

NEAX 2000 IPS Basic IP Setup (R8 and higher)

For Basic IP setup the NEAX 2000IPS requires CM 05 to assign Virtual FP's which control Virtual PIMs. The Virtual PIMs are where the IP Dterms are then assigned with CM 14. One Virtual PIM allows the assignment of 64 IP Dterms.

Only PIM 00 cannot be assigned as a Virtual PIM. If the site supports 8 hardware PIMs, Virtual PIMs 8~11 and 14~15 can be utilized for the IP Dterm assignment.

If the site has only 1 or 2 hardware PIMs, with no expectation of hardware expansion, PIMs 3~7 could be used for IP Dterm assignment. IP Dterm licenses are purchased in groups of 8 and license capacity's for IP Dterms can be viewed in CM F88>12.

PIM 3	FP 17 <small>If Virtual PIM Only</small>	PIM 7	FP 19 <small>If Virtual PIM Only</small>	PIM 11	FP 20~31 60~63 <small>Note 1</small>	PIM 15	FP 20~31 60~63 <small>Note 1</small>
PIM 2	FP 01	PIM 6	FP 03	PIM 10	FP 20~31 60~63 <small>Note 1</small>	PIM 14	FP 20~31 60~63 <small>Note 1</small>
PIM 1	FP 16 <small>If Virtual PIM only</small>	PIM 5	FP 18 <small>If Virtual PIM Only</small>	PIM 9	FP 20~31 60~63 <small>Note 1</small>	P to P CCIS	FP 20~31 Note 1, 2
PIM 0	Built in FP 00	PIM 4	FP 02	PIM 8	FP 21~31 60~63 <small>Note 1</small>	P to P CCIS	FP 20~31 Note 1, 2

Note 1. FP's 60~63 are reserved for control of Virtual PIMs with WCS PS stations only.

Note 2. It is recommended that PIMs 12 and 13 are used for Peer to Peer CCIS trunks.

The IP Dterms are assigned to the ports in the Virtual PIMs and then regular Dterm assignments take effect for all other operation functions E.g. CM 90 for key data, CM 12 and CM 13 for Station Class etc.

1. **CM 050>XX>00** where **XX** = the sense wheel or virtual wheel setting.
2. **CM 054>XX>YY** where **XX** = the sense wheel or virtual wheel setting and **YY** = the PIM it is to control. This CM is not available for FP's 00~03 when they are supporting 2 hardware PIMs. [Note 3.](#)
3. **CM 056>XX>Y** where **XX** = the sense wheel or virtual wheel setting and **Y** will be
 - 0** for Virtual PIM
 - 2** for Built in FP (FP 00 only)
 - 3** for regular FP (CP15/CP17)

Note 3: If a hardware FP is to be split (E.g. PIM 2 hardware and PIM 3 Virtual) the hardware FP must be assigned in CM 054 to the PIM it is mounted in. If this is not assigned you cannot assign CM 054 for the Virtual FP. A Hardware FP (CP15/CP17) assumes control of 128 FP ports (PIM it resides in and the PIM mounted above it) if CM 054 is not assigned.

Below is an example of how CM 05 would be set when IP Dterms are to be programmed within the first 8 PIMs.

CM 05		8 HardW Pims	7 HardW 1 Virtual PIM	6 HardW 2 Virtual Pims	5 HardW 3 Virtual PIMs	4 HardW 4 Virtual PIMs	3 HardW 5 Virtual PIMs	2 HardW 6 Virtual PIMs	1 HardW 7 Virtual PIMs
Y Data	1st Data	2nd Data							
0	00	00	00	00	00	00	00	00	00
	16	NONE	NONE	NONE	NONE	NONE	NONE	NONE	00
	01	00	00	00	00	NONE	00	00	00
	17	NONE	NONE	NONE	NONE	NONE	00	00	00
	02	00	00	00	00	00	00	00	00
	18	NONE	NONE	00	00	00	00	00	00
	03	00	00	00	00	00	00	00	00
	19	NONE	00	00	00	00	00	00	00
4	00	NONE	NONE	NONE	NONE	NONE	NONE	NONE	00
	16	NONE	NONE	NONE	NONE	NONE	NONE	NONE	01
	01	NONE	NONE	NONE	NONE	NONE	02	02	02
	17	NONE	NONE	NONE	NONE	NONE	03	03	03
	02	NONE	NONE	NONE	04	04	05	04	04
	18	NONE	NONE	NONE	05	05	05	05	05
	03	NONE	06	06	06	06	06	06	06
	19	NONE	07	07	07	07	07	07	07
6	00	2	2	2	2	2	2	2	2
	16	3	3	3	3	3	3	3	0
	01	3	3	3	3	3	3	0	0
	17	3	3	3	3	3	0	0	0
	02	3	3	3	3	0	0	0	0
	18	3	3	3	0	0	0	0	0
	03	3	3	0	0	0	0	0	0
	19	3	0	0	0	0	0	0	0

Below is an example of how CM 05 would be set if none of the first 8 PIMs were available for Virtual FP/Virtual PIM assignment. If WCS is to be assigned in the same system it is recommended to assign the PS stations and IP Dterms in different Virtual PIMs.

CM 05		
Y Data	1st Data	2nd Data
0	20~31	00
4	20~31	08~11, 14, 15
6	20~31	0

PBX LAN Assignment

1. **CM 0B00>00>000000000000-255255255255** IP Address for the system (Must be a Static IP Address supplied by Network Administrator). Default PBX address 192.168.1.36
2. **CM 0B00>01>000000000000-255255255000** Subnet Mask for the system (Supplied by the Network Administrator)
3. **CM 0B00>02>000000000000-255255255255** Default Gateway Address for the system. (IP Address of the router supplied by the Network Administrator).
4. **CM EC6>0>0** and Reset the MP.

Dterm IP Assignment

1. **CM 050>01~03, 16~19, 20~31>00** Assign FP. See page 2.
2. **CM 054>00~03, 16~19, 20~31>Virtual PIM No.01-11, 14, 15.** See page 2.
2. **CM 056>00~03, 16~19, 20~31>00** Assign FP as Virtual FP. See page 2.
3. **CM 14>XXZZZ>FX-FXXXXXXX** Where **XX** = the FP assigned in step 1 and **YY** = port number 000-063. **FX-FXXXXXX** = the Dterm IP Station.
4. Normal Dterm assignments are then applied E.g. **CM 12, 90, 93** etc.
5. Go to the Cheat Sheet **Basic IP Dterm Setup** for IP Phone and Pad Card programming.

Additional IP Dterm Features

1. **CM 08>513>0** Assigns Protected Login Mode system wide.
2. **CM 15480>XX>0** Assigns Protected Login Mode on a Service Feature Class basis where **XX** = the Service Feature Class C assigned in CM 1207 for the IP stations in question.
3. **CM 2B00>X-XXXXXX>Y-YYYYYY** Where **X-XXXXXX** = the IP Dterm station number and **Y-YYYYYY** = the password for that station.
4. **CM 2B10>00>X-XXXXXX** Where **X-XXXXXX** = the password for initial IP Dterm Login. This is a one time use of a password for the initial install, or new user, to log in the Dterm.
5. **CM 08>516>0** Allows Dterm Login Over Ride. This allows a user to log in at another extension without logging out from the previous Dterm. The original Dterm must be idle and the Protected Login feature must be assigned to allow this operation.
6. **CM 15143>XX>0** Assigns the ability to log out an IP Dterm where **XX** = the Service Feature Class A of the IP Dterm assigned in CM 1202.
7. **CM 200>X-XXXX>A239** Assigns a log out code where **X-XXXX** = and available access code in the numbering plan.
8. **CM 9000>X-XXXXXX,YY>F0B39** Assigns a Log out key to the IP Dterm where **X-XXXXXX** = the IP Dterm and **YY** = the feature key number 01~24.
9. **CM 200>X-XXXX>A231** Assigns a password change access code so that a logged in IP Dterm user can change/update their password for the IP station. User must dial the access code followed by the old password and then the new password twice. Password digit length is controlled by **CM 42>73>01~08**. Default password length is 4 digits.