your radio *transmission* settings might not be correct.
 - If they can hear you on their radio, but you still can't hear a reply, your radio *reception* settings might not be correct.

Usage to Summon Help In An Emergency

In an emergency, use your radio to summon help as follows:

1. Power on your radio and select the “BRC 911 Alt” channel.
2. Listen for a moment to see if anyone is currently using the channel.
3. If the channel is clear, initiate your emergency call:
 - a. Press and hold your radio’s Push-To-Talk (PTT) button.
 - b. Say “Black Rock, Black Rock, <your name>.”
 - c. Release the PTT button.
4. When you hear “<your name>, go for Black Rock,” press and hold your radio’s PTT button and say the following things:
 - a. What you need (i.e., ambulance, fire truck, police, etc.)
 - b. Where you need it (i.e., at Esplanade and 7:30)
 - c. Why you need it (i.e., a participant cut their foot on rebar and is bleeding badly)
 - d. Then release the PTT button.
5. Continue to monitor your radio and answer any follow-up questions.

Other Options to Get Help In An Emergency

If you don’t have a radio, or if you are unable to obtain help using this radio, you can obtain help by flagging down a Black Rock Ranger, a member of law enforcement, or any other event staff or volunteer with an Org radio, or sending someone to fetch help at a Ranger Outpost or ESD Station.

Appendix A: Selecting a Radio

In order to use the new “BRC 911 Alt” channel, you’ll need an appropriate radio. This would need to be a two-way UHF radio that can be configured to use 451.9000 MHz with a PL tone of 91.5 and 12.5 kHz spacing to transmit at no more than 4 Watts.

There are many radios that will work on “BRC 911 Alt” but in order to be compliant with FCC rules your radio should be FCC Part 90 certified for commercial service in the United States. BMP has no intention of making sure your radio is Part 90 certified, but in theory the FCC could.

There are many manufacturers of Part 90 certified UHF radios. The following is a partial list of such manufacturers in alphabetical order, though this is not an endorsement for any of them:

Baofeng (aka Pofung)
Icom
Kenwood
Motorola
Wouxun
Yaesu

Note that these manufacturers make many different radio models; not all are compatible with the “BRC 911 Alt” channel and not all are Part 90 certified.

The ePlaya community (at <http://eplaya.burningman.org>) will be exploring this topic as it relates to the “BRC 911 Alt” channel.

Appendix B: Using CHIRP to Program a Radio

Though most radios can be programmed using a variety of different methods, one of the most common is to use the free, open-source software tool called CHIRP. This Appendix describes using CHIRP to add the “BRC 911 Alt” channel to a Baofeng UV82C radio, but the steps are very similar for any radio supported by CHIRP.

1. Obtain the CHIRP software.
CHIRP can be downloaded from http://trac.chirp.danplanet.com/chirp_daily/LATEST/
CHIRP is easiest to run in Windows, but can run in Mac OS X or Linux with some additional effort.
2. Install the CHIRP software on your computer.
3. Download a sample configuration file. The Burning Man community is a wealth of knowledge and a sample file might be available from someone on the ePlaya forum. (This step is optional; you can also enter the configuration manually, as described below.)
4. Obtain a programming cable for your radio.
This will probably be a cable made specifically for use with your radio model. It will typically have a USB plug on one end (to connect to your computer) and a proprietary plug on the other (to connect to your radio). Some cables, especially cheap ones, use a counterfeit Prolific PL-2303 USB chip, which can make the cable more difficult to use.
For a *much* deeper discussion of this topic, see:
<https://chirp.danplanet.com/projects/chirp/wiki/CableGuide>
5. Connect the radio to your computer with the programming cable.
6. Download your radio’s initial configuration from your radio to your computer.
 - a. In CHIRP, select **Radio** from the menu.
 - b. Select **Download from Radio**.
 - c. In the pop-up window, select the appropriate options:
Port: This is the serial port to which your radio is connected. If you’re not sure which port, you can try each of the available options until one works.
Vendor: This is the manufacturer of your radio (for example, Baofeng)
Model: This is the model of your radio (for example, UV82C)
 - d. Click **OK**.
 - e. Follow the instructions.
7. Starting with your radio’s initial configuration, edit the configuration to include the BRC 911 Alt channel:
 - a. Open the sample configuration file you downloaded:
 - i. In CHIRP, select **File** from the menu.
 - ii. Select **Open**.
 - iii. Browse to the sample configuration file you downloaded.
 - b. Copy the first entry from the sample configuration file:
 - i. In CHIRP, click on the first line (line 0).
 - ii. Type **<Control-C>**.
 - iii. Click the **X** on the sample configuration file tab to close that file.

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- iv. You should now be back at your radio's initial configuration.
 - c. Decide which "slot" in your radio you want to use for BRC 911 Alt.
(To make it quick to find in an emergency, we recommend you use the first slot.)
 - d. Click on the line for your desired slot.
 - e. Paste the entry from the sample configuration file by typing **<Control-V>**.
You might see a warning pop up asking if you want to overwrite the location you selected; you'll need to choose **Yes**.
 - f. If you'd rather program the slot manually, use these values:
Note: The below fields are for a Baofeng UV82C. Other brands and models might be slightly different.
Frequency: 451.9000
Name: BRC 911 Alt
Tone Mode: Tone (or CTCSS)
Tone: 91.5
ToneSql: <leave blank>
DTCS Code: <leave blank>
DTCS RX Code: <leave blank>
DTCS Pol: <leave blank>
Cross Mode: <leave blank>
Duplex: <leave blank>
Offset: <leave blank>
Mode: NFM (for 12.5 kHz spacing)
Power: High
Note: Choose a **Power** setting that for your radio corresponds to 4 watts or less.
Skip: <leave blank>
8. Save the new configuration to your computer.
 - a. In CHIRP, select **File** from the menu.
 - b. Select **Save As**.
 - c. Name the file something descriptive, then select where you want to save it.
9. Upload the new configuration to your radio.
 - a. In CHIRP, select **Radio** from the menu.
 - b. Select **Upload to Radio**.
 - c. In the pop-up window, select the appropriate options:
Port: This is the serial port to which your radio is connected. If you're not sure which port, you can try the available options until one works.
Vendor: This is the manufacturer of your radio (for example, Baofeng)
Model: This is the model of your radio (for example, UV82C)
 - d. Click **OK**.
 - e. Follow the instructions.
10. Test your radio (but wait until you're on play!).
Because BMP's license to use the "BRC 911 Alt" frequency is only for the playa, you can't legally test your configuration until you're on playa.
Once you are on playa, however, you can test the radio as described above in **Test Your Radio**.