

## **Abstract**

Bassically, communication for user need two wire. This is used for guarantee full duplex communication and for minimalizing interference between user communication. But, one wire communication can be make to full duplex communication by look at grading of interference (crosstalk). This is useful for wire efficiency. Usually one wire communication only use to multi user communication (line used together). This cause nothing switching equipment in one wire communication.

In this final task (Tugas Akhir), made mini switching equipment for communication one wire and common. Characteristic of communicaton is full duplex. In the same time, only one of signaling process and used separating circuit communication. Subscriber interface using telephone set equipment. In this communication, each user connected to switching equipment using star configuration. One wire common connected to reference zero voltage of switching equipment. Ability of this equipment is : Overing Power Suply, Offhook/Onhook detection, Pulse dial detection, tone generator, ringing bell and function of switching.

Result of this Final Task indicating that one wire communication is can be happened with standar quality.

This is can be expanded for a lot of user on star configuration by look at value of cosstalk.

*STTTTELKOM*