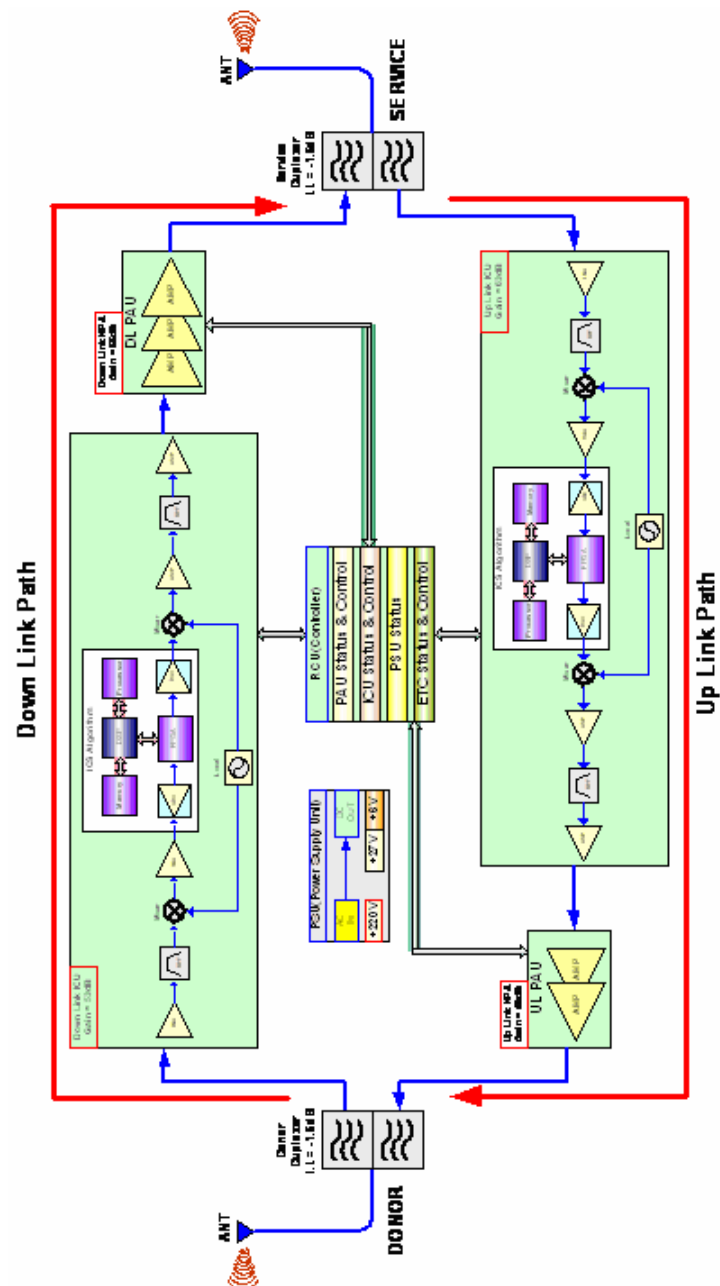


System Operation

The JI-43CP is designed to amplify between multiple MS and BTS in a PCS System.

The Unit consists of a filter and amplifier chain in the downlink and a filter and amplifier chains in the uplink. The uplink and downlink paths are connected via a band pass filter on both ends of each path.



[Figure 1- 1] Configuration of the JI-43CP

1.Downlink

In the downlink path, a signal originating from the BTS is forwarded to the ICU (interference cancellation unit) through the Duplexer. The ICU down-converts the signal to base-band, digital filters, amplifies and up-converts the signal. In addition, the interference cancellation system algorithm (ICS algorithm) is implemented in the ICU.

Finally, the signal is sent to the final power amplifier.

2. Uplink

In the uplink path, a signal originating from the Mobile Station is forwarded to the ICU (interference cancellation unit). The ICU down-converts the signal to base-band, digital filters, amplifies and up-converts the signal. In addition, the interference cancellation system algorithm (ICS algorithm) is implemented in the ICU.

Finally, the signal is sent to the final power amplifier