Dterm IP Set Programming

1. Plug the AC adapter into the IP Dterm. Note: If using an adapter to a Series E set ensure the adapter is an IPW-2U (P-P) adapter. The adapter does not have to be connected to the IP network to be programmed.

2. Press Hold, Transfer, *, #, keys in that order. The "User Menu" appears in the LCD.

3. Press Hold, #, 0 and enter the "Administrator Menu".

4. Press 7 on the keypad for "Factory Value Set?" and press the "OK" soft key.

2. Press the "Exit" soft key to return to the "Users Menu".

3. For test purposes program the IP Dterm for direct connection via a small hub to the MP. At least one IP Dterm (and if possible all) must be tested this way initially to prove operation before utilizing the customer LAN/WAN equipment. This can and WILL save you hours of frustrating IP Network troubleshooting that may not be your responsibility.

4. From the graph below program into the IP Dterm items 1, 2, 4, and 6. Connect the IP Dterm to the same hub as the PBX and bring it on line.

Menu Number	Indication	Setting Data	Description
1	DHCP Mode	1. DHCP Mode Disable 2. DHCP Mode Enable	Set to "1" for testting
2	DRS Address Primary	XXX.XXX.XXX.XXX	Enter IP address of DRS server or PBX from CM 0B00
3	DRS Address Secondary	XXX.XXX.XXX.XXX	Enter IP address of back up DRS server or back up PBX
4	Dterm IP Address	XXX.XXX.XXX.XXX	Enter IP address of the IP Dterm
5	Default Gateway	XXX.XXX.XXX.XXX	Enter Default Gateway Address. When no Gateway (no router) is provided, this setting is not required.
6	Subnet Mask	XXX.XXX.XXX.XXX	Enter Subnet Mask for IP Dterm.
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IPLA PAD Card

The IPLA PAD (Packet Assembler De-assembler) card takes Peer to Peer voice traffic and converts it to regular TDM voice traffic and vise versa.

The card is utilized by voice traffic only when a Peer to Peer IP Dterm calls to any TDM station or trunk and vise versa.

It is also utilized by regular Dterms connected to other IPS systems via Peer to Peer CCIS.

Calls from a Peer to Peer Dterm to another Peer to Peer Dterm (in the same PBX or via Peer to Peer CCIS) DO NOT use the IPLA PAD channels.

The card can only be installed in LT01 (also takes LT00) and LT05 (also takes LT04) of any PIM with a max of 2 cards per FP which = 8 per system. Each IPLA card is connected, via cables, to a VCTA card containing 16 channels for voice traffic between P to P and TDM. Up to 2 VCTA cards can be connected for a total of 32 channels per IPLA PAD card.

If you have 2 IPLA cards in a single PIM no other LT slots in that particular PIM can be utilized though AP cards can be installed in AP08~AP11. Also the 2 LT slots to the right of each IPLA card can ONLY be filled with the VCTA card.

Basic IPLA PAD card Assignment
(Note: Programming reflects a basic network where card is in the same subnet (connected to same hub as the IP Dterms and IPS MP)

IP PAD No. **This number 0~3 is used for CM 0A00 ONLY!!**

PIM \ LT Slot	LT Slot 01(00)	LT Slot 05 (04)
PIM 0,2,4,6	IP-PAD No. 0	IP-PAD No. 1
PIM 1,3,5	IP-PAD No. 2	IP-PAD No. 3

1. CM 0A00>00~15>XXZ   Where XX= the FP controlling the PIM where the IPLA PAD is mounted and Z= the IP-PAD No. from the chart above. First Data 00~15 represents the LAN Interface number. The first IPLA you assign must always be 00 regardless of it's physically mounted position.

2. CM 0A01>00~15>XXX.XXX.XXX.XXX Where X's = the IPLA PAD IP Address. First Data 00~15 represents the LAN Interface number.

3. CM 0A02>00~15>XXX.XXX.XXX.XXX Where X's = the Subnet Mask for the IP Address entered in CM 0A01. First Data 00~15 represents the LAN Interface number.

4. CM 0A22>00~15>0 This enables the Non Linear Processor to control echo on analog trunk connections.

5. CM 0A50>00~15>X Where X= 0~7 IP PAD No. Where 0 = the first IPLA assigned, 1 the second and so on. This number has NO relation to the IP PAD No. assigned in CM 0A00. This CM is NOT assigned with R 6.2 and higher revisions of software.

6. CM 0A73>00~15>XX Where XX=07 for 32 VCT channels assigned, 02 for 24 VCT channels assigned, 01 for 16 VCT channels assigned, and 00 for 8 VCT channels assigned.

7. CM 10>000~763>DDXZZ Where X= 0~7 (see step 5) The first LEN on the LT slot covered by the IPLA card (LT00 or LT04) is where the first assignment is placed. If you have only one VCTA card you must assign all 16 channels. If you have 2 VCTA cards you must assign all 32 channels.

8. CM 6719>XX>Y Where XX = the location group of the PAD card (Default 00 or assigned in CM 0A09) and Y = 00 for Priority to IP-PAD channel without VCT, 01 for Priority to IP-PAD channel with VCT, 02 for IP-PAD channel without VCT, and NONE for use ONLY IP-PAD channel with VCT.

9. CM EC6>0>0 and then reset the IPLA card. Connect the card to the test hub along with the IP Dterm and the MP. Make test calls from the IP Dterm to a TDM station or trunk in the system and vise versa to confirm voice path.

Placing it all in Service

The IP Dterm IP Addresses must be checked, and changed, if they were temporarily assigned for direct (same subnet) connection to the MP. Or if DHCP is to be utilized this should be assigned in the User Menu.
Finally when placing all equipment into service make sure the Default Gateway address is assigned if you have connections between LANs (subnets) via routers. The Default Gateway Address is the IP Address of the router or layer 3 switch connecting the 2 networks.

Default Gateway for the MP   CM 0B00>02>
Default Gateway for the IP Dterm   User Menu item 5.
Default Gateway for the IPLA PAD   CM 0A02>00~15>

All devices (MP, IPLA, IP Dterm) must be directly connected to a layer 2 switch and not a hub when placed into service.

QOS should also be implemented in the IP network via TOS, Diff Serv or other method to guarantee voice quality.