

GENERAL DESCRIPTION

The AL800 encoder can send numeric, as well as alphanumeric messages directly to a POCSAG pocket pager, at a baud rate of 512, 1200 or 2400. 4 sets of message per input can be generated: a message on power applied, on power removed, on detection of pulse and on recall of alarm state. Each message (of 32 or 64 characters) can be sent to up to eight different pagers. Each pager has its specific capcode, function codes, baud rate and type. Messages can be programmed in factory prior to shipping, or with a programmer using a Windows™ software. All informations are saved in a non-volatile memory. Modules can share radio frequency with other radio systems. An AL800 module is completely operational by itself and thus needs no master. Many modules can be linked together thru an internal BUS without no specific limits. The link thru the internal BUS is only a common 10 wires flat cable. Each module can be connected or disconnected, added or removed without interfering with the others, even without the need to turn the power off. Even a failure of a module will not stop other modules to work properly.

INPUTS

Inputs can accept voltages from 5 to 24 Vdc. A 24 Vac will also be recognized. Each input is made of a separate opto-isolator, witch electrically isolates all inputs from the circuit board and from each other inputs. Thus, connecting signals from different systems to the same AL800 is possible.

CONNECTIONS

Opto-isolator inputs:

A MAS-CON male plug of 16 pins, with a spacing of .100", is used to connect the generator signal to the module. The connection is done on a female MAS-CON connector witch accepts wire gages from 24 to 20 awg.

Radio Transceiver Output / power:

A MAS-CON male plug of 5 pins, with a spacing of .100", is used to connect the AL800 to a radio transmitter (in option) , and also to supply the module. The connection is done on a female MAS-CON connector witch accepts wire gages from 24 to 20 awg.

Internal BUS:

A 10 pins (2 X 5) male connector is used to connect many AL800 together. This BUS carries the POWER as well as different control signals needed for a good operation of all the systems, without the need for other connections. Modules can be connected or disconnected from this BUS without the need for turning the main power off.

POWER

Modules are powered by the Internal BUS or by the Radio transceiver output/power connector. A current of 10mA and a voltage of 8 Vdc to 15 Vdc is all it requires.

OUTPUT

Radio output signals required for the transceiver are:

- 1-PTT line ("open collector" type, short to ground when transmitting).
- 2-DATA line, that can be connected to the "Flat audio input" or "DATA INPUT", depending on the radio model used. This output has a potentiometer to adjust the ouput voltage from 0v to 5V, in order to fine tune the deviation.
- 3-Busy line, that suspends the module from transmitting when short to ground. This input is usually connected to the Carrier Detect of the radio.

MAIN CHARACTERISTICS

- Accepts dry or wet contacts.
- Alarm detection time: .1 sec.
- RISC microcontroller for a powerful multi tasking system.
- Memorizes events while transmitting (up to 28 different events).
- 3 Leds.

Green	Power
Yellow	Alarm detection
Red	Transmitting

ELECTRICALS AND PHYSICALS

- Operating Voltage : 8 to 15 volts DC.
- Operating temperature : 0°C to 60°C
- Power:

10 mA (standby)
20 mA (transmit)
- Weight : 28 g (1 oz)
- Dimensions :

81 mm X 56 mm X 20 mm
.75" X 2.25" X 3.25"

PROGRAMMABLE FUNCTIONS

Detection time of Alarm/pulse/Return to normal:
 .1 to 25.5 sec. 0=inactive,

Recall cycle: 30 sec. to 120 min. 0=inactive (in 30 sec. increment).

Length of alarm messages = 64 (32 if pulse detect is active).

Length of Return messages = 64 (32 if recall is active).

Length of pulse and recall messages =32

Radio signal polarity : normal or reversed.

Normal states: Voltage off or voltage on.

Accessories required(*) or optional

MAS-CON16F	*Female connector of 16 pins, for contacts.
MAS-CON5F	*Female connector of 5 pins, for power.
MAS-CONPIN	Termination tool for MAS-CON female
PAN8 or PAN32	Mounting panel for 8 or 32 AL800
BOI1212	Electrical box for PAN8
BOI2420	Electrical box for PAN32
TX-5	UHF, 5 watts Radio transmitter.
TX-25U, TX-25V	UHF/VHF 1 to 25 watts Radio transmitter.
AL800BUS-XX	Internal BUS cable (XX = number of AL800)
PW-125, PW1211	Power supply: 1 TX-5 + 10 AL800, TX-5 + 100 AL800

ENCODER CHARACTERISTICS

Encoding : BCH 21,30,1

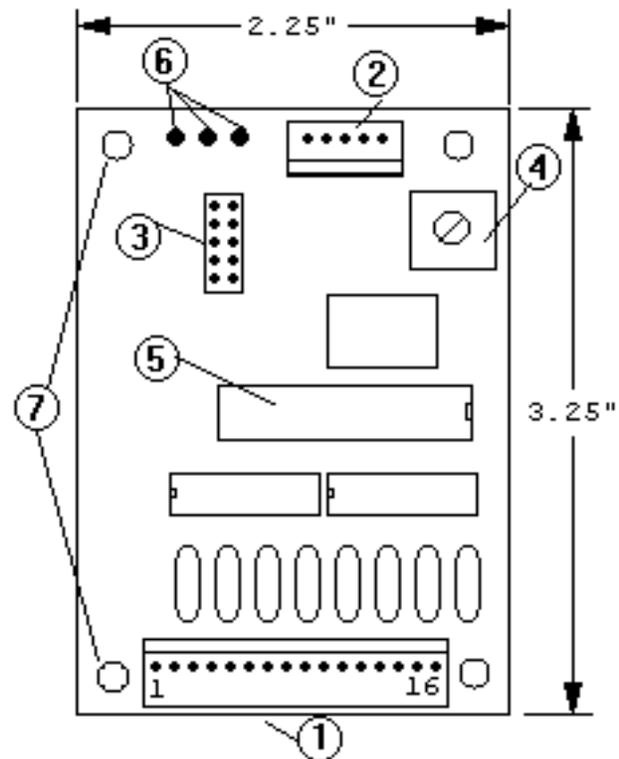
Message types: Tone only, numeric or alphanumeric.

Functions: 4

Baud rate: 512, 1200 and 2400 bauds.

Type, baud rate, capcode and function code specific for each pager.
 Module contains a bank of 8 pagers.

PARTS IDENTIFICATION



1. 16 pins male connector, alarm inputs.
2. 5 pins male connector, power and radio interface.
3. 2X5 male connector, internal BUS.
4. Deviation adjustment potentiometer.
5. RISC microprocessor.
6. L.E.D. green, yellow and red.
7. Mounting holes (4 X .150")