;only for topspin 1.3 version  
;mfa\_cosy\_relay  
  
#include <Avance.incl>  
#include <Grad.incl>  
  
"d0=3u"  
"d13=4u"  
  
1 ze  
2 d1  
3 50u  
  p1 ph1  
  d0  
  d13 UNBLKGRAD  
  p16:gp1  
  d16  
  p1 ph2  
  d13  
  p16:gp1  
  d16  
  goscnp ph31  
  d13 wr #1   
  p16:gp2  
  d16  
  p1 ph11  
  d13  
  p16:gp2\*-1  
  d16   
  goscnp ph31  
  d13 wr #2   
  p16:gp3\*-1  
  d16  
  p1 ph11  
  d13  
  p16:gp3  
  d16   
  goscnp ph31  
  d13 wr #3   
  p16:gp4  
  d16  
  p1 ph11  
  d13  
  p16:gp4\*-1  
  d16 BLKGRAD  
  gosc ph31  
  d1 wr #4   
  lo to 3 times 2  
  30u if #1  
  30u if #2  
  30u if #3  
  30u if #4  
  30u id0  
  lo to 3 times td1  
    
exit  
  
ph1=0 2   
ph2=0  
ph11=1    
ph31=0 2  
  
  
;pl1 : f1 channel - power level for pulse (default)  
;p0 : f1 channel -  20 to 90 degree high power pulse  
;p1 : f1 channel -  90 degree high power pulse  
;p16: homospoil/gradient pulse  
;d0 : incremented delay (2D)                         [3 usec]  
;d1 : relaxation delay; 1-5 \* T1  
;d13: short delay                                    [4 usec]  
;d16: delay for homospoil/gradient recovery  
;in0: 1/(1 \* SW) = 2 \* DW  
;nd0: 1  
;NS: 1 \* n  
;DS: 16  
;td1: number of experiments  
;FnMODE: QF  
  
;use gradient ratio:    gp 1 : gp 2 : gp3 : gp4  
;              50 :  30 : 40 : 17  
  
;for z-only gradients:  
;gpz1: 50%  
;gpz2: 30%

;gpz3: 40%  
;gpz4: 17%  
  
;use gradient files:     
;gpnam1: SINE.100  
;gpnam2: SINE.100  
;gpnam3: SINE.100  
;gpnam4: SINE.100  
  
  
  
;$Id: cosygpqf,v 1.3 2002/06/12 09:04:27 ber Exp $