Installation guide for LexCom Home Telephone Module T100



Application

The telephone module is used exclusively in LexCom Home. It is designed to be fitted to a DIN rail.

The module is a passive component that distributes telephone lines across up to eight telephone outputs in the outputs of the wall outlets.

Construction

On the top of the telephone module, (figure 1) there are two terminals for the connection of analogue telephone lines. There is also an RJ45 port to connect ISDN.



Figure 1: The telephone module viewed from above

On the front are eight RJ45 ports (figure 2), so that the telephones and modems can be connected to 8 of the 24 outputs in the LexCom Home system.



Figure 2: Front view of the telephone module

The two screw terminals supplied are used to connect analogue telephone lines.

The three switches that are also on the front provide for the different configurations (see "Configuration").

Installation

Place the module on the middle DIN rail, where it is positioned in the centre due to its low level of heat generation.

The installation procedure is divided into connection and configuration:

Connection

The module can be connected to up to two analogue lines (called Line 1 and Line 2) and an ISDN line from the NT box (SO bus).

With an ISDN connection, however, it is only possible to connect one analogue line at the same time.

The following combinations are permitted for the three inputs:

| Incoming lines | Line 1 | Line 2 | ISDN S0 |
|--------------------------------------|--------|--------|---------|
| 1 standard analogue line | x | | |
| 1 standard analogue line | | х | |
| 2 standard analogue lines | x | x | |
| ISDN S0 | | | x |
| ISDN S0 and 1 standard analogue line | x | | х |

Configuration

The function of the T100 telephone module is set using the three switches, designated SW1, SW2 and SW3. Each switch can be set to one of two positions, A or B.

The positions of the three switches determine the properties of the eight ports.

The eight RJ45 ports on the actual T100 module are not numbered. In the following tables of configuration options, the individual outputs are identified and referred to on the basis of the number allocation shown in figure 2.

The following three configuration charts describe the setup options for each of the following:

- A. analogue installation only
- B. ISDN installation only
- C. combined analogue and ISDN installation.

The switch positions are given as A or B. If the position of a switch is not relevant, "Do Not Care", this is denoted with the # symbol.

A. Only analogue lines connected (Line1 and/or Line2)

In this section the terms Master and Slave are used. Master denotes the situation or status of an output in which it (and no others) transmits a call signal to a fax machine or fax module, for example, and the call signal can be returned to the module if the fax module is not active (i.e. the fax does not have to 'pick up the phone'). Slave denotes the status of one or more outputs in which they only transmit a call signal if it is returned from the connection unit on the Master output.

Line 1 setup (phone number: XXXX XXXX)

| Function/Setup | SW1 | SW2 | SW3 |
|-------------------------------------------------------------------------------------------|-----|-----|-----|
| 1 analogue line connected to Line1 Out on 1, 2, 3, 4, 5, 6, 7, 8 | в | A | A |
| 1 analogue line connected to Line1 Out on 1, 2, 3, 4 | в | # | в |
| 1 analogue line connected to Line1 Out on 1, 2, 3, 4, 5, 6, 7 | в | в | A |
| 1 analogue line connected to Line1 Master out on 1, Slave out on 2, 3, 4 * | A | # | в |
| 1 analogue line connected to Line1 Master out on 1, Slave out on 2, 3, 4, 5, 6, 7, 8 * | A | A | A |

Table 1 *) Adapter box for return connection to FAX must be used by the Master output in the wall outlet.

Line 2 setup (phone number: YYYY YYYY)

| Function/Setup | SW1 | SW2 | SW3 |
|-------------------------------------------------------------------------------------------|-----|-----|-----|
| 1 analogue line connected to Line2 Out on 1, 2, 3, 4, 5, 6, 7, 8 | в | A | A |
| 1 analogue line connected to Line2 Out on 5, 6, 7, 8 | # | A | в |
| 1 analogue line connected Line2 Out on 8 | # | в | # |
| 1 analogue line connected to Line2 Master out on 8, Slave out on 7, 6, 5 * | # | в | в |
| 1 analogue line connected to Line2 Master out on 8, Slave out on 7, 6, 5, 4, 3, 2, 1 * | в | в | A |

Table 2*) Adapter box for return connection to FAX
must be used by the Master output in the
wall outlet.

It is possible to combine a row from table 1 with a row from table 2 on condition that:

- 1. No port is used for both lines simultaneously
- 2. Each of the three switches SW1, SW2 and SW3 is in the same position for the two lines or is "Do Not Care" for at least one line.

B. Only ISDN SO line connected

When connecting an ISDN line, it is possible to feed back two analogue outputs, for example from an ISDN modem (terminal adapter device / A/B box). These are subsequently called A/B analog1 and A/B analog2 respectively.

| Function/Setup | SW1 | SW2 | SW3 |
|--------------------------------------------------------------|-----|-----|-----|
| ISDN S0 out on 8. A/B-analog1 out on 5, 6, 7 * | # | в | в |
| ISDN S0 out on 8. A/B-analog1 out on 1, 2, 3, 4, 5, 6, 7* | в | в | Α |
| ISDN S0 out on 8. A/B-analog2 out on 1, 2, 3, 4 | В | В | в |

Table 3*) Adapter box for return connection to ISDN
must be used by the ISDN SO output in the
wall outlet.

C. Combined connection of ISDN SO and one analogue line (Line1)

| Function/Setup | SW1 | SW2 | SW3 |
|-------------------------------------------------------------------------------------------------------------------------------------|-----|-----|-----|
| ISDN S0 out on 8. Analogue line (connected to Line1) out on 1, 2, 3, 4, 5, 6, 7 | в | в | Α |
| ISDN S0 out on 8. A/B analog1 out on 5, 6, 7 * Analogue line (connected to Line1) out on 1, 2, 3, 4, | в | в | в |
| ISDN S0 out on 8. A/B analog1 out on 2, 3, 4, 5, 6, 7 * Analogue line (connected to Line1) out on 1 | А | в | А |
| ISDN S0 out on 8. A/B analog1 out on 5, 6, 7 * Analogue line (connected to Line1) MASTER out on 1, ** SLAVE out on 2, 3, 4 | A | в | в |
| ISDN S0 out on 8. Analogue line (connected to Line1) MASTER out on 1, ** SLAVE out on 2, 3, 4, 5, 6, 7 | A | в | A |

- Table 4
 *) Adapter box for return connection to ISDN must be used by the ISDN SO output in the wall outlet.
 - **) Adapter box for return connection to FAX must be used by the MASTER output in the wall outlet.

Note!

The CE label on the side acts as a seal. If this seal is broken the guarantee is not valid.

Re. the number of telephones connected to one line, please refer to national regulations.

Terminal guide

The adhesive sheet supplied is intended to act as a terminal guide for the end user, i.e. an overview of:

- which lines (phone or fax numbers) are included in the installation
- which line each port is connected to due to the configuarations.

In the middle of the adhesive sheet are 4 x 5 small symbols for the lines to which a given port can be connected. (A1 stands for Analogue Line 1, etc.). These symbols are used for attaching to the ports shown on the label on the left, to provide an overview showing which line each port is connected to.

The installation's phone numbers are recorded on the right of the sheet. These are also transferred to the label on the left (to the lines under the ports).

The label on the left now comprises a complete terminal guide, which can be attached to the cover of the distribution board – on the central bar above the telephone module.

Technical data

| Inputs | 1 ISDN S0 bus – RJ45 Jack Passive ISDN bus 2 analogue telephone lines (screw terminal) |
|------------------------|-------------------------------------------------------------------------------------------|
| Outputs | 8 RJ45 connectors (analogue telephone signals) 1 of 8 connectors is also ISDN S0 bus |
| Ambient temperature | 0° C to + 40° C |
| Directives: | IEC 512-2, 1985 Test 3A Method C |