**HC Analogs Module**

*This module provides functions to read the state of the HC controller’s analog inputs and encode them into proper motor duty cycle and microphone level bytes to be transmitted to the DCH*

**init\_HC\_Analog:**

Set analog input pins

**checkMic:**

Read analog mic signal

If signal is above threshold

Return TRUE

Else

Return FALSE

**MotorCmds:**

Read analog pot signal

Read analog accelerometer signal

Calculate a value proportional to pot signal deviation from neutral, call this the offset

Calculate a value proportional to accelerometer deviation from neutral, cal this the difference

Set Motor0 command to offset plus difference

Set Motor1 command to offset minus difference

Saturate both to +-100

Format command bytes with leading bits indicating address and trailing bits indicating duty cycle

**Get\_Motor0:**

Return Motor0 command byte

**Get\_Motor1:**

Return Motor1 command byte