- Server/Station communication
  - Messages
    - Message format
      - Human readable
      - #: display, don't interpret
      - every messages ends with one of
        - \r
        - \n
        - \r\n
      - empty lines are ignored
      - Numbers
        - Consistent with library
        - BOM: 0...15
        - Motors: 1/2
        - Rangefinders: (look at the library code)
        - Encoders: 1/2
    - Server -> Station
      - help
        - Outputs list of commands
        - Use # for output
      - start tests
        - all tests
          - start_test all
        - all tests for one component
          - all rangefinders
          - start_test rangefinder all
          - start_test encoder all
          - start_test motor all
          - start_test bom all
        - test one individual component
          - rangefinder 3
          - start_test rangefinder <num>
          - start_test enocder <num>
          - start_test motor <num>
          - start_test bom <num>
      - stop
    - Station -> Server
      - data messages
        - bom
          - data bom emitter <num> <value> <value> <value> ...
          - data bom detector <num> <value> <value> <value> ...
        - rangefinders
          - data rangefinder <num> <direction> <wall_distance>/<rangefinder_reading>...
        - motors
          - data motor <num> <direction> <acceleration> <pwm>/<velocity>...
            - num
            - direction
              - forward
              - backward
            - acceleration
              - increasing
              - decreasing
            - velocity
              - dynamo steps per second
        - encoders
          - data encoder <num> <direction> <dynamo_value>/<encoder_value>
            - direction
              - forward
              - backward
      - finished
  - Samples
    - Server > Statation
      - >start_test all
      - < # Testing rangefinders
      - < # Testing rangefinder 1
      - < # Rangefinder 1 test finished
      - < data rangefinder 1 ...
      - < # ...
      - < # Testing rangefinders finished
      - < # Testing BOM
      - < # ...
      - < # All tests finished
      - > start_test rangefinder 3
      - > # ...
      - > data rangefinder 3 ...
  - Enhancements
    - robot died
    - error conditions
      - warning <message>
      - error <message>
    - start_test <component> num, num, num, ...
    - finished_test
      - mandatory for all tests where starting_test was sent
      - optional for detailed messages
        - rangefinder <num>
    - starting_test <test specification>
      - rangefinder <num>
      - motors <num>
      - enocder <num>
      - bom <num>
      - starting_test rangefinder 4