CP-750 TECHNICAL DESCRIPTION

1. BASE UNIT.

1.1. GENERAL DESCRIPTION:
The AN-ID base is consist of MCU , COMPANDOR , CHARGER , HYBRIC , INTERFACE , SUPPLY and RF circuit.
The MCU UNIT: contains u101, q101 , q105, q106 q107 and the ather surrounding components

The MCU is designed to handle the following missions .

1.1.1 Processes the "LINE-INUSE" signal and outputs a flash signal to LINE IN USE led.

1.1.2 Processes the "MODEM_DET" signal and outputs a "MODEM IN USE" data signal to handset avoid the handset seizes the line in TALK mode and ture on the "MODEM IN USE" led on base.

1.1.3 Processes the "P_PHONE" signal and send command to both handset and base Relay so as to release "HOLD" mode.

1.1.4 .Receives CID I or II data signal and convers to Tx-data fand sends handset.

1.1.5. Receives ringer signal and outputs ringer sound to Bzzer and sends Tx-data to andset .

1.1.6 . Outputs PLL control signal to RF unit to control the channel.

1.1.7 . Outputs DTMF signal to TEL. LINE when TONE dialing data from handset is received.

1.1.8 Controlles the relay RL201 on/off when the handset is in "TALK" mode.

1.2 COMPANDER .
The compandor circuit is consist of u202 and its surrounding components.
The compandor circuit contains a pair of emphases and pre-emphases and a pair of dylamic compresser and expandor.

1.2.1 The emphases and pre-emphases is used for improving the S/N ratio in high band of audio frequency.

1.2.2 The compandor is designed to reduce the transmition noise in audio band .

1.3 CHARGER
The charger circuit is consist of q108, q109,q110, q112 , d110 and so on.

1.3.1 Q108 spplys the quick charge current and r129 spplys the constant current.

1.3.2 Q109 outputs the charging signal to the "CHARGING" led and mcu.

1.3.3 Through Q110 and q112 ,MCU resets the handset while in charging beginning with the"HS_ RESET" signal so as to transsmit the ID CODE to it.

1.4 HYBRIC
It is consist of q203 ,t201 , q202 , some components.

1.4.1. Audio signal through q203 ,t201 couple to the line.
The audio signal form the line through t201 to r22 , c218 and q202 send to Tx path . R235.r282,c243 and r221 ,c218 consist the sidetone cancelation network.

1.5 INTERFACE

It contains Fuse, Varsitor (vd201), Line signal detecter u201 and so on.

1.5.1 The u201-7 and q209 detect the line dc level when it is lower than 20V dc ,the LINE IN USE signal will be send to mcu.

1.5.2. U201-7 and q206 detect the line dc level dropping while in off hook, When a parallel phone (< 300 ohm dc resister) off hook is detected , q206 will send a "P-PHONE" signal to mcu

1.5.3.U201-1 and q205 detect ringer signal and send it to mcu.

1.5.4. U201-1 , u201-8, u201-14 and q204 consist the modem monitor. If there is a modem signal on the line and it's level is higher than -28 dBv, the MODEM_DET signal will be send to mcu. and

1.6 POWER SPPLY

A 120Vac to 12Vdc adeptor supplies 12Vdc to the main board. It is changed into 4 types dc source. 12v for relay and charger.

9v for hybric

5v for ICs.

3.6v for RF module

1.7 RF

RF unit is an alone module .

1.7.1 Rx circuit contain Duplexer (DF601), Down convertor(q602) , If amplifyer (q613,q614) ,10.7 mhz filter (cf 602) Mixer and Audio Detecter (TA31161)

1.7.2 Tx circuit contains Duplexer, Power amp(q611) ,Vco(Q609), and so on.

1.7.3 PLL

U601 controlled by mcu and VCO(q606,vd601) consist of. the local. oscillator to output a reference frequency for the down convertor.

CP-750TECHNICAL DESCRIPTION

2. HANDSET UNIT.

2.1. GENERAL DESCRIPTION:

The AN-ID hand consists of MCU , COMPANDOR ,BATTERY PROTECTION CIRCUIT , AUDIO CIRCUIT and RF UNIT

The MCU UNIT: contains u702,u703 ,q701--q707 q718 Xc62sp and the ather surrounding components.

The MCU process the following missions.

2.1.1 Process the Key In signal from keyboard and output Tx-tata signal to compander or send to u703 for save.

1.1.2 Process the "modem in use" data signal and output to LCD desplay .

1.1.3 Receive the "paralle phone"data signal and stop the LED flashing. while on"holh" released

1.1.4 .Receive CID I or II data signal and output to both LCD desplay and u703 to save.

1.1.5. Receive ringer signal and gerating ringer sound for Buzzer

1.1.6 . Output PLL control signal to RF unit to control the channel.

1.1.7 .. Receive the ID CODE while handset on cradle and send it to u703 to save.

1.2 COMPANDER .

The compandor circuit is consist of u801 and its surrounding components. The compandor contains a pair of emphases and pre-emphases circuit. And a pair of Dylamic Compresser and Expandor.

1.2.1 The emphases and pre-emphases is suedto improve the S/N ratio in high band of audio frequency

. 1.2.2 The compandor reduce the transmition noise in the usful audio band .

1.3 BATTERY PROTECTION CIRCUIT

The circuit consist z701, d701 and r730 and so on.

1.3.1 Z701 avoid the battery from over charge and d707-d710 is used to fixed poler . of charger

1.3.2 R730 let the HS_RESET signal from base pass to the mcu.

1.4 AUDIO CIRCUIT

1. 4.1. Rx Audio signal through q801 ,q808 output to the receiver. q803,q805,q810 consist the volum control.

1.4.2 Tx audio from mic. through q806 send to compandor to RF unit.

1.5 RF UNIT

Refer to base rf unit

The Transmit frequencies for Base and Handset are as follow: -

CH #	HS Tx freq	BS Tx freq
1	902580000	925080000
2	902640000	925140000
3	902700000	925200000
4	902760000	925260000
5	902820000	925320000
6	902880000	925380000
7	902940000	925440000
8	903000000	925500000
9	903060000	925560000
10	903120000	925620000
11	903180000	925680000
12	903240000	925740000
13	903300000	925800000
14	903360000	925860000
15	903420000	925920000
16	903480000	925980000
17	903540000	926040000
18	903600000	926100000
19	903660000	926160000
20	903720000	926220000
21	903780000	926280000
22	903840000	926340000
23	903900000	926400000
24	903960000	926460000
25	904020000	926520000
26	904080000	926580000
27	904140000	926640000
28	904200000	926700000
29	904260000	926760000
30	904320000	926820000
31	904380000	926880000
32	904440000	926940000
33	904500000	927000000
34	904560000	927060000
35	904620000	927120000
36	904680000	927180000
37	904740000	927240000
38	904800000	927300000
39	904860000	927360000
40	904920000	927420000