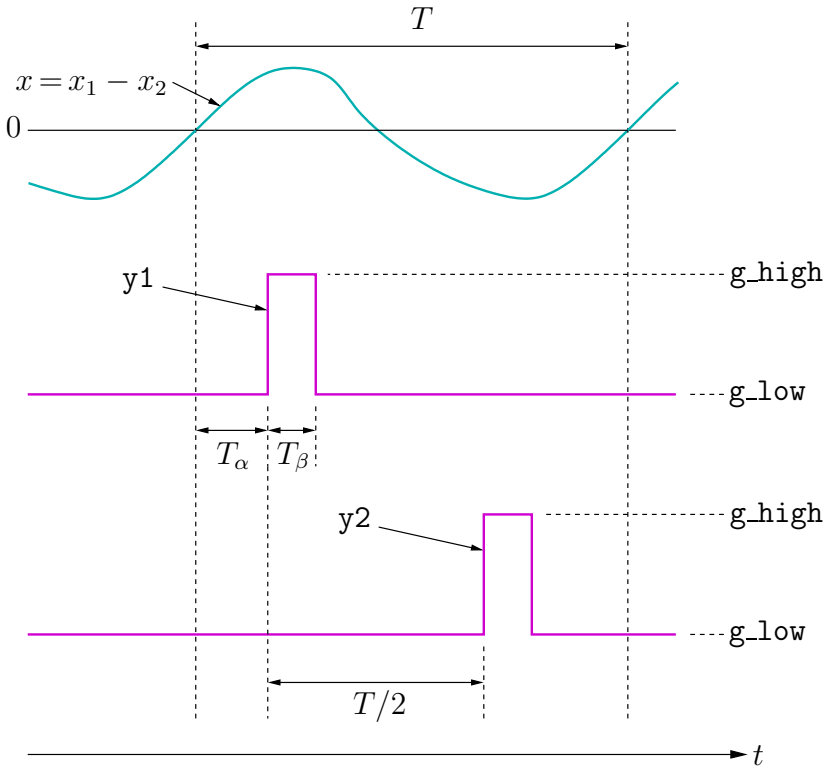
gate_pulse_1.gce

Attributes

```
  mainvars: x1 x2 y1 y2
  rparms:
+   frequency=50
+   alpha=90
+   beta=20
+   g_low=0
+   g_high=1
+   delt_min=1.0e-6
+   delt_nrml=1.0e-3
```

Description

`gate_pulse_1.gce` can be used to produce two pulses which are 180° apart (`y1` and `y2`), triggered by zero-crossing of $x = x_1 - x_2$ (see figure). The inputs `x1` and `x2` are assumed to be periodic, with the frequency specified by the real parameter `frequency`. The pulse duration is determined by the real parameter `beta` (in degrees) and is computed as $T_\beta = \dfrac{\beta \times T}{360}$. The pulse `y1` is delayed with respect to the zero-crossing of x (from negative to positive), the delay being specified by the real parameter `alpha` (in degrees). The delay interval is computed as $T_\alpha = \dfrac{\alpha \times T}{360}$.



The parameters `delt_min` and `delt_nrml` denote the minimum and normal time step, respectively. They are used to ensure that the transitions (from low to high and high to low) are captured with a good resolution. `delt_min` should be generally set to be small (by a factor of 10 to 100) compared to `delt_nrml`.

AC behaviour is not implemented.