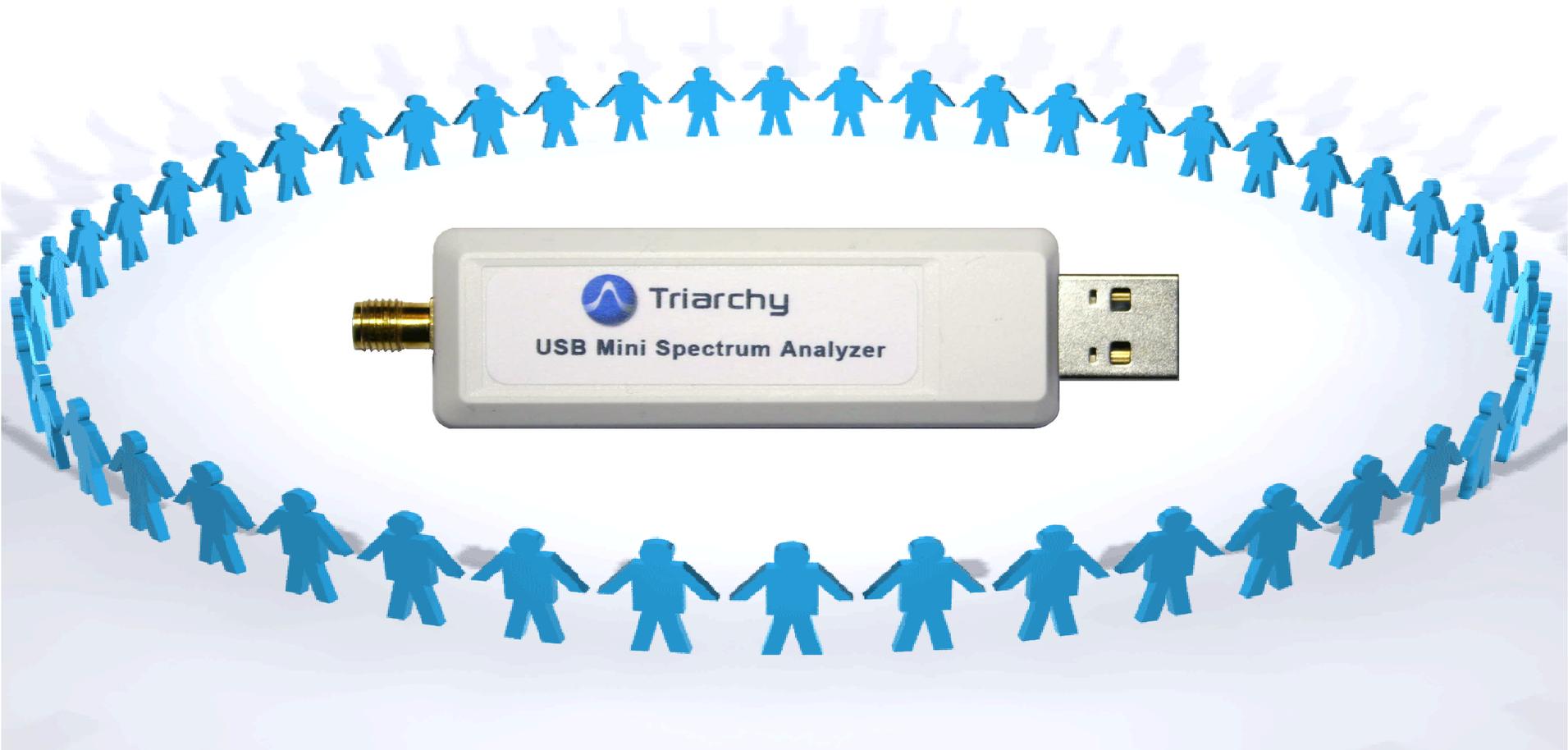




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DECT signal testing with TSA5G35





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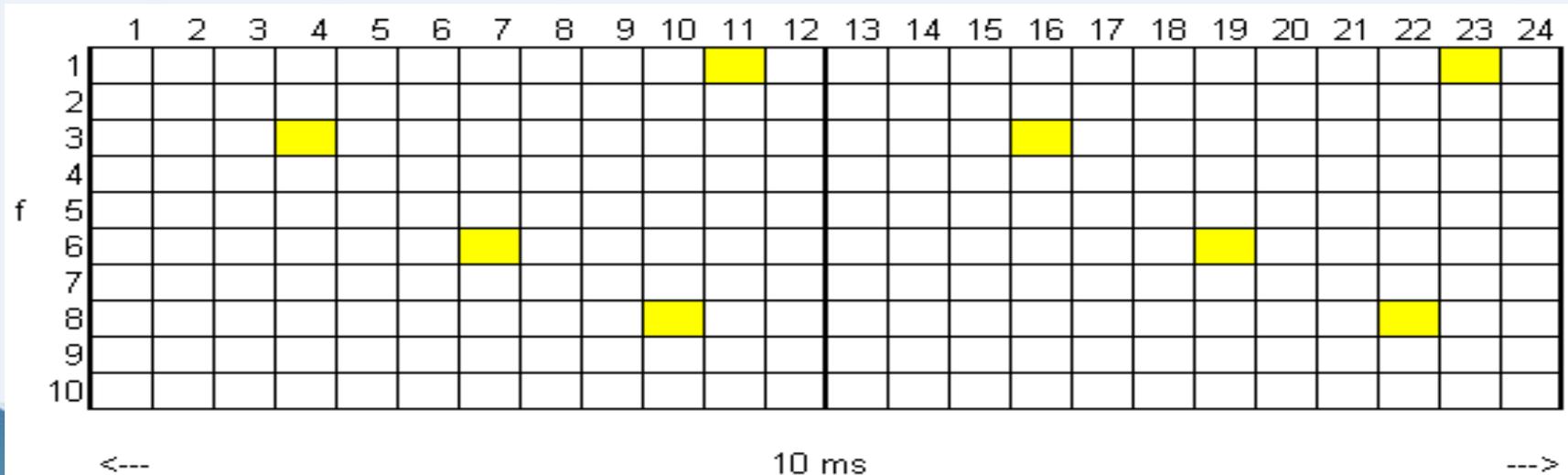
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DECT standard overview

DECT is based on Time Division Duplex (TDD) and Time Division Multiple Access ([TDMA](#)) with 10 carriers in the 1880 - 1900MHz band. It has a TDD/TDMA frame structure.

$CH_n(\text{MHz}) = 1897.344 - 1.728 * n$, ($n = 0 \sim 9$)

The complete frame is 10ms in duration with 24 time slots. The first 12 slots are allocated for transmission of BS TX, and the other 12 slots are for transmission of HS.





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DECT cordless phone radiation testing

TSA5G35 parameter setting:

Parameter Setting	
Center-Freq(MHz)	1890
Span(MHz)	20
Amplitude(dBm)	20 <input checked="" type="checkbox"/> External ATT(30dB)
Sweep Time	x2 (Burst Mode)

Start

Set SPAN to cover whole DECT band, make phone call to pick the DECT signal

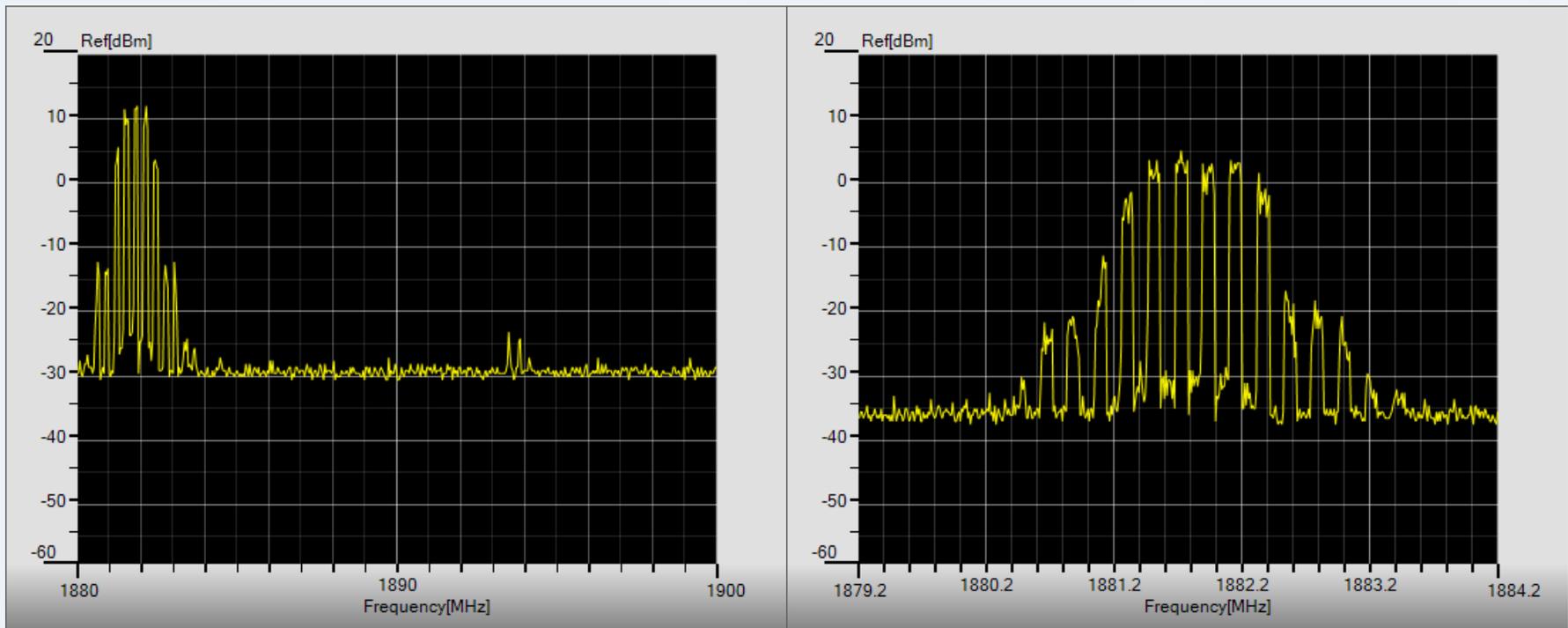




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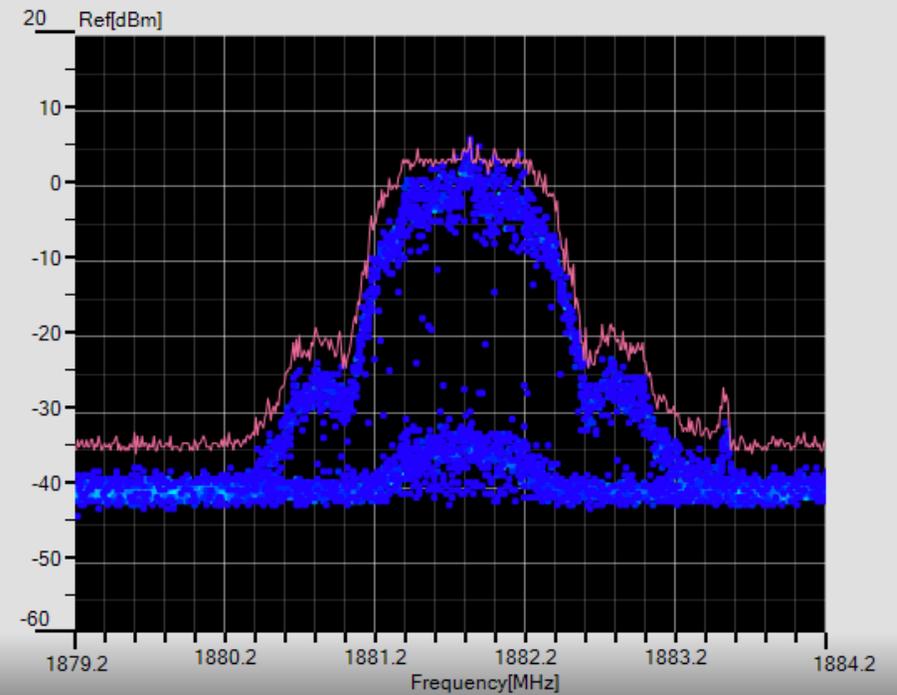
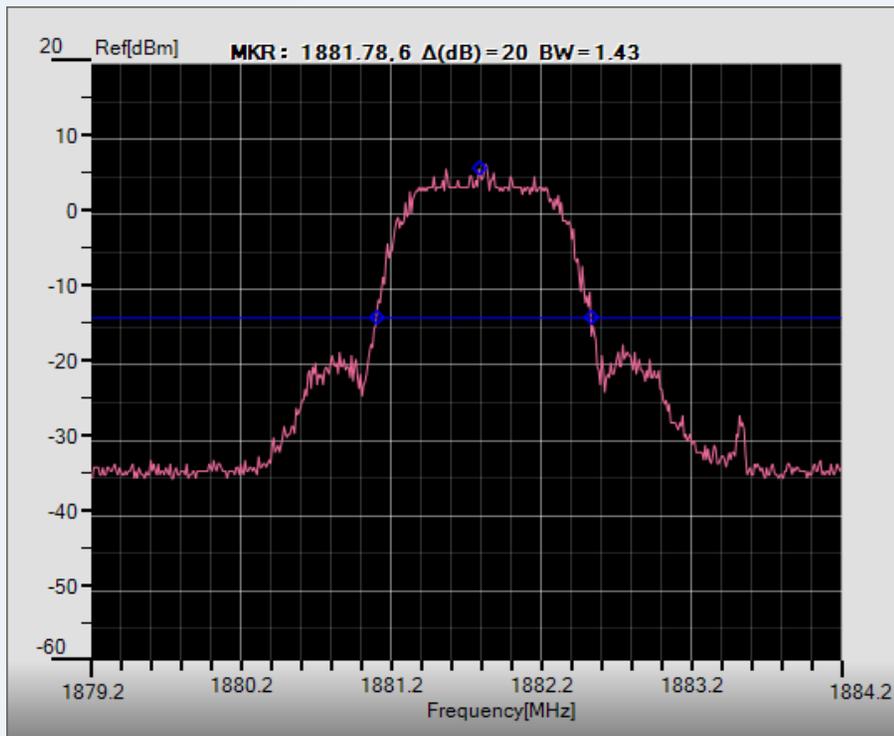
First find DECT signal at 20MHz SPAN, then change FREQ and SPAN setting to look around the detail the signal spectrum.



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DECT cordless phone radiation testing



CH9=1881.792MHz, measured frequency is 1881.78MHz.
Signal level is 6dBm, bandwidth is 1.43MHz.