

*Receive Modulated Waveform*

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graph TD; A([Receive Modulated Waveform]) --> B[Generate swept sine]; B --> C[Find FFT of swept sine and received wave form]; C --> D[Apply piece-wise multiplication with swept sine and received wave form]; D --> E[Find maximum value]; E --> F[Find index corresponding to the maximum value]; F --> G[Increment the index to correspond to the start of the data]; G --> H([Concatenate the received wave form]);
```

*Generate swept sine*

*Find FFT of swept sine  
and received wave form*

*Apply piece-wise  
multiplication with swept  
sine and received wave form*

*Find maximum value*

*Find index  
corresponding to the  
maximum value*

*Increment the  
index to correspond  
to the start of the data*

*Concatenate the  
received wave form*