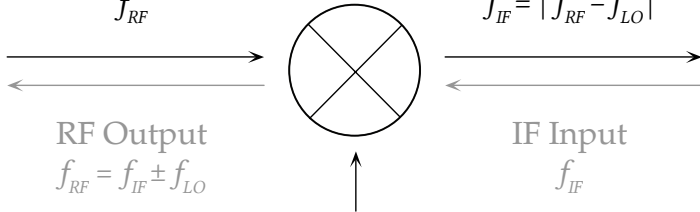


Downconversion
Mixer

RF Input
 f_{RF}

IF Output
 $f_{IF} = |f_{RF} - f_{LO}|$



Upconversion
Mixer

RF Output
 $f_{RF} = f_{IF} \pm f_{LO}$

IF Input
 f_{IF}

Local Oscillator f_{LO}