

# 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

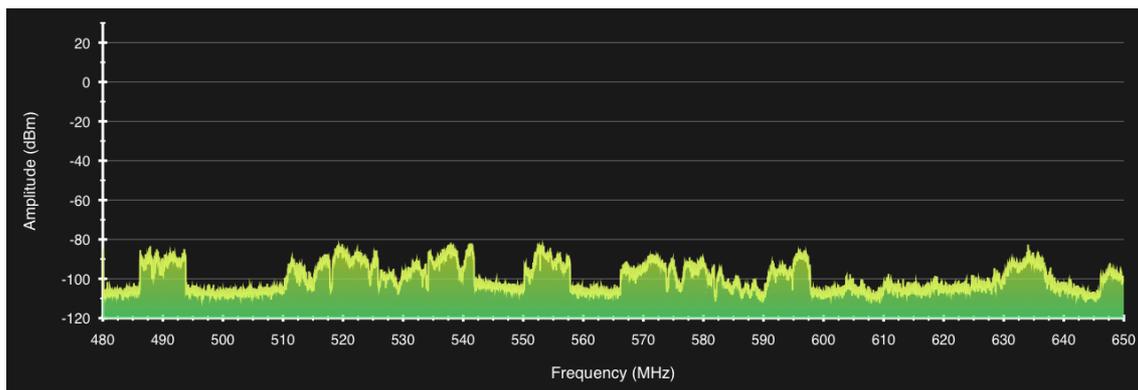
**Potential interference devices** TV channels (TDT), Walkie talkies.

**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

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**External links and References**

BOE-A-2013-4845

ISM Bands

TDT1

Shure Wireless Guide

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