

Installation and Operation

UAS 7000

Network Interface Unit
Model DIU 7616



Errata Sheet for Installation and Operation UAS 7000 Network Interface Unit Model DIU 7616

Publication 087R703-000, Issue 1

Overview

This publication reflects changes to the Installation and Operation manual for the DIU 7616. Please make a note on the corresponding pages.

Page 1-3 Figure 1-1 define X7 through X12 Loops:

Add under X8 - (Loop 2)

under X10 - (Loop 1)

under X12 - (Loop 3)

Page 1-4 Change Figure 1-2 and add new information under "Loop Diagnostics":

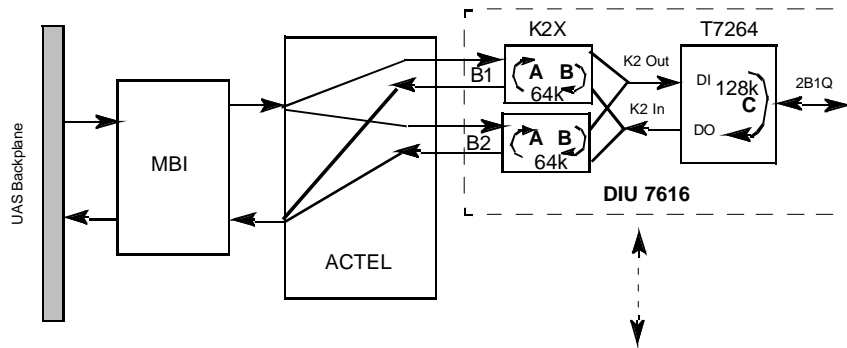


Figure 1-2 DIU 7616 Loopbacks

Loop Diagnostics

Loops A and B	
ST (Self-Test)	Normally green. Flashes red when errors are detected.
DL (Digital Loopback)	Normally solid red. Flashes when 2B1Q line is open.
UT (Unit Test)	Flashes red.
NOTES: K2 - (T7264) Lucent Technologies Inc. 2B1 Q Line Interface Unit. K2X - GDC LSI used to convert 512kbps multiplex bus to 64 kbps DTE interfaces. MBI - Multiplex Bus Interface - GDC LSI that interfaces to the backplane. FPGA - GDC LSI that converts 4 Mbit backplane to 64kbit, (K2X) B1 and B2.	

DIU 7616

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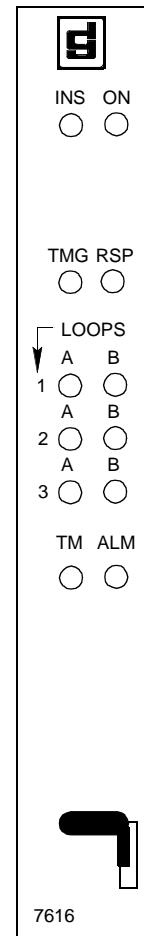
DIU 7616

The DIU (Drop-Side Interface Unit) 7616 provides a connection as a two-wire transmission product that uses 2B1Q for its line coding scheme as defined in ITU G.960. Three basic rate loops are supported. Each loop supports 64k, dual 64k or 128kbps data rates.

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

Other features are:

- fully compliant with ITU I.430.
- SNMP managed via SCM Management Card an associated backplane.
- complies with basic rate ISDN loopbacks.
- six 64 kbps or three 128 kbps channels are provided.
- Internal independent test pattern generation and detection.
- three transmitter timing options.
- can generate Loop Sense Current described in ITU I.430.

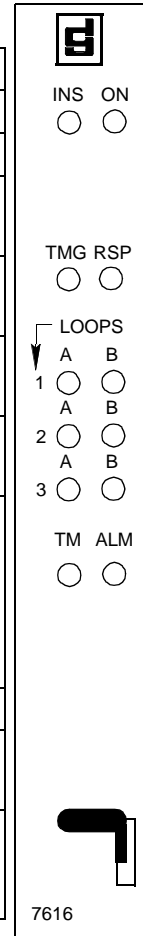


Front Panel Indicators

Table 1-1 describes the front panel indicators.

Table 1-1 Front Panel Indicators

Indicators	
LED	Use
General	
INS	In Service. Green - constant = In service.
ON	Power ON. Green - power is applied
TMG	Timing. Green - Lights when supplying 8k timing source to shelf.
RSP	Response. Green - Flashes when the card is responding to a SCM message.
LOOPS A, B 1 2 3	Tri-color LEDs (red/green/off) are used for Channel A (A) and Channel B (B) for all three loops (1, 2, 3). Red - solid - Indicates a channel is in the test mode. Flashes when an alarm exists. Green - solid - Active in data mode for each channel. At 128 kbps, both Channel A and B LEDs are green.
Status	
TM	Test Mode. Red - Lights during a test mode. There is one LED for all three loops.
ALM	Alarm. Red - (there is one LED for all three loops) - solid - indicates an alarm exists. Refer to Tests.



Options

The DIU 7616 basecard has six jumpers that select line power for either the LTU or NTU function.

You select options by positioning the jumpers on the card.

Set the jumpers as shown in *Figure 1-1*.

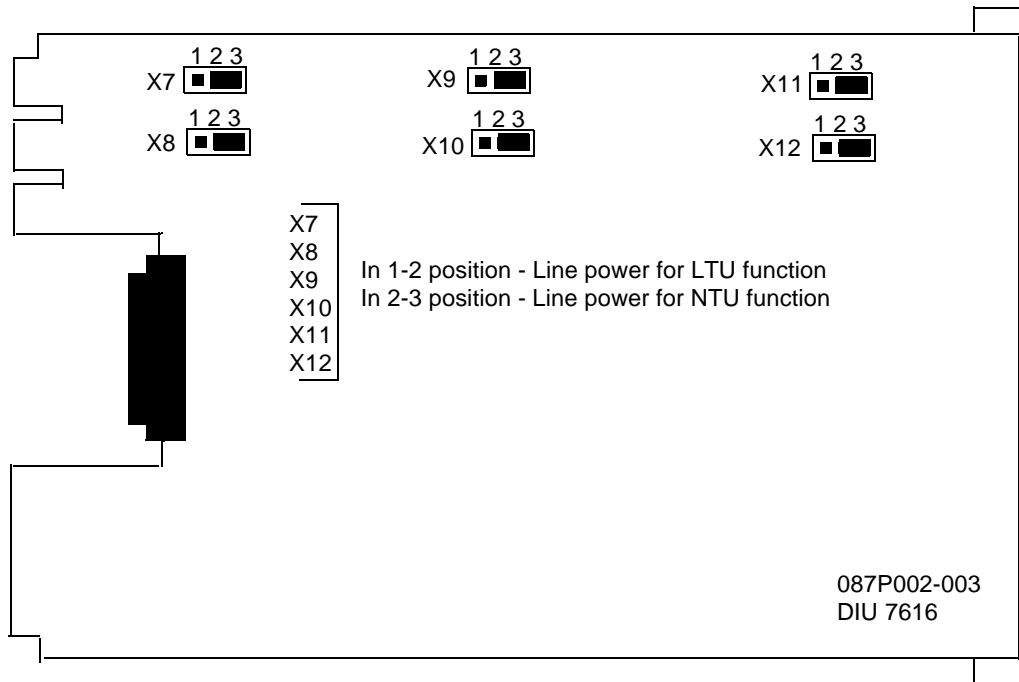
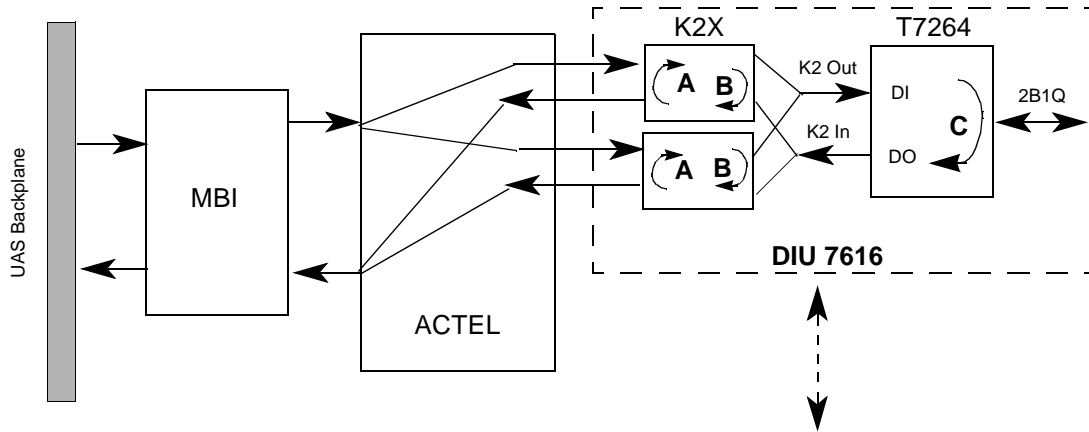


Figure 1-1 DIU 7616

Tests

The DIU 7616 supports all of the loopbacks required by Basic Rate ISDN. All loopbacks are network managed. Each channel of each loop is capable of the loops shown in *Figure 1-2*.



- A, C = Unit Test** Starts a 2047 pattern generator at A and loops back at C.
- B = Digital Loopback** This loopback directs data from RXDx to TXDx toward the E1 Interface.
- Self-Test** Starts a 2047 pattern generator at K2x toward the 2B1Q line.

Figure 1-2 DIU 7616 Loopbacks

Loop Diagnostics

Loops A&B

- ST (Self-Test) Normally green. Flashes red when errors are detected.
- DL (digital Loopback) Normally solid red. Flashes when 2B1Q line is open.
- UT (Unit Test) Flashes red.

Table 1-2 50-Pin Telco Mapping

Rear Panel 5-Pin "J" Nos.	Slot No.	7616		
		Loop 1	Loop 2	Loop 3
J20		Loop 1	Loop 2	Loop 3
	1	1, 26	3, 28	4, 29
	2	5, 30	7, 32	8, 33
	3	9, 34	11, 36	12, 37
	4	13, 38	15, 40	16, 41
	5	17, 42	19, 44	20, 45
J21	6	21, 46	23, 48	24, 49
	7	1, 26	3, 28	4, 29
	8	5, 30	7, 32	8, 33
	9	9, 34	11, 36	12, 37
	10	13, 38	15, 40	16, 41
	11	17, 42	19, 44	20, 45
J22	12	21, 46	23, 48	24, 49
	13	1, 26	3, 28	4, 29
	14	5, 30	7, 32	8, 33
	15	9, 34	11, 36	12, 37
	16	13, 38	15, 40	16, 41

Parts List and Specifications

Table 1-3 Parts List and Specifications

Parts List	
087P002-003	DIU 7616 module
Specifications	
Ambient Temperature (operating)	0 to 50 ° C
Humidity (operating)	5% to 95% (non condensation)
Altitude operating	0 to 10,000 feet
non-operating	0 to 40,000 feet
Interface	
Operating mode	Full duplex with adaptive echo cancellation.
Data rate	160 kbps total: 128 kbps user data, 16 kbps internal control, 16 kbps for timing and synchronization.
Line coding	2B1Q, compatible with ANSI T1.601.
Line requirements	2-wire, non-loaded metallic circuit.
Operating range	5.5 km (18,000 ft.) - with 0.4 mm (26 gauge wire)