– Press "Finish".

– Now you are ready to use Python for the MIB migration.

A.3.4 – LT configuration file modification

If the MIB migration CD content has not been copied in the default directory ("C:"), you need to edit the LT configuration file (C:\ProgramFiles\7390LT\Craft.ini) and modify the following parameter:

MIB_MIGRATION_SCRIPT_PATH="C:\mibconv"

If "Python" has not been installed in the default directory, you need to edit the LT configuration file (C:\ProgramFiles\7390LT\Craft.ini) and modify the following parameter:

MIB_MIGRATION_PYTHON_EXE="C:\Program Files\Python\Python.exe"

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Appendix 4 – Mounting coaxial connector

Mounting on cable LDF4
Alcatel Code: 77096434

1/2" Foam Dielectric, LDF Series – *50-ohm*

LDF4-50A

Description	Type No.
Cable Ordering Information	
Standard Cable	
1/2" Standard Cable, Standard Jacket	LDF4-50A
Fire Retardant Cables	
1/2" Fire Retardant Jacket (CATVX)	LDF4RN-50A
1/2" Fire Retardant Jacket (CATVR)	LDF4RN-50A
Low VSWR and Specialized Cables	
1/2" Low VSWR, specify operating band	LDF4P-50A-(**)
Phase Stabilized and Phase Measured Cable	See page 590
Jumper Cable Assemblies – See page 584	

** Insert suffix number from "Low VSWR Specifications" table, page 498

Characteristics

Electrical

Impedance, ohms	50 ± 1
Maximum Frequency, GHz	8.8
Velocity, percent	88
Peak Power Rating, kW	40
dc Resistance, ohms/1000 ft (1000 m)	
Inner	1.45 (1.48)
Outer	0.58 (1.90)
dc Breakdown, volts	4000
Jacket Spark, volts RMS	8000
Capacitance, pF/ft (m)	23.1 (75.8)
Inductance, µH/ft (m)	0.058 (0.19)

Mechanical

Outer Conductor	Copper
Inner Conductor	Copper-Clad Aluminum
Diameter over Jacket, in (mm)	0.63 (16)
Diameter over Copper Outer Conductor, in (mm)	0.55 (14)
Diameter Inner Conductor, in (mm)	0.189 (4.6)
Nominal Inside Transverse Dimensions, cm	1.11
Minimum Bending Radius, in (mm)	5 (125)
Number of Bends, minimum (typical)	15 (50)
Bending Moment, lb-ft (N•m)	2.8 (3.8)
Cable Weight, lb/ft (kg/m)	0.15 (0.22)
Tensile Strength, lb (kg)	250 (113)
Flat Plate Crush Strength, lb/in (kg/mm)	110 (2.0)

Attenuation and Average Power Ratings

Frequency MHz	Attenuation dB/100 ft	Attenuation dB/100 m	Average Power, kW
0.5	0.045	0.149	40.0
1	0.064	0.211	35.8
1.5	0.079	0.259	29.2
2	0.091	0.299	25.3
10	0.205	0.672	11.3
20	0.291	0.954	7.93
30	0.357	1.17	6.46
50	0.463	1.52	4.98
88	0.619	2.03	3.73
100	0.661	2.17	3.49
108	0.688	2.26	3.36
150	0.815	2.67	2.83
174	0.880	2.89	2.62
200	0.946	3.10	2.44
300	1.17	3.83	1.97
400	1.36	4.46	1.70
450	1.45	4.75	1.59
500	1.53	5.02	1.51
512	1.55	5.08	1.49
600	1.69	5.53	1.37
700	1.83	6.01	1.26
800	1.97	6.46	1.17
824	2.00	6.56	1.15
894	2.09	6.85	1.10
960	2.17	7.12	1.06
1000	2.22	7.28	1.04
1250	2.51	8.23	0.921
1500	2.77	9.09	0.833
1700	2.97	9.74	0.777
1800	3.07	10.1	0.753
2000	3.25	10.7	0.710
2100	3.34	11.0	0.691
2200	3.43	11.2	0.673
2300	3.52	11.5	0.657
3000	4.09	13.4	0.565
3400	4.39	14.4	0.526
4000	4.82	15.8	0.479
5000	5.49	18.0	0.421
6000	6.11	20.1	0.378
8000	7.26	23.8	0.318
8800	7.69	25.2	0.300

Standard Conditions:
For attenuation. VSWR 1.0, ambient temperature 20°C (68°F).
For Average Power, VSWR 1.0, ambient temperature 40°C (104°F), inner conductor temperature 100°C (212°F), no solar loading.

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ANDREW

Customer Service Center - Call toll-free from: • U.S.A., Canada and Mexico 1-800-255-1479

Installation Instructions

N Connectors
for HELIAX® LDF4-50A Coaxial Cable

ANDREW®

L4NM-C
L4NM-HC
L4PNM-C
L4PNM-HC

L4NF-C
L4PNF-C

21 mm
21 mm

207866
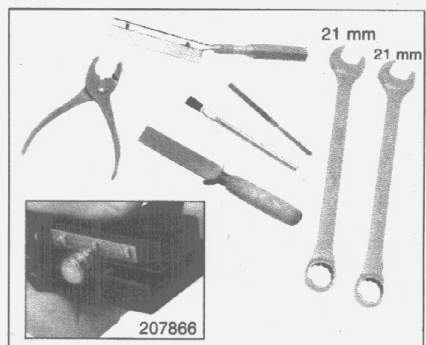
*FAX-On-Demand:* +1-708-873-3614 • North America: 1-800-861-1700

Tips and Techniques (SP50047) available by FAX-On-Demand.
Los consejos prácticos y técnicas (SP50047) pueden solicitarse por fax.

• Conseils et techniques (SP50047) disponibles par fax à la demande.
  Tips und Anleitungen (SP50047) auf Faxanfrage erhältlich.

Dicas e Técnicas (SP50047) disponíveis via pedido por fax.
提示與方法（SP50047）可以通過電傳獲得

1

Trim cable jacket.
Recortar la envuelta del cable.
Coupez la gaine du câble.
Kabelmantel abziehen.
Retire a capa do cabo.

切整電纜外皮

2"
(51 mm)
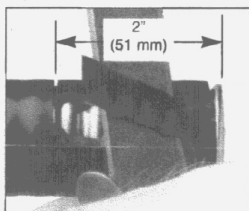
2

Add O-ring, grease, and clamping nut.
Añadir la junta tórica, la grasa y la tuerca
sujetadora.
Mettez en place le joint torique, de la
graisse et l'écrou de serrage.
O-Ring und Klemmutter vor Montage
einfetten.
Coloque o anel O ring, graxa e a porca
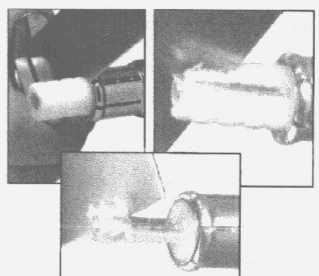de aperto.

加 O 型圈，油脂和緊固螺母
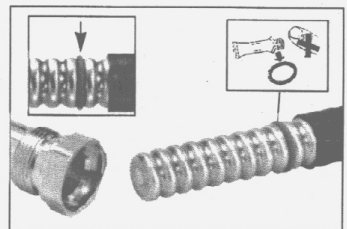
3

Cut outer conductor.
Cortar el conductor externo.
Coupez le conducteur extérieur.
Außenleiter zurückschneiden.
Corte o condutor externo.

切外導體
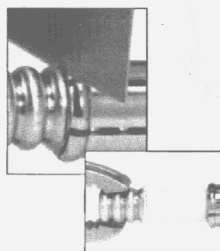
4

Remove foam and adhesive.
Retirar el material de espuma y el adhesivo.
Enlevez la mousse et l'adhésif.
Verschäumung und Klebeband entfernen.
Remova a espuma e o adesivo.

去除泡沫塑料和粘潔劑

5

Trim inner conductor. Remove debris.
Cortar el conductor interno. Retirar los restos.
Coupez le conducteur intérieur. Enlevez les débris.
Innenleiter abschneiden. Metallspäne entfernen.
Limpe o condutor interno. Remova os detritos.

切整內心導體 。去除殘渣

1/4"
(6.35 mm)

1/32"
(1 mm)

Inches
Millimeters
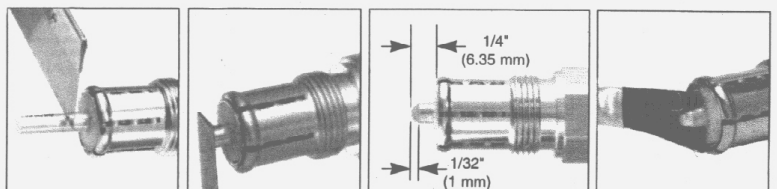
6

Compress foam.

Comprimir el material de espuma.

Comprimez la mousse.

Verschäumung zusammendrücken.

Comprima a espuma.

壓緊泡沫塑料
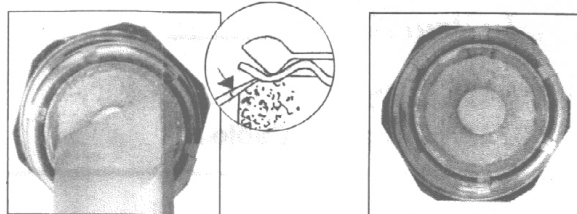
7

Flare outer conductor, examine flare, remove debris

Acampanar el conductor externo, examinar la forma de campana y retirar los restos.

Evasez le conducteur extérieur, examinez l'évasement et enlevez les débris.

Außenleiter aufweiten, Öffnung prüfen und Metallspäne entfernen.

Flangear o condutor externo, examinar o flangeamento e remover os detritos.

擴張外導體，檢查擴張表面，去除殘骸。

10-14 lb•ft
(13-19 N•m)
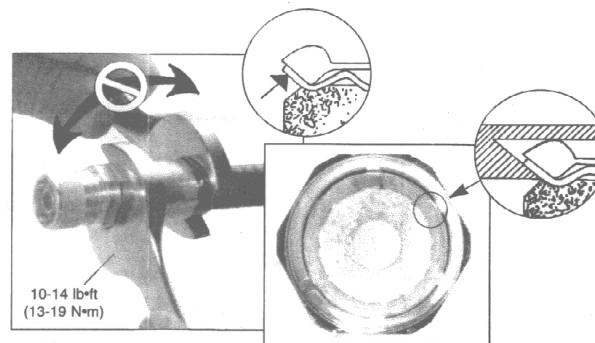
8

Add O-ring and grease. Reassemble connector.

Añadir la junta tórica y grasa. Montar nuevamente el conector.

Mettez en place le joint torique et graissez. Réassemblez le connecteur.

O-Ring vor Montage einfetten. Steckverbindung wieder zusammenbauen.

Coloque o anel em O ring e graxa. Reinstale o conector.

加 O 型圈和油脂。重新裝配接頭

10-14 lb•ft
(13-19 N•m)

0.210"-0.230"
(5.35-5.84 mm)

0.187"-0.207"
(4.75-5.26 mm)
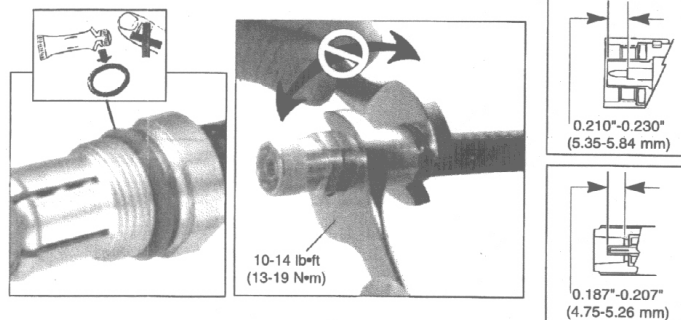
9

Coupling torque.

Par de acoplamiento.

Couple de serrage.

Anschlußdrehmoment.

Torque de conjugação.

配合扭矩

15 lb-in (1.7 N·m) Typical
20 lb-in (2.3 N·m) Maximum
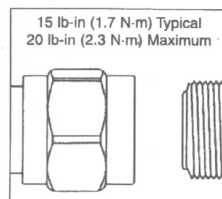
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Appendix 5 – Correspondence between commercial codes and industrial codes relating to the BS

Installation item	Commercial code	Industrial code	Comments
DBS basic configuration			
Rack 22 U	9900CAB001	3CC 10067 AAxx	
DBS installation items			
Power S. cable	POWCAB0001	77096649	15 m 3x10 mm^2
Distributor Panel 16x2 Mbits/s	9900XXI416	3CC 08061 AAxx 2x3CC 11236 AAxx	75 Ohms 1.6 / 5.6
	9900XXI416	3CC 08061 ABxx 2x3CC 11237 AAxx	75 Ohms / BNC
	9900XXI416	3CC 10316 ABxx 2x3CC 11238 AAxx	120 Ohms - EMC
RBS installation items			
Grounding cable (20 meters)	9900XXC502	3CC 08166 AAxx (per meter)	
Consummable	9900UXT002	3CC 06503 AAxx	
50 Ohms coaxial cable (50 meters)	9900UXI202	50 m of 1AC 001100022	
Coaxial connector	9900UXI203	2 x 1AB 095530021	(x2)
Grounding kit	9900UXI204	1AB 128500002	
114 mm tube (2 meters)	SUPOUTD001	3CC 04658 AExx	
2 pole-mounting fastening kit (1+1)	9900UXI104	3CC 11681 AAxx	
Self supporting mast 114 mm (1.5 meter)	SUPMAST001	3CC 05148 AAxx	
Cable tray cablofil (6 m)	INFRA00003	3CC 07580 AAxx	
Cable tray PVC (4 m)	INFRA00004	3CC 06511 AAxx	
Cable tray CES (12 m)	INFRA00005	3CC 06759 AAxx	
Gaine Capri (12 m)	INFRA00006	3CC 06512 AAxx	
Cable LDF 4-50	9900WVG001	77 096 434	50 Ohms (10 m)
N Connector kit	9900UXX022	77 096 433	N male right, 1 for each cable LDF4-50

Installation item	Commercial code	Industrial code	Comments
Jumper	9900WVG004	3CC 09514 AAAA	N male bented/ Nmale right (3 m)
Jumper	9900WVG005	3CC 09514 ABAA	N female bented/ N male right (3 m)
RBS installation tools			
Tool kit	9900UXT103	3CC 08409 AAxx	
PC 9900LT			
Laptop PC French (incl. Ethernet module)	9900LTH001	3CC 10939 AAxx	
Desktop PC French (incl. Ethernet module)	9900LTH002	3CC 10626 AAxx	
Laptop PC English (incl. Ethernet module)	9900LTH001	3CC 11200 AAxx	
Desktop PC English (incl. Ethernet module)	9900LTH002	3CC 11201 AAxx	
NFS Server software LT application software CDROM Embedded software package CDROM CDROM User Manual 2.1, 2.2a, 2.2b	9900LTS001	1AH 00845 AAxx 3CC 12468 AAxx 3CC 12464 AAxx 3CC 12144 AAxx	

Appendix 6 – Error messages and corrective actions

The tables below list the main **error messages** when **operating 7390 LT.**

The purpose of this chapter is to give, for each message, an additional information and to suggest one or more corrective actions. However, various causes may originate malfunction and it may occur and derive one from another; thus the corrective action suggested may not be the only solution. Furthermore, the operator is, in some cases, free to take initiative to solve the problem, considering that troubleshooting should take into account the configuration context.

Whenever the malfunction is not fixed, please contact TAC (see page 3).

A.6.1 – Error messages for 7390LT software

Message	Definition	Corrective actions
Error in craft.ini file	7390LT software can not be launched, its configuration file contains errors. The errored parameter name is displayed on the screen.	The solution requires an intervention at the craft.ini file level. Only qualified personnel should intervene. For this purpose, please contact the TAC (see page 3).
An error occured when opening the Data Base	7390LT can not retrieve its data base files.	Make sure the .mdb files are installed in the database directory. If not, install again 7390LT (see Appendix A.2).
Info model version compatible	When connecting to a BS, the data base versions differ on agent and manager side: e.g.: the 7390LT is version 2.1 whereas the base station is version 2.0.	Perform download of the appropriate software version (see § 7.3.10).

A.6.2 – NT management error messages

Message	Definition	Corrective actions
Error when declaring the new NT	Declaring the new NT is denied.	Make sure that: . the serial number is valid, (preceded by 4 dashes then CU follow-up by 1 dashe) . the associated AMD board configuration is fully carried out.
An NT with this index already exists	The NT identification number entered is already assigned to another NT.	Assign a free number. Contact the scheduler.
Waiting NT characteristics	This message displays a system status and shows no anomaly. At the end of the NT creation, the system is waiting for information about it.	Please, wait until the relevant information is transmitted.
Error at the reception of SNMP message: Error when destroying the NT.	The NT destroy control is denied, one of its ports being used by an IP cross-connection or leased lines (LL).	Delete all IP or LL cross-connections that use the NT ports before initiating the NT destroy control.

A.6.3 – Error messages for communication between BS and 7390LT

Message	Definition	Corrective actions
An error occured at the BS connection: Error when declaring the manager	Declaring the manager is denied.	Make sure that no other LT session is active (see section 4.3.1).
Connection failure: NE not found	The communication establishment with BS at the IP level failed.	. Check the IP level link with BS. . Check if the cable fits to your network configuration (crossed or no Pc-DBS ethernet cable).
TIMEOUT on request	No answer to SNMP request when timeout expired. One of the causes may be a communication interruption between the BS and the PC on which 7390 LT is installed. This interruption may be brief. If this problem is persistent, the message "The connection with the NE has been lost. The Craft will be re-initialized" comes to confirm a permanent cut.	If the interruption is brief, the malfunction will disappear without any intervention being required. In case of a permanent cut, refer to the following message: "The connection with the NE has been lost. The Craft will be re-initialized".
The connection with the NE has been lost. The Craft will be re-initialized	Permanent cut of communication between the BS and the PC on which 7390LT is installed.	Start again the 7390LT. If the problem persists, check all elements involved in the connection between BS and PC.

A.6.4 – Error message linked with client services

A.6.4.1 – Error messages linked with E1 leased lines

Message	Definition	Corrective actions
Already involved in another cross-connection	Creation control for a leased line denied, assigned TSs being already used by other cross-connections.	Try to create another leased line using available TSs.
A cross-connection exists on the TNT port N°xxx	Creation control for a leased line denied, another line using the port N°xxx of the TNT.	Try to create another leased line using available TNT port (see the cross-connections list in section 4.11.4.1).
A cross-connection exists on the NT port N°xxx	Creation control for a leased line denied, another line using the port N°xxx of the NT.	Try to create another leased line using available NT port (see the cross-connections list in section 4.11.4.1).
Error when creating the cross-connection: not enough downstream resources allocated.	Creation control for a leased line denied because of a lack of resources for the upstream communication.	Check the upstream channel traffic using the supervision (see section 4.7).
Error when creating the cross-connection: not enough upstream resources allocated.	Creation control for a leased line denied because of a lack of resources for the downstream communication.	Check the allocation with the scheduler.

Message	Definition	Corrective actions
The selected ports must be configured identically before selecting a TS (Time Slot).	Creation control for a leased line denied because the selected ports have a different configuration.	Check the configuration of the NT and TNT ports (see section 4.11.1.3). Perform any relevant modification.
E1 slots must be consecutive	Creation control for a leased line denied because the time slots numbers are not consecutive.	Assign contiguous numbers to time slots (TS).
Time out on creating the leased line	Creating the leased line did not succeed at the time out.	Carry out data downloading (see section 4.4.1).
Time out on deleting the selected leased line	Deleting the selected leased line did not succeed at the time out.	Carry out data downloading (see section 4.4.1).
Error when deleting the Cross-connection: the cross-connection on leased line is not locked	Creation control for a cross-connection on leased line denied because it is liable to route traffic.	Lock the cross-connection before triggering the deletion control (see § 4.11.4.5).

A.6.4.2 – Error messages linked with IP "cross-connection"

Message	Definition	Corrective actions
Error when creating the Cross-connection: Down Resource Problem.	Creation control for an IP cross-connection denied because of a lack of upstream resources.	Check upstream traffic using the supervision (see section 4.7).
Error when creating the Cross-connection: Up Resource Problem.	Creation control for an IP cross-connection denied because of a lack of down-stream resources.	Check allocation with the scheduler.
Error when creating the Cross-connection: Ethernet Port already involved.	Creation control for an IP cross-connection denied because the NT Ethernet port is already used.	see the IP cross-connection list that displays the used ports (see section 4.12.2.1). Carry out any relevant modification.
Error when creating the Cross-connection: ATM Port Value error.	Creation control for an IP cross-connection denied because one of the following values is false: either "VCL Vpi" or "VCL Vci".	Assign a value within the range of the possible values (see section 4.12.2.3).
Error creating the cross-co : ATM Medium type is not configured		Configure the ATM medium type (see section 4.9.1).

A.6.4.3 – Error messages linked with circuit emulation

Message	Definition	Corrective actions
CES link configuration failed	Creation control for an CES denied because the TNT port is unlocked.	lock TNT port (see section 4.11.1.4)

A.6.5 – Download error messages

Message	Definition	Corrective actions
Software download done with problems detected.	An error occurred during data download.	. Check the NFS server status is operational, . Chek hardware description for the BS boards. . Check the exported directory has been added to the omni-NFS server during a session with adminis-trator rights.
Package commit done with problems.	An error occurred during referencing.	Check for any current board alarms. If so, rectify the problem in all cases (whether or not the card presented an alarm) carry out again a complete download.

A.6.6 – Error message at backup / restore

Message	Definition	Corrective actions
Error when transfering the sRam File	NFS server problem (directory not recognized by the server)	Export the directory in R/W to the NFS server.

A.6.7 – Error messages for radio management

A.6.7.1 – Error messages linked to the radio configuration

Message	Definition	Corrective actions
Error when setting the radiolink characteristics	The modification of the radio link characteristics displayed cannot be taken into account.	Before modifying the bandwidth, suppress the NTs linked to this radio link (see 4.6.3)

A.6.7.2 – Radio Resources Manager (RRM)

Message	Definition	Corrective actions
Bad static Value downstream	Inconsistency between the services already created and the modified static zone in the downstream	- Cancel the modification - Update the static zone with a value compatible with the static services already created
Bad static Value upstream	Inconsistency between the services already created and the modified static zone in the upstream (x from 1 to 4)	- Cancel the modification - Update the static zone with a value compatible with the static services already created
Bad dynamic max Value downstream	Inconsistency between the services already created and the modified dynamic zone in the downstream.	Update the dynamic zone with a value compatible with the dynamic service already created and the overbooking factor limit

Message	Definition	Corrective actions
Bad dynamic Value upstream x	Inconsistency between the services already created and the modified dynamic zone in the upstream.	Update the dynamic zone with a value compatible with the dynamic service already created and the overbooking factor limit
Bad dynamic max Value upstream x	(x from 1 to 4)	Update over booking factor limit with a value compatible with the dynamic services created and the dynamic zone.

A.6.8 – ASAP error messages

Message	Definition	Corrective actions
Error removing ASAP	The ASAP cannot be removed because at least one NT is attached to the ASAP table.	Before removing, the ASAP table has to be deleted for each NT attached to the table.

A.6.9 – Miscellaneous error messages

Message	Definition	Corrective actions
Error when destroying the board	Board deletion control denied.	The corrective action is related to the type of board: . **AMD board:** make sure that no NT is associated with the board. . **TNT board**: make sure that no port is used either by a leased line or as a potential source of synchronization. . **NT board**: make sure that no port is used either by a leased line or by an IP cross-connection.
Error when modifying the TNT board	The modification of the TNT board characteristics cannot be taken into account.	All circuit emulation services must be suppressed before modifying the configuration of a TNT board.
Error when updating the BS	In BS's local network screen one parameter is not correct.	- Check that BS's IP address is a real IP address. - Check that Ethernet and ATM networks are different.
Error when setting synchro parameters	Synchronization configuration is not allowed.	Check that the reserved channels are configured (see § 4.11).
Error when enabling/ disabling E1 traffic on a TNT port	Enabling/disabling is not allowed.	If the TNT port is used for system synchronization, the TNT port cannot be locked.

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Appendix 7 – List of abbreviations

MNEMONIC	ENGLISH
AAL	ATM Adaptation Layer
AIS	Alarm Indication Signal
AL	Alarm
AMD	ATM Modulator Demodulator
ANT	ATM Network Termination
ASAP	Alarm Severity Assignment Profile
ATM	Asynchronous Transfer Mode
AT	Attend alarm on LT
AVC	Attribute Value Change
BER	Bit Error Rate
BNC	Bayonet-locking Connector
BS	Base Station
CBR	Constant Bite Rate
CCIR	International radio consultative comitee
CEPT	Conference of European Post and Telecommunications administrations
CPL	Coupler
CRC	Cyclic Redundancy Check
DBS	Digital Base Station
EMC	ElectroMagnetic Compatibility
EPROM	Electronically Programmable Read-Only Memory
ETSI	European Telecommunications Standards Institute
ETH	Ethernet
FAS	Frame Alignment Signal
FEC	Forward Error Correction
HDB3	High Density Binary 3 code (3rd order)
IBS	Intermediate frequency Base Station
ICS	Identifier Change Status

MNEMONIC	ENGLISH
I^{2}C or IIC	Inter Integrated Circuit
ID	IDentifier
IEC	International Electrotechnical Commission
IM	Information Model
IP	Internet Protocol
ISDN	Integrated Services Digital Network
ITU	International Telecommunication Union
LAIS	Line Alarm Indication Signal
LAN	Local Area Network
LED	Light Emitting Diode
LMDS	Local Multipoint Distribution Service
LMFA	Loss of MultiFrame Alignment
LOF	Loss Of Frame
LOP	Loss Of Pointer
LOPC	Loss Of Polling Cell
LORF	Loss Of Radio Frame
LOS	Loss Of Signal
LRDI	Line Remote Defect Indicator
LT	Local Terminal
MAC	Medium Access Control
Mbps	Mega Bit Per Second
MIB	Management Information Base
MMI	Man Machine Interface
MSC	Message Sequence Chart
MUX	Multiplexer
NE	Network Element
NFS	Network File System
NIT	Network Installation Tool
NRZ	Non return to zero
NT	Network Terminal

MNEMONIC	ENGLISH	MNEMONIC	ENGLISH
OC	Object Creation	VPI	Virtual Path Identifier
OD	Object Deletion	VCI	Virtual Channel Identifier
OOF	Out Of Frame	WAN	Wide Area Network
OS	Operation System	X-Pol RT	Cross Polarized Radio Terminal
PAIS	Path Alarm Indication Signal	X-Pol RBS Rx	Cross Polarized Radio Base Station Reception
PC	Personal Computer	X-Pol RBS Tx	Cross Polarized Radio Base Station Emission
PCR	Peak Cell Rate		
PDH	Plesiochronous Digital Hierarchy		
PLL	Phase Locked Loop		
PSU	Power Supply Unit		
PVC	Permanent Virtual Circuit		
QAM	Quadrature amplitude Modulation		
RAI	Remote Alarm Indicator		
X-Pol RBS	Radio of Base Station		
RDI	Remote Defect Indication		
REI	Remote Error Indication		
RF	Radio Frequency		
RIT	Radio Installation Tool		
RT	Radio Terminal		
SC	State Change		
SDH	Synchonous Digital Hierarchy		
SMD	Surface Mounted Device		
SNMP	Simple Network Management Protocol		
SNTP	Simple Network Time Protocol		
STP	Shielded Twisted Pair		
TAC	Technical Assistance Center		
TCP	Transmission Control Protocol		
TDM	Time Division Multiplex		
TE	Transaction End		
TNT	TDM Network Termination		
TS	Terminal Station		
UNI	User Network Interface		

END OF DOCUMENT