HOTEL MOTEL MANUAL

BX SERIES

Ver: 2

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THIS MANUAL WAS WRITTEN FOR SOFTWARE VERSION CX8AR03q/MS-I01sh/PMS-8. WHILE ALL CARE HAS BEEN TAKEN TO ENSURE ACCURACY IT RESTS WITH THE INSTALLER TO ENSURE THAT THE FUNCTIONS PERFORM AS TO THE CUSTOMERS REQUIREMENTS. THE POLICY OF AUTO TELECOM IS ONE OF CONTINUAL IMPROVEMENT AND LATER VERSIONS OF HARDWARE AND SOFTWARE MAY CONTAIN ENHANCEMENTS TO THE OPERATION OR FUNCTIONS OF THE BX8 and BX320. AUTO TELECOM DOES NOT AUTOMATICALLY PROVIDE LATER HARDWARE OR SOFTWARE VERSIONS TO ENHANCE FEATURES OR OPERATION AND A CHARGE MAY BE INCURRED FOR UPGRADES.

NOT ALL THE FEATURES MENTIONED IN THIS MANUAL ARE AVAILABLE IN ALL HYBREX SYSTEMS. AUTO TELECOM IN RESPONDING TO MARKET REQUIREMENTS WILL ADD NEW FEATURES TO ONLY ONE SYSTEM AT A TIME AND IT MAY HAPPEN THAT A FEATURE THAT IS DESCRIBED HERE MAY NOT YET BE FITTED TO THE WHOLE RANGE. WHERE PRACTICAL FEATURES WILL BE EXPANDED ACROSS THE FULL RANGE AS PART OF FUTURE SOFTWARE DEVELOPMENT.

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Introduction

The BX8 and BX320 are both fitted with many features designed to make them the best, most cost effective choice for small and medium sized (Up to approximately 230 Rooms) Hotels and Motels available in Australia. The following features are available in one or both systems.

Mini Call Accounting.
Mini Call Accounting allows the Hotel / Motel operator to provide a printout of calls made and costings to each room individually with a minimum of additional hardware.
Mini Call Accounting allows the system to record details of all Wake up calls made or attempted to be made and a record of whether each was successful or if unsuccessful the reason why.
Mini call accounting allows the Hotel/Motel owner to set a multiplier to decide how much they will charge for each metering pulse received from the telephone exchange and will automatically multiply the pulses received by the cost to give a cost per call and a total cost per room.
Mini Call Accounting allows the operator to set a Credit Limit so that when a caller has made enough calls to reach the limit set they will not be able to make any further calls without consultation with the operator.
Mini Call Accounting allows the operator to see a total of all calls waiting to be charged out against all rooms.
Only Telstra customers are able to use Mini Call Accounting because of the need for Meter pulses.
The hardware requirements are Meter Pulse Detection Cards(12Khz/50Hz) for each outgoing trunk, the B2-RSC Serial Interface and a low cost Serial printer (we recommend the Epson LX300 as a proven cost effective solution).

Check In/Check out.
The operator phone can check in a phone when the guest arrives and then check out when they leave. Once checked out the phone is locked and staff are unable to make outgoing calls thus protecting the operator from fraudulent use. The locked phone can still call 000 for emergencies.

Clean Room Status
On the BX systems when a room is checked out it will flash red on the DSS console (optional programming required). When the staff have completed cleaning the room they lift the phone and dial a code [776] which will change the flashing red light to a solid Green light indicating the room is ready for occupancy by new guests.

Wake Up Call
Either the operator or the room itself can set a wake up call for the room. This call will be received by the room at the appointed time and the room will hear Music/DND Tone or if the optional Voice card is fitted then can hear a message advising them it is a wake up call.

Voice Service Card
The optional Voice Service Card allows the use of several features including the voice message for wake up calls, the voice message to request a guest to contact reception to collect a message and the ability to allow callers to ring directly to guests rooms. In smaller motels where the reception is not manned 24 hours a day the system can be programmed to automatically answer all calls after hours with a voice message and give the caller the opportunity to dial a room number direct. The system can be programmed so that unsuccessful (wrong number or pulse dialling) calls are cut off or alternatively sent to an answering machine to take a message. Automatic supervision signals (Polarity Reversal or Busy Tone Detection) can be used to prevent unsuccessful calls keeping lines open for an excessive time period.

ISDN Indial (BX320)
Where ISDN is available the BX320 can be set up for Indial operation. This can be used by resort type units where guests stay for more than one or two nights. Each room can be assigned an indial number allowing guests to give their number to friends or family and they can be contacted direct rather than going through the front desk and if the units do not have 24 hour reception the guest is still able to receive calls.

PMS(Fidelio) Integration (BX320)
This feature allows the BX320 to interface with the Micros Fidelio Property Management System. Property Management Systems allow the Front Office computer to control Check In/Out, Guest names, Room Change, Wake Up calls, Message Waiting, Clean Room status and DND status. The PMS package will also receive charging information from the BX320 for billing purposes.

Polarity Reversal Detection for Charging
Telstra customers are able to receive meter pulses for charging, however Customers of Optus or other carriers are only able to receive Polarity Reversal signals to indicate that the call has been successful and to start the charging time. This method requires that the operator has an external Call Accounting package or device to charge the calls. The Hybrex is able to receive polarity reversal signals without additional hardware.

Message Waiting
Several different methods of message waiting are available depending on the system installed and the customers requirements. The BX8 supports Intercom Ring Signalling and also Ring Burst signalling. Ring Burst signalling is designed to work with a special handset modification and will provide a flashing red light on the phone when a message is waiting for the Guest. The BX320 can use both of these methods but can also now be fitted with the optional SLUM card which provides the 90V DC signal needed to drive a standard Neon message waiting light on the majority of message waiting phones sold in Australia.

Single Digit Dialling
Rooms can be set to dial up to 5 different extensions within the Hotel just by dialling 1 digit. For instance they could dial 1 for the Bar, 2 for the restaurant, 3 for room service etc. This is in addition to dialling 9 and 0 for the operator and outside lines. Rooms can still dial each other direct (if allowed) by prefixing the room number with a 6

Room To Room Calling Restriction
If required rooms can be prevented from dialling each other.

Hot Line
Individual phones can be set to automatically call either an extension or an outside number just by lifting the handset. For instance a phone could be installed in the reception area which when taken off hook would automatically call a taxi, or a phone in reception could be set to call another extension (maybe a cordless phone) if the front desk was unattended.

Flexible Room Numbering
Extensions can be renumbered to line up with room numbers and can be 2, 3 or 4 digits in length.

Busy Console Queuing Capability
The system can be programmed so that calls to a busy console will not receive busy tone but will receive Ring Back Tone and will camp on to the busy Console(s). The console will receive Off Hook Busy Remind signal for the camped on call.

1. Mini Call Accounting Operation

! **Hotel Key Operation:**

1. Check in:

1.) Press [Hotel], [1]
2.) Enter the station number
3.) Press [Save]
4.) Enter Toll class if required and press [Save] otherwise step 5.
5.) [Spk]

```
Check In
Set Toll Class 0
```

If the room is already checked in the display will show

```
Check In
Room Occupied
```

Previously set Morning Calls will be disabled and Morning Call History reset to nil for this room.

2. Check out:

1.) Press [Hotel], [2]
2.) Enter the station number
3.) [Save]

```
Check Out
200          SAVE
```

3. Charge Inquiry:

1.) Press [Hotel], [3]
2.) Enter the station number
3.) [Save]

```
111     IN
000022-00000550
```

The LCD will display the In/Out status as well as the charges for the room.

4. Set Rate for Meter Pulses:

1.) Press [Hotel], [4]
2.) Enter the rate for each meter pulse (BX8 and newer BX320) or one rate for the older BX320
3.) [Save]

```
Metering Rate 01
00 00 00
```

BX8

```
Meter Rate: 00.00
00.00   00.00
```

BX320

The system will charge the first meter pulse at the first amount entered, the second meter pulse at the second amount entered and the third meter pulse and all following at the third amount entered on the BX8 and newer BX320. On the older BX320 only 1 rate is able to be set You **MUST** enter all 3 amounts even if they are the same amount or calls will not charge correctly.

5. Print out:

1.) Press [Hotel], [5]
2.) Enter the station number
3.) [Save]

If there are no records the display will show

```
Print Out
No Records
```

If there are records the print out will be this format

Mini Call Accounting Output Data Format

```
HOTEL   *** HYBREX BX320                                *** 03.06  10:29
ROOM    123
 TK.    DATE    TIME    DURATION    TELEPHONE NUMBER        UNITS   COSTS
________________________________________________________________________
 01     06.03   08:45   00:04'20"   0733914222              000003  00000075
 05     06.03   08:48   00:08'35"   0395782222              000004  00000100
 02     06.03   09:01   00:03'15"   96113651                000001  00000025
 01     06.03   09:16   00:05'46"   0722233156              000012  00000300
 04     06.03   09:17   00:10'20"   001188629645764         000017  00000425
________________________________________________________________________
TOTAL:                                                      000038  00000925
```

6. Set page length:

1.) Press [Hotel], [6]
2.) Enter the number of lines for each page (Minimum line number: 10 lines)

3.) [Save]

```
Page Line
20
```

7. List the number of records stored in the system:

1.) Press [Hotel], [7]

```
List Records
0005
```

The maximum number of records for the BX8 is 350 and for the BX320 it is 1400.

8. Print out the total cost of all extensions:

1.) Press [Hotel], [8]
2.) [Save] to print

```
All Ext Total
000018-00000450
```

9. Set credit limit for extensions:

1.) Press [Hotel], [9]
2.) Enter the station number to set credit limit for
3.) Enter the credit (unit: Meter Pulses, Maximum: 65,535)
4.) [Save]

```
Ext Limit Set
000000
```

10. Print out Morning Call History:

1.) Press [Hotel], [0], [*]
2.) Enter the station number to check
3.) [Save]

```
Print Function
* Print # Clear
```

11. Clear Morning Call History:

1.) Press [Hotel], [0], [#]
2.) Enter the station number to clear
3.) [Save]

Mini Accounting Morning Call History Output Data Format

```
03/06 10:25 Room 0011 Morning Call History
-----------------------------------------
Day Time  Status
 03 80:00 N
 03 08:04 B
 03 08:06 A
```

N: Station did not answer
B: Station was busy
A: Station answered

If there are no morning calls recorded for the station then the screen will show

```
Print Function
No Records
```

11. Clear Room Messages:

1.) Press [Hotel], [*]
2.) Enter the station number to clear the message for.
3.) [Save]

```
Cancel Room Msg
112          Save>
```

12. Change Room Status to Clean:

1.) Press [Hotel], [#]
2.) Enter the station number to change status to clean.
3.) [Save]

```
Set Room Status
112          Save>
```

PMS Integration for Micros Fidelio

Fidelio is a software package for Motel use which is used by the Front Office to record all guest details, control the telephone system and do all billing for the Guest for rooms, telephone, Bar, Restaurant and miscellaneous items. It can also be used to set messages to the rooms, set wake up calls to the rooms, set room DND, receive room status from the Hybrex and supervise the delivery of Morning calls. Micros terminal equipment is often used in conjunction with the Fidelio software for restaurant and bar terminals and magnetic stripe key writer/readers. The connection between the 2 systems is via a RS232 cable from the Fidelio Server PC to the Hybrex MPU serial connection. The standard BX to PC 6 wire cable is used for the interconnection. The Fidelio link file has been standardised at 2400 Baud, No parity, 8 data bits, 1 stop bit.

When a guest checks into the Hotel/Motel their details are recorded into the front Office PC and when completed the PC will Check In the Room and enter the guests name into the Hybrex's programming so that calls from the room to an LCD display phone will display the guests name to the answering staff. Credit limits if needed are controlled by Fidelio not the Hybrex.

Fidelio uses an SMDR format that is totally different to the normal Hybrex output and if PMS is enabled there will be no normal SMDR output to the Serial port.
Fidelio is designed to work with Meter Pulsing and if this is not available a separate Call Accounting package which must be Fidelio approved is needed to translate the SMDR data to a format that can be used by Fidelio. This may require a separate PC to be used as an SMDR interface.

When a wake up call is set by the front Office it is entered into the Hybrex straight away by the PC and the Hybrex will then take charge of delivering the wake up call. If the Hybrex has Morning Call history enabled and the Room does not answer the Morning call then the Hybrex will notify Fidelio of the inability to deliver the call. IF Fidelio has a printer connected then the message will be printed out otherwise there will be notification to the PC package. The Hybrex will still continue to try and deliver the Morning Call and also notify the Console phone that it is unable to wake up the Room. It is also possible to still use the Hybrex Console to set Morning calls without involving the Front Office PC in the process.

When a Message is received for a guest it is recorded in the Fidelio PC which will then turn on the MW light on the guests phone. The guest will respond to the message by calling the Console rather than dialling 76. This will not cancel the MW unlike in previous versions. When they call reception and the message is read to the guest and acknowledged in the PC then the MW is turned off by the PC. This is a safety issue because Fidelio will not turn off the MW key until ALL messages held for the room are opened and acknowledged.

When room DND is set (from the PC) then no calls can be made to that room except for Morning calls which will still be delivered.

If the guest changes rooms then the Front office will notify the Hybrex which will Check out the old room, Check in the new room and change the name and if any Message wait light has been set it will be transferred to the new room.

Once the guest checks out then the PC will also check out the room and mark it as Out and Dirty. When the cleaner cleans the room then they will on leaving the room use the phone to dial a code which will mark the room as Out and Clean and ready to re let in Fidelio.

Set Morning Call:
When the Console phone is not in use:

Prog **Redial** **Ext No.** **Alarm Time** **SAVE** **SPK**

OR

Funct. Key **Ext No.** **Alarm Time** **SAVE**

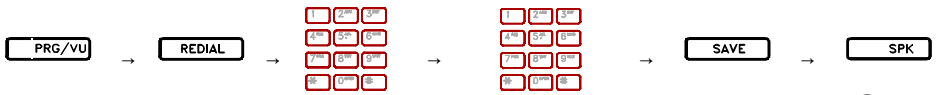
When the Console phone is in conversation:

Spd **Prog** **Redial** **Ext No.** **Alarm Time** **SAVE** **SPK**

The alarm time format is as following:
HH:MM DD HH = Hour
MM = Minute
DD = 99

Cancel Morning Call:

When the Console phone is not in use:



Prog **Redial** **Ext No.** **Alarm Time** **SAVE** **SPK**

The alarm time format is as follows:
HH:MM DD HH = Hour
MM = Minute
DD = 00

3. Setting the time from the extension itself (Key Station).

Phone is not in use:

Prog **Alarm Time** **99** **SAVE** **SPK**

Press PROG, HOLD, Hour (2 digit), Minute (2 digit), 99, SAVE.

To cancel the setting

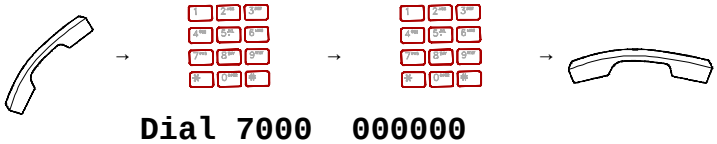
Prog

press PROG, HOLD, HOLD.

4. Setting the time from the extension itself (ANALOGUE).

Dial 700 **Alarm Time** **99** **Dial # or**

Lift handset, dial 700, Hour (2 digit), Minute (2 digit), 99, # (or hang up).



Dial 7000 000000

To cancel the setting lift handset and dial 7000, 000000, and hang up.

In all of the above operations the station will receive 1 Morning call only but if 09 is substituted for 99 the station will receive a Morning call EVERY morning at this time until the procedure is cancelled.

MORNING CALL OPERATION.

1. Voice card fitted.

At the pre-programmed time the system will call the extension automatically and if answered will play the voice message to the extension.

If the extension is busy the message will be placed in the queue buffer and every 2 minutes an attempt will be made to send the message until the call is successful.

If the extension does not answer the ring will continue for 50 seconds and then the call will be placed in the queue buffer and the system will attempt to deliver the message until successful.

Once a message has been placed in the queue buffer the MSG lamp will be flashing on the console to indicate that a morning call has been unsuccessful and the console may attempt to send the message manually by pressing SPD, MSG. Even if the call is unsuccessful the call will be cancelled unless the console presses SPD again before hanging up.

2. No Voice card fitted.

At the pre-programmed time the MSG light will flash on the console and the console can then deliver the message manually by pressing SPD, MSG and speaking to the extension. If the call is unsuccessful the console MUST press SPD before hanging up to retain the call in the system.

Hardware Requirements and Programming

The Mini Call Accounting feature requires that the BX system be fitted with meter pulse cards for each outgoing trunk. Auto Telecom Corporation supplies 12 kHz meter pulse cards only. Auto Telecom Australia now manufactures a 50 Hz metering card for where 12 Khz can not be used or is not available. We reccommend that 12 Khz is used wherever it is available and you are no more than about 4Km from the exchange. A B2-RSC card and a serial printer are required to provide the printout. The Epson LX300 is recommended as a reliable cost effective unit. This printer will cost around $250 and is connected to the Hybrex serial port using the following cabling configuration.

BX to Epson 6 wire connection

BX 9 Pin		**PRINTER/PC 25 pin**
2-RD	>	2-TD
3-TD	>	3-RD
4-DTR	>	6-DSR
5-GND	>	7-GND
6-DSR	>	20-DTR
7-RTS & 8-CTS	>	5-CTS

This configuration has been used with the Epson LX300 printer for Mini Call Accounting on thousands of sites. There are other suggested methods of connecting the BX and printer using less wires and some jumpers however this method is the most reliable one so far found and it is not recommended that any others are used. It will be necessary to set the printer to the correct Baud rate, Parity, Data and Stop Bit. The default is 1200,n,8,1 for the BX8 and 2400,n,8,1 for the BX320. The BX installation manual contains some suggested connection diagrams for other serial printers.

When setting up a printer **DO NOT** enable Mini Call Accounting until the printer is proven to be working with the standard SMDR. If the printer is off line or not working correctly it can interfere with the correct operation of Check Out in particular

! Related system programming:

Mode 05-04-01. SET RS232 Baud Rate:

0=1200 1 = 2400 3 = 3600

Mode 05-03-06. Station Number Digit Length

2 =2 3 = 3 4 = 4

Mode 05-05-01. Morning Call Signalling and Record Morning Call Delivery.

0 = Use the VPC channel to perform Morning Call service.
1 = Use background music or DND tone to perform Morning Call service.
2 = Use VPC channel to perform Morning Call service and use SMDR output for Morning Call History.
3 = Use background music or DND tone to perform Morning Call service and use SMDR output for Morning Call History.

Mode 05-08-05. SLT programming digit:

0 = Disable 1 = Enable

Mode 05-09-02. Camp On to Busy Console:

0 = Disable 1 = Enable

Mode 05-12-07. LED Indication of Check In/Check Out and Clean Room Status:

0 = Disable 1 = Enable

Mode 05-13-01. Enable PMS (Fidelio) Integration (Bx320-PMSx Software):

0 = Disable 1 = Enable

Mode 07-gp Flexible Key Group Assignment:

Add function code 59 for [Hotel] key.

Mode 08-gp Flexible DSS Key Group Assignment:

Programs the key assignment for the DSS Console(s)

Mode 14-01-08 Polarity Reversal Detection/Enable Mini Call Accounting:

This parameter enables polarity reversal detection for accurate timing of calls and also enables the Mini Call Accounting feature. 4 is the correct setting for Mini Call Accounting.

0= Do Not Detect P.R. / Normal SMDR format output
1= Detect P.R. / Normal SMDR format output
2= Do Not Detect P.R. / Simple SMDR format output
3= Detect P.R. / Simple SMDR format output
4= Do Not Detect P.R. / Enable Mini-Accounting Feature
5= Detect P.R. / Enable Mini-Accounting Feature

* If the Mini Call Accounting Feature has been enabled, the system will not record the call if no meter pulses are received.

Mode 43-CN-01 Flexible Renumbering:
Mode 43-CN-01 Assign DSS Console Control Station:
Mode 43-CN-03 Assign DSS Console Key Pattern Group:
Mode 41-STN-02/03 Assign DSS Console Key Pattern Group (late model BX320):

Mode 44-ST-02 Place Calls on Hold:

This mode when set prevents room phones from placing calls on hold. It is recommended that all Room phones are prevented from placing calls on hold unless there is a specific reason for not doing so.

0 = Enable 1 = Disable

Mode 45-ST-08 To Record SMDR Data:

This parameter enables or disables the system from recording the SMDR data for this station if Mini Call Accounting is used. In this case **ALL** Administration phones **MUST** be disabled to prevent their calls using up the available memory. Mini Call Accounting **MUST** not be used for administration phones it **MUST** only be used for room phones. Do not ignore this instruction.

0 = Record 1 = Not Record

Mode 46-ST-02 Send Message Wait Signal Level:

This parameter enables or disables the ability of stations to send a message wait signal. It is strongly recommended that this feature is set to 0 for all room phones to prevent inadvertent operation.

0 = No Message can be sent
1 - 9 = Higher levels can message wait equal or lower levels