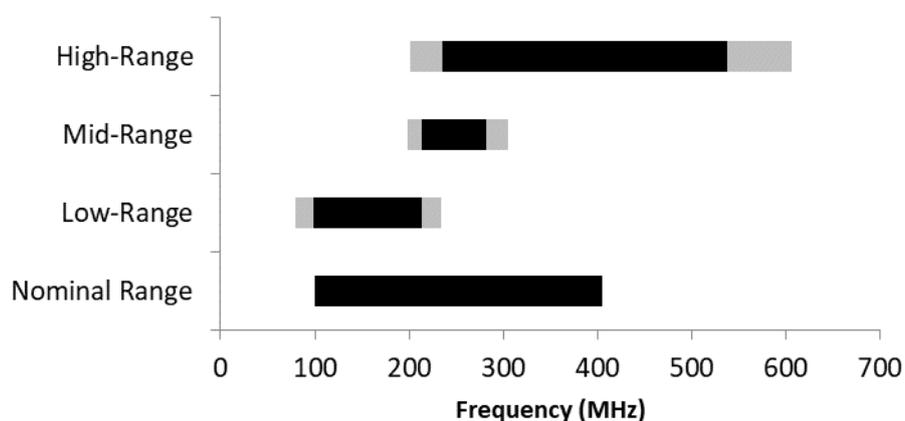


X-Channel: Tuning Range Setup

The overall tuning range of the X-channel is split into three intervals, covering Larmor frequencies from ^{15}N to ^{31}P . Depending on the observed nucleus the correct interval can be set by a combination of the two switches labelled as "1" and "2". The frequency ranges and the corresponding switch setting is illustrated below:



	SW 1	SW 2	Frequency Range	Typical Nuclei
Low-Range	pushed (closed)	pulled (open)	98 – 213 MHz	^{15}N , ^2H
Mid-Range	pulled (open)	pulled (open)	214 – 282 MHz	^{79}Br , ^{13}C , ^{27}Al ,
High-Range	pulled (open)	pushed (closed)	235 – 537 MHz	^{31}P ,
Not – recom.	push (closed)	pushed (closed)	n/a	n/a

Fig. 1 – *Low*-, *Mid*-, and *High*-Range with corresponding resonance frequencies. Note, that the *Mid*-Range should be used preferably since this setting provides a higher NMR sensitivity as compared to the *High*-Range.