RCSL No: 42-i2042

Edition: May 1982

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Title:

RC855 Installation Guide

RCSL 42-i1905

A/S REGNECENTRALEN
af 1979

Keywords:

RC855, hardware, installation.

Abstract:

This manual describes how to install the RC855 hardware equipment. Is contains: notes on planning; survey of equipment; specific information concerning cable connections, RC-CIRCUIT and printer set-up.

(18 printed pages)

Printed by A/S Regnecentralen af 1979, Copenhagen

RCSL 42-i1905

FOREWORD

First edition: RCSL No 42-i1685.
This guide includes the information which up to now was covered by the leaflet RCSL No 42-i1757.

Henning Christensen
A/S REGNECENTRALEN af 1979, January 1982

Second edition: RCSL No 42-i2042.
Revised and enlarged edition.

Henning Christensen
A/S REGNECENTRALEN af 1979, May 1982

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1. INTRODUCTION 1.

The RC855 work station is designed for the construction of distributed systems in which each work station may be used interchangeably for communication with a host computer and as a local microcomputer system.

The RC855 is available as a 'soft-programmed' work station which can be used for the different purposes by loading the appropriate software from an attached flexible disc drive.

The RC855 is also available as a 'hard-programmed' terminal for dedicated use.

The work stations/terminals are all based on the RC855 VDU (visual display unit) and the installation is accomplished by means of cable connections at the VDU rear panel. Some of the connections are always used (keyboard, power, etc.) whereas the use of others depends on the configuration (printer, host, RC-CIRCUIT, etc.). The configuration possibilities are described in ref. [1].

Up to two flexible disc drives and one printer may be connected as well as the work station/terminal may be part of a clustered configuration.

In a cluster configuration, up to 8 work stations and/or terminals can be interconnected by means of the RC-CIRCUIT, a common twisted pair of cables which are looped through wall-boxes/wall-receptacles.

2. INSTALLATION PLANNING

2.

Planning the installation of the RC855 hardware equipment, the following general requirements must be considered:

- provide for ample space around the equipment.
- keep the temperature in the range 16-32°C (60-90°F) and the humidity in the range 40-60% RH; optimum conditions are 21°C and 50% RH.
- avoid stactic electricity as far as possible; eventual discharges should not exceed 2 kV.
- the power supply of the equipment must be 220/240 V AC $\pm$ 10%, 50 Hz $\pm$ 2 Hz.
- all power-outlets must include a ground connection.

More information about the general aspects of planning an installation of RC computer equipment can be found in ref. [2].

3. EQUIPMENT SURVEY 3.

3.1 Equipment List 3.1

RC No	Product Name
RC855	Display Terminal
TF663S	RC855 Modem cable, short (5m)
TF663M	RC855 Modem cable, medium (12m)
TF663L	RC855 Modem cable, long (25m)
TF664	RC-CIRCUIT, wall-box/wall-receptacle, kit for surface mounting
TF665	RC-CIRCUIT, wall-box/wall-receptacle, kit for flush mounting
TF656	RC-CIRCUIT, wall-receptacle, separate unit
TF661	RC-CIRCUIT, terminal connection cable (5m)
RC862	Matrix Printer, 120 cps, 80 print pos.
RC867	Matrix Printer, 120 cps, 136 print pos.
RC868	Daisy Wheel Printer, 55 cps., 132-198 print pos.
RC762	Flexible Disc Drive, 8" maxi-diskettes

3.2 Dimensions 3.2

RC No	Height (cm)	Width (cm)	Depth (cm)	Weight (kg)	Note
RC855,					
-terminal	39-49	47	33	30	1)
-keyboard	8.5	44	25	4	
RC862	13.3	36.1	32.8	8.9	
RC867	13.3	51.2	32.8	14	
RC868	17.2	61.7	42.6	20.5	
RC762	14	29	46	13.5	

1) Height is adjustable; depth is affected by tilting.

3.3 Environmental 3.3

RC No	Ambient Temp. (°C)	Relative Himidity *) (%)	Heat Dissipation (kJ/h)	Power Consumption (W)
RC855	10-35	40-80	288	80
RC862	5-40	20-90	432	120
RC867	5-40	20-90	432	120
RC868	10-40	10-90	540	150
RC762	10-35	20-80	300	83

*) Non-condensing.

4. INSTALLATION SPECIFICATIONS 4.

4.1 Visual Display Unit 4.1

The installation is accomplished by means of cable connections at the VDU rear panel.

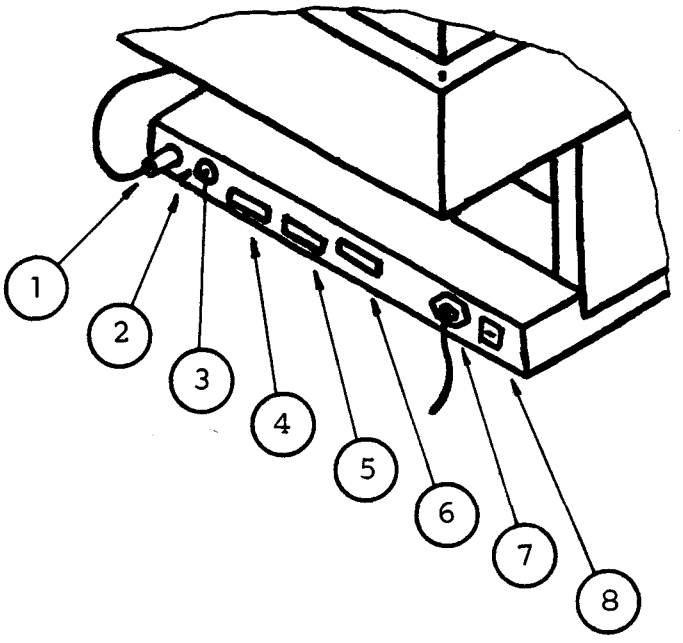


Figure 1: VDU rear panel.

1) Keyboard connection.
2) RESET push-button.
3) CIRCUIT connection.
4) Printer (LINE II) connection.
5) Host (LINE I) connection.
6) Flexible disc drive connection.
7) Power cord and fuse.
8) POWER switch.

The cable connections are described below with reference to the position numbers of figure 1. In the descriptions, whenever relevant, both the RC order numbers and part numbers are included, the latter to enable identification of the cables.

With the RC855 VDU, the traditional setting of switches in order to determine operational characteristics has been substituted by software controlled configuration parameters. These parameters are entered in accordance with the operational conditions to follow and this is done as part of the initial operating start procedures. See the actual software operating guide for information about the configuration parameters.

4.2.1 Cable Connections

4.2.1

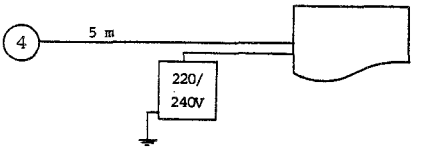
Keyboard connection

use: always
delivery: with keyboard
RC order no: -
RC part no: -
cable length: 1.5 m

CIRCUIT connection

use: in cluster configuration; cable leads to wall-receptacle of the RC-CIRCUIT (see also 4.2)
delivery: separately ordered
RC order no: TF661
RC part no: CBL 926
cable length: 5 m

Printer connection



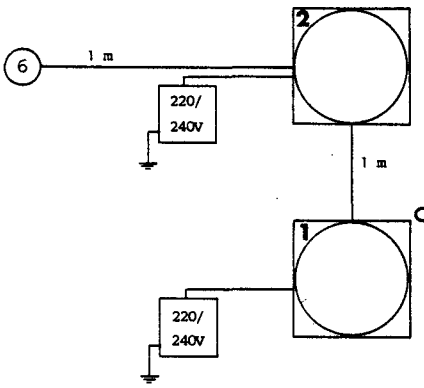
use: with optional printer (see also 4.3)
delivery: with printer
RC order no: -
RC part no: RC862: CBL 909
RC867: CBL 909
RC868: CBL 977
cable length: 5 m (normally)
note: separate power-outlet for printer

Host connection

use: for communication with host computer
delivery: separately ordered
RC order no: TF 663S/M/L
RC part no: CBL 585/604/605
cable length: 5/12/25 m
note: separate power-outlet for the modem must originate from same switchboard as the power-outlet for the VDU

The modem equipment may forward other additional requirements.

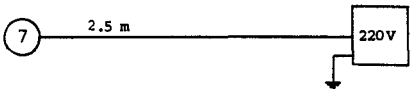
Flexible disc drive connection



use: with optional flexible disc drives
delivery: with flexible disc drives
RC order no: -
RC part no: -
cable length: VDU to drive: 1 m
between drives: 1 m
note: in daisy-chaining two drives, drive "2" is connected to VDU and drive "1" is connected to drive "2"

Separate power-outlet for each drive.

Power connection



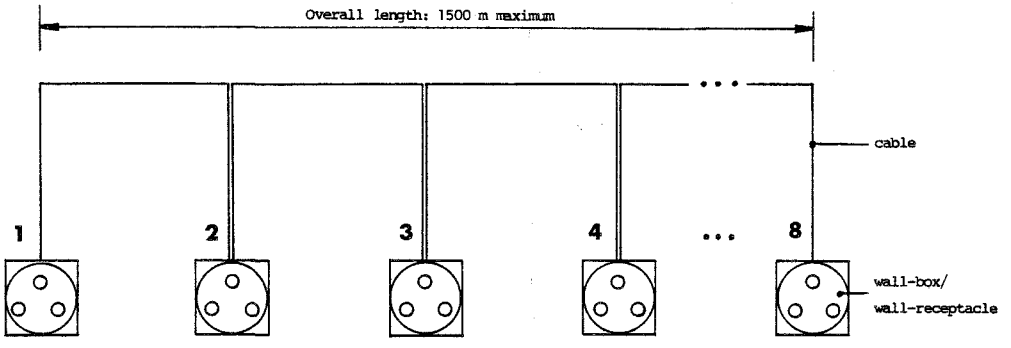
use: always
delivery: with VDU
RC order no: - (power plugs acc. to national standards are indirectly specified by selecting national character set variants).

RC part no: DANISH/NORWEGIAN: CBL 440
DANISH OFFS.: CBL 440
SWEDISH: CBL 973
GERMAN: CBL 973
US-ASCII: CBL 973
UK-ASCII: CBL 927
cable length: 2.5 m (normally)
note: CBL 440 has a Danish plug;
CBL 973 has a Schuko plug;
CBL 927 has no plug and is
2 m only.

4.2 RC-CIRCUIT

4.2

The RC-CIRCUIT installation consists of a twisted pair of cables which is looped through wall-boxes/wall-receptacles in up to 8 connection sites. The overall length of the RC-CIRCUIT is limited to 1500 metres.



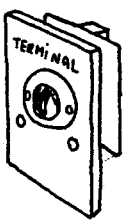
Cable: 1x2x0.6 (e.g. Dätwyler type G51)
Cable length: 1500 metres, max.
Wall-box/wall-receptacle,
- kit for surface mounting: TF664
- kit for flush mounting: TF665
Wall-receptacle, separate unit: TF656

The wall-boxes/wall-receptacles are available as mounting-kits either for mounting directly on the wall surface (RC order no: TF664), or for flush mounting (RC order no: TF665). The wall-

boxes may locally be obtainable from other suppliers (surface mounting: LK-NES type 102H1030; flush mounting: LK-NES type 102H1041) in which case the wall-receptacles can be supplied as separate units (RC order no: TF656).

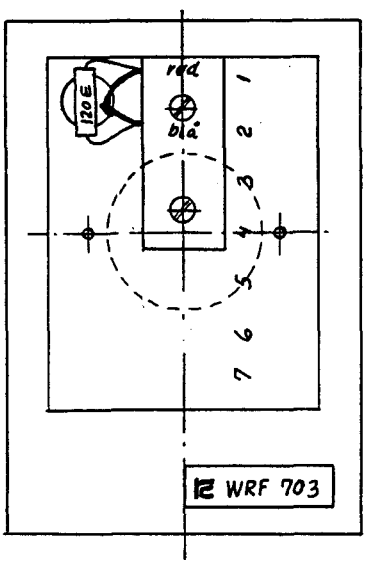
Normally the customer arranges that the RC-CIRCUIT cable is installed including the empty wall-boxes. The installation of the wall-receptacles is normally ordered (separately charged) from RC or its representative.

Note: When installing the wall-receptacles, the resistor (denoted 120E) at the rear side must be removed except for the two wall-receptacles that make out the two outer positions in the RC-CIRCUIT installation.



1=red
2=blue

Rear-view:



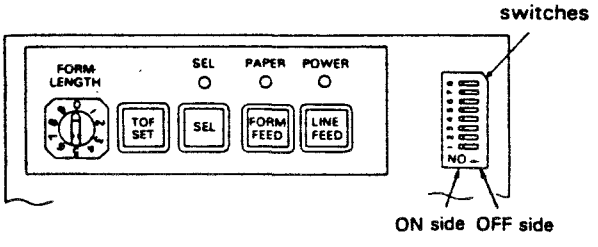
4.3 Printer

Different printers are available as options. Depending on the type of printer, some internal switches may have to be set in accordance with the requirements forwarded by the terminal system and the operations. These aspects are covered by the manuals supplied with the printers.

4.3.1 RC862/RC867 Printers

As a general feature, the RC862/RC867 printers are supplied with a multiple character set, which contains all the national variants. The national variant to be used is selected by switch setting.

The switches are accessible by removing the upper cover of the printer (see printer manual). They are placed on the operator panel to the right.



National variants of the character set is selected by setting the switches as follows:

Switch no. / Variant	1	2	3	4	5	6	7	8
DANISH/NORWEGIAN	OFF	ON	ON	not to be changed, always:				
DANISH OFFS	ON	ON	ON					
SWEDISH	ON	OFF	ON					
GERMAN	ON	ON	OFF	OFF	ON	OFF	ON	ON
US-ASCII/FRENCH	OFF	OFF	ON					
UK-ASCII	OFF	ON	OFF					

A. REFERENCES A.

[1] RCSL No 42-i1984:
RC855 Configuration Guide
Torsten Schmidt, Henning Christensen, March 1982
Abstract: This manual gives some outlines in the configuration possibilities of the RC855 Terminal System.

[2] RCSL No 42-i1621:
RC Computer Equipment, Installation Planning
Jørgen Rosendahl, Henning Christensen, February 1981
Abstract: It is the concern of this publication to provide information on the installation planning of RC computer equipment. Only hardware installation is covered. General information is given with respect to computer room, environment, power supply, precautional arrangements and the connection patterns of the equipment.

RETURN LETTER

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