## Band Pass Filter Example

# Types of Filters

#### Low Pass filter

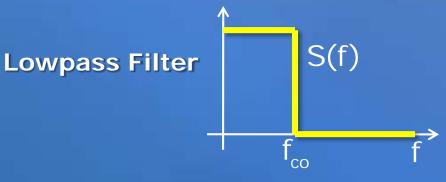
- Passes frequencies below f<sub>co</sub>
  - f<sub>co</sub> = cutoff frequency
- Emphasizes "bass"

#### **Band Pass filter**

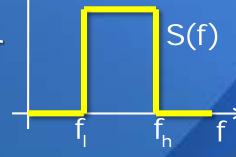
- Passes frequencies between f<sub>l</sub> and f<sub>h</sub>
  - f<sub>I</sub> = low frequency cutoff
  - f<sub>h</sub> = high frequency cutoff
- Emphasizes "midrange"

### **High Pass filter**

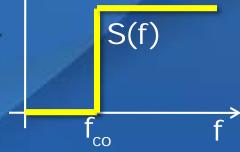
- Passes frequencies above f<sub>co</sub>
- Emphasizes "treble"



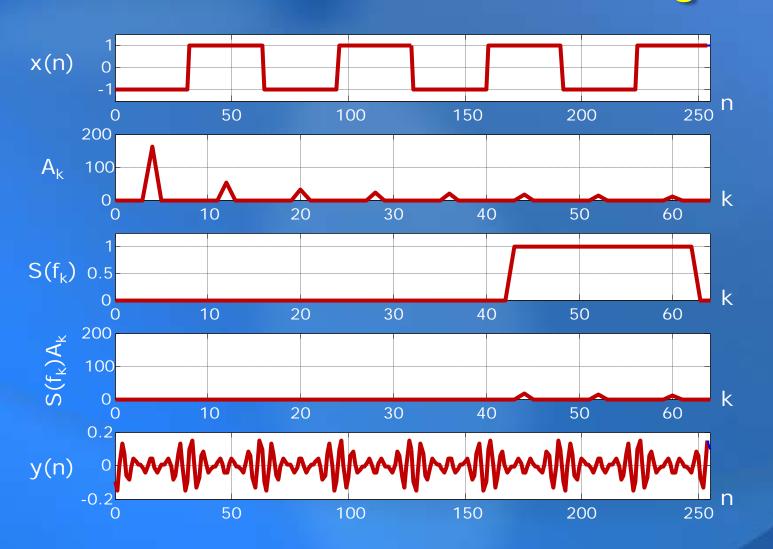


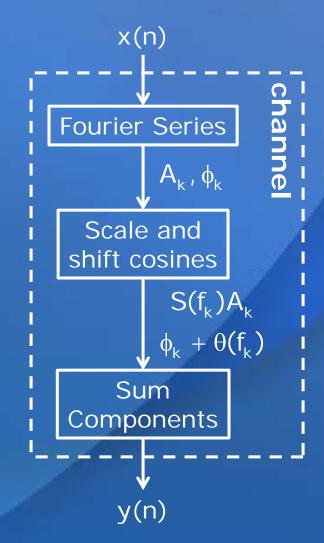




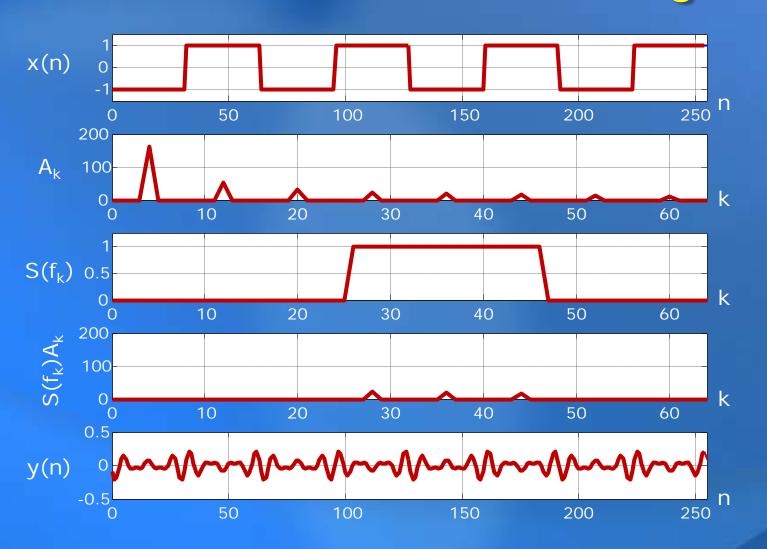


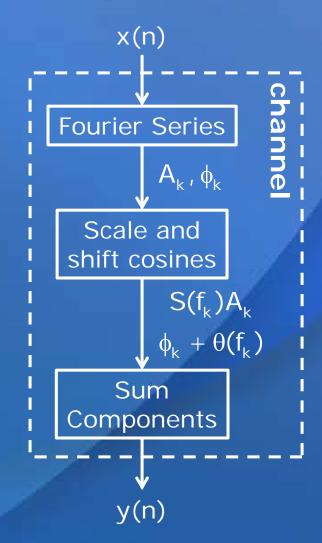
## Band Pass Filter f<sub>c</sub> = 52/256





### Band Pass Filter f<sub>c</sub> = 36/256





### Band Pass Filter f<sub>c</sub> = 20/256

