OMNEX
CONTROL SYSTEMS INC

Spread Spectrum Transmitter
Model T100-900

User Manual

Rev A

1 SAFETY

1.1 General

- Read all instructions before operating equipment
- Save these instructions for later use.
- Follow all warnings and instructions

1.2 Battery

Use only standard AA **alkaline** batteries in the unit. Use of any other types will invalidate any approval or warranty applying to the product, and may be dangerous.

1.3 Labels

Your transmitter has a label on it, which is important for service and related purposes. Be careful not to lose the label or the information there.

WARNING!

This device complies with Part 15 of the FCC rules. Operation is subject to conditions: (1) This device may not cause harmful interference, and (2) this device must accept interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by OMNEX Control Systems Inc. invalidate any approval or warranty applying to the product and can void the user's authority to operate this equipment.

2 USER GUIDE

2.1 Configuration

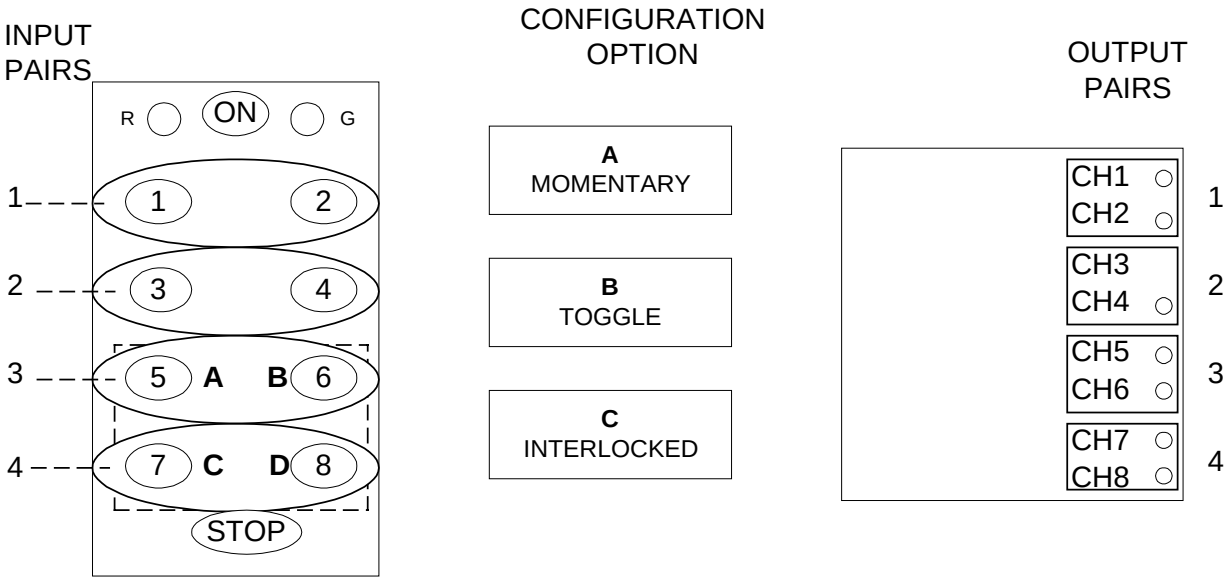
2.1.1 Power Configuration

The unit can operate in several different power-on modes:

MODE #	ON/OFF SWITCH	DESCRIPTION
A.	Unit turns ON when ON switch pressed and Off when OFF switch pressed.	• When unit is first turned ON or any time the ON button is pressed, data is transmitted • When a change of state takes place, data is transmitted. • If a function is still active (button is held) data is transmitted every 1 out of 10 packets. • If no functions are active, data is transmitted 1 packet out of 30. • If STOP is pressed, data is transmitted and then transmitter turns OFF. Receiver outputs will default to initial state.
B.	"	• same as Mode 1 except that outputs retain last state on sending STOP.
C.	Unit turns ON when any function depressed	• When a button is pressed, data is transmitted • Transmitted will timeout in 30 seconds • If STOP is pressed, all outputs in the receiver shall revert to their default state.

2.1.2 Output Configuration

SETTING THE CONFIGURATION OPTIONS



A. MOMENTARY

Outputs directly reflect inputs. Outputs are ANDed with 'MAIN" function. This means that if a button is pressed and the RF carrier is lost, the output will automatically clear.

B. TOGGLE

Each output pair is independently toggled and latched. Every time a button is pressed, its corresponding output toggles. In the event of loss of carrier, the status of the output will either retain its state or turn OFF depending on the POWER ON mode selected.

C. INTERLOCKED

Each of the 8 outputs are paired. Within each pair, only one output can be on at one time (ie. interlocked). The default outputs shall be odd numbers OFF and even numbers ON. Whether the pairs retain last state or default upon loss of carrier shall depend on the POWER ON mode selected.

2.1.3 Link Mode

Sends out all configuration data including the factory programmed ID to the desired receiver

2.1.4 Security Configuration

In certain cases it may be desirable to prevent accidental use of the unit by preventing anyone except authorized personnel to activate the unit. Entering the SECURITY MODE shall enable a user to program in a unique 4 digit startup ID. This ID must be entered while simultaneously depressing the ON switch.

2.2 Normal Operation

During normal operation, the unit will function like an 8 channel transmitter. The specific functions of each button is defined during device configuration.

3 SPECIFICATIONS

TX Power	10mW
Supply Voltage	3.3 – 10 VDC
Current	< 20mA on transmit; 2mA on standby
Data Rate	4800 bps