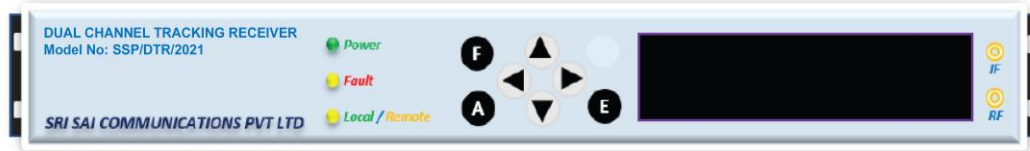


DUAL CHANNEL TRACKING RECEIVER

(MODEL No: SSP/DTR/2021)



The dual channel tracking receiver receives two independent single channel monopulse AM modulated carrier signals simultaneously at 850 MHz and 950 MHz frequencies from the C Band down converters in the RF system of the ground station.

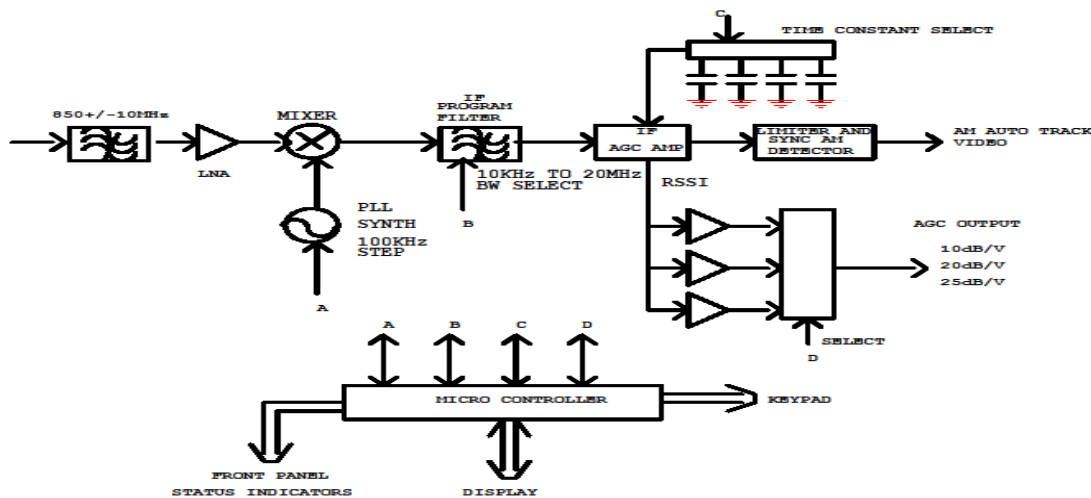
Each channel is individually processed for the extraction of AM tracking video and AGC for feeding to the Antenna Control Unit of the ground station for realizing the closed loop auto tracking functionality of the station.

The important parameters of the receiver such as the AGC time constant, predetection IF bandwidth and the AGC slope etc., are programmable as required by the user.

Monitoring and control of the programmable parameters and the health status of the unit are either can be controlled and monitored on the front panel through key pad and LCD display, or can be carried out remotely through TCP/IP protocols.

The unit will be supplied in a 2U 19" standard rack mountable chassis and fed with 230V AC power input.

The functionality and signal flow is identical for both the input tracking signals. The signal flow schematic of each channel is shown below.



TECHNICAL SPECIFICATIONS OF THE UNIT

S.No	Parameter	Specifications
1	No of Input Channels	Two
2	Input Frequencies	L Band (Compatible with two Track Input frequencies 850 MHz & 950 MHz)
3	Frequency Tuning	100 KHz step size
4	Acquisition Range	± 500 KHz
5	Input Signal Level	-90dBm to -10 dBm
6	Pre Detection Bandwidth	10 KHz to 20 MHz (Programmable)
7	Automatic Gain Control	Built In
8	AGC time constant	0.1, 10, 100, 1000 msec (Selectable)
9	AGC Output levels	10 dB/V, 20 dB/V, 25 dB/V (Selectable)
10	Output Signals	Auto Track-Video & AGC Signals AGC1, AM1 (For corresponding Track Input 850 MHz) AGC2, AM2 (For corresponding Track Input 950 MHz)
11	M&C	M&C provides the health status of receiver and programmability locally and remotely
12	Dimensions	2U standard 19" rack mountable
13	Weight	≤ 10 Kg
14	Operating Temperature	-30°C to 55°C
15	Storage Temperature	-40°C to 85°C