

1.3 OPERATING INSTRUCTIONS

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1.3.1 TELEPHONE STATION

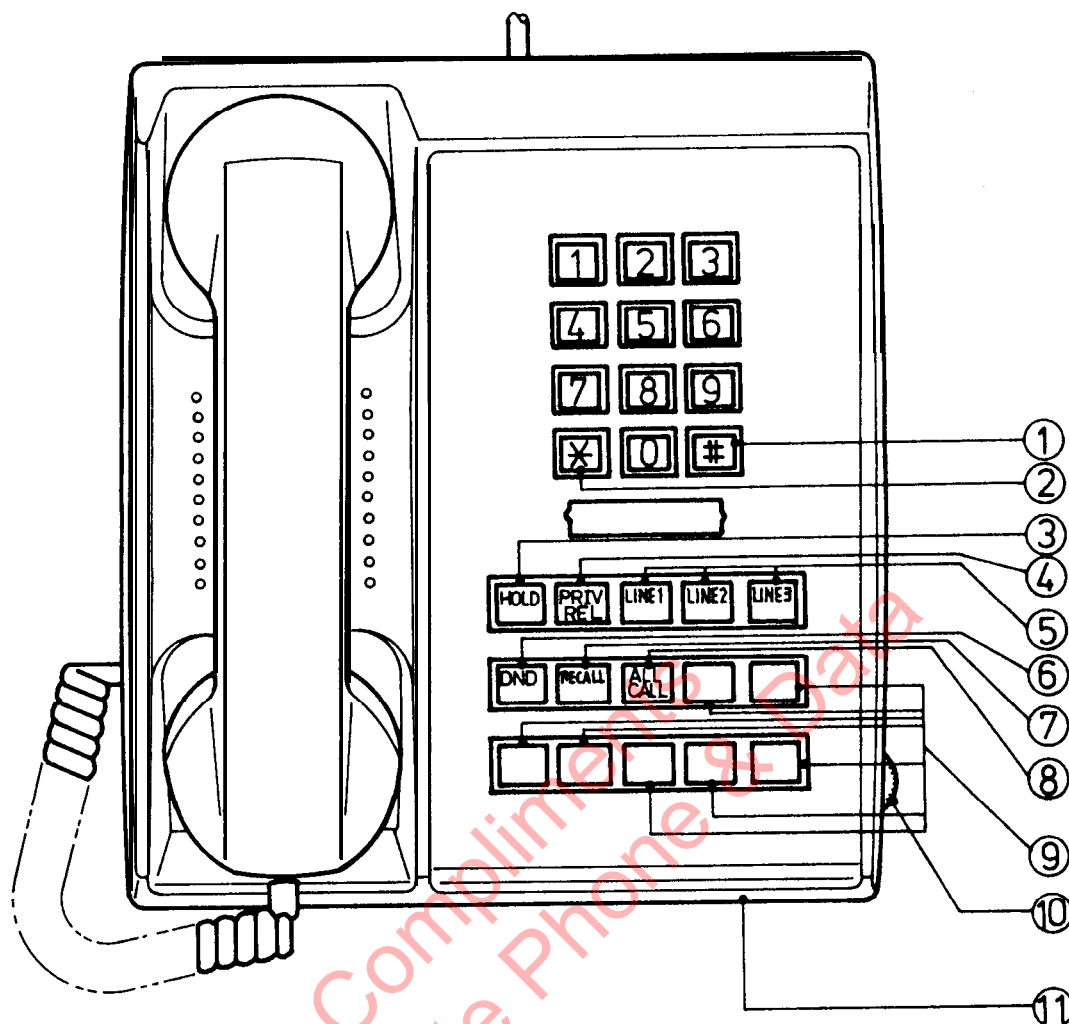






FIG. 1 - N308 TELEPHONE STATION
TS-308-DEC/DEAB/VFAB

1.3.1.1 NOMENCLATURE (Figure 1)

1. Abbreviated Dialling '#' Button
2. Abbreviated Number Coding and Last Number Redial '*' Button
3. Hold 'HOLD' Key
4. Privacy Release 'PRIV REL' Key
5. Exchange Line Keys
6. Do Not Disturb 'DND' Key
7. Recall for PABX working 'RECALL' Key
8. All Call Paging 'ALL CALL' Key
9. Direct Station Selection - Intercom 'DSS' Keys
10. Volume Control
11. Microphone

1.3.1.2 LED INDICATION

Visual display of the status of calls is provided by the following flashing speeds.

LAMP	INDICATION	FLASHING RATE PER MINUTE
 Steady	Busy	Steady
 Slow Flash	Incoming Calls	60 IPM
 Flash	Hold Condition	120 IPM
 Rapid Flash	I-Hold Condition Microphone on	480 IPM


1.3.1.3 PLACING AN EXCHANGE LINE CALL

Lift the handset.


Operate a free Exchange Line Key (5).

After receiving dial tone, dial the desired number.

The selected Exchange Line LED (5) indicates:


 Busy at all stations

1.3.1.4 ANSWERING AN EXCHANGE LINE CALL

 Incoming calls are indicated by a Tone Ringer (if assigned) and the Exchange Line Lamp (5) flashes at all stations.

To answer the call, lift the handset and operate the Exchange Line Key (5).

The Exchange Line LED (5) will then indicate:

 Busy at all stations.

1.3.1.5 ABBREVIATED DIALLING

Up to 50 frequently called telephone numbers (maximum 20 digits) can be coded into the abbreviated dial.

(i) CODING

Lift the handset.

Select a free Exchange Line Key.

Operate the '#' button twice in quick succession (dial tone will cease).

Operate the '*' button.

Dial a two digit abbreviated code (00 to 49).

Dial the required telephone number.

If a pause (fixed duration) is required in the dialled number operate the '*' button twice in quick succession.

Operate '*', '#' in quick succession (tone is now at normal level).

The telephone number is now coded in the selected memory location.

Another number can be stored in a similar manner. To clear all the telephone numbers in the dial:

Lift the handset

Select a free Exchange Line Key

Operate '#, #, *, *' in quick succession.

(ii) **DIALLING USING AN ABBREVIATED NUMBER**

Lift the handset.

Select a free Exchange Line Key.

Operate the '#' button twice in quick succession.

Dial the desired two digit memory location.

The stored number will then be dialled out automatically.

1.3.1.6 LAST NUMBER REDIAL (WITH ABBREVIATED DIAL)

Lift the handset.

Select a free Exchange Line Key (5).

Operate the '**' button twice in quick succession.

The last telephone number dialled on the key pad will automatically be redialled. A pause will not be inserted unless the '*' button was operated twice in quick succession while dialling the number.

1.3.1.7 LAST NUMBER REDIAL (WITH STANDARD DECADIC DIAL)

Lift the handset.

Select a free Exchange Line Key (5).

Operate the '#' button to automatically redial the last telephone number dialled on the keypad.

Note: Pause is not available on this dial.

1.3.1.8 EXCHANGE LINE TRANSFER

There are three methods.

(i) **VOCAL TRANSFER**

Place the call on HOLD by operating the Hold Key (3) and tell the required person to answer the call.



The Exchange Line LED (5) at the transferring station indicates I-HOLD.



The Exchange Line LED (5) at all other stations indicates HOLD.

(ii) **TRANSFER BY INTERCOM**

Operate the DSS Key (9) of the required person (the call will automatically be put on Hold) and announce the call over the intercom.



The Exchange Line LED (5) at the transferring station indicates I-HOLD.



The Exchange Line LED (5) at all other stations indicates HOLD.

(iii) **TRANSFER BY ALL CALL PAGING**

Operate and hold the All Call Key (8) and announce the call.



The Exchange Line LED (5) at the transferring station indicates I-HOLD.



The Exchange Line LED (5) at all other stations indicates HOLD

The transferred call is taken by lifting the handset and operating the nominated Exchange Line Key (5).

1.3.1.9 AUTOMATIC RECALL


If the exchange line call is left on I-HOLD for a preset time the holding station will receive the Auto-Recall signal.

1.3.1 .10 EXCHANGE LINE CONFERENCE (OUTSIDE CALL CONFERENCE)


An outside call conference can be arranged by advising another station either vocally or by an intercom call.

(i) V O C A L

An outside call is established

-  The Exchange Line LED (5) at all stations indicates the first station has established an outside call


The first station user vocally requests the second station user join the call by operating the appropriate Line Key (5). The first station user establishes the conference by operating the PRRL Key (7).

-  The Exchange Line LED (5) at all stations indicates busy.


A third station may be added to the conference in the same manner

(ii) INTERCOM


An outside call is established

-  The Exchange Line LED (5) at all stations indicate the first station has established an outside call


The first station user places an intercom call to a second stations requesting the user join an outside call.

-  The Exchange Line LED (5) at the second station indicates HOLD.

The second station user is advised to operate the appropriate Line Key (5) when its LED goes steady. The first station operates the Line Key (5) again and then operates and holds the PRRL Key (4). The PRRL Key (4) is released when the conference has been established.

-  The Exchange Line LED (5) at all stations goes steady indicating the outside call has been re-established.

A third station may be added to the conference in the following manner. Establish a conference between two stations in the manner shown above.

-  The Exchange Line LED (5) at all stations indicates an outside call has been established.

Station one advises the second station user to operate and hold the PRRL Key (4) until the conference has been established.


Station one places an intercom call to a third station requesting the user to join the conference.

-  The HOLD LED (3) at the third station rapid flashes indicating an intercom call.

The third station is advised to lift the handset and then operate the appropriate Line Key (5) when the HOLD LED (3) is extinguished.

The first station then releases the intercom call by operating the appropriate Line Key (5).

-  The HOLD LED (3) is extinguished.

-  The Exchange Line LED (5) at all stations indicates busy.

Three stations and an outside party are now in conference.

1.3.1.11 MULTI-EXCHANGE LINE CONFERENCE (SIMULTANEOUS OUTSIDE LINE CALL)

To set up a conference, a telephone station places an exchange line call. The station places that exchange line on HOLD and then places another exchange line call.

To start the conference, operate simultaneously the two Exchange Line Keys (5), that is, the existing exchange line and the exchange line that was placed on HOLD. A Conference now proceeds between two exchange line parties and one station.

If it is desired to remain speaking to one of the exchange line parties, then operate the corresponding Exchange Line Key (5). To end a conference replace the handset.

1.3.1.12 PLACING AN INTERCOM CALL

Make sure the Hold LED (3) is not lit.

Lift the handset.

Operate the required DSS Key (9) and speak after a Single Tone Burst is heard.

A Single Tone Burst indicates the called station is free to receive the call.

A Double Tone Burst indicates the called party is busy.

A Repeating Tone indicates the called station is in the Do Not Disturb mode.



The Hold LED (3) will light on all stations to show that the intercom link is busy.

1.3.1.13 ANSWERING AN INTERCOM CALL

Incoming intercom calls are indicated by a Single Tone Burst followed by the calling party's voice being heard through the Speaker.

The call is answered as a 'Handsfree Talkback' call, without lifting the handset.



The Hold LED (3) rapid flashes at the called station indicating that the microphone is active.

Operating the DND Key (6) during the call cuts the microphone off, operate again to reactivate it.

The call can be converted from Handsfree Talkback to normal mode by lifting the handset.

1.3.1.14 ALTERNATE POINT ANSWERING

An intercom call to a particular station can be answered at any other station by lifting the handset and operating the Privacy Release Key (4).

1.3.1.15 INTERCOM CONFERENCE

The system may be programmed so that any station may join an Intercom Call which has been established between any two stations with handsets lifted. The third party joins this call by simply lifting the handset. A three way conference is now established. Follow the same procedure if more stations are to join the conference.

1.3.1.16 DO NOT DISTURB

Operate the DND Key (6) to activate the Do Not Disturb facility



The DND LED (6) will light to indicate that the facility is in use and all audible signals will be blocked to that station.

The facility is disabled by operating the DND Key (6) again.

1.3.1.17 ALL CALL PAGING

Make sure the Hold LED (3) is not lit.

Lift the handset.

Operate the All Call Key (8) for the duration of the call.

Release the All Call Key (8) after the announcement is completed.

The paging announcement will be transmitted through the speakers of all stations that are on-hook.

1.3.1 .18 MONITORING WITH AN INTERCOM STATION

Monitoring is only available when the third exchange line is not fitted. For detail on this operation refer to section 1.3.2.1.2 'Monitoring Function'.

1.3.1.19 POWERFAIL

- i) Short AC Mains Failure
If the AC mains is cut for a short period the power fail LED on the Power Supply will light up and calls in progress will be lost. Operate the reset switch located on the power supply to turn the lamp off. On power up the system automatically resets to restore the normal operation of the system. It is not necessary to call for Telecom service.
- ii) AC Mains failure for an Extended Period
The system will automatically assign predetermined telephone stations to one of the three exchange lines. In this situation the facilities of the system cannot be used. The stations are assigned as follows:

Exchange Line Number	Station Number
1	1, 4, 7
2	2, 5, 8
3	3, 6

When AC Mains is restored all of the calls in progress will be lost.

1.3.2 OTHER EQUIPMENT

1.3.2.1 INTERCOM STATION (Figure 2)

1.3.2.1 .1 Nomenclature

- 21. Monitoring Function (MON Key)
- 22. Do Not Disturb (DND Key)
- 23. All Call (AC Key)
- 24. Volume Control
- 25. Microphone
- 26. LEDs

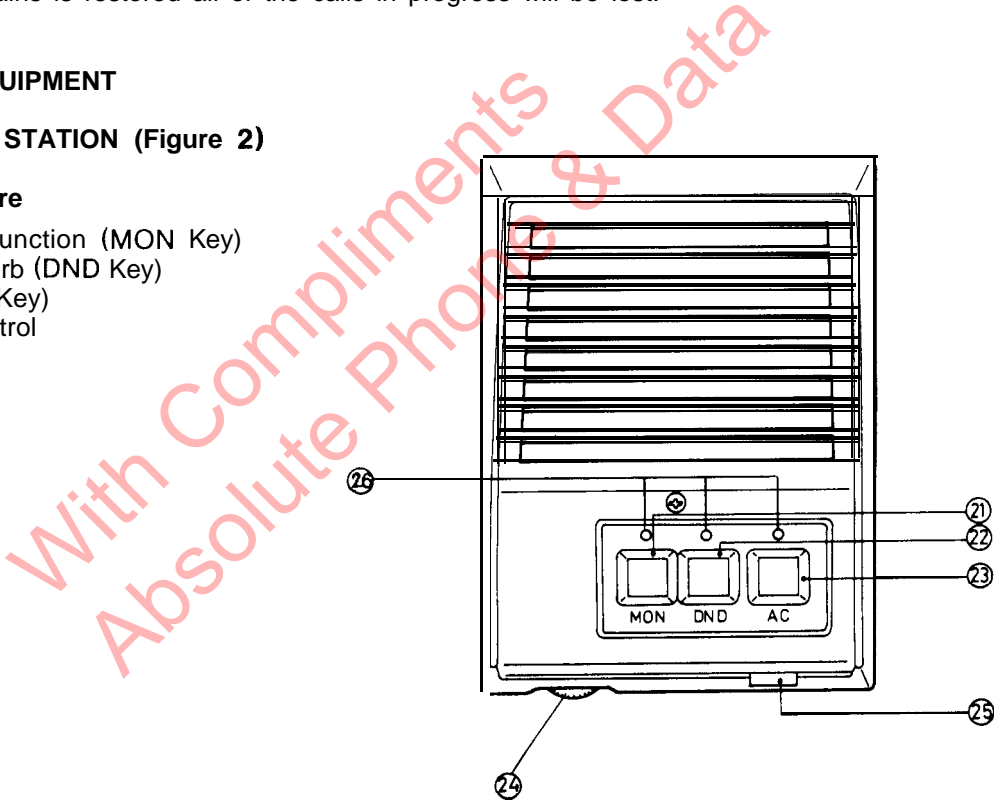




FIG. 2 - N308 INTERCOM STATION
IS-308

1.3.2.1.2 Monitoring Function

Used when up to three Telephone Stations wish to monitor sound in the vicinity of an Intercom Station. The reception at a monitoring telephone station is achieved as follows:

-  Operate the MON Key (21) on the Intercom Station to turn the microphone on. The key will lock and the Monitoring LED will light up.
-  Operate the MON Key (5) (3rd Exchange Line Key) at the monitoring Telephone Station (Monitor LED flashes at monitoring station and is steady at all other stations) to receive sounds from the Intercom Station.


To stop monitoring:

Operate the MON Key (5) at the monitoring station.

Operate the MON Key (21) at the Intercom Station to turn off the microphone.

Note: The MON Key is the third exchange line key on a telephone station, if all exchange lines are equipped monitoring is not possible.


1.3.2.1.3 Do Not Disturb

-  DND Key (22) is operated to block out incoming Intercom Calls, All Calls and Background Music. Operate to lock and operate a second time to release the key.

The Do Not Disturb LED will light up to indicate Do Not Disturb status.


1.3.2.1.4 All Call

To announce a message to all stations in the system, operate the AC Key (23) for the duration of the call. Speak normally towards the microphone in the intercom station.

-  The Hold LED of telephone stations and the All Call LED at the intercom station is lit.

1.3.2.1.5 Receiving Intercom Calls

Handsfree talkback is possible when both the microphone and loudspeaker are activated.

-  An indication that the microphone is in the active state is rapid flash on the All Call LED.

1.3.2.2 DOOR STATION (Figure 3)

1.3.2.2.1 Nomenclature

- 31. Chime Key
- 32. Microphone

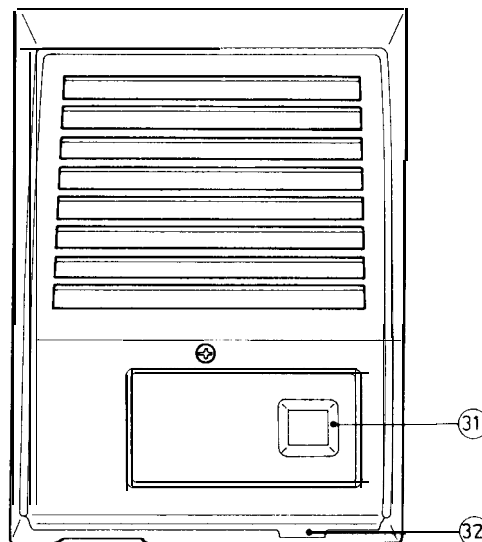


FIG. 3 - N308 DOOR STATION
DS-308

1.3.2.2.2 Operation

The Door Station provides Handsfree Talkback.

When the Chime Key (31) is operated at the Door Station, chime tone will be transmitted to telephone stations and intercom stations.

The Door Station chime is inhibited when a Direct Station Selection Key (9), assigned to the Door Station, is operated.

1.3.2.3 HANDSFREE CONSOLE (Figure 4)

1.3.2.3.1 Nomenclature

- 41. Microphone Cutoff (MIC/OFF Key)
- 42. ON/OFF Key
- 43. Volume Control

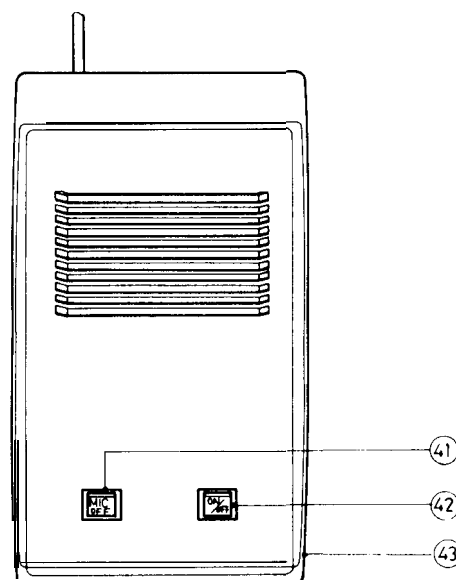


FIG. 4 - HANDSFREE CONSOLE
HFC-N

1.3.2.3.2 Operation

To seize a line:

Operate the ON/OFF Key (42).

The LED (42) will light up.

Then operate an Exchange Line Key (5) on the Telephone Station.

To release the line:

Operate the ON/OFF Key (42) again to release the line.

The LED (42) will go off when the line is released.

Transferring a call from the telephone station handset to the handsfree console:

Operate the ON/OFF Key (42) with the handset off-hook, then replace the handset.

Transferring a call from the handsfree console to the telephone handset:

Lift the handset and the handsfree console will be automatically released.

Privacy:

Operate the MIC/OFF Key (41) to cut off the microphone. Operate again to reactivate. The LED (41) indicates status.

1.3.2.4 REMOTE EXTENSION AND TIE LINE INTERFACE UNIT (RTIU) (Figure 5)

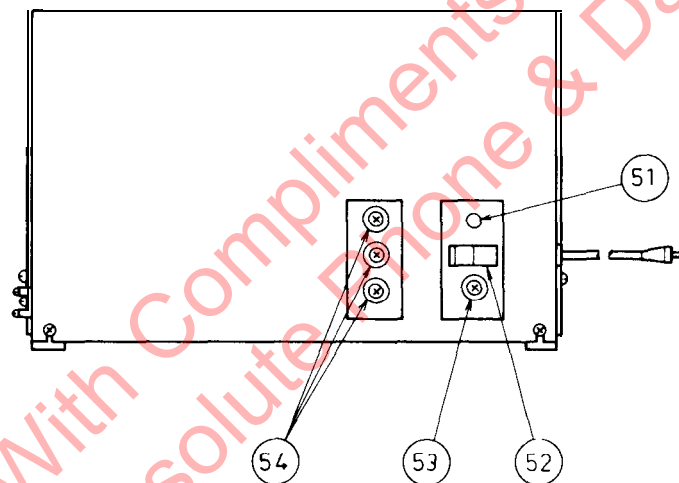


FIG. 5 - REMOTE EXTENSION AND TIE LINE INTERFACE UNIT
RTIU-N

1.3.2.4.1 Nomenclature

51. Power Failure Indicator

52. On/Off Mains Switch

53. AC Mains Fuse

54. Fuses

Remote Extension: Any Decadic Telephone.

Remote Extensions are located in premises remote from the system and are restricted in their use of system facilities.

1.3.2.4.2 Operation

(i) Tie-Line Call:

When a system uses a Tie Line, the Tie Line takes the place of an Exchange Line. Therefore, a Tie Line appears as an Exchange Line Key on each telephone station.

Placing a Call:-

Lift the handset.

Select an exchange line key which is assigned to a tie line.

Wait until the call has been accepted.

If the type of tie-line is Loop-In/Ring-Out the caller will hear ring tone while calling. For Ring-In/Ring-Out no ring tone will be heard.

Answering:-

Incoming calls are handled the same way as an exchange line call.

(ii) Remote Extension Calls:

Intercom Calls:-

Originating at a
Remote Extension

Lift the Handset.

Dial the desired station call code after receipt of internal dial tone (numbers 201 to 208, the digits 20 are the station call code and the last digit is the station number). The call may proceed.

Answering at
Remote Extension

Incoming calls are indicated by ringing of the telephone bells. To answer the call, lift the handset.

Exchange Line Calls:

Placing a Call from
a Remote Extension

Call a telephone station and ask that station to make an exchange line call to the required number. The station lifts the handset, dials the number and places the line on hold, and then informs the extension of the line number. The station replaces the handset and the remote extension then depresses the switch hook momentarily. Wait for internal dial tone. Dial exchange line selection code (31 to 33)

Answering at the
Remote Extension

It is not possible to directly answer incoming exchange line calls. Answering must be performed by a telephone station and the call must be transferred to the Remote Extension.

Transferring to a
Remote Extension

A telephone station places the call on Hold, then places an intercom call to the Remote Extension.

The station user informs the extension of the exchange line on which the call had been answered.

The station handset is placed on-hook.

The Remote Extension depresses the switchhook momentarily.

Waits for internal dial tone.

Then dials the appropriate exchange line selection code (numbers 31 to 33) to receive the call.

Transferring from a
Remote Extension

Depressing the switchhook momentarily will place the exchange line on hold, dial tone will be sent to the Remote Extension.

Then dial the desired station call code. If the station is busy or it does not respond to the call, depress the switchhook and dial 3. The Remote Extension will reanswer the held line. Repeat the above operation if necessary.