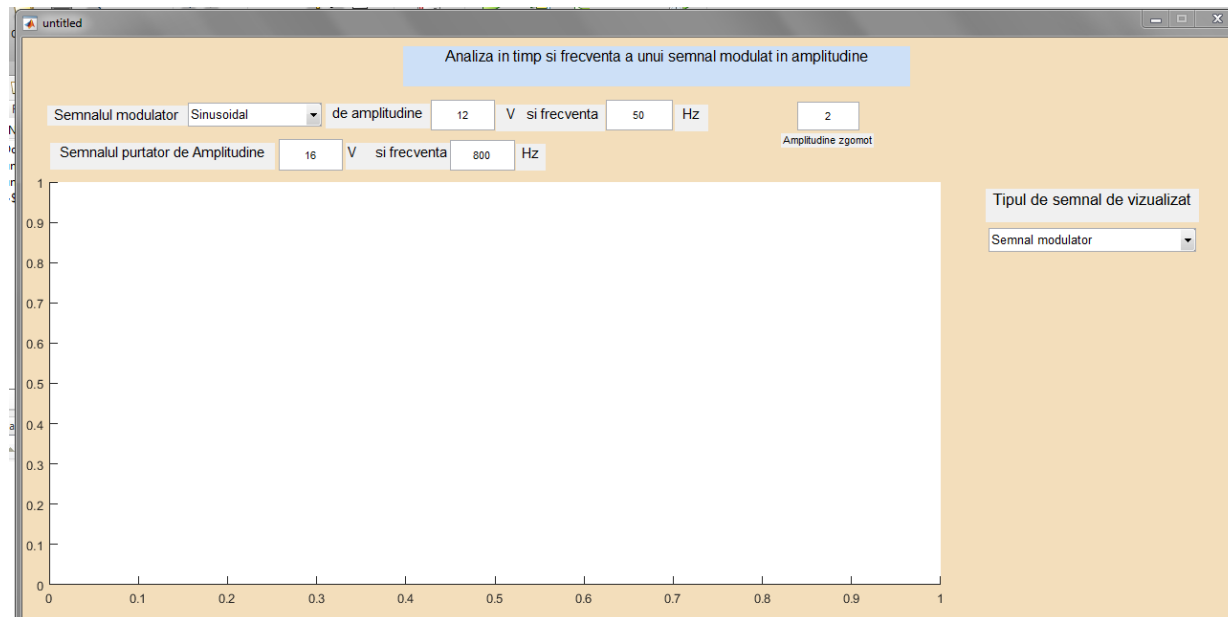


## Rezultate ale simularilor

### Cazul 1: semnal modulator sinusoidal



Amplitudinea modulatorului: 12 V

Frecventa modulatorului: 50Hz

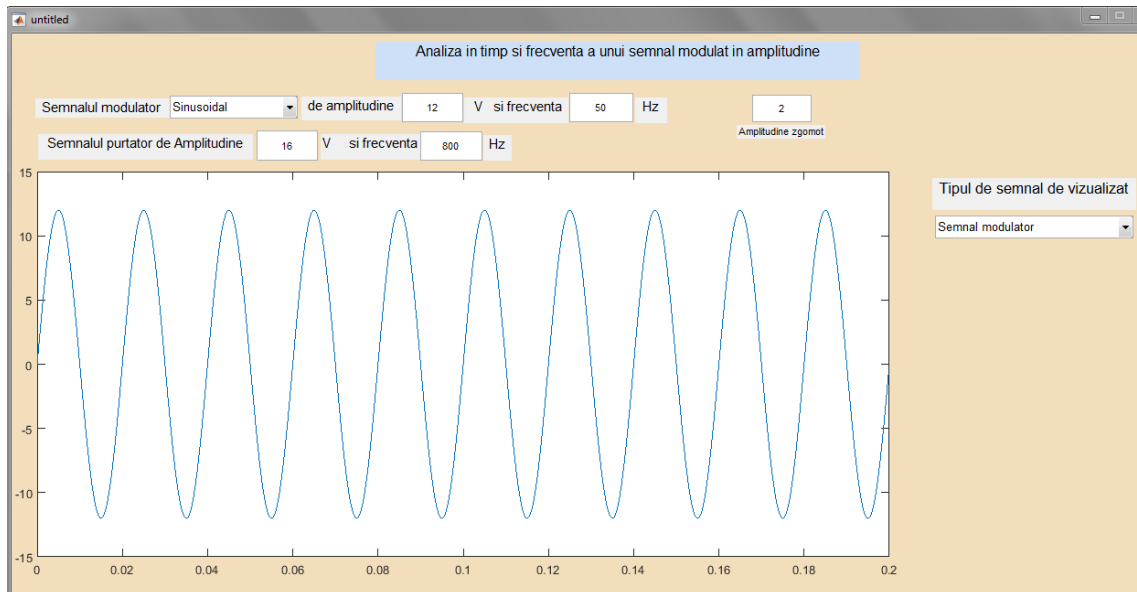
Amplitudinea purtatorului: 16V

Frecventa purtatorului: 800Hz

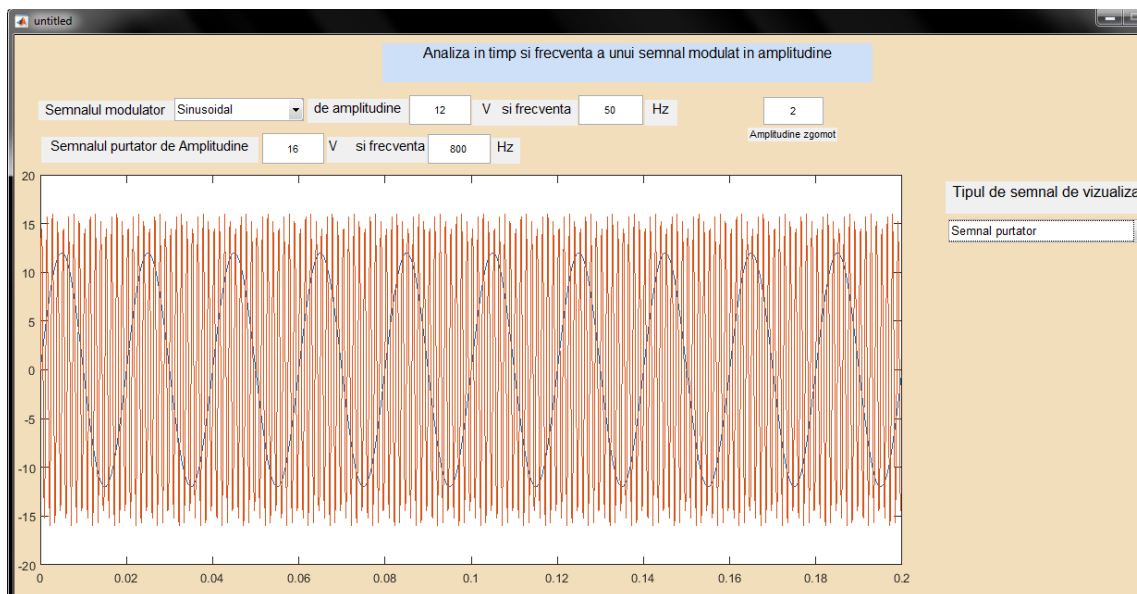
Amplitudinea zgomotului: 2

În funcție de opțiunea selectată la rubric “Tipul de semnal de vizualizat”, în chenarul destinat grafice vor apărea următoarele:

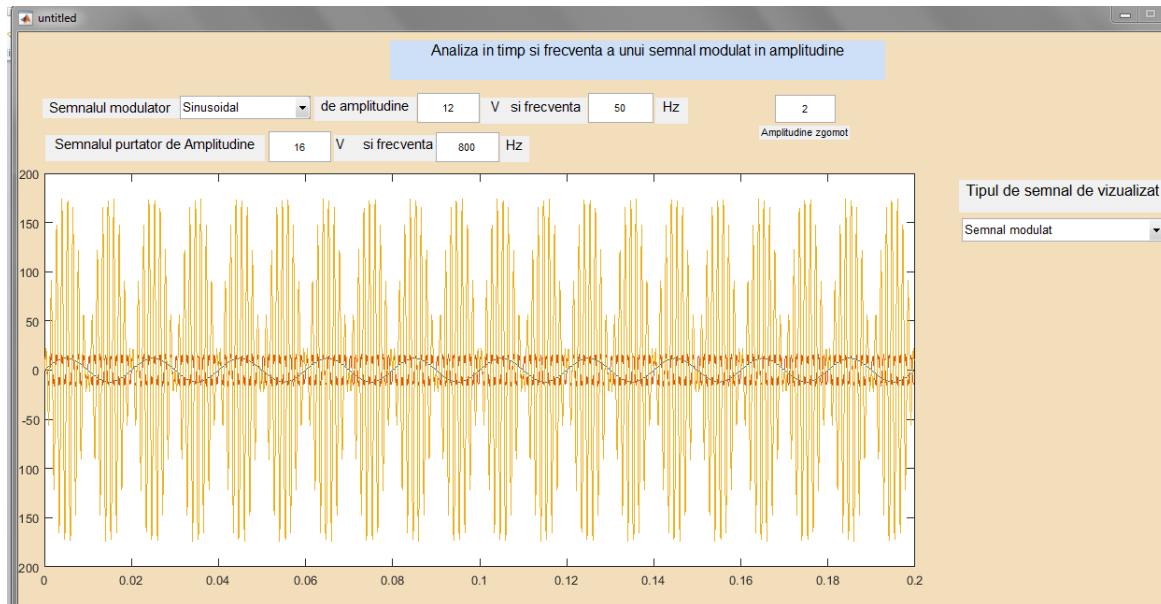
- Semnalul modulator:



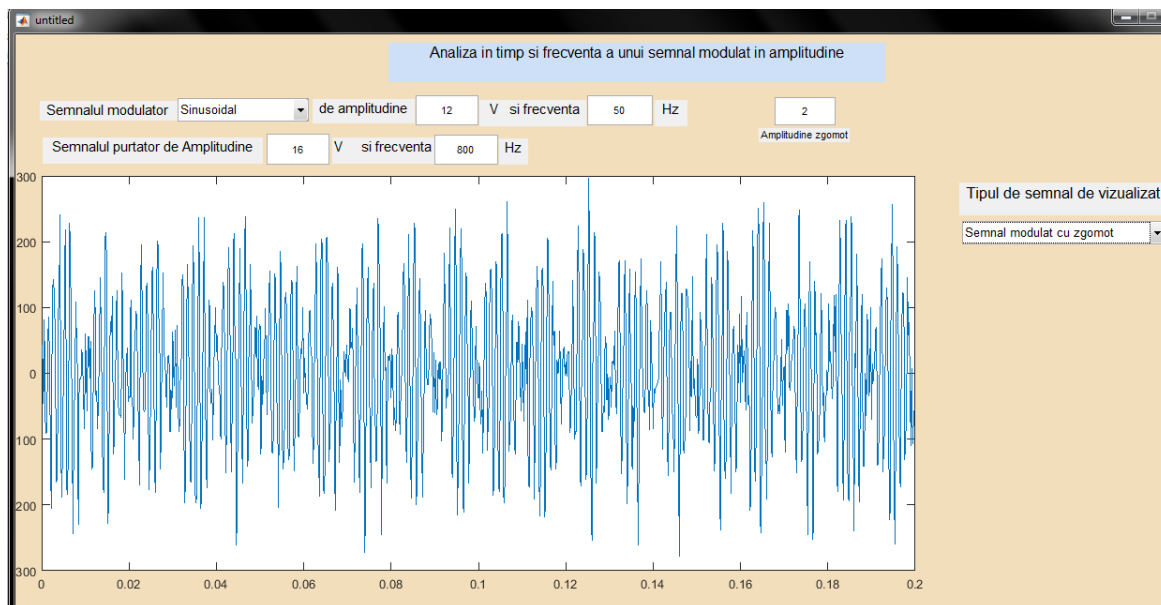
- Semnalul purtător:



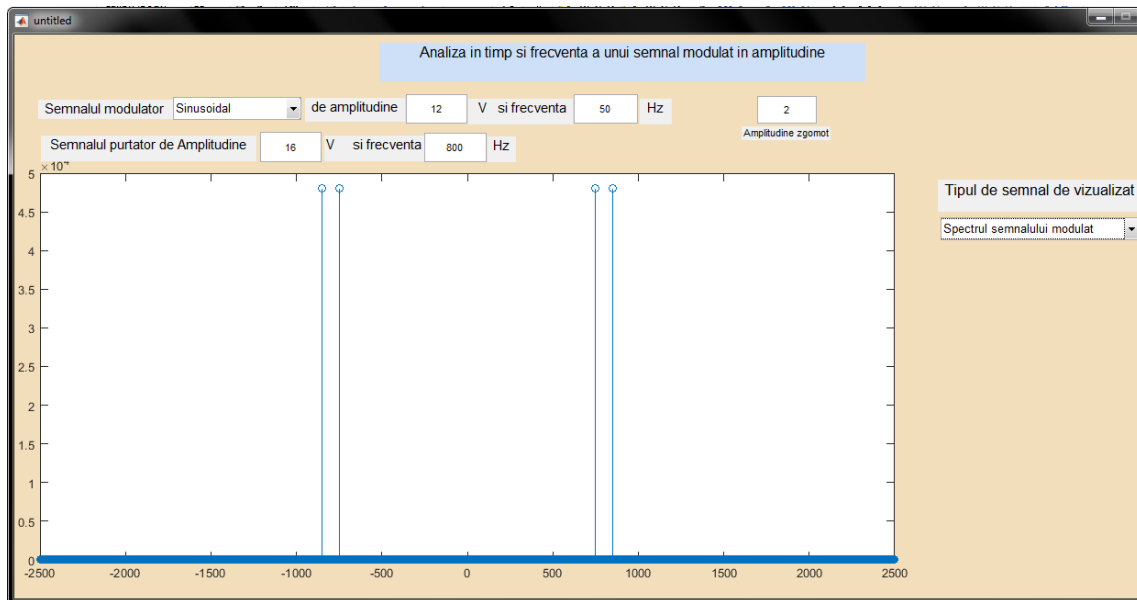
- Semnalul modulat in amplitudine:



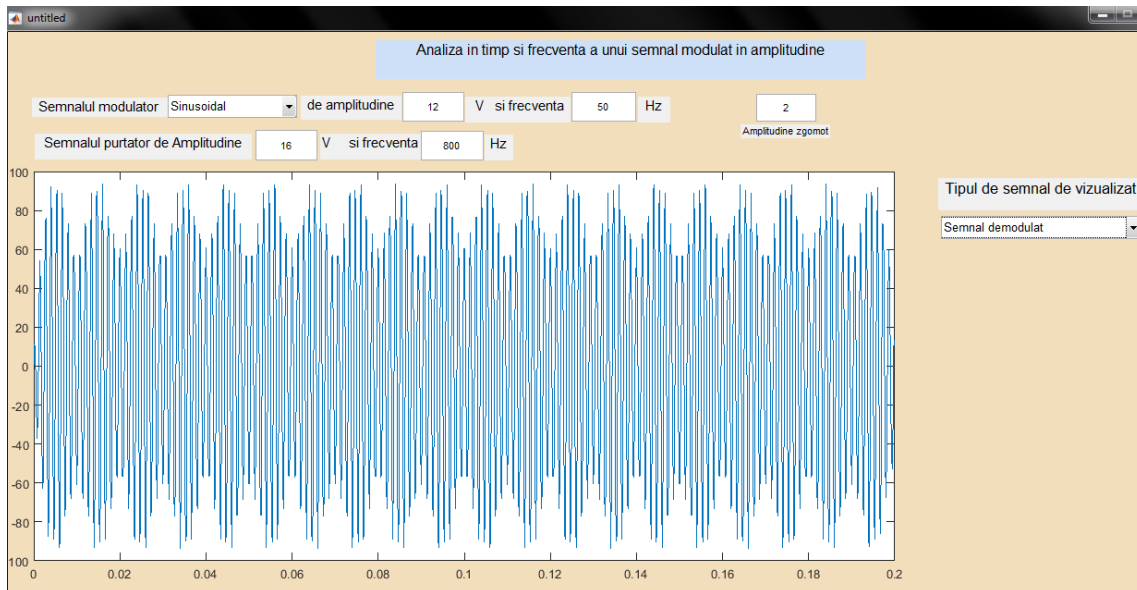
- Semnalul modulat cu zgomot:



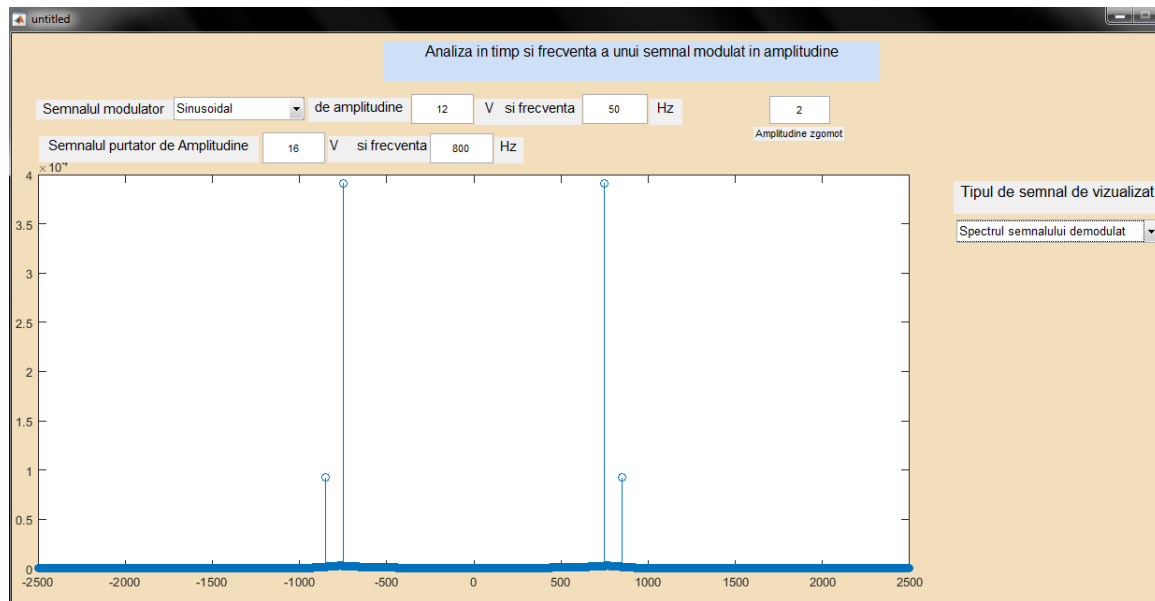
- Spectrul semnalului modulat:



- Semnalul demodulat:

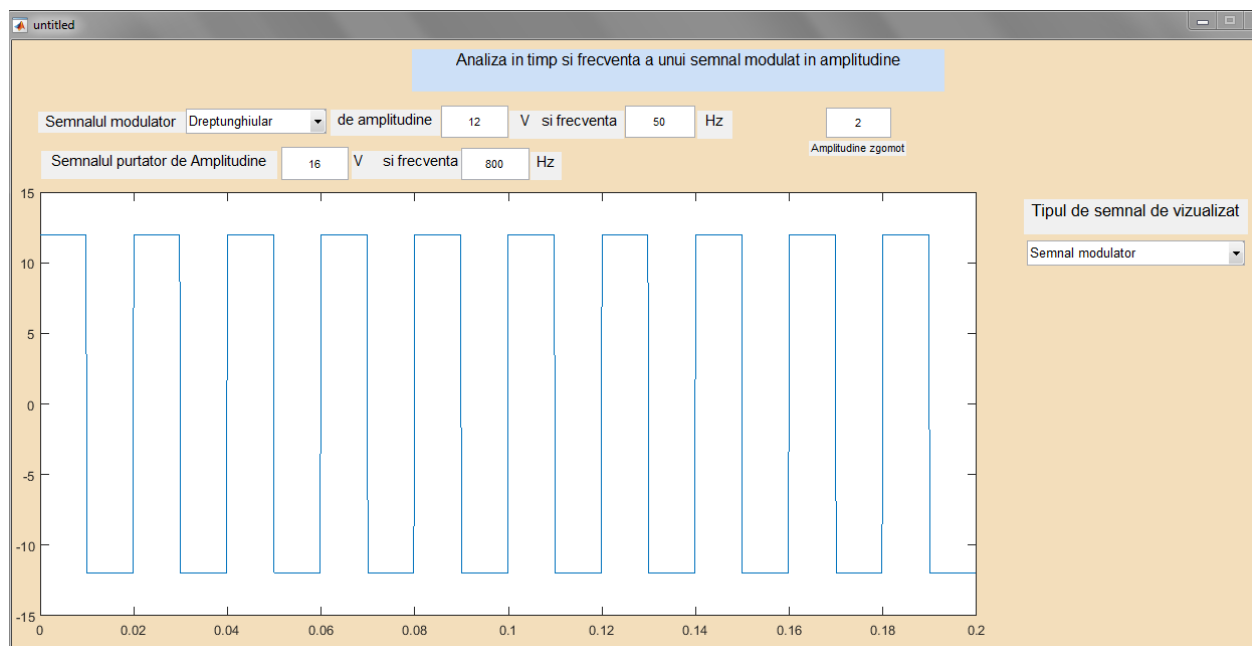


- Spectrul semnalului demodulat:

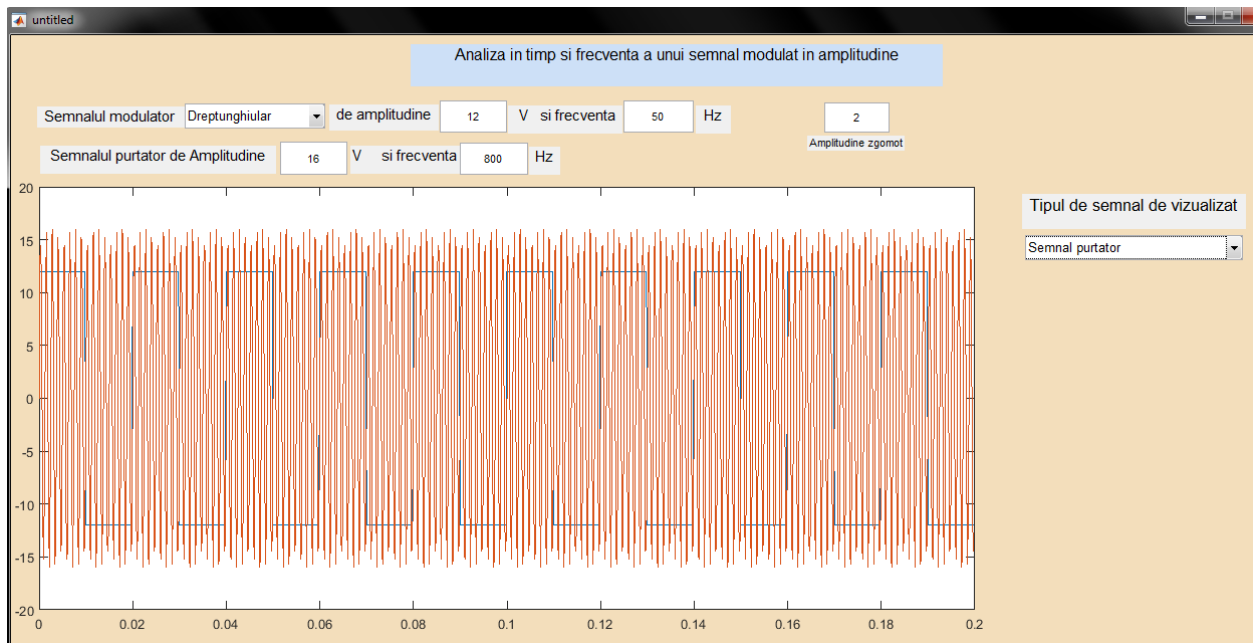


## Cazul 2: semnal modulator dreptunghiular

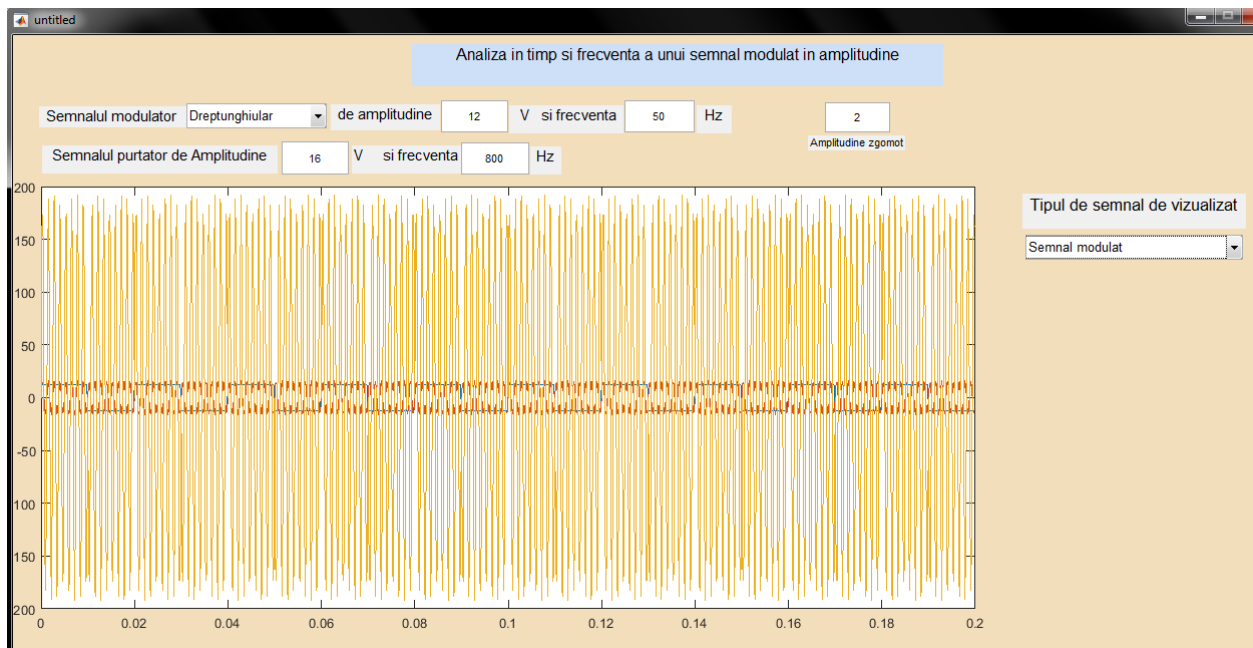
- Semnalul modulator:



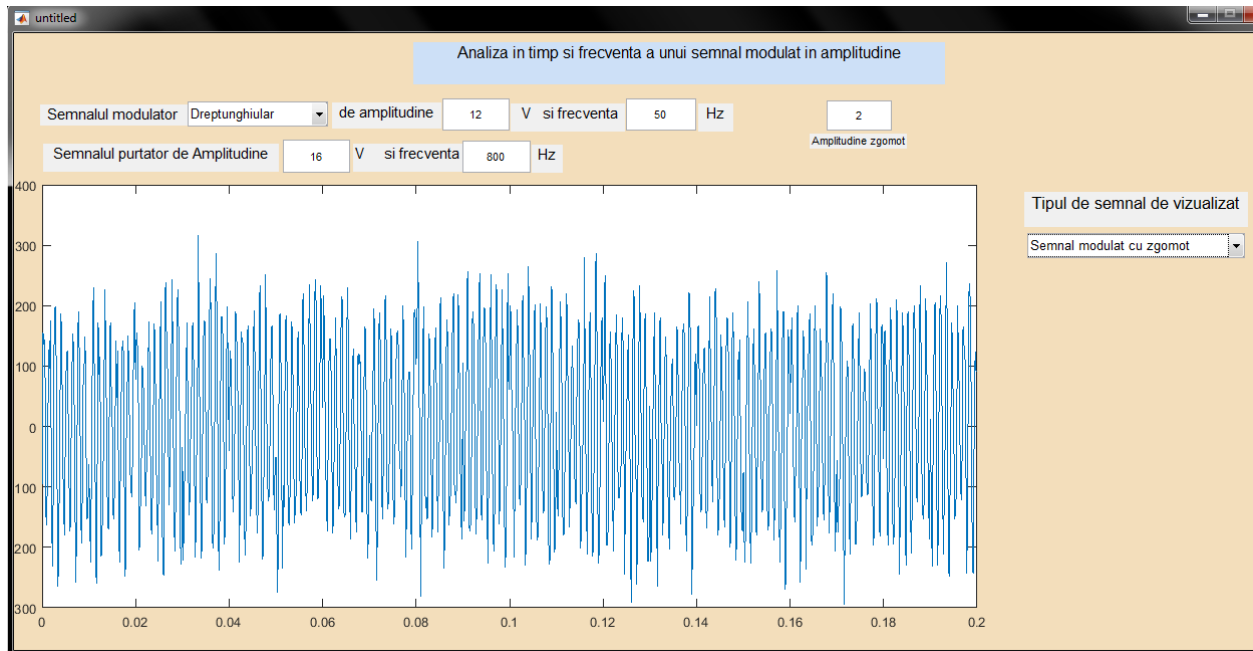
- Semnalul purtator:



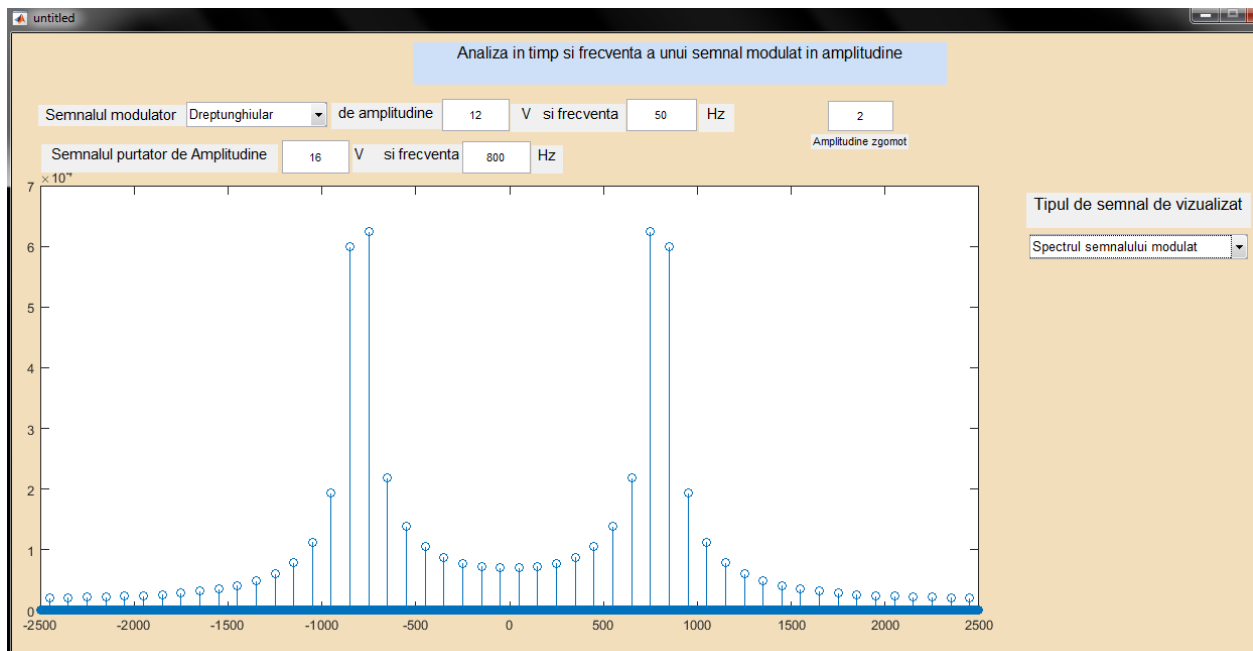
- Semnalul modulat:



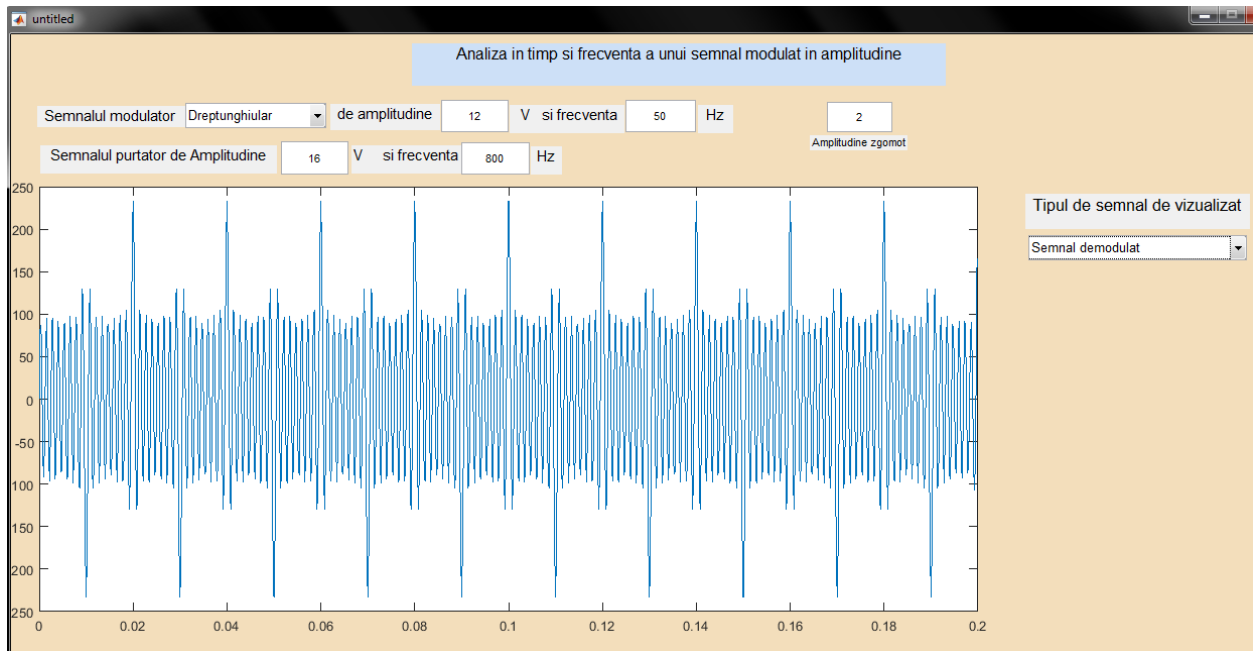
- Semnalul modulat cu zgomot:



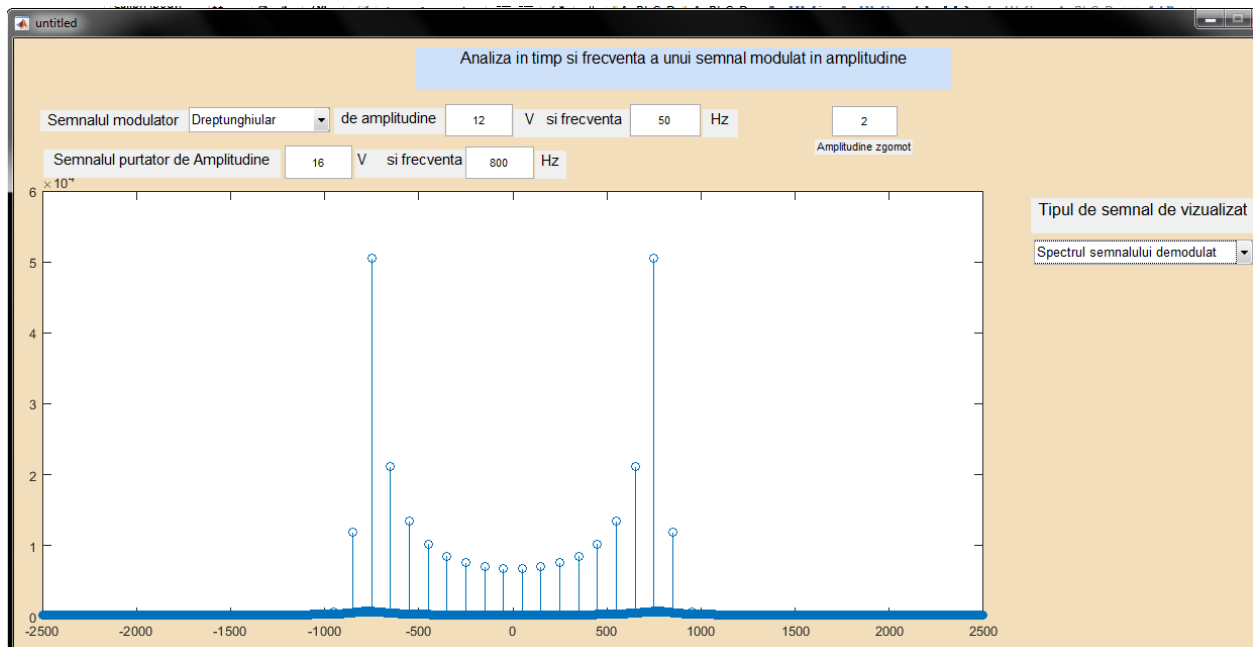
- Spectrul semnalului modulat:



- Semnalul demodulat:



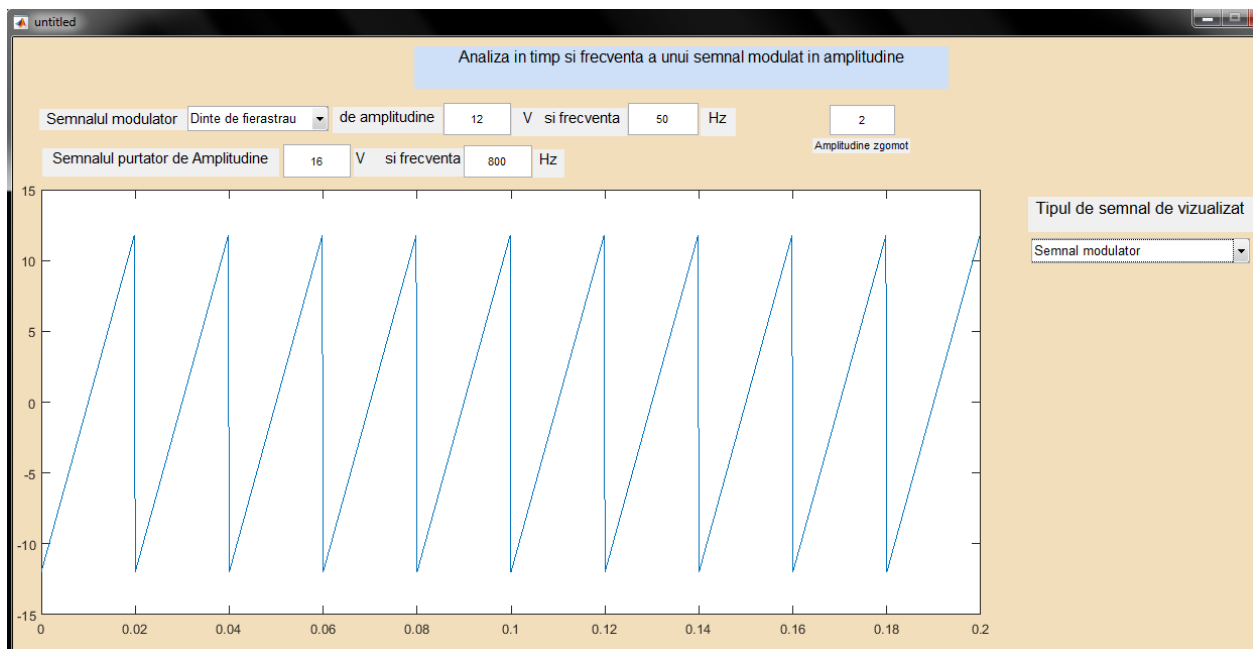
- Spectrul semnalului demodulat:



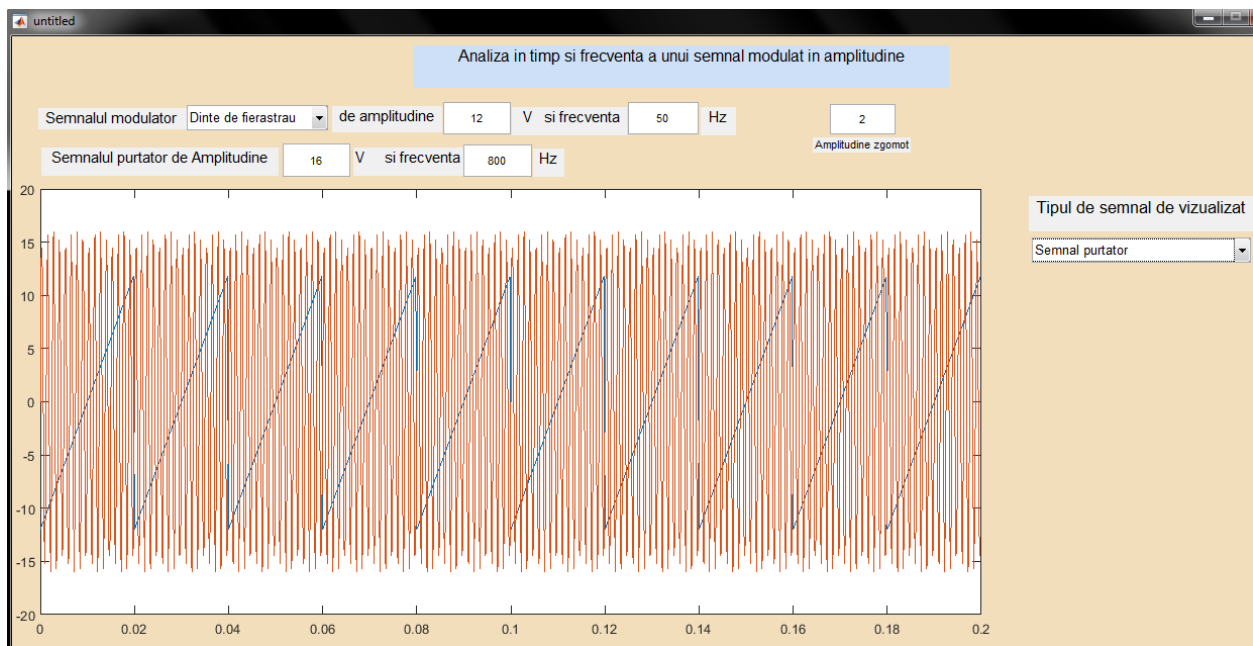


### Cazul 3: semnal modulator dinte de fierastrau

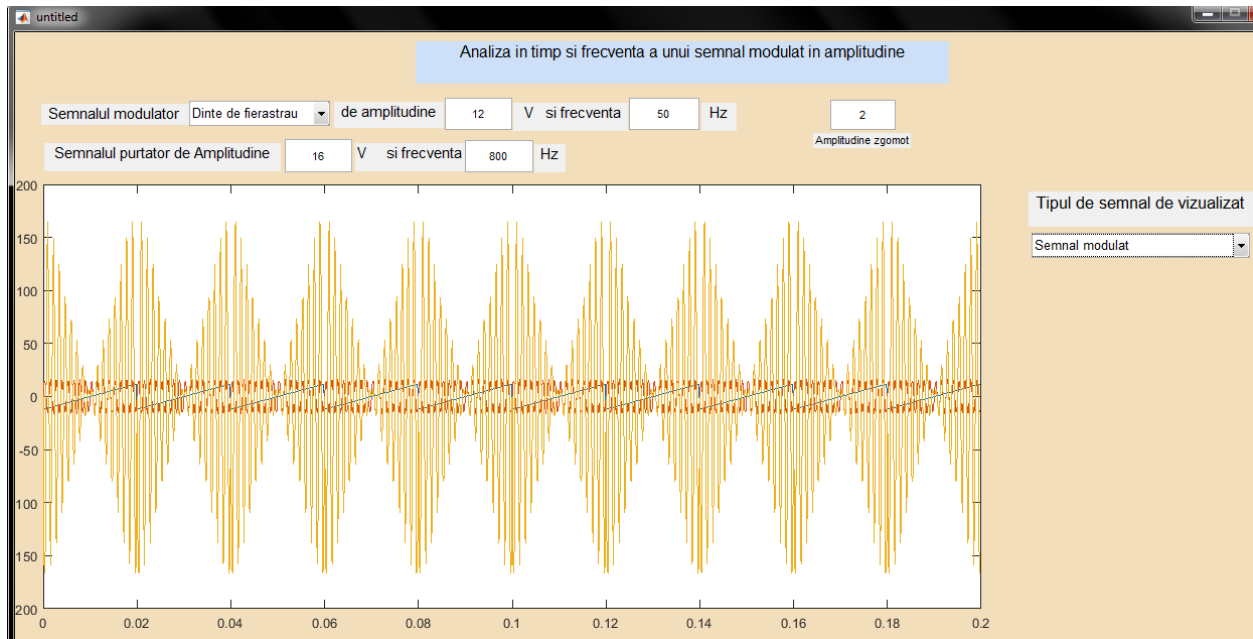
- Semnalul modulator:



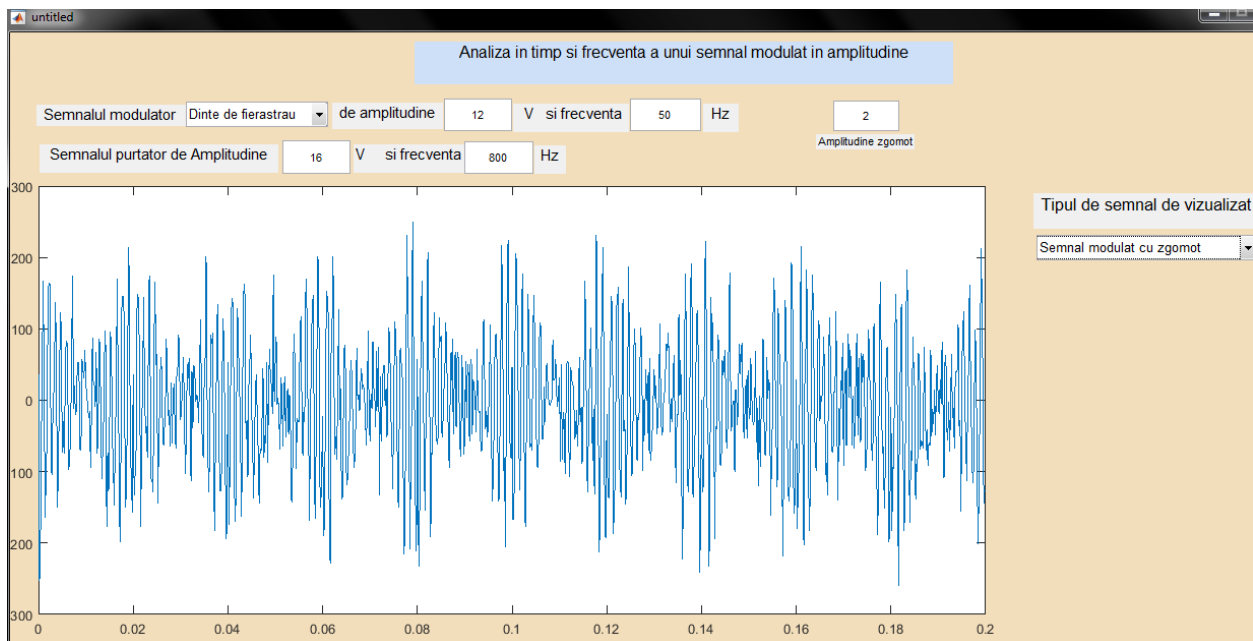
- Semnalul purtator:



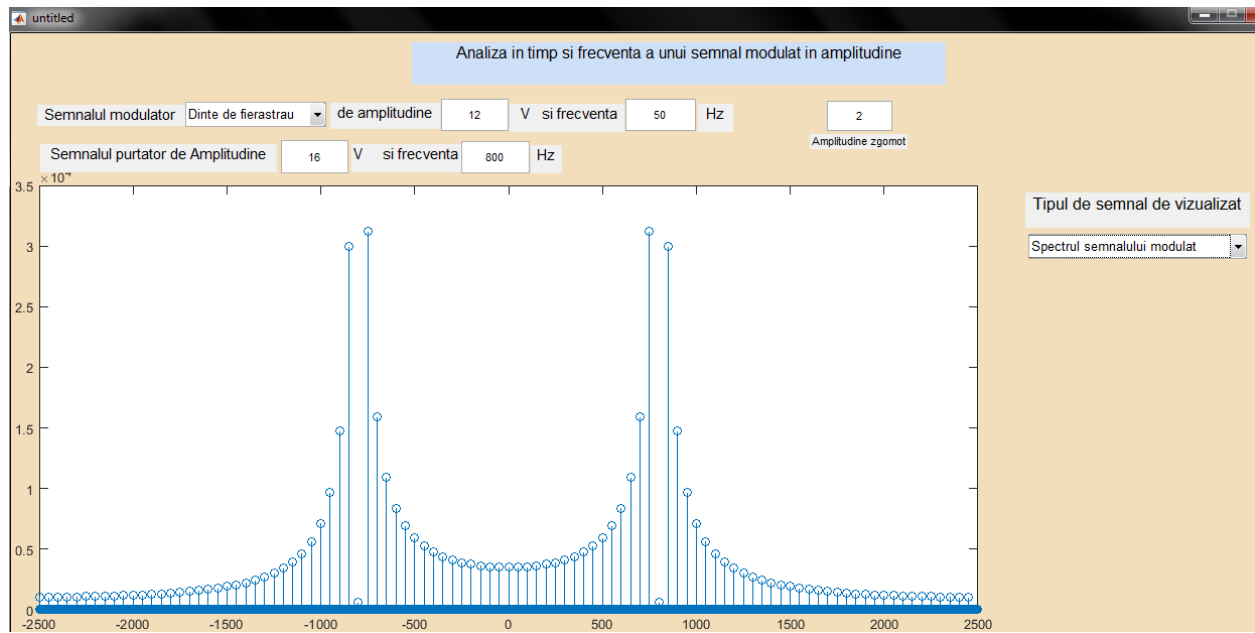
- Semnalul modulat:



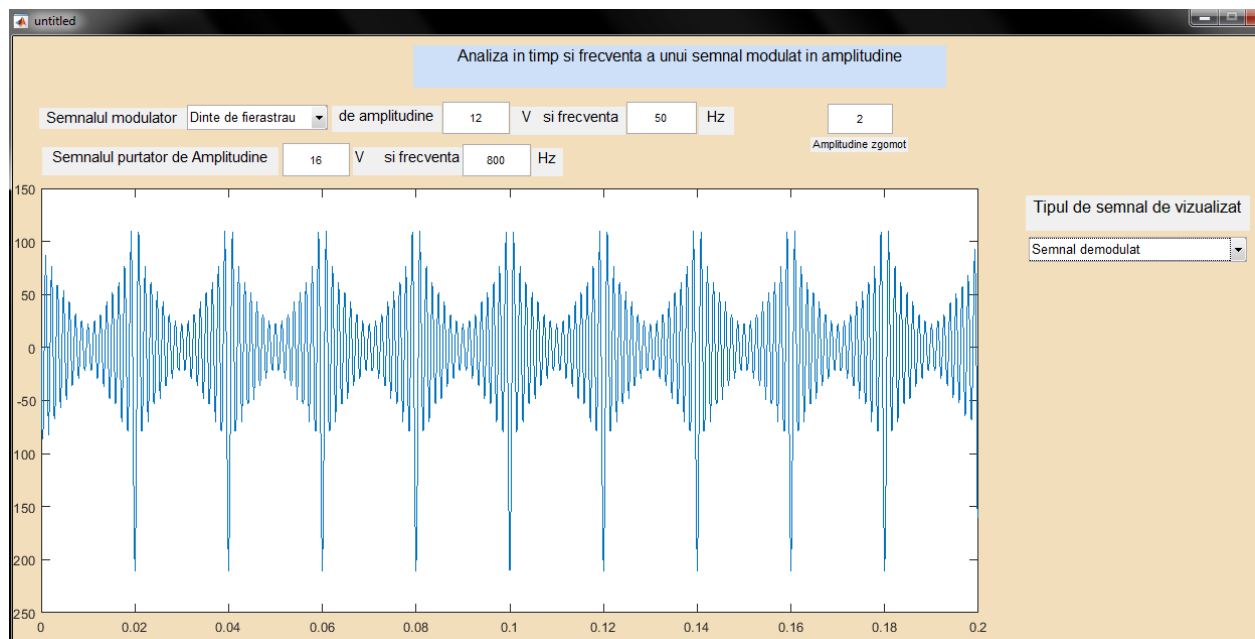
- Semnalul modulat cu zgomot:



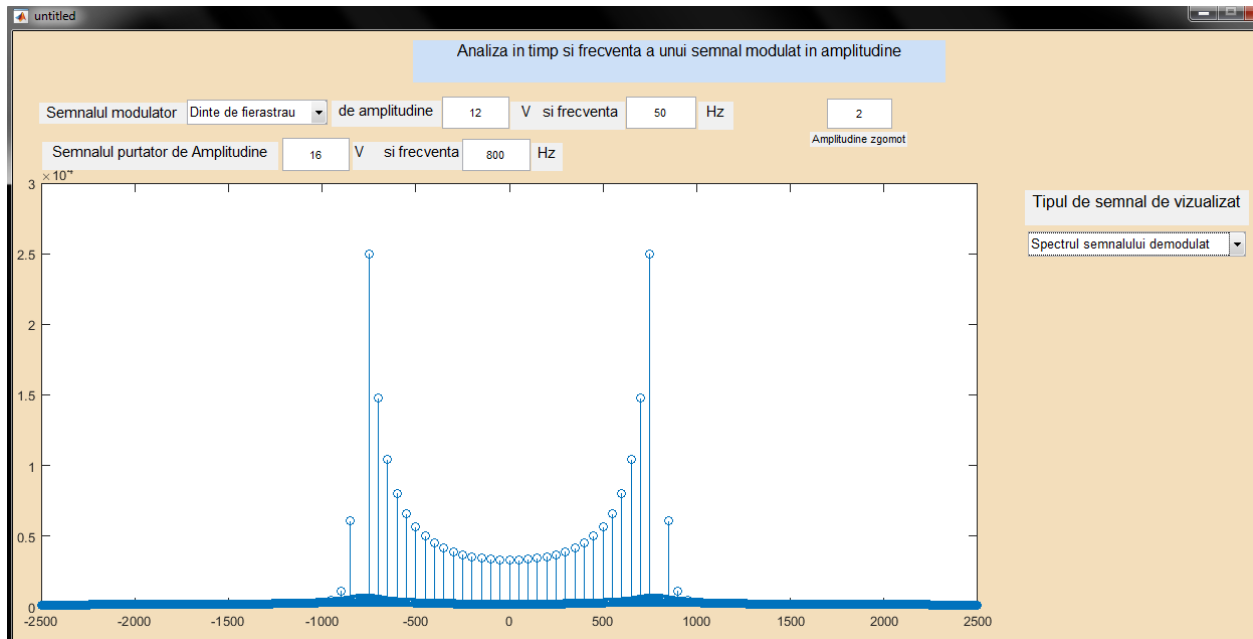
- Spectrul semnalului modulat:



- Semnalul demodulat:

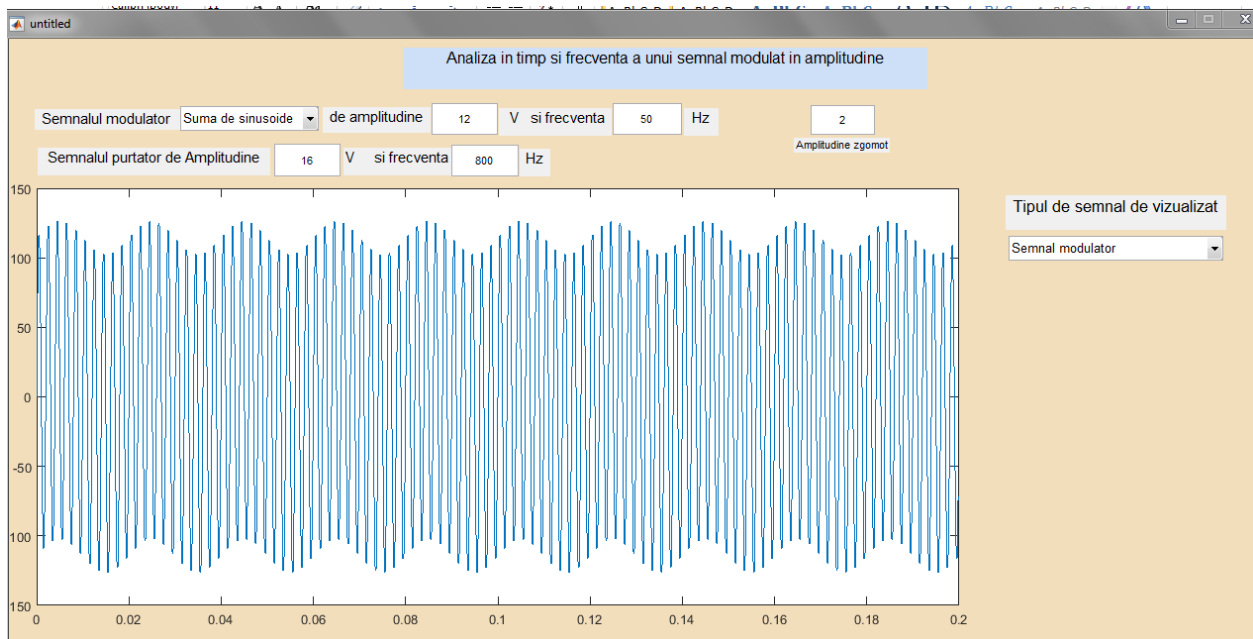


- Spectrul semnalului demodulat:

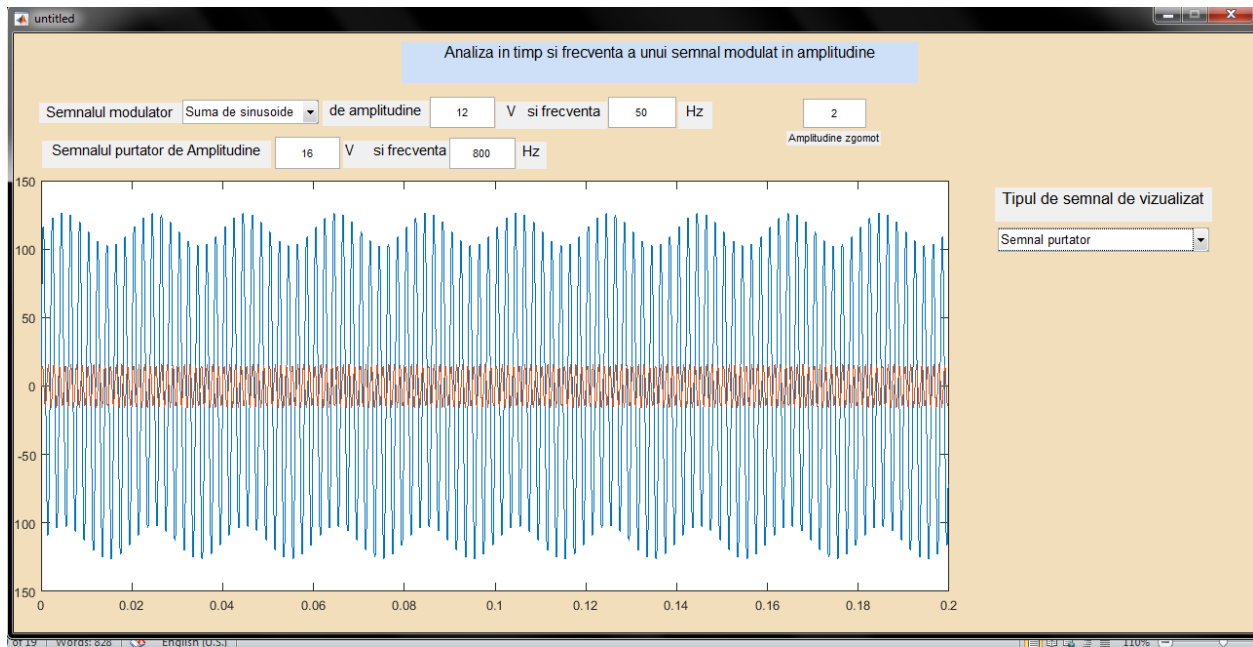


#### Cazul 4: semnal modulator suma de sinusoida

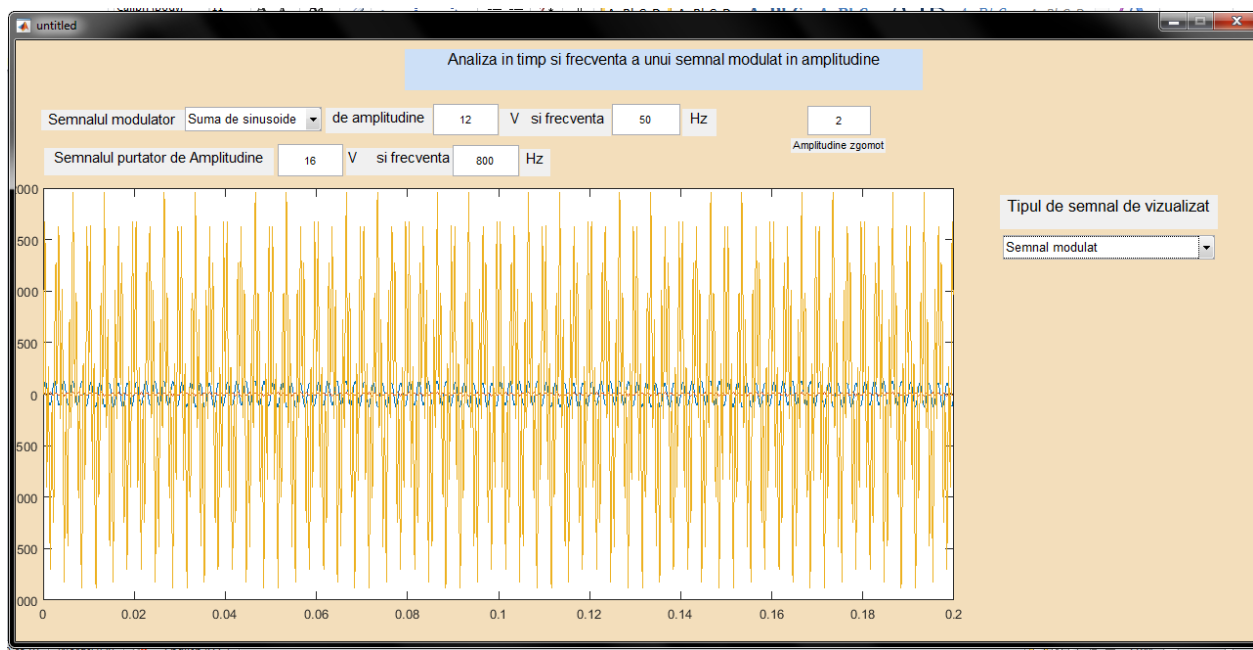
- Semnalul modulator:



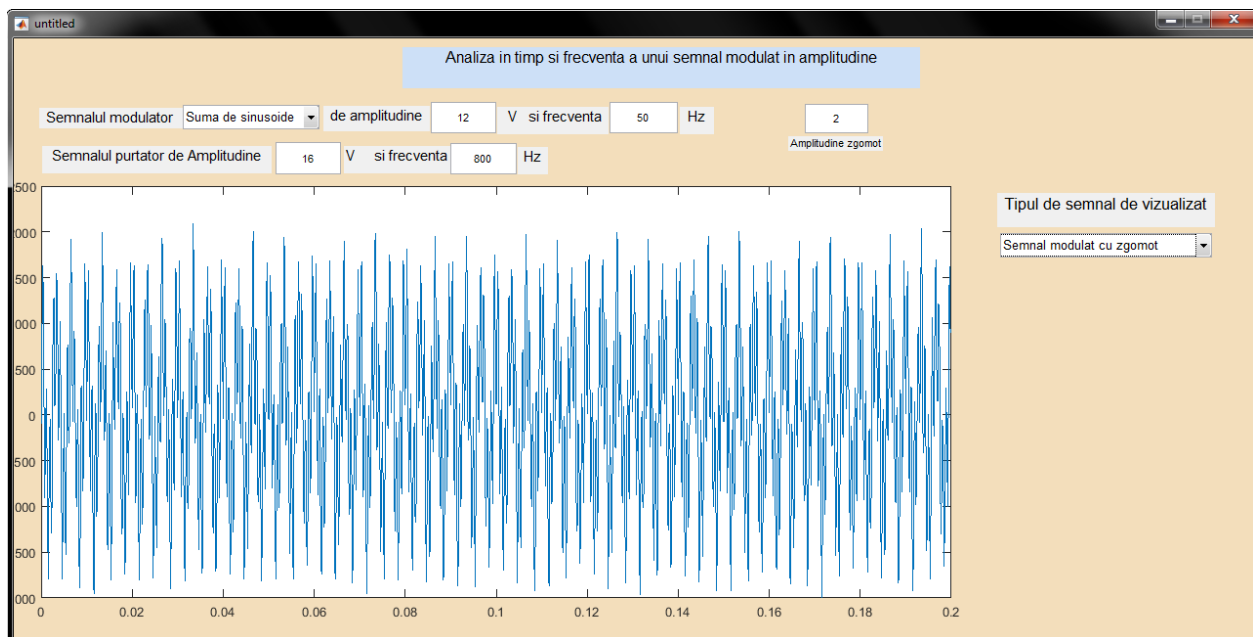
- Semnalul purtator:



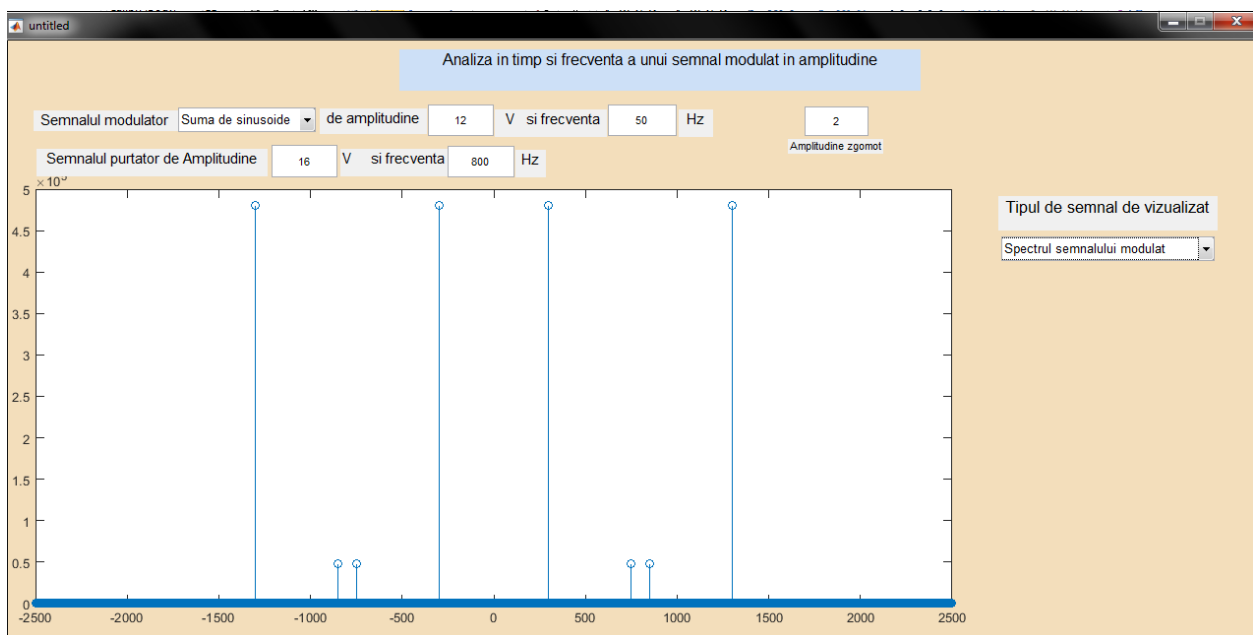
- Semnalul modulat:



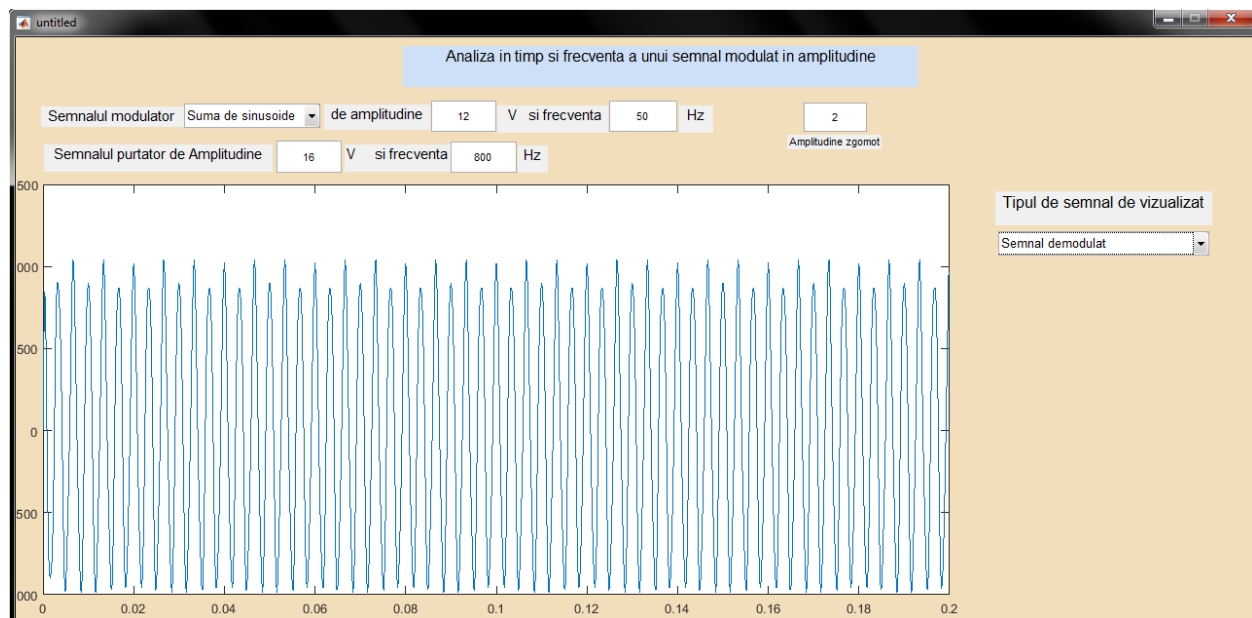
- Semnalul modulat cu zgomot:



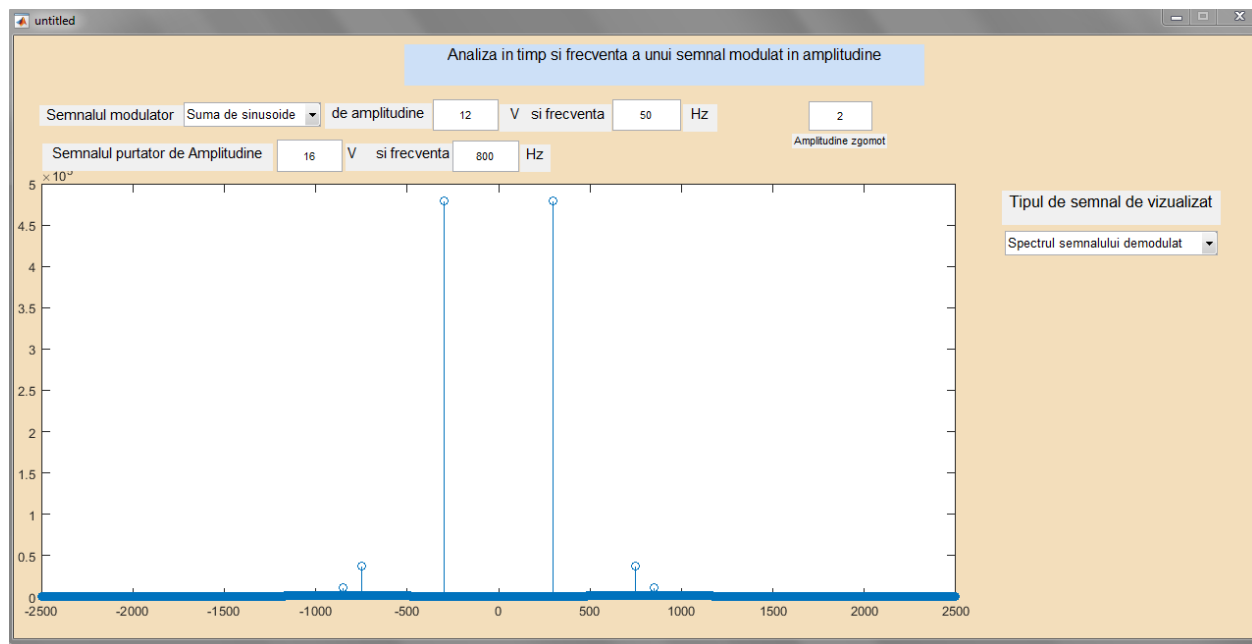
- Spectrul semnalului modulat:



- Semnalul demodulat:



- Spectrul semnalului demodulat:



## Concluzii

- Indiferent de semnalul modulator ales, purtator ramane acelasi, un semnal sinusoidal cu parametrii setati in interfata.
- Proiectul permite vizualizarea semnalului modulat in amplitudine in fiecare etapa: semnalele modulator si purtator individuale, semnalul modulat, semnalul modulat cu zgomot, spectrul semnalului modulat si demodulat.
- Frecventa semnalului purtator trebuie aleasa mult mai mare decat frecventa semnalului modulator.