600 HCN Cold Probe Default Parameters

- ***Tuning for Ubiquitin***
  - $^{1}H \sim 55$
  - $^{13}C \sim 65$
  - $^{15}N \sim 95$
- ***Offsets***
  - tof ~ 215.2 (~4.77 ppm at 25 deg C)
  - dof (^{13}C) ~ 11509 (~174 ppm)
  - dof2 (^{15}N) ~ 1264 (~119 ppm)
- ***Pulse widths***
  - ^{1}H: pw = 7.2 at tpwr = 58
  - ^{13}C: pwC = 12.5 at pwClvl = 59
  - ^{15}N: pwN = 31.0 at pwNlvl = 60
- ***Deuterium decoupling using channel 4 (assumes garp1 or waltz with pwD90 of 250 usec)***
  - H2dpwr3D = 44
  - H2dmf3D = 3565
  - H2pw90(CH4) = 146.25 at 49 dB
  - H2seq = garp1
  - H2dres3D = 1
- ***Amplifier compressions***
  - compH = 0.97
  - compC = 1.09
  - compN = 0.98
- ***Maximum Power Limits (set in ghn_co)***
  - Channel 1: 58dB
  - Channel 2: 60 dB
  - Channel 3: 60 dB
  - Channel 4: 50 dB
- ***BioPack Power Limits (set in ghn_co)***
  - BPpwrlimits = 1
  - BPspinlock =
  - 1H observe = dB
  - 13C decoupling = dB
  - 1H/13C spinlock =
  - 15N decoupling = dB
  - 2D decoupling = dB
- ***Gradients***

    - gzlvl1 = 18000, gzlvl2 = 18260 (ratio 0.986)
- **Lock level values for lineshape sample**
    - Lock power = 28
    - Lock gain = 32
    - Lock level when shimmed well > 70
- ***Gain***
    - Gain values should always be > 18. Values between 20 and 25 are typically good values.