1RE30 &TECHNORIDERS

DATA TRANSMISSION THROUGH LASER

1. How much percentage of work has been completed so far? What is your demonstration plan for 25th May?

   We have completed 40% of our work. Main part is about coding. We have started coding part this week.

2. According to your Plan of Action, what work was planned to be completed till 18th May?

   Coding part and transmitter-receiver circuit was supposed to be completed by 18th May.

3. What work has been actually completed?

   We are done with electronics part. In first few days of this week, we solved the problem of noise at receiver end. We have perfect square wave at receiver end now at 5714.28Hz.We have also started coding part.

4. What purchases were made till 18th May?

   - Red led.
   - 2N5777 photo transistor.
   - Laser diode (red coloured).
   - SFH 203 photo diode.

   No purchases this week.

5. What problems did you face with respect to project work in this week? Did you find a solution to them or are they still pending? What was the solution to these problems?

   The main problem we are facing is of coding. We need to know about serial data transmission and reception at Arduino. We learnt PROCESSING language which is useful in serial communication, but we have problems regarding its implementation.

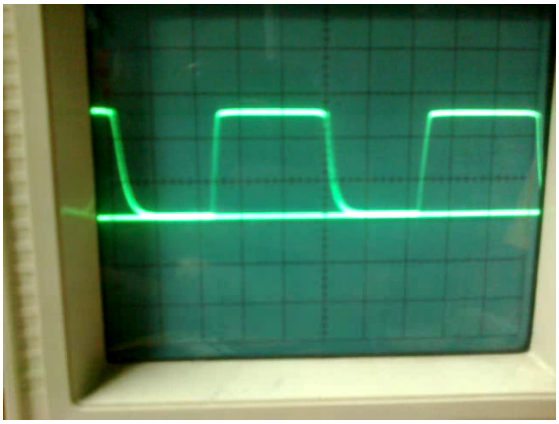
6. What was discussed in the meetings with your mentor this week?

   First meet was with Debajyoti. We showed him the finalized circuit to be used in the project. We also discussed about possible high speed laser for alternatives.

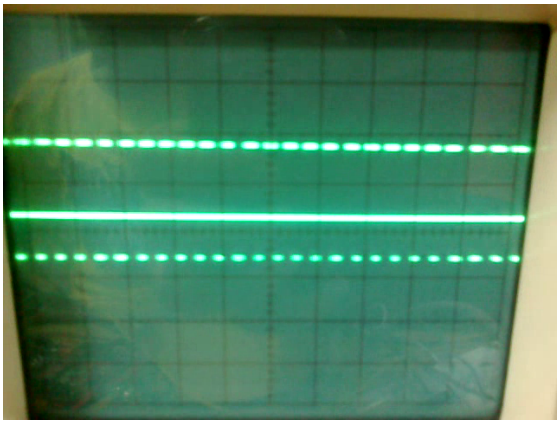
7. What is the work-plan for the next week?

   I. Completing programming part
   II. Completing communication part(texting from one computer to other)
   III. Starting with data transfer(in the form of file and folders)

8. Project Pictures (Compulsory)- Upload these pictures on the facebook group (ITSP 2012) also.



(A)



(B)

Image (A) shows waveform at the receiver end when alternate HIGH and ZERO i.e. 101010....1 was sent through laser. Image (B) is nothing but the improved version of received waveform using Schmitt Trigger so that the Output is in the digital format.