

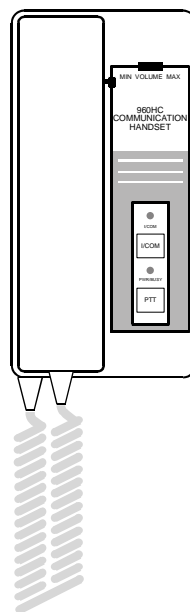
## 960 Series Handsets, Consoles and Plinths

BISS Tech manufactures and supports a high quality range of reliable Radio Communications Handset and Console Systems. The 960 Range of Handsets and Consoles are designed for the simplest of applications and are available in the following models.

### Handsets

#### *960HC Handset*

This is a basic handset unit with built-in speaker, conference microphone, intercom facility and power/busy LED. The handset comes either as a desk handset or wall-mount. Two press-to-talk switches are provided with one mounted on the cradle and the other ideally positioned for thumb control on the handpiece.



**Figure 1: 960HC Handset**

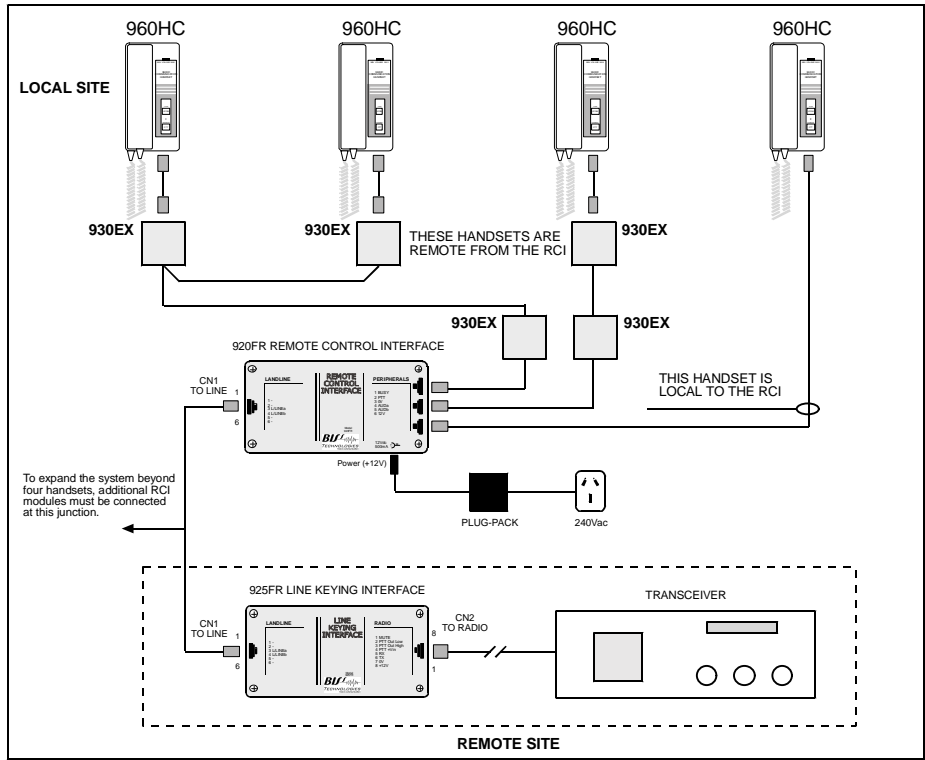


Figure 2: Four 960HC Handsets with peripheral components

**960HS Handset**

In addition to the features available with the 960HC Handset, the 960HS SelCal Handset also includes the following: SelCal tone encoding from the keyboard, three-digit automatic number identification (ANI) and single-digit status displayed on a four digit numeric LED display. Also provided and displayed is a queue facility for storing SelCal & ANI numbers. All this plus the means to fully customise the 960HS handset using the CP960 Programmer, places this product with the very best available today.

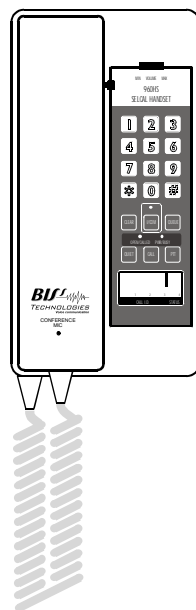


Figure 3: 960HS handset

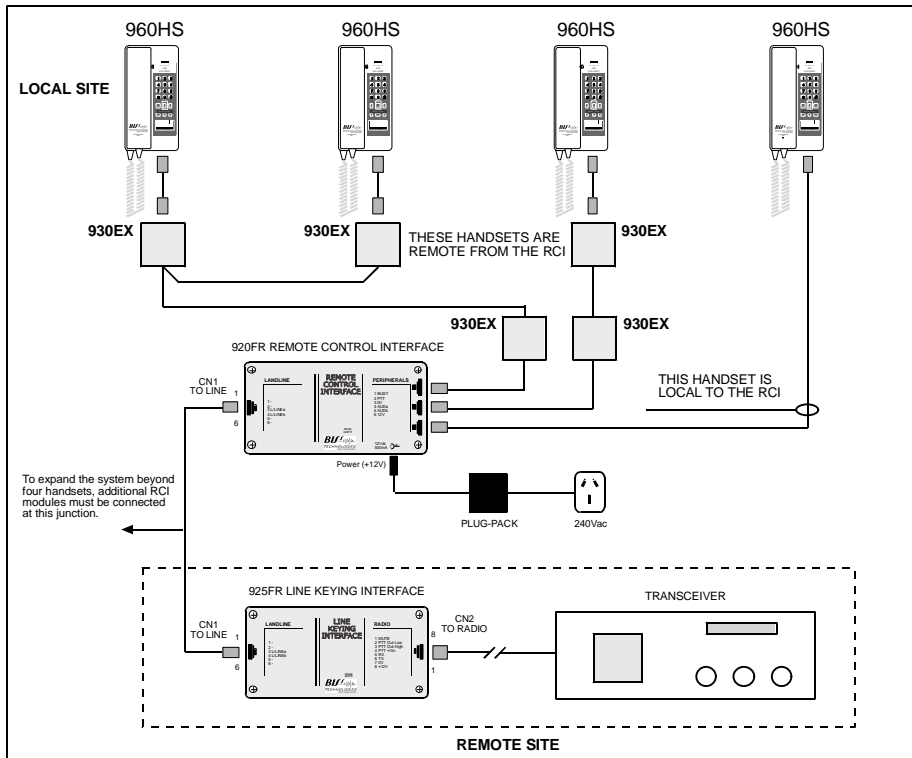


Figure 4: Four 960HS Handsets with peripheral components

### Handset Specifications

FEATURE	960HC	960HS
Conference Microphone	Yes	Yes
In-built Speaker	Yes	Yes
Intercom	Yes	Yes
Cradle PTT Switch	Yes	Yes
Handpiece PTT Switch	Yes	Yes
Busy Indication	Yes	Yes
Power Indication	Yes	Yes
SelCal	No	Yes
ANI	No	Yes
Volume Control	Yes	Yes

## Consoles

### 960CC Communications Console

This is a basic console unit with built-in loudspeaker, electret microphone, LED level meter, intercom facility, mute control and rear connections for headset, desk microphone and foot PTT switch.

### 960CC COMMUNICATIONS CONSOLE

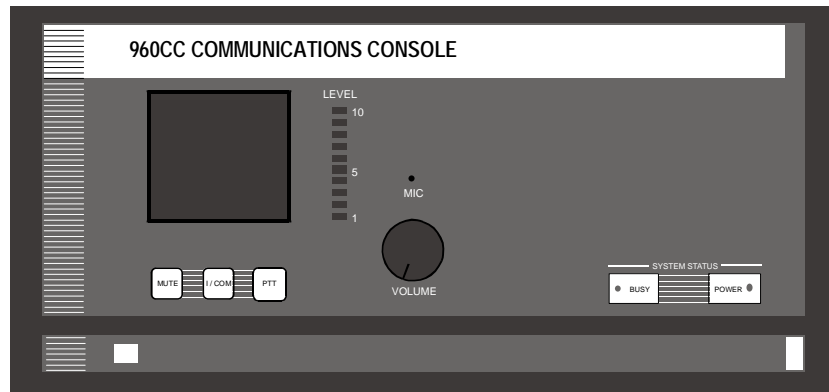


Figure 5: 960CC Communications Console

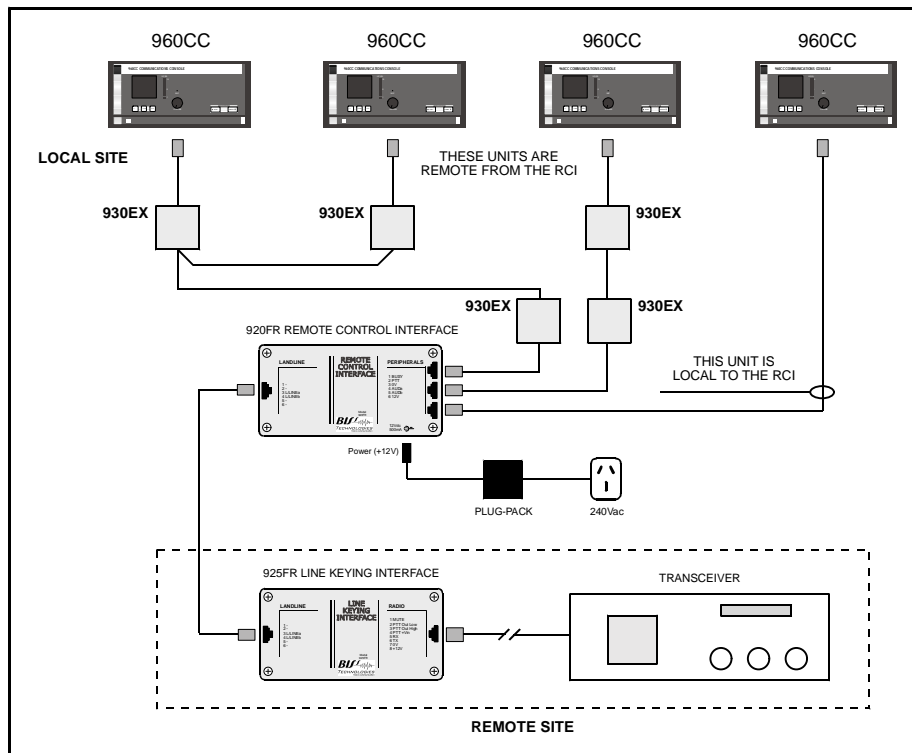
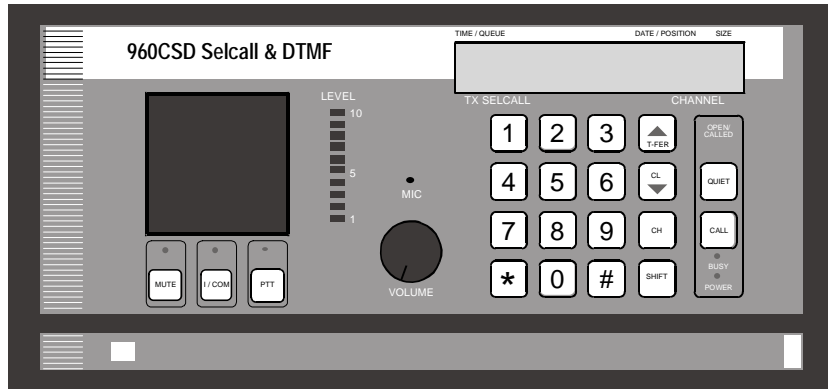


Figure 6: Four 960CC consoles with peripheral components

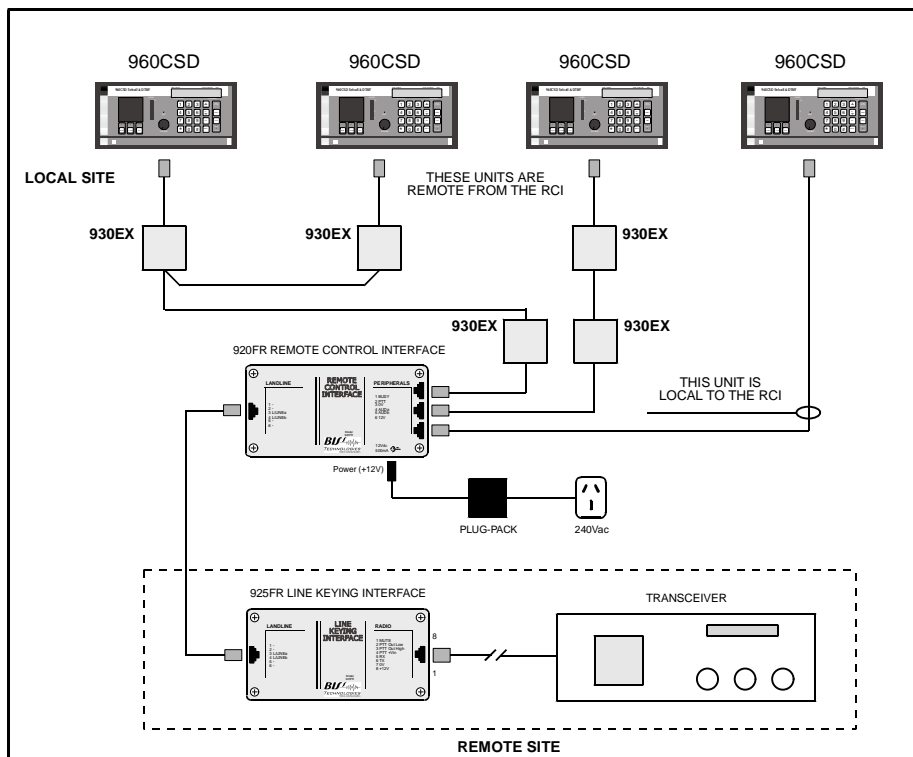
**960CSD Communications Console**

The 960CSD Communications Console represents the latest in the series of 960 Communications Consoles offered in this particular BISS Tech product range. The 960CSD console provides a greater degree of flexibility than previous models by including both SelCal/ANI and DTMF functionality. In addition, the CP960 Console Programmer is provided to allow full customising of the Console's operating parameters. Those already familiar with the BISS Tech 960 Communications Console range will find upgrading to the 960CSD console effectively seamless since it has been developed as an extension of previous consoles.

**960CSD Selcall & DTMF CONSOLE**



**Figure 7: 960CSD Communications Console**



**Figure 8: Four 960CSD consoles with peripheral components**

## 960 Series

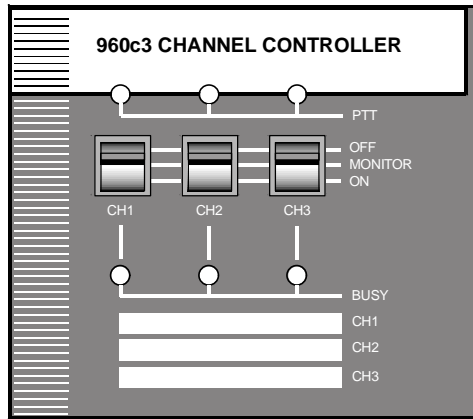
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### Console Specifications

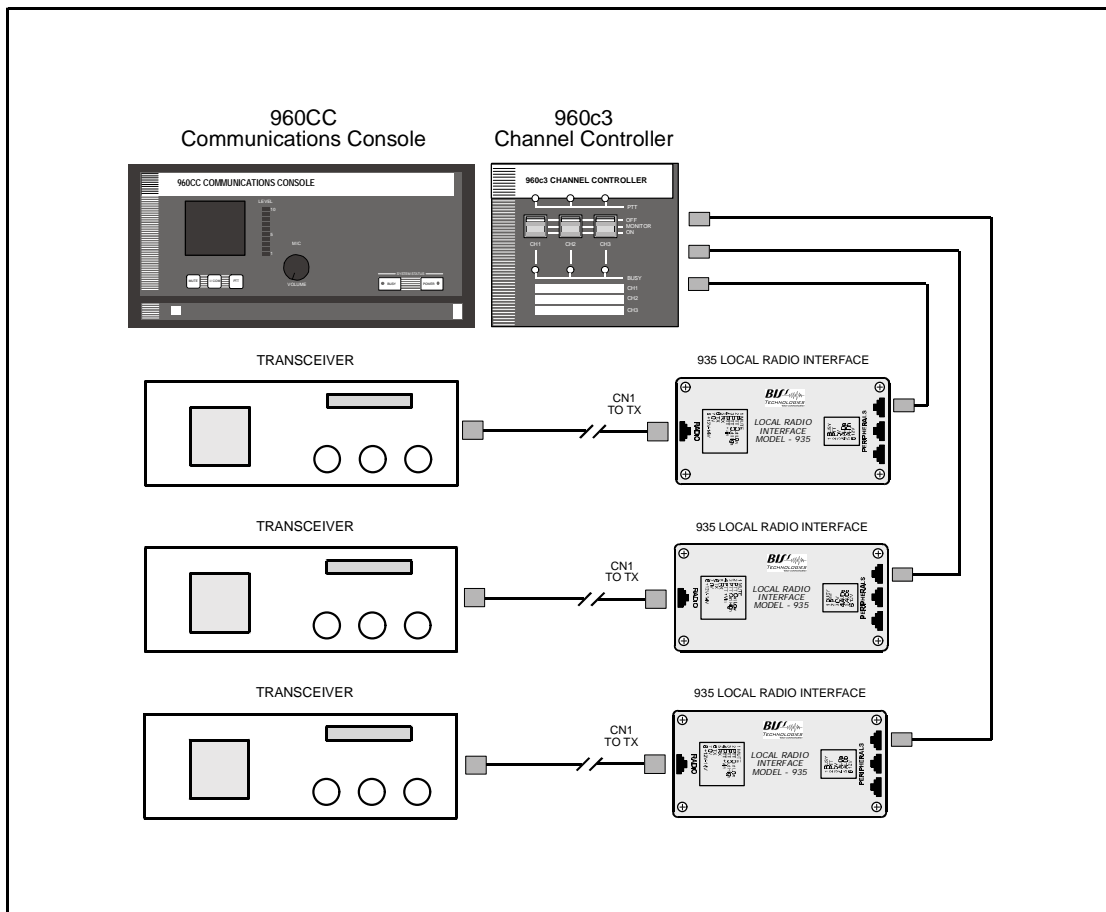
<b>FEATURE</b>	<b>960CC</b>	<b>960CSD</b>
Conference Microphone	Yes	Yes
Built-in Speaker	Yes	Yes
Intercom	Yes	Yes
Cradle PTT Switch	Yes	Yes
Handpiece PTT Switch	Yes	Yes
Busy Indication	Yes	Yes
Power Indication	Yes	Yes
SelCal	No	Yes
ANI	No	Yes
Volume Control	Yes	Yes
DTMF Channel Change	No	Yes

**960C3 Channel Controller**

Offering control of up to three individual channels, the 960C3 Channel Controller is ideally positioned between a single channel 960 series console or handset combination and the multi-channel 950 Radio Management System.



**Figure 9: 960C3 Channel Controller**



**Figure 10: 960C3 and a Three Channel System**

Plinths

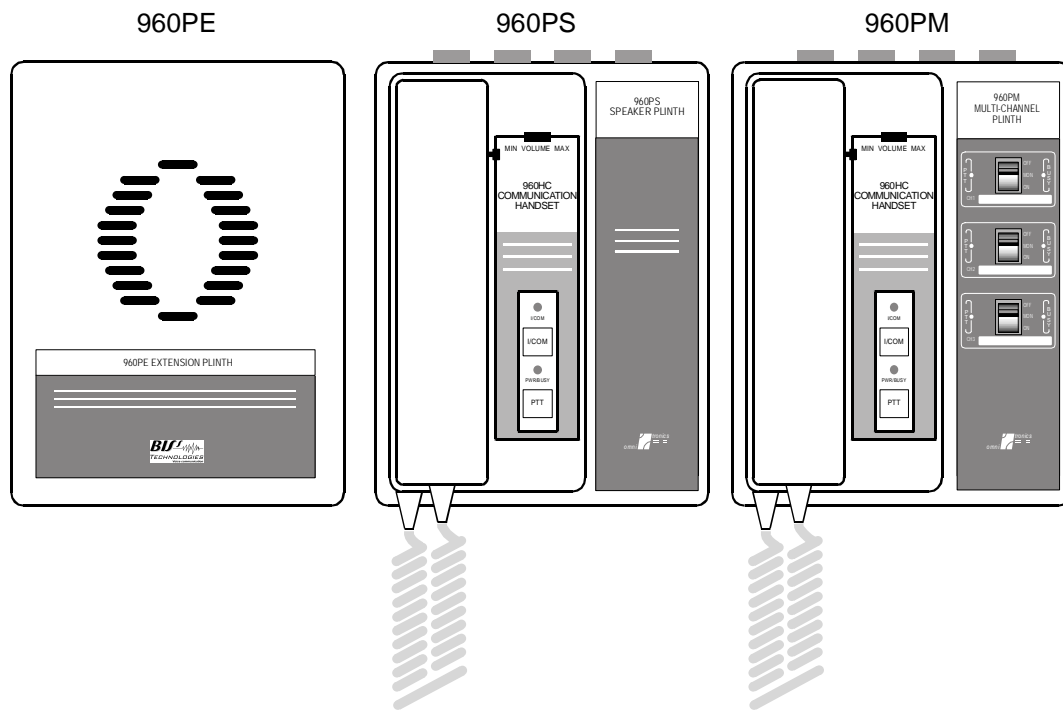


Figure 11: 960 Plinths

**960PE Extension Speaker Plinth**

Designed primarily as an extension speaker for the 960 Series of peripheral interfaces, this unit allows for individual volume setting (independent of the connected handset or console) and offers the option of “cross-muting”.

**960PS basic Plinth**

This practical unit provides a mounting base for any of the 960 Handsets and provides the benefits of louder and clearer audio via a larger speaker, which can either be switched through the handset’s hook-switch or heard continuously.

**960PM Multi-channel Plinth**

Ideal for those people who may want more than a simple peripheral/interface set-up, but don’t require a full 950 Radio Management System, this unit provides the operator with control of up to three channels.

**Plinth Specifications**

FEATURE	960PE	960PS	960PM
Solid Steel Construction	Yes	Yes	Yes
Volume Control	No	Yes	No
Cross Muting	Yes	No	No
Radio Channel Control	No	No	Yes
960H Mounting Base	Yes	Yes	Yes
Off Hook / On Hook audio	No	Yes	Yes
Busy / PTT Status	No	No	Yes



### Typical Connections for the 960 Series

BISS Tech 960 Series Handsets and Consoles can fit together to suit a wide variety of applications. They suit the most basic requirement of a one-channel, one-operator system through to a myriad of combinations to suit more complicated requirements in both local and remote configurations.

Outlined below are some typical connections for the 960 Series Systems. These connections have been broken down into the following three categories for easy reference.

- Single Operator & Single Radio Configurations
- Multiple Operator & Single Radio Configurations
- Multiple Operator & Multiple Radio Configurations

#### Single Operator & Single Radio Configurations

##### Application Description

Single operator control of a base or trigger radio in the local radio configuration. The 960HC Handset may be positioned up to 100 metres from the 935 Local Radio Interface.

##### Parts List

960HC	Handset	One
935LRI	Local Radio Interface	One

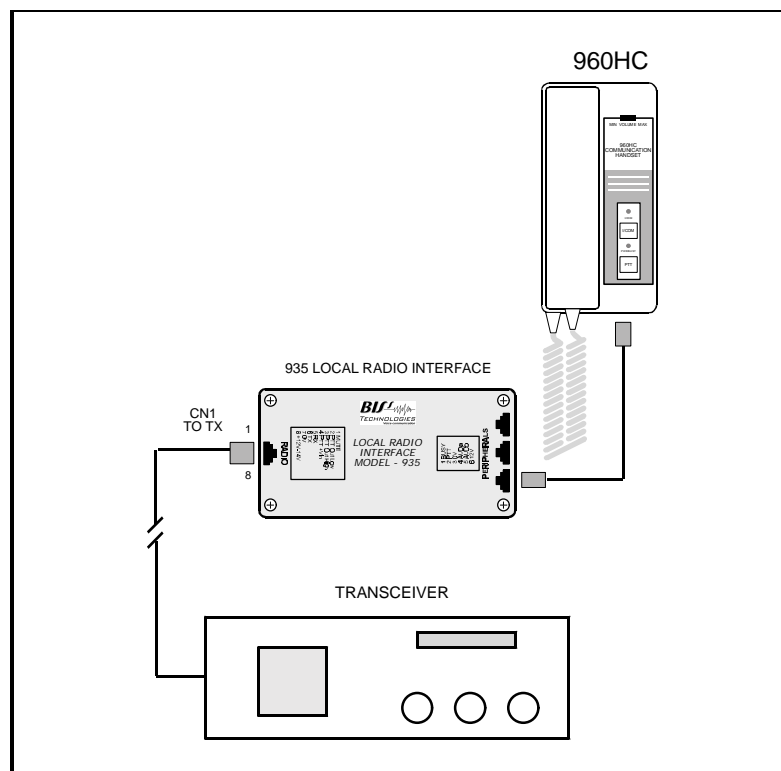


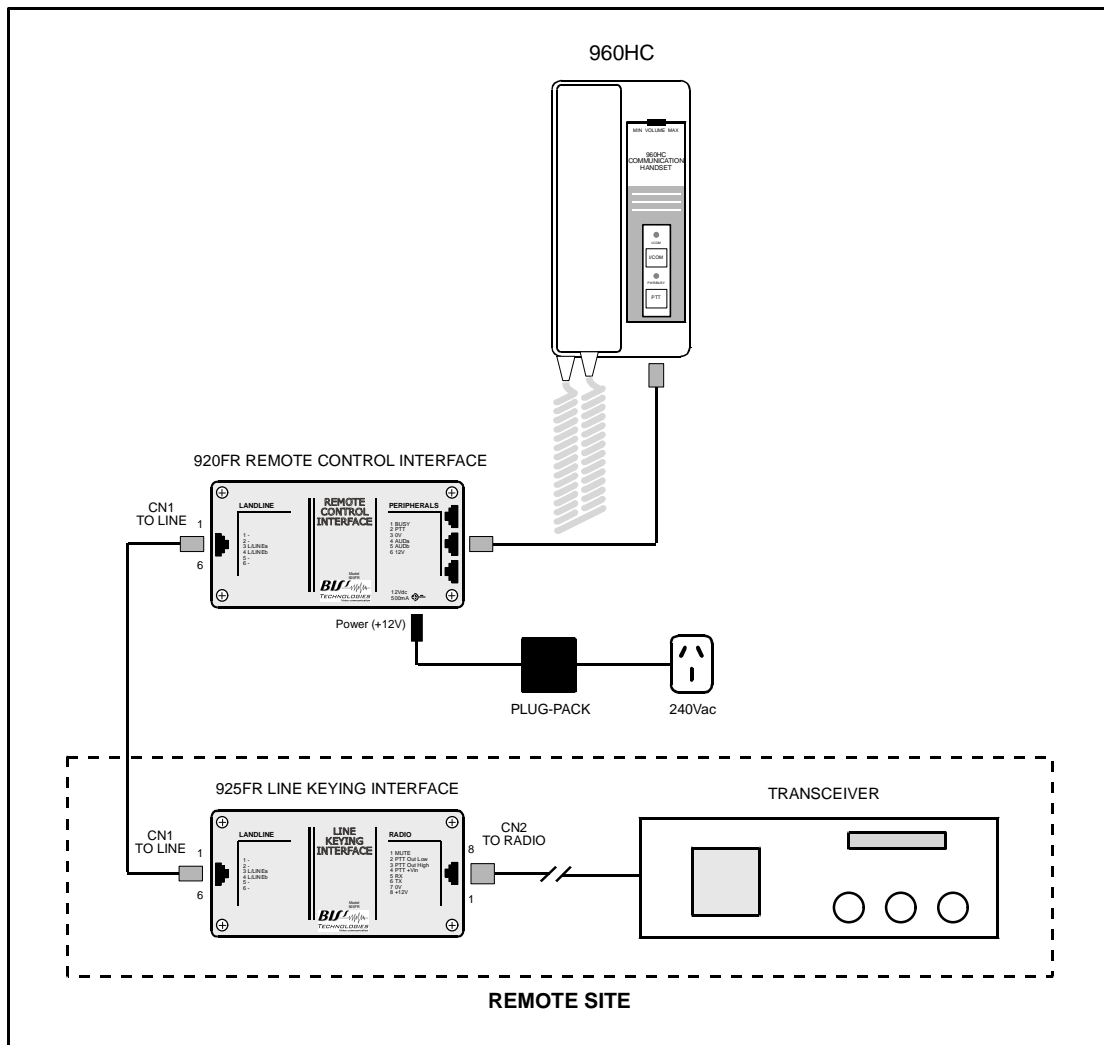
Figure 12: Basic Local Radio Configuration

**Application Description**

Single operator control of a base or trigger radio in the remote or landline control configuration. The 960HC Handset may be positioned up to 100 metres from the 920FR Remote Control Interface with the 920FR and 925FR combination offering the capability of kilometres of separation. The 920FR and 925FR products have approvals for connection to Austel lines.

**Parts List**

960HC	Handset	One
920FR	RCIRemote Control Interface	One
925FR	LKILine Keying Interface	One



**Figure 13: Basic Remote Radio Configuration**

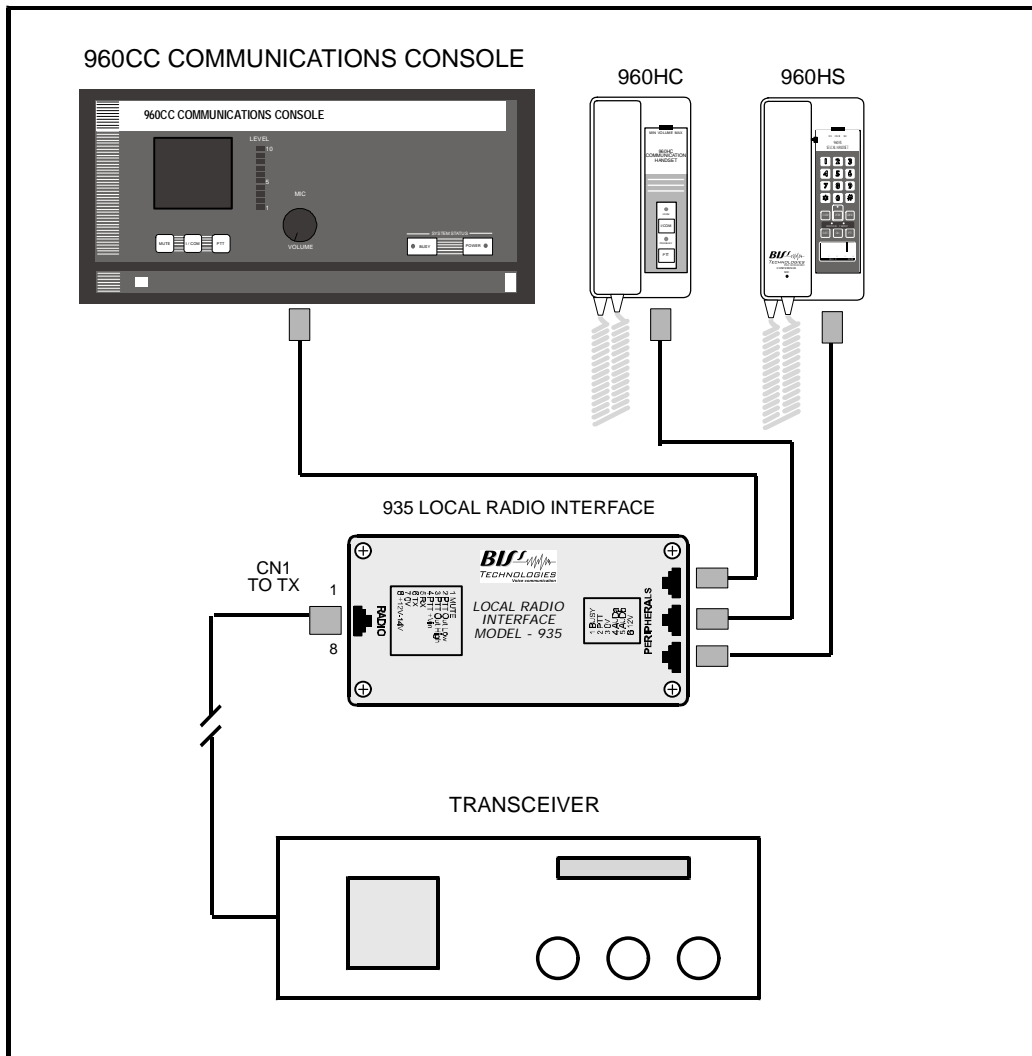
*Multiple Operator & Single Radio Configurations*

**Application Description**

This application illustrates the multiple operator control of a base or trigger radio in the local configuration. The 960HC and HS Handsets and the 960CC Console may be positioned up to 100 metres from the 935 Local Radio Interface.

**Parts List**

960HC Handset	One
960HS Handset	One
960CC Console	One
935LRI Local Radio Interface	One



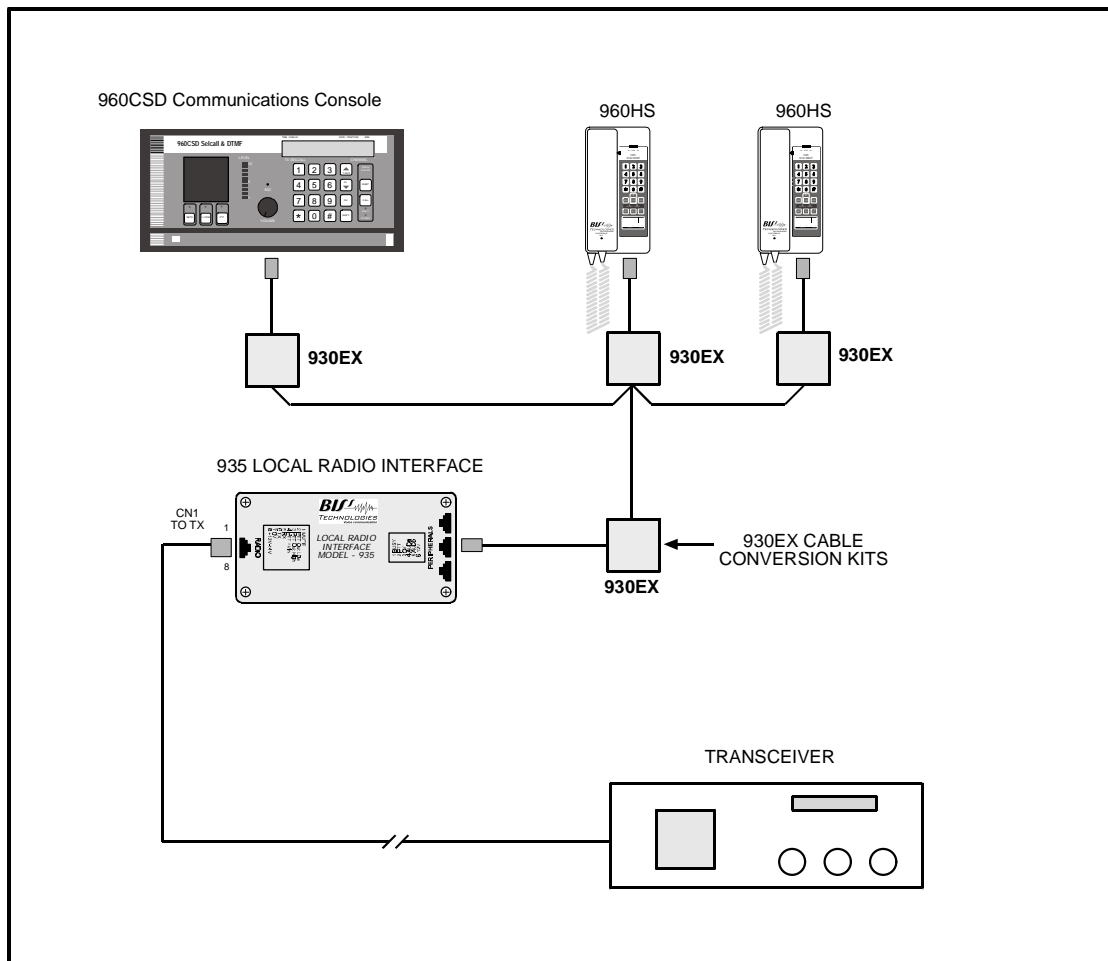
**Figure 14: Multiple Local Radio Configuration 1**

**Application Description**

Again this diagram illustrates the multiple operator control of a base or trigger radio in the local configuration. The 960HS Handsets and the 960CSD Console may be positioned up to 100 metres from the 935 Local Radio Interface. This diagram also illustrates that the handsets and console combinations may be paralleled from a single cable run.

**Parts List**

960HS Handset	Two
960CSD Console	One
935LRI Local Radio Interface	One
930EX Cable Conversion Kits	Two Pairs



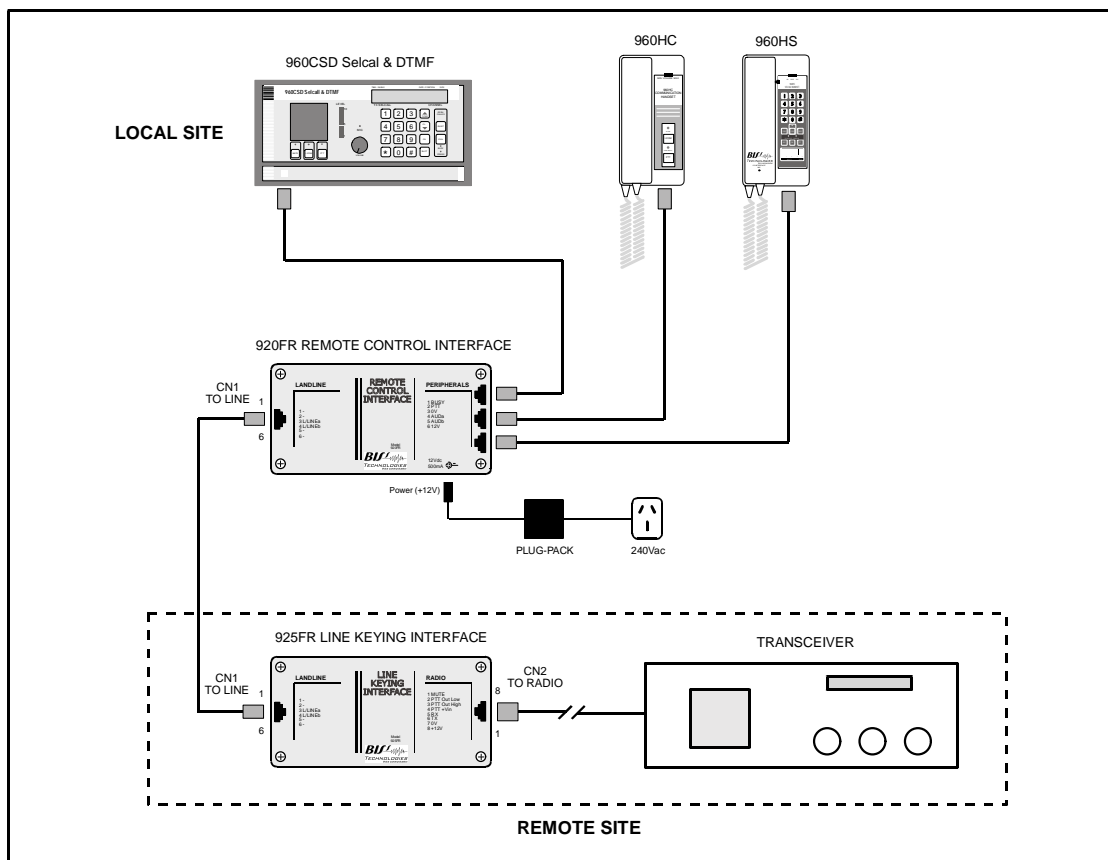
**Figure 15: Multiple Local Radio Configuration 2**

**Application Description**

This diagram illustrates a multiple operator control of a base or trigger radio in the remote or landline control configuration. The 960 Handsets and 960 Consoles may be positioned up to 100 metres from the 920FR Remote Control Interface with the 920FR and 925FR combination offering the capability of kilometres of separation. The 920FR and 925FR products have approvals for connection to Austel lines.

**Parts List**

960HC Handset	One
960HS Handset	One
960CSD Console	One
920FR RCI Remote Control Interface	One
925FR LKI Line Keying Interface	One



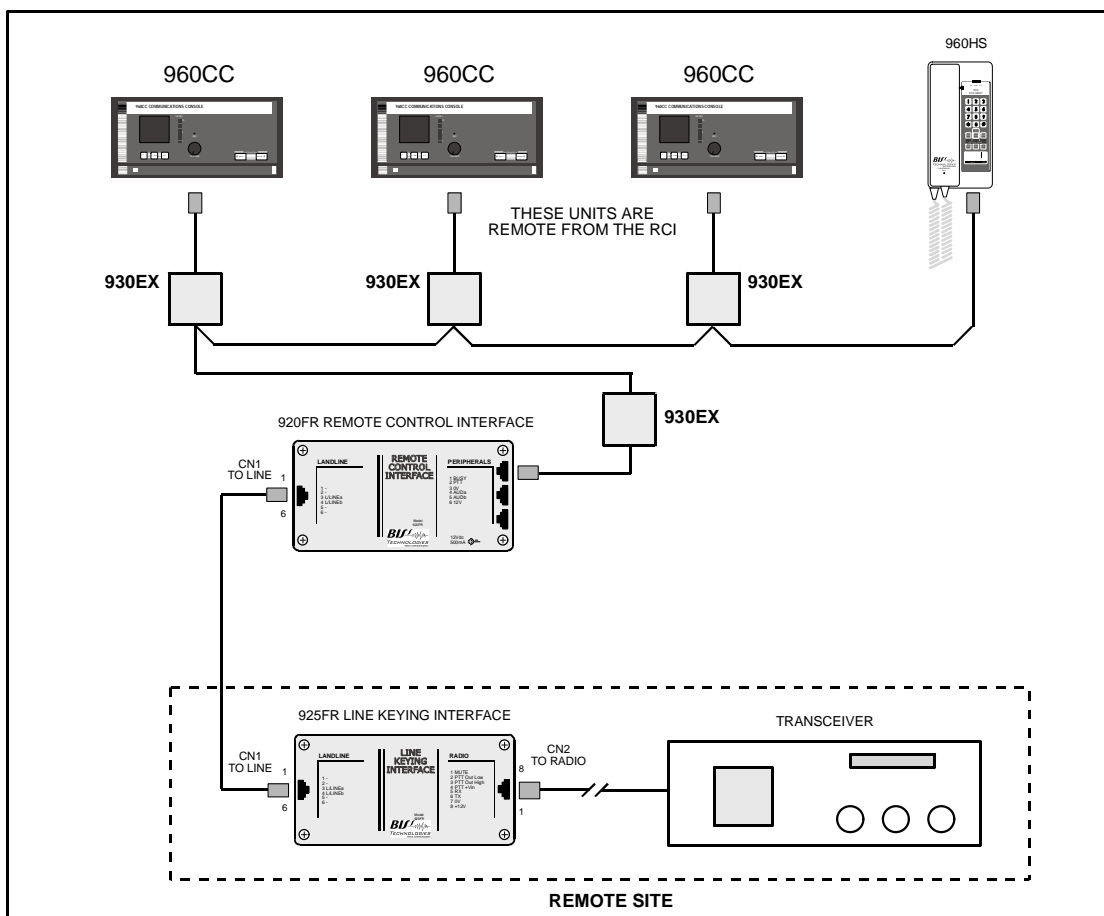
**Figure 16: Multiple Remote Radio Configuration 1**

**Application Description**

This diagram describes a multiple operator control of a base or trigger radio in the remote or landline control configuration. The 960 Handset and 960 Consoles may be positioned up to 100 metres from the 920 Remote Control Interface with the 920 and 925 combination offering the capability of kilometres of separation. This diagram further illustrates that the consoles and handset combinations may be paralleled from a single cable run. The 920 and 925 products have approvals for connection to Austel lines.

**Parts List**

960HS Handset	One
960CC Consoles	Three
920FR RCI Remote Control Interface	One
925FR LKI Line Keying Interface	One
930EX Cable Conversion Kits	Two Pairs



**Figure 17: Multiple Remote Radio Configuration 2**

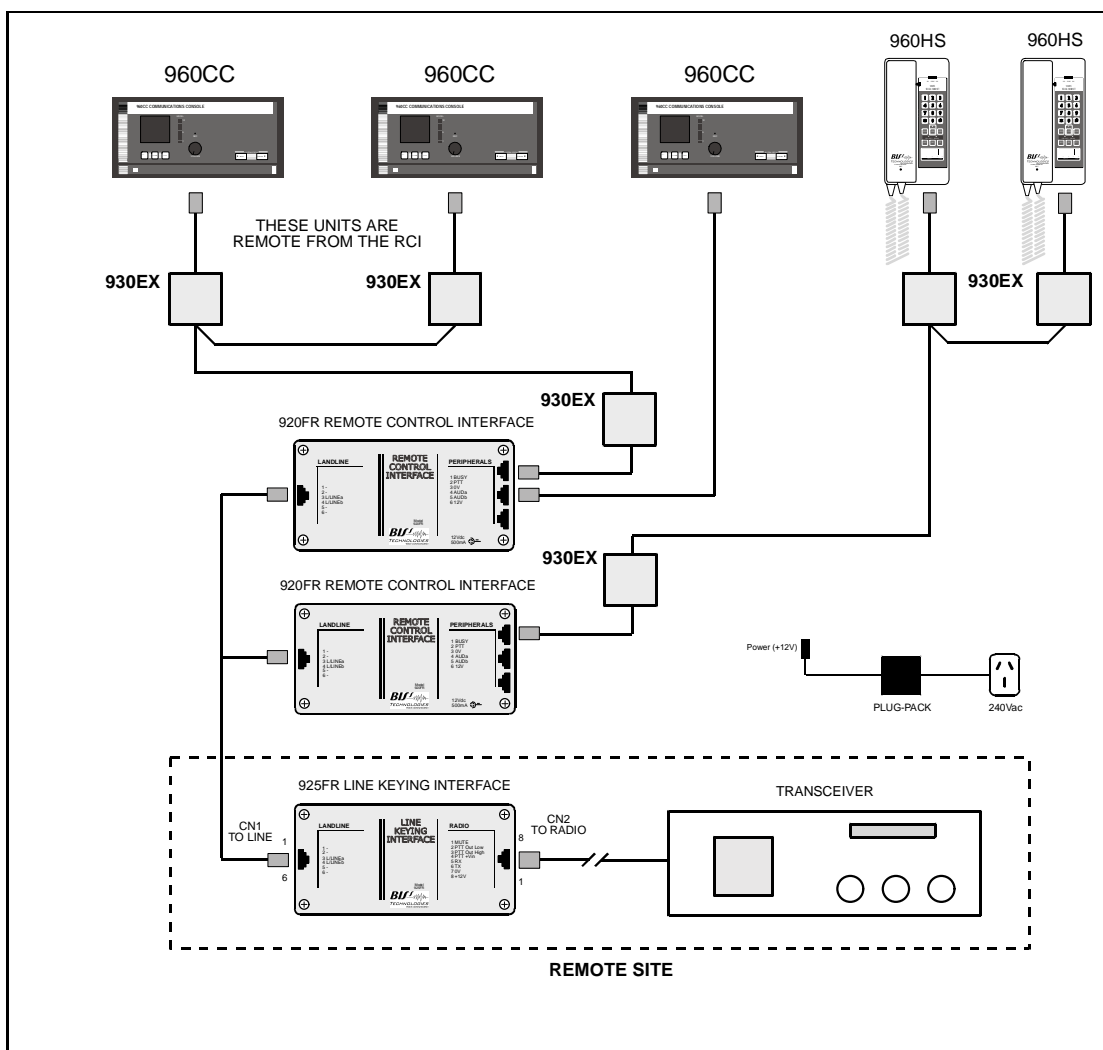
Note: In the configuration shown above it will be necessary to provide power additional to that supplied by the standard plug-pack provided with the 920FR Remote Control Interface (12Vdc at a current of 500mA). This configuration will require a supply of 12Vdc at a current of 1A. It will be necessary to connect this additional power supply at one of the consoles or at the handset. It should not be connected directly to the 920FR, which is fused at 500mA.

**Application Description**

This diagram illustrates multiple operator control of a base or trigger radio in the remote or landline control configuration. The 960 Handsets and 960 Consoles may be positioned up to 100 metres from the 920FR Remote Control Interface with the 920FR and 925FR combination offering the capability of kilometres of separation. This diagram also shows that multiple 920FR units may parallel from a single 925FR two-wire or landline run. The 920FR and 925FR products have approvals for connection to Austel lines.

**Parts List**

960HS Handsets	Two
960CC Consoles	Three
920FR RCI Remote Control Interface	Two
925FR LKI Line Keying Interface	One
930EX Cable Conversion Kits	Three Pairs



**Figure 18: Multiple Remote Radio Configuration 3**

Note: That power additional to that supplied by the standard plug-packs may be required for the configuration shown above. See also the note on the previous page.

Single Operator & Multiple Radio Configurations

Application Description

This diagram illustrates a single operator control of three base or trigger radios in the local control configuration. The 960 Handset or 960 Console may be positioned up to 100 metres from the 935 Local Radio Interfaces. This diagram shows the teaming up of the 960HC Handset and the 960PM Three Channel Plinth to provide the operator with the multi channel selection and control.

Parts List

960HC Handset	One
960PM Three Channel Plinth	One
935LRI Local Radio Interface	Three

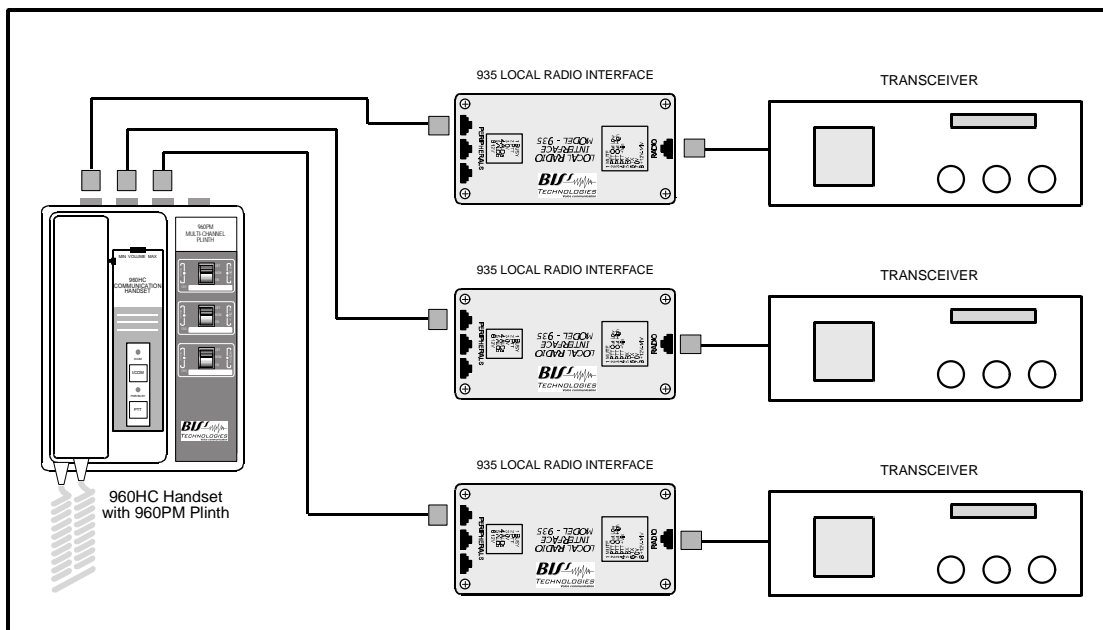


Figure 19: Basic Multiple Local Channel Configuration



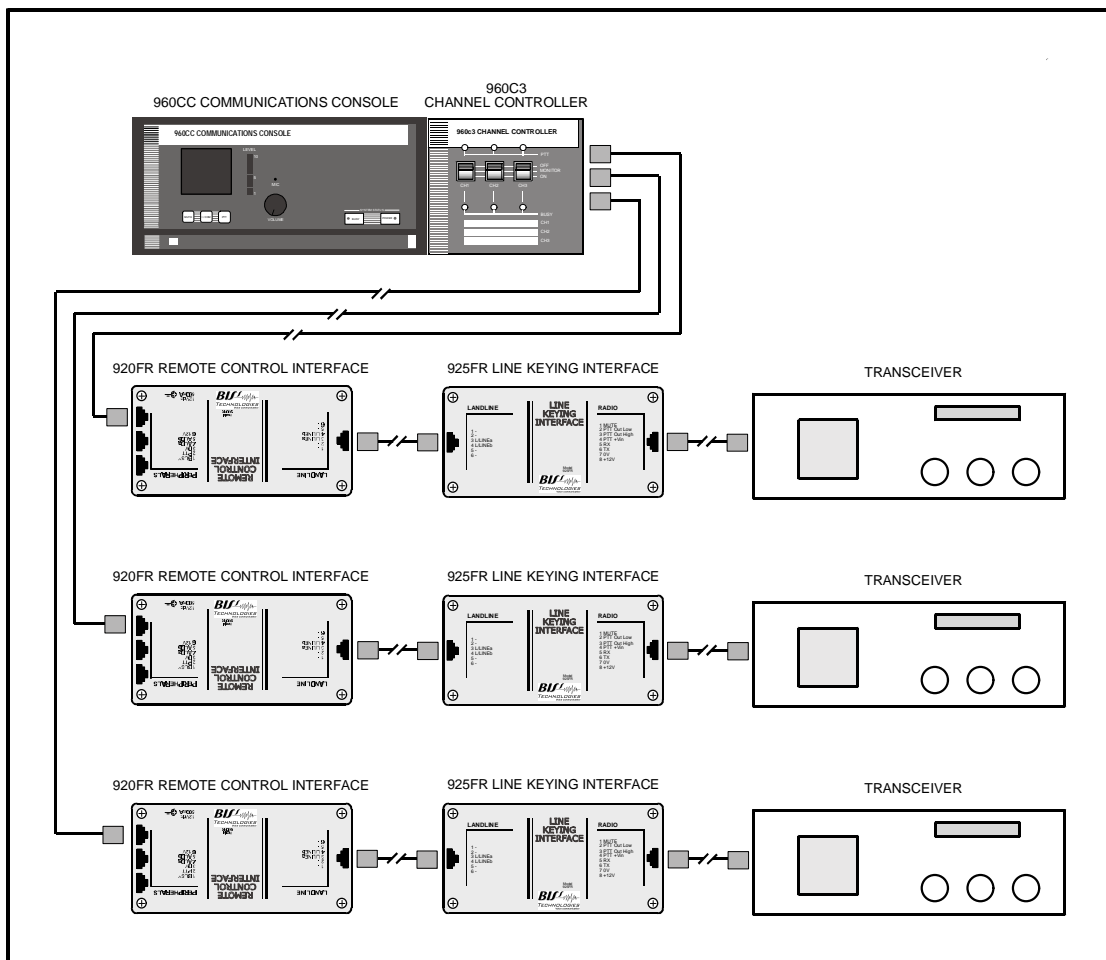
**Application Description**

This diagram illustrates a single operator control of three base or trigger radios in the remote two-wire or landline control configuration. The 960 Handset or 960 Console may be positioned up to 100 metres from the 920 Remote Control Interfaces. This diagram shows the teaming up of the 960CC Console and the 960C3 Three-Channel selector to provide the operator with the multiple channel selection and control.

The 920B Base Busy Decoder (installed in the 920FR) and the 925E Base Busy Encoder (installed in the 925FR) are CTCSS sub-audible products that bring the mute or carrier detect of the radio back up the two-wire or landline to provide indication to the operator of the busy channel. The 920VX Vox detector may also be used in place of the sub-audible units.

**Parts List**

960CC Console	One
960C3 Three Channel Selector	One
920FR RCI Remote Control Interface	Three
920B Base Busy Decoder	Three
925FR LKI Line Keying Interface	Three
925E Base Busy Encoder	Three



**Figure 20: Basic Multiple Remote Channel Configuration**

### *Multiple Operator & Multiple Radio Configurations*

#### **Application Description**

The diagram on the following page illustrates a multiple operator control of three base or trigger radios in the remote two-wire or landline and local control configuration. The 960 Handset or 960 Console may be positioned up to 100 metres from the 920 Remote Control Interfaces or 935 Local Radio Interfaces. This diagram shows the teaming up of the 960CC Console and the 960C3 Three Channel selector and the 960HC Handset teaming up with the 960PM Three Channel plinth to provide the operators with their multi channel selection and control.

#### **Parts List**

960CC Console	Two
960C3 Three Channel Selector	Two
960HC Handset	One
960PM Three Channel Plinth	One
920FR RCI Remote Control Interface	One
920B Base Busy Decoder	One
925FR LKI Line Keying Interface	One
925E Base Busy Encoder	One
935LRI Local Radio Interface	Two

See next page.

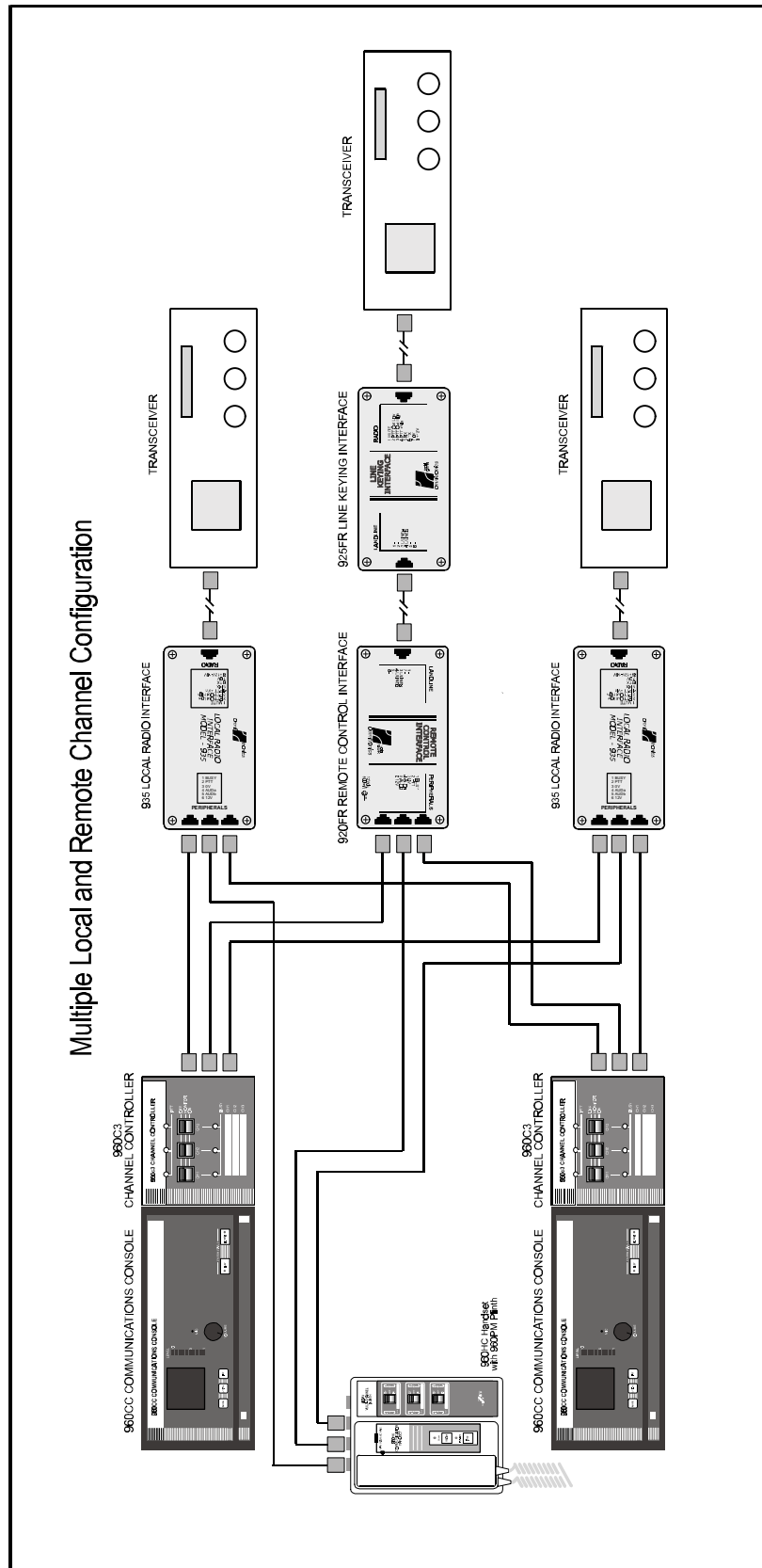


Figure 21: Basic Multiple Local and Remote Channel Configuration