

ISDN PRI Basic Assignment IVS2/IPS

The following is an example only for programming required for basic ISDN PRI assignment. Wheel settings, trunk routes, and numbers, etc. are examples only.

1. Take note of, or set the sense wheel on the 24PRTA/B/C card e.g. 06
2. **CM 050>06>12** Set the Sense wheel of the 24PRT card (06) to a type 12 for ISDN PRI.
3. **CM 0608>0>06** Set the DCH channel (0~7) to the sense wheel of the 24PRT card (06).
4. **CM 0701>0600~0623>D200~D223** To the sense wheel of the 24PRT card (06), assign to each channel (00~23) a trunk (D200~D223). All channels should be assigned.
5. **CM 3000>200~222>20** Place each Voice trunk (200~222) assigned in step 4, to a trunk route (20).
CM 3000>223>21 Place the D channel trunk (223) assigned in step 4 to its own trunk route (21). **NOTE:** this must be the 24th channel of the span.
6. **CM 3002>200-222>18** Assign each Voice trunk (200~222) to ISDN in-dial (18) in Day Mode.
7. **CM 3003>200-222>18** Assign each Voice trunk (200~222) to ISDN in-dial (18) in Night Mode.
8. **CM 3040>200-222>18** Assign each Voice trunk (200~222) to ISDN in-dial (18) in Mode A.
9. **CM 3041>200-222>18** Assign each Voice trunk (200~222) to ISDN in-dial (18) in Mode B.
10. **CM 3007>200-222>000-022** To each Voice trunk (200~222) set a Circuit Identification Code (CIC, 000~022). **NOTE:** No CIC should be assigned to the D channel trunk (223).
11. **CM 3500>20>00** Set the voice trunk route (20) type to CO (00).
12. **CM 3504>20>2** Set the voice trunk route (20) to Answer signal arrives (2).
13. **CM 3509>20>08** Set the voice trunk route (20) to ISDN incoming signaling (08).
14. **CM 3516>20>0** Set the voice trunk route (20) to Sending of Hook Flash disabled (0).
15. **CM 3518>20>0** Set the voice trunk route (20) to allow DID/DNIS digit conversion with CM 76 (0).
16. **CM 3528>20>0** Set the voice trunk route (20) to disallow Trunk Queuing.
17. **CM 3590>20>3** Set the voice trunk route (20) to ISDN PRI.
CM 3590>21>3 Set the D channel trunk route (21) to ISDN PRI. **NOTE:** This is the *only* CM 35 bit set for the D channel trunk route (21).
18. **CM 3593>20>00** Assign the Voice trunk route (20) to the ISDN DCH channel set in **Step 2**.
19. **CM A900>0>223** Assign the DCH channel (0) to the DCH trunk (223). **NOTE:** this must be the 24th channel of the span.
20. **CM 410>50>05** Set the timing start for ISDN calls to 5 seconds.
CM 410>57>05 Set the timing start for ISDN tandem calls to 5 seconds.
21. **CM 482>04>0** Enable 2nd dial tone sending on ISDN trunks.
22. **CM AA00>06>0** Set the sense wheel of the 24PRT card (06) to AT&T Specifications (0).
23. **CM AA06>06>20/21/28** To the 24PRT sense wheel (06) assign an ISDN protocol. 20 = AT&T, 21 = Northern, 28 = NI2.
24. **CM AA14>06>0/1** For the sense wheel of the 24PRT (06) card assign the type of ISDN card being utilized. 0 = 24PRT, 1 = SC01.

Some further LCR programming may be required depending on the ISDN protocol utilized in CM AA06. See CM 8A5XXX>157-164. See the Advanced LCR Cheat Sheet.

The following pages contain some of the more commonly used features pertaining to Caller ID sent and received over ISDN PRI.

[Sending Caller ID to Network, Trunk Basis.](#)
[Sending Caller ID to Network, Station Basis.](#)
[Sending Name Display to Network.](#)
[Restricting Caller ID to Network.](#)
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Sending Caller ID to Network. Trunk basis.

1. **CM 3034>200~222>00** To each Voice trunk (**200~222**) assign a Local Office Code Table number (**00**). There are 15 tables available **00~14**.
2. **CM 5005>00>XXXXXXXXXX** Assign to the table number set in step 1 (**00**) a **10 digit number** to be projected to the network when a call is made on the ISDN PRI.

Sending Caller ID to the Network. Station Basis

Note: If station base is set it will override trunk basis.

1. **CM 1212>Station number>XXXX** To the station assign the last **4 digits** of the caller ID to be projected to the network.
2. **CM 1213>Station number>01** To the station assign a Local Office Code Table number (**01**). There are 15 tables available **00~14**. These are the same tables utilized by CM 3034 above.
3. **CM 5005>01>XXXXXX** Assign to the table number (**01**) set in step 2, a 6 digit number (area code + office code) to be added in front of the four digit number in step 1.

Sending NAME Display to Network.

Note: this feature is available with IPS 3600 Series (R11) software and a 24PRTA-D and higher.

1. Assign NAME display to each station to use this feature (MATWorx Station Management or via MOC utilizing CM 770 or CM 771).
2. **CM 1202>Station number>1515** Take note of the Service Restriction Class B for the stations (**15**).
3. **CM 15156>15>1** Allow Calling Party Name sending to the **SFC B** from step 2.
4. **CM 35268>20>0** For the Voice trunk route (**20**) allow Calling Party Name sending to ISDN (**0**).
5. **CM 08>502>0** When calling from the sub line (Virtual) station allow the sending of the name of the my line (Prime) to ISDN.

Restricting Caller ID to the Network.

1. **CM 1325>Station number>0** To disable Caller ID being sent to the network when station makes an ISDN call.

Restrict Caller ID to Display of Dterm.

Note: this feature is available with IPS 3600 Series (R11) software and higher.

1. **CM 1202>Station number>1515** Take note of the Service Restriction Class A for the stations (**15**).
2. **CM 15214>15>0** Restrict Caller ID to the Display of the Dterm for SFC **A** from step 1.

Retaining Received Name/Number in Dterm Display.

Note: This feature is available with IPS 3300 Series (R8) software and higher.

1. **CM 08>557>0** Allow received Caller ID number /name display to show in Dterm display for the length of the call. Default setting 1 = 6 seconds.

Retaining Dialed Number in the Dterm Display.

Note: This feature is available with IPS 3300 Series (R8) software and higher.

1. **CM 08>558>0** Allow the dialed number to show in the display of the Dterm for the length of the call. Default setting 1 = 6 seconds.

Sending Caller ID over CCIS out ISDN at Main/Tandem site.

Remote Site Programming

1. **Assign Caller ID on a Stations basis as described above.**
2. **CM 08>379>0** Set maximum digits over CCIS to 24 digits.
3. **CM A728>CCH>0** To the CCIS Common Channel Handler (**0~7**) allow Caller ID over CCIS.
4. **CM 8A5XXX>165>0** To the LCR pattern (**XXX**) for the outbound calls that require the Caller ID enable the Caller ID on outgoing call by CCIS.

Main/Tandem Site Programming

1. **CM 08>379>0** Set maximum digits over CCIS to 24 digits.
2. **CM A728>CCH>0** To the CCIS Common Channel Handler (**0~7**) allow Caller ID over CCIS.
3. **CM 35145>XX>0** For the ISDN Voice Trunk route (**XX**) enable Calling Party information transfer to ISDN on tandem call from CCIS. This CM **MUST NOT** be flagged for the CCIS route in either site.

Caller ID Call Routing

1. **CM 3518>20>0** To the ISDN PRI Voice trunk route (**20**) allow digit conversion.
2. **CM 7600>XXXX>000~999** Point the received DID/DNIS number (**XXXX**) to a conversion block (**000~999**).
3. **CM 7626>000~999>0** Assign the conversion block (**000~999**) from **Step 2** to a Development Pattern (**0**) for Calling Party number. Available Patterns are **0~2** (**CM 2A50~CM 2A52**).
4. **CM 2A50>XXXXXXXXXX>000~999** Within Development Pattern 0 assign the received **Calling Party Number** (up to 16 digits) to a conversion block. This **MUST** be a conversion block different to the one assigned in **Step 2**.
5. **CM 7601>000~999>XXXX** For Day mode terminate the conversion block assigned in **Step 4** to the required destination (Station/Trunk announcement/Attcon/TAS/DISA etc).
6. **CM 7602>000~999>XXXX** For Night mode terminate the conversion block assigned in **Step 4** to the required destination (Station/Trunk announcement/Attcon/TAS/DISA etc).
7. **CM 7603>000~999>XXXX** For Mode A terminate the conversion block assigned in **Step 4** to the required destination (Station/Trunk announcement/Attcon/TAS/DISA etc).
8. **CM 7604>000~999>XXXX** For Mode B terminate the conversion block assigned in **Step 4** to the required destination (Station/Trunk announcement/Attcon/TAS/DISA etc).

No Caller ID Routing

Note: this feature is available with **IPS 3600 Series (R11) software and higher**.

1. **CM 35133>20>0** For the Voice route (**20**) of the ISDN PRI span allow the Dterm to display, on a received "No Caller ID" call, the reason for no caller ID. **See Note 1 below**.
2. **CM 7600>XXXX>000~999** Point the received DID/DNIS number (XXXX) to a conversion block (Even if the incoming DID/DNIS is not being converted it must still be assigned a conversion block).
3. **CM 7633>000~999>0/1** To the conversion block for the incoming DID/DNIS, assigned in **Step 2**, specify whether the "No Caller ID routing" will be only for calls that present as "Privacy" (**0**) or ALL No Caller ID calls, "Privacy" and "Out of Area" (**1**). This CM is for Day mode only.
4. **CM 7635>000~999>0/1** Same as the step 3 but assignment for the conversion block (**000~999**) in Night Mode/ModeA/Mode B.
5. **CM 7634>000~999>0/1/2** For the conversion block (**000~999**) assign the destination for the call with No caller ID. Destinations are **0** For another Station/Attcon or a DAT. **Go to Step 6.**
 - 1** To reject the call. Caller hears fast busy and trunk is released.
 - 2** To terminate with special ringing/appearance. **Go to Step 9.**
6. **CM 5133>00~63>X-XXXXXX/E00X/EBXXX** For the tenant of the trunk (**00~63**) set the destination to either a Station (**X-XXXXXX**), an Attendant (**E00X**), or a Digital Trunk Announcement (**EB000~EB127**).
7. **CM 4900>000~127>2200** In **Step 6**, if a DAT is selected, assign the announcement trunk (**000~127**) to the Announcement Service for Caller ID (**2200**). **See Note 2** for recording instructions.
8. **CM 410>45>01~99** Assign the timing length of the assignment in 4 second increments (E.g. 1 = 4 secs, 2 = 8 secs, 3 = 12 secs etc.). After timer has expired the call is terminated.
9. **CM 7637>000~999>0/1** To the conversion block for the incoming DID/DNIS (**000~999**) assign the ringing call appearance to Green LED (**0**) or Red LED (**1**). This is the LED of the feature key and not the bubble lamp located at the top RHS of the Dterm set. This CM is only valid if **Step 5** is assigned to a **2**.
10. **CM 7638>000~999>0~3** For the conversion block assign one of 4 (**0~3**) different ring interval patterns. See the NEAX 2000IPS Command manual for details. This CM is only valid if **Step 5** is assigned to a **2**.
11. **CM 7639>000~999>0~7** For the conversion block assign one of 8 (**0~7**) different ring tone patterns. See the NEAX 2000IPS Command manual for details. This CM is only valid if **Step 5** is assigned to a **2**.
12. **CM 7640>000~999>0~7** For the conversion block assign one of 8 (**0~7**) different termination indicator lamps on Attendant Console. This CM is only valid if **Step 5** is assigned to a **2**. See the NEAX 2000IPS Command manual for details.

Note: 1 A caller intentionally blocking the caller ID (E.g. dialing *67 before dialing number) will show as "PRIVACY" in the Dterm display. A caller who simply does not have caller ID, or whose information cannot be passed due to PSTN limitations, will show "OUT OF AREA" in the Dterm Display.

Note: 2 To record the trunk announcement a record access code must be assigned to an **A100** in CM 20 (PBX numbering plan). To record lift the Dterm handset and dial the access code followed by the assigned EB number 000~127. CP24/26 has DAT's EB000 and EB001 on the MP board by default. EB002~EB127 must be assigned to 2DATA or 4DATA cards installed in PIM LT slots.

Simultaneous Name and Number in Dterm Display

Note: This feature is available with IPS 3800 Series (R13) software and higher.

1. **CM 1202>X-XXXXXX>YYZZ** For the **station number** take note the **Service Feature Class A** assignment (00~15 default 15).
2. **CM 15136>YY>1** Make sure the **SFC A** is set to a **1** for Calling Name Display on incoming call.
3. **CM 15400>YY>0/1/7** For the **SFC A** set the display order for the name and number to show in the Dterm Display. Options are:
 - 0** = Number in top row, Name in middle row of display.
 - 1** = Name in top row, Number in middle row of display.
 - 7** = No simultaneous name and number display (Default setting).