



## Radio Microphone Frequencies

Last updated 20/01/26 by CHTJ

### General Notes

The ADC Theatre can operate up to 24 channels of radio mics using in-house equipment. For higher channel counts, shows will need to provide their own additional equipment. This *must* follow the frequency plots below which have been agreed directly with Ofcom, the body legally responsible for managing all radio frequency spectrum usage in the UK.

If you are unsure if you have the correct license or equipment, please speak to the Technical Manager well in advance of your show. If you are using your own radio transmitters & receivers and not using the ADC's, you are of course free to use any of the house frequencies in channels 41, 42 or 45.

Note that radio microphones operating in the 2.4GHz or 5GHz license-free bands are not permitted for use at the ADC Theatre. Experience has shown that such systems cause severe interference with the building's wireless (Wi-Fi) networking, which is used for critical front of house and show control purposes. You will also likely experience audio breakup.

Reception of radio signals is via two Sennheiser 'paddle' antennae mounted on opposite ends of the rear of auditorium rigging bar. These may not be removed or adjusted. These feed a series of Sennheiser antenna distribution units which then ultimately feed the radio mic receivers. An A/B pair of  $50\Omega$  coaxial cables terminating in BNC connectors are provided in the sound box for connection to hired or touring radio mic racks.

## House Frequencies

The Theatre holds a site license for the usage of radio microphones on 16 frequencies in channels 41 & 42 and 8 frequencies in channel 45. The maximum permitted power of transmitters in these bands is 10mW ERP or 50mW ERP for transmitters which are body worn (i.e. beltpacks).

The frequency plot below has been coordinated with other nearby radio frequency users and agreed directly with Ofcom to avoid interference following a series of complaints. Following this frequency plot is a legal requirement of our licence.

These frequencies *must not* be altered without the prior approval of the Technical Manager.

<b>Receiver №</b>	<b>Frequency (MHz)</b>	<b>In House or Hired?</b>
<b>Channels 41 &amp; 42</b>		
1	630.425	ADC
2	631.125	ADC
3	632.450	ADC
4	633.375	ADC
5	634.675	ADC
6	635.200	ADC
7	636.675	ADC
8	637.550	ADC
9	640.175	ADC
10	641.150	ADC
11	641.925	ADC
12	642.450	ADC
13	643.300	ADC
14	644.400	ADC
15	644.950	ADC
16	645.875	ADC
<b>Channel 45</b>		
17	663.175	ADC
18	664.075	ADC
19	665.075	ADC
20	666.075	ADC
21	666.725	ADC
22	667.400	ADC
23	668.500	ADC
24	669.325	ADC

## **Hired and Touring Frequencies**

Additional hired or touring radio microphones may be operated on the frequencies in the plot below, which covers channels 38, 65, 66 and 70. Equipment is usually tuned to either channels 38 thru 42 or channels 65 & 66, but not both. Make sure to account for this when planning your show.

Users of hired microphones and receivers will likely be issued with licences to cover their hire from their equipment supplier, but this must be verified. Alternatively, licenses may need to be purchased from the Ofcom PMSE website.

<b>Receiver №</b>	<b>Frequency (MHz)</b>	<b>In House or Hired?</b>
<b>Channel 38</b>		
17	607.500	Hired
18	608.000	Hired
19	609.500	Hired
20	610.550	Hired
21	611.225	Hired
22	612.200	Hired
23	612.625	Hired
24	613.400	Hired
<b>Channels 65 &amp; 66</b>		
25	823.275	Hired
26	824.225	Hired
27	824.925	Hired
28	825.400	Hired
29	826.375	Hired
30	826.800	Hired
31	829.025	Hired
32	829.675	Hired
33	830.075	Hired
34	830.675	Hired
35	831.475	Hired
36	831.925	Hired
<b>Channel 70</b>		
37	863.125	Hired
38	863.550	Hired
39	864.450	Hired
40	864.950	Hired