

Installation and Operation

UAS 7000

Network Interface Unit Model NIU 7002



General DataComm



**Errata Sheet
for
Installation and Operation
UAS 7000
Network Interface Unit
Model NIU 7002
Publication 087R702-000, Issue 1**

Overview

This publication reflects changes to the Installation and Operation manual for the NIU 7002. Please make a note on the corresponding pages.

*Page 1-2 **Table 1-1** Front Panel Indicators:*

*Under **LED** column:*

*LOS after Red -.....E1 signal - **add** (May flicker on LOS condition).*

*OOF after Red -.....E1 framing - **add** (May flicker on LOS condition).*

*Page 1-3 under “**Options**” heading:*

Delete “Both must match”.

In Figure 1-1 NIU 7002 description of X1 option switch:

Add “must be set to NORM” after NOT SUPPORTED

*Page 1-4 under **Tests** heading:*

Add after first bulleted item - (All 32 DS0s)

Add after second bulleted item - (FAS and NFAS are generated in E1 Framer)

In illustration delete - (DIU) from first block.

Page 1-6 Table 1-3 - Impedance row should read:

“75 ohm coax (unbalanced transmit and receive shield are common) remote side or 120 ohm twisted pair (Balanced).”

June, 1997

NIU 7002

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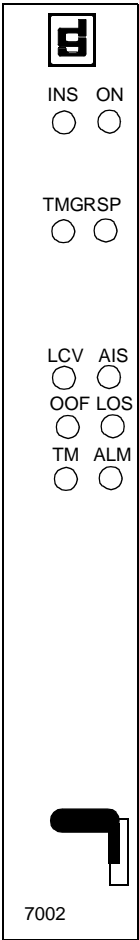
NIU 7002

The NIU (Network Interface Unit) 7002 provides a connection to E1 networks. It is used as the network interface to the shelf backplane. Each 7002 supports a single E1 line. The NIU 7002 is a single slot card that may be installed in single or multiple shelves or enclosures. Each of the E1 interfaces supports Basic or CRC-4 multiframe, with HDB3 or AMI line coding.

The unit is fully network managed by the shelf resident GDC SpectraComm Manager (SCM), and an associated SNMP manager.

Other features are:

- can be mixed or matched with other SpectraComm UAS data sets in the same shelf. **A 7001 cannot reside in the same shelf.**
- supports concentrator for central termination function
- full E1s can be terminated in a single shelf; up to four NIUs may be supported in a single or dual shelf
- multiplexes Drop-Side Interface Units (DIUs) like the 7616 via the shelf backplane.

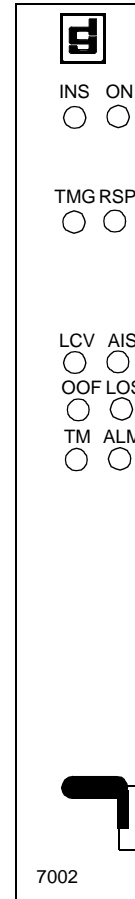


Front Panel Indicators

Table 1-1 describes the front panel indicators.

Table 1-1 Front Panel Indicators

Indicators	
LED	Use
General	
INS	In Service. Green - constant = Basecard in service.
ON	Power ON. Green - power is applied
TMG	Timing. Green - Lights when supplying 8k timing source to shelf.
RSP	Response. Green - Lights upon transmission of a backplane NMS command.
Network	
LCV	Line Code Violation. Red - Lights upon reception of line code violation in the received E1 data.
AIS	Alarm Indication Signal. Red - Lights upon the reception of a defect condition from the received E1 signal.
LOS	Loss of Signal. Red - Lights upon absence of an E1 signal.
OOF	Out of Frame. Red - Lights upon detection of loss of selected E1 framing.
Status	
TM	Test Mode. Red - Lights when unit is undergoing a diagnostic test. Flashes if errors occur in a self-test pattern recognition.
ALM	Alarm. Red - Lights when any alarm threshold is exceeded.



Options

The NIU 7002 has two options, a 75 or 120 ohm line impedance selection and Normal or Redundant. Both must match.

Refer to *Figure 1-1*.

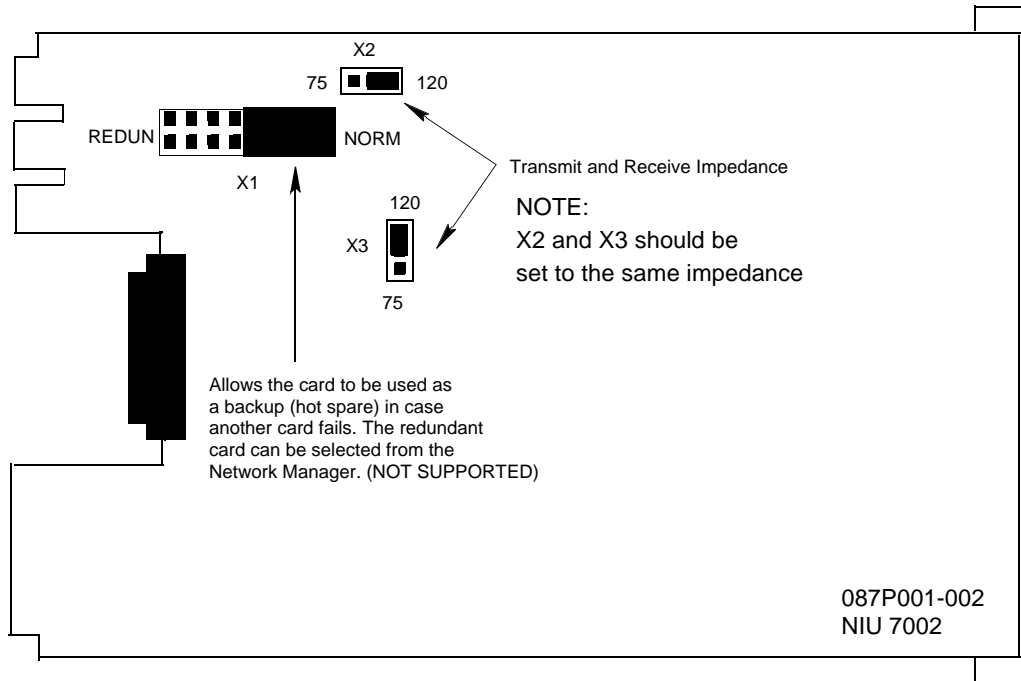


Figure 1-1 NIU 7002

Tests

The NIU 7002 performs the following diagnostic loopbacks:

- Line loopback (LL) - Loops the Telco transmit and receive paths back towards the E1 network.
- Payload loopback (PLB) - Loops the recovered E1 receive and transmit paths back towards the E1 network.

You may initiate these tests using UAS or Team 7000 network management. See *Figure 1-2*.

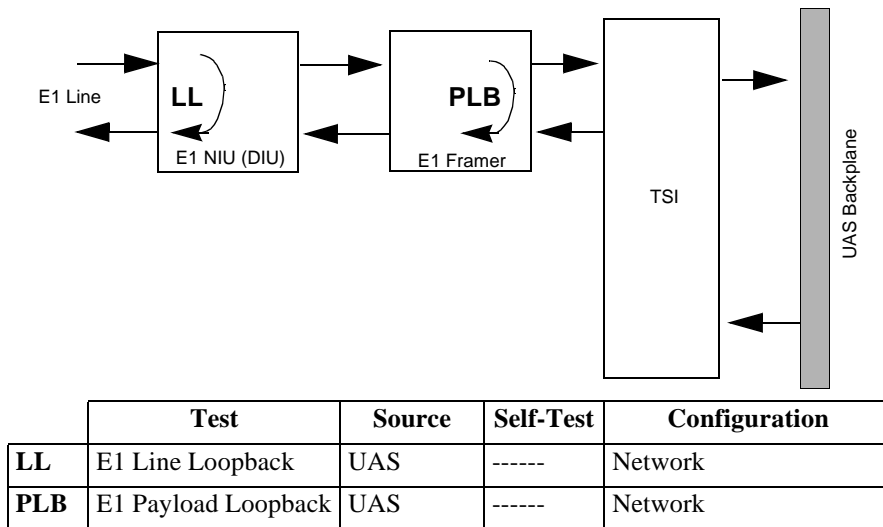


Figure 1-2 NIU 7002 Loopbacks - UAS

Table 1-2 50-Pin Telco Mapping

Rear Panel 50-Pin "J" Nos.	Slot No.	7002			
		Transmit Tip	Transmit Ring	Receive Tip	Receive Ring
J17	1	28	3	26	1
	2	32	7	30	5
	3	36	11	34	9
	4	40	15	38	13
	5	44	19	42	17
	6	48	23	46	21
J18	7	28	3	26	1
	8	32	7	30	5
	9	36	11	34	9
	10	40	15	38	13
	11	44	19	42	17
	12	43	23	46	21
J19	13	28	3	26	1
	14	32	7	30	5
	15	36	11	34	9
	16	40	15	38	13

Parts List and Specifications

Table 1-3 Parts List and Specifications

Parts List	
087P001-002	NIU 7002 module
209-044-001	RJ48C to Dual 75 ohm unbalanced E1 BNC Connector
Specifications	
Ambient Temperature (operating)	0 to 50° C
Humidity (operating)	5% to 95% (non condensation)
Altitude operating non-operating	0 to 10,000 feet 0 to 40,000 feet
Rate	2048 kbps
Framing	E1 Framed G.704
Interface	2048 kbps per G.703 and G.704 (-6.0 dB receiving sensitivity)
Impedance	75 ohm coax remote side or 120 ohm twisted pair.