

BARCELONA RF GUIDE



Complete list of licence free frequencies for RF coordination in Barcelona.

If you need to use radio mics in Barcelona for media or film production, there are some frequency ranges you have to keep in mind. Barcelona RF guide is a complete list of licence free frequencies you can use for wireless microphone transmission.

470 MHz

Frequency Range 470 - 786 MHz

Maximum RF power 50mW

Regulated by UN36 / BOE-A-2013-4845

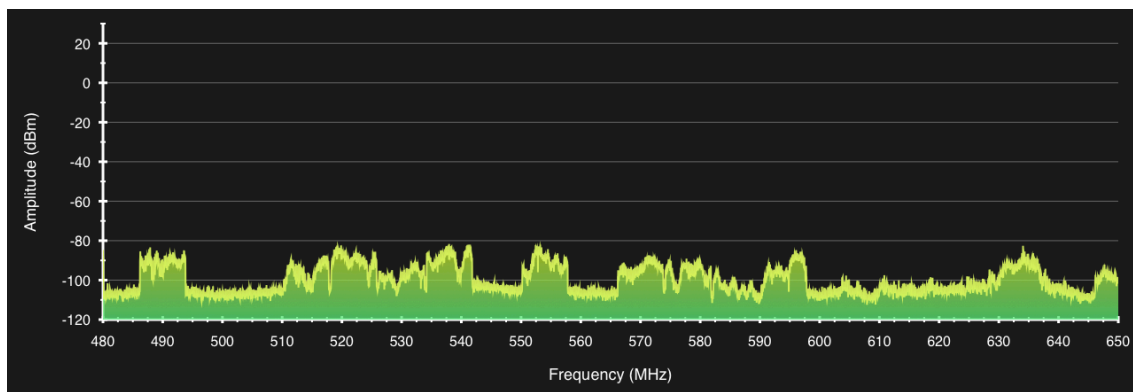
Potential interference devices TV channels (TDT), Walkie talkies.

Comments It's the most convenient range for professional audio transmission. In order to avoid any interference would be recommendable to set radio transmitters between 494 and 678MHz.

You can use this frequency range but always without using same frequencies than tv channels. Those TV channels are allocated in different frequencies depending on the area of Spain you are working, let's see some examples.

TV Channels	Frequencies	Barcelona	Madrid
21	470-478	AVAILABLE	AVAILABLE
22	478-486	AVAILABLE	TV
23	486-494	TV	AVAILABLE
24	494-502	AVAILABLE	AVAILABLE
25	502-510	AVAILABLE	AVAILABLE
26	510-518	TV	TV
27	518-526	TV	AVAILABLE
28	526-534	AVAILABLE	AVAILABLE
29	534-542	TV	AVAILABLE
30	542-550	AVAILABLE	AVAILABLE
31	550-558	TV	AVAILABLE
32	558-566	AVAILABLE	TV
33	566-574	TV	TV

34	574-582	TV	AVAILABLE
35	582-590	AVAILABLE	AVAILABLE
36	590-598	AVAILABLE	AVAILABLE
37	598-606	AVAILABLE	AVAILABLE
38	606-614	AVAILABLE	AVAILABLE
39	614-622	AVAILABLE	TV
40	622-630	AVAILABLE	AVAILABLE
41	630-638	TV	TV
42	638-646	AVAILABLE	AVAILABLE
43	646-654	TV	AVAILABLE
44	654-662	TV	AVAILABLE
45	662-670	AVAILABLE	AVAILABLE
46	670-678	AVAILABLE	AVAILABLE
47	678-686	TV	AVAILABLE
48	686-694	TV	AVAILABLE
49	694-702	AVAILABLE	TV
50	702-710	AVAILABLE	TV
51	710-718	AVAILABLE	AVAILABLE
52	718-726	AVAILABLE	AVAILABLE
53	726-734	AVAILABLE	AVAILABLE
54	734-742	AVAILABLE	AVAILABLE
55	742-750	AVAILABLE	TV
56	750-758	AVAILABLE	AVAILABLE
57	758-766	AVAILABLE	AVAILABLE
58	766-774	AVAILABLE	TV
59	774-782	AVAILABLE	TV
60	782-790	AVAILABLE	AVAILABLE



RF scan in Poblenou, Barcelona.

823 MHz

Frequency Range 823 - 832 MHz

Maximum RF power 20mW

Regulated by UN151 / BOE-A-2013-4845

Comments Even though this range has a short bandwidth, it is recommended for professional transmission. Keep in mind that you will not be able to fit many microphones in the spectrum.

863 MHz

Frequency Range 863 - 865 MHz

Maximum RF power 10mW

Regulated by UN118 / BOE-A-2013-4845

Potential interference devices Hifi audio equipment, wireless headphones, prosumer audio equipment.

Comments This frequency range is license free in all European countries. Due to it's short bandwidth and low rf power is not recommended for professional transmission if many microphones are required.

1785 MHz

Frequency Range 1785 - 1800 MHz

Maximum RF power 50mW

Regulated by UN119 / BOE-A-2013-4845

2,4 GHz

Frequency Range 2,4 – 2,48 GHz

Maximum RF power 100mW

Regulated by ISM

Potential interference devices Wi-fi, Bluetooth, Alarms.

Comments This frequency range is license free in all countries. Many microphones in this range are prosumer products with high latency and automatic frequency allocation.

AREAS WITH HIGH RF LEVELS



Last Update

January 2019

Made by

Grau Bardulet Torner (grau@jump.cat)

External links and References

BOE-A-2013-4845

ISM Bands

TDT1

Shure Wireless Guide

Sponsored by:

Jump Studio Barcelona

Location Sound / Audio post production / Voiceover recording

www.jump.cat