ACCORD XPC

Installation Manual

ADT®

Table of Contents

Section 1: Wiring Regulations and Compliances for Safety

General Information

It is essential that this product is installed correctly, in particular with respect to a persons safety and connection to the mains electricity supply. This product is not suitable for installation, maintenance or connection by the user. A competent, qualified installer, with for example BS5750 or NACOSS approval, must carry out installation and maintenance.

Compliance

The Accord xpC is compatible with the relevant parts of the following standards:

- BS 4737
- EN 60950
- CTR 21
- CE Standards (EN 50130-4)
- EN 41003

It is a condition of the product's approval that the installation complies with the following:

Siting

The control panel enclosure must be sited indoors in a secure area where it cannot be readily interfered with. There must adequate ventilation, ample light and easy access for servicing and maintenance. It is not suitable for siting externally or in harsh environments where it could be subject to high humidity, extremes of temperature, chemical atmospheres, high dust levels, or in a position where it may be subject to being dripped on, or splashed by, water or other fluids.

The enclosure base must be securely fixed to a vertical, smooth, solid surface that is a part of the fabric of the building. The position chosen must allow the cabinet door to be removed and allow unhindered access for installation and maintenance.

Ventilation

While the control panel has been designed so that no part attains an unsafe temperature it is important that adequate ventilation is provided around the cabinet, therefore the cabinet should not be positioned close to heat-radiating equipment or other sources of heat.

Cabling

The panel has high voltage barriers between the a.c. mains supply and the alarm wiring terminals. It is essential that these barriers are maintained in the way the cables enter the cabinet, are routed inside the cabinet, and are routed externally.

Additional holes must not be cut in the enclosure, rear entry points are provided for cables. Alarm system cables must be neatly trimmed and not be allowed to loop inside the cabinet.

Cables external to the cabinet must be either firmly affixed to the fabric of the building using suitable clips or saddles, or mechanically protected in conduit or trunking. It must not be possible to put strain on the wiring within the control cabinet by pulling on cabling external to the cabinet.

It must not be possible to push a finger or similar size object or instrument into any hole or cable entry point.

Mains Supply Connections

The connection to the a.c. mains supply must be made by a competent, qualified person, for example NICEIC approved, in accordance with the current IEE and local supply regulations.

Warning: A means of isolation from the mains supply must be provided within two metres of the control panel. Where live and neutral supplies can be identified, a fused spur with a 3A fuse, must be fitted on the live circuit. Where live and neutral circuits cannot be reliably identified, 3A fuses must be fitted to both circuits.

Where a flexible cable is connected to the control having cores coloured brown and blue it is important to connect the wires to the mains terminal block as follows:

- Blue (Neutral) – connect to terminal N
- Brown (Live) – connect to terminal L

Where a non-flexible cable is connected to the control having cores coloured red with black sleeves, it is important to connect the wires according to the following code:

- Black (Neutral) – connect to terminal N
- Red (Live) – connect to terminal L

Note: No connections should be made to the Earth terminal (marked E) or on the mains terminal block.

The insulation of each conductor must be prepared and connected such that no part of the bare conductor is visible or protruding outside the terminal block. In the case of standard conductors, all strands must be twisted together and firmly clamped in the mains terminal block.

The outer covering insulation must be clamped under the cable clamp. It is important that this cable enters the control panel enclosure through the mains entry hole under the mains terminal block, is not looped within the control panel enclosure and does not run

close to other system cables inside or external to the enclosure.

The control panel enclosure must not be opened before isolating the mains supply. The cover must be securely fitted in normal use.

Mains Cable Type

The conductors of the mains supply cable must have a minimum cross-sectional area of 0.75 mm and the insulating material on each conductor must be a minimum of 0.4 mm thick Polyvinyl Chloride (pvc). Flexible cables must conform to the requirements of BS6500 and IEC Publication 227. Non-flexible electrical installation cables must conform to BS6004.

Telecoms Approvals

Connection to the PSTN

The Telecommunications Network Voltage (TNV) port (terminals A and B on TB5) must be permanently connected (hard-wired) to the PSTN via a BT master socket. The master socket is sealed to prevent use by the customer. The ADT socket is the customer master, which supplies all other telephone points in the premises.

If the BT socket is not the NTE5 type then the TNV port (terminals A and B on TB5) is connected to the BT master socket via the terminal block in the back of the ADT socket. Connection to the old type of master socket cannot be performed by an ADT engineer and must be made by the network operator. A line jack and captive locking bar are used to prevent the customer from unplugging the alarm from the telephone. The Accord Control Panel is connected to the BT master socket using cable suitable for connection to 2.8 mm diameter screw terminals.

Note: To prevent exposure to potentially lethal voltages from the PSTN, the cover of the Accord enclosure must be replaced whenever any connection to the BT master socket is completed .

Interconnection circuits should be such that the equipment continues to comply with the requirements of 4.2 of EN41003 for TNV (Telephone Network Voltage) circuits and 2.3 of EN60950 of SELV (Safety Extra Low Voltage) circuits, after making connections between circuits.

Approvals

The Accord xpC is approved for connection to direct lines of the PSTN and PBX exchanges (with or without secondary proceed indication).

It should be noted that the Accord xpC is not suitable as an extension to a payphone.

The Accord xpC has been approved for the use of the following facilities:

- Auto-dialling.
- Auto-answering.
- Auto-clearing.
- Modem communications.
- Series connection.
- Operation with Call Process Monitor (CPM) tone recognition.
- Multiple repeat attempts.

Any other usage invalidates the approval of the Accord xpC if, as a result, it then ceases to comply with standards against which approval was granted.

Approval of the Accord xpC is also invalidated if it is used with internal software or subjected to any hardware modification not authorised by BABT.

Public Switched Telephone Network (PSTN) Approval

The equipment has been approved to {Commission Decision 98/482/EC} for Pan - European single terminal connection to the Public Switched Telephone Network (PSTN). However due to differences between the individual PSTNs provided in different countries the approval does not, of itself, give an unconditional assurance of successful operation on every PSTN network termination point.

In the event of problems you should contact your equipment supplier in the first instance.

The Accord xpC is designed to interwork with the following networks:

Austria	France	Italy	Norway	Switzerland
Belgium	Greece	Liechtenstein	Portugal	United Kingdom
Denmark	Iceland	Luxembourg	Spain	* Germany
Finland	Ireland	The Netherlands	Sweden	

Note: Contact the equipment supplier before using the Accord xpC on any network not listed.

Private Branch Exchange (pbx) Approval

The Accord xpC is only approved for use with BABT approved pbxs. The correct operation of the Accord xpC can not be guaranteed under all possible conditions of connection to compatible pbxs.

** May have interworking difficulties.*

Ren and Sen Numbers

- The Ren of the Accord xpC is one (1).
- The Sen of the Accord xpC is 0.3.
- Nominal series resistance is 90 milli-ohms
- Nominal insertion loss is 0.1 dB.

Note: Difficulties may be experienced when making calls from other apparatus if the total sen value approaches one or the total series resistance 50 ohms.

Zone Cable Type

Zone and detector cable should be standard alarm cable.

Equipment Electrical Rating

The control equipment is designed to operate on a UK mains supply of 230 Volts a.c. (230 V ±10%) at a frequency of 50 Hz. It is not suitable for other types of supply. The maximum current consumption in normal use is 80 mA.

Fuses

The mains fuse within the cabinet is rated at 200 mA.

Example: The mains supply must be disconnected before opening the cabinet and changing the fuse. Replace the mains fuse with the same type and rating, that is:

- Rating: 200 mA anti-surge (T).
- Construction: Glass cartridge.
- Dimensions: 20 mm length, 5 mm diameter.
- Conformance: BS EN 60127-2 and IEC127-2.

There are three on board fuses:

- F1 Battery: 1 A, 20 mm, Anti-surge.
- F2 Speaker/Bell: 500 mA, 20 mm, Anti-surge.
- F3 Keypad/Aux power: 500 mA, 20 mm, Anti-surge.

Batteries

The battery used with the control panel must be a 12 V sealed lead-acid rechargeable battery of up to 7.2 Amp-hour capacity. The battery must be positioned on the battery shelf. The battery leads must be connected to the battery observing terminal polarity and not left hanging near the mains terminal block.

Section 2: Installing the Accord xpC

Ancillaries Pack

The Accord xpC control panel comes with an ancillaries pack. It contains ten zone links, a cable clamp (with two self tapping screws), two M4×20 mm lid screws, battery connector leads and 16 1K resistors.

Initial Mounting

Use the keyhole slot in the enclosure base to position the control panel enclosure. Three mounting screws (not provided) are required to mount the enclosure base. Fix one of the screws into the mounting surface, this will be used for the top, keyhole mounting hole. Hang the enclosure base on the mounting screw ensuring that the screw sits in the narrow portion of the keyhole.

All cables should be brought into the enclosure base via the cable entry points shown in **figure 2.1**. There are six cable entry holes for the entry of alarm cables. There is one a.c. mains cable entry point located below the mains terminal block.

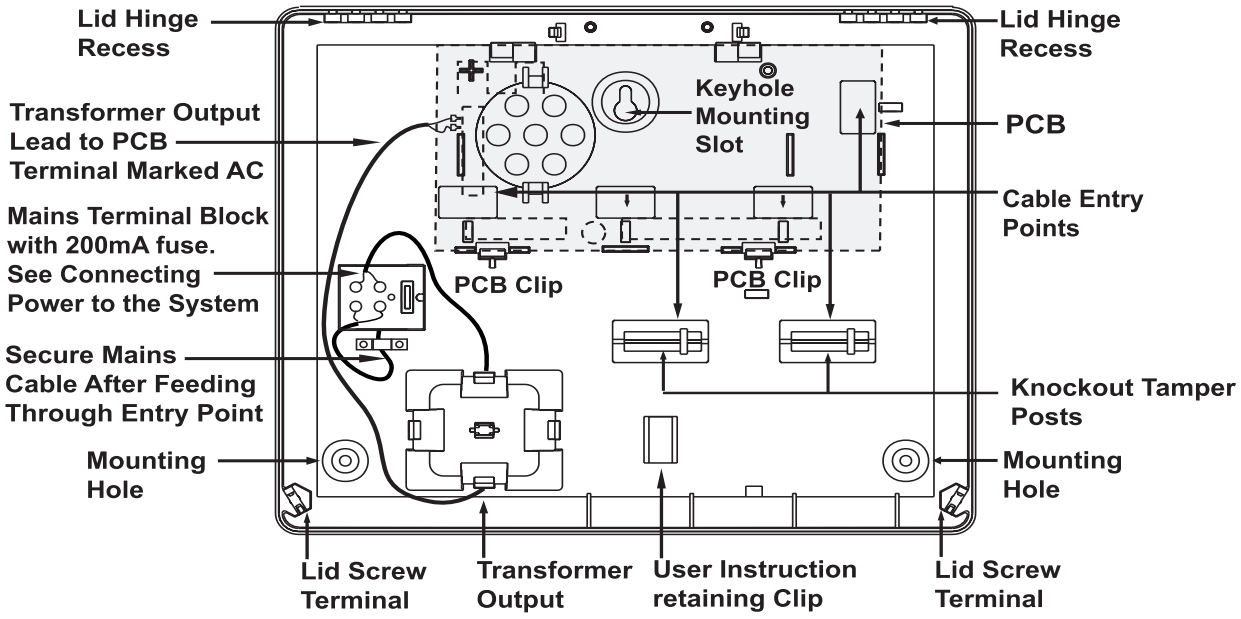


Figure 2.1 Accord xpC Enclosure Layout

Note: Leave about 60 mm above the control panel enclosure to enable the enclosure lid to move on its hinges for removal and replacement.

Removing and Replacing the Accord xPC PCB

If necessary the Accord PCB can be removed from the mountings to aid with enclosure mounting and cable wiring.

Note: The control panel enclosure must not be opened before isolating the mains supply. Illumination of the green power LED indicates the presence of a.c. mains supply.

To remove the PCB:

1. Gently pull back the PCB mounting clips to free the Accord PCB.
2. Lift the PCB free of the PCB mounting slots.

To replace the PCB:

1. Insert the PCB into the PCB mounting slots.
2. Ensure that any cabling is clear of the PCB support pillars.
3. Gently pull back the PCB mounting clips and place the PCB on top of the PCB support pillars.
4. Release the PCB mounting clips ensuring that they spring back into place and that the PCB is held firmly in place.

For information on the layout of the enclosure base, see **figure 2.1**.

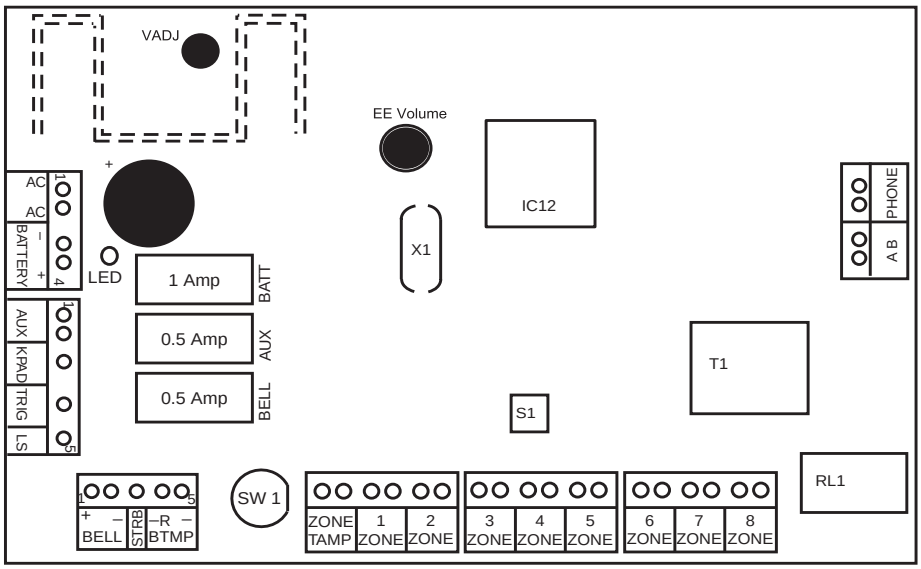


Figure 2.2 Accord xpC pcb

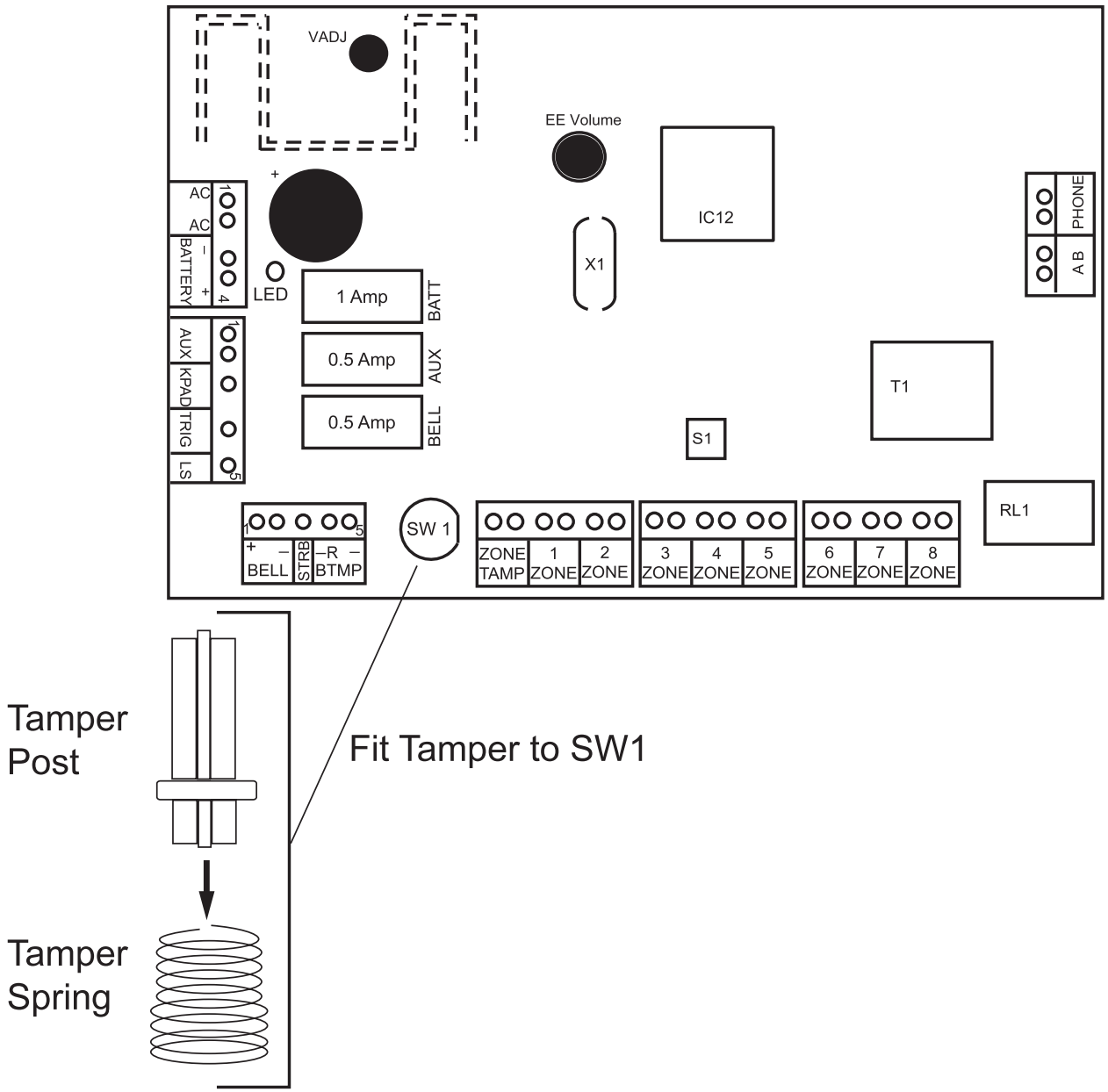
SW1 — Accord Tamper

Switch SW1 on the Accord control panel PCB is the control panel tamper. Removing the enclosure lid releases the tamper switch; this causes a tamper alarm if the system is not in programming mode.

Note: The installer must attach the Tamper switch pin and spring supplied with the ancilleries pack in order for the tamper to operate.

Fitting the Tamper Switch

The Accord xpC enclosure is supplied without a Tamper Actuator in place. The panel will not function without a Tamper, it is therefore, the installer's responsibility to correctly attach the Tamper Actuator. The Tamper Actuator consists of a spring, which is supplied in the Accord xpC Installation Kit, and one of the Knockout Tamper Posts, see **figure 2.1.** The installer should knockout one of these Tamper Posts from the enclosure base and ensure the spring is securely attached to the short end of the Tamper Post, before fitting the opposite end of the spring to the Tamper Switch (SW1) on the PCB (see below).



Mounting and Wiring the LCD Remote Keypad

To mount and wire the Accord xpC LCD keypad:

1. Loosen the retained fastening screw on the bottom of the keypad. Gently pull the front and back keypad casing apart.
2. Route the wiring from the control panel through any of the five knockout holes on the back case of the keypad. *Tip: Use a knife to help dislodge knockouts.*
4. Securely mount the back case to a wall or electrical box via the mounting holes. Ensure The Tamper Tab is securely screwed down.
3. The remote keypad PCB should be wired to the control panel PCB as outlined in Table 2.1 LED/LCD Keypad Wiring.
5. Re-attach the keypad front to the back case, aligning the hinges on the top. Gently apply pressure to the keypad front and tighten the retained fastening screw on the bottom.

Panel	Keypad
Aux +	+ ve
Aux –	– ve
K'PAD	kpad

Table 2.1 LCD Keypad Wiring

Note: Up to four keypads can be connected to the system. Keypads can be wired to the control panel independently, in series, or in a star configuration. Both LED and LCD keypads can be connected to the same panel.

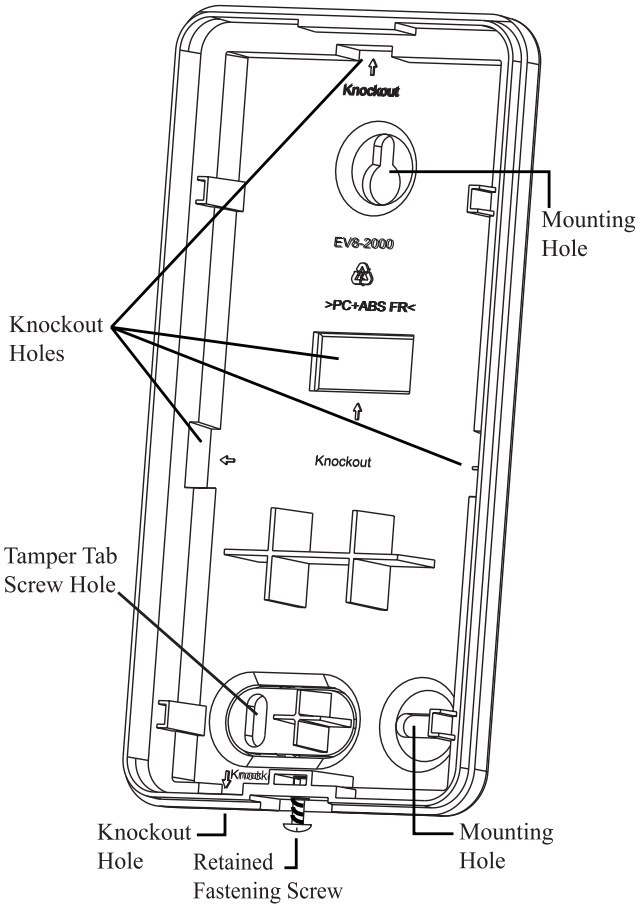


Fig 2.4 Accord xpC LCD Keypad

Connecting the External Sounders

Connections for Self Actuating Bells and Bell/Siren combinations should be made as outlined in **table 2.2** and **table 2.3**.

Connections for SAB	
Panel	**Bell**
BELL +	Positive Supply/Hold Off
BELL –	Trip/Signal Negative
BELL TAMP –	Negative Supply/Hold–Off
BELL TAMP +	Negative Tamper Return
STRB	Strobe Negative Signal

Table 2.2 Connections for SABs

Connection for Bell/Siren only	
Panel	**Bell**
BELL +	Bell & Strobe Positive
BELL -	Bell Negative
BELL TAMP -	Tamper SW Common
BELL TAMP +	Tamper SW N/C
STRB	Strobe Negative

Table 2.3 Connections for Bell/Siren only

Wiring the Loudspeaker

A 16 Ω Loudspeaker may be connected between the **LS** terminal and the **Aux +** terminal.

Wiring the Zones

The zones on the Accord xpC can function in one of three modes Normal Closed, Double Balanced and U.S. End of Line. Zone wiring for the three modes are illustrated below. The mode of operation for the zones is programmed from Group 5 — Option 9 Zone Configuration.

It is strongly recommended that the maximum cable run on each zone is 100 m.

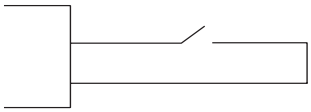


Figure 2.5 Zone Wiring for Normal Closed

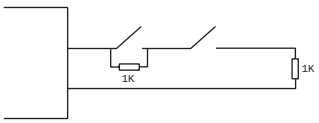


Figure 2.6 Zone Wiring for Double Balanced Zones

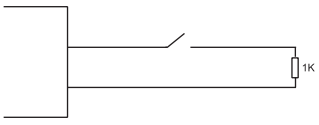


Figure 2.7 Zone Wiring for US EOL Zones

Zone Links

The eight zones, the zone tamper and the bell tamper circuits can be shorted using the Zone Links provided in the ancillaries pack. It is strongly recommended that this be done if any of the circuits are not to be used. If Double Balanced or U.S. End of Line, fit a 1K resistor across the zone and not the shorting link.

Connecting Power to the System

Mains Power

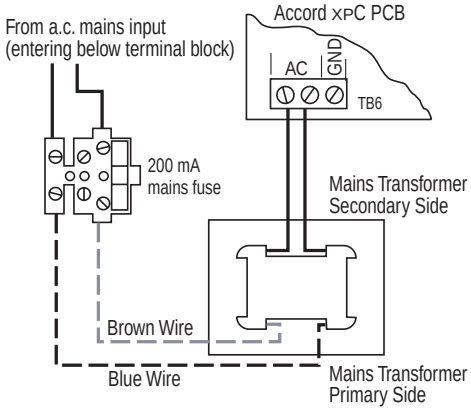
Mains power for the system is 230 V a.c. 50 Hz (a 24-hour unswitched source). The mains cable should be brought into the control cabinet through the mains entry point under the mains terminal block and firmly secured using the mains clamp and screws provided in the ancillaries pack. The mains cable should be wired to the mains input terminal block as illustrated in **figure 2.6**.

Note: No connections should be made to the Earth terminal on the mains terminal block.

If the cable is three core the green/yellow earth core should be trimmed back to the outer sheath such that none is visible.

The secondary side of the mains transformer should be connected to the two terminals on the control panel PCB marked **AC.**

Example: Do not apply power to the transformer at this point.



Note: Connections shown as dashed lines are factory made. Make no connections to the earth terminal on the mains terminal block.

Figure 2.8 Mains Connections to the Accord

Stand-by Battery

The system can be protected against mains failure by the addition of a Stand-by Battery with a maximum rating of 7.2 Ahr.

Calculate the system quiescent current draw and multiply this by the number of hours required for stand-by cover, e.g. 200 mA × 12 hours = 2.4 Ahr. Install the next battery size up, in this case 2.8 Ahr.

Connecting the Accord XPC to the PSTN

The Telecommunications Network Voltage (TNV) port (terminals A and B on TB5) must be permanently connected (hard-wired) to the PSTN via a BT master socket, refer to **figure 2.9**.

Note: If the BT master socket is the newer type (NTE5) the connection can be carried out by the ADT engineer. The master socket should be sealed to prevent use by the customer.

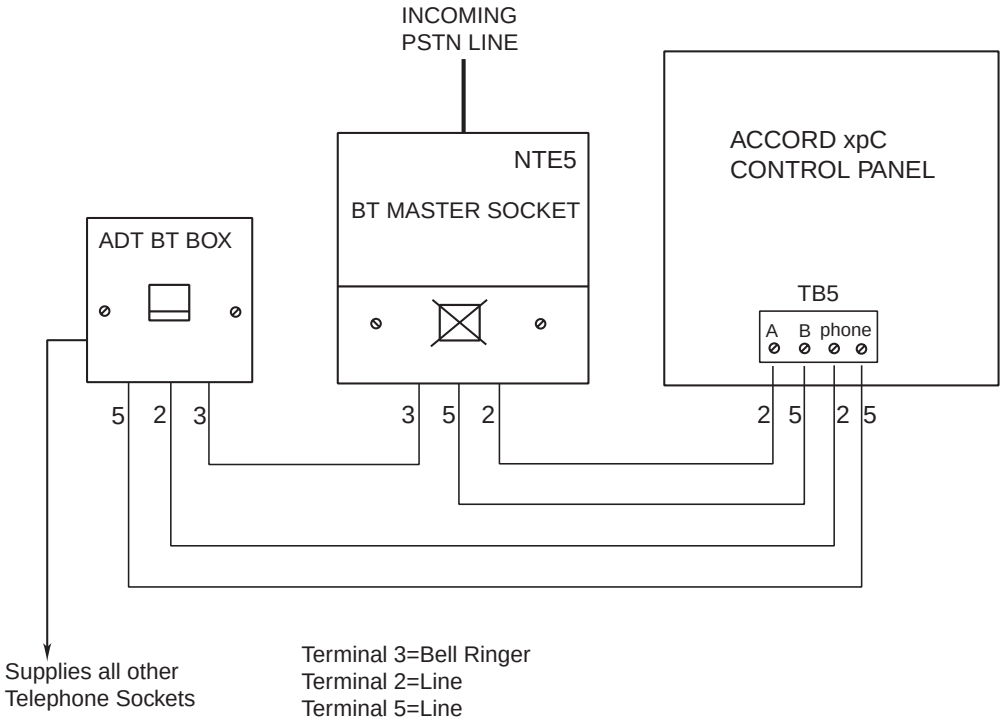


Figure 2.9. Connecting the Accord xpC to the PSTN

It is strongly recommended that the Accord xpC panel is the only device on the line.

If another device is to be connected to the line, connect PHONE terminals on the Accord xpC PCB to the terminals 2 and 5 on the ADT BT Box.

The ADT socket is the customer master, which supplies all other telephone points in the premises. All sockets must have the same polarity.

Using cable suitable for connection to 2.8 mm diameter screw terminals, strip back approximately 20 mm of the outer sheath and then remove approximately 4 mm of the insulation from the wires to be connected to the Accord xpC.

Connect terminals 2 and 5 on the BT Master socket across the A and B terminals (TB5) on the Accord xpC, refer to **Figure 2.9**.

Example: The control panel enclosure must not be opened before isolating the mains supply. Illumination of the green power LED indicates the presence of a.c. mains supply. The cover of the Accord xpC enclosure must be replaced whenever any connection to the BT master socket is completed to prevent exposure to potentially lethal voltages from the PSTN.

If using the older type of BT socket (not NTE5), then connections should be made as shown in **Figure 2.10.**

The Telecommunications Network Voltage (TNV) port (terminals A and B on TB5) is connected to the BT master socket via the terminal block in the back of the ADT socket.

Note: Connection to the older type of master socket cannot be performed by an ADT engineer and must be made by the network operator. A line jack and captive locking bar are used to prevent the customer from unplugging the alarm from the telephone.

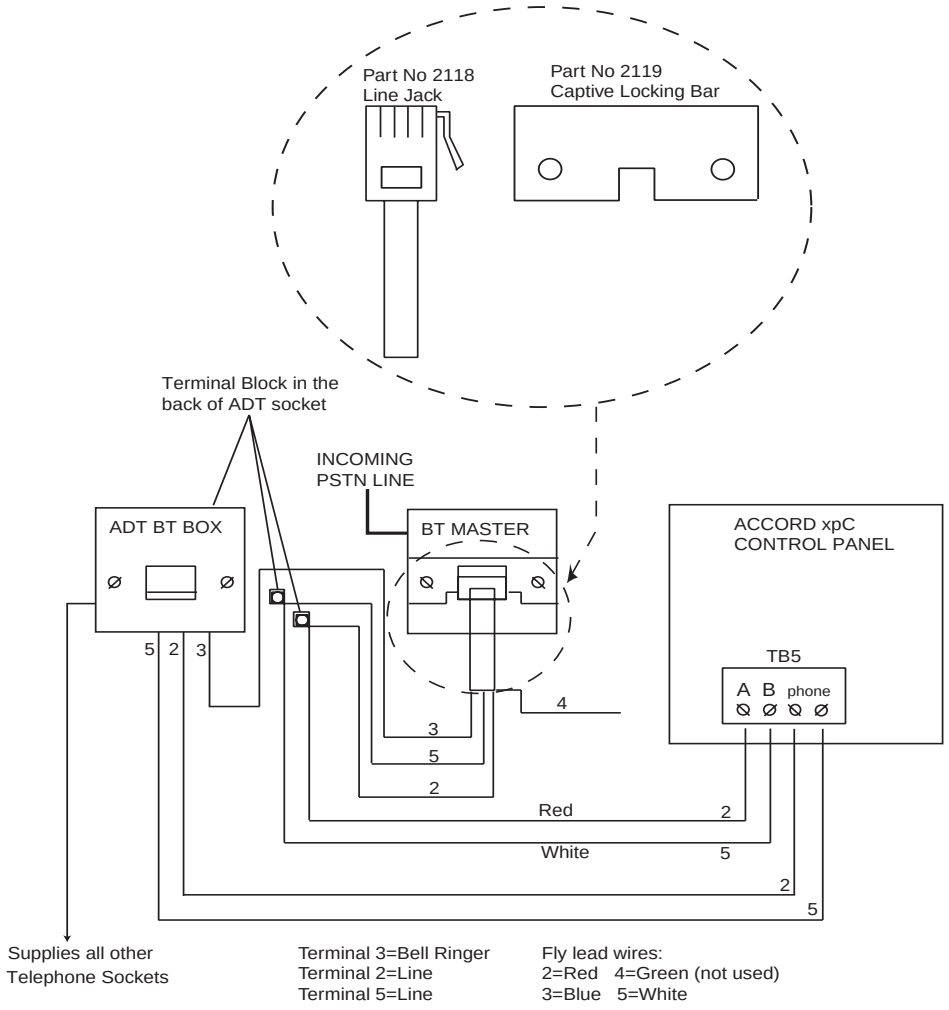


Figure 2.10. Connecting the Accord xpC to the PSTN

Connect terminals 2 and 5 on the Terminal Block at the back of the ADT socket across the A and B terminals (TB5) on the Accord xpC, refer to **figure 2.10**

REN and SEN Numbers

It is possible to simultaneously connect a number of items to one line of the PSTN. The limit is determined by summing the Ringer Equivalence Number (REN) shown on each item of apparatus, ensuring that the sum of RENs is not more than four.

The REN of the Accord xpC is one (1).

Assume that all British Telecom equipment has a REN of one unless otherwise marked.

More than one item of series apparatus may be connected to the Accord xpC ports marked phone. This is limited by summing the Series Equivalence Number (SEN) shown on each item of series connected apparatus, ensuring that the sum of the SENs is not more than one (1). The total series resistance, including cabling, must not exceed 50 Ohms.

- The SEN of the Accord xpC is 0.3.
- Nominal series resistance is 90 milli-ohms.
- Nominal insertion loss is 0.1 dB.

Note: Difficulties may be experienced when making calls from other apparatus if the total SEN value approaches one or the total series resistance 50 ohms. If such difficulties are experienced, please consult the Accord XPC installer or supplier, not BT.

It is recommended that the PSTN should have the following facilities:

- Outgoing calls only (when used as dialler only).
- Direct exchange.
- Tone dialling.

Private Branch Exchange (PBX) Connection

The Accord xpC is only approved for use with BABT approved PBXs. The correct operation of the Accord XPC can **not** be guaranteed under all possible conditions of connection to compatible PBXs.

When connected to a PBX, the Accord xpC can be programmed to pause for two seconds, between the dialling of the digits.

Final Mounting

Once all cable entries have been made to the enclosure and connected to the control panel the enclosure should be firmly mounted in place using the two mounting holes at the bottom of the control panel enclosure.

Securing and Removing the Enclosure Lid

To secure the lid in place:

1. Hold the lid at an angle of 90º to the enclosure base.
2. Place the eight (two groups of four) lid hinges into the lid hinge recesses on the lip of the Accord xpC enclosure.
3. Swing the lid down such that the hinges swing into the holes in the top of the enclosure rim and the lid fits snugly on top of the enclosure base.
4. Fix the lid in place by inserting and tightening the two M4×20 mm pan head screws provided, into the screw holes in the bottom corners of the lid.

Note: To remove the lid, simply reverse the process.

Testing the Installation

Power-up and Initial Test Procedure

When the Accord control panel has been installed in accordance with the preceding safety and wiring instructions the system should be tested. The test procedure is outlined below.

Note: Before the test commences all auxiliary devices such as powered sensors (PIRs), remote keypads, alarm sounders, etc, must be connected. The stand-by battery should not be connected at this point.

Apply input power to the mains transformer. Check that the Auxiliary Voltage at terminals AUX + and AUX – on the main terminal strip measures between 13.5 V and 14 V d.c. If the auxiliary voltage is under 13.5 V, too much current is being drawn. For the current consumption of the control panel and keypads see **Appendix A**.

Note: If the auxiliary voltage is between 13.5 V and 14 V d.c., connect the battery to the Battery Terminals, observing the correct polarity.

Further Test Procedures

Once the control panel has been installed, and the power up and initial test procedure have been performed, it is advisable to check that the keypad(s) and ancillary devices are operating correctly.

To test the keypad:

1. Press 1234 1 – Set.
2. Press ✶ (Escape) – Exit Panel Set.

This ensures that the keypad and control panel are communicating correctly. Test each keypad in this manner. See Section 4 for test information.

Walk Test Zones:

It is advisable to Walk Test all programmed zones, including RF zones and any zone added after initial Power-Up.

Engineer Digicom Test:

This test allows the enigeer to send a test report through the digicom. Two beeps confirm entry of key sequence whilst a further two beeps confirm kiss off.

To send Test Report:

1. Press Engineer Code, # then 5.

Section 3: Programming the Accord xpC

An Introduction to Programming the Accord xpC

Getting In and Out of Programming Mode Using LCD keypad.

All zone and system programming must be carried out from the Programming Mode. To enter Programming Mode enter the Engineer Code, press the # key and then the * key.

The Engineer Code is 9090 by default.

The keypad beeps twice, the Day icon (○) goes out and the Power icon ( ) on the keypad flashes to indicate that the system is in programming mode.

To exit Programming Mode press the # key followed by the * key. The power icon ( ) on the keypad stops flashing and the Day icon (○) activates.

During engineer programming mode, no communication to the central station will take place. To perform an engineer reset enter the four digit engineer code (no need to enter programme mode). Entering the programme mode during communication will abort the communication.

Note: Pressing the * and # keys together within five seconds of power up defaults the master code and the engineer code to factory settings.

Pressing the * and # keys together within five seconds of leaving the engineer mode also defaults the master and engineer codes to factory settings. Pressing any key within the five second period extend it for a further five seconds.

If Group 5 - Option 4 (Hotkey Enable) is enabled, pressing * and # activates the keypad panic facility . The keypad panic facility will not operate within five seconds of leaving engineer mode or powering up the system.

Defaulting Codes

To default the Master User Code and the Engineer Code press the * and # keys together within five seconds of power up. Hold both keys down for approximately two seconds until two beeps are emited. The Engineer Code defaults to 9090 and the Master Code to 1234.

Note: For important information on * and # key operation see the note above.

The Programming Format

An easy to use Programming Format has been adopted, to make Accord xpC programming as simple as possible. Each system parameter has been allocated to a Programming group. To programme a parameter select the programming group, select the parameter and enter the desired value.

Programming Fields

To programme a parameter select the programming group. Enter the second digit to choose the zone number, zone option or system option to be modified. Enter the third digit to programme the zone type, zone option or system option.

Key	Name
1	Full Set Options
2	Part Set Options
3	Night Set Options
4	System Options 1
5	System Options 2
6	Comms Options 1
7	Comms Option 2
8	Triggers
9	System Options 3
0	System Options 4

Table 3.1 Programming Groups

Note: If the keypad beeps twice the information has been correctly entered. If the control panel beeps three times after making a programme entry, either the entry was invalid or too much time was taken to enter the information.

Viewing Field Programming

To view the programme options in groups 1, 2, 3, 4, 5, 7, 8 and 9; enter Engineer mode and enter the group number then 00. The value for each option will display in sequence.

To view the single option programming for groups 6 and 0, enter engineer mode followed by the group number, then 0 followed by the option number.

Example: To View the Primary telephone number:

1. If not in Engineer Mode, enter the engineer code.

2. Enter the group number 6, press 0, then the option number 1.

3. The LCD keypad displays the telephone number as a sequence of digits.

Programming Groups 1, 2 and 3 (Zone Programming For Full, Part and Night Set)

Programming Groups one to three are used to programme the eight zones for each of the three setting modes: Full, Part and Night Set. This allows zones to be isolated or assigned different functions for each of the three setting conditions.

The available zone types are:

0. Not Used
1. Final Exit
2. Keyswitch
3. Intruder
4. Walk Through
5. 24 hr tamper
6. PA silent
7. PA audible
8. Push-to-set
9. Fire

Zone Programming — Group 1 Full Set

In programming mode:

- The first digit entered is 1 for Full Set.
- The second digit is the zone number 1 — 8.
- The third digit is the zone type, see table 3.2.

Note: The default programming is shown in brackets in Table 3.2.

Full Set		
Group	Zone No	Default Zone Type
1	1	(1)
1	2	(4)
1	3	(3)
1	4	(3)
1	5	(3)
1	6	(3)
1	7	(6)
1	8	(9)

Table 3.2 Full Set Zones

Example: In Programming Mode press 1 + 2 + 3. This programmes Zone 2 as an Alarm in the Full Set mode and is accompanied by two beeps, indicating a correct entry.

To review the programming**:** press the 1 key (Full Set) or 2 key (Part Set) or 3 key (Night Set) followed by 00. The zone type is indicated on the display for zone 1 (accompanied by one beep), then zone 2 (accompanied by one beep), etc.

Zone Programming — Group 2 Part Set

In programming mode:

- The first digit entered is 2 for Part Set.
- The second digit is the zone number 1 — 8.
- The third digit is the zone type.

Note: The default programming is shown in brackets in Table 3.3.

Part Set		
Group	Zone No	Default Zone Type
2	1	(1)
2	2	(4)
2	3	(3)
2	4	(3)
2	5	(3)
2	6	(3)
2	7	(6)
2	8	(9)

Table 3.3 Part Set Zones

Example: In Programming Mode press 2 + 2 + 3. This programmes zone 2 as an Alarm in the Part Set mode and is accompanied by two beeps, indicating a correct entry.

Zone Programming — Group 3 Night Set

In programming mode:

- The first digit entered is 3 for Night Set.
- The second digit is the zone number (1 — 8).
- The third digit is the zone type.

Note: The default programming is shown in brackets in Table 3.4.

Night Set		
Group	Zone No	Default Zone Type
3	1	(1)
3	2	(1)
3	3	(3)
3	4	(3)
3	5	(3)
3	6	(3)
3	7	(6)
3	8	(9)

Table 3.4 Night Set Zones

Example: In Programming Mode press 3 + 2 + 3. This programmes zone 2 as an Alarm in the Night Set mode and is accompanied by two beeps, indicating a correct entry.

Programming System Options

System Programming — Group 4 System Options

- The first digit entered is 4 for System Options.
- The second digit is the required system option (1 — 9).
- The third digit is the option value.

SYSTEM OPTIONS		
GROUP	OPTION	DEFAULT
4	1=Exit Time (0=Final Contact, 1–9=Exit Time ×10 s).	(0)
4	2=Entry Time (1–9=Exit Time × 10 s).	(3)
4	3=Bell Cut-off Time — See **Table 3.6** Bell Cut-off Times.	(8)
4	4=Part Set Exit Warning (0=Silent, 1=Keypad, 2=Keypad and Internal Sounders).	(0)
4	5=External Bells and Strobe in Part Set (0=No, 1=Yes).	(1)
4	6=External Bells and Strobe in Night Set (0=No, 1=Yes).	(1)
4	7=Trigger Output — See **Option 7 — Trigger Outputs**.	(1)
4	8=Easy Set (0=No, 1=Yes)	(0)
4	9=Prevent Set with (0=Mains fail, 1=Low Batt, 2=Mains Fail/Low Batt)	(0)

Table 3.5 Group 4 System Options

Group 4 — Option 1 Exit Time

This is the amount of time that the user has to exit the premises after the Full setting procedure has been initiated. Entering 411 will set the Exit Time to 10 seconds, 412 = 20 seconds, 413 = 30 seconds, to 419 = 90 seconds.

If final contact set is required enter 410. This gives infinite Exit Time. The system will only set when a Final Exit zone is closed after the exit timer has started.

Note: Exit Times for Part Set and Night Set are fixed at 30 seconds.

Group 4 — Option 2 Entry Time

This is the amount of time that the user has to enter the premises and unset the system. Entering 421 will set the Entry Time to 10 seconds, 422 = 20 seconds, to 429 = 90 seconds.

Group 4 — Option 3 Bell Cut-off Time

This is the amount of time that the sounders/bells activate after an alarm condition has occurred. To programme the Bell Cut-off time enter 43 then number 0 — 9, see **Table 3.6 Bell Cut-off Times.**

Note: The system will reset when the Bell Cut-off Time has expired . Group 7 - Option 9 programming determines the number of times a zone will activate before it is automatically omitted.

Bell Cut-off Times
0 = Continuous Bells
1 = 1 minute
2 = 2 minutes
3 = 3 minutes
4 = 4 minutes
5 = 5 minutes
6 = 10 minutes
7 = 15 minutes
8 = 20 minutes
9 = 30 minutes

Table 3.6 Bell Cut-off Times

Group 4 — Option 4 Part Set Exit Warning

This option allows the Part Set Exit Warning to be silent, audible through the keypad or audible through the keypad and internal sounder. Night Set will always have a silent exit warning but this option will affect the Night Set comfort tone (confirmation of set) and fault warnings given at the end of the Exit Time. All possible options are shown in the tables 3.7 – 3.9.

PART SET EXIT WARNING — **440 SILENT**				
	EXIT TONE	FAULT TONE	FAULT TONE AT END OF EXIT TIME	COMFORT TONE
Part Set	None	None	Keypad only	Keypad only
Night Set	None	None	Keypad only	Keypad only

Table 3.7 Part Set Exit Warning: 440 Silent

PART SET EXIT WARNING — **441 KEYPAD BUZZER ONLY**				
	EXIT TONE	FAULT TONE	FAULT TONE AT END OF EXIT TIME	COMFORT TONE
Part Set	Keypad only	Keypad only	Keypad only	Keypad only
Night Set	None	None	Keypad only	Keypad only

Table 3.8 Part Set Exit Warning : 441 Buzzer Only

PART SET EXIT WARNING — **442 KEYPAD BUZZER AND INTERNAL SOUNDER**				
	EXIT TONE	FAULT TONE	FAULT TONE AT END OF EXIT TIME	COMFORT TONE
Part Set	Both	Both	Both	Both
Night Set	None	None	Both	Both

Table 3.9 Part Set Exit Warning : 442 Keypad and Sounder

Group 4 — Option 5 External Bells and Strobe in Part Set

This option determines whether the External Bell and Strobe outputs activate during an alarm condition when the system is Part Set. During an alarm condition, External Bell and Strobe outputs activate when enabled (1), when disabled (0) they do not.

This option defaults to 1 (enabled).

Note: Internal sounders always sound.

Group 4 — Option 6 External Bells and Strobe in Night Set

This option determines whether the External Bell and Strobe outputs activate during an alarm condition when the system is Night Set. During an alarm condition, External Bell and Strobe outputs activate when enabled (1), when disabled (0) they do not.

This option defaults to 1(enabled).

Note: Internal sounders always sound.

Group 4 — Option 7 Alarm Trigger Output

This option determines the operation of the Trigger output, marked TRIG on TB1, .

This option has three settings:

1. 0 V Detector Reset

This output type is used to provide the negative supply to devices such as sensors. The 0 V supply is removed for five seconds when the setting procedure is initiated to ensure devices are reset before the system sets. After an alarm activation, the 0 V will be removed when the system is reset to clear any latched conditions.

2. Set Latch Positive

This output type is used with latching PIRs. The output is set to 0 V switching to 12 V when the first of the following occur:

- Alarm Condition.
- Entry Timer is Started.
- System is Unset.

3. Alarm

This sets the output to 12 V switching to 0 V when any of the following occur:

- Alarm Condition.
- Panic Alarm.
- Fire Alarm.

This output may be used to trip a transistorized relay for control of auxiliary equipment. The alarm trigger can also be inverted so that it is normally 0 V switching to 12 V, see Programming Group 5 Option 7 Trigger Output.

This option defaults to (1) 0V Detector Reset.

Group 4 — Option 8 Easy Set

When enabled (1) this option allows users to (Full, Part or Night) set the system without entering a user code.

When enabled users set the system by pressing the # key and : 1 (to Full Set), 2 (to Part Set), or 3 (to Night Set). The same exit times as apply as with Full, Part and Night Set. A valid user code is still required to unset the system.

This option defaults to 0 (disabled).

Group 4 — Option 9 Prevent Setting for Power Fails

This option determines which power fail conditions prevent setting of the system:

0. Mains fail.
1. Low battery.
2. Mains fail and low battery.

This option defaults to 0 (mains fail).

System Programming — Group 5 System Options

Group five programming is as follows:

1. The first digit entered is 5 for System Options.
2. The second digit is the required system option 1 — 9.
3. The third digit is the option value.

SYSTEM OPTIONS		
GROUP	OPTION	DEFAULT
5	1=Audible Warning of AC Loss (0=No, 1=Yes).	(1)
5	2=Supplementary Entry (0=No, 1=Yes).	(0)
5	3=Engineer Reset for Alarms. (0=Customer, 1=Engineer, 2=Technistore, 3=Engineer or Technistore).	(3)
5	4=Hotkey Enable (0=No, 1=Yes).	(0)
5	5=Auto Omit Keypad (0=No, 1=Yes).	(0)
5	6=Bell Output (0=Neg. Applied, 1=Neg. Removed).	(0)
5	7=Trigger Output (0=Neg. Applied, 1=Neg. Removed).	(0)
5	8=Engineer Reset for Day Tampers. (0=Customer, 1=Engineer, 2=Technistore, 3=Engineer or Technistore).	(0)
5	9=Zone Configuration (0=N/C Loop, 1=Double Balanced, 2=E.O.L.).	(1)

Table 3.10 Group 5 System Options

Group 5 — Option 1 Audible Warning of AC Loss

When enabled (1) an audible indication is given from the keypad piezo that an a.c. mains failure has occurred. The loudspeaker output LS also activates. Visual indication is always given by the flashing  on the keypad and at the control panel. No audible indication is given when the system is set.

This option defaults to 1 (enabled).

Note: When disabled no audible indication is given.

Group 5 — Option 2 Supplementary Entry

When disabled (0) an alarm condition occurs if the system has not been unset at the end of the entry time.

When enabled (1) an internal only alarm occurs if the system has not been unset at the end of the entry time (Trigger, External Bell and Strobe do not activate). The internal alarm will run for 30 seconds. A full alarm will occur if the system has not been unset at the end of this time.

This option defaults to 0 (disabled).

Group 5 — Option 3 System Reset for Alarm

This option determines how the system may be reset after an alarm condition:

0. Customer.
1. Engineer.
2. Technistore.
3. Engineer or Technistore.

Set to 0 (Customer): User code resets the system after alarm activations.

Set to 1 (Engineer): User code can cancel an alarm activation but the engineer code is required to reset the system.

Set to 2 (Technistore): User code can cancel an alarm activation but a Technistore reset number must be entered to reset the system.

Set to 3 (Engineer or Technistore): User code can cancel an alarm activation but either the engineer code or a Technistore reset number must be entered to reset the system.

This option defaults to 3 (Engineer or Technistore).

Note: A system reset by the engineer for alarms does not affect Fire, PA Silent or PA, these can be reset by a user code.

Technistore resets are overridden for set types in which communication is not enabled, if communication is enabled at all (Group 7 – Option 6)

Group 5 — Option 4 Hotkey Enable

When enabled (set to 1) this option permits Assistance, Fire and Panic facilities to operate via a double-push on the keypad.

Assistance: Press 4+6 together. Keypad displays -╬- icon with fast pulse tone.

Fire: Press 7+9 together. Keypad displays icon  with slow pulse tone.

Panic: Press * and # together. PA illuminate and a constant tone emits.

Buttons must be held down for two seconds for Hotkey Operation.

This option defaults to 0 (disabled).

Note: For important information on * and # key operation see the note in An Introduction to Programming the Accord xpC.

Group 5 — Option 5 Auto Omit Keypad

When enabled (set to 1) the keypad is omitted if 20 keys are pressed without a valid code being entered, this does not include the # key. The keypad is omitted from the system for 10 minutes and affects all keypads on the system. Keypad auto omit is indicated by icon (– –) on the keypad and constant tone.

A keypad auto omit may be cancelled by operating a zone programmed as Keyswitch.

This option defaults to 0 (disabled).

Group 5 — Option 6 Bell Output

When set to 0 the Bell output is negative applied (positive removed).

When set to 1 the Bell output is negative removed (positive applied).

This option defaults to 0 (negative applied).

Group 5 — Option 7 Alarm Trigger Output

When set to 0 the Alarm Trigger Output is negative applied (positive removed).

When set to 1 the Alarm Trigger is negative removed (positive applied).

This option defaults to 0 (negative applied).

Note: Only valid when Alarm Trigger Output (Group4 - Option 7) is set to 3.

Group 5 — Option 8 System Reset for Day Tampers

This option determines how the system may be reset after a tamper condition that occurs when the panel is unset and has four modes:

0. Customer.
1. Engineer.
2. Technistore.
3. Engineer or Technistore.

Set to 0 (Customer): User code resets the system after day tamper activations.

Set to 1 (Engineer): User code can cancel a day tamper activation but the engineer code is required to reset the system.

Set to 2 (Technistore): User code can cancel a day tamper activation but a Technistore reset number must be entered to reset the system.

Set to 3 (Engineer or Technistore): User code can cancel a day tamper activation but either the engineer code or a Technistore reset number must be entered to reset the system.

This option defaults to 3 (Engineer and Technistore).

Note: This option only affects Tamper conditions occurring when the system is unset. It does not affect tamper conditions occurring when the system is in one of the set modes; these tamper conditions are covered by menu option Group 5 – Option 3 Engineer Reset for Alarms.

Group 5 - Option 9 Zone Configuration

The zones on the Accord xpC function as Normally Closed, Double Balanced, U.S. End of Line.

0. Normally Closed
1. Double Balanced
2. U.S. End of Line

This option defaults to (1) double balanced.

System Programming - Group 6 Comms Options1

Group six programming is as follows:

1. The first digit entered is 6 for System Options.
2. The second digit is the required system option 1 — 9.
3. The third digit is the option value.

Group 6 — Option 1 Primary Telephone No.

A telephone number of up to 20 digits must be entered here. This is the telephone number of the Alarm Receiving Centre (ARC).

- Enter # to create a two second pause dialling of the ARC telephone number. Multiple entries may be used, e.g. three consecutive presses would give a six second pause.
- If less than 20 digits are used, end programming by pressing ✶.
- To delete a telephone number press # then ✶.

Group 6 — Option 2 Secondary Telephone No.

A telephone number of up to 20 digits may be entered here.

- Enter # to create a two second pause in the dialling of the ARC telephone number. Multiple entries may be used, for example three consecutive presses would give a six second pause.
- If less than 20 digits are used, end programming by pressing ✶.
- To delete a telephone number press # then ✶.

Group 6 — Option 3 Account Number

A four to six digit account number must be entered here. Two confirmation beeps are heard when the Account Number has been accepted.

- If less than 6 digits are used, end programming by pressing ✶.

Group 6 — Option 4 User Duress

User 8 can be assigned as User Duress. There are two available options.

0. Duress disabled
1. Duress enabled

This option defaults to 0 (disabled).

Note: Although Duress Codes may set/unset, etc, the Duress signal should be sent as soon as the four digit code is entered.
No audio or visual indication should be given at any time for Duress, other than in the event log where the zone numbers are scrolled through. If a keypad is omitted, the Duress Code must remain active and allow setting and unsetting to take place.

Group 6 — Option 5 Downloader Telephone Number (0870 241 4952)

A Downloader Telephone Number of up to 20 digits may be entered. If less than 20 digits are used, end programming by pressing the * key.

This option should only be programmed if the Ademco Microtech Windows Downloader software is to be used with the panel. The Ademco Microtech Windows Downloader is a software programme that allows remote servicing of the Accord xpC panel, including programme/event-log uploading and downloading. The Ademco Microtech Windows Downloader software runs on an IBM compatible PC running Microsoft Windows 3.0, 3.1, 95 or 98.

The Downloader software must be operated in one of three modes:

Call Back: The call is initiated from the PC. The panel answers and the PC establishes that the correct Downloader ID is present. The panel hangs up and calls the Downloader Telephone No. Remote servicing may begin when the PC answers and a correct Downloader ID is confirmed.

Wait for Call: Enter a valid user code at a keypad, press the # key then 1 to initiate dialling of the Downloader Telephone No. Remote servicing may begin when the PC answers and a correct Downloader ID is confirmed.

Dial Site: The call is initiated from the PC. The panel answers and checks the programmed Account No and Downloader ID. If correct, a valid link is established and remote servicing may begin.

Access to the system via the Downloader software is subject to menu option Group 7 — Option 8 Downloader Options.

Group 6 – Option 6 Downloader I.D. Number

This option specifies an I.D.number for panels communicating via the Downloader Software.

This option defaults to 99999997.

Group 6 — Option 7 Ring Count

This option determines how many times the telephone line rings before the panel picks up. The programmable range of 00 to 15 is outlined in **Table 3.11**.

No of Rings	Panel Operation
00	Panel never answers incoming calls.
01 – 14	Entry equals the number of rings before the panel answers.
15	Answer machine defeat.

Table 3.11 No of Rings

If set to answer machine defeat (15) the Accord xpC only picks up the line if the download PC dials in, hangs up after one ring then redials.

This option defaults to 10 rings (10).

Group 6 — Option 8 Communicator Format

The Accord xpC panel has three communicator format options:

0. Comms disabled.
1. High Speed.
2. Contact I.D.

This option defaults to 1 (High Speed).

0 = Comms Disabled

If Option 8 Communicator Format is set to 0 the panel will not dial-out. Setting Option 8 Communicator Format to 0 (Comms Disabled) does not erase the Comms programming. Communication can be restored with the previous programming by selecting 1-High speed.

1 = High Speed (8 channel)

If Option 8 Communicator Format is set to 1 the panel reports using 8 channel Ademco Fast Format.

The system reports the triggers as detailed below:

- **Fire** zones report using Code 1 in Channel 1 and Restore using Code 3 in Channel 1.
- **PA**, **PA Silent and Duress** zones report using Code 1 in Channel 2 and restore using Code 3 in Channel 2.
- **Alarm** zones report using Code 1 in Channel 3 and restore using Code 3 in Channel 3.
- **Open** (Unset) zones report using Code 2 in Channel 4 and **Closing** (Set) signals report using Code 4 in Channel 4. The process of Setting and Unsetting can be inverted using Group 9 - Option 2 (Invert Open/Close).
- **Tamper** zones report using Code 1 in Channel 5 and restore using Code 3 in Channel 5 when the system is unset. When the system is set Tamper zones report using Code 1 in Channel 3 and restore using Code 3 in Channel 3.
- **Abort** zones report using Code 1 in Channel 7.
- **Verified Alarm** zones report using Code 1 in Channel 8. A Verified Alarm is two alarm conditions during one set period that are separated by no more than the Verified Alarm Time Window (default) 30 minutes. The alarm conditions **must** come from separate zones.
- **RF Low Battery** zones report using Code 1 in Channel 6 and restore using Code 3 in Channel 6.
- **RF Supervision Loss or RF Jam** zones report using Code 1 in Channel 5 and restore using Code 3 in Channel 5.
- **Battery Low/AC Mains Loss** and **Test** report in the status channel (Channel 9).

2 = Contact I.D.

The panel reports using Contact I.D when Option 8 Communicator Format is set to 2. Contact I.D. transmits event type and event source to the monitoring station (see **Table 3.12**).

Note: Assistance Channel (Group 0 - Option 3) must be non-zero for Contact I.D. to function and report assistance events.

Group 6 — Option 9 Central Station (ARC) Receiver Handshake

This option has three settings:

0. UK.
1. Belgium.
2. Paris.

This option defaults to 0 (UK).

System Programming — Group 7 Comms Options 2

Group 7 — Option 1 Dual Reporting

This option can be programmed in one of two modes:

0. Single Report
1. Dual Report

This option defaults to 0 (Single report).

0 Single Report

If set to 0, event/alarm reporting operates in Single Report mode. The panel has to communicate with either the primary or secondary telephone number for successfull communication.

CONDITION	EVENT CODE	NOTES
KEYPAD ASSIST.	101	See Group 0.
FIRE	110	See Group 8.
DURESS	121	See Group 6.
SILENT PA	122	See Group 8.
AUDIBLE PA	123	See Group 8.
INTRUDER	130	See Group 8.
DAY TAMPER	137	See Group 8.
VERIFIED ALARM	139	See Group 8.
SYSTEM TROUBLE	300	Used if Aux/Bell fuse fail.
A.C. FAIL	301	See Group 8.
BATTERY LOW	302	See Group 8.
PROGRAM CHANGED	306	Only sent if Contact ID selected.
BATTERY MISSING	311	Batt fuse blown or batt missing.
RECEIVER JAMMED	344	See Group 0.
RF SUPERVISION FAIL	381	See Group 0.
RF ZONE LOW BATTERY	384	See Group 0.
OPEN/CLOSE	401	See Group 8.
ABORT	406	See Group 8.
EASY SET	408	Only sent if open/close reporting is selected.
KSW SET	409	
DOWNLOAD ACCESS	412	Only sent if Contact ID selected.
ZONE OMIT	570	See Group 9.
PERIODIC TEST	602	See Group 8.
POINT TESTED OK	611	Only sent if Periodic Test enabled. No restore signals.

Table 3.12 Contact ID Trigger Events

When reporting, the panel will dial the Primary Telephone Number:

The panel receives a confirmation signal if successful and the communicator shuts down until another report needs to be sent. If unsuccessful (i.e. the panel does **not** receive a confirmation signal) the panel will try the Secondary Telephone Number.

If the panel does not communicate successfully when dialling the Secondary Telephone Number, it alternates between each number until it either:

- Communicates with one successfully and receives a confirmation signal.
- Tries each number a total of five times. A Comms Fail indication will be given and the communicator will shut down until another report needs to be sent.

Note: Comms Fail is indicated by a flashing ( ) icon on the keypad.

1 Dual Report

If set to 1, the alarm reports in Dual mode, i.e. the panel has to communicate successfully with both primary and secondary telephone numbers.

The communicator shuts down until another report needs to be sent if both reports have been successfully sent.

If either, or both reports are not successful the panel redials the unsuccessful number(s) until:

- It has successfully reported to both numbers.
- It has tried the unsuccessful number(s) a total of five times. A Comms Fail is given and the communicator shuts down until another report needs to be sent.

Group 7 — Option 2 Dial Type

If this option is set to 0 the panel dials using Pulse dialling, also known as Rotary or Loop Disconnect

If this option is set to 1 the panel dials using DTMF Dial, also known as Tone.

Note: Although this equipment can use either Pulse or DTMF dialling, only the performance of the DTMF signalling is subject to regulatory requirements for correct operation. It is therefore recommended that the equipment is set to use DTMF dialling.

This option defaults to 1 (DTMF).

Group 7 — Option 3 Prevent Full Set if Line Fail

If disabled (0) the panel can be full set if a Line Fail has been detected.

If enabled (1) the panel can not be full set if a Line Fail has been detected.

This option defaults to 0 (disabled).

Group 7 — Option 4 Bell Delay

If this option is disabled (set to 0) there is no Bell Delay.

If this option is enabled (set to 1) there is a 10 minute delay between an alarm and the activation of internal and external sounders. During this time the entry beeps sound if the unsetting procedure is initiated and the Bell Delay is overridden if a Line Fail or Comms Fail condition occurs.

This option defaults to 0 (No Bell Delay).

Note: Bell Delay is over-ridden in set states that are not programmed to communicate (Group7 - Option 6).

Group 7 — Option 5 Push-to-Set

If Push-to-Set is enabled (options 1 – 4), Full, Part or Night set exit times for the selected will be set to infinity. For Full Set this overrides the value programmed in the Exit Time option (Group 4 System Options — Option 1 Exit Time).

Setting of the system is terminated when a Push-to-Set zone is opened during the exit time. There is a five second delay between the closing of the Exit Terminate zone and the setting of the system.

Note: The operation (opening and closing) of Exit Terminate zones has no effect on the system except during the setting procedure.

The options for Push-to-Set are:

0. Push-to-Set not used.
1. Push-to-Set on Full Set only.
2. Push-to-Set on Full Set and Part Set.
3. Push-to-Set on Full Set and Night Set.
4. Push-to-Set on all set modes.

This option defaults to disabled 0 (Push-to-Set not used).

Note: Push-to-Set on Full Set is over-ridden when Final Contact is programmed (Group 4 Option 1 = 0).

Group 7 — Option 6 When to Communicate

This option determines under which set conditions the panel communicates following, Alarm, Abort, Verified Alarm and Tamper. This option has four modes of operation:

0. Full Set only.
1. Full Set and Part Set.
2. Full Set and Night Set.
3. All Sets (Full, Part and Night).

This option does not affect any other signals. Communication of Set/Unset is only sent for Full Set conditions.

This option defaults to 0 (Full Set only).

Group 7 — Option 7 Line Fail

If this option is disabled (set to 0) there is no internal alarm or indication in the event of a line fail condition being detected.

If this option is enabled (set to 1), a line fail condition will cause an internal alarm. An audible indication is accompanied by the solid ( ) icon on the keypad. A Line Fail indication does not activate until 40 seconds after detection of the line fail.

The audible indication of the line fail is cancelled by the entry of a valid user code but the ( ) icon remains until 30 seconds after the Line Fail condition is restored.

The communicator still attempts to dial out in the event of an alarm, even if a Line Fail condition has been detected. When the panel cannot dial due to the Line Fail condition the Comm Fail indication flashing ( ) does **not** override the Line Fail indication solid ( ).

This option defaults to 1 (enabled).

Group 7 — Option 8 Downloader Options

This option determines under what set conditions the Ademco Microtech Downloader software may access the Accord xpC panel. There are three options:

0. Full Access.
1. No Access When Set.
2. No Unsetting.

This option defaults to 1 (No access when set).

Full Access (0), permits access at any time and the Downloader software can perform all system operations.

No Access When Set (1), prevents access in any (Full, Part or Night) set condition. The system must first be unset from the site, before the Downloader software can perform all system operations.

No Unsetting (2), permits access the system to perform a download at any time. However, the Downloader cannot unset the system from a set condition.

Group 7 — Option 9 Zone Auto Omit

This option determines the number of times a zone can activate during a set period before it is omitted from the system. There are two options:

0. Two activations during a set period then the zone is omitted.
1. One activation during a set period then the zone is omitted.

This option defaults to 0 (Two activations).

System Programming – Group 8 Communication Enable / Disable

This option is used to enable/disable the communications triggers. The triggers are outlined in **Table 3.13**.

Accord xpC Triggers		
Trigger No.	**Trigger**	**Default**
1	Fire	Enabled
2	PA (+PA Silent)	Enabled
3	Intruder	Enabled
4	Set/Unset	Disabled
5	Day Tampers	Disabled
6	Abort	Disabled
7	Verified Alarm	Disabled
8	Batt Low/AC Fail	Disabled
9	Test Report	Disabled

Table 3.13 Group 8—Triggers

Group 8 — Option 1 Communicate Fire

This option has two settings:

0. No (Fire Comm disabled).
1. Yes (Fire Comm enabled).

This option defaults to 1 (Fire Comm enabled).

Group 8 — Option 2 Communicate PA Signals (PA and PA Silent)

This option has two settings:

0. No (PA Comm disabled).
1. Yes (PA Comm enabled).

This option defaults to 1 (PA Comm enabled).

Group 8 — Option 3 Communicate Intruder

This option has two settings:

0. No (Intruder Comm disabled).
1. Yes (Intruder Comm enabled).

This option defaults to 1 (Intruder Comm enabled).

Group 8 — Option 4 Communicate Set/Unset

This option has two settings:

0. No (Set/Unset Comm disabled).
1. Yes (Set/Unset Comm enabled).

This option defaults to 0 (Set/Unset Comm disabled).

Group 8 — Option 5 Communicate Tamper

This option has two settings:

0. No (Tamper Comm disabled).
1. Yes (Tamper Comm enabled).

This option defaults to 0 (Tamper Comm disabled).

Note: Tamper communication is only sent during unset mode. A Tamper during set (Full, Part or Night) condition, on any zone type, results in an Intruder signal being sent.

Group 8 — Option 6 Communicate Abort

This option has two settings:

0. No (Abort Comm disabled).
1. Yes (Abort Comm enabled).

This option defaults to 0 (Abort Comm disabled).

Group 8 — Option 7 Communicate Verified Alarm

This option has two settings:

0. No (Verified Alarm comm disabled).
1. Yes (Verified Alarm Comm enabled).

This option defaults to 0 (Verified Alarm Comm disabled).

Group 8 — Option 8 Communicate Battery Low and AC Mains Failure

This option has two settings:

0. No (Batt Low/AC Fail Comm disabled).
1. Yes (Batt Low/AC Fail Comm enabled).

This option defaults to 0 (Batt Low/AC Fail Comm disabled).

Note: A.C. mains failure is transmitted after a one hour delay.

Group 8 — Option 9 Communicate Periodic Test Report

This option has four settings:

0. Periodic Test Report Comm disabled.
1. Periodic Test Report Comm enabled—24 hr test period.
2. Periodic Test Report Comm enabled—7 day test period.
3. Periodic Test Report Comm enabled—31 day test period.

When enabled (set to 1, 2 or 3) , the time between periodic test signals is dependant on the option selected.

This option defaults to 0 (Periodic Test Report Comm disabled).

System Programming — Group 9 Parameters

SYSTEM OPTIONS		
GROUP	OPTION	DEFAULT
9	1 = Communicate Omitted Zones (0=No, 1=Yes).	(0)
9	2 = Invert Unset/Set signal (0=No, 1=Yes).	(0)
9	3 = Double Knock zone (0=None, 1–8=zone number).	(0)
9	4 = User Zone Omit (0=No, 1=Yes).	(1)
9	5 = Send restore signals on Unset/Reset (0=No, 1=Yes).	(0)
9	6 = Entry deviation allowed (0=No, 1=Yes).	(0)
9	7 = Print event log (0=No, 1=Yes).	(0)
9	8 = Factory default settings (0=No, 1=Yes)	(0)
9	9 = View software version (0=No, 1=Yes).	(0)

Table 3.14 System Parameters

Group 9 — Option 1 Communicate Omitted Zones

When choosing Contact I.D. as a communication format, zones can be omitted to prevent them operating in this mode. This option allows these zones to communicate with the central station.

This option has two settings:

0. No (Communicate omitted zones disabled)
1. Yes (Communicate omitted zones enabled)

This option defaults to 0 (Communicate omitted zones disabled).

Group 9 — Option 2 Invert Set/Unset Signals

This option has two settings:

0. No (invert Set/Unset disabled).
1. Yes (invert Set/Unset enabled).

This option defaults to 0 (invert Set/Unset disabled).

If this option is enabled (1), Set signals report a Code 4 signal on Channel 4. If disabled (2), Unset signals report a Code 2 signal on Channel 4.

Group 9 — Option 3 Double Knock Zone

This option allows one zone to be programmed as a Double Knock zone. The control panel will only acknowledge the Double Knock zone if it is activated twice within five minutes, or once for more than ten seconds.

Note: Only one zone can be selected for double knock. If a zone is programmed as Double Knock, unsetting and setting will not affect the Double Knock status.

0. No Zone.

1-8. Number of zone for double knock.

This option defaults to 0 (No Zone).

Group 9 — Option 4 User Omit Zone

This option has two settings:

0. Zone omit disabled, zones cannot be omitted by the user.
1. Zone isolation enabled, zones can be omitted by the user.

This option defaults to 1 (enabled).

When this option is disabled, three error beeps are heard after a user code is entered and 6 (Omit) is selected.

Note: This option only affects users. The engineer code can omit zones regardless of this option setting.

Group 9 — Option 5 Restore Signals on Unset or Reset

This option has two settings:

0. Restore on Unset.
1. Restore on Reset.

If set to 0 (Restore on Unset) the restore signal is sent, after an alarm condition during a set state, when a user code is entered to unset the system.

If set to 1 (Restore on Reset) the restore signal is sent after an alarm condition during a set state, when the system is Reset.

This option affects High Speed format only.

This option defaults to 0 (Restore on Unset).

Group 9 — Option 6 Entry Deviation Permitted

This option has two settings:

0. Entry deviation not permitted.
1. Entry deviation permitted.

If set to 0 (Entry Deviation not permitted), deviation from an entry route during entry or supplementary entry periods will result in a Full Alarm Condition.

Entry Deviation permitted (1), starts a 30 second time window when deviation occurs. During the 30 seconds an internal alarm warning should sound. External bells/ communications/triggers, will be withheld until 30 seconds has passed or the entry period ends. Entering a valid code before a full alarm condition, prevents communication of triggers.

This option defaults to 0 (Entry Deviation not permitted).

Group 9 — Option 7 Print Event Log

This option allows the system event log to be printed by a serial printer.

0. No Event Log Print
1. Print Event Log

The Event Log is printed from Programming Mode by pressing 971 then exiting Programming Mode. On exiting Programming Mode, this option automatically resets to 0 and the log will not print again until this operation is repeated.

This option defaults to 0 (No Event Log Print).

Note: See Appendix B for instructions on connecting a printer to the system.

Group 9 — Option 8 Factory Defaults

The control panel programming can be reset to the factory defaults.

0. No Reset
1. Reset (981 must be entered twice).

This option defaults to 0 (No Reset).

Reset is enabled from Programming Mode by pressing 981 twice within 5 seconds.

If the Engineer or Master User Code has been lost they can be defaulted separately from the rest of the system. This is done from Day Mode:

- Power down the control.
- Re-power the control.
- Hold down the * and # keys together until two beeps are heard.
- The Engineer Code is now 9090 and the Manager Code is 1234.

Group 9 — Option 9 Show Software Version

Enter 991 to display a three digit version number.

Group 0 Communications

Group 0 — Option 1 Technistore Version

This option is for use with Technistore reset. The engineer can programme the Technistore Version Number with a valid range of 000 to 255.

To programme the Technistore Version Number:

- Enter Programming Mode.
- Press 0, then 1, then enter the Technistore version number.

This option defaults to 002.

Note: The Technistore Version should be selected after discussion with the Alarm Central Station (ARC).

Group 0 — Option 2 Verified Alarm Time Window

This option represents the necessary time period between the activation of two separate zones before a verified alarm signal is sent to the ARC.

0. 45 mins
1. 10 mins
2. 20 mins
3. 30 mins

This option defaults to 3 (30 mins).

Group 0 — Option 3 Assistance Channel

The engineer can assign any zone as an Assistance Channel. This option when enabled will overide any chosen Group 8 Option.

0. Disabled
1. Overide report Fire to ARC
2. Overide report PA channel to ARC
3. Overide report Alarm channel to ARC
4. Overide report Set/Unset channel to ARC
5. Overide report Day Tamper channel to ARC
6. Overide report RF Low Battery channel to ARC
7. Overide report Abort channel to ARC
8 Overide report Verify Alarm channel to ARC

This option defaults to 6.

Note: The function of Assistance Channel depends upon the relevant Group 8 Option being enabled.

Zone Type Definitions

General Information

The Accord xpC has ten zone types, these are:

0 — Not Used

Zones which are unused should be programmed as 0 Not Used. These zones should also be linked out using the appropriate zone link or 1K resistor provided in the Auxilliary pack.

1 — Final Exit

The Final Exit zone is used for the entry/exit route(s), usually assigned to the front door or other main entry point(s). The zone becomes operational when the system is set or setting.

The Exit Time must be set to infinite (410) for a Final Exit zone to terminate a Full Setting procedure.

Activation of a Final Exit zone while the system is set, initiates the unsetting procedure. The keypads beep and all Intermediate Exit Zones are isolated. A valid User Code must be entered at the keypad or a Keyswitch Zone activated before the Entry Time has elapsed. The Exit Time is fixed at 30 seconds when the system is Part Set or Night Set then.

2 — Keyswitch

A Keyswitch zone has a latching operation.

The Keyswitch should be wired across the zone terminals to Full Set the system. Opening the Keyswitch zone will start the Full setting procedure. Closing the Keyswitch zone (closed circuit) instantly unsets the system.

The Keyswitch can also unset the system from Part or Night Set when programmed in group 2 and 3.

It is strongly recommended that the Keyswitch should be fitted in a Tamper protected case with the Tamper switch connected in series with the other Tamper circuits at the control panel.

3 — Intruder

An Intruder zone is used on devices that require an instant alarm if activated when the system is Set. During the Set state, zone activations cause internal sounders and external sounders to activate.

4 — Walk Through

A walk Through zone is used with the Final Exit zone. The unsetting procedure is initiated, all Walk Through zones are omitted during the Entry Time when the system is set and a Final Exit zone is activated. This gives users access to a keypad or keyswitch.

If a Walk Through zone is activated first when the system is Full Set it causes a full alarm.

5 — 24 Hour Tamper

A 24 Hour Tamper zone is used for system tampers and for zones covering sensitive areas such as stock rooms, fire doors, external bell box, etc.

If a 24 Hour Tamper zone is activated when the system is Unset, the keypads sound and the corresponding zone is indicated on the keypad. External sounders do **not** operate.

It is strongly recommended that a zone programmed as 24 Hour Tamper is programmed in one of the following ways:

- Programmed as 24 Hour Tamper in Groups 1 (Full Set), 2 (Part Set) and 3 (Night Set).

- Programmed as 24 Hour Tamper in Group 1 (Full Set), and, 0 (Not Used) or 24 Hour Tamper in Groups 2 (Part Set) and 3 (Night Set).

Programming a zone in Group 1 (Full Set) also covers the unset condition.

6 — PA Silent

The PA Silent zone type is assigned to a panic button. Activation of a PA Silent zone does not cause any audible indication and no indication is given on the keypad display

until a valid code is entered at the keypad. The activation is reported via the Accord xpC dialler.

It is strongly recommended that a zone programmed as PA Silent is programmed in one of the following ways:

- Programmed as PA Silent in Group 1 (Full Set), 2 (Part Set) and 3 (Night Set).
- Programmed as PA Silent in Group 1 (Full Set), and, 0 (Not Used) or PA Silent in Groups 2 (Part Set) and 3 (Night Set).

Programming a zone in Group 1 (Full Set) also covers the unset condition.

7 — PA Audible

A PA Audible zone is assigned to a panic button. Activation of a PA Audible zone initiates a full alarm condition. The activation is also reported via the Accord xpC downloader.

It is strongly recommended that a zone programmed as PA Audible is programmed in one of the following ways:

- Programmed as PA Audible in Groups 1 (Full Set), 2 (Part Set) and 3 (Night Set).
- Programmed as PA Audible in Group 1 (Full Set), and, 0 (Not Used) or PA Audible in Groups 2 (Part Set) and 3 (Night Set).

Programming a zone in Group 1 (Full Set) also covers the unset condition.

8 — Push-to-Set

A Push-to-Set zone becomes active when the setting procedure is intiated. Setting will terminate if the Accord xpC detects a change in state (Set/Unset) on a Push-to-Set zone

Note: For Push-to-Set zones to operate Group 7 - Option 5 (Push to set) must be enabled. There is a five second delay between the activation of the Push-to-Set zone and the setting of the system.

Push-to-Set zones have no effect when the system is set .

9 — Fire

A Fire zone is used for fire detection devices with normally closed outputs.

It is strongly recommended that a zone programmed as Fire is programmed in one of the following ways:

- Programmed as Fire in Group 1 (Full Set), 2 (Part Set) and 3 (Night Set).
- Programmed as Fire in Group 1 (Full Set), and, 0 (Not Used) or Fire in Groups 2 (Part Set) and 3 (Night Set).

Programming a zone in Group 1 (Full Set) also covers the unset condition.

Activation of a Fire zone at any time causes the Loud-Speaker, Keypad Sounder and Bell outputs to pulse on and off.

Section 4: Operating The Accord

Setting and Unsetting the System

Before setting the system:

- Ensure all doors and windows are secure.
- Ensure movement detectors are not obstructed.

Full Set 1 (●)

To Full Set the system:

- Enter your User Code then press the 1 (Full Set) key.
- A constant exit tone is heard which changes to a broken tone as you pass the detectors (except Final Exit zones) on the exit route.
- The full set icon (●) will flash during the Exit Time.
- To cancel the setting procedure press the * key.
- When the system sets, two confirmation beeps are emitted by the keypad and internal speaker. The * key will no longer function.

Easy Set allows users to Set the system without entering a User Code. If Easy Set is programmed you may set the system by pressing the # key, then the 1 (Full Set) key. See SECTION 3: Programming the Accord; Group 4 — Option 8 Easy Set.

Part Set 2 (◗)

To Part Set the system:

- Enter your User Code then press the 2 (Part Set) key.
- This starts the setting of the system using the Part Set zone programming. This allows a sub-set of the system to be set.
- The Part Set icon (◗) will flash during the Exit Time.
- To cancel the setting procedure press the * key.
- When the system sets two confirmation beeps are emitted by the keypad and internal speaker; after this the * key does not function.

Note: The activation of the keypad buzzer and internal speaker are dependant on the programming of Group 4 — Option 4 Part Set Exit Warning.

Easy Set allows users to Part Set the system without entering a User Code. If Easy Set is programmed the system may be set by pressing the # key, then the 2 (Part Set) key. See SECTION 3: Programming the Accord; Group 4 — Option 8 Easy Set.

Night Set 3 ( )

To Night Set the system:

- Enter your User Code then press the 3 (Night Set) key.
- This starts the setting of the system using the Night Set zone programming. This allows a sub-set of the system to be set.
- The Night Set icon ( ) will flash during the Exit Time.
- To cancel the setting procedure press the * key.
- When the system sets, two confirmation beeps are emitted by the keypad and internal speaker; after this the * key does not function.

Note: The activation of the keypad buzzer and internal speaker are dependant on the programming of Group 4 — Option 4 Part Set Exit Warning.

Easy Set allows users to Night Set the system without entering a User Code. If Easy Set is programmed you may set the system by pressing the # key, then the 3 (Night Set) key. See SECTION 3: Programming the Accord; Group 4 – Option 8 Easy Set.

Unsetting [4]

To Unset the system the user should go to the keypad via the agreed entry route and enter their user code.

Unsetting After or During an Alarm

On the keypad the zone number corresponding to the first zone to go into alarm illuminates. Entering a User Code stops any alarm that is in progress. To reset the system enter the User Code again. If set for engineer reset after an alarm, entering the Engineer Code causes an Engineer Reset. If the system is set for a technistore reset after an alarm, the (**cE**) icon will appear on the keypad display followed by the zone number. The (**cE**) icon will then reappear followed by the 5 digit technistore code, one digit at a time. Enter this code at the monitoring station to obtain an anticode which when entered causes technistore reset.

Note: The user code cannot reset the system after an alarm condition if Group 5 – Option 3 (Engineer Reset for Alarms) has been programmed for Engineer Reset or Technistore Reset. .

Engineer Setting and Unsetting

The Engineer Code can be used to set the system (Full, Part or Night). It can **only** be used to unset the system when it was previously used to set it.

Testing the System 5 ( )

To Test the zones and outputs on the system enter a valid code then press the 5 ( ) key.

The Bell output and zone number are run through activate for five seconds. The Strobe output flashes until the test is finished.

When the keypad has reset to Day Mode (○), test the zones in turn. Activate each zone individually to verify that the corresponding number on the keypad displays and you hear two beeps from the keypad.

To exit test mode enter a valid code, the keypad beeps twice to confirm.

Omit Zone 6 (–●→)

To omit one or more zones enter a valid user code and press 6 (–●→) key. Enter the zone numbers(s) to be omitted. After five seconds the selected zones are omitted and the panel exits from omit.

Example: To omit specific zones

- Enter a user code.
- To omit zones four, five and six press 6 456.
- Zone numbers four, five and six now flash on the keypad.

To delete all the zones from the omit list enter a valid user code, press the 6 (–●→) key and then press the * key.

When the zones are omitted, set the system in the normal way. All zones will be restored to normal (non–omitted) operation when the system is next unset.

Note: PA Silent, PA Audible and Fire type zones cannot be omitted.

Changing Codes 8 (o-)

The Accord xpC can be programmed with up to eight User Codes. User 1 is assigned as the Master User. The master user code is neccessary to programme new User Codes for the system.

Note: User eight may be assigned as Duress via group 6 option 4.

Reprogramming Your Code

To reprogramme your code, enter it at a keypad, select the codes option by pressing 8, select your user number and enter the new code.

The Master User Code is code 1, the Engineer Code is code 0.

Note: The engineer must change his code from day mode not programme mode.

Example: To change the master user code (Code 1) to 5678:

- Enter the Master User Code.
- Press: 8 1 5678.
- Two beeps confirm that the new code has been accepted.
- The master user code is now 5678.

Note: The master user code defaults to 1234, the Engineer Code defaults to 9090.

The master user code can reprogramme the other seven user codes. Only the master user code can be used to reprogramme the master user code.

Only the Engineer code can be used to re-programme the Engineer Code.

Each user can re-programme their own code.

Programming New User Codes

To programme a new User Code, enter the Master User Code, select the code option by pressing 8, press the appropriate key to select the User Code (2 — 8) and enter the new code number.

Example: To programme User Code 2 as 2626:

- Enter the Master User Code.
- Press: 8 2 2626.
- Two beeps confirm that the new code has been accepted.
- User Code 2 is now 2626.

Removing a User Code from the System

Users can remove their own user code from the system. To remove their own User Code, enter code, select the codes option by pressing 8, press the appropriate key for your user number and press the ✶ key.

Example: To delete User Code 2 from the system User 2 should:

- Enter user 2's User Code.
- Press: 8 2 ✶.
- Two beeps confirm that the User Code has been deleted.
- User two has been removed from the system.

Note: The Master User Code (User 1) can delete the other seven User Codes. The Master User Code cannot be deleted. If the engineer deletes the engineer code, it can be rectified by defaulting the code.

Enabling/Disabling the Chime Function 9 (♫)

Any zone can be programmed to Chime (two beeps from the keypad and internal sounder) when it is activated.

Enabling the Chime Function on Zones

To enable the Chime function on a zone or zones: enter your User Code, select the Chime option by pressing 9 and press the appropriate keys for the zones you wish to chime.

Example: To enable the Chime function on zones three and five:

- Enter your User Code.
- Press: 9 3 5.
- Two beeps confirm that the Chime function has been assigned to these zones.
- Zones three and five now have the Chime option enabled.

Disabling the Chime Function on All Zones

To disable the Chime function on all zones, enter your User Code, select the Chime option by pressing 9, then press the * key.

Note: The Chime function cannot be disabled on individual zones. However, the chime function on a zone is deleted when entering and exiting programming mode.

Viewing the Event Log from a System Keypad

To view the 16 Event Log:

- Enter a valid User Code and press 0.
- The most recently activated zone number is displayed and the keypad beeps once.
- The system works its way through the history of the zone activations.
- If a zone has been activated two or more times in succession the zone number will display and the keypad beeps for each activation.
- Hotkey conditions are indicated by scrolling numbers.
- The keypad beeps twice in rapid succession at the end of the Log display.

The * key can be used to terminate event log veiwing at any time.

Viewing the Event Log from Ademco Microtech Downloader Software

The Ademco Microtech Downloader software allows the 250 Event Log of the Accord xpC panel to be viewed. The log stores 250 time and date stamped events.

Viewing the Event Log through the keypad is restricted to the last 16 alarm events (with no time/date stamp), only by using the Downloader software or a serial printer, can the full 250 events and the time/date be viewed.

Printing the Event Log

The Event Log can be printed in full by a serial printer connected to the AUX supply and loudspeaker terminal via a 4110 Printer Lead (**Part No. 2011-095**) and adapter (**Part No. 2011-096**). A Print option is provided in Group 9 — Option 7 Print Event Log.

Programming the Time and Date

The time and date may be set through the keypad by entering any valid code and pressing # 0 (Log) then DDMMYYHHMM where DD is the day of the month (01 – 31),

MM is the month (01–12), YY is the year (00 – 99), HH is the hour (00 – 23) and MM is the minute (00 – 59). Confirmation beeps acknowledge that a valid date and time have been entered. The time and date can also be set using the Ademco Microtech Downloader software, for more information see the Accord xpC Downloader Instruction Manual.

Note: Time defaults back to 00:00 1/1/00 when the power is switched off.

Hot Keys

When Hotkey function is enabled (Group 5 – Option 4), Assistance, Fire and Panic alarms will function via a double push on the keypad (see table below).

Hot Key	Type	Colour Code	Keypad N⁰	LCD Display
1	Assistance	Green	4 + 6	
2	Fire	Red	7 + 9	
3	Panic	Blue	* + #	PA

Note: Hotkey buttons must be pressed for 2 seconds for Hotkey function.

Section 5: Systems Indications and What They Mean

FUNCTIONS	LCD KEYPAD (enhancements)
DAY MODE	 (solid)
FULL SET	 (flashing)
PART SET	 (flashing)
NIGHT SET	 (flashing)
ZONE 9 TAMPER	 (flashing)
ZONAL TAMPER	 (solid) + zone no.
ALARM/TEST	Zone no.(solid)
LINE FAULT	 (solid)
COMMS FAIL	 (flashing)
LOCKOUT	-- (solid)
PA HOTKEY	PA (solid)
FIRE HOTKEY	 (solid)
ASSIST HOTKEY	 (solid)
OMIT	 (solid) + zone no.
RF JAM	 (flashing)
RF LOW BATT	 (solid)
RF SUPER. FAIL	 (solid) + zone no.
BATT. MISSING	 (solid) X flashing
BATTERY LOW	 (solid) X flashing
MAINS FAIL	 (flashing)
ENG. MODE	 (flashing)

Section 6: Handing the System Over to the User

Fill In the User Instructions!

User Instructions come with every Accord xpC panel that explaining end-user functions.

To minimise false alarms and unnecessary call outs it is important that the user is familiar with the operation of the system. It is strongly recommended that the engineer explains fully the operation of the system to the user.

Appendix A: Specifications

Panel Specification

Physical	*Width:*	*300 mm*
	Height:	*250 mm*
	Depth:	*90 mm*
Electrical	*Mains Input:*	*230 V a.c. 50Hz nominal*
	Current Drain:	*30 mA (normal use)*
	Power Supply	*12 V d.c. 750 mA*
	Bell Output	*12 V d.c. 500 mA*
	Strobe Output	*12 V d.c. 250 mA*
	Internal Speaker Driver	*16 Ohms*

Note: Due to continued product development these specifications may change without notice.

Remote Keypad Specification

Connected via a three wire terminal block on the back of the keypad.

Built in piezo warning sounder

Physical*Width:*	*120 mm*	
	Height:	*120 mm*
	Depth:	*25 mm*
Electrical	*Voltage Input:*	*12 V d.c.*
	Current Drain:	*50 mA (typical), 100 mA (maximum)*

Appendix B: Connecting a Printer to the System

Installing a Printer

Two printer leads are required to connect the Accord xpC panel to a serial printer.

1. Master Printer Lead (part no. 2011-095) connects from the Printer to the Adapter Printer Lead.
2. Adapter Printer Lead (part no. 2011-096) connects from the Control Panel to the to the Master Printer Lead.

The Adapter Printer Lead connects to the control panel using a 3 wires connection:• Yellow wire to LS terminal

- Red wire to +Aux(12V)
- Black wire to -Aux(0V)

The serial printer should have the following setting:

- Baud Rate 1200
- Parity None
- Stop Bits 2
- Data Bits 8
- Start Bits 1

Appendix C : Bell-Box Connections

The terminal connections for various bell-box models are shown below.

Lynteck Ltd. - 120 LED / 120 Lexon.

Accord Terminals	BELL +	BELL -	BELL TAMP -	BELL TAMP - R	STRB
Bell Box Terminals	HOLD +	TRG	HOLD -	TAMP R	STRB

Elmdene - Rapier 3000, 4000, 5000, 6000; Prima 100, 200, 300, 400, 500, 600; Starlight 020.

Accord Terminals	BELL +	BELL -	BELL TAMP -	BELL TAMP - R	STRB
Bell Box Terminals	+ H	- R	- H	RTN	- ST

CQR Security - Sigma, Cequera, Cequera Plus and Ultima.

Accord Terminals	BELL +	BELL -	BELL TAMP -	BELL TAMP - R	STRB
Bell Box Terminals	HOLD OFF +VE	SIREN TRIG	HOLD OFF -VE	A/T RET SIG	STROBE TRIG

Ventcroft Security - Vision, Classic and Spirit.

Accord Terminals	BELL +	BELL -	BELL TAMP -	BELL TAMP - R	STRB
Bell Box Terminals	HOLD OFF +VE, STB +VE	TRIG -	HOLD OFF -VE	RTN	STB -

Flashguard - Xtra

Accord Terminals	BELL +	BELL -	BELL TAMP -	BELL TAMP - R	STRB
Bell Box Terminals	SUPPLY +, STROBE +	TRIGGER	TAMP OUT	SUPPLY -	STROB -

C & K - Active Guard

Accord Terminals	BELL +	BELL -	BELL TAMP -	BELL TAMP - R	STRB
Bell Box Terminals	12V+, STRB +	S -	12V -, TAM 24 (left)	TAM 24 (right)	STB -

Note: Where two connections are specified for the bell box connection a 0W link should be made between the two terminals on the bell box PCB.

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Ademco-Microtech Ltd, 3 Wellington Crescent, Fradley Park, Lichfield, Staffs, WS13 8RZ.

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