



Intrinsically safe pager, type APG7

APG7 INTRINSICALLY SAFE PAGER LIMITATIONS OF USE

This page contains BASEEFA related information. No alterations are permitted without reference to the BASEEFA liaison officer

THE APG7 SERIES OF MOBILES ARE INTRINSICALLY SAFE AND MUST NOT BE MODIFIED WITHOUT PRIOR PERMISSION FROM THE CERTIFYING BODY.

| | |
|---|--|
| Classification | Category 1 |
| Rating | ia, zone 0 |
| Temperature rating.: See below | |
| | (Suitable for all gas/air flammable mixtures except carbon disulphide) |
| IP rating (protection level against the ingress of dust and liquid) | 53 |
| Main case material ambient temperature range | -20°C to +40°C |

The polycarbonate material used to manufacture the main case together with the natural leather pouch have been selected to protect the equipment against damage, e.g. being dropped or knocked, during normal operation.

These units contain no user serviceable parts, other than the battery. Units must be returned to the factory for servicing

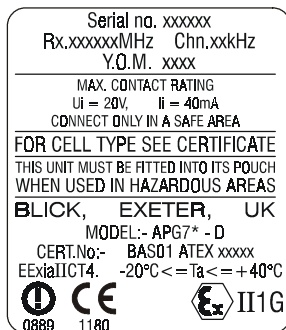
Important: The pager must be fitted into its leather pouch when used in hazardous areas

Type: APG7*-D.

Battery option, alkaline,

Blick Pt.No. 151015 must be fitted

Temperature rating: **T4**

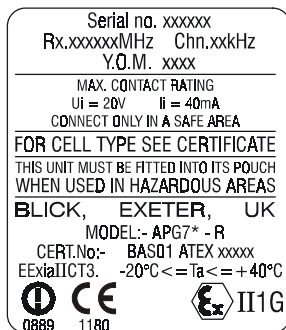


Type:APG7*-R

Battery option, NiMH,

Blick Pt.No. 151026 must be fitted

Temperature rating **T3**



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Introduction

APG1 and APG2 pagers are designed for use in both on-site and wide area paging systems. The robust plastic case is fitted with a removable clip that allows the pager to be worn on a belt or in a pocket. A safety cord with clip is also supplied.

The APG1 is an alphanumeric pager. The APG2 is an alphanumeric pager that can receive speech messages where the system licence allows.

- Pagers have a memory that can store up to 80 characters. Messages are displayed in blocks of eight characters and can be reviewed and deleted when required.
- The display can be inverted by the user so that messages are legible whichever way round the pager is worn.
- The operational prompts may be displayed in any of six languages.
- Fourteen different bleep tones are available. Two volume levels or silent operation can be selected. A light flashes during the call.
- Each pager can be programmed with up to seven different addresses. The first address is the pager's Individual Code number and the remaining six are Group Codes. Each Group Code can be allocated to any number of pagers to allow them to be called simultaneously.
- Addresses may be entered or changed by sending special programming calls to the selected pager.
- The pagers are powered by one AA size cell (battery); this can be either disposable or rechargeable. A rechargeable cell will be charged when the pager is placed in a charging rack.
- A low battery indication is made on the pager's display when cells require replacement or recharging.
- Vibrator (optional).
- A display back light.

How to use this guide

To perform the required task simply follow the paragraphs in the left column.

To give you further information an information column appears on the right hand side of the instructions. This gives additional information for the step that you are following or, in some cases, the result of your actions.

To prepare your pager for use

Before you use your pager for the first time ...

Please ensure that the battery is new (disposable) or fully charged (rechargeable).

To ensure that a rechargeable battery is fully charged place your pager in a charging rack for 14 hours.

To insert (or change) the battery

Press down on the battery door, slide it towards the centre and hinge it outward to reveal the battery compartment.

Invert the pager and allow the old battery to slide out.

Place the new battery (size AA) into the compartment with its positive terminal facing outwards.

Hinge the door over the battery, press down and slide it towards the side of the pager case until it clicks into position.

The pager will bleep and display two crosses to show that it is active.



If your pager shows: NO CODES....

You will need to program it with an Identity Code before it can be used.

Please refer to your supplier for details.




NO CODES

Pager Controls

All the functions of your pager are controlled by pressing combinations of the three push buttons on the side.


To switch your pager off

Press and hold

the power button .

When the displays go blank, release the button.

To switch your pager on

Press and hold  until the displays show two crosses.

Release the button.


The function button

When your pager was configured a number of 'user selectable' functions were enabled. You can access these using this button whilst in the selection mode (please refer to the section '**User selectable functions**' for details).


When you enter the selection mode the screen on your pager will show the available functions in sequence. Each option is displayed for a short period before changing to the next. Whilst a function is displayed it can be switched between the settings by pressing button **f**.

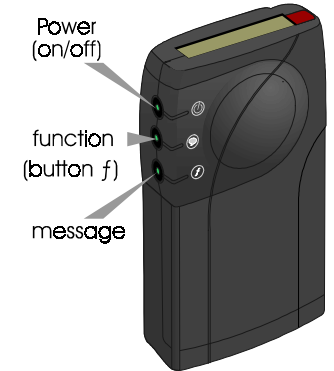
Functions that can be switched on or off are selected when a tick (3) is shown and deselected by a cross (X).

If alternative settings are offered then the text indicates the choice (e.g., HIGH VOL or LOW VOL).

Message button 

This button controls message review.

You can press  to cancel the bleep tone whilst receiving a call.



To reprogram your pager with identity codes, Individual (IC) or Group (GC)

You will need to be able to send programming calls from your paging encoder (keyboard) to carry out this procedure. Please refer to the encoder user guide for details.

Press and hold button **(f)** until the top display shows the pager's current Individual Code . Release the button.

Wait until the display shows

PROGRAM?

then press and

release **(f)**.

The display will first show

PROGRAM?

and then the

Individual Code.

To change the Individual Code press and hold button **(f)** while it is displayed.

Send a programming call from the paging encoder.

When the new code appears release the button.

The pager will show the Group Codes (GC) in sequence.

To add, change or delete a Group Code press and hold **(f)** while it is displayed.

Send a programming call from the paging encoder

When the new code appears release the button. The display will change to show the next Group Code.

If you wish to add, change or delete the code press and hold **(f)** and send a programming call.

If you do not wish to make changes do not press the button and allow the pager to return to normal operation.

IMPORTANT:
BEFORE PROGRAMMING YOUR PAGER PLEASE ENSURE THAT YOU FIT A NEW OR FULLY CHARGED BATTERY. FAILURE TO DO SO MIGHT RESULT IN LOST CODES.

The display will scroll through the user selectable options (e.g., display, silent, volume) before reaching PROGRAM?

The current Individual Code will be shown, for example:

IC 12345



The display will show

++

to indicate that your pager has returned to normal operation.

To use your pager

To receive paging calls

When your pager receives a call it will bleep and display a message (and vibrate).

The display will show **BLEEP**, **SPEECH** or a message.

Press the message button **(M)** if you wish to cancel the bleep tone whilst receiving the call.

After you have received a message call you will offered the option to:

DELETE ?

If you do not wish to save the message momentarily press **(M)**

If you do nothing your pager will store the message. The message will remain on the display until you receive another call.

MESSAGE

BLEEP indicates that there is no message. The sound of the bleep tone selected by the system operator is normally chosen to indicate the action that you should take.

SPEECH (available on APG2 pagers) indicates that a speech message is about to be transmitted. When the bleep tone has finished you will receive the speech message.

To change the top display orientation when in a charging rack

To alter the orientation of the display press button **(M)** during the first second of entry into the rack. The selection remains in the memory.

Low battery

When **LOW BATT** is displayed you must replace or recharge (as appropriate) the battery as soon as possible.

Out of range

If this option was selected during configuration your pager will bleep and display **RANGE?** if you are out of range of the transmitter for more than 40 seconds.

To review and delete stored messages

The message store has a capacity of 80 characters. When the store is full, new messages will overwrite the existing ones, starting with the oldest.

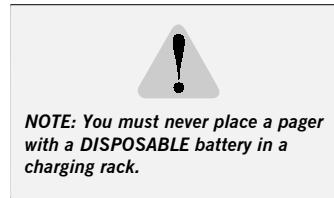
You can set your pager (see 'User selectable functions', page 11) to review messages using either of two options:

- a Block message review. When you initiate the message review your pager will display all the stored messages in sequence. If you choose to delete then all messages are cleared from the store.
- b Individual message review. This option allows you to review and delete any stored message.

Block message review

(User selectable option)

Press the message button  to display the number of stored messages.




Your pager will continue to display RANGE? until it receives a valid transmission. Other active pager functions will be displayed alternately.

Display backlight
When stored messages are reviewed the display will be illuminated automatically.


The default message review method is set during pager configuration (p13). If you select the alternative then your pager will revert to the default when you next switch it on.

When no messages are stored then the displays will show: 0 M

To view the messages press and hold  until the last message is displayed. Release the button. The pager will display all the messages in sequence.

When all messages have been displayed the pager will show:


DELETE ?

Press the message button  momentarily if you wish to clear all messages from the store.

Individual message review

(User selectable option)

Press the message button  to display the number of stored messages.


Press the message button  again to display the individual message number, starting with the oldest.

Hold the button in to scroll through the message numbers.

Release the button when the message that you wish to see is shown.

When the message has been shown you will be offered the option to delete it.

Press the message button  momentarily if you wish to delete the message.

If you wish to pause the display press and hold .

The number of each message is shown on the display.

If you do not delete the reviewed messages the displays will show the number of stored messages.

2 OF 2

NOTE
If you switch your pager off or place it in a charging rack (rechargeable batteries only) all messages will be deleted.

The display will show:

2 M

The display will show:

2 OF 2

The display will show:

1 OF 2

The display will show:

DELETE ?

The display will show:

DELETED

NOTE
If you switch your pager off or place it in a charging rack (rechargeable batteries only) all messages will be deleted.

User selectable functions

You can customise some of the functions of your pager to suit your own requirements. This can be done at any time.

The following is a complete list of the functions. You will only see those functions made available to you when your pager was configured.

Several functions are set as configuration defaults in the factory. The headings for these are in normal text. The remaining functions are shown in italics. The user functions are shown on the TOP display. The front display will show the last received message (if any).

To access the selection mode

Press and hold button **f** until the individual code is displayed then release it.

IC 12345

Display orientation

DISPLAY MIRROR

Silent mode

SILENT ✓ SILENT X

Long ID

LONG ID X LONG ID ✓

Bleep volume

HI VOL LO VOL

To change the setting of a function press **f** whilst it is shown on the display.

Each time you press the button the setting will change.

If you do not press the button for a short while the pager will move to the next function.

The pager will show the available functions in sequence.

Press button **f** only if you wish to make a change.

This inverts the display to make it easier to read wherever you wear your pager.

You can stop your pager from beeping whilst receiving a call. If you select SILENT the word will be displayed alternately with other active pager functions e.g., RANGE, LOW BATT.

This selection will lengthen the beep period to 24 seconds. You can still cancel the tone in the normal way by pressing the message (bottom) button.

Two bleep volume levels are available.

Message review method

BLKMESSX BLKMESS ✓
(select individual) (select block)

This screen will allow you to choose message review facility. Select a tick to use BLOCK MESSAGE review or a cross to review INDIVIDUAL MESSAGES.

If you switch the pager off it will revert to the default setting the next time that it is switched on (the default is set during pager configuration - see below).

Program

PROGRAM?

Programming instructions can be found on page 7.

If you wish to program an identity code (Individual or Group) press **f** and follow the instructions on page 5. Otherwise allow the pager to continue through the selection sequence.

User groups

G3X99999 G2V66666

This facility allows you to join (or leave) any of the groups programmed into your pager. Each of the programmed groups is displayed in sequence. Press button **f** to make your choice.

When you have finished your pager will return to normal operation.

To configure your pager

These procedures allow you to set the engineering functions of your pager to allow it to operate with your paging system and to select user functions.

WARNING

If you are not sure how to set these engineering functions please refer to your supplier. If you make an invalid setting your pager might not work.

You must delete all identity codes from your pager before you can change the configuration.

To delete all codes

Press and hold button **f** until the top display shows the pager's current Individual Code.

Release the button.

Allow the pager to go through the user selections.

Wait until the display shows

PROGRAMP

then press and

release **f**.

The display will first show

PROGRAMV

then the

individual code.

Press and hold **f**

Send a DELETE ALL programming code from the system encoder.

The display will show:

NO CODES

Your pager is now ready to be configured.

You will need to be able to send programming calls from your paging encoder to carry out these procedures. Please refer to the appropriate user guide for details.

IMPORTANT: Please ensure that the battery is fully charged (rechargeable) or new (disposable) before programming the identity codes otherwise they might not be saved to memory.

Refer to the section **To configure the pager and program the identity codes** for details.

To change the format and program codes without altering the configuration.

Press and release button **f**

The display will show the current format setting

e.g., FORMAT C

Whilst the format is displayed, each time you press **f** the format will change.

Release the button when the required format is displayed.

The display will show IC (Individual Code).

Press and hold button **f**

Send a programming call for the required Individual Code from the system encoder.

When the new code appears release the button.

The pager will show the Group Codes (G1 to G6) in sequence.

IMPORTANT: Please ensure that the battery is fully charged (rechargeable) or new (disposable) before programming the identity codes otherwise they might not be saved to memory.

FORMAT is normally set in the factory from the ordering specifications.

The FORMAT letter shown MUST correspond to the format setting in the system encoder otherwise the pager will not work.

A, B and C represent the three coding formats. Format C is the default Blick setting. A and B can be used for specific systems (please refer to your supplier before using these options)..

This will store the new format setting

Continued on next page

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To add a Group Code press **f** while it is displayed.

Send a programming call for the new code from the system encoder.

This will store the new code

When the new code appears release the button. The display will change to show the next Group Code.

If you wish to add another code press **f** and send a programming call.

This will store the new code

If you do not wish to make changes do not press the button and allow the pager to return to normal operation.

To configure the pager and program the identity codes

Switch the pager off

Press and hold button **f** then switch the pager on. The pager will display the software title, for example,

APG203

IMPORTANT: Please ensure that the battery is fully charged (rechargeable) or new (disposable) before programming the identity codes otherwise they might not be saved to memory.

To change the setting of a function press **f** whilst it is shown on the display.

Each time you press the button the setting will change.

If you do not press the button for a short while the pager will move to the next function.

then, after a short while, the first 8 function codes (shown in the table). for example,

ES-LP#0-

Release the button to reveal those remaining., for example,

63-V-----

The pager will now show the available function options in sequence. Press button **f** only if you wish to make a change.

LANGUAGE The language options are automatically shown in sequence. When your required language is displayed, press and release button **f**

SILENT

RANGE

LED (Light)

POWER

Block 1 position:
 1 = E, D, N, F, G, I (Language)
 2 = S (Silent)
 3 = R (Range)
 4 = L (Light)
 5 = P (Switch)
 6 = A, B, C (Format)
 7 = 0 - 8 (0 to 8 errors)
 8 = L (Long Bleep)

Block 2 position:
 1 = 2 - 6 (Decode algorithm)
 2 = B (Block message)
 3 = U User groups
 4 = V (Vibrate)

NOTE: Where a dash appears on the display the function is disabled.

Language for prompts:
 E, English; D, Dutch; N, Norwegian;
 F, French; G, German; I, Italian

If you select SILENT the pager will not bleep on receipt of a call. The light will still flash, unless it has been disabled (see 'light' below)

This function, if selected, will cause the pager to bleep and display RANGE? if no valid transmission has been received for approximately 40 s. Other active pager functions will be displayed alternately. The RANGE facility must also be selected in the system encoder.

To prevent the LED from illuminating select X for this option.

Select this option to prevent the pager being switched off.

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FORMAT

FORMAT is an engineering function and is normally set in the factory. The format letter shown MUST correspond to the format setting in the system encoder. The default setting is C.

ERRORS (error level)

The display shows a number between 0 and 8 which indicated the number of non-correctable errors that are permissible in each message block before a message is rejected as unusable. If a message is rejected in this way the call is disregarded and the pager does not respond. Corrupted characters are shown as blanks.

LONG ID (long beep)

Select this option to allow the user to choose either the normal beep time, 5 s or a long beep time, 24 s.

BITSPRE (decode algorithm)

This is an engineering function only and must be set to 6.

BLKMESS

(default message review method)

This screen will allow you to set the default message review facility. Select a tick to default to BLOCK MESSAGES or a cross to default to INDIVIDUAL MESSAGES. You can temporarily change the setting from the "user selectable functions" (page 9). If you switch the pager off it will revert to the default setting the next time that it is switched on.

Block message review allows all the messages in the store to be read at once in sequence. If the offer to DELETE? is accepted then all the messages are erased.

Individual message review allows individual messages to be selected, read and deleted.

USRGRPS (user groups)

Select USRGRPS to allow the user to join or leave any of the groups programmed into the pager.

VIBRATE

This selects the vibrator (where fitted).

IMPORTANT

Send a programming call for the required Individual Code from the system encoder.

This will save the settings.

When the new code appears release the button

The pager will accept a maximum of 6 group codes.

The pager will show the Group Codes (GC) in sequence.

To add a Group Code press **f** while it is displayed.

Send a programming call from the system encoder.

This will save the settings.

When the new code appears release the button. The display will change to show the next Group Code.

If you wish to add another Group Code press **f** and send a programming call.

If you do not wish to make changes do not press the button and allow the pager to return to normal operation.

To enter the open channel mode

Switch the pager off.

Press and hold button **(f)** and then press the power button **(⏻)**.

Release the buttons.

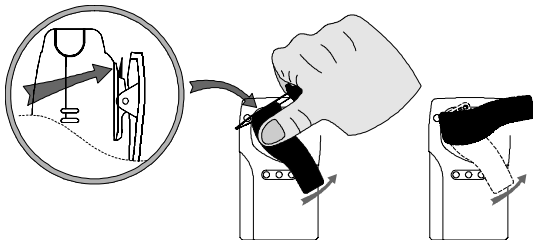
To return to normal operation momentarily press the power button **(⏻)**.

Open channel is a diagnostic mode that allows the pager to display information from all transmitted calls. This is a 3 digit information code followed by the identity code of the pager being called.

The pager will display its software title and, after a short while, the first 8 function digits.

The remainder of the function digits are displayed and the pager will enter the open channel mode.

To replace the clip



Place your thumb on top of the clip and, using a screwdriver, pull the locking tab away from the pager body.

The thumb pressure avoids placing too much strain on the clip mounting.

Whilst pressing the clip towards the pager body, rotate it anticlockwise by 90° and gently pull it away from the case

To fit the new clip hold it 90° to the pager case and insert it into the aperture.

Lift the locking tab, and whilst applying pressure, and rotate the clip clockwise until it “clicks” into position.

Never rotate the clip without lifting the tab as you will damage the case.

Please note:

Under certain circumstances your pager can be subjected to electrostatic discharge. This can cause the unit to reset and go through the start-up sequence before returning to normal operation.



Glossary of paging terms

| | |
|---------------------|--|
| Bleep | Used to describe the sound made by a pager when called (also bleep-tone, bleep-sound). |
| Group Code | A number shared between pagers allowing them to be called simultaneously. |
| Individual Code | A number representing the unique identity of a pager allowing it to be called selectively. |
| Pager configuration | The process of selecting those pager functions that will be available to the user. This normally forms part of system commissioning. |
| Pager programming | The procedure required to enter or change pager identity codes (individual and group). |
| Open channel | A diagnostic mode that allows a pager to receive all calls transmitted on a system and display the results in code. |

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