**Lab 1：Introduction**

|  |  |
| --- | --- |
| **Author** | Name：张旭东 Student ID: 12011923 |
| **Introduction**  In Lab 1, we do amplitude modulation by using LabView. We set the sampling rate of all the signal generators to 1M Hz. First, we need to create a modulator to obtain the signal, Sm(t). Then, Sm(t) is through AWGN Channel. However, it is all known that AWGN Channel has noise interference in the transmission process. So, we use Sm(t) to generate white noise, which simulate the noise in the transmission process and be received by the demodulator with Sm(t). Last, the signal after demodulating is played through Play Waveform.  **Lab results & Analysis**：  The following figure is the program chart.  The following figure is the result.    **Note**: Please indicate meaning of the symbols in all expressions. Please indicate the coordinate and unit in all figures. | |
| **Experience**  What’s the most important is that the sampling rate of all the signal generator must be the same and must be greater than twice the frequency. | |
| **Score** |  |