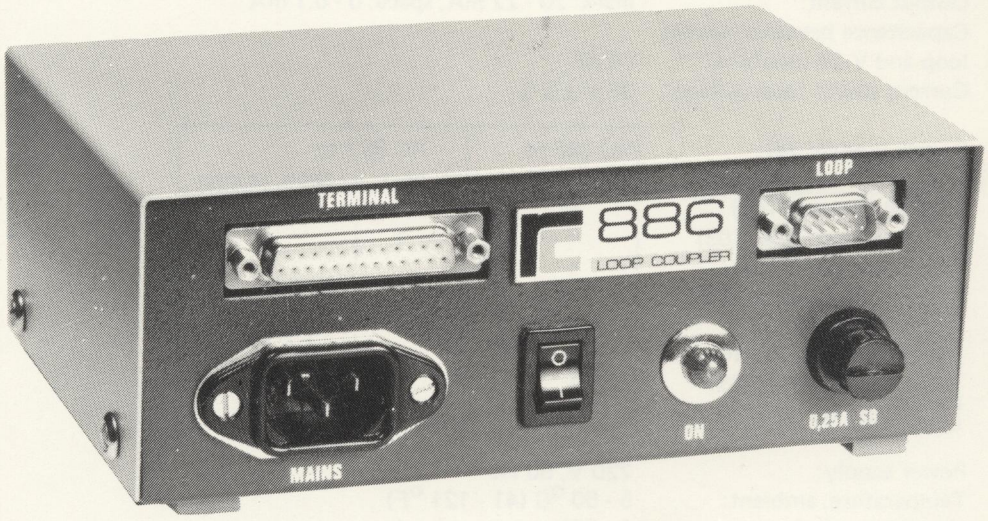
RC 886/87

Asynchronous Loop Couplers

- LOCAL LINKING DISTANCES UP TO 10 KM
- 20 mA CURRENT LOOP SYSTEM CONVERTER
- DIFFERENT TRANSMISSION SPEEDS
- GALVANIC SEPARATION OF EQUIPMENT



GENERAL

The RC Current Loop System is designed for data transmission on private lines between host facilities and terminals. The system is used if standard interfaces (RS 232 C or V.24) are inadequate either because of the distance involved or due to interfering conditions. The host facilities can be a computer system, a remote device controller or a terminal concentrator. The terminals are devices which usually are operated by means of an asynchronous multiplexer and the appropriate junction panels.

The RC 886/87 Loop Couplers provide local linking distances up to 10 km between the above-mentioned items. They transmit data asynchronously in full-duplex mode of operation and allow different transmission speeds. Furthermore, the installation of line couplers provide galvanic separation between connected parts.

CHARACTERISTICS

The RC 886 Loop Couplers generally apply between host facility and terminal equipment, excepting for the special task covered by the RC 887 Line Coupler. The RC 886 may either be served at the host site by a V.24 junction panel (F82) or by a current loop adapter (F86). In the later case only one RC 886 unit is needed per transmission line because the current loop adapter itself comprises the functions of one loop coupler per line.

The RC 887 Line Couplers have been specially designed to connect between a V.24 junction panel (F82) of the host facility and the RC Terminal Printers.

In principle the connecting options follow the pattern shown:

<table>
<tr><td colspan="3">HOST FACILITY</td></tr>
<tr><td colspan="2">V.24 JUNCTION PANEL</td><td rowspan="2">CURRENT LOOP ADAPTER</td></tr>
<tr><td>RC 887</td><td>RC 886</td></tr>
<tr><td colspan="3">COMMUNICATIONS LINES, FULL-DUPLEX</td></tr>
<tr><td>RC 887</td><td colspan="2">RC 886</td></tr>
<tr><td>TERMINAL PRINTERS</td><td colspan="2">TERMINAL EQUIPMENT (EXCEPT TERM. PRINTERS)</td></tr>
</table>

(a vertical line will run through facilities connectable)

SPECIFICATIONS

Transmission type:	asynchronous, full-duplex
Transmission speed:	max. 4800 bps, at 10 km distance: max. 1200 bps
Transmission distance:	max. 10 km, at 4800 bps: max. 2 km distance
Output current:	mark: 20 - 22 mA, space: 0 - 0.1 mA
Capacitance between current loop and V.24 interface:	⟨ 4 pF
Current source loop voltage:	32 V ±5 %

Signals used (V.24):

	RC 886 to host/term.	RC 887 to host	RC 887 to term. printer
Signal Ground (102)	+	+	+
Transmitted Data (103)	+	+	
Received Data (104)	+		+
Ready for Sending (106)		+	
Dataset Ready (107)	+	+	+
Data Terminal Ready (108/2)	+	+	+
Received Carrier (109)	+	+	+
Not Busy (not a V.24 signal)			+

Power supply:	220 V, 50 Hz
Temperature, ambient:	5 - 50 °C (41 - 121 °F)
Humidity, relative:	0 - 95%, non condensing
Mounting:	self-contained unit

DIMENSIONS

Height:	7.5 cm (3 inches)
Width:	18.0 cm (7.1 inches)
Depth:	12.5 cm (5 inches)
Weight:	1.7 kg (3.8 lbs)