Conventional Portable – BLX Series
Entry with Selcall

Main Features
- 16 Channels Capacity
- Frequency Range: refer to Product Table below
- Environmental protection to IP55
- Rugged - MIL STD 810 C/D/E/F
- 1800mAh Li-Ion battery
- Robust multi-pin accessory socket
- 2/5 Tone Encode / Decode
- Voice annunciation (option)
- Bluetooth™ wireless communications (option)
- 16 Channels Capacity
- Frequency Range: refer to Product Table below
- Environmental protection to IP55

For - Convenience
- VOX hands free (with audio accessory)
- Programmable channel monitor button
- 2/5 tone selective calling & FFSK
- Open or Closed channel modes
- Call a group, individual or all radios at once
- 16 pre-programmed contacts
- Multiple ring tones
- Talk around
- DTMF dial mode - stored

For - Security
- Stun & alarm a lost or stolen radio (& revive if found)
- Programmable scrambler (voice inversion)

For - Safety
- Local Personal Attack Alarm
- Panic button with remote alert
- Emergency microphone live
- Automatic Lone Worker alarm mode
- Automatic Man Down alarm mode (option)
- Shunting mode (for rail companies)
- Continue alarm even if switched off

For those who want the benefits of 5-tone selective calling without the need for more than 16-channels or an LCD screen, the compact entry level selcall BLX400 provides exactly what they require. From the compact ergonomic design that fits comfortably in your hand, to the exceptionally loud audio that enables you to communicate in the noisiest environments, this radio, positioned as an entry level 5-tone model, easily outclasses its competition.

With 16 channels, this model, like all our BLX series portables, is built to meet the MIL-STD 810C/D/E/F rating for tough enduring performance and in addition has a superior IP55 splash proof construction.

Utilising the latest intelligent Lithium-Ion battery technology with battery cycle count* the entry level selcall BLX400 will even alert you to imminent battery life expiration. Simple to use, yet highly specified, this model, offering variable point voice scrambler, lone worker, personal attack alarm, channel scanning, shunting mode and whisper mode, together with optional man down and Bluetooth facilities, will exceed the expectations of even the most experienced radio users.

*Battery cycle count can only be displayed on LCD model.
<table>
<thead>
<tr>
<th>Benelec Part #</th>
<th>Model and Spec</th>
<th>Description &amp; Spec</th>
<th>Frequency (MHz)</th>
<th>Thumbnail</th>
</tr>
</thead>
<tbody>
<tr>
<td>01131422S</td>
<td>BLX422S</td>
<td>VHF High - 16 Channels</td>
<td>136 - 174</td>
<td></td>
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<tr>
<td>01151482SU</td>
<td>BLX482S-U</td>
<td>UHF U - 16 Channels</td>
<td>450 - 520</td>
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</table>

**Technical Specifications**

**General**
- **Frequency Range**: BLX422S: VHF 136 - 174MHz / BLX482S-U: UHF 450 - 520MHz
- **Channels**: 16 Channels
- **Channel Spacing**: 12.5 kHz / 25 kHz
- **Communication Method**: Simplex / semi duplex
- **Antenna Impedance**: 50 Ω
- **Antenna**: Whip / stubby
- **Battery Type**: 1800 mAh Li-Ion battery pack
- **Power Supply Voltage**: 7.4V DC
- **Microphone**: Internal condenser microphone
- **Operating Temperature**: -20º to +55ºC

**Transmitter**
- **Power Output**: High: 5W, Low: 1W
- **Modulation**: 8K0G3E / 16K0G3E
- **Oscillator Method**: PLL
- **Frequency Stability**: < ±0.00025% (±2PPM)
- **Maximum deviation**: ±2.5kHz (Narrow) / ±5kHz (Wide)
- **Audio Distortion**: < 5% (1 kHz 60%)
- **Spurious Emission**: -68dBc
- **Hum & Noise**: -40dB

**Receiver**
- **Receiver Type**: Double Super Heterodyne type
- **Sensitivity**: -0.25uV (12dB SINAD)
- **Frequency Stability**: ±0.00025
- **Spurious Rejection**: -60 dB
- **Adjacent Channel Selectivity**: -60 dB (Narrow), -70 dB (Wide)
- **Distortion**: 5% (1 kHz 60%)
- **Hum & Noise**: -40 dB
- **Audio Output**: 1W
- **Speaker Size**: 45mm

**Supplied Accessories**
- CNB450E - 7.4v, 1800mAh rechargeable Lithium-Ion battery pack
- CBH450 - Spring loaded belt clip
- High efficiency antenna (can be exchanged for stubby antenna at point of order)
- User manual
### Optional Accessories

#### Batteries & Chargers

<table>
<thead>
<tr>
<th>Model No &amp; Descriptions</th>
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<tr>
<td><strong>CNB450E - 7.4v, 1800mAh rechargeable Lithium-Ion battery pack</strong></td>
<td><img src="image1.png" alt="Thumbnail" /></td>
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<tr>
<td>The CNB450E is an 1800mAh Lithium-Ion lightweight battery pack for the BLX series of hand portable radios. The Lithium-Ion technology gives the radio a long operating time and the batteries will not suffer from the ‘memory effect’ that can be experienced on radios using alternative battery chemistries.</td>
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<tr>
<td><strong>CNB451E - 7.4v, 2300mAh rechargeable Lithium-Ion battery pack</strong></td>
<td><img src="image2.png" alt="Thumbnail" /></td>
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<tr>
<td>The CNB451E is an 2300mAh Lithium-Ion high capacity battery pack for the BLX series of hand portable radios. The Lithium-Ion technology gives the radio a long operating time and the batteries will not suffer from the ‘memory effect’ that can be experienced on radios using alternative battery chemistries.</td>
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<tr>
<td><strong>CMC450E – Single-unit, 12v dual slot rapid charger for the BLX series hand portable</strong></td>
<td><img src="image3.png" alt="Thumbnail" /></td>
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<tr>
<td>This intelligent rapid mains charger ensures that the battery only receives the correct amount of charge. Charge status is indicated via a multi-coloured LED so you will know whether the battery is fully charged before use. Charger operates between 110-230V. The front pocket accommodates the radio complete with attached battery; the rear pocket accommodates the battery only. Charging commences with the front pocket and when the charge is complete it switches to the rear pocket. Due to the high capacity of the BLX Li-Ion battery pack, charge time is between 1.5 - 2 hours.</td>
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<tr>
<td><strong>CSAHX – Single-unit, dual slot rapid charger for the BLX series hand portable</strong></td>
<td><img src="image4.png" alt="Thumbnail" /></td>
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<td>This intelligent rapid mains charger ensures that the battery only receives the correct amount of charge. Charge status is indicated via a multi-coloured LED so you will know whether the battery is fully charged before use. Charger operates between 110-230V. The front pocket accommodates the radio complete with attached battery; the rear pocket accommodates the battery only. Charging commences with the front pocket and when the charge is complete it switches to the rear pocket. Due to the high capacity of the BLX Li-Ion battery pack, charge time is between 1.5 - 2 hours.</td>
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<tr>
<td><strong>CSBH450 - Six-unit multi rapid charger for BLX series hand portable radio</strong></td>
<td><img src="image5.png" alt="Thumbnail" /></td>
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<tr>
<td>This six-unit intelligent rapid mains charger ensures that the batteries only receive the correct amount of charge. Charge status is indicated on each pod via a multi-coloured LED so you will know whether the battery is fully charged before use. The front pocket accommodates the radio complete with attached battery; the rear pocket accommodates the battery only. Charging commences with the front pocket and when the charge is complete it switches to the rear pocket. Charger operates between 110-230V. Due to the high capacity of the BLX Li-Ion battery pack, charge time is between 1.5 - 2 hours.</td>
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#### Audio Accessories

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<tr>
<td><strong>CMP1/450 – Pocket size lapel speaker microphone for the BLX series hand portable radio</strong></td>
<td><img src="image6.png" alt="Thumbnail" /></td>
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<tr>
<td>The CMP1/450 is attached with a revolving clip and allows the radio user to carry the radio on their belt and have the facility to both make and receive calls without removing their radio. This keeps the radio safe and ensures that calls are not missed, especially in noisy environments. The CMP1/450 has a socket (3.5mm mono) to allow an optional earpiece (EHP9) for discreet reception of calls. This accessory is designed for light to medium duty applications, so to ensure maximum life span it should be personally allocated to users.</td>
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<tr>
<td><strong>CMP450 - Heavy duty submersible speaker microphone</strong></td>
<td><img src="image7.png" alt="Thumbnail" /></td>
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<tr>
<td>CMP450 - A submersible, very rugged, heavy duty lapel speaker microphone for the BLX series hand portable radio. The CMP450 is attached with a revolving clip and allows the radio user to carry the radio on their belt and have the facility to both make and receive calls without removing their radio. This keeps the radio safe and ensures that calls are not missed, especially in noisy environments. The CMP450 has a socket (3.5mm mono) to allow an optional earpiece (EHP9) for discreet reception of calls. Note: When the earpiece is attached the speaker microphone is no longer submersible, until the earpiece is removed and the waterproof cover is replaced and tightened.</td>
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</table>
EA12/450 – ‘D’ shaped earpiece and tie clip microphone for the BLX series hand Portable Radio
A ‘D’ shaped, soft rubber-feel earpiece, which fits over your ear. This is connected to a combined tie clip microphone and press to talk button via a curly cable. A rotating strain relief clip can attach to your collar to prevent the earpiece being dislodged if the cable were pulled. The EA12/450 allows the radio user to carry the radio on their belt and have the facility to both make and receive calls without removing their radio. This keeps the radio safe and ensures that calls are not missed, especially in noisy environments. This accessory is designed for light to medium duty applications, so to ensure maximum life span it should be personally allocated to users.

EA15/450 – Acoustic tube earpiece and tie clip microphone for BLX series hand Portable Radio
A clear acoustic tube earpiece which fits in your ear using the small or large soft pink ear plugs supplied. This is connected to a combined tie clip microphone and press to talk button (PTT). The EA15/450 allows the radio user to carry the radio on their belt and have the facility to both make and receive calls without removing their radio. This keeps the radio safe and ensures that calls are not missed, especially in noisy environments. This accessory is particularly suited to covert, security applications. This accessory is designed for light to medium duty applications, so to ensure maximum life span it should be personally allocated to users.

EA19/450 – ‘D’ shaped earpiece with boom microphone for the BLX series hand Portable Radio
A ‘D’ shaped, soft rubber-feel earpiece, which fits over your ear. The earpiece is combined with a lightweight short profile boom microphone. There is an in-line press to talk button (PTT) with clip. The EA19/450 allows the radio user to carry the radio on their belt and have the facility to both make and receive calls without removing their radio. This keeps the radio safe and ensures that calls are not missed, especially in noisy environments. This accessory is designed for light to medium duty applications, so to ensure maximum life span it should be personally allocated to users.

EPT40/450 - Bone conductive earpiece microphone for the BLX series hand Portable Radio
The combined microphone/earpiece allows discreet communication with no visible microphone. The earpiece connects via a quality in line connector to a large rugged waterproof press to talk (PTT) button that can clip on to a belt or other suitable position using the rugged revolving clip. The press to talk switch is easy to use, has a positive feel and can be used by a gloved hand or under clothing. As with all bone conductive accessories, we do not recommend using voice operated transmit (VOX).

CXR5/450 - Bone conductive skull microphone with in-line PTT for the BLX series hand portable radio
A high quality rugged bone conductive skull cap. The fully adjustable CXR5 fits on your head similar to a cap. The metal frame supports the bone conductor microphone, which fits on adjustable straps and sits on the top of your head. The adjustable twin earpieces clip into position each side. The robust cable exits the skullcap from the rear and attaches via a quality in-line connector to a large rugged waterproof press to talk switch that can clip on to a belt or other suitable position using the rugged revolving clip. The press to talk switch is easy to use, has a positive feel and can be used by a gloved hand or under clothing. As with all bone conductive accessories, we do not recommend using voice operated transmit (VOX).

CXR16/450 – ‘D’ Shaped earpiece, throat microphone with large in-line PTT for the BLX series hand portable radio
A high quality throat microphone with a comfortable soft-feel adjustable neck band. A rugged ‘D’ shaped earpiece accompanies the throat microphone and connects via a quality in-line connector to a large rugged waterproof press to talk switch that can clip on to a belt or other suitable position using the rugged revolving clip. The large sized press to talk (PTT) switch is easy to use, has a positive feel and can be used by a gloved hand or under clothing.

CHP1/450 - Lightweight single earpiece headset with in-line PTT and VOX for the BLX series hand portable radio
A ‘breeze’ style single earpiece wire-framed headset with boom microphone and wind cover. The headset has an in-line press to talk (PTT) button or the headset can be used with automatic voice activated transmit (when activated on the radio). The CHP1/450 allows the radio user to carry the radio on their belt and have the facility to both make and receive calls without removing their radio. This keeps the radio safe and ensures that calls are not missed, especially in noisy environments. This accessory is designed for light to medium duty applications, so to ensure maximum life span it should be personally allocated to users.

CHP450HS - Single earpiece ear defender (hard hat use only) with VOX for the BLX series hand portable radio
A heavy duty single ear-cup earpiece with high quality noise-cancelling boom microphone and designed to connect to any safety hard hat via the supplied universal adapter. The headset provides both voice operated transmit (VOX) and a large easy-to-use press to talk button with spring-loaded clip, allowing the radio to be operated using a gloved hand or under clothing. We do stock a small range of common hard hat adapters which can be supplied in place of the universal adapter (please specify at time of ordering).
CHP450HD - Double ear-cup ear defender (hard hat use only) with VOX for the BLX series hand portable radio
A heavy duty ear defender headset with high quality noise-cancelling boom microphone designed to connect to any safety hard hat via the supplied universal adapter. The headset provides both voice operated transmit and a large easy-to-use press to talk button with spring loaded clip, allowing the radio to be operated using a gloved hand or under clothing. We do stock a small range of common hard hat adapters which can be supplied in place of the universal adapter (please specify at time of ordering).

CHP450D - Double ear-cup ear defender with comfort headband and VOX for the BLX series hand portable radio
A heavy duty ear defender headset with high quality noise-cancelling boom microphone designed to connect to any safety hard hat via the supplied universal adapter. The headset provides both voice activated transmit and a large easy-to-use press to talk (PTT) button with spring-loaded clip, allowing the radio to be operated using a gloved hand or under clothing. We do stock a small range of common hard hat adapters which can be supplied in place of the universal adapter (please specify at time of ordering).

EHP450 – 'D' shaped covert style earpiece for the BLX series hand portable radio
A 'D' shaped soft rubber-feel earpiece which fits over your ear. The earpiece is designed to connect into the BLX series radio, via the locking accessory connector. (Note: before this accessory can be used, it is necessary for the dealer to enable the listen-only feature in the radio’s programming software). This accessory is designed for light to medium duty applications, so to ensure maximum life span it should be personally allocated to users.

EHP9 - 'D' shaped covert style earpiece for the BLX series hand portable radio
A 'D' shaped soft rubber-feel earpiece which fits over your ear. The earpiece is designed to connect into the CMP400 or CMP1/400 lapel speaker microphones. This accessory is designed for light to medium duty applications, so to ensure maximum life span it should be personally allocated to users.

Miscellaneous

CFC450 – Soft leather case with carry strap for the BLX series hand portable radio
A soft lightweight carry case with belt clip available in black. The case comes with a wrist lanyard offering the choice of carrying methods and gives the radio both cosmetic and some impact protection.

CLC450 – Heavy duty leather case and strap with belt loop for the BLX series hand portable radio
A heavy duty leather carry case with belt loop and strap. This will give the radio cosmetic and maximum impact protection if dropped or knocked.

CXW591 - Antenna adaptor for external aerial connection

CBH450 - Spare spring loaded belt clip

CAT450V - VHF high-band helical antenna for the BLX series hand portable
A VHF high band antenna for the BLX series hand portables. This antenna provides optimum performance with the VHF hand portable transceiver.

CAT450VS - VHF high-band stubby antenna for the BLX series hand portable
A VHF high band antenna for the BLX series hand portables. This antenna offers a compact size whilst still delivering good performance.

Note: if the range of your communication system is an important factor, we suggest that you use the full-length antenna for the BLX Series.