

# Usage

```
aircrack-ng [options] <capture file(s)>
```

You can specify multiple input files (either in .cap or .ivs format) or use file name wildcarding. See [Other Tips](#) for examples. Also, you can run both [airodump-ng](#) and aircrack-ng at the same time: aircrack-ng will auto-update when new IVs are available.

Here's a summary of all available options:

Option	Param.	Description
-a	amode	Force attack mode (1 = static WEP, 2 = WPA/WPA2-PSK).
-b	bssid	Long version <code>-bssid</code> . Select the target network based on the access point's MAC address.
-e	essid	If set, all IVs from networks with the same ESSID will be used. This option is also required for WPA/WPA2-PSK cracking if the ESSID is not broadcasted (hidden).
-p	nbcpu	On SMP systems: # of CPU to use. This option is invalid on non-SMP systems.
-q	none	Enable quiet mode (no status output until the key is found, or not).
-c	none	(WEP cracking) Restrict the search space to alpha-numeric characters only (0x20 - 0x7F).
-t	none	(WEP cracking) Restrict the search space to binary coded decimal hex characters.
-h	none	(WEP cracking) Restrict the search space to numeric characters (0x30-0x39) These keys are used by default in most Fritz!BOXes.
-d	start	(WEP cracking) Long version <code>-debug</code> . Set the beginning of the WEP key (in hex), for debugging purposes.
-m	maddr	(WEP cracking) MAC address to filter WEP data packets. Alternatively, specify <code>-m ff:ff:ff:ff:ff:ff</code> to use all and every IVs, regardless of the network.
-M	number	(WEP cracking) Sets the maximum number of ivs to use.
-n	nbits	(WEP cracking) Specify the length of the key: 64 for 40-bit WEP, 128 for 104-bit WEP, etc. The default value is 128.
-i	index	(WEP cracking) Only keep the IVs that have this key index (1 to 4). The default behaviour is to ignore the key index.
-f	fudge	(WEP cracking) By default, this parameter is set to 2 for 104-bit WEP and to 5 for 40-bit WEP. Specify a higher value to increase the bruteforce level: cracking will take more time, but with a higher likelihood of success.
-H	none	Long version <code>-help</code> . Output help information.
-l	file name	(Lowercase L, ell) logs the key to the file specified.
-K	none	Invokes the Korek WEP cracking method. (Default in v0.x)
-k	korek	(WEP cracking) There are 17 korek statistical attacks. Sometimes one attack creates a huge false positive that prevents the key from being found, even with lots of IVs. Try <code>-k 1</code> , <code>-k 2</code> , ... <code>-k 17</code> to disable each attack selectively.

- p threads Allow the number of threads for cracking even if you have a non-SMP computer.
- r database Utilizes a database generated by airolib-ng as input to determine the WPA key. Outputs an error message if aircrack-ng has not been compiled with sqlite support.
- x/-x0 *none* (WEP cracking) Disable last keybytes brutforce.
- x1 *none* (WEP cracking) Enable last keybyte bruteforcing (default).
- x2 *none* (WEP cracking) Enable last two keybytes bruteforcing.
- X *none* (WEP cracking) Disable bruteforce multithreading (SMP only).
- y *none* (WEP cracking) Experimental single bruteforce attack which should only be used when the standard attack mode fails with more than one million IVs
- u *none* Long form `-cpu-detect`. Provide information on the number of CPUs and MMX support. Example responses to `"aircrack-ng -cpu-detect"` are `"Nb CPU detected: 2"` or `"Nb CPU detected: 1 (MMX available)"`.
- w words (WPA cracking) Path to a wordlist or `"-"` without the quotes for standard in (stdin).
- z *none* Invokes the PTW WEP cracking method. (Default in v1.x)
- P *none* Long version `-ptw-debug`. Invokes the PTW debug mode.
- C MACs Long version `-combine`. Merge the given APs to a virtual one.
- D *none* Long version `-wep-decloak`. Run in WEP decloak mode.
- V *none* Long version `-visual-inspection`. Run in visual inspection mode.
- 1 *none* Long version `-oneshot`. Run in oneshot mode.
- S *none* WPA cracking speed test.