Phone sets DBC 222, 223, 224, 225, Key Panel Unit DBY 419 01 and Option Unit DBY 420 01

INSTALLATION INSTRUCTIONS

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1   GENERAL

1.1   SCOPE

The digital telephone sets (DTS) and peripherals described in these installation instructions are to be used together with the Mitel exchanges MX-ONE, BusinessPhone or MD-Evolution.

In a MX-ONE environment the DTS is connected to a digital extension board, ELU33, ELU28/3, or equivalent.

1.2   DOWNLOADABLE FW

The feature downloadable FW is enabled in the telephone. To check the current FW revision press **C**, ***** and **4** at the same time. In the display the text CAA 158 0026 RXX is shown, where XX stands for the revision. The revisions of the font files are only available with commands from the exchange.

1.3   ENVIRONMENTAL REQUIREMENTS

The products covered in these installation instructions comply with the prerequisites stipulated for placing in office and exchange room environments.

     1531-DBC 222 Uen E1 2016-03-03

2 AIDS

Wall mounting requires additional screws. Wall mounting of a telephone with option unit is not recommended but possible with additional spacers.

3 PREPARATIONS

Verify that it is possible to connect an extension line and check that a line cord is available.

4 POWER EQUIPMENT

The DTS and its peripherals are powered from the extension line.Maximum power consumption: 2 W

5 EARTHING

The DTS and its peripherals need no special earthing.

6 CABLING

Maximum line length between DTS and extension line unit (ELU33, ELU28/3 or equivalent) using EKKX 0.5 mm (180 ohms/km) cable: 1000 m (3280 ft).

7 INSTALLATION OF DTS

7.1 DELIVERY METHOD

The DTS body is delivered in a box together with one handset, one handset cord, two feet, designation label and designation cover.
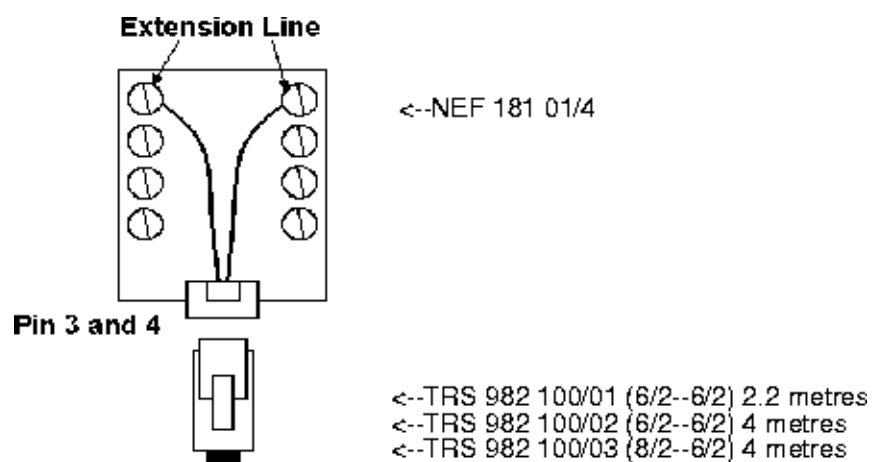
7.2 CONNECTION OF THE HANDSET

The handset cord shall be connected with one end (short uncoiled) to the handset and the other end (long uncoiled) to the connector in the bottom of the set marked HANDSET.Use the cord guide to secure the handset cord to the DTS. Choose the proper guide to emerge the cord to the left or right side of the telephone. With an extra key panel mounted, it is only possible to emerge the cord to the left.

7.3 CONNECTION TO THE EXTENSION LINE

Line cord and wall box are normally not included in the box.

The line cord shall be connected in one end to the wall box, see Figure 1 Connection of extension line on page 9, and the other end to the connector in the bottom of the set marked LINE.

Figure 1:   Connection of extension line

7.4 WALL MOUNTING

• Mount two screws (diameter 5.5 max) vertically with 100 mm distance and 9.5 mm space to the wall, see Figure 2 Positions and dimensions for screws on page 10.

• Break away the two screw hole covers with e.g. a screwdriver.

• Dismount and turn the hook around, see Figure 3 Changing the hook position on page 10.

- If the adjustable feet are mounted they must be removed.

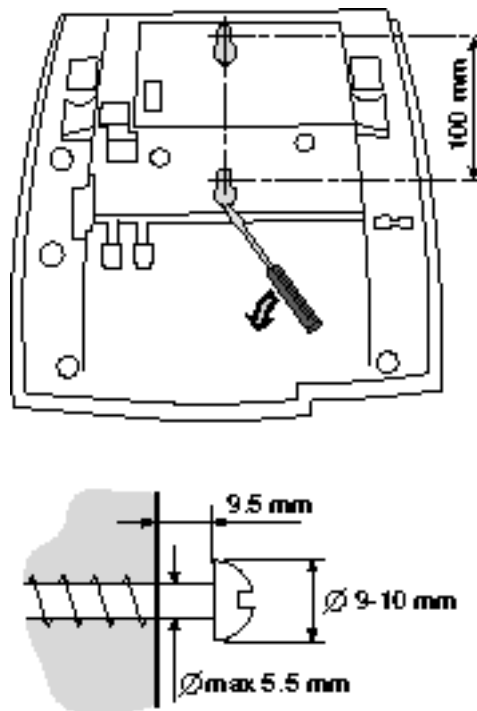- Mount the telephone on the screws and press it down on the keyholes.

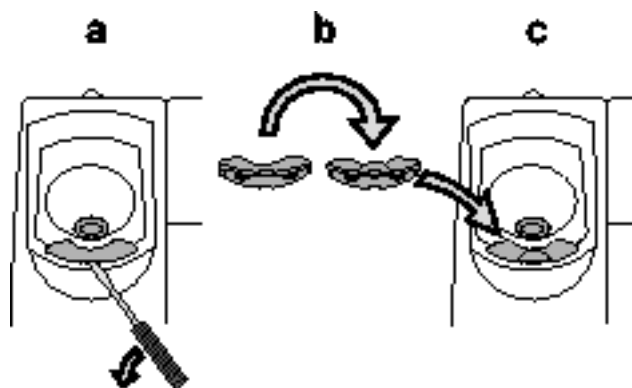**Figure 2:   Positions and dimensions for screws**

Figure 3:   Changing the hook position

7.5   LEVEL ADAPTATION FOR PEOPLE WITH IMPAIRED HEARING (HA-LEVEL)

To increase the receive level both for the handset and the headset (for people with impaired hearing), the keys **C, * and 5** are pressed at the same time for 5 seconds, after a tone the display shows setting mode. By pressing the Line 1 key the amplification can be set ON (LED lit) and OFF (LED not lit). ON position gives an extra amplification of 5 dB. Press # to return.

Note: The handset is as standard equipped with a hearing aid coil.

7.6 DOWNLOADABLE FW

The feature downloadable FW is enabled in the telephone. The feature is not controlled from the telephone, but from the system. The revision of the FW can be obtained by pressing **C**, * and **4** at the same time during one second. On the display is the FW number and revision status shown, i.e. CAA 158 0026 RXX. The revisions of the font files are only available with commands from the exchange.

7.7 USING DBC 22X PHONES TOGETHER WITH CT ADAPTERS

When using a DBC 22x phone together with a CT adapter, the phone must be configured for short signals. Follow the steps below to configure the phone for short signals:

1. Make sure that the phone is using a firmware with revision R4E or later.
2. Connect the line cord directly to a wall box, without using the CT adapter.
3. Press C, *, and 4 simultaneously. A confirmation tone will be heard.
4. Activate short signals by pressing * and 0 simultaneously.
5. Unplug the line cord from the wall box and connect it at the operator position, including the CT adapter.

This procedure can also be applied for reconfiguring the phone for long signals.

7.8 POST INSTALLATION MEASURES

Connect the extension line and check that a call can be established from and to the DTS.

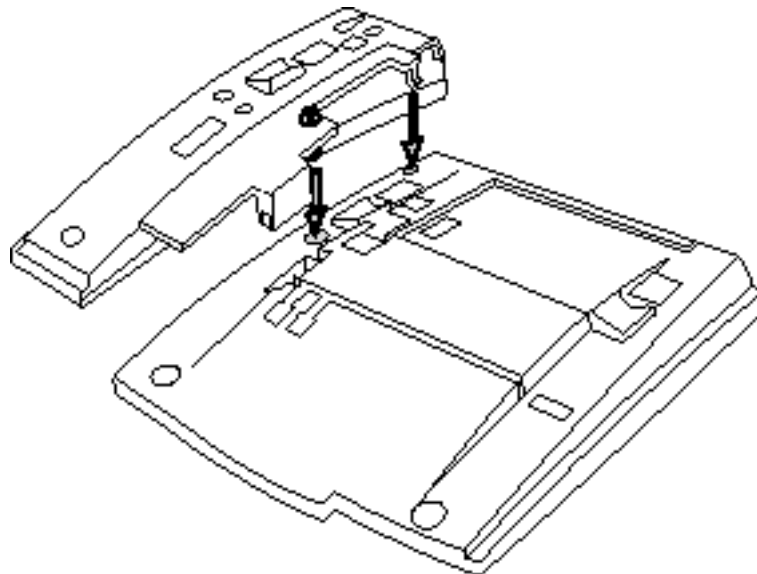# 8 INSTALLATION OF EXTRA KEY PANEL DBY 419 01

Note: The number of extra key panels is depending on to which exchange and system release the telephone is connected and the type of DTS the key panel will be connected to. E.g. for DBC 222 a maximum number of one extra key panels can be connected, and four extra key panels can be connected to the DBC 223 and DBC 225.

8.1 INSTALLATION OF EXTRA KEY PANEL DBY 419 01

Make necessary arrangements to avoid electrostatic discharges.

- Disconnect the DTS from the exchange.

- Remove the feet.

- Attach/snap the DBY 419 01 to the telephone, see Figure 4 Attaching of the DBY 419 01 to the telephones on page 12.

- Press down at the connector position to secure good contact, see Figure 5 Securing good contact of the DBY 419 01 on page 13 and see Figure 6 Securing good electrical contact on page 13.

- The procedure above is repeated for the next DBY 419 01.

- Mount the proper quantity of feet in recommended positions, see Figure 7 Feet positions with 1 to 4 pcs DBY 419 01 connected (rear view) on page 14.

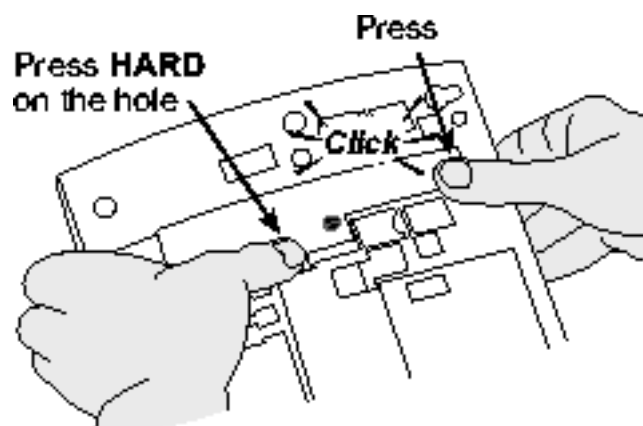**Figure 4:   Attaching of the DBY 419 01 to the telephones**
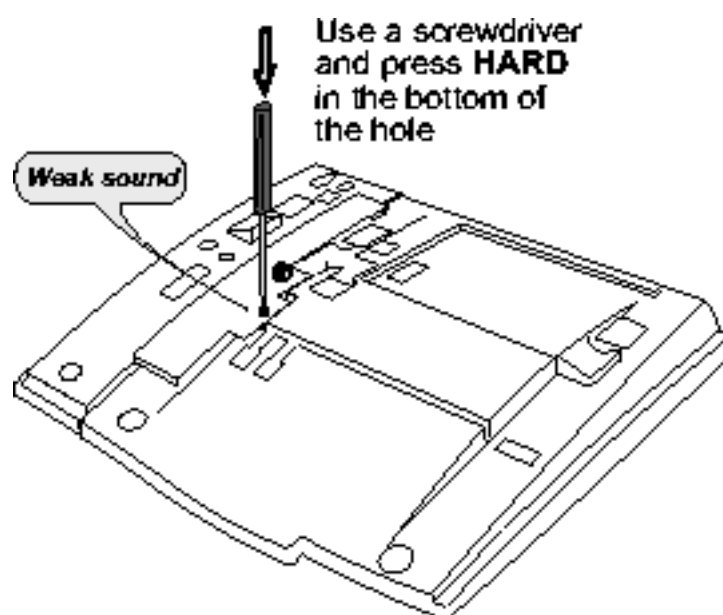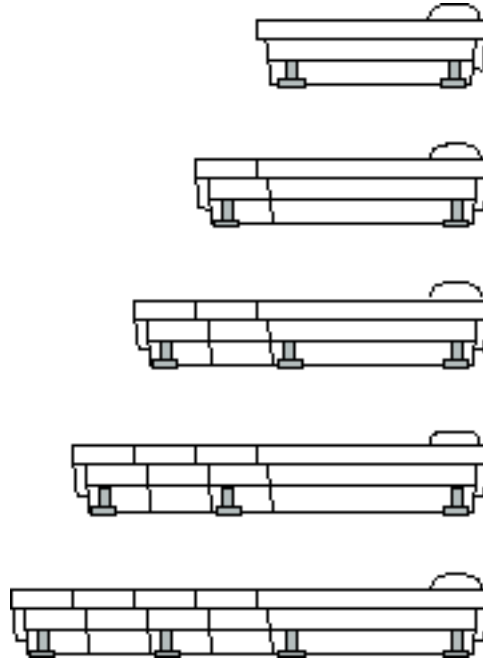
Figure 5:   Securing good contact of the DBY 419 01

Figure 6:   Securing good electrical contact

Figure 7:   Feet positions with 1 to 4 pcs DBY 419 01 connected (rear view)

8.2   POST INSTALLATION MEASURES

Connect the telephone with the extra key panel(s) DBY 419 01 to the extension line and verify that the bottom LED at each DBY 419 01 is activated during start-up. Establish a call using one key on each DBY 419 01.
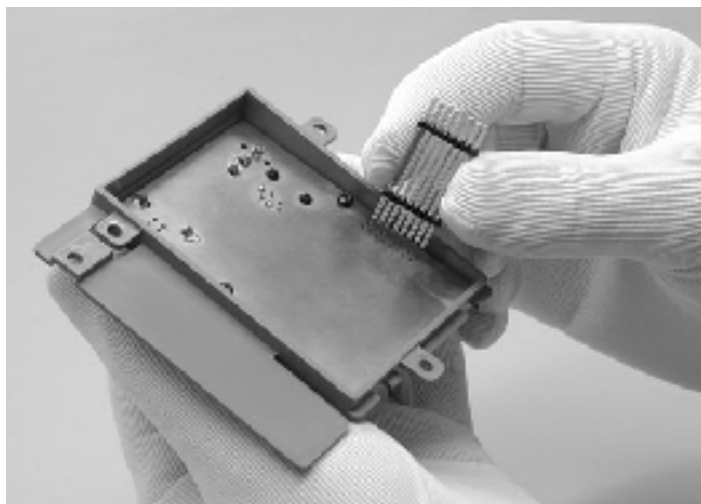
9 INSTALLATION OF OPTION UNIT DBY 420 01

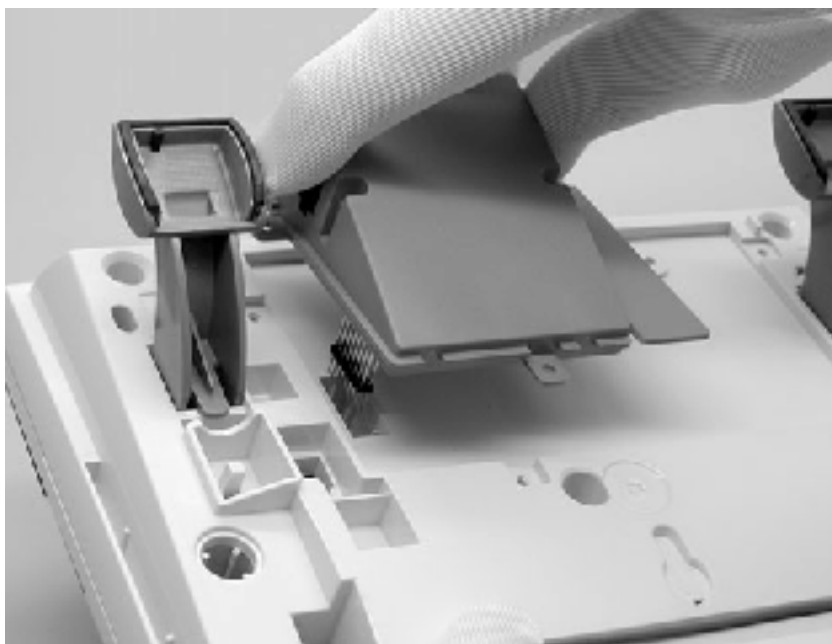Make necessary arrangements to avoid electrostatic discharges:

• Disconnect the telephone set from the exchange.

• If the option unit is to be mounted on a DBC 222, break the part A away, see Figure 8 Breaking cover part away for DBC 222 on page 15.

• Mount the pin connector to the option unit, see Figure 9 Mounting of pin connector on page 15. Avoid if possible to touch the contacts.

• Connect the option unit to the telephone, see Figure 10 Mounting of Option unit to the telephone on page 16 and also see Figure 11 Press down the Option unit to secure good contact. on page 16

• Secure the option unit with the three screws (Screwdriver for Torx No. T8).
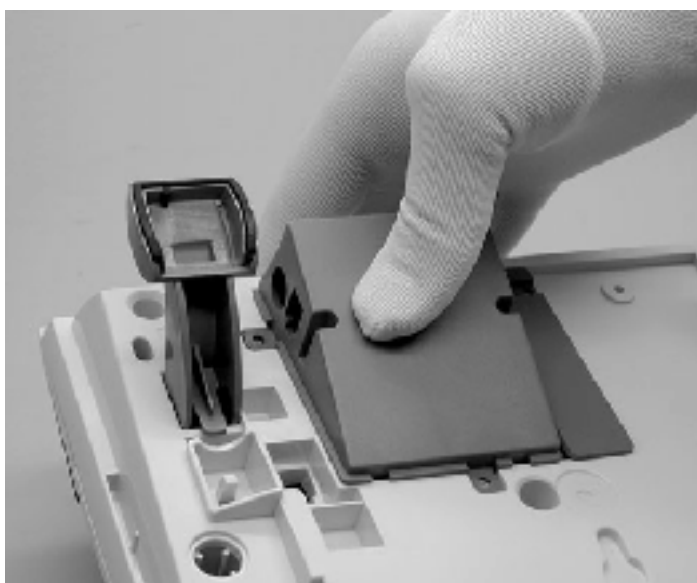

Figure 8:   Breaking cover part away for DBC 222

Figure 9:   Mounting of pin connector

Figure 10: Mounting of Option unit to the telephone

Figure 11: Press down the Option unit to secure good contact.

9.1   EXTERNAL FUNCTIONS

For pin outlets of the external functions, see Figure 12 Rear view of DTS/OPI with DBY 420 01 connectors on page 17.
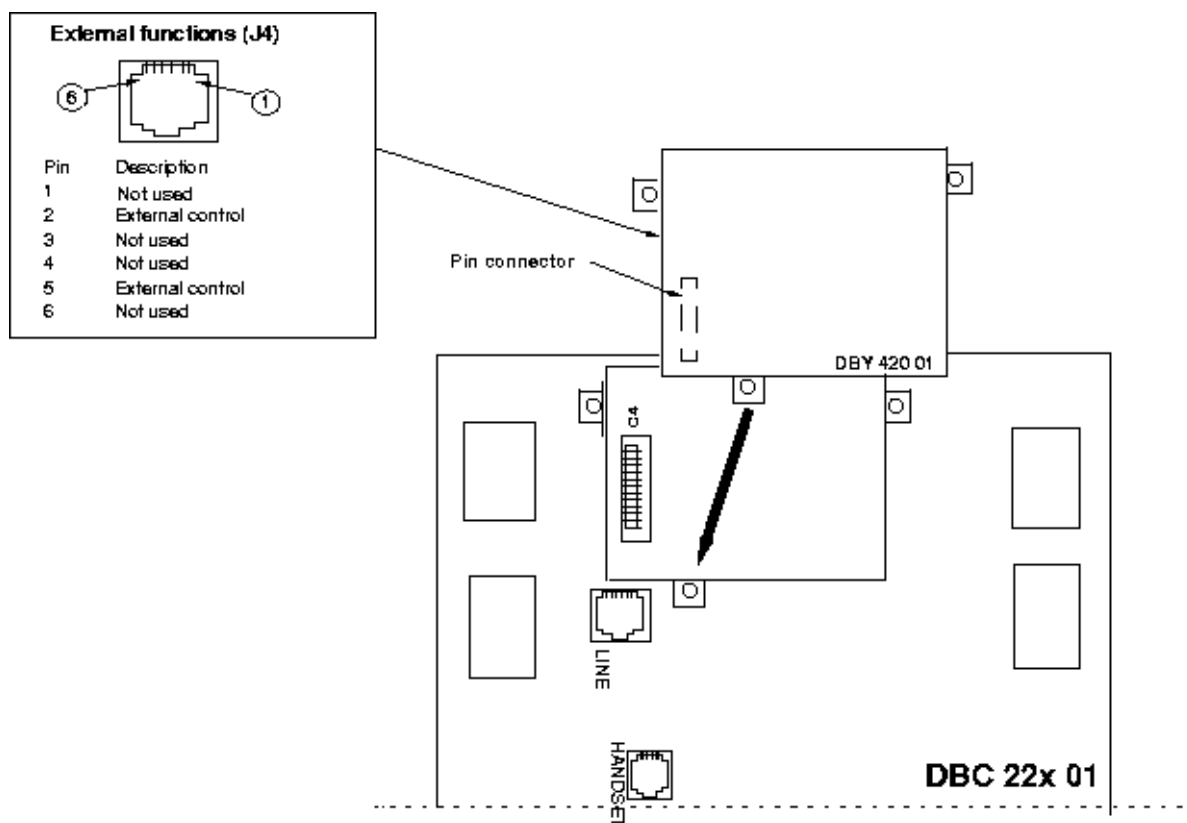
Figure 12: Rear view of DTS/OPI with DBY 420 01 connectors

9.2   EXTRA BELL / BUSY SIGNAL

There are three alternatives using this function. The function is selected by repeatedly pressing the function key, see Figure 13 Indication of function key on page 17, and is indicated by means of the LED on that function key.
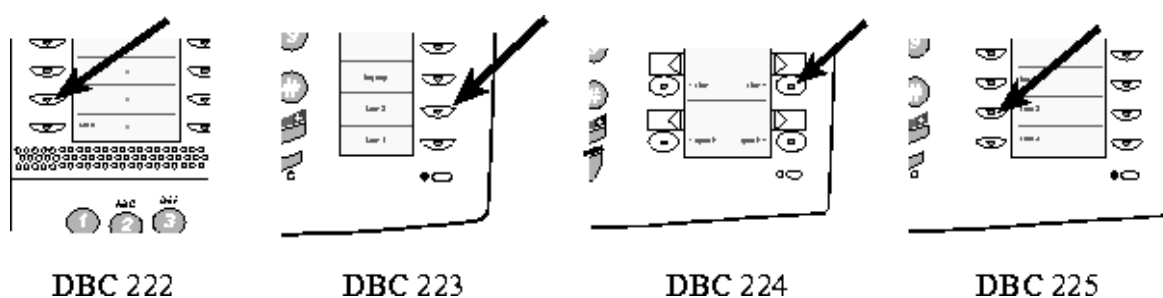

Figure 13: Indication of function key

Extra bell:
> Intermittent active when the DTS receives a ring signal. The key LED shall be set to OFF. The function can be used to control an external alerting device or similar.

Busy signal:
> Steady active when the DTS is in off-hook mode. The key LED shall be set to ON. The function can be used to control a Do-not-disturb lamp at the door or other (not applicable for DBC 224 01/0X001).

Combined Extra bell and Busy signal:

Intermittent active when the DTS receives a ring signal, and steady active when the DTS is in off-hook mode. The key LED shall be set to FLASHING. The function can be used to control an external lamp or other (not applicable for DBC 224 01/0X001).

Note: For Combined and Extra bell, a call on another free line does not activate the Extra bell function.

The function can be reached between pin 2 and pin 5 in jack J4, see Figure 12 Rear view of DTS/OPI with DBY 420 01 connectors on page 17. A short-circuit is obtained when the function is ACTIVE (An opto relay is used to separate the external device electrically from the telephone). Maximum load on EXTERNAL DEVICE is 1 A resistive or 0.3 A capacitive or 0.3 A inductive load at maximum 24 V AC or 48 V DC (An external over-voltage protection is recommended).

9.2.1 BUSY LAMP INDICATION INSTEAD OF RING SIGNAL

When the OPU is connected and there is a second incoming call, it is possible to have no ring signal and only indication on the busy lamp. The following configuration has to be done:

- Enter " Option Unit Settings " by pressing **C,*,1**.

- Press ACCESS2 key until the LED blinks quickly to get the alternative 4.

  When pressing ACCESS2 key, EXTERNAL BELL /BUSY alternatives are changing in a order of: 1->2->3->4->1->2->3->4->1->....

There are the following alternatives when pressing ACCESS2 key:

1. LED OFF: The phone will ring and EXTERNAL BELL lamp will be ON, and BUSY lamp will be OFF when in the call.

2. LED ON: The phone will ring and EXTERNAL BELL lamp will not be ON, and BUSY lamp will be ON when in the call.

3. LED slow BLINK: The phone will ring and EXTERNAL BELL lamp will be ON, and BUSY lamp will be ON when in the call.

4. LED quick BLINK: The phone will not ring and EXTERNAL BELL lamp will ON, and BUSY lamp will be ON when in the call.

Note: ODN or MNS key ring type should not be set to 0.

9.3 POST INSTALLATION MEASURES

Connect the extension line and check that a call can be established and check that the installed extra equipment can be used in both directions (if applicable).