
Telstra AM35 Multi-Service Access Platform Installation Guide for RIM Housings

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NEC

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	NEC Australia Pty Ltd Incorporated In Victoria A.C.N. 001 217 527 649-655 Springvale Road Mulgrave Victoria 3170 Australia Telephone: +61-3-9262 1111 Fax: +61-3-9264 3892	We want to hear from you. If you have any comments, questions or suggestions about our documentation, send them to the following email address: cuproplus.documentation@nec.com.au

Change History

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1	3/09/2004	Chris Ross-Stubbs	Document Issue
2	4/05/2005	Chris Ross-Stubbs	Updated with AM35 Optical Base and minor amendments.
3	18/07/2005	Chris Ross-Stubbs	Optical Link Budget Calculation added.
4	3/11/2005	Chris Ross-Stubbs	Updated pictures & Configuration added

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1 Purpose and Scope

The purpose of this manual is to provide reference information for the installation, of the AM35 Access Multiplexer. It is not a detailed operational manual or technical specification document for this product.

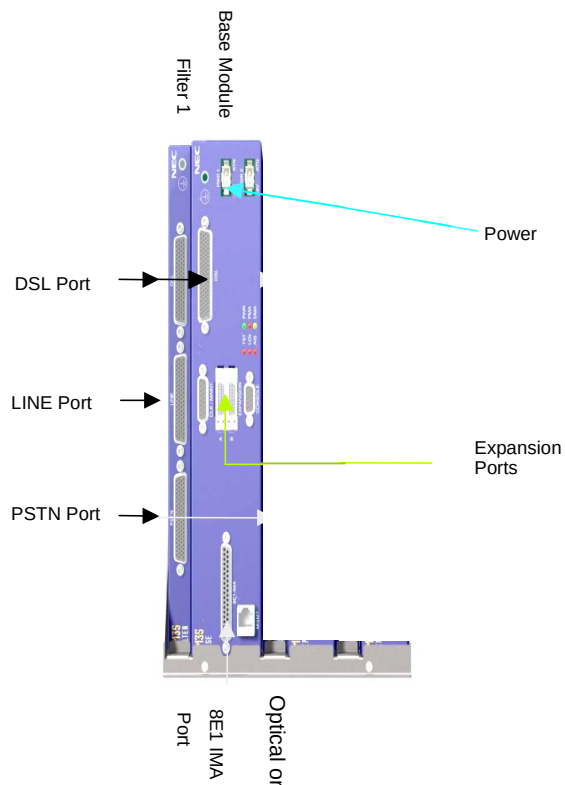
The AM35 Multi-Service Access Platform is the network element of the NEC Access solution to be housed in curb-side housing, office or building complex or remote / rural exchange environments. The anticipated audience of this manual is skilled telecommunications technicians and their supervisors. They should have theoretical and practical competence in installing, commissioning and maintaining telecommunication systems. The manual assumes that they are suitably qualified and familiar with the technology used by the NEC Access solution. This includes a basic knowledge of the ATM and DSL technology described in this manual.

2 Telstra Configuration

The current configuration for Telstra RIM sites is:

32 Port, 64 Port or 96 Port

2.1 32 Line Configuration



Telstra AM35 RIM Configuration for
32 PORTS to be installed into the first
nominated RIM Access Panel is:

1 x AM35 Base Module

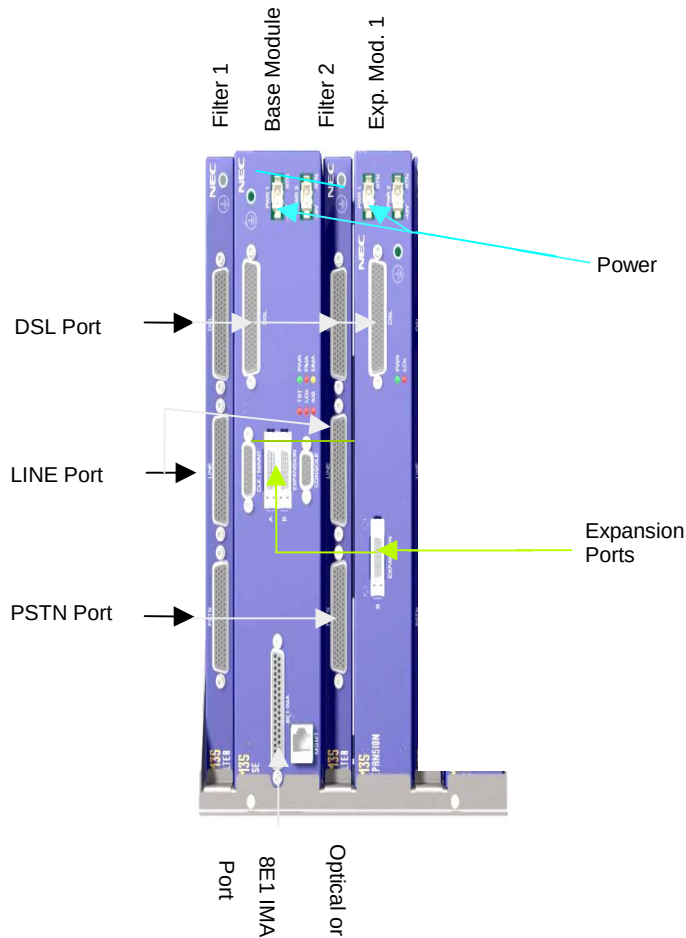
- ATM 8 port E1 IMA or 155LH2 Optical
- 32 Port ADSL or ADSL2+

1 x 32Port Filter Module

1 x AM35 RIM Installation Kit Type: 1G,
2G 1-64 Lines or 3G 1-64Lines.

Note in a 32 PORT configuration,
Expansion Module 1 & 2 and Filter
Module 2 & 3 are not to be installed.

2.2 64 Line Configuration



Telstra AM35 RIM Configuration for 64 PORTS to be installed into the first nominated RIM Access Panel is:

1 x AM35 Base Module

- ATM 8 port E1 IMA or 155LH2 Optical Base
- 32 Port ADSL / 32 Port ADSL 2+

2 x Filter Module

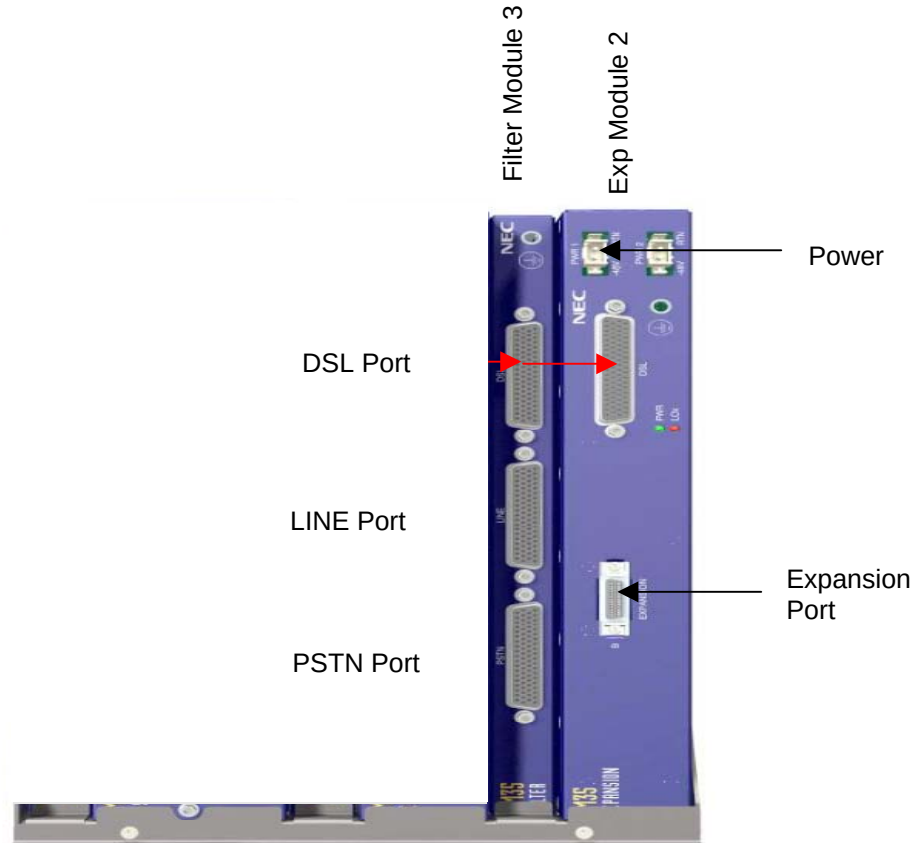
1 x AM35 Expansion Module, 32 Port ADSL or ADSL2+

1 x AM35 RIM Installation Kit: Type 1G, 2G 1-64 Lines or 3G 1-64Lines.

Note in a 64 PORT configuration, Expansion Module 2 and Filter Module 3 are not to be installed.

2.3 96 Line Configuration

The additional 32 Lines are to be installed into the second nominated RIM Access Panel



The additional 32 Lines to support a 96 Line configuration for RIM installations is:

1 x AM35 Expansion Modules

- 32 Port ADSL or ADSL2+

1 x 32 Port Filter Module

1 x AM35 RIM Installation Kit, Type: 1G, 2G 65-128 Lines or 3G 65-128 Lines.

2.4 RIM Installation Kits

AM35 RIM INST KIT 3G 1-64L		
Part No: A5963A		
Telstra Serial/Item: 907/00066		
Part Description	Part No.	Qty
Mounting Frame	999-B00233-00	1
Earth Loom (4-way) (3m)	G54-7160-0A00	1
Power Tail (3-way)	G54-7153-0A00	1
DSL / Filter Cable	G54-7154-0A00	2
Bus Expansion Cable (0.41m)	G54-7156-0A00	1
CCF Cable - 3G Horiz. Pairs (3m)	G54-7155-0A00	1
IMA Cable - DDF (3m)	G54-7163-0A00	1
CCF Layout Label 1	999-B00241-00	1
RIM External Alpha-num. Pack	999-M05575-00	1
Ferrites	999-CF0038-07	4

AM35 RIM INST KIT 3G 65-128L		
Part No: A5963B		
Telstra Serial/Item: 907/00067		
Part Description	Part No.	Qty
Mounting Frame	999-B00233-00	1
Earth Loom (4-way) (3m)	G54-7160-0A00	1
Power Tail (3-way)	G54-7153-0A00	1
DSL / Filter Cable	G54-7154-0A00	2
Bus Expansion Cable (0.6m)	G54-7156-0B00	2
CCF Cable - 3G Horiz. Pairs (3m)	G54-7155-0A00	1
Ferrites	999-CF0038-07	4

AM35 RIM INST KIT 1G, 2G 1-64L		
Part No: A5963C		
Telstra Serial/Item: 907/00098		
Part Description	Part No.	Qty
Mounting Frame	999-B00233-00	1
Earth Loom (4-way) (3m)	G54-7160-0A00	1
Power Tail (3-way)	G54-7153-0A00	1
DSL / Filter Cable	G54-7154-0A00	2
Bus Expansion Cable (0.41m)	G54-7156-0A00	1
CCF Cable - 1G 2G Vert. Pairs (3m)	G54-7162-0A00	1
IMA Cable - Optomux (3m)	G54-7159-0A00	1
CCF Layout Label 1	999-B00241-00	1
AM35 Blank Space Label	999-B00242-00	1
RIM External Alpha-num. Pack	999-M05575-00	1
Ferrites	999-CF0038-07	4

AM35 RIM INST KIT 1G, 2G 65-128L		
Part No: A5963D		
Telstra Serial/Item: 907/00099		
Part Description	Part No.	Qty
Mounting Frame	999-B00233-00	1
Earth Loom (4-way) (3m)	G54-7160-0A00	1
Power Tail (3-way)	G54-7153-0A00	1
DSL / Filter Cable	G54-7154-0A00	2
Bus Expansion Cable (1.5m)	G54-7156-0C00	2
CCF Cable - 1G 2G Vert. Pairs (3m)	G54-7162-0A00	1
Ferrites	999-CF0038-07	4

2.5 AM35 Modules

2.5.1 AM35 Base Modules

Serial / Item	Description	Comment
907/00011	8 Port E1 IMA Base Module, 32 ADSL ports	Can support up to 96 ports per system
907/00120	8 Port E1 IMA Base Module, 32 ADSL 2+ ports	Can support up to 160 ports per system. Deployment rules limit to 96 ports.
907/00119	Optical 1550 LH2 Base Module, 32 ADSL 2+ ports	Can support up to 160 ports per system. Deployment rules limit to 96 ports.
907/00112	Single Fibre Working AM35 Kit.	Comprises one 907/00119 and a WDM coupler.

2.5.2 AM35 Expansion Module

Serial / Item	Description	Comment
907/00012	Expansion Module, 32 ADSL ports	
907/00121	Expansion Module, 32 ADSL 2+ ports	

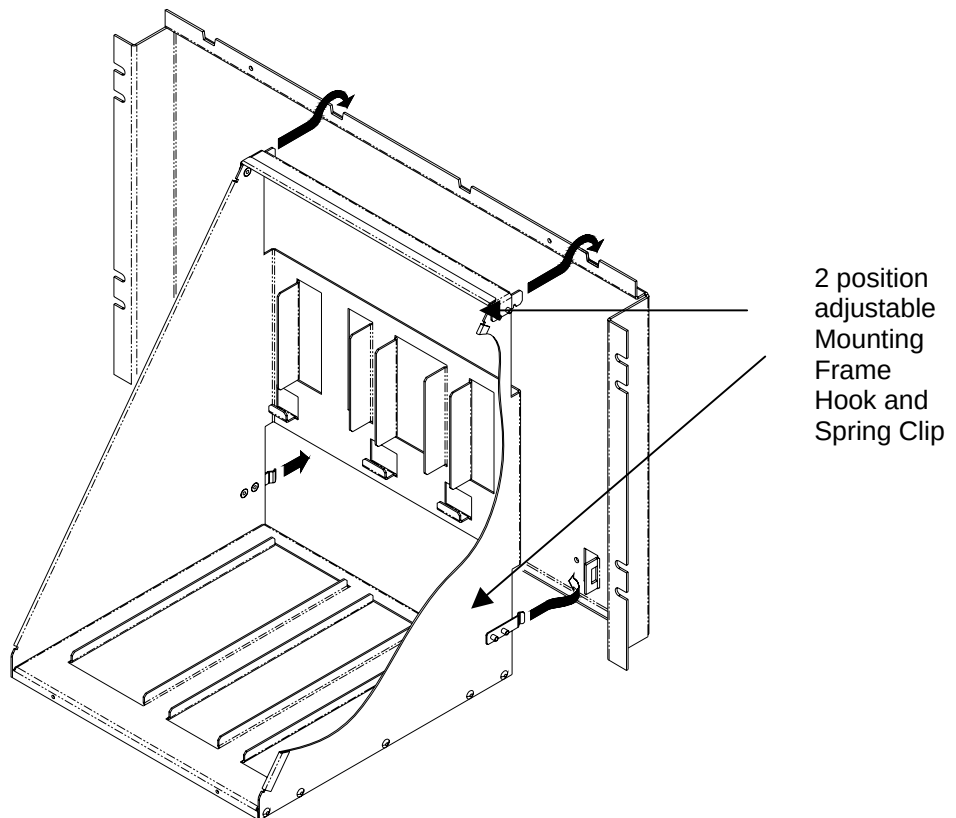
2.5.3 AM35 Filter Module

Serial / Item	Description	Comment
907/00013	Filter Module, 32 ports	

3 Installing AM35 into Telstra RIM Housings

3.1 Installing the AM35 Mounting frame

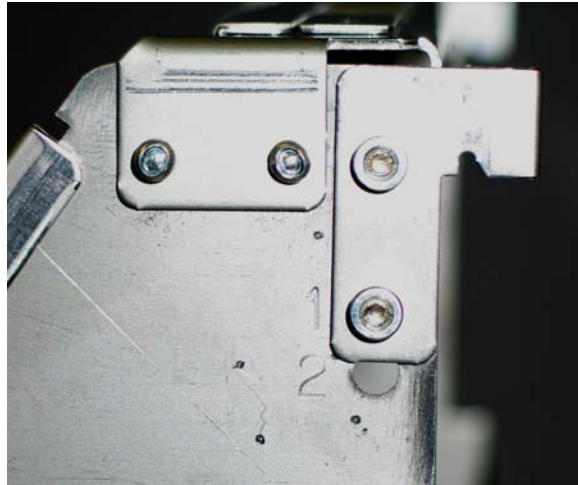
3.1.1 Adjustment of Mounting Frame Hook and Spring Clip



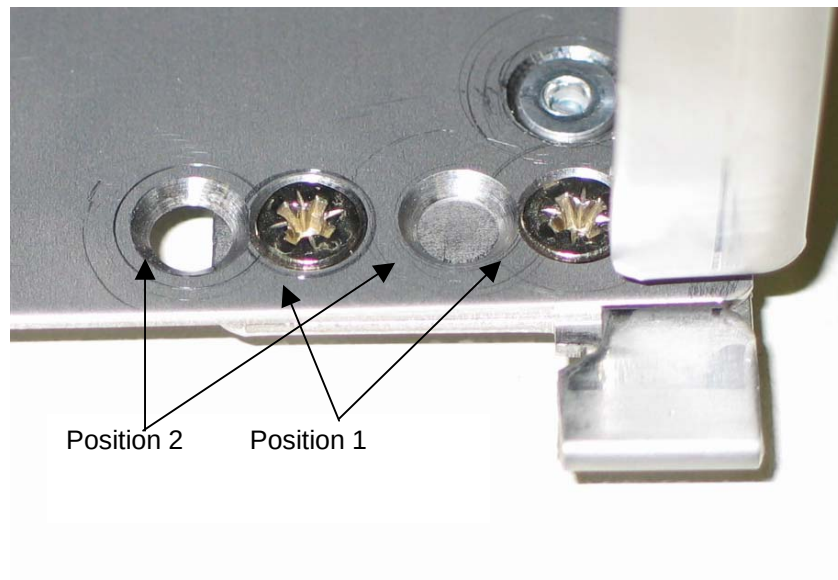
Prior to fitting the AM35 Mounting Frame into the RIM Access Panel check to ensure the Hook and Spring Clip are in the correct position.

1. RIM housing type 2G480 only: Hook and Spring Clip should be in Position 2
2. RIM housing type 1G240, 1G480, 2G180, 3G480: Hook and Spring Clip should be in Position 1

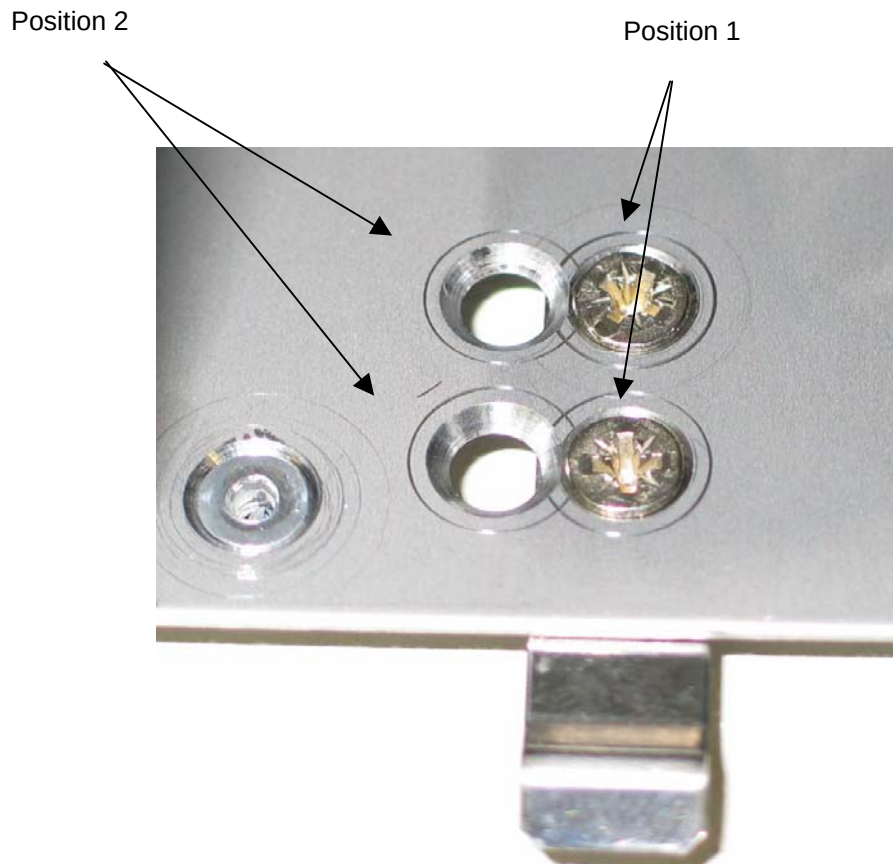
Use a Philips Head Screwdriver to remove and reposition Hook and Spring Clip.



Exterior Side View of AM35 Mounting Frame with positional stamps



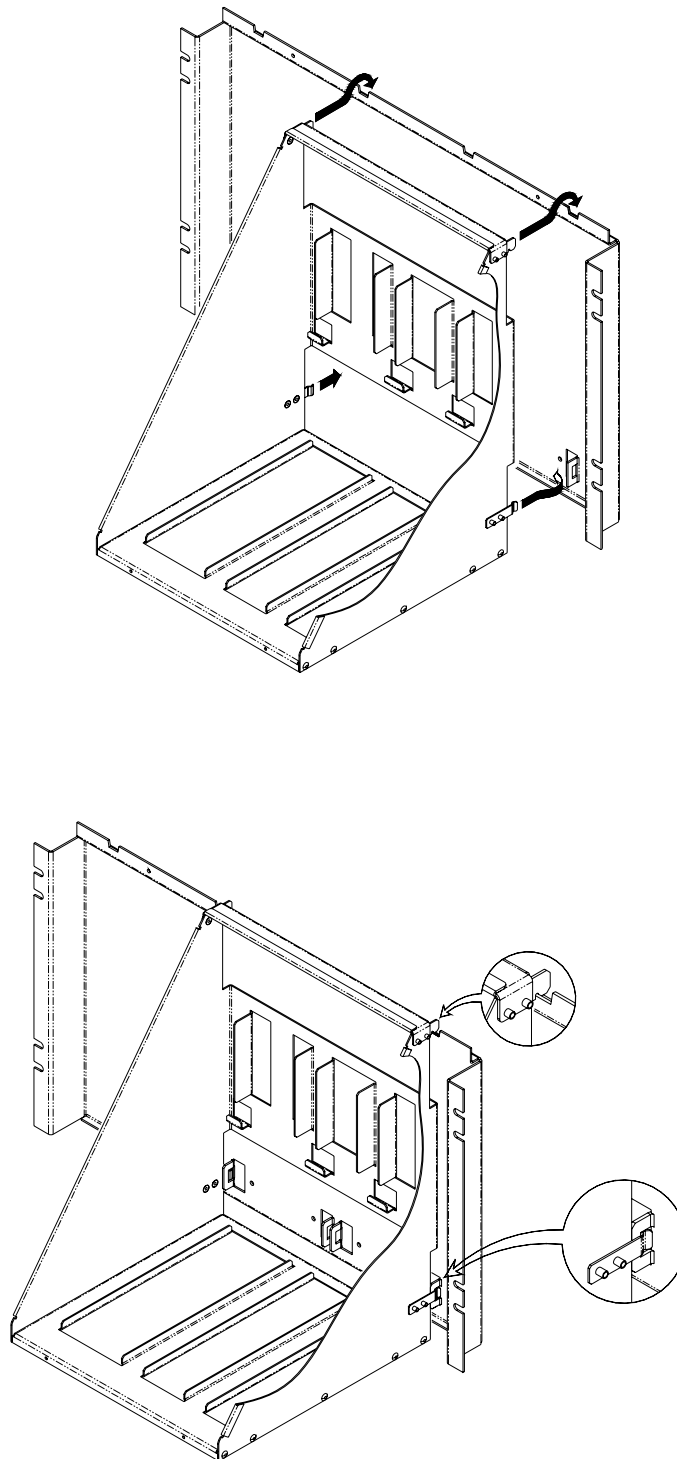
Interior Side View of AM35 Mounting Frame Hook Adjustable Positions



Mounting Frame Spring Clip Adjustable Positions

Note: Position 1 and 2 are stamped near holes on exterior of Mounting Frame

3.1.2 Fitting the Mounting Frame

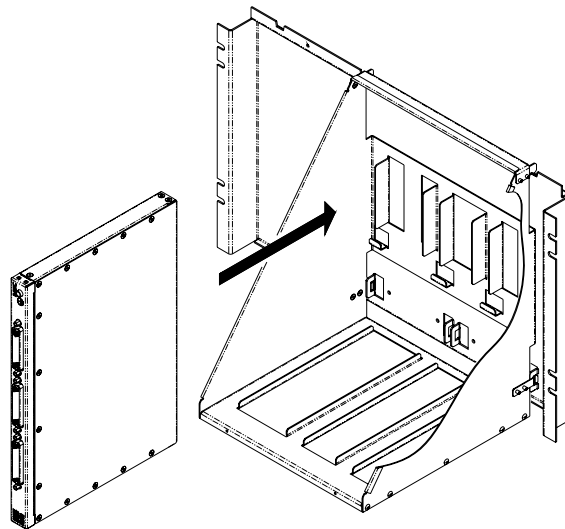


To inserting the mounting frame into the RIM Recessed Access Mounting Panel:

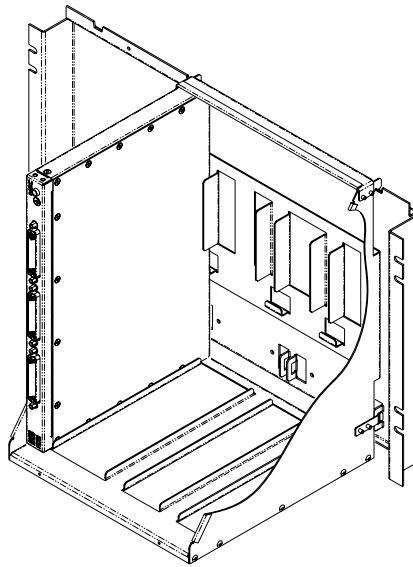
1. Place mounting frame mounting hooks in the location cut outs on top edge of access mounting panel (see preceding diagrams)
2. Centralise mounting frame about tabs on the bottom of the mounting panel. Access mounting panel tabs locate on inside of lower left and right mounting frame spring clips.
3. Press to engage spring clips of mounting frame into access mounting panel tabs (see preceding diagrams).
4. Inspect all fixtures and verify that the mounting frame sits squarely, securely and correctly on the access-mounting panel (see preceding diagrams).

3.2 Installing and Removing Modules

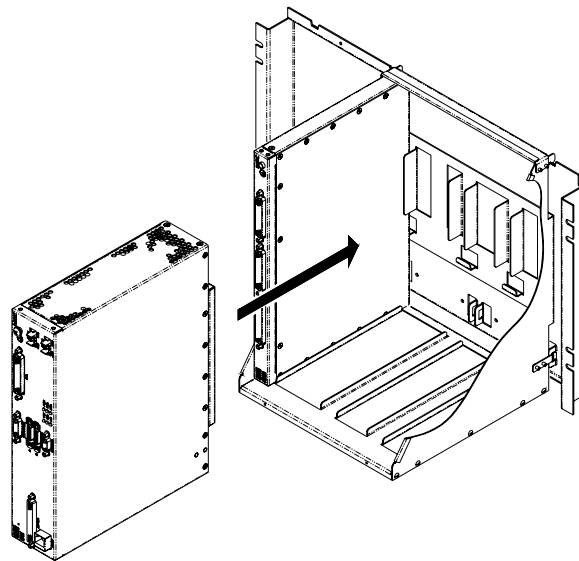
3.2.1 Inserting Filter Module No. 1



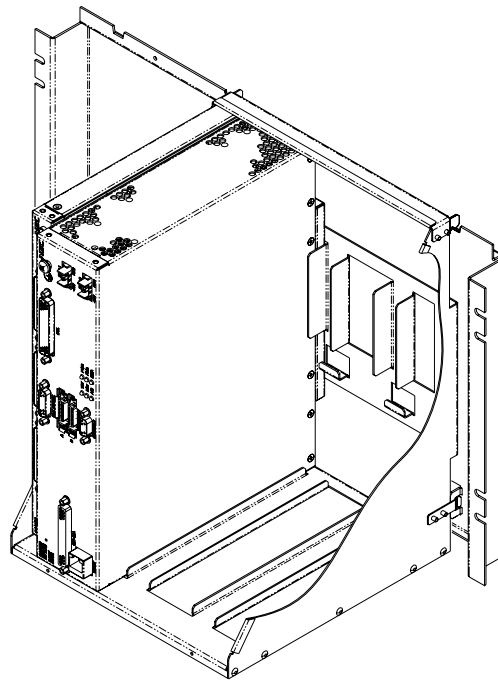
1. On the front of the mounting frame, undo the retaining screws and remove the mounting frame module-securing bracket.
2. Place the module into far LHS mounting frame guide slot (see preceding diagram).
3. Press / slide firmly and ensure module is located under the mounting frame top lip and is in contact with the rear stops.
4. Check module sits correctly within mounting frame (see next diagram)



3.2.2 Inserting Access Module

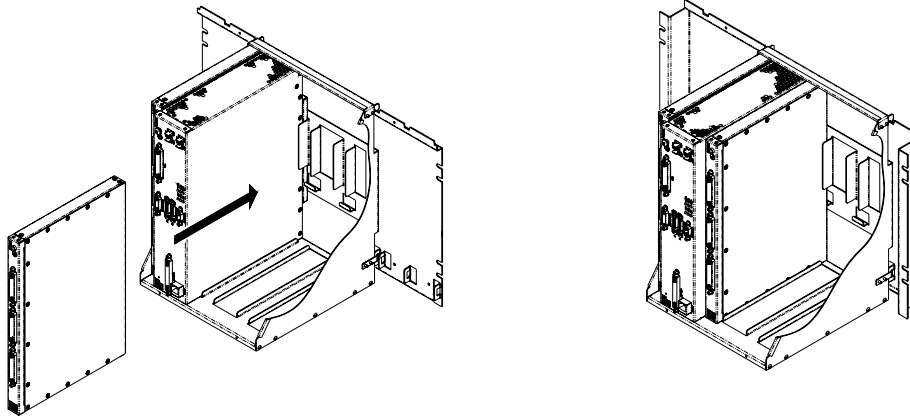


1. Ensure mounting frame module-securing bracket has been removed.
2. Place the module into Access Module mounting frame guide slot, second slot from LHS (see preceding diagram).
3. Press / slide firmly and ensure unit is located under the mounting frame top lip and is in contact with the rear stops.
4. Check module sits correctly within mounting frame (see next diagram)

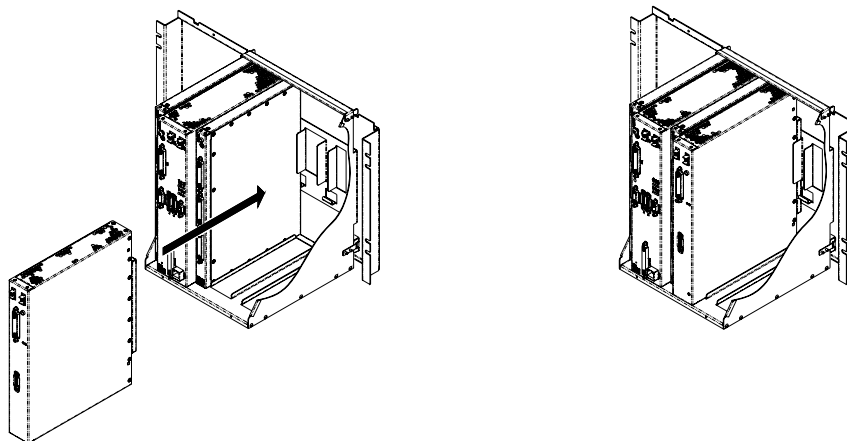


3.2.3 Inserting Remaining Modules

Use similar procedures to install the following remaining modules.

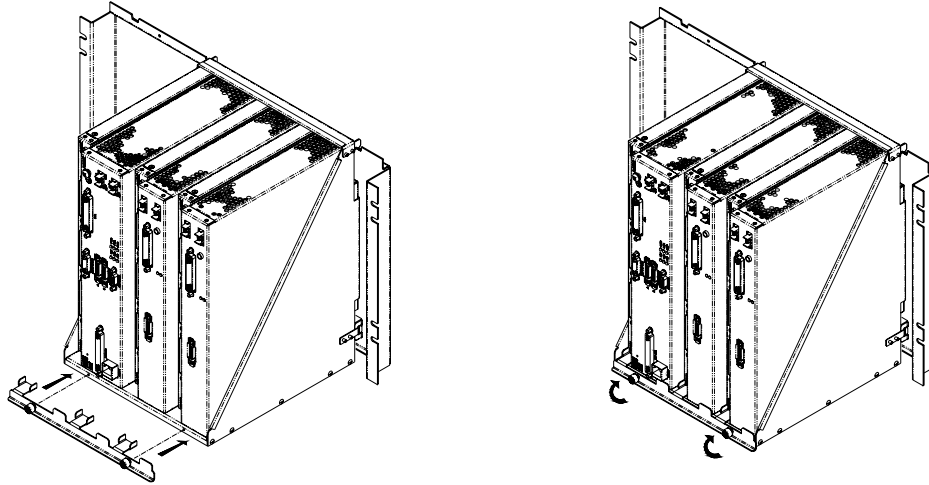


Fitting Filter Module 2



Fitting Expansion Module 1

3.2.4 Installing the Module Retaining Bracket

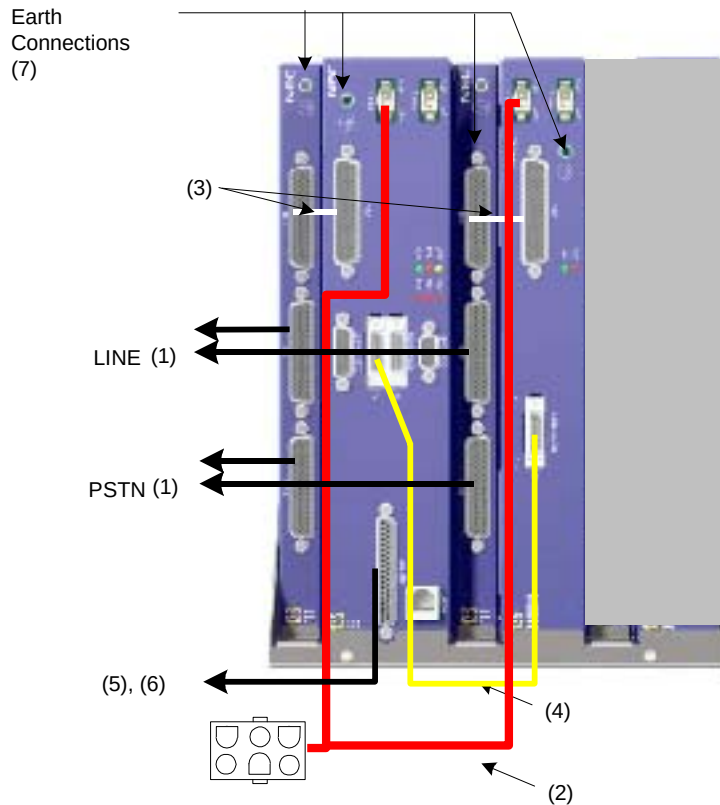


The module-retaining bracket secures the modules within the mounting frame.

1. Ensure modules are in position and in contact with the rear stops on the back edge of mounting frame.
2. Fit module-retaining bracket on front bottom leading edge of mounting frame. If modules are fitted correctly, bracket will fit snugly securing modules in place. If not, recheck module positioning.
3. With bracket in place locate screws into threaded holes and tighten taking care not to cross thread.
4. Check modules are secure.

3.3 Installing the AM35 in a RIM Housing

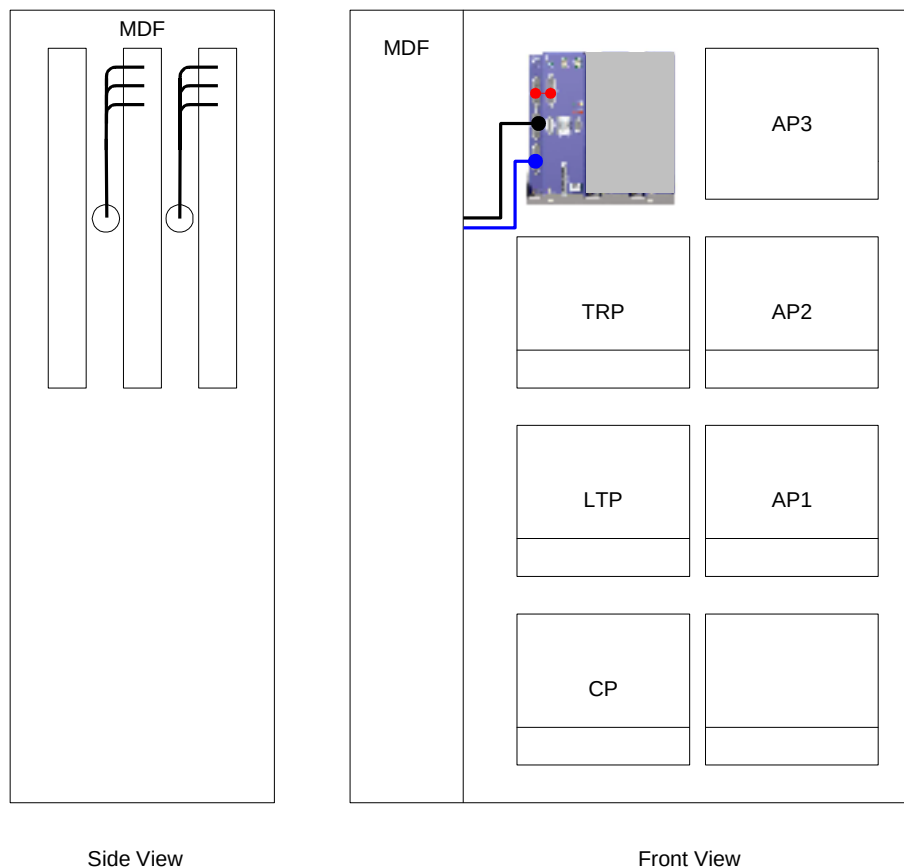
3.3.1 AM35 with Expansion and Filter Modules Cabling



AM35, expansion and filter modules, shown in the front view. The power is connected to the "PWR 1" feed only and is connected to the nearest spare RIM Panel power connection point.

Item	Cable	Part No.	Qty	From / To	Comments
1	ADSL to CCF Cable Loom for RIM	G54-7155-0A00 G54-7162-0A00	1	Line & PSTN Filter Ports to MDF.	3G 1G, 2G
2	AM35 Power Tail	G54-7153-0A00	1	RIM -48VDC Power to AM35	Use PWR 1 only
3	Base/Exp to Filter Cable, 32pair 78pin to 78pin D-sub.	G54-7154-0A00	2	Base/Exp DSL Port to Filter DSL Port.	1 st 32 Lines 2 nd 32 Lines
4	BUS expansion cable	G54-7156-0A00 G54-7156-0B00 G54-7156-0C00	1 2 2	Base to expansion modules	1G, 2G, 3G 1-64L, , 3G 65-128L 1G, 2G 65-128L
5	Base to Optomux	G54-7159-0A00	1	Base Module	1G, 2G

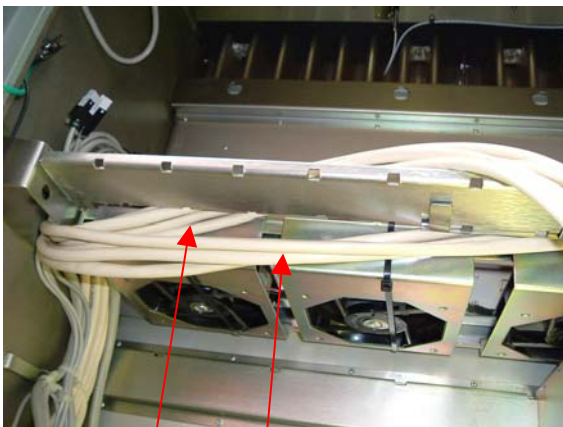
Item	Cable	Part No.	Qty	From / To	Comments
	IMA Cable			Optomux	
6	Base to DDF IMA Cable	G54-7163-0A00	1	Base Module to DDF	3G
7	Earth	G54-7160-0A00	1	Base, Expansion and Filter Module to Earth Bar / Connection point.	

3.3.2 1G 240

The diagram above shows a 1G 240 RIM Housing with AM35 Installation

1. Reposition any existing RIM cabling that may interfere with location of mounting frame and AM35 cabling. **Ensure sufficient clearance exists between the AM35 equipment cabling and RIM door to avoid potential cable pinching damage when RIM door is closed.**
2. Install AM35 Mounting frame and modules into Access Panel 4 position on RIM on the top Left Hand Side cabinet next to AP3 as shown above and depicted in photograph following this text.

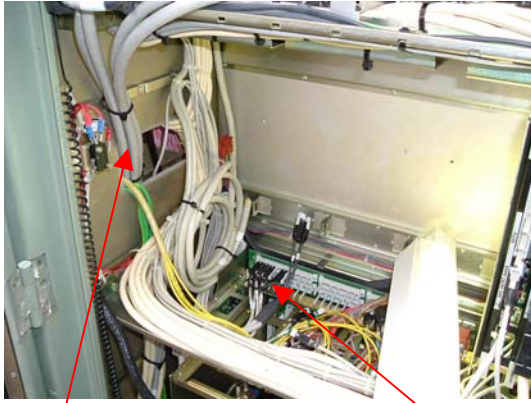
3. Install Earth cable onto AM35 Modules and terminate onto RIM Earth Bar / Connection Point.
4. Connect DSL cable from Filter Module to AM35 Base Module.
5. For Electrical Base: Connect 8E1 IMA cable to IMA connection point on AM35 Base Module and plug 3x2 Module connectors labelled T1 and T4 directly into appropriate Optomux tributaries as defined in design pack information.
6. For Optical Base see Section 3.4 AM35 Optical Base
7. Utilise the existing 100 Pair high-density Krone blocks associated with AP4 position. Consult design pack information.
8. Connect CCF cable connectors marked AM35-1-C to LINE Port on Filter Module. See section 3.6
9. Run and terminate CCF connectors into the appropriate connection fields for AP4. See also Consult design pack for any information.
10. Connect the tails of the Power Cable to the "PWR 1" feed only on the AM35. Plug Universal Mate and Lock connector to the spare RIM Panel power connection point reserved for Access Panel.
11. Install CCF layout label on RIM door
12. Install Ferrites on IMA and bus Expansion cable see section 4 AM35 RIM Installation – Ferrite Installation Procedure



Existing Cable to be relocated beneath cable tray



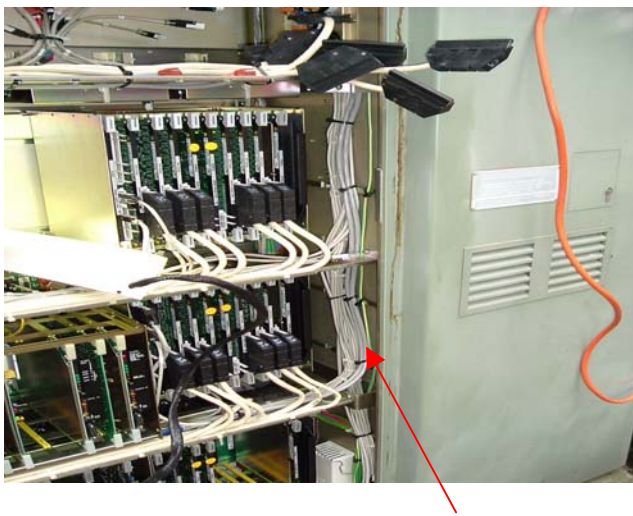
AM35 mounting frame installed



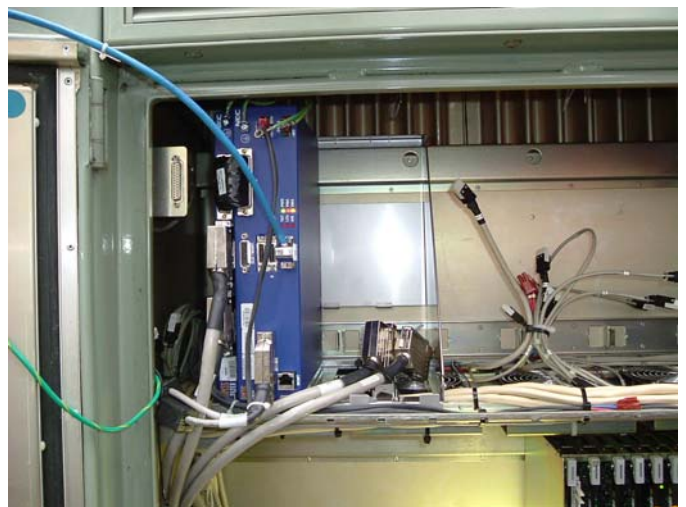
Exit path of the CCF cable and location of the 3 x 2 module connections



CCF cables installed behind Krone Frame supporting bars.

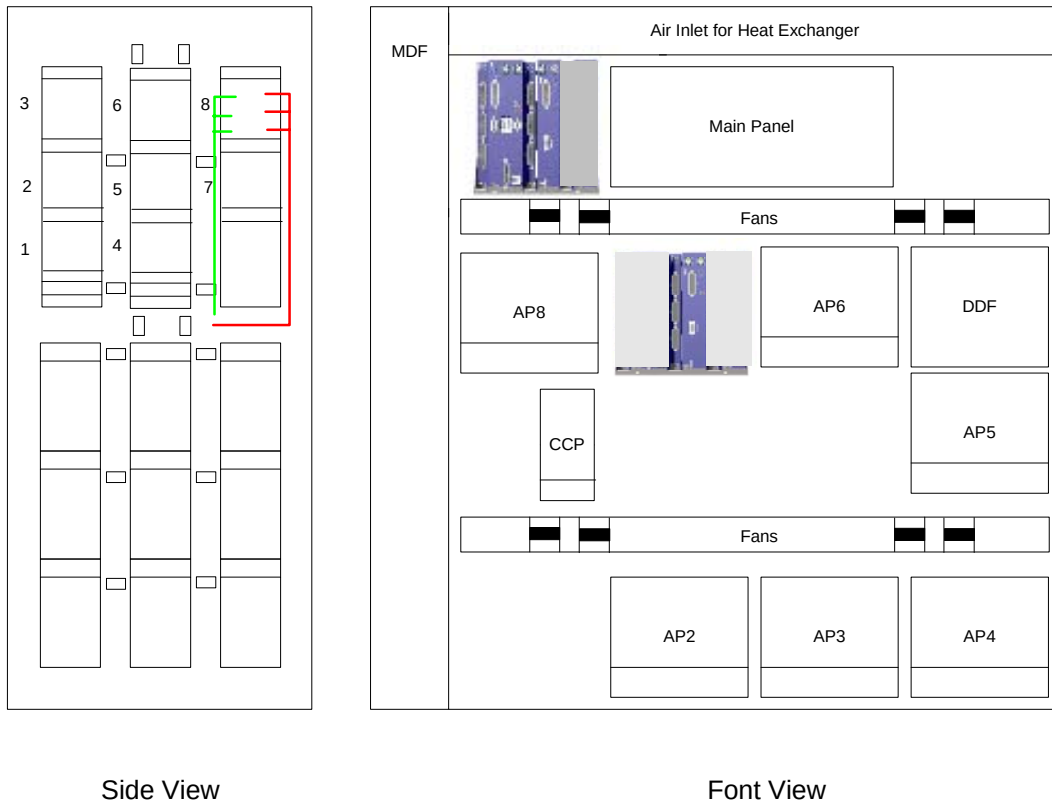


DDF cable is installed to the RHS of RIM cabinet to use up excess cable.



Completed Installation

3.3.3 1G 480 RIM



The above diagram shows a 1G480 RIM Housing with AM35 Installation

1. Reposition any existing RIM cabling that may interfere with location of mounting frame and AM35 cabling. **Ensure sufficient clearance exists between the AM35 equipment cabling and RIM door to avoid potential cable pinching damage when RIM door is closed.**
 2. Install AM35 Mounting frame and modules into vacant position on top shelf to the left of Main Panel on RIM as shown above.
 3. Install Earth cable onto AM35 Modules and terminate onto RIM Earth Bar / Connection Point.
 4. Connect Bus Expansion port labelled "A" from AM35 Base Module to Expansion slot in Expansion Module 1.
- Note:** Secure Bus Expansion Cable with cable tie(s) to an appropriate fixture and maintain a necessary clearance from the cable and the closed cabinet door, thus avoiding pinching.
5. Connect DSL cable from Filter Module 1 to AM35 Base Module.
 6. Connect DSL cable from Filter Module 2 to Expansion Module 1.

For RIM Housing Release 8.2:

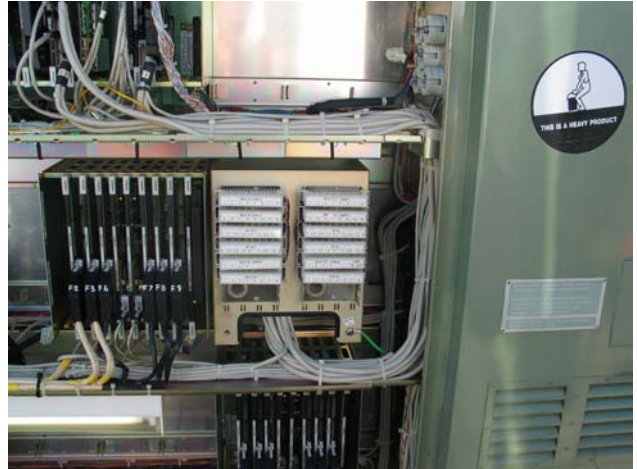
- i. Install 2 new Krone 8-way blocks onto the vacant positions on the DDF. One for AM35 IN and the other for AM35 OUT. The RIM DDF may have a spare 8-way Krone strip installed that may be utilised. See following RIM DDF picture.
- ii. Cut the 3x2 Module connectors labelled T1 and T4 from the 8E1 IMA cable.
- iii. For Electrical Base: Connect 8E1 IMA cable to IMA connection point on AM35 Base Module and terminate on the spare strips on DDF. Run jumpers to the appropriate tributary appearances on the DDF as per design pack information. See also. See picture RIM DDF following text.
- iv. For Optical Base see Section 3.4 AM35 Optical Base

For RIM Housing Release 6.1:

- v. For Electrical Base: Connect 8E1 IMA cable to IMA connection point on AM35 Base Module and plug 3x2 Module connectors labelled T1 and T4 directly into appropriate Optomux tributaries as defined in design pack information.
 - vi. For Optical Base see Section 3.4 AM35 Optical Base
-
7. Utilise the existing 100 Pair high-density Krone blocks associated with Spare Panel position and existing 100 Pair high-density Krone block for AP8. Install new 100 Pair high density in CCF associated with Spare Panel if one does not exist. Consult design pack information.
 8. Connect CCF cable connectors marked AM35-1-C to LINE Ports on Filter Module No.1 and AM35-2-C to LINE Ports on Filter Module No 2. See section 3.6
 9. Connect CCF cable connectors marked AM35-1-X to PSTN Ports on Filter Module No.1 and AM35-2-X to PSTN Ports on Filter Module No 2. See section 3.6
 10. Run and terminate CCF connectors into the appropriate connection fields for AP8 and spare 100-way HD Krone block. See also. Consult design pack for any information.
 11. Connect the tails of the Power Cable to the "PWR 1" feed only on the AM35 Base and Expansion modules. Plug Universal Mate and Lock connector to the spare RIM Panel power connection point reserved for Access Panel.
 12. Install a label "Do Not Use This Access Panel Location", onto the rear of the vacant AP8.
 13. Install CCF Layout on RIM door
 14. Install Ferrites on IMA and bus Expansion cable see section 4 AM35 RIM Installation – Ferrite Installation Procedure
 15. Install the additional 32 Line Filter Module, Expansion Module and Mounting Frame into AP7 in the same manor as described in the preceding text.



Mounting frame shown installed.
Existing RIM cables are tied behind the cable tray and
beneath the AM35 mounting frame.



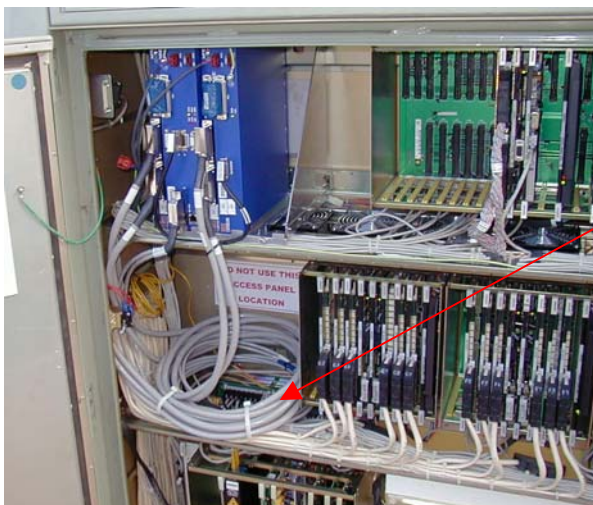
Location of DDF. The lower blocks are usually
spare and bottom positions vacant.



BEU cable placement

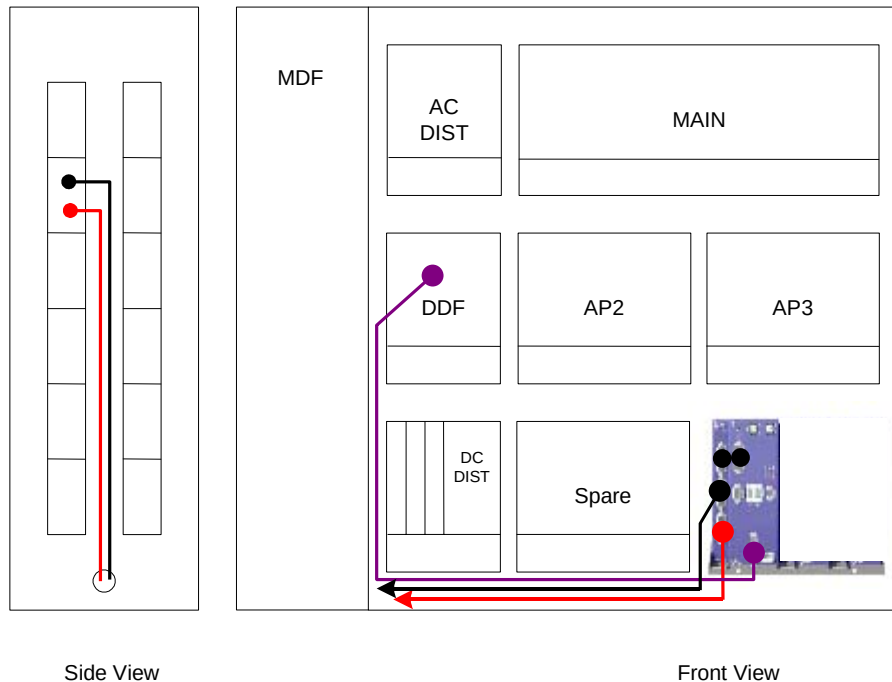


Power cables tied to BEU cable to reduce strain on
power plugs



Excess CCF Cable management.

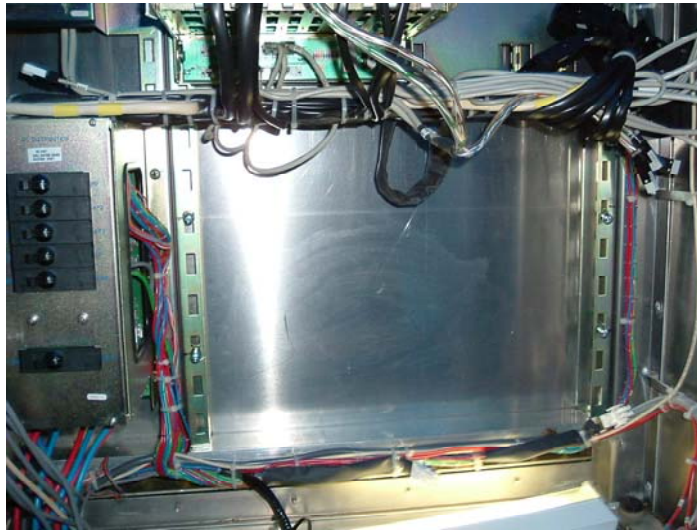
3.3.4 2G 180



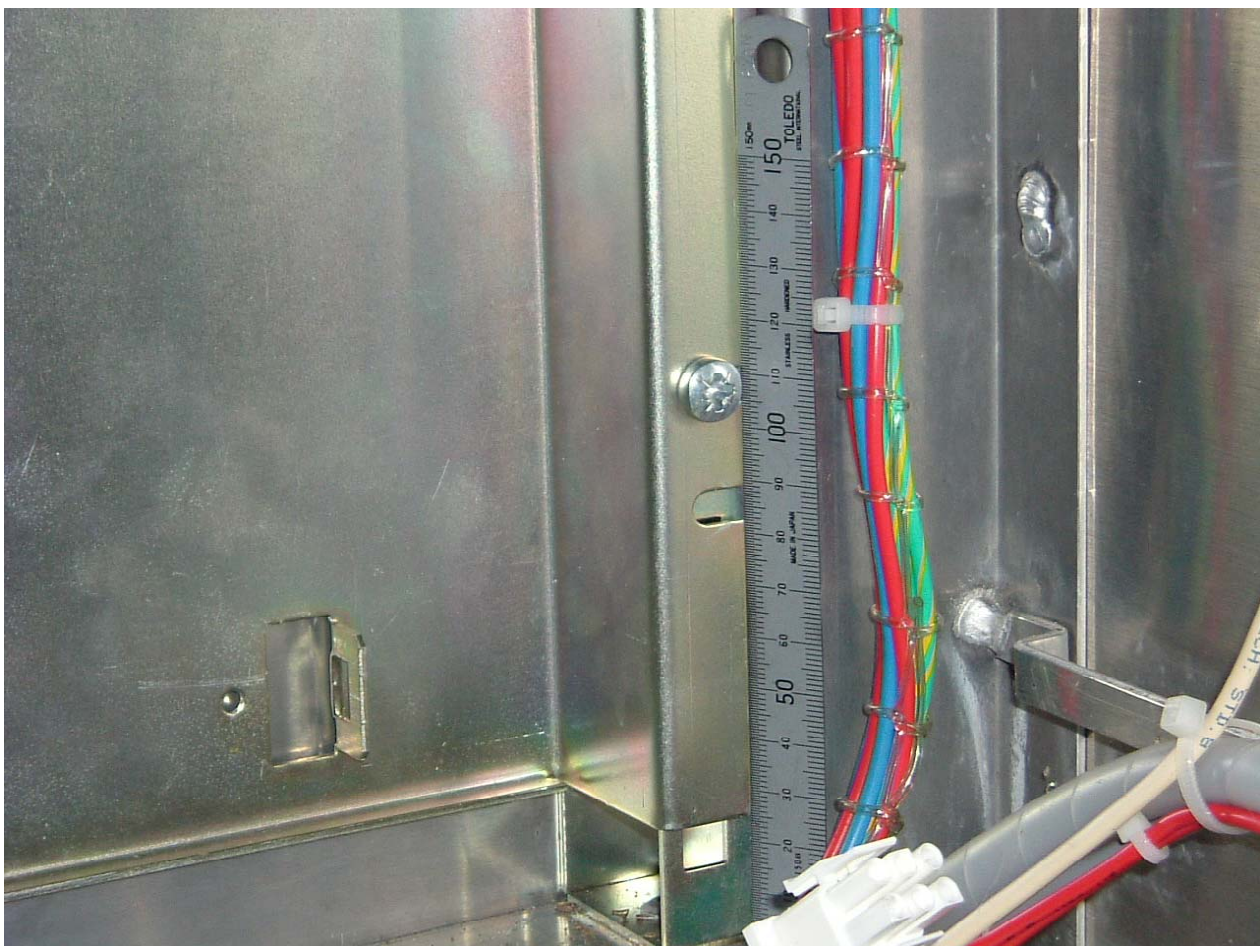
The diagram above shows a 2G 180 RIM Housing with AM35 Installation

1. Note: A recessed rack adapter is required and is not provided as part of the NEC AM35 RIM Kit. This item should be purchased as part of the design bill of materials.
2. Install a recessed rack adapter in the spare location below AP2 & AP3 as shown above. This is not provided as part of the NEC AM35 RIM kit. This item should be purchased as part of the design bill of materials. See pictures following text.
3. Reposition any existing RIM cabling that may interfere with location of mounting frame and AM35 cabling. **Ensure sufficient clearance exists between the AM35 equipment cabling and RIM door to avoid potential cable pinching damage when RIM door is closed.**
4. Install AM35 Cradle and modules into Right Hand Side of the recessed rack adapter on RIM as shown above.
5. Install Earth cable onto AM35 Modules and terminate onto RIM Earth Bar / Connection Point.
6. Connect DSL cable from Filter Module 1 to AM35 Base Module.
7. Install 2 new Krone 8-way blocks onto the vacant positions on the DDF. One for AM35 IN and the other for AM35 OUT. The RIM DDF may have a spare 8-way Krone strip installed that may be utilised. See following RIM DDF picture.
8. Cut the 3x2 Module connectors labelled T1 and T4 from the 8E1 IMA cable.
9. For Electrical Base: Connect 8E1 IMA cable to IMA connection point on AM35 Base Module and terminate on the spare strips on DDF. Run jumpers to the appropriate tributary appearances on the DDF as per design pack information. See also.

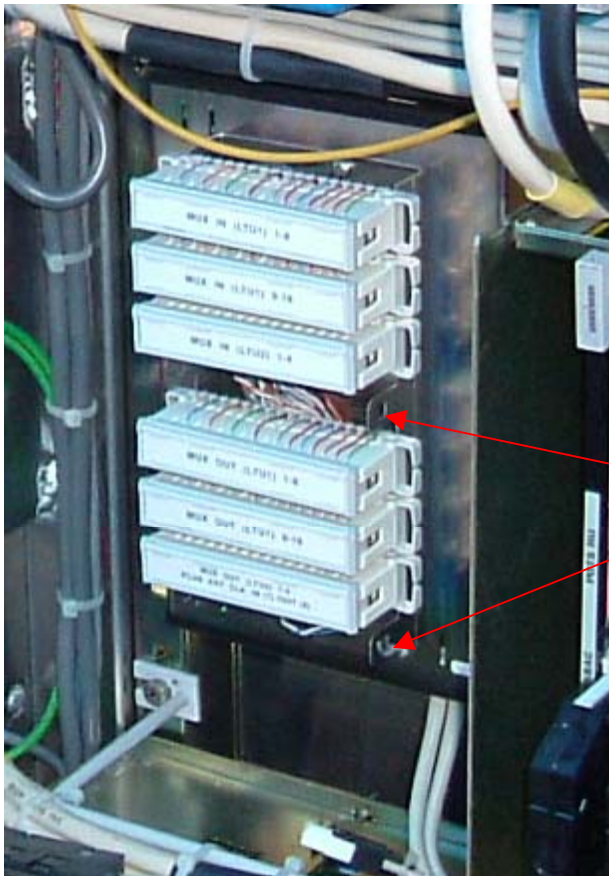
10. For Optical Base: For Optical Base see Section 3.4 AM35 Optical Base.
11. Utilise the existing CCF 100 Pair high-density Krone blocks associated with AP4 position. Consult design pack information.
12. Connect CCF cable connectors marked AM35-1-C to LINE Port on Filter Module. See section 3.6
13. Connect CCF cable connectors marked AM35-1-X to PSTN Port on Filter Module. See section 3.6
14. Run and terminate CCF connectors into the appropriate connection fields for AP4 100-way HD Krone block. Consult design pack for any information.
15. Connect the tails of the Power Cable to the "PWR 1" feed only on the AM35 Base Module. Plug Universal Mate and Lock connector to the spare RIM Panel power connection point reserved for Access Panel.
16. Install the label "Do Not Use This Access Panel Location" on the rear of vacant AP3.
17. Install CCF layout label on RIM door
18. Install Ferrites on IMA and bus Expansion cable see section 4 AM35 RIM Installation – Ferrite Installation Procedure



Recessed rack adapter to be installed in 2G 180 RIM prior to AM35 installation.

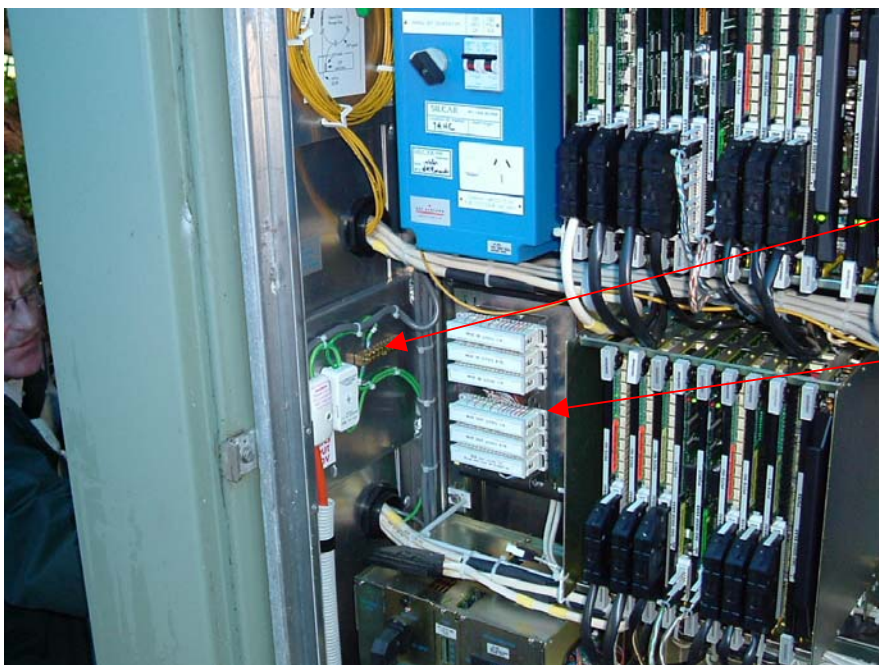


Recessed rack adapter positioning.



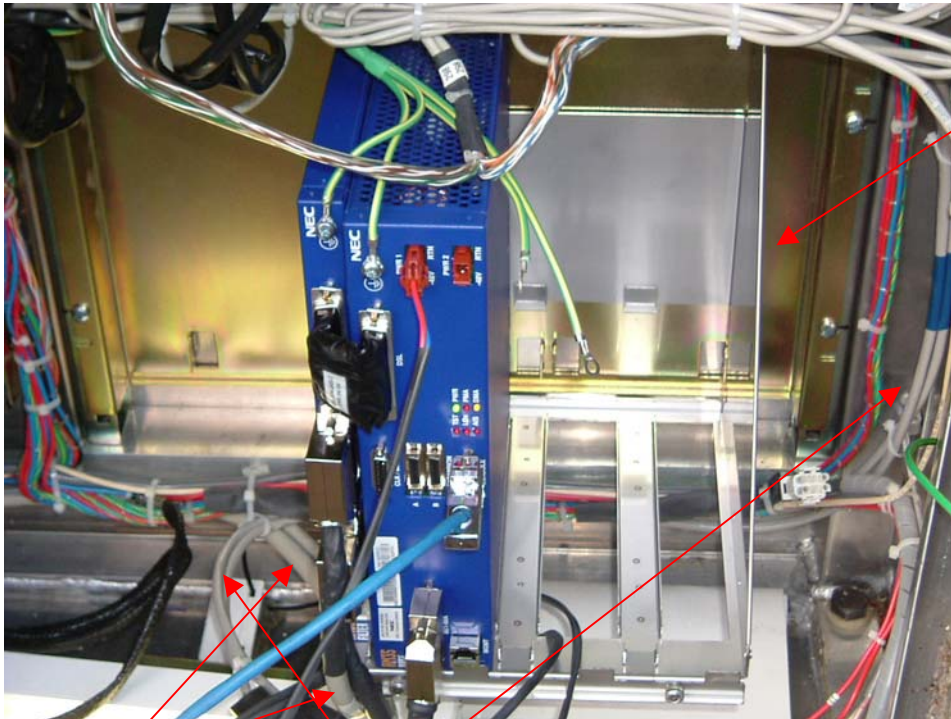
Spare DDF Mounting
Locations

2G 180 RIM DDF layout



Earth connection point

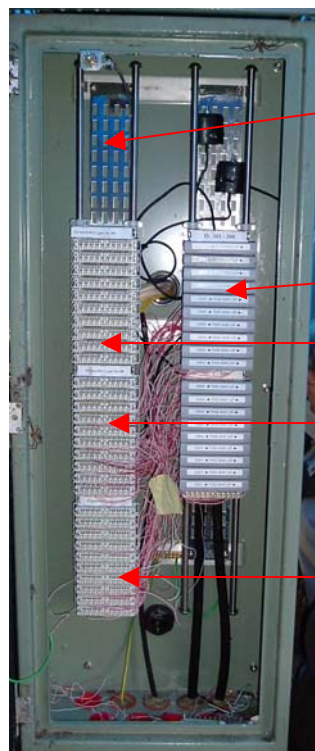
DDF



AM35 Mounting Frame
installed on RHS location
on recessed adapter
panel.

CCF Cable

IMA Cable



Three more Krone
modules to cater for the
additional 14 pairs PSTN
and 14 pairs DSL.
Krone pairs 301 - 330

C Pairs

X Pairs 201-300

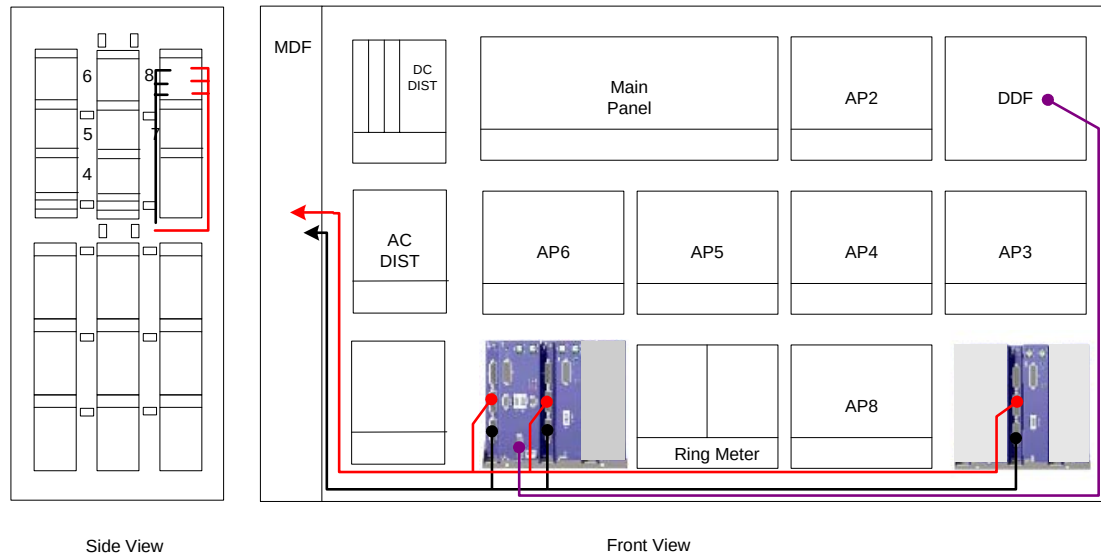
X Pairs 101-200

X Pairs 1-100

AP3 uses pairs 201 – 300. The cables in AP3 will be removed and the Krones reused for AM35 connections. If 64 connections are required then three additional Krone blocks must be installed.

100 Krone connections cater for 50 x PSTN connections and 50 x DSL connections.

3.3.5 2G 480 RIM



The diagram above shows a 2G 480 RIM Housing with AM35 Installation

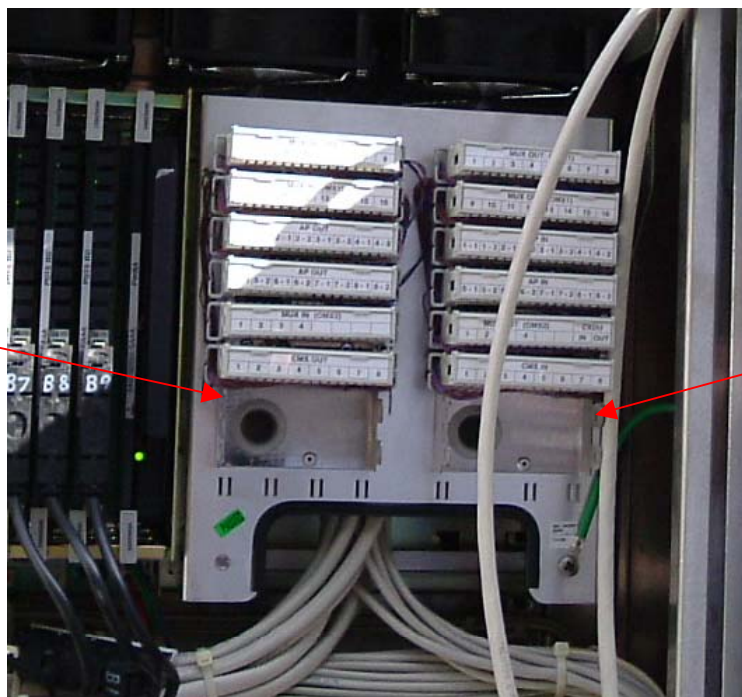
1. Reposition any existing RIM cabling that may interfere with location of mounting frame and AM35 cabling. **Ensure sufficient clearance exists between the AM35 equipment cabling and RIM door to avoid potential cable pinching damage when RIM door is closed.**
 2. Install AM35 Mounting frame and modules into Spare Access Panel position on RIM to the Left Hand Side of the Ring Meter Unit as shown above and depicted in photograph following this text.
 3. Install Earth cable onto AM35 Modules and terminate onto RIM Earth Bar / Connection Point (see Photo following text)
 4. Connect Bus Expansion port labelled "A" from AM35 Base Module to Expansion slot in Expansion Module 1.
- Note:** Secure Bus Expansion Cable with cable tie(s) to an appropriate fixture and maintain a necessary clearance from the cable and the closed cabinet door, thus avoiding pinching.
5. Connect DSL cable from Filter Module 1 to AM35 Base Module.
 6. Connect DSL cable from Filter Module 2 to Expansion Module 1.
 7. Install 2 new Krone 8-way blocks onto the vacant positions on the DDF. One for AM35 IN and the other for AM35 OUT. The RIM DDF may have a spare 8-way Krone strip installed that may be utilised. See following RIM DDF picture.
 8. Cut the 3x2 Module connectors labelled T1 and T4 from the 8E1 IMA cable.
 9. For Electrical Base: Connect 8E1 IMA cable to IMA connection point on AM35 Base Module and terminate on the spare strips on DDF. Run jumpers to the appropriate tributary appearances on the DDF as per design pack information. See also.

10. For Optical Base see Section 3.4 AM35 Optical Base.
11. Utilise the existing 100 Pair high-density Krone blocks associated with Spare Panel position and existing 100 Pair high-density Krone block for AP8. Install new 100 Pair high density in CCF associated with Spare Panel if one does not exist. Consult design pack information (see Photo following text).
12. Connect CCF cable connectors marked AM35-1-C to LINE Ports on Filter Module No.1 and AM35-2-C to LINE Ports on Filter Module No 2. See section 3.6
13. Connect CCF cable connectors marked AM35-1-X to PSTN Ports on Filter Module No.1 and AM35-2-X to PSTN Ports on Filter Module No 2. See section 3.6
14. Run and terminate CCF connectors into the appropriate connection fields for AP8 and spare 100-way HD Krone block. See also. Consult design pack for any information (see Photo following text)
15. Connect the tails of the Power Cable to the "PWR 1" feed only on the AM35 and Expansion modules. Plug Universal Mate and Lock connector to the spare RIM Panel power connection point reserved for Access Panel.
16. Install a label "Do Not Use This Access Panel Location", onto the rear of the vacant AP8.
17. Install CCF layout label on RIM door.
18. Install Ferrites on IMA and bus Expansion cable see section 4 AM35 RIM Installation – Ferrite Installation Procedure
19. Install the additional 32 Line Filter Module, Expansion Module and Mounting Frame into AP7 in the same manor as described in the preceding text.

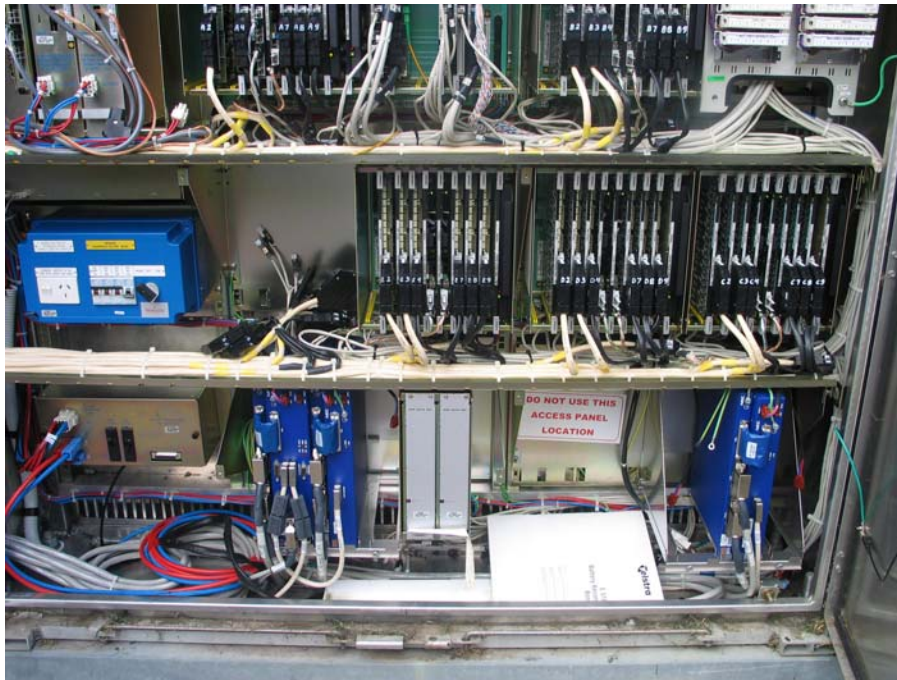


AM35 Mounting frame and Modules positioned into a 2G480 RIM Housing.

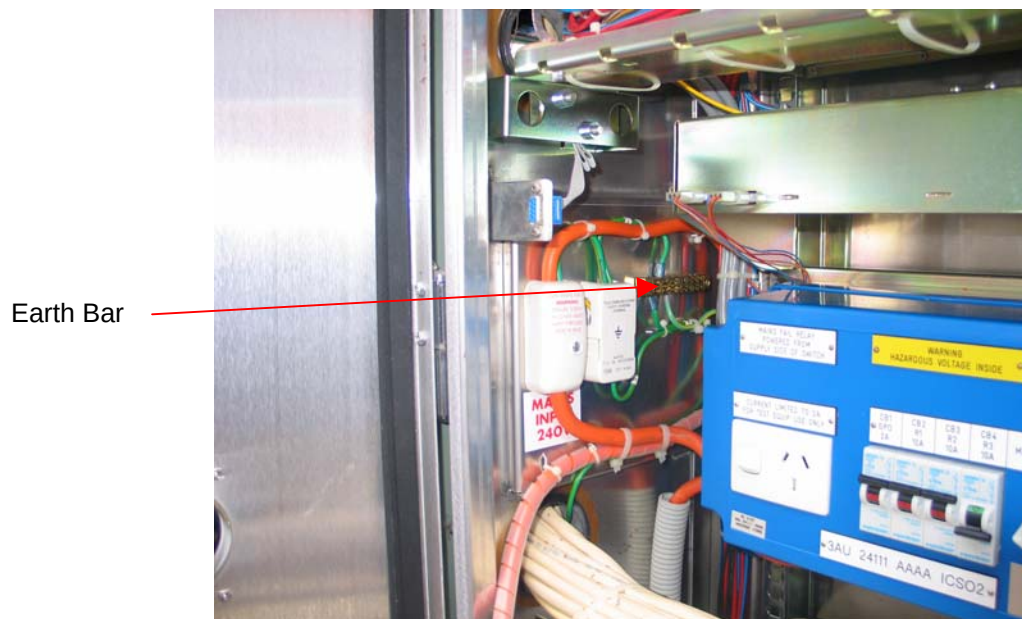
Vacant locations
to mount 8-way
Krone strips
DDF OUT



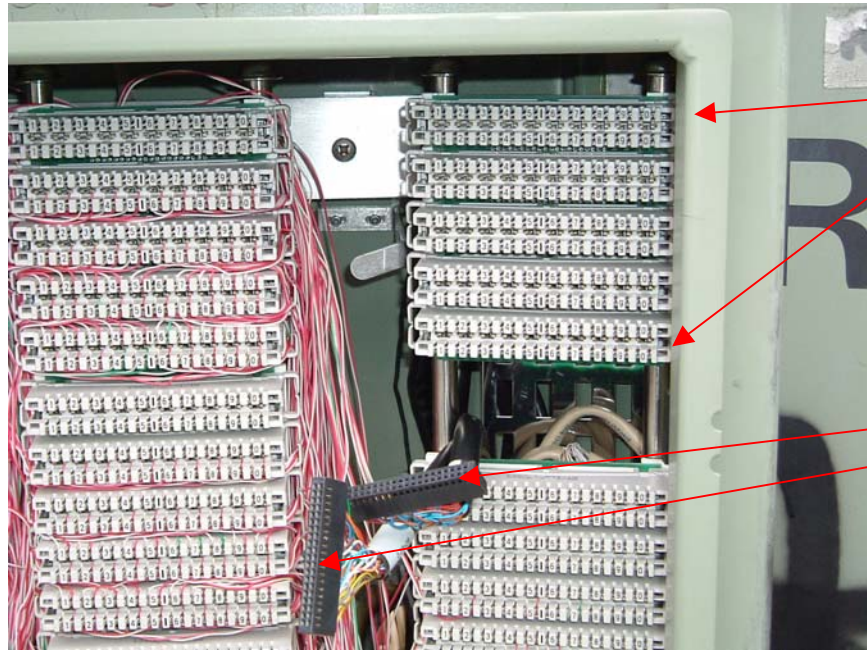
Vacant locations
to mount 8-way
Krone strips
DDF IN



AM35 Installed in 2G480 RIM Housing.



2G480 Earth Bar location

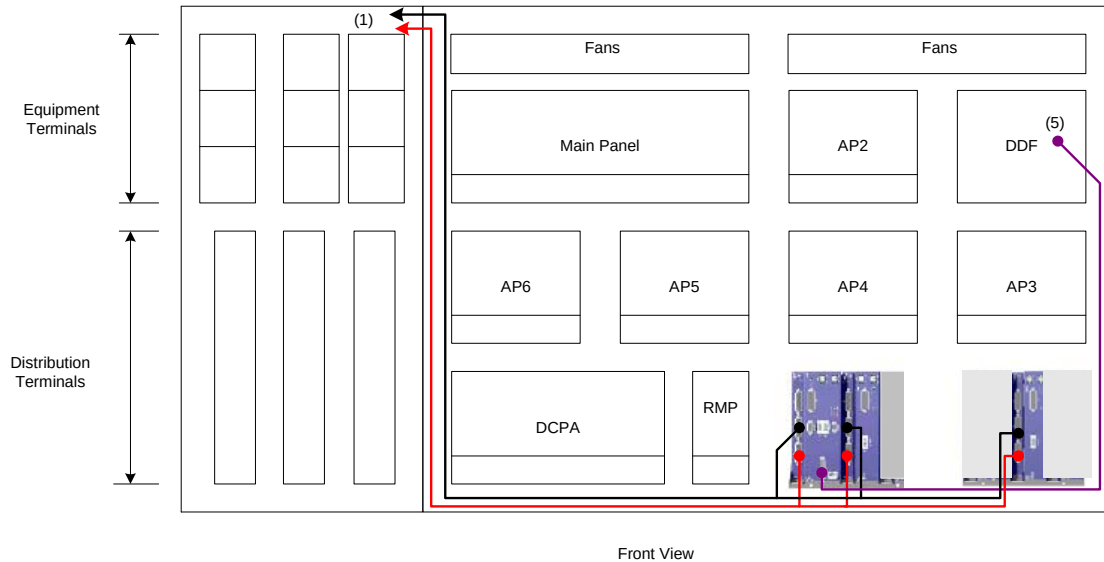


100 Pair
CCF
Block

Another Block is
required to
terminate
remainder of
cables

2G480 CCF Layout

3.3.6 3G 480 RIM



The diagram above shows a 3G 480 RIM Housing with AM35 Installation

1. Note: For 3G Housings Serial / Item 903 / 425 is required and is not provided as part of the NEC AM35 RIM Kit. This item should be purchased as part of the design bill of materials.
2. Remove Perspex covers.
3. Reposition any existing RIM cabling that may interfere with location of mounting frame and AM35 cabling. **Ensure sufficient clearance exists between the AM35 equipment cabling and RIM door to avoid potential cable pinching damage when RIM door is closed.**
4. Install AM35 Mounting frame and modules into vacant Access Panel 8 in RIM housing as shown above.
5. Install Earth loom cable onto AM35 Modules and terminate onto RIM Earth Bar / Connection Point.
6. Connect Bus Expansion port labelled "A" from AM35 Base Module to Expansion slot in Expansion Module 1.

Note: Secure Bus Expansion Cable with cable tie(s) to an appropriate fixture and maintain a necessary clearance from the cable and the closed cabinet door, thus avoiding pinching.

7. Connect DSL cable from Filter Module 1 to AM35 Base Module.
8. Connect DSL cable from Filter Module 2 to AM35 Expansion Module 1.

9. Install 2 new Krone 8-way blocks onto the vacant positions on the DDF. One for AM35 IN and the other for AM35 OUT. The RIM DDF may have a spare 8-way Krone strip installed that may be utilised. See following picture.
10. For Electrical Base: Connect 8E1 IMA cable to IMA connection point on AM35 Base Module and terminate on the spare strips on DDF. Run jumpers to the appropriate tributary appearances on the DDF as per design pack information. See also
11. For Optical Base see Section 3.4 AM35 Optical Base.
12. Utilise the existing CCF high-density Krone strips associated with AP8 and AP7 as well as the spare positions located below the appearance of AP7. Consult design pack information.
13. Connect CCF cable connectors marked AM35-1-C to LINE Port on Filter Module No.1 and AM35-2-C to LINE Port on Filter Module No 2. See section 3.6
14. Connect CCF cable connectors marked AM35-1-X to PSTN Port on Filter Module No.1 and AM35-2-X to PSTN Port on Filter Module No 2. See section 3.6
15. Run and terminate CCF connectors into the appropriate connection fields for AP8, AP7 and spare strips below AP7 appearance in CCF. See also and refer to CCF label.
16. Connect the tails of the Power Cable to the "A" feed only on the AM35 Base and Expansion modules. Plug Universal Mate and Lock connector to the RIM Panel power connection point of AP8.
17. Install CCF layout label on RIM door.
18. Install Ferrites on IMA and bus Expansion cable see section 4 AM35 RIM Installation – Ferrite Installation Procedure
19. Refit Perspex Panel cover.
20. Install the additional 32 Line Filter Module, Expansion Module and Mounting Frame into AP7 in the same manor as described in the preceding text.



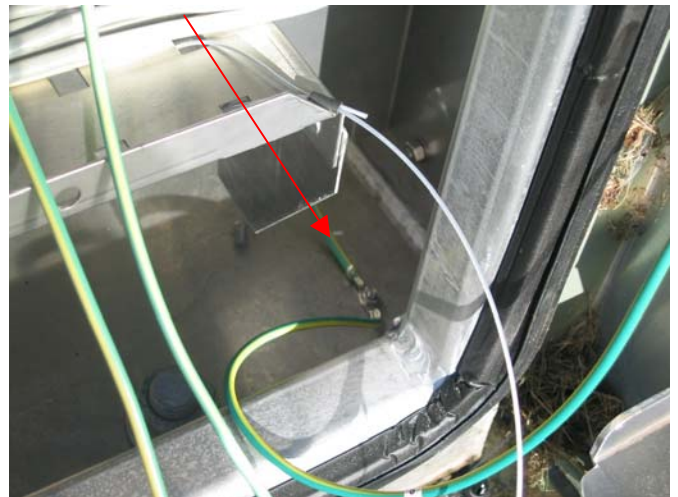
Spare 8-way
Krone strip and
vacant positions

3G 480 DDF

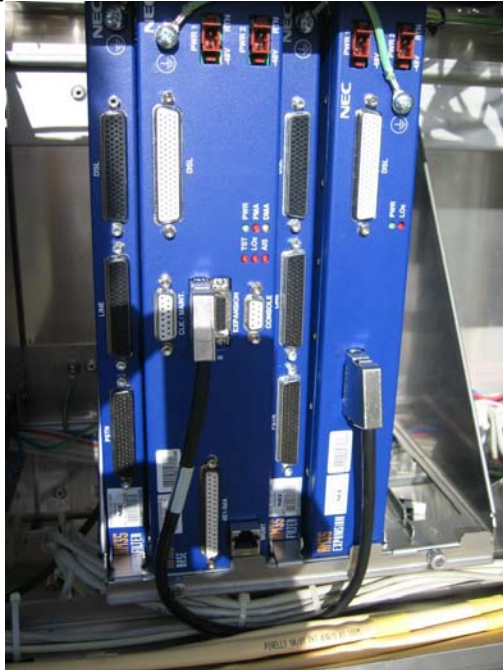
Earth loom – AM35



Earth Connection Point



Bus Expansion cable



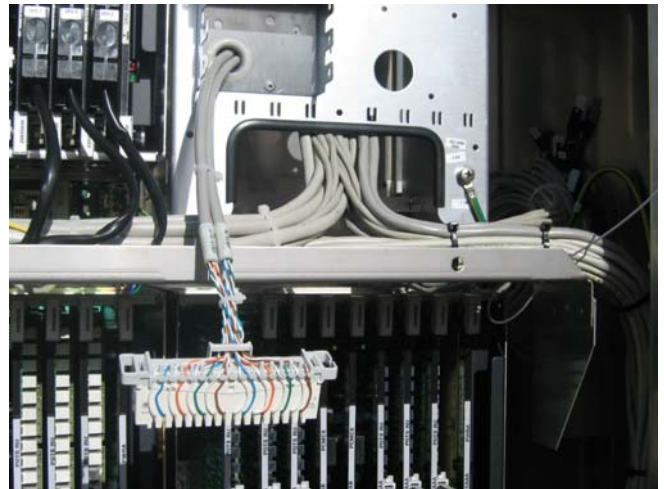
DSL cables – Base and Expansion to Filters



DDF-IMA cable



DDF cable termination



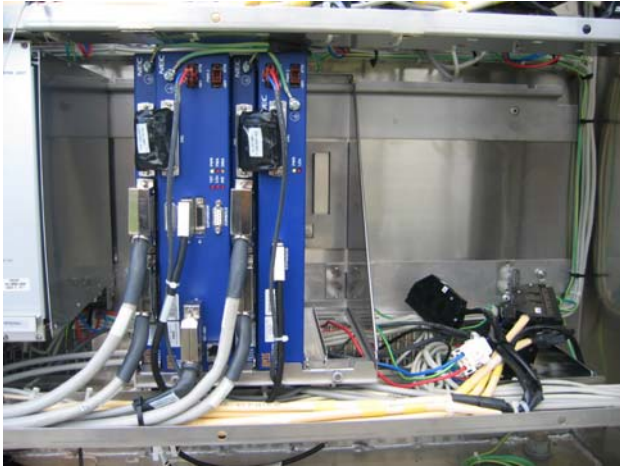
CCF access and Cables



CCF Cable routing – AM35



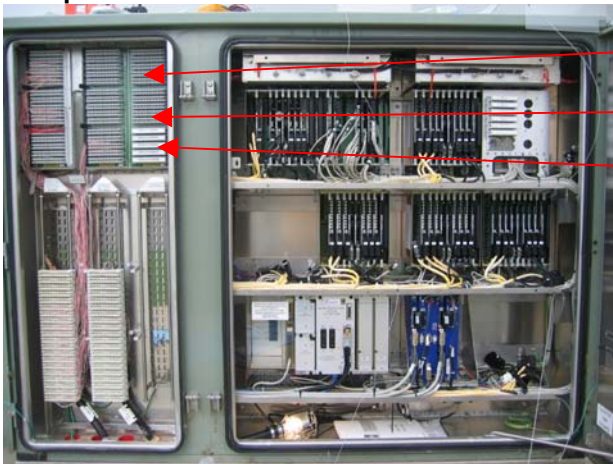
Power Cable



CCF termination



Complete Installation



AP8 Krone CCF appearance

AP7 Krone CCF appearance

Spare Krone CCF locations

Complete Installation with 96 Lines



3.4 AM35 Optical Base

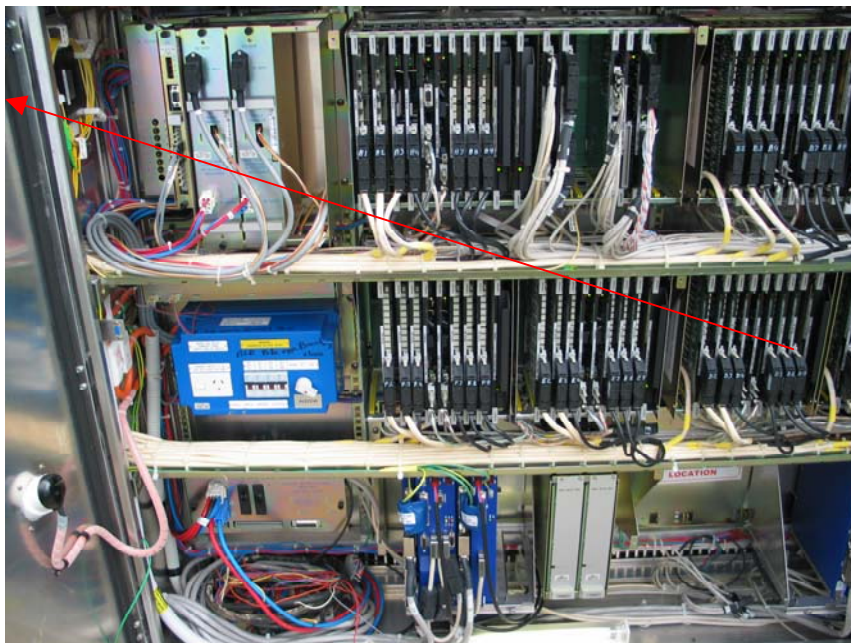


AM35 Optical Base shown installed into a RIM cradle with an expansion module and 2 filter units.

Optical interface with LC connection fields:

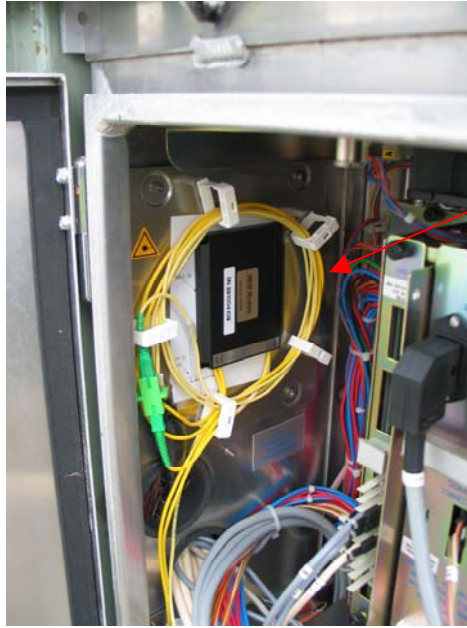
Tx 1550nm

Rx 1310nm



Optical Base, Expansion modules installed into a housing. This is an and Optical Base with Working.

le secured to side of



Single Fibre Working WDM Unit secured to the LHS of the RIM cabinet via double sided tape. Excess fibre wound around plastic fibre rings stuck to the RIM housing

The WDM unit separates the Tx 1550nm and RX 1310nm from the single fibre into individual fibres for connection into the AM35 Optical interface.

3.5 IGU Commands to assist in Optical Link Budget Calculation

As an aid to the optical link budget determination and the calculation of appropriate optical attenuation, NEC has provided an LCT command to over-ride the automatic laser shutdown safety feature.

Note:

- *This feature does not compromise the Class-1 laser safety..*
- *The IGU should be returned to automatic mode directly after link dimensioning is performed..*

Optical transmit dimensioning using this feature should be performed prior to inserting the Optical Rx fibre.

The following commands are available from the IGU LCT for use during installation only:

phy laser on: This command turn the transmit laser on until a changed optical Rx state is discovered.

phy laser auto: This command returns the unit to automatic laser shutdown mode.

phy laser: This command reports the optical interface mode and transmit laser status.

If optical transmit power is measured with an averaging optical instrument, the measured power will be -3dB from the peak optical transmit power due to transmission of the STM-1 frame.

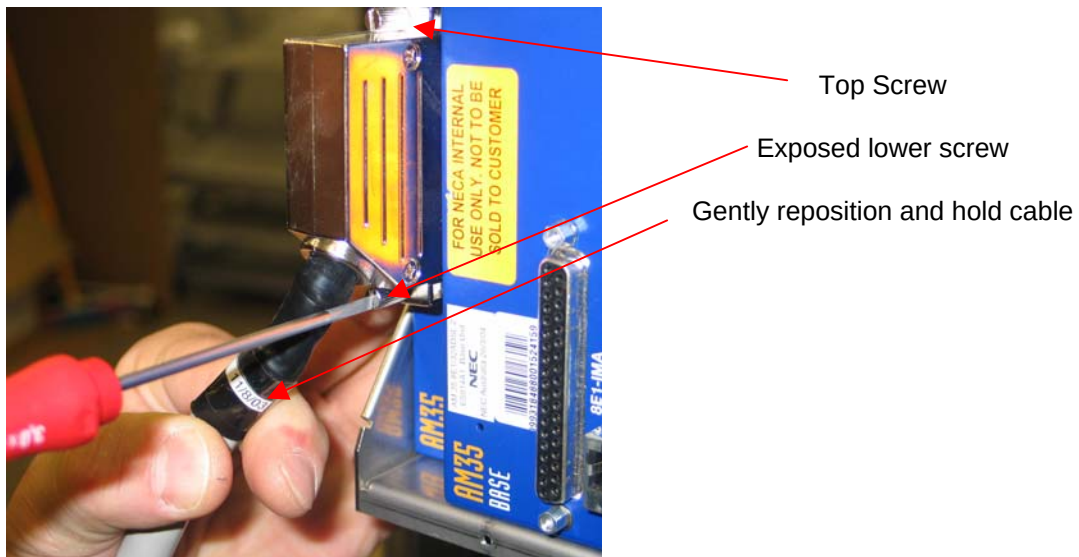
The IGU defaults to automatic laser shutdown after reset.

Please refer to Telstra Procedure 007332 A084 AM 3x Multi-Service Access Platform (NEC DSLAM) – Installation & Commissioning Standard for detail on Optical Fibre Commissioning calculations.

3.6 CCF and DSL Cable Connection into the AM35

The correct procedure to fit AM35 CCF and DSL cables into AM35 Base, Expansion and Filter Modules is as follows:

1. Insert male connector firmly until D-shell makes connection with the AM35 faceplate.
2. Firmly screw in top screw to 0.3 Nm torque setting.
3. Gently push and hold cable to expose bottom screw head.
4. Using a flat blade (4mm x 0.8mm) thin-shanked screwdriver, tighten lower screw to 0.3 Nm torque setting.



4 AM35 RIM Installation – Ferrite Installation Procedure

Introduction

To ensure compliance with EMC standard AS/NZS CISPR22: 2002 Class B, installation of the AM35 into the Telstra RIM sites requires that ferrites be added to particular cables that interface with the AM35 8E1/32ADSL Base Module.

Cables:

The cables that require the ferrites are:

- IGU-8E1-IMA to DDF cable (G54-1759-0A00, G54-1763-0A00)
- BUS Expansion Cable (G54-7156-0A00, 0B00, 0C00)

Ferrites:

There are four (4) ferrites supplied with each installation kit
The part number is Steward: 28A2029-0A2 (Black).

Installation

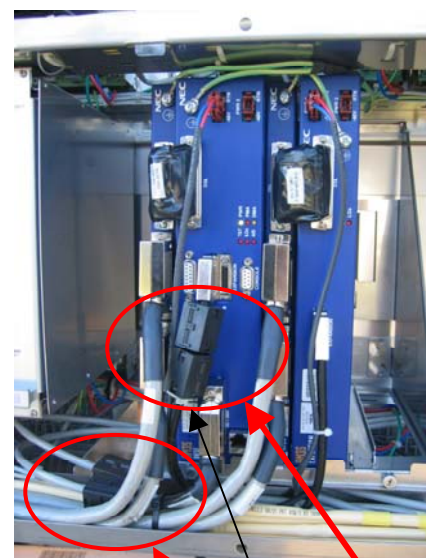
- Add 1 x Ferrite on each of the Equip. IN and Equip. OUT cable, next to the end of the heat-shrink section. (See photos following text). Note that different ferrites appear in the pictures due to availability of parts at the time of photography.

BUS Expansion cable

- Add 2 x Ferrites for each Bus Expansion cable as near as possible to the connector of the BUS Expansion port on the AM35 8E1/32ADSL Base Module
- Add 1 x Cable Tie below the ferrites to maintain their position near the connector, and to prevent them from sliding down.



Ferrites installed on BUS Expansion Cable with cable tie to secure ferrite position.



BUS Expansion cable
Add Cable Tie here
IMA cables
(Equipment IN & OUT)

5 On Completion of AM35 RIM installation

On completion of an AM35 installation into a RIM cabinet (2G or 3G) the X326 jumper on the FABD card must be changed to 240H.

The X326 link has 3 pins. With the jumper covering the top 2 pins the FABD is operating as 480H. With the jumper covering the bottom 2 pins the FABD is operating as 240H.

- When the jumper is set to 480H (480 Line housing) the fans operate at a fixed 35 volts.
- When the jumper is set to 240H (240 Line Housing) the fans operate at a variable voltage ranging from 30 to 40 volts.

5.1 FABD card

The consequences of removing the FABD card are:

- Main Equipment Compartment fans will not operate.
- Lid fans for the 480 line 2G Remote Housing will not operate.
- The battery contactor will open, disconnecting the batteries from the load

Therefore the FABD card should only be removed when the rectifier is present and working.

5.2 Removing and Re-inserting the FABD card

- Check that the housing is fitted with a rectifier, and that the AC power supply and rectifier are operating correctly.
- Trip the Fan and Lamp circuit breaker.
- Using the relevant anti-static procedures, remove the FABD card.
- Change the FABD X326 jumper to the 240H position.
- Re-insert the FABD card.
- Restore the Fan and Lamp circuit breaker.
- Confirm that the power system is operating correctly.

Note – The FABD card is described in detail in the Alcatel C-RIM Technical Handbook Releases 7.1 to 8.2 (Chapter 15 Section 4).

6 Configuration of AM35

6.1 Connecting to the Serial Port of an AM35

1. Using a serial cable, connect a laptop/PC via its serial port to the IGU/BEU cards.
2. Run a terminal emulation program such as Windows HyperTerminal on the laptop/PC.
3. Configure HyperTerminal as follows:

Port Settings
Emulation: **VT100**
Bits per second: **9600**
Data bits: **8**
Parity: **None**
Stop bits: **1**
Flow Control: **None**.

6.2 Configuring the Network Settings of an IGU-8E1-IMA/ IGU-A155-SH5 (AM35) – In-band Management

1. Connect a local PC to the serial port of the IGU-8E1-IMA/IGU-A155-SH5 card and start a HyperTerminal session.
2. Once connected press **Enter** to display the "**Password:**" prompt.
3. Enter a valid password. Note – the factory default password is: **adsligu**
4. The following message will then appear:
Welcome to the NEC CuproPlus Integrated Gateway Unit
5. Type ? <Enter> to see a full list of commands available

6.3 Configuration Commands

Command	Comments
<code>erase_configuration</code>	For AM35 – erase previous configuration
<code>router default_path=2</code>	Configures the management to be inband.
<code>router atm_vcc=1/32,604</code>	Configures inband ATM VCC where 1 is the VPI , 32 is the VCI and 604 is the default Telstra inband management bandwidth in cells per second.
<code>ip n.n.n.n</code>	Configures the IP address of the IGU where n.n.n.n is the IP address of the AM31/AM35
<code>router atm_mask=n.n.n.n</code>	Configures the Subnet Mask where n.n.n.n is the subnet mask of the IP address. Default = 255.255.255.0
<code>router enet_mask=0.0.0.0</code>	Disables Outband Ethernet port
<code>router print</code>	Confirm settings
<code>quit&restart_now!</code>	A reboot is needed for changes to come into effect
Optical ATM Interfaces ONLY	
<code>mib ext igu set trunk type 1 sdh</code>	Configure the ATM framing for SDH

6.4 Configuring the Network Settings of a BEU-3 (AM31)

Command	Comments
<code>ip n.n.n.n</code>	Configures the IP address of the BEU where n.n.n.n is the IP address of the AM31. The IP address should be on the same subnet as the IGU that is connected to this BEU
<code>shelf n</code>	Configure the sub-rack number of the BEU. Valid numbers are from 2 – 5. Usual convention is that BEU connected to expansion bus connector “A” is Shelf Id 2, B – 3, C – 4, D – 5
<code>quit&restart_now!</code>	A reboot is needed for changes to come into effect

6.5 General Commands

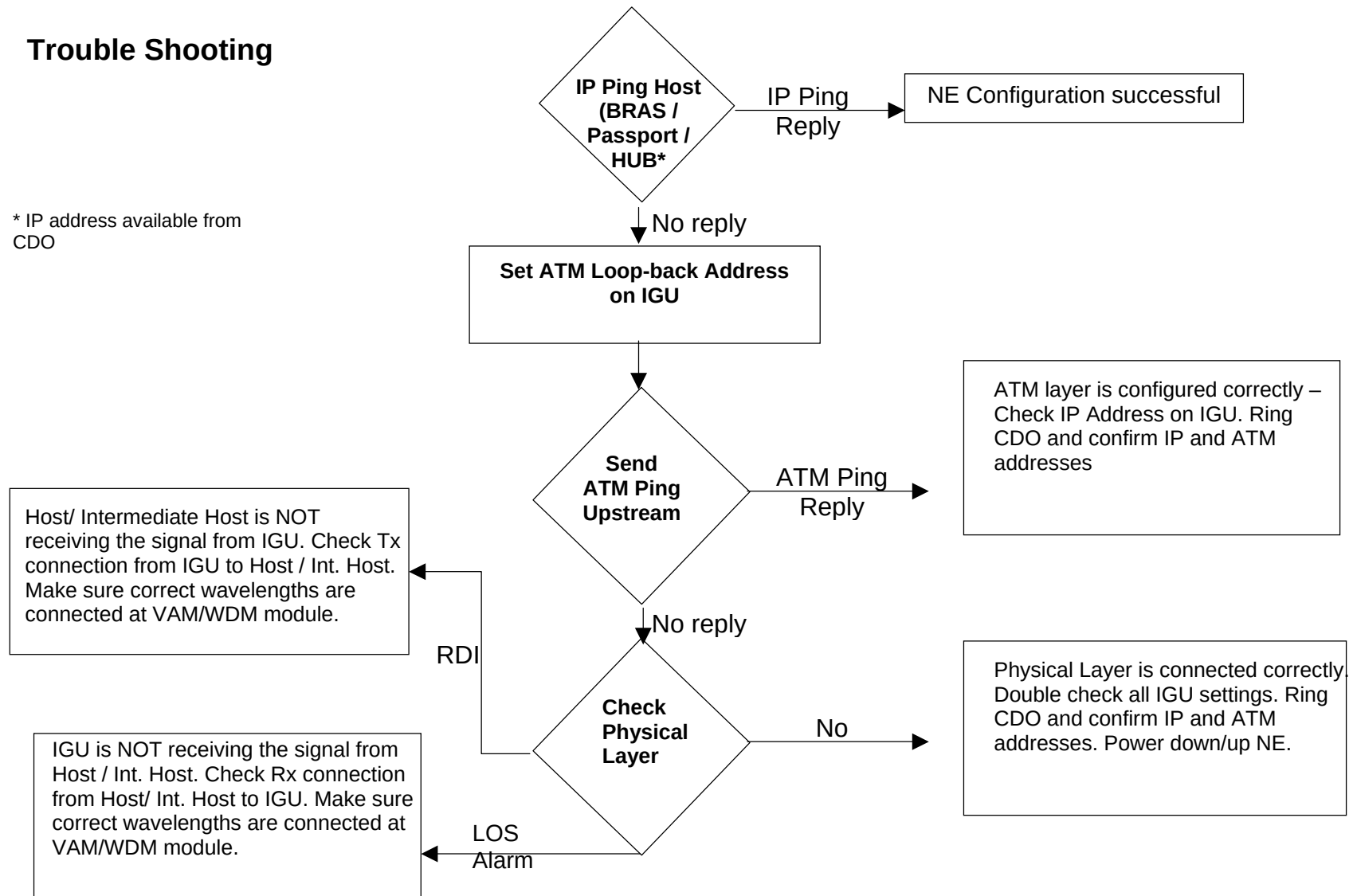
Command	Comments
phy ds1stat	Lists physical status of IMA links
phy hwinfo	Lists physical status of Optic link
p	Print line cards available in current sub-rack
prsa	Lists general alarm status for sub-rack
prsaf	Lists all alarm status for sub-rack

6.6 Connectivity Affirmation Commands

Command	Comments
ping n.n.n.n	IP ping, affirms IP connectivity to target
atmcc llid 01020304 01020304 01020304 01020304	ATM Ping Loop-back ID (Loop-back ID must be set else ATM ping will not work, ID is set at 01020304 01020304 01020304 01020304.).
atmcc lb 0 us seg	ATM segment ping. Affirms ATM segment connectivity.
atmcc lb 0 us ete	ATM end to end ping. Affirms ATM end to end connectivity.

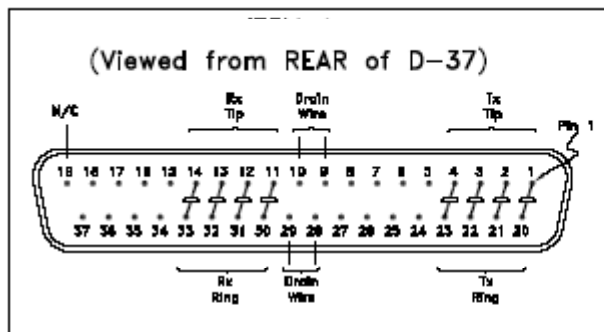
6.7 Trouble Shooting

* IP address available from
CDO



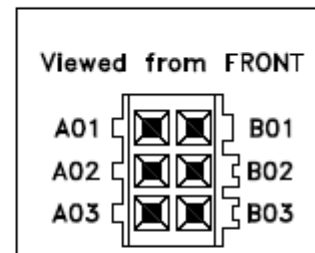
7 Appendix A Cable Termination Detail

AM35 IGU-8E1-IMA (Part No.: G54-7159-0A00)



NOTE 1.
AM35 IN = Rx
AM35 OUT = Tx

DETAIL A

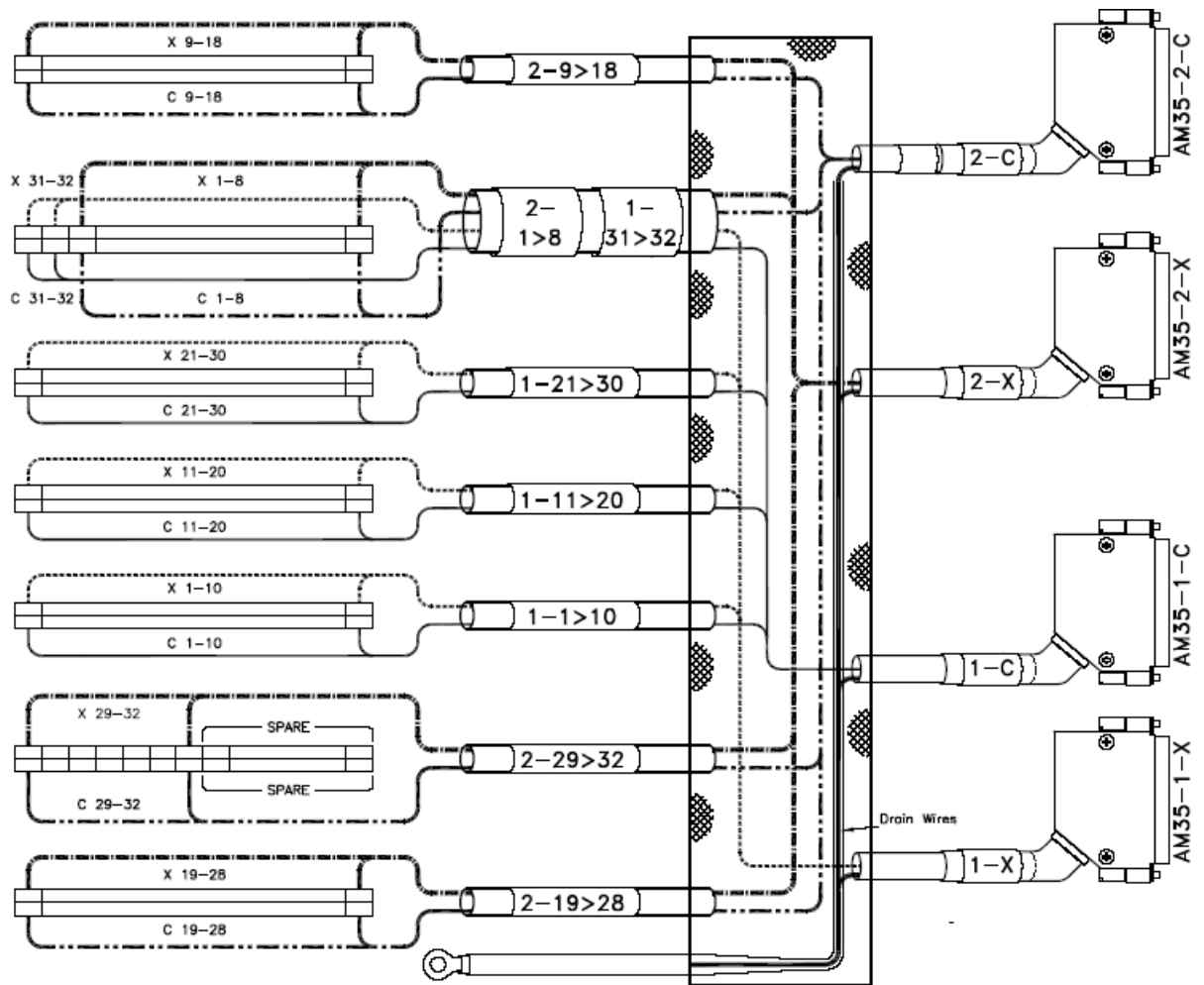


DETAIL B

AM35 IGU-8E1-IMA Termination: Cable

Pair No	Label	Colour	37-way male Pin no. (Detail A)	Ring or Tip	3 x 2 Module (T) (Detail B)	T
1	AM35 OUT	White	1	Tip	B03	1
		Blue	20	Ring	A03	
2		White	2	Tip	B03	2
		Orange	21	Ring	A03	
3		White	3	Tip	B03	3
		Green	22	Ring	A03	
4		White	4	Tip	B03	4
		Brown	23	Ring	A03	
1	AM35 IN	White	11	Tip	B01	1
		Blue	30	Ring	A01	
2		White	12	Tip	B01	2
		Orange	31	Ring	A01	
3		White	13	Tip	B01	3
		Green	32	Ring	A01	
4		White	14	Tip	B01	4
		Brown	33	Ring	A01	

AM35 CCF Cables (Part No. G54-7155-0A00) 3G RIM TYPE ONLY

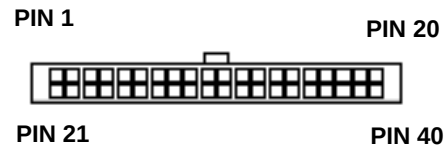


Connector Label	Connect Location
AM35 – 1 - X	Filter Unit 1 PSTN
AM35 – 1 - C	Filter Unit 1 LINE
AM35 – 2 - X	Filter Unit 2 PSTN
AM35 – 2 - C	Filter Unit 2 LINE

AM35 CCF Cable for 3G RIM TYPE ONLY (G54-7155-0A00 Revision 2)



View from Rear



View from Front

Pins not connected:
17 – 20, 37 – 39, 56 – 59, 75 - 78

AM35-1-X : 1-1>10				
X Pair No.	Colour	AM35-1-X 78-way Pin No.	1-1>10 40-way Pin No.	Ring or Tip
1	White	1	1	Ring
	Blue	21	3	Tip
2	White	40	5	Ring
	Orange	80	7	Tip
3	White	2	9	Ring
	Green	22	11	Tip
4	White	41	13	Ring
	Brown	81	15	Tip
5	White	3	17	Ring
	Gray	23	19	Tip
6	Red	42	21	Ring
	Blue	82	23	Tip
7	Red	4	25	Ring
	Orange	24	27	Tip
8	Red	43	29	Ring
	Green	83	31	Tip
9	Red	5	33	Ring
	Brown	25	35	Tip
10	Red	44	37	Ring
	Gray	84	39	Tip

AM35-1-C				
C Pair No.	Colour	AM35-1-C 78-way Pin No.	1-1>10 40-way Pin No.	Ring or Tip
1	White	1	2	Ring
	Blue	21	4	Tip
2	White	40	6	Ring
	Orange	80	8	Tip
3	White	2	10	Ring
	Green	22	12	Tip
4	White	41	14	Ring
	Brown	81	16	Tip
5	White	3	18	Ring
	Gray	23	20	Tip
6	Red	42	22	Ring
	Blue	82	24	Tip
7	Red	4	26	Ring
	Orange	24	28	Tip
8	Red	43	30	Ring
	Green	83	32	Tip
9	Red	5	34	Ring
	Brown	25	36	Tip
10	Red	44	38	Ring
	Gray	84	40	Tip

AM35-1-X : 1-11>20				
X Pair No.	Colour	AM35-1-X 78-way Pin No.	1-11>20 40-way Pin No.	Ring or Tip
11	Black	6	1	Ring
	Blue	26	3	Tip
12	Black	45	5	Ring
	Orange	65	7	Tip
13	Black	7	9	Ring
	Green	27	11	Tip
14	Black	46	13	Ring
	Brown	66	15	Tip
15	Black	8	17	Ring
	Gray	28	19	Tip
16	Yellow	47	21	Ring
	Blue	67	23	Tip
17	Yellow	9	25	Ring
	Orange	29	27	Tip
18	Yellow	48	29	Ring
	Green	68	31	Tip
19	Yellow	10	33	Ring
	Brown	30	35	Tip
20	Yellow	49	37	Ring
	Gray	69	39	Tip

AM35-1-C				
C Pair No.	Colour	AM35-1-C 78-way Pin No.	1-11>20 40-way Pin No.	Ring or Tip
11	Black	6	2	Ring
	Blue	26	4	Tip
12	Black	45	6	Ring
	Orange	65	8	Tip
13	Black	7	10	Ring
	Green	27	12	Tip
14	Black	46	14	Ring
	Brown	66	16	Tip
15	Black	8	18	Ring
	Gray	28	20	Tip
16	Yellow	47	22	Ring
	Blue	67	24	Tip
17	Yellow	9	26	Ring
	Orange	29	28	Tip
18	Yellow	48	30	Ring
	Green	68	32	Tip
19	Yellow	10	34	Ring
	Brown	30	36	Tip
20	Yellow	49	38	Ring
	Gray	69	40	Tip

AM35-1-X : 1-21>30				
X Pair No.	Colour	AM35-1-X 78-way Pin No.	1-21>30 40-way Pin No.	Ring or Tip
21	White-Blue	11	1	Ring
	Blue	31	3	Tip
22	White-Blue	50	5	Ring
	Orange	70	7	Tip
23	White-Blue	12	8	Ring
	Green	32	11	Tip
24	White-Blue	51	13	Ring
	Brown	71	15	Tip
25	White-Blue	13	17	Ring
	Gray	33	18	Tip
26	Red-Blue	52	21	Ring
	Blue	72	23	Tip
27	Red-Blue	14	25	Ring
	Orange	34	27	Tip
28	Red-Blue	53	29	Ring
	Green	73	31	Tip
29	Red-Blue	15	33	Ring
	Brown	35	35	Tip
30	Red-Blue	54	37	Ring
	Gray	74	39	Tip

AM35-1-C				
C Pair No.	Colour	AM35-1-C 78-way Pin No.	1-21>30 40-way Pin No.	Ring or Tip
21	White-Blue	11	2	Ring
	Blue	31	4	Tip
22	White-Blue	50	5	Ring
	Orange	70	8	Tip
23	White-Blue	12	10	Ring
	Green	32	12	Tip
24	White-Blue	51	14	Ring
	Brown	71	16	Tip
25	White-Blue	13	18	Ring
	Gray	33	20	Tip
26	Red-Blue	52	22	Ring
	Blue	72	24	Tip
27	Red-Blue	14	26	Ring
	Orange	34	28	Tip
28	Red-Blue	53	30	Ring
	Green	73	32	Tip
29	Red-Blue	15	34	Ring
	Brown	35	36	Tip
30	Red-Blue	54	38	Ring
	Gray	74	40	Tip

AM35-1-X : 1-31>32				
X Pair No.	Colour	AM35-1-X 78-way Pin No.	1-31>32 40-way Pin No.	Ring or Tip
31	Blue-Black	15	1	Ring
	Blue	35	3	Tip
32	Blue-Black	30	5	Ring
	Orange	75	7	Tip

AM35-1-C				
C Pair No.	Colour	AM35-1-C 78-way Pin No.	1-31>32 40-way Pin No.	Ring or Tip
31	Blue-Black	15	2	Ring
	Blue	35	4	Tip
32	Blue-Black	30	5	Ring
	Orange	75	8	Tip

AM35-2-1 Item 17: 2-1>8				
X Pair No.	Colour	AM35-2-X 78-way Pin No.	2-1>8 40-way Pin No.	Ring or Tip
1	White	1	8	Ring
	Blue	21	11	Tip
2	White	40	13	Ring
	Orange	60	15	Tip
3	White	2	17	Ring
	Green	22	19	Tip
4	White	41	21	Ring
	Brown	61	23	Tip
5	White	3	25	Ring
	Gray	23	27	Tip
6	Red	42	29	Ring
	Blue	62	31	Tip
7	Red	4	33	Ring
	Orange	24	35	Tip
8	Red	43	37	Ring
	Green	63	39	Tip

AM35-2-C				
C Pair No.	Colour	AM35-2-C 78-way Pin No.	2-1>8 40-way Pin No.	Ring or Tip
1	White	1	10	Ring
	Blue	21	12	Tip
2	White	40	14	Ring
	Orange	60	16	Tip
3	White	2	18	Ring
	Green	22	20	Tip
4	White	41	22	Ring
	Brown	61	24	Tip
5	White	3	26	Ring
	Gray	23	28	Tip
6	Red	42	30	Ring
	Blue	62	32	Tip
7	Red	4	34	Ring
	Orange	24	36	Tip
8	Red	43	38	Ring
	Green	63	40	Tip

AM35-2-X : 2-9>18				
X Pair No.	Colour	AM35-2-X 78-way Pin No.	2-9>18 40-way Pin No.	Ring or Tip
9	Red	5	1	Ring
	Brown	23	3	Tip
10	Red	44	5	Ring
	Gray	64	7	Tip
11	Black	6	9	Ring
	Blue	28	11	Tip
12	Black	45	13	Ring
	Orange	65	15	Tip
13	Black	7	17	Ring
	Green	27	19	Tip
14	Black	48	21	Ring
	Brown	68	23	Tip
15	Black	8	25	Ring
	Gray	28	27	Tip
16	Yellow	47	29	Ring
	Blue	67	31	Tip
17	Yellow	9	33	Ring
	Orange	29	35	Tip
18	Yellow	49	37	Ring
	Green	69	39	Tip

AM35-2-C				
C Pair No.	Colour	AM35-2-C 78-way Pin No.	2-9>18 40-way Pin No.	Ring or Tip
9	Red	5	2	Ring
	Brown	23	4	Tip
10	Red	44	6	Ring
	Gray	64	8	Tip
11	Black	6	10	Ring
	Blue	28	12	Tip
12	Black	45	14	Ring
	Orange	65	16	Tip
13	Black	7	18	Ring
	Green	27	20	Tip
14	Black	48	22	Ring
	Brown	68	24	Tip
15	Black	8	26	Ring
	Gray	28	28	Tip
16	Yellow	47	30	Ring
	Blue	67	32	Tip
17	Yellow	9	34	Ring
	Orange	29	36	Tip
18	Yellow	49	38	Ring
	Green	69	40	Tip

AM35-2-X : 2-19>28				
X Pair No.	Colour	AM35-2-X 78-way Pin No.	2-19>28 40-way Pin No.	Ring or Tip
19	Yellow	10	1	Ring
	Brown	30	3	Tip
20	Yellow	49	5	Ring
	Gray	69	7	Tip
21	White-Blue	11	9	Ring
	Blue	31	11	Tip
22	White-Blue	50	13	Ring
	Orange	70	15	Tip
23	White-Blue	12	17	Ring
	Green	32	19	Tip
24	White-Blue	51	21	Ring
	Brown	71	23	Tip
25	White-Blue	13	25	Ring
	Gray	33	27	Tip
26	Red-Blue	52	29	Ring
	Blue	72	31	Tip
27	Red-Blue	14	33	Ring
	Orange	34	35	Tip
28	Red-Blue	53	37	Ring
	Green	73	39	Tip

AM35-2-C				
C Pair No.	Colour	AM35-2-C 78-way Pin No.	2-19>28 40-way Pin No.	Ring or Tip
19	Yellow	10	2	Ring
	Brown	30	4	Tip
20	Yellow	49	6	Ring
	Gray	69	8	Tip
21	White-Blue	11	10	Ring
	Blue	31	12	Tip
22	White-Blue	50	14	Ring
	Orange	70	16	Tip
23	White-Blue	12	18	Ring
	Green	32	20	Tip
24	White-Blue	51	22	Ring
	Brown	71	24	Tip
25	White-Blue	13	26	Ring
	Gray	33	28	Tip
26	Red-Blue	52	30	Ring
	Blue	72	32	Tip
27	Red-Blue	14	34	Ring
	Orange	34	36	Tip
28	Red-Blue	53	38	Ring
	Green	73	40	Tip

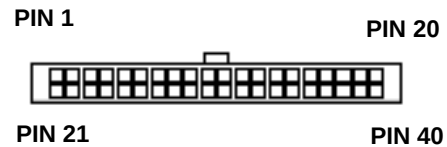
AM35-2-X : 2-29>32				
X Pair No.	Colour	AM35-2-X 78-way Pin No.	2-29>32 40-way Pin No.	Ring or Tip
29	Red-Blue	15	1	Ring
	Brown	35	3	Tip
30	Red-Blue	54	5	Ring
	Gray	74	7	Tip
31	Blue-Black	16	9	Ring
	Blue	36	11	Tip
32	Blue-Black	55	13	Ring
	Orange	75	15	Tip

AM35-2-C				
C Pair No.	Colour	AM35-2-C 78-way Pin No.	2-29>32 40-way Pin No.	Ring or Tip
29	Red-Blue	15	2	Ring
	Brown	35	4	Tip
30	Red-Blue	54	6	Ring
	Gray	74	8	Tip
31	Blue-Black	16	10	Ring
	Blue	36	12	Tip
32	Blue-Black	55	14	Ring
	Orange	75	16	Tip

AM35 CCF Cable for 3G RIM TYPE ONLY (G54-7155-0A00 Revision 3)



View from Rear



View from Front

Pins not connected:
17 – 20, 37 – 39, 56 – 59, 75 - 78

AM35-1-X : 1-1>10				
X Pair No.	Colour	AM35-1-X 78-way Pin No.	1-1>10 40-way Pin No.	Ring or Tip
1	White	1	1	Ring
	Blue	21	3	Tip
2	White	40	5	Ring
	Orange	60	7	Tip
3	White	2	8	Ring
	Green	22	11	Tip
4	White	41	13	Ring
	Brown	61	15	Tip
5	Red	3	17	Ring
	Blue	23	19	Tip
6	Red	42	21	Ring
	Orange	62	23	Tip
7	Red	4	25	Ring
	Green	24	27	Tip
8	Red	43	29	Ring
	Brown	63	31	Tip
9	Black	5	33	Ring
	Blue	25	35	Tip
10	Black	44	37	Ring
	Orange	64	39	Tip

AM35-1-C				
C Pair No.	Colour	AM35-1-C 78-way Pin No.	1-1>10 40-way Pin No.	Ring or Tip
1	White	1	2	Ring
	Blue	21	4	Tip
2	White	40	8	Ring
	Orange	60	8	Tip
3	White	2	10	Ring
	Green	22	12	Tip
4	White	41	14	Ring
	Brown	61	16	Tip
5	Red	3	18	Ring
	Blue	23	20	Tip
6	Red	42	22	Ring
	Orange	62	24	Tip
7	Red	4	26	Ring
	Green	24	28	Tip
8	Red	43	30	Ring
	Brown	63	32	Tip
9	Black	5	34	Ring
	Blue	25	36	Tip
10	Black	44	38	Ring
	Orange	64	40	Tip

AM35-1-X : 1-11>20				
X Pair No.	Colour	AM35-1-X 78-way Pin No.	1-11>20 40-way Pin No.	Ring or Tip
11	Black	6	1	Ring
	Green	26	3	Tip
12	Black	46	5	Ring
	Brown	66	7	Tip
13	Yellow	7	8	Ring
	Blue	27	11	Tip
14	Yellow	46	13	Ring
	Orange	66	15	Tip
15	Yellow	8	17	Ring
	Green	28	19	Tip
16	Yellow	47	21	Ring
	Brown	67	23	Tip
17	White	9	25	Ring
	Blue	29	27	Tip
18	White	48	29	Ring
	Orange	68	31	Tip
19	White	10	33	Ring
	Green	30	35	Tip
20	White	49	37	Ring
	Brown	69	39	Tip

AM35-1-C				
C Pair No.	Colour	AM35-1-C 78-way Pin No.	1-11>20 40-way Pin No.	Ring or Tip
11	Black	6	2	Ring
	Green	26	4	Tip
12	Black	46	6	Ring
	Brown	66	8	Tip
13	Yellow	7	10	Ring
	Blue	27	12	Tip
14	Yellow	46	14	Ring
	Orange	66	16	Tip
15	Yellow	8	18	Ring
	Green	28	20	Tip
16	Yellow	47	22	Ring
	Brown	67	24	Tip
17	White	9	26	Ring
	Blue	29	28	Tip
18	White	48	30	Ring
	Orange	68	32	Tip
19	White	10	34	Ring
	Green	30	36	Tip
20	White	49	38	Ring
	Brown	69	40	Tip

AM35-1-X		1-21>30		
X Pair No.	Colour	AM35-1-X 78-way Pin No.	1-21>30 40-way Pin No.	Ring or Tip
21	White-Blue	11	1	Ring
	Blue	31	3	Tip
22	White-Blue	50	5	Ring
	Orange	70	7	Tip
23	White-Blue	12	8	Ring
	Green	32	11	Tip
24	White-Blue	51	13	Ring
	Brown	71	15	Tip
25	White-Blue	13	17	Ring
	Gray	33	18	Tip
26	Red-Blue	52	21	Ring
	Blue	72	23	Tip
27	Red-Blue	14	25	Ring
	Orange	34	27	Tip
28	Red-Blue	53	29	Ring
	Green	73	31	Tip
29	Red-Blue	15	33	Ring
	Brown	35	35	Tip
30	Red-Blue	54	37	Ring
	Gray	74	39	Tip

AM35-1-C		1-21>30		
C Pair No.	Colour	AM35-1-C 78-way Pin No.	1-21>30 40-way Pin No.	Ring or Tip
21	White-Blue	11	2	Ring
	Blue	31	4	Tip
22	White-Blue	50	5	Ring
	Orange	70	8	Tip
23	White-Blue	12	10	Ring
	Green	32	12	Tip
24	White-Blue	51	14	Ring
	Brown	71	16	Tip
25	White-Blue	13	18	Ring
	Gray	33	20	Tip
26	Red-Blue	52	22	Ring
	Blue	72	24	Tip
27	Red-Blue	14	26	Ring
	Orange	34	28	Tip
28	Red-Blue	53	30	Ring
	Green	73	32	Tip
29	Red-Blue	15	34	Ring
	Brown	35	36	Tip
30	Red-Blue	54	38	Ring
	Gray	74	40	Tip

AM35-1-X		1-31>32		
X Pair No.	Colour	AM35-1-X 78-way Pin No.	1-31>32 40-way Pin No.	Ring or Tip
31	Yellow	18	1	Ring
	Green	38	3	Tip
32	Yellow	56	5	Ring
	Brown	75	7	Tip

AM35-1-C		1-31>32		
C Pair No.	Colour	AM35-1-C 78-way Pin No.	1-31>32 40-way Pin No.	Ring or Tip
31	Yellow	18	2	Ring
	Green	38	4	Tip
32	Yellow	56	8	Ring
	Brown	75	6	Tip

AM35-2-X		2-1>8		
X Pair No.	Colour	AM35-2-X 78-way Pin No.	2-1>8 40-way Pin No.	Ring or Tip
1	White	1	9	Ring
	Blue	21	11	Tip
2	White	40	13	Ring
	Orange	60	15	Tip
3	White	2	17	Ring
	Green	22	19	Tip
4	White	41	21	Ring
	Brown	61	23	Tip
5	Red	3	25	Ring
	Blue	23	27	Tip
6	Red	42	29	Ring
	Orange	62	31	Tip
7	Red	4	33	Ring
	Green	24	35	Tip
8	Red	43	37	Ring
	Brown	63	39	Tip

AM35-2-C		2-1>8		
C Pair No.	Colour	AM35-2-C 78-way Pin No.	2-1>8 40-way Pin No.	Ring or Tip
1	White	1	10	Ring
	Blue	21	12	Tip
2	White	40	14	Ring
	Orange	60	16	Tip
3	White	2	18	Ring
	Green	22	20	Tip
4	White	41	22	Ring
	Brown	61	24	Tip
5	Red	3	26	Ring
	Blue	23	28	Tip
6	Red	42	30	Ring
	Orange	62	32	Tip
7	Red	4	34	Ring
	Green	24	36	Tip
8	Red	43	38	Ring
	Brown	63	40	Tip

AM35-2-X 2-9>18				
X Pair No.	Colour	'W'	AM35-2-X 78-way Pin No.	2-8>18 40-way Pin No. Ring or Tip
9	Black		3	1 Ring
	Blue		25	3 Tip
10	Black		44	5 Ring
	Orange		64	7 Tip
11	Black		8	9 Ring
	Green		28	11 Tip
12	Black		43	13 Ring
	Brown		85	15 Tip
13	Yellow		7	17 Ring
	Blue		27	18 Tip
14	Yellow		48	21 Ring
	Orange		88	25 Tip
15	Yellow		8	25 Ring
	Green		28	27 Tip
16	Yellow		47	29 Ring
	Brown		87	31 Tip
17	White		8	33 Ring
	Blue		20	35 Tip
18	White		48	37 Ring
	Orange		88	39 Tip

AM35-2-C				
C Pair No.	Colour	'W'	AM35-2-C 78-way Pin No.	2-8>18 40-way Pin No. Ring or Tip
9	Black		5	2 Ring
	Blue		25	4 Tip
10	Black		44	6 Ring
	Orange		64	8 Tip
11	Black		8	10 Ring
	Green		28	12 Tip
12	Black		45	14 Ring
	Brown		85	18 Tip
13	Yellow		7	18 Ring
	Blue		27	20 Tip
14	Yellow		48	22 Ring
	Orange		88	24 Tip
15	Yellow		8	26 Ring
	Green		28	28 Tip
16	Yellow		47	30 Ring
	Brown		87	32 Tip
17	White		9	34 Ring
	Blue		20	36 Tip
18	White		48	38 Ring
	Orange		88	40 Tip

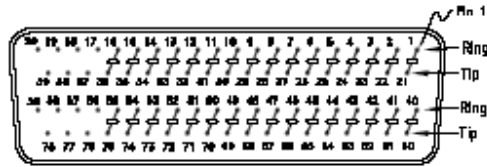
AM35-2-X 2-19>28				
X Pair No.	Colour	'W'	AM35-2-X 78-way Pin No.	2-18>28 40-way Pin No. Ring or Tip
19	White		10	1 Ring
	Green		30	3 Tip
20	White		49	5 Ring
	Brown		89	7 Tip
21	Red		11	9 Ring
	Blue		31	11 Tip
22	Red		50	13 Ring
	Orange		70	15 Tip
23	Red		12	17 Ring
	Green		32	19 Tip
24	Red		51	21 Ring
	Brown		71	23 Tip
25	Black		13	25 Ring
	Blue		33	27 Tip
26	Black		82	29 Ring
	Orange		72	31 Tip
27	Black		14	33 Ring
	Green		34	35 Tip
28	Black		53	37 Ring
	Brown		73	39 Tip

AM35-2-C				
C Pair No.	Colour	'W'	AM35-2-C 78-way Pin No.	2-18>28 40-way Pin No. Ring or Tip
19	White		10	2 Ring
	Green		30	4 Tip
20	White		49	6 Ring
	Brown		89	8 Tip
21	Red		11	10 Ring
	Blue		31	12 Tip
22	Red		50	14 Ring
	Orange		70	16 Tip
23	Red		12	18 Ring
	Green		32	20 Tip
24	Red		51	22 Ring
	Brown		71	24 Tip
25	Black		13	26 Ring
	Blue		33	28 Tip
26	Black		82	30 Ring
	Orange		72	32 Tip
27	Black		14	34 Ring
	Green		34	36 Tip
28	Black		53	38 Ring
	Brown		73	40 Tip

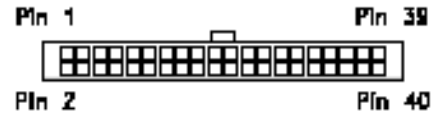
AM35-2-X 2-29>32				
X Pair No.	Colour	'W'	AM35-2-X 78-way Pin No.	2-28>32 40-way Pin No. Ring or Tip
29	Yellow		15	1 Ring
	Blue		35	3 Tip
30	Yellow		54	5 Ring
	Orange		74	7 Tip
31	Yellow		16	9 Ring
	Green		36	11 Tip
32	Yellow		55	13 Ring
	Brown		75	15 Tip

AM35-2-C				
C Pair No.	Colour	'W'	AM35-2-C 78-way Pin No.	2-28>32 40-way Pin No. Ring or Tip
29	Yellow		15	2 Ring
	Blue		35	4 Tip
30	Yellow		54	6 Ring
	Orange		74	8 Tip
31	Yellow		16	10 Ring
	Green		36	12 Tip
32	Yellow		55	14 Ring
	Brown		75	16 Tip

AM35 CCF Cables for 2G 180, 2G 480, 1G 240, 1G 480 (Variant 6.1 & 8.2) RIM TYPE ONLY (Part No. G54-7162-0A00 Revision 1)



View from Rear



View from Front

Pins not connected:

17 – 20, 37 – 39, 56 – 59, 75 - 78

AM35-1-X 1-1>10				
X Pair No.	Colour	AM35-1-X 78-way Pin No.	1-1>10 40-way Pin No.	Ring or Tip
1	White	1	21	Ring
	Blue	21	22	Tip
2	White	40	23	Ring
	Orange	60	24	Tip
3	White	2	25	Ring
	Green	22	26	Tip
4	White	41	27	Ring
	Brown	81	28	Tip
5	White	3	29	Ring
	Gray	23	30	Tip
6	Red	42	31	Ring
	Blue	62	32	Tip
7	Red	4	33	Ring
	Orange	24	34	Tip
8	Red	43	35	Ring
	Green	63	36	Tip
9	Red	5	37	Ring
	Brown	25	38	Tip
10	Red	44	39	Ring
	Gray	64	40	Tip

AM35-1-C				
C Pair No.	Colour	AM35-1-C 78-way Pin No.	1-1>10 40-way Pin No.	Ring or Tip
1	White	1	1	Ring
	Blue	21	2	Tip
2	White	40	3	Ring
	Orange	60	4	Tip
3	White	2	5	Ring
	Green	22	6	Tip
4	White	41	7	Ring
	Brown	81	8	Tip
5	White	3	9	Ring
	Gray	23	10	Tip
6	Red	42	11	Ring
	Blue	62	12	Tip
7	Red	4	13	Ring
	Orange	24	14	Tip
8	Red	43	15	Ring
	Green	63	16	Tip
9	Red	5	17	Ring
	Brown	25	18	Tip
10	Red	44	19	Ring
	Gray	64	20	Tip

AM35-1-X 11>20				
X Pair No.	Colour	AM35-1-X 78-way Pin No.	1-11>20 40-way Pin No.	Ring or Tip
11	Black	8	21	Ring
	Blue	26	22	Tip
12	Black	45	23	Ring
	Orange	65	24	Tip
13	Black	7	25	Ring
	Green	27	26	Tip
14	Black	46	27	Ring
	Brown	86	28	Tip
15	Black	8	29	Ring
	Gray	28	30	Tip
16	Yellow	47	31	Ring
	Blue	67	32	Tip
17	Yellow	9	33	Ring
	Orange	29	34	Tip
18	Yellow	48	35	Ring
	Green	68	36	Tip
19	Yellow	10	37	Ring
	Brown	30	38	Tip
20	Yellow	49	39	Ring
	Gray	69	40	Tip

AM35-1-C				
C Pair No.	Colour	AM35-1-C 78-way Pin No.	1-11>20 40-way Pin No.	Ring or Tip
11	Black	8	1	Ring
	Blue	26	2	Tip
12	Black	45	3	Ring
	Orange	65	4	Tip
13	Black	7	5	Ring
	Green	27	6	Tip
14	Black	46	7	Ring
	Brown	86	8	Tip
15	Black	8	9	Ring
	Gray	28	10	Tip
16	Yellow	47	11	Ring
	Blue	67	12	Tip
17	Yellow	9	13	Ring
	Orange	29	14	Tip
18	Yellow	48	15	Ring
	Green	68	16	Tip
19	Yellow	10	17	Ring
	Brown	30	18	Tip
20	Yellow	49	19	Ring
	Gray	69	20	Tip

AM35-1-X 1-21>30				
X Pair No.	Colour	AM35-1-X 78-way Pin No.	1-21>30 40-way Pin No.	Ring or Tip
21	White-Blue	11	21	Ring
	Blue	31	22	Tip
22	White-Blue	50	23	Ring
	Orange	70	24	Tip
23	White-Blue	12	25	Ring
	Green	32	26	Tip
24	White-Blue	51	27	Ring
	Brown	71	28	Tip
25	White-Blue	13	29	Ring
	Gray	33	30	Tip
26	Red-Blue	52	31	Ring
	Blue	72	32	Tip
27	Red-Blue	14	33	Ring
	Orange	34	34	Tip
28	Red-Blue	53	35	Ring
	Green	73	36	Tip
29	Red-Blue	15	37	Ring
	Brown	35	38	Tip
30	Red-Blue	54	39	Ring
	Gray	74	40	Tip

AM35-1-C				
C Pair No.	Colour	AM35-1-C 78-way Pin No.	1-21>30 40-way Pin No.	Ring or Tip
21	White-Blue	11	1	Ring
	Blue	31	2	Tip
22	White-Blue	50	3	Ring
	Orange	70	4	Tip
23	White-Blue	12	5	Ring
	Green	32	6	Tip
24	White-Blue	51	7	Ring
	Brown	71	8	Tip
25	White-Blue	13	9	Ring
	Gray	33	10	Tip
26	Red-Blue	52	11	Ring
	Blue	72	12	Tip
27	Red-Blue	14	13	Ring
	Orange	34	14	Tip
28	Red-Blue	53	15	Ring
	Green	73	16	Tip
29	Red-Blue	15	17	Ring
	Brown	35	18	Tip
30	Red-Blue	54	19	Ring
	Gray	74	20	Tip

AM35-1-X 1-31>32				
X Pair No.	Colour	AM35-1-X 78-way Pin No.	1-31>32 40-way Pin No.	Ring or Tip
31	Blue-Black	15	21	Ring
	Blue	36	22	Tip
32	Blue-Black	55	23	Ring
	Orange	76	24	Tip

AM35-1-C				
C Pair No.	Colour	AM35-1-C 78-way Pin No.	1-31>32 40-way Pin No.	Ring or Tip
31	Blue-Black	16	1	Ring
	Blue	36	2	Tip
32	Blue-Black	55	3	Ring
	Orange	76	4	Tip

AM35-2-X Item 17: 2-1>8				
X Pair No.	Colour	AM35-2-X 78-way Pin No.	2-1>8 40-way Pin No.	Ring or Tip
1	White	1	25	Ring
	Blue	21	26	Tip
2	White	40	27	Ring
	Orange	60	28	Tip
3	White	2	29	Ring
	Green	22	30	Tip
4	White	41	31	Ring
	Brown	61	32	Tip
5	White	3	33	Ring
	Gray	23	34	Tip
6	Red	42	35	Ring
	Blue	62	36	Tip
7	Red	4	37	Ring
	Orange	24	38	Tip
8	Red	43	39	Ring
	Green	63	40	Tip

AM35-2-C				
C Pair No.	Colour	AM35-2-C 78-way Pin No.	2-1>8 40-way Pin No.	Ring or Tip
1	White	1	5	Ring
	Blue	21	6	Tip
2	White	40	7	Ring
	Orange	60	8	Tip
3	White	2	9	Ring
	Green	22	10	Tip
4	White	41	11	Ring
	Brown	61	12	Tip
5	White	3	13	Ring
	Gray	23	14	Tip
6	Red	42	15	Ring
	Blue	62	16	Tip
7	Red	4	17	Ring
	Orange	24	18	Tip
8	Red	43	19	Ring
	Green	63	20	Tip

AM35-2-X 2-9>18				
X Pair No.	Colour	AM35-2-X 78-way Pin No.	2-9>18 40-way Pin No.	Ring or Tip
9	Red	5	21	Ring
	Brown	25	22	Tip
10	Red	44	23	Ring
	Gray	64	24	Tip
11	Black	6	25	Ring
	Blue	26	26	Tip
12	Black	45	27	Ring
	Orange	65	28	Tip
13	Black	7	29	Ring
	Green	27	30	Tip
14	Black	46	31	Ring
	Brown	66	32	Tip
15	Black	8	33	Ring
	Gray	28	34	Tip
16	Yellow	47	35	Ring
	Blue	67	36	Tip
17	Yellow	9	37	Ring
	Orange	29	38	Tip
18	Yellow	48	39	Ring
	Green	68	40	Tip

AM35-2-C				
C Pair No.	Colour	AM35-2-C 78-way Pin No.	2-9>18 40-way Pin No.	Ring or Tip
9	Red	5	1	Ring
	Brown	25	2	Tip
10	Red	44	3	Ring
	Gray	64	4	Tip
11	Black	6	5	Ring
	Blue	26	6	Tip
12	Black	45	7	Ring
	Orange	65	8	Tip
13	Black	7	9	Ring
	Green	27	10	Tip
14	Black	46	11	Ring
	Brown	66	12	Tip
15	Black	8	13	Ring
	Gray	28	14	Tip
16	Yellow	47	15	Ring
	Blue	67	16	Tip
17	Yellow	9	17	Ring
	Orange	29	18	Tip
18	Yellow	48	19	Ring
	Green	68	20	Tip

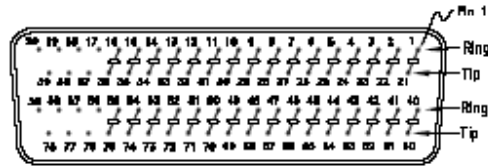
AM35-2-X 2-19>28				
X Pair No.	Colour	AM35-2-X 78-way Pin No.	2-19>28 40-way Pin No.	Ring or Tip
19	Yellow	10	21	Ring
	Brown	30	22	Tip
20	Yellow	49	23	Ring
	Gray	69	24	Tip
21	White-Blue	11	25	Ring
	Blue	31	26	Tip
22	White-Blue	50	27	Ring
	Orange	70	28	Tip
23	White-Blue	12	29	Ring
	Green	32	30	Tip
24	White-Blue	61	31	Ring
	Brown	71	32	Tip
25	White-Blue	13	33	Ring
	Gray	33	34	Tip
26	Red-Blue	52	35	Ring
	Blue	72	36	Tip
27	Red-Blue	14	37	Ring
	Orange	34	38	Tip
28	Red-Blue	53	39	Ring
	Green	73	40	Tip

AM35-2-C				
C Pair No.	Colour	AM35-2-C 78-way Pin No.	2-19>28 40-way Pin No.	Ring or Tip
19	Yellow	10	1	Ring
	Brown	30	2	Tip
20	Yellow	49	3	Ring
	Gray	69	4	Tip
21	White-Blue	11	5	Ring
	Blue	31	6	Tip
22	White-Blue	50	7	Ring
	Orange	70	8	Tip
23	White-Blue	12	9	Ring
	Green	32	10	Tip
24	White-Blue	61	11	Ring
	Brown	71	12	Tip
25	White-Blue	13	13	Ring
	Gray	33	14	Tip
26	Red-Blue	52	15	Ring
	Blue	72	16	Tip
27	Red-Blue	14	17	Ring
	Orange	34	18	Tip
28	Red-Blue	53	19	Ring
	Green	73	20	Tip

AM35-2-X -29>32				
X Pair No.	Colour	AM35-2-X 78-way Pin No.	-29>32 40-way Pin No.	Ring or Tip
29	Red-Blue	15	21	Ring
	Brown	35	22	Tip
30	Red-Blue	54	23	Ring
	Gray	74	24	Tip
31	Blue-Black	15	25	Ring
	Blue	36	26	Tip
32	Blue-Black	55	27	Ring
	Orange	75	28	Tip

AM35-2-C				
C Pair No.	Colour	AM35-2-C 78-way Pin No.	-29>32 40-way Pin No.	Ring or Tip
29	Red-Blue	16	1	Ring
	Brown	35	2	Tip
30	Red-Blue	54	3	Ring
	Gray	74	4	Tip
31	Blue-Black	16	5	Ring
	Blue	36	6	Tip
32	Blue-Black	55	7	Ring
	Orange	75	8	Tip

**AM35 CCF Cables for 2G 180, 2G 480, 1G 240, 1G 480 (Variant 6.1 & 8.2)
RIM TYPE ONLY (Part No. G54-7162-0A00, Revision 2)**



View from Rear



View from Front

Pins not connected:
17 – 20, 37 – 39, 56 – 59, 75 – 78

AM35-1-X		1-1>10			
X Pair No.	Colour	W	AM35-1-X 75-way Pin No.	1-1>10 40-way Pin No.	Ring or Tip
1	White	Blue	1	21	Ring
	Blue		21	22	Tip
2	White	Orange	40	23	Ring
	Orange		80	24	Tip
3	White	Green	2	25	Ring
	Green		22	26	Tip
4	White	Brown	41	27	Ring
	Brown		81	28	Tip
5	Red	Blue	3	29	Ring
	Blue		23	30	Tip
6	Red	Orange	42	31	Ring
	Orange		82	32	Tip
7	Red	Green	4	33	Ring
	Green		24	34	Tip
8	Red	Brown	43	35	Ring
	Brown		83	36	Tip
9	Black	Blue	5	37	Ring
	Blue		25	38	Tip
10	Black	Orange	44	39	Ring
	Orange		84	40	Tip

AM35-1-C		1-1>10			
C Pair No.	Colour	W	AM35-1-C 75-way Pin No.	1-1>10 40-way Pin No.	Ring or Tip
1	White	Blue	1	1	Ring
	Blue		21	2	Tip
2	White	Orange	40	3	Ring
	Orange		80	4	Tip
3	White	Green	2	5	Ring
	Green		22	6	Tip
4	White	Brown	41	7	Ring
	Brown		81	8	Tip
5	Red	Blue	3	9	Ring
	Blue		23	10	Tip
6	Red	Orange	42	11	Ring
	Orange		82	12	Tip
7	Red	Green	4	13	Ring
	Green		24	14	Tip
8	Red	Brown	43	15	Ring
	Brown		83	16	Tip
9	Black	Blue	5	17	Ring
	Blue		25	18	Tip
10	Black	Orange	44	19	Ring
	Orange		84	20	Tip

AM35-1-X		1-11>20			
X Pair No.	Colour	W	AM35-1-X 75-way Pin No.	1-11>20 40-way Pin No.	Ring or Tip
11	Black	Blue	8	21	Ring
	Green		26	22	Tip
12	Black	Orange	45	23	Ring
	Brown		85	24	Tip
13	Yellow	Blue	7	25	Ring
	Blue		27	26	Tip
14	Yellow	Brown	46	27	Ring
	Orange		86	28	Tip
15	Yellow	Blue	8	29	Ring
	Green		28	30	Tip
16	Yellow	Orange	47	31	Ring
	Brown		87	32	Tip
17	White	Blue	9	33	Ring
	Blue		29	34	Tip
18	White	Orange	48	35	Ring
	Orange		88	36	Tip
19	White	Green	10	37	Ring
	Green		30	38	Tip
20	White	Brown	49	39	Ring
	Brown		89	40	Tip

AM35-1-C		1-11>20			
C Pair No.	Colour	W	AM35-1-C 75-way Pin No.	1-11>20 40-way Pin No.	Ring or Tip
11	Black	Blue	8	1	Ring
	Green		26	2	Tip
12	Black	Orange	45	3	Ring
	Brown		85	4	Tip
13	Yellow	Blue	7	5	Ring
	Blue		27	6	Tip
14	Yellow	Brown	46	7	Ring
	Orange		86	8	Tip
15	Yellow	Blue	8	9	Ring
	Green		28	10	Tip
16	Yellow	Orange	47	11	Ring
	Brown		87	12	Tip
17	White	Blue	9	13	Ring
	Blue		29	14	Tip
18	White	Orange	48	15	Ring
	Orange		88	16	Tip
19	White	Green	10	17	Ring
	Green		30	18	Tip
20	White	Brown	49	19	Ring
	Brown		89	20	Tip

AM35-1-X 1-21>30				
X Pair No.	Colour	W	AM35-1-X 75-way Pin No.	1-21>30 40-way Pin No. Ring or Tip
21	Red	Orange	11	21 Ring
	Blue		31	22 Tip
22	Red		50	23 Ring
	Orange		70	24 Tip
23	Red		12	25 Ring
	Green		32	26 Tip
24	Red		51	27 Ring
	Brown		71	28 Tip
25	Black		13	29 Ring
	Blue		33	30 Tip
26	Black	Blue	52	31 Ring
	Orange		72	32 Tip
27	Black		14	33 Ring
	Green		34	34 Tip
28	Black		53	35 Ring
	Brown		73	36 Tip
29	Yellow		15	37 Ring
	Blue		35	38 Tip
30	Yellow		54	39 Ring
	Orange		74	40 Tip

AM35-1-C				
C Pair No.	Colour	W	AM35-1-C 75-way Pin No.	1-21>30 40-way Pin No. Ring or Tip
21	Red	Orange	11	1 Ring
	Blue		31	2 Tip
22	Red		50	3 Ring
	Orange		70	4 Tip
23	Red		12	5 Ring
	Green		32	6 Tip
24	Red		51	7 Ring
	Brown		71	8 Tip
25	Black		13	9 Ring
	Blue		33	10 Tip
26	Black	Blue	52	11 Ring
	Orange		72	12 Tip
27	Black		14	13 Ring
	Green		34	14 Tip
28	Black		53	15 Ring
	Brown		73	16 Tip
29	Yellow		15	17 Ring
	Blue		35	18 Tip
30	Yellow		54	19 Ring
	Orange		74	20 Tip

AM35-1-X -31>32				
X Pair No.	Colour	W	AM35-1-X 75-way Pin No.	1-31>32 40-way Pin No. Ring or Tip
31	Yellow	Orange	15	21 Ring
	Green		35	22 Tip
32	Yellow		55	23 Ring
	Brown		75	24 Tip

AM35-1-C				
C Pair No.	Colour	W	AM35-1-C 75-way Pin No.	1-31>32 40-way Pin No. Ring or Tip
31	Yellow	Orange	15	1 Ring
	Green		35	2 Tip
32	Yellow		55	3 Ring
	Brown		75	4 Tip

AM35-2-X Item 17: 2-1>8				
X Pair No.	Colour	W	AM35-2-X 75-way Pin No.	2-1>8 40-way Pin No. Ring or Tip
1	White	Blue	1	25 Ring
	Blue		21	26 Tip
2	White		40	27 Ring
	Orange		60	28 Tip
3	White		2	29 Ring
	Green		22	30 Tip
4	White		41	31 Ring
	Brown		61	32 Tip
5	Red		3	33 Ring
	Blue		23	34 Tip
6	Red	Orange	42	35 Ring
	Orange		62	36 Tip
7	Red		4	37 Ring
	Green		24	38 Tip
8	Red		43	39 Ring
	Brown		63	40 Tip

AM35-2-C				
C Pair No.	Colour	W	AM35-2-C 75-way Pin No.	2-1>8 40-way Pin No. Ring or Tip
1	White	Blue	1	0 Ring
	Blue		21	0 Tip
2	White		40	7 Ring
	Orange		60	8 Tip
3	White		2	9 Ring
	Green		22	10 Tip
4	White		41	11 Ring
	Brown		61	12 Tip
5	Red		3	13 Ring
	Blue		23	14 Tip
6	Red	Orange	42	15 Ring
	Orange		62	16 Tip
7	Red		4	17 Ring
	Green		24	18 Tip
8	Red		43	19 Ring
	Brown		63	20 Tip

AM35-2-X 2-9>18				
X Pair No.	Colour	W	AM35-2-X 75-way Pin No.	2-9>18 40-way Pin No. Ring or Tip
9	Black	Blue	5	21 Ring
	Blue		25	22 Tip
10	Black		44	23 Ring
	Orange		64	24 Tip
11	Black		6	25 Ring
	Green		26	26 Tip
12	Black		45	27 Ring
	Brown		65	28 Tip
13	Yellow		7	29 Ring
	Blue		27	30 Tip
14	Yellow	Orange	46	31 Ring
	Orange		66	32 Tip
15	Yellow		8	33 Ring
	Green		28	34 Tip
16	Yellow		47	35 Ring
	Brown		67	36 Tip
17	White		9	37 Ring
	Blue		29	38 Tip
18	White		48	39 Ring
	Orange		68	40 Tip

AM35-2-C				
C Pair No.	Colour	W	AM35-2-C 75-way Pin No.	2-9>18 40-way Pin No. Ring or Tip
9	Black	Blue	5	1 Ring
	Blue		25	2 Tip
10	Black		44	3 Ring
	Orange		64	4 Tip
11	Black		6	5 Ring
	Green		26	6 Tip
12	Black		45	7 Ring
	Brown		65	8 Tip
13	Yellow		7	9 Ring
	Blue		27	10 Tip
14	Yellow	Orange	46	11 Ring
	Orange		66	12 Tip
15	Yellow		8	13 Ring
	Green		28	14 Tip
16	Yellow		47	15 Ring
	Brown		67	16 Tip
17	White		9	17 Ring
	Blue		29	18 Tip
18	White		48	19 Ring
	Orange		68	20 Tip

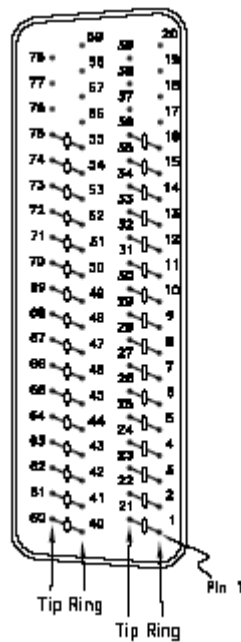
AM35-2-X		Item 23: 2-19>28			
X Pair No.	Colour	W	AM35-2-X 78-way Pin No.	2-19>28 40-way Pin No.	Ring or Tip
19	White	Orange	10	21	Ring
	Green		30	22	Tip
20	White		48	23	Ring
	Brown		69	24	Tip
21	Red		11	25	Ring
	Blue		31	26	Tip
22	Red		60	27	Ring
	Orange		70	28	Tip
23	Red		12	29	Ring
	Green		32	30	Tip
24	Red		51	31	Ring
	Brown		71	32	Tip
25	Black		13	33	Ring
	Blue		33	34	Tip
26	Black		52	35	Ring
	Orange		72	36	Tip
27	Black		14	37	Ring
	Green		34	38	Tip
28	Black		53	39	Ring
	Brown		73	40	Tip

AM35-2-C		Item 23: 2-19>28			
C Pair No.	Colour	W	AM35-2-C 78-way Pin No.	2-19>28 40-way Pin No.	Ring or Tip
19	White	Orange	10	1	Ring
	Green		30	2	Tip
20	White		48	3	Ring
	Brown		69	4	Tip
21	Red		11	5	Ring
	Blue		31	6	Tip
22	Red		50	7	Ring
	Orange		70	8	Tip
23	Red		12	8	Ring
	Green		32	10	Tip
24	Red		51	11	Ring
	Brown		71	12	Tip
25	Black		13	13	Ring
	Blue		33	14	Tip
26	Black		52	15	Ring
	Orange		72	16	Tip
27	Black		14	17	Ring
	Green		34	18	Tip
28	Black		53	19	Ring
	Brown		73	20	Tip

AM35-2-X		Item 22: 2-29>32			
X Pair No.	Colour	W	AM35-2-X 78-way Pin No.	2-29>32 40-way Pin No.	Ring or Tip
29	Yellow	Orange	15	21	Ring
	Blue		35	22	Tip
30	Yellow		64	23	Ring
	Orange		74	24	Tip
31	Yellow		15	25	Ring
	Green		36	26	Tip
32	Yellow		55	27	Ring
	Brown		75	28	Tip

AM35-2-C		Item 22: 2-29>32			
C Pair No.	Colour	W	AM35-2-C 78-way Pin No.	2-29>32 40-way Pin No.	Ring or Tip
29	Yellow	Orange	15	1	Ring
	Blue		35	2	Tip
30	Yellow		64	3	Ring
	Orange		74	4	Tip
31	Yellow		15	5	Ring
	Green		36	6	Tip
32	Yellow		55	7	Ring
	Brown		75	8	Tip

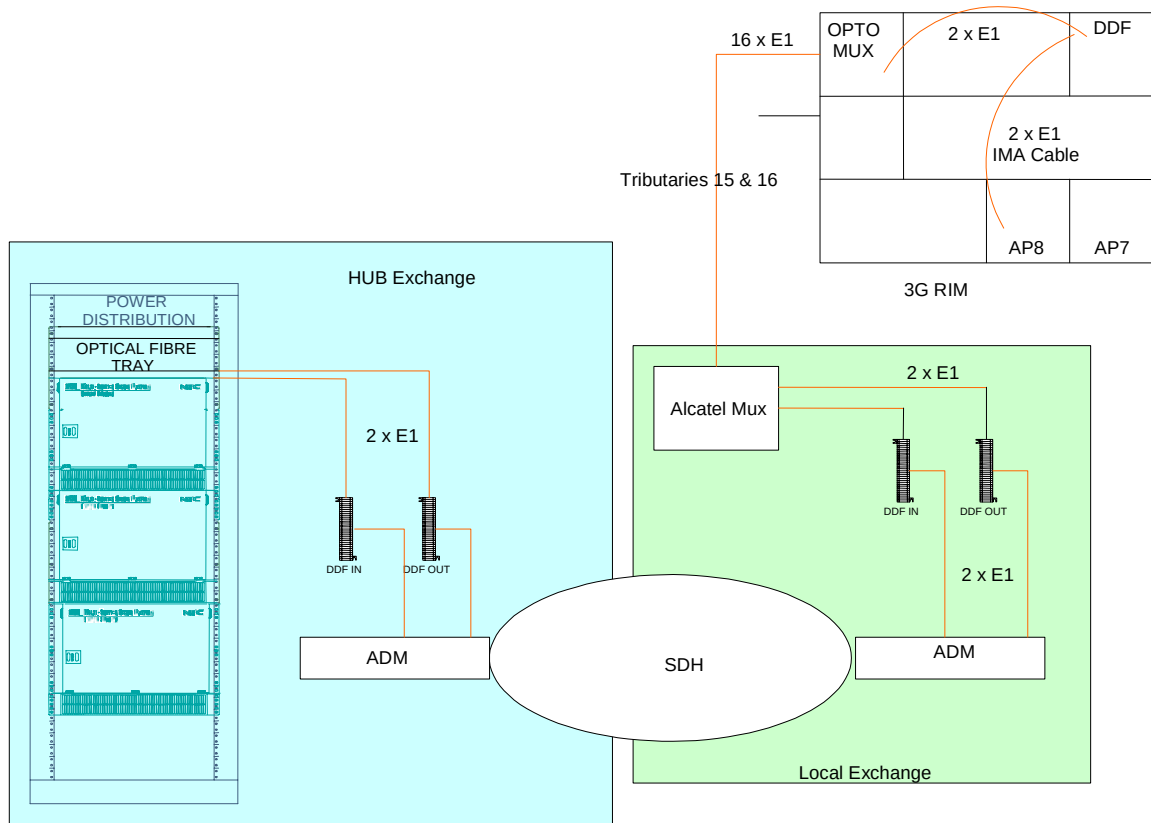
***AM35 Filter to MDF Cable (G54-7155-0A00, G54-7162-0A00, with 40 way
connectors cut off to make open ended CCF cable)***



Male connector viewed from REAR
Pins not connected: 17 – 20, 37 – 39, 56 – 59, 76 - 78

Pair No.	Cond. Colour	Whipping Colour	78-way Male D-sub Pin No.	Ring or Tip	Pair No.	Cond. Colour	Whipping Colour	78-way Male D-sub Pin No.	Ring or Tip
1	White	Blue	1	Ring	17	White	Orange	9	Ring
	Blue		21	Tip	17	Blue		29	Tip
2	White		40	Ring		White		48	Ring
	Orange		60	Tip	18	Orange		68	Tip
3	White		2	Ring	18	White		10	Ring
	Green		22	Tip		Orange		30	Tip
4	White		41	Ring	19	White		49	Ring
	Brown		61	Tip		Green		69	Tip
5	Red		3	Ring	20	White		11	Ring
	Blue		23	Tip		Brown		31	Tip
6	Red		42	Ring	21	Red		50	Ring
	Orange		62	Tip		Blue		70	Tip
7	Red		4	Ring	22	Red		12	Ring
	Green		24	Tip		Orange		32	Tip
8	Red		43	Ring	23	Red		51	Ring
	Brown		63	Tip		Green		71	Tip
9	Black	Blue	5	Ring	24	Red		13	Ring
	Blue		25	Tip		Brown		33	Tip
10	Black		44	Ring	25	Black	Orange	52	Ring
	Orange		64	Tip		Blue		72	Tip
11	Black		6	Ring	26	Black		14	Ring
	Green		26	Tip		Orange		34	Tip
12	Black		45	Ring	27	Black		53	Ring
	Brown		65	Tip		Green		73	Tip
13	Yellow		7	Ring	28	Black		15	Ring
	Blue		27	Tip		Brown		35	Tip
14	Yellow		46	Ring	29	Yellow		54	Ring
	Orange		66	Tip		Blue		74	Tip
15	Yellow		8	Ring	30	Orange		16	Ring
	Green		28	Tip		Yellow		36	Tip
16	Yellow		47	Ring	31	Orange		55	Ring
	Brown		67	Tip		Green		75	Tip
					32	Yellow			
						Brown			

8 Appendix B RIM Transmission Path



End of Document