

SEE ALSO:



LED STATUS

NETWORK
LPI / LPE

- | | |
|----------|---|
| ○ OFF | No synchronization with the ACME |
| ● GREEN | Synchronized with good signal quality on NET Loop 1/Loop 2 (> 2 dB margin) |
| ● YELLOW | Synchronized with marginal signal quality on NET Loop 1/Loop 2 (1 to 2 dB margin) |
| ● RED | Synchronized with poor signal quality on NET Loop 1/Loop 2 (0 dB margin) |

CUSTOMER

- | | |
|--------|--|
| OFF | No synchronization with the RL |
| GREEN | Synchronized with good signal quality on CUST Loop 1/Loop 2 (3-4 dB margin) |
| YELLOW | Synchronized with marginal signal quality on CUST Loop 1/Loop 2 (1 to 2 dB margin) |
| RED | Synchronized with poor signal quality on CUST Loop 1/Loop 2 (0 dB margin) |

REL/REL

- | | |
|----------|--|
| ● GREEN | Indicates L3 from HSR toward the network is active. |
| ● YELLOW | Indicates L3 from HSR toward the network is active. |
| ● RED | Indicates L3 from HSR toward the customer is active. |

HDSL LOOP SPECIFICATIONS FOR OPTIMUM OPERATION

- Cable pairs must be reterminated
- No single bridged Tap > 2 ft
- Maximum loop resistance is 900 Ω
- Pulse attenuation (10:55 or 10:58, Current System Status screen) < 30 dB
- Impulse noise < 50 dBm as measured using a 50 k Ω filter
- Total bridged Tap < 2.5 M Ω
- 190 KHz insertion loss < 35 dB
- Signal quality of 6 dB or higher, with no fluctuation and equal on both loops
- Wideband Noise < 31 dBm as measured using a 50 k Ω filter
- Internal Clock Accuracy < 25 ppm (see also Stratum 4)

LOOPBACK AND CONTROL CODES

[illegible]

*All users must be armed with a T3000 or T3000b before this code will work.

Card Edge Pin Assignment

Pin	Designation	Description
1	GND	Ground
2	NC	No Connect
3	T1	Customer Loop 1 Tip
4	R1	Customer Loop 1 Ring
5	T1	Network Loop 1 Tip
6	R1	Network Loop 1 Ring
7	NC	No Connect
8	T	Network Loop 2 Tip
9	R	Network Loop 2 Ring
10	GND	Ground
11	T	Customer Loop 2 Tip
12	R	Customer Loop 2 Ring



■ For a complete Installation and Maintenance Practice (P/N 60170503) 1-800-367-5903. Faxback Document 989. Please have your fax number ready. ■

POWERING OPTIONS

The ICOT will power the entire Total Access 1000 System. When an HRE is used to extend the range of the POTS circuits, a second ICOT is used to provide auxiliary span power to the system through additional copper pairs. (See Figure 1). The Total Access 1000 system consists to receive span power through the HDSL loops. The second ICOT is only needed for the span powering capacity. No circuit information can be accessed from it. No DSL-1 connections are necessary. The loop will not break, and it will always show an alarm condition. Applications using only IS-SMTTs do not require an additional ICOT.

WARRANTY

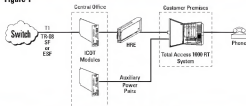
ADTRAN will replace or repair this product within the warranty period if it does not meet its published specifications or fails while in service. Warranty information can be found at www.adtran.com/warranty. USA and Canadian customer feedback: (877) 457-5007, Document 484.

COMPLIANCE

The 238 HRE complies with the requirements covered under UL 9550 and is intended to be installed in an enclosure with an Installation Code (IC) of "B" or "E". Inner chassis ground is properly connected.

Code	Input	Output
Power Code (PC)	C	C
Telephone Extension Code (TEL)	N	N
Installation Code (IC)	A	A

Figure 1



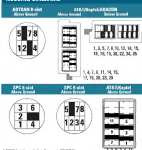
ADTRAN 238 REPEATER HOUSINGS

PART #	Description	HRE Capacity	CLIC Code*	Material
110001A1	4-slot Air Shk	4	EDM000A1MA	Stainless Steel
110001L2	4-slot Gal Shk	4	EDM000A1MA	Stainless Steel
110001L3	2-slot Gal Shk	2	EDM000A1MA	Valve Plastic
110001A4	4-slot Air Shk	2	EDM000A1MA	Stainless Steel
110001L1	4-slot Air Shk	4	EDM000A1MA	Stainless Steel
110001L2	4-slot Gal Shk	4	EDM000A1MA	Stainless Steel
110001L3	4-slot Gal Shk	4	EDM000A1MA	Stainless Steel
110001L4	4-slot Gal Shk	4	EDM000A1MA	Stainless Steel
110001L5	16-slot Air Shk	16	EDM000A1MA	Stainless Steel
110001L6	16-slot Gal Shk	16	EDM000A1MA	Stainless Steel
110001L7	16-slot Gal Shk	16	EDM000A1MA	Stainless Steel

HRE 238 DEPLOYMENT IN OTHER HOUSINGS

Company	Description	HRE Capacity	Basic Ground	Value Ground	Material
AT&T, Kynnet, ASA/DEM	25-slot	12	10**		Platinum
SPC	6-slot Air Shk	5	5		Stainless Steel
SPC	6-slot Gal Shk	5	5		Stainless Steel
SPC	8-slot Air Shk	7	5		Stainless Steel
SPC	8-slot Gal Shk	7	5		Valve Plastic
Kynnet	8-slot Air Shk	8	5		Platinum
AT&T, Kynnet	12-slot Air Shk	6	N/A		Platinum
Sequent	190-slot	42	N/A		Steel

HOUSING DIAGRAMS



* CLIC American code for software is 00000000

** If the HRE is loaded inside the HRE housing for software ground capacity, connections can be loaded in slots 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43, 45, 47, 49, 51, 53, 55, 57, 59, 61, 63, 65, 67, 69, 71, 73, 75, 77, 79, 81, 83, 85, 87, 89, 91, 93, 95, 97, 99, 101, 103, 105, 107, 109, 111, 113, 115, 117, 119, 121, 123, 125, 127, 129, 131, 133, 135, 137, 139, 141, 143, 145, 147, 149, 151, 153, 155, 157, 159, 161, 163, 165, 167, 169, 171, 173, 175, 177, 179, 181, 183, 185, 187, 189, 191, 193, 195, 197, 199, 201, 203, 205, 207, 209, 211, 213, 215, 217, 219, 221, 223, 225, 227, 229, 231, 233, 235, 237, 239, 241, 243, 245, 247, 249, 251, 253, 255, 257, 259, 261, 263, 265, 267, 269, 271, 273, 275, 277, 279, 281, 283, 285, 287, 289, 291, 293, 295, 297, 299, 301, 303, 305, 307, 309, 311, 313, 315, 317, 319, 321, 323, 325, 327, 329, 331, 333, 335, 337, 339, 341, 343, 345, 347, 349, 351, 353, 355, 357, 359, 361, 363, 365, 367, 369, 371, 373, 375, 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