

**S**ELCAL has traditionally been limited to a method of calling individuals or groups in a two-way radio system. BISS Tech has developed the 970SM module that provides a wide range of additional facilities which will significantly expand the use of a radio communications system. Its ability to handle a number of inputs and outputs, together with its in-built relay and alarm tone generator, gives access to a wide range of telemetry functions usually associated with much more sophisticated and expensive products.

The 970SM SELCAL Encoder/Decoder module is capable of handling most of the industry standard sequential tone formats. It features 8 digital inputs, 6 digital outputs and a single, dual-pole relay with voltage-free contacts. All the SELCAL parameters are configurable via an easy-to-use "Windows" program. Three standard connectors interface to the outside world. A female DB-25 allows for digital I/O and relay connections, an 8 way US modular provides a radio interface and a DB-9 serves as the RS232 port for programming purposes. Logging functions are available

from the RS232 port. Software is provided to support this feature.

Up to eight digital inputs and 6 outputs can be individually addressed with SELCAL codes. This offers the communications designer numerous options for remote control and monitoring.

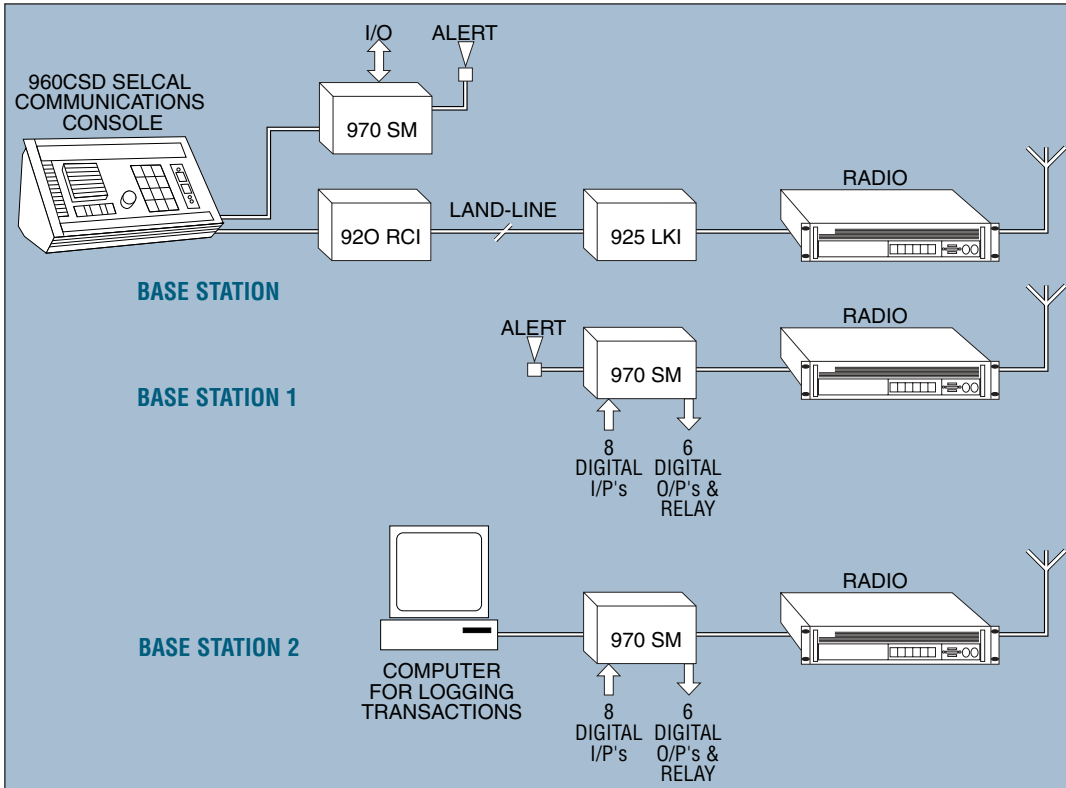
**970SM Features:**

- Encodes 8 and decodes 6 unique sequential SELCAL codes.
- Fully compatible with the BISS Tech 960CSD communications console.
- All standard code formats and timings are covered.
- All parameters are software programmable.
- Logging of all events is available using an external computer.
- Designed for easy connection to radio systems.
- Voltage free relay output with programmable time-out.
- Programming and Logging software provided with unit.



Screen shots of configuration program supplied with the 970SMA computer logging system program is also provided.

## TYPICAL EQUIPMENT CONFIGURATION



This configuration allows the Base Station to control and maintain multiple I/O at Remote Stations using SELCAL tones.

## APPLICATIONS

- Small scale telemetry solutions.
- Mobile selective calling, individual and group.
- Monitoring and logging of alarm functions.
- Simple pump control.
- Small scale telemetry solutions.
- Logging of remote operator functions.
- Remote building security monitoring.
- Site monitoring.
- Blast/alarm tone generator.



Screen shots of configuration program supplied with the 970SMA computer logging system program is also provided.

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 Voice communication

### Specifications:

- SELCAL tone standards: ZVEI,1,2&3, PZVEI, DZVEI, CCIR, EEA and EIA.
- Number of tones: 4 to 8.
- Nine outputs. These are made up of 6 general-purpose open collectors, a LED indicator driver, a microphone mute control and a relay with two voltage free change over contacts. An ALERT tone output is also provided.
- Eight inputs. Each input is internally pulled up to +5V which is activated by connecting to ground.
- Tone period: 20,33,40,50,60,80,90 and 100 ms.
- Lead in delay, lead out delay and "Beep" acknowledge period: programmable from 0 to 25.5 seconds in 100 mS steps.
- Programmable repeat and "Beep" ACK tones.
- Programmable timers for outputs, relay, LED and alert tones from 0 to 255 seconds in one second increments.
- Digital outputs can be SET and RESET from different SELCAL codes.
- Programming and logging software runs on Windows™ software WIN9X, XP and NT. Software and programming cable are provided.
- Three ports are provided, a DB-25 for general I/O, a DB-9 for programming and logging functions, and a 8 way RJ radio interface connector.
- Power requirements: 11-28 Vdc. Current: less than 100mA.
- Dimensions: 130 x 67 x 46 mm
- Enclosure: Grey plastic ABS box.

FOR PRODUCT AND SYSTEM SALES AND SUPPORT CALL +33 2 4165 5722

970SM SELCAL Encoder/Decoder