SEI ADVISOR

PUBLIC SAFETY
ENCODING - DECODING - RECORDING







SEI RECORDER

Smart Equipment Innovators LLC

seinnovators.com



SEI Advisor Recorder

TABLE OF CONTENTS

PRODUCTS	<u>3</u>
ENCODER FEATURES	5
DECODER FEATURES	6
RECORDER FEATURES	7
ADVISOR FEATURES	8
ADVISOR SPECIFICATIONS	10
RECORDER SPECIFICATIONS	12
CONFIGURATIONS	13
OPERATION	16
WARRANTY	17

603 447 3925



ADVISOR

ADVISOR ENCODE/DECODE

1000 ENCODE SLOTS:

- 2 TONE PAGING GROUP CALL PAGING OPTIONAL ALERT TONE DTMF PAGING KNOX DTMF PAGING
- UP TO 50 STACKS CAN BE SET UP WITH UP TO 48 PAGES EACH
- 16 CHARACTER ALIAS TO IDENTIFY EACH SLOT

19 DECODE SLOTS:

- ACTIVATE ALERT RELAY OPTIONALLY ON FOR 2 SECS OR ON UNTILL RESET BY THE "*" KEY
- TURN OFF THE STOVE, START RECORDING THE CALL ETC.
- ALERT RELAY CAN BE RESET WITH A PAGE
- CHOICE OF 3 ASCENDING VOLUME TONES TO ALERT DUTY PERSONAL
- RED LIGHT CAN BE ACTIVATED BEFORE THE ROOM LIGHTS ARE ACTIVATED
- THE RADIO TRAFFIC CAN BE ROUTED TO THE PA SYSTEM
- 3 DIFFERENT RELAY OUTPUTS CAN BE ACTIVATED WITH 3 DIFFERENT PROGRAMMABLE RELAY SEQUENCES
 TO BLOW A HORN OR FOR LONG TERM TIMING SUCH AS OPENING THEN CLOSING DOORS
 (THIS FUNCTION ACTS LIKE 3 SEPARATE PROGRAMMABLE LOGIC CONTROLLERS)
- A TWO TONE REPAGE OR DTMF SEQUENCE CAN BE RE-PAGED AFTER A DECODE
- MONITOR FUNCTION ALLOWS LISTENING TO ALL RADIO TRAFFIC OVER THE PA SYSTEM
- EASY TO SETUP AND PROGRAM

OPTION ___BUILT IN RECEIVER __ALLOWS THE BASE RADIO TO SCAN AND STILL RECEIVE THE TONES. ALSO ALLOWS THE ADVISOR TO OPERATE AS A DECODER WITHOUT CONNECTION TO A BASE RADIO (VHF OR UHF)

OPTION ____ **BUILT IN RECORDER** ___ 4000 HOURS OF RECORDING BEFORE IT STARTS TO RE-RECORD OVER THE OLDEST MEMORY – WIFI CONNECTION ALLOWS ACCESS FROM ANY DEVICE IN THE WIFI NETWORK OR CAN BE ACCESSED DIRECTLY FROM A CELL PHONE OR ANY WIFI DEVICE – OPTIONAL CLOUD WEBSITE AND STORAGE ALLOWS ACCESS FROM ANY INTERNET CONNECTED DEVICE FROM ANYWHERE IN THE WORLD – PERSONAL CAN REPLAY THE CALL ON THEIR PHONE WHILE RESPONDING

OPTION ____**DTMF DECODE** __DECODE A SINGLE DTMF SEQUENCE UP TO 8 DIGITS___TRIGGERS DECODE SLOT 20

OPTION ____ KNOX DTMF DECODE __DECODE A SINGLE KNOX DTMF SEQUENCE UP TO 8 DIGITS TRIGGERS DECODE SLOT 20

OPTION ____ LOCAL AUDIO AMP WITH BUILT IN SPEAKER

OPTION ___EXTERNAL TRIGGER ___TRIGGERS DECODE SLOT 20



RECORDER

- -4000 HOURS OF RECORDING BEFORE IT STARTS TO RE-RECORD OVER THE OLDEST MEMORY
- -WIFI CONNECTION ALLOWS ACCESS FROM ANY DEVICE IN THE WIFI NETWORK OR CAN BE ACCESSED DIRECTLY FROM A CELL PHONE OR ANY WIFI DEVICE
- -OPTIONAL CLOUD WEBSITE AND STORAGE ALLOWS ACCESS FROM ANY INTERNET CONNECTED DEVICE FROM ANYWHERE IN THE WORLD
- -PERSONAL CAN REPLAY THE CALL ON THEIR PHONE WHILE RESPONDING



RECEIVER RECORDER

-RECEIVER/RECORDER COMBINED - PLUG IT IN AND CONNECT AN ANTENNA

- -4000 HOURS OF RECORDING BEFORE IT STARTS TO RE-RECORD OVER THE OLDEST MEMORY
- -WIFI CONNECTION ALLOWS ACCESS FROM ANY DEVICE IN THE WIFI NETWORK OR CAN BE ACCESSED DIRECTLY FROM A CELL PHONE OR ANY WIFI DEVICE
- -OPTIONAL CLOUD WEBSITE AND STORAGE ALLOWS ACCESS FROM ANY INTERNET CONNECTED DEVICE FROM ANYWHERE IN THE WORLD
- -PERSONAL CAN REPLAY THE CALL ON THEIR PHONE WHILE RESPONDING

FIRE GROUND RECORDING

- -CHANGE CHANNELS USING A CELL PHONE
- -PLAY BACK DIRECTLY TO A CELL PHONE AT THE SCENE
- -CONNECT TO THE CLOUD IF VEHICLE HAS ON BOARD WIFI OR THROUGH A CELL PHONE AS A HOT SPOT THIS ALLOWS OFF SCENE PERSONAL TO FOLLOW THE COMMUNICATIONS AT THE FIRE SCENE IN ALMOST REAL TIME (APROX 60 SEC DELAY)

ENCODER FEATURES

1000 SLOT ENCODER

Provides All Public Safety Encoding Functions





Two Tone - DTMF - Knox F1 DTMF Group Calls - Alert Tones - Stacks

Accepts ANY TONES

Just enter the Tones from the Keypad

16 CHARACTER ALIAS



Alias Displays .7 second after the Slot Number is Entered (You Can Page Immediately without Waiting for the Alias)

DECODER FEATURES CREW WAKEUP SEQUENCE



WAKEUP TONES START LOW AND RAMP IN VOLUME TO KEEP FROM STARTLING CREW MEMBERS (RAMPING CAN BE SHUT OFF WITH PROGRAMMING)

4 Seconds

CREW ASLEEP	RED WAKE-UP LIGHTS	ROOM LIGHTS
	WAKEUP SEQUENCE TONES	RADIO TRAFFIC ROUTED TO PA SYSTEM
THE SEI ADVISOR HAS 3 DIFFER-	4 Sec. Audio Alert	IO PA SISIEM

THE SEI ADVISOR HAS 3 DIFFER-ENT WAKEUP SEQUENCES SO A DIS-TINCTION BETWEEN FIRE AND AM-BULANCE (FOR EXAMPLE) CAN BE ESTABLISHED.

4 Sec. Audio Alert Red WAKE-UP Lights Switch on

ALERT RELAY

THE DEFAULT FOR RELAY 1 (THE ALERT RELAY) IS ON FOR 2 SECS THEN OFF. IT CAN BE PROGRAMMED FOR "ON UNTIL RESET" (WITH THE "*" KEY.) THE ALERT RELAY STATUS IS INDICATED BY THE LED ON THE FRONT COVER. THE ALERT RELAY CAN ALSO BE DEACTIVATED WITH A DECODE SO IT CAN BE USED TO CONTROL REMOTE DEVICES.

RELAY SEQUENCES

- -RELAYS CAN BE PROGRAMMED FOR SEQUENCES
- -3 RELAYS CAN BE PROGRAMMED FOR 3 DIFFERENT SEQUENCES
- -SEOUENCE A HORN OR SIREN
- -CAN BE PROGRAMMED FOR TIMING FUNCTIONS
- -SHUT THE STOVE OFF
- -START RECORDING
- -OPEN DOORS AND ACTIVATE LIGHTS

REPAGE

REPAGE 2 TONE, DTMF OR KNOX DTMF ON DECODE

CONFIGURING THE ADVISOR

THE ADVISOR CAN BE CONFIGURED TO HANDLE ANY ALERTING, SWITCHING AND CONTROL SITUATIONS YOU MAY ENCOUNTER.

WE WILL HELP YOU WITH PLANNING AND CONFIGURATION TO DO WHAT YOU NEED TO DO. CALL DAVE AT 603 662 2149.

RECORDER FEATURES

Wifi Connected Optional Cloud Connection

FIREHOUSE RECORDING

- -RECORDS ALL RADIO TRAFFIC WITH DATE AND TIME
- -IDENTIFIES WHAT UNITS WERE TONED OUT
- -BACKUP AUDIO FILES TO LOCAL PC OR CLOUD
- -LISTEN TO FILES FROM ANY DEVICE ON THE LOCAL WIFI NETWORK
- -WITH CLOUD SERVICES IT WILL AUTOMATICALLY BACKUP
 TO THE CLOUD ALLOWING ACCESS FROM ANYWHERE





FIREGROUND RECORDING

- -MOBILE MOUNTING CONNECTS TO RADIO IN VEHICLE
- -RECORD ALL MOBILE AND PORTABLE FIRE GROUND TRAFFIC AT THE SCENE
- -AUDIO FILES CAN BE ACCESSED FROM ANY PC WHEN THE UNIT RETURNS TO WI-FI RANGE AT THE STATION
- -PLAY BACK LOCALLY ON YOUR CELL PHONE
- -SMALL SIZE EASILY MOUNTS ANYWHERE (CAN MOUNT INSIDE THE CONSOLE AS YOU DON'T NEED TO BE ABLE TO SEE IT)
- -AUTO CONNECTS WHEN IN THE RANGE OF STATION WIFI
- -WITH CLOUD SERVICES IT WILL AUTOMATICALLY BACKUP TO THE CLOUD WHEN BACK IN THE RANGE OF STATION WIFI ALLOWING ACCESS FROM ANYWHERE



RECORDER UNIT

Shuts Down if Vehical is Not Used

RECEIVER/RECORDER STAND ALONE UNIT



PLAY BACK



THREE WAYS TO ACCESS THE AUDIO FILES

- 1 Direct connection from a WIFI enabled computer or cell phone to the recorder. (The recorder is an access point with internal webpages)
- 2 Connect the recorder to you local WIFI network and connect from any device in the network. (A DHCP reservation should be make in the router so the router can't change the local IP address.)
- 3 Connect from any computer through the cloud. You have your own website with all your recorders on it. (An annual fee is charged for this service.) OPTIONAL CLOUD SERVICES:

Backup Files to the Cloud Automatically. Review Files from Anywhere in the World. Dispatch can Verify that Tones and Message Transmitted Correctly. Have Your Own Dedicated Website.

FIREGROUND COMMUNICATIONS CAN BE HEARD DIRECTLY THROUGH THE CLOUD

If the vehicle has onboard WIFI then the fireground traffic can be accessed remotely. (apx 60

ADVISOR FEATURES EASY TO SETUP

All Connections and Adjustments are External so no Disassembly is Required.



RJ45 is used for All Connections.



Shielded Jacks

INTUTATIVE PROGRAMMING

Hold the # Key Down for 6 Seconds to enter the Program Mode.

PROGRAM MODE



PROG ENCODER * YES # NO



Just Follow the Displays.



ENCODER CAPABILITIES

1000 ENCODER SLOTS

ANY TONES CAN BE ENTERED (JUST PUNCH IN THE NUMBERS) TWO TONE

STANDARD TONES 1 SEC. 1ST TONE, 3 SEC. 2ND TONE GROUP CALLS 8 SEC. TONE

DTMF TONES

STANDARD AND KNOX F1

1 - 8 DIGIT SEQUENCES

0 - D DIGITS

OPTIONAL DELAY TO ACCOMMODATE A PTT ID DE-EMPHASIS IF NEEDED TO COMPENSATE FOR PRE-EMPHASIS OPTIONAL ALERT TONE AFTER PAGE

16 CHARACTER ALIAS CAN BE ADDED TO ANY ENCODER SLOT STACKS

50 STACK CAPACITY
UP TO 48 TWO TONE PAGES PER STACK
CAN ADD AN ALERT TONE TO THE END OF A STACK

ADVISOR FEATURES

DECODER

RECEIVING TONES

CONNECT AUDIO INPUT TO BASE STATION (ON A DEDICATED CHANNEL WITHOUT SCANNING) OR STAND ALONE OPERATION WITH RECEIVER

(WITH THE OPTIONAL RECEIVER YOU CAN CONNECT TO THE BASE STATION FOR ENCODING AND RECEIVER IS USED FOR DECODING SO THE BASE STATION CAN SCAN)

19 DECODER SLOTS
CREW WAKE-UP SEQUENCE
3 DISTINCT ASCENDING VOLUME
TONE SEQUENCES ROUTED TO
PA SYSTEM
RADIO TRAFFIC ROUTED TO PA SYSTEM
RED LAMP TURNED ON FOR 4 SEC.
ROOM LIGHTS TURNED ON AFTER 4 SEC.
RESET TIME IS PROGRAMMABLE.

ALERT ACTIVATED RELAY OUTPUTS (2)

ACTIVATE THE SEI RECORDER TO LOG RADIO TRAFFIC ON THE CALL TURN OFF THE KITCHEN STOVE DURING A CALL OPEN BAY DOORS DEACTIVATE RELAY OVER THE AIR MANUALLY ACTIVATE AND DEACTIVATE FROM KEYPAD (DEFAULT - 2 SEC RELAY CLOSURE, PROGRAMMABLE - "ON UNTIL RESET")

PROGRAMMABLE RELAY SEQUENCES
3 PROGRAMMABLE RELAY SEQUENCES
EACH SEQUENCE CAN OPERATE 1 RELAY, 2 RELAYS OR ALL 3 RELAYS
FOR HORN SEQUENCES
OPEN AND CLOSE DOORS ETC.

DTMF AND KNOX DTMF DECODING OPTION

GENERAL

BUILT TO BE TROUBLE FREE

OVERSIZED VOLTAGE REGULATOR
TRANSIENT VOLTAGE SUPPRESSION ON ALL INPUTS/OUTPUTS
RF FILTERING ON ALL INPUTS/OUTPUTS
SHIELDED JACKS FOR HIGH NOISE ENVIRONMENTS
HIGH QUALITY COMPONENTS

ADVISOR SPECIFICATIONS

Encoder

Capacity 1000 calls - Two Tone Paging or

Formats DTMF sequences 2 Tone Sequential

1 second 1st tone, 3 seconds 2nd tone Group call 8 seconds

Optional high low alert tone

DTMF Sequences Standard or Knox F1 1—8 digit sequences (Digits 0 - D)

Digit duration of 100ms
Gap between digits of 100ms
50 stacks of 48 pages each

Alias 16 Characters

Displays .7 seconds after Slot Number is Entered

Displays with Two Tone, DTMF and Stacks

Frequency

Stacks

Range 300 - 3000HZ +/- .5db Audio Output 0-4VPP to the transmitter Flat or De-emphasized

+/-.75HZ

Frequency

Accuracy

Frequency +/- .005%

Stability

Decoder

Audio Input Minimum .1 VPP

Tones In 250.0 HZ - 3000.0 HZ

Capacity 19 2-tone calls (or Group Calls 8 sec. Tones)

Output Dry relay contacts (two sets)

Default 2 sec pulse

Programmable for "ON UNTIL RESET"

LED Indicator

Output can be activated and deactivated manually

3 Programmable Relay Sequences

Optional DTMF and Knox DTMF decode

Audio Out to PA System Adjustable up to 6vpp into 600 ohms

Relay Capacity 2 Amps at 30V

Crew WAKE-UP Sequence

3 Different WAKE-UP Tones (Ascending Volume)

Red Light on for 4 seconds

Then Room lights on after 4 seconds

Radio Routed to PA System

Reset All After Programmable Timeout3

ADVISOR SPECIFICATIONS

General Specifications

Power Requirements 12 - 15VDC Power Consumption < 1Watt

Current 45 ma normally

Draw 100 ma during paging

Operating -20C to +70C

Temperature

Size Desk Top W 3.25" D 6" H 1.6"

Wall Mount W 9.5" D 1.75" H 5"

Weight .5 lbs

CUSTOM CONFIGURATIONS AND CAPABILITIES ARE AVAILABLE 603 447 3925

RECORDER SPECIFICATIONS

SD CARD CAPACITY 128 GB 4303 HRS

WHEN THE SD CARD IS FULL, IT STARTS RECORDING AT THE BEGINNING AGAIN

VOX OPERATION WITH SETTABLE THRESHOLD

WIFI ACCESS
DIRECTLY FROM PHONE TABLET, PC OR
FROM BUILDING WIFI ON ANY DEVICE IN
THE WIFI NETWORK
OPTIONAL CLOUD SERVICES
BACKUP FILES ON THE CLOUD
PLAYBACK FROM ANYWHERE

MOBILE RECORDER WILL AUTOMATICALLY CONNECT WHEN IN THE RANGE OF THE WIFI SYSTEM

BACKUP FILES ON PC

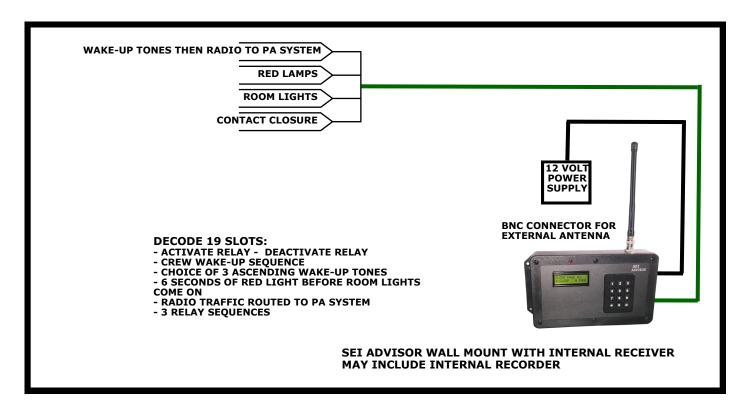
POWER REQUIREMENTS 10 - 15 VDC

CURRENT DRAW

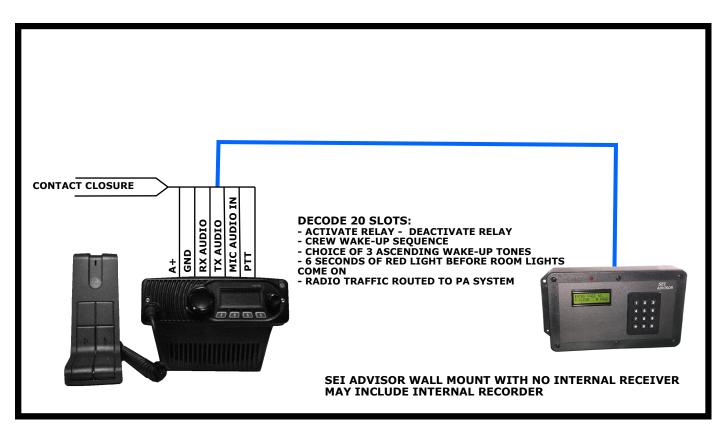
140MA MAX MOBILE UNIT SHUTS DOWN AFTER 24HRS OF
NO IGNITION VOLTAGE (TO PREVENT LONG TERM BATTERY
DRAIN IF VEHICLE IS NOT USED)

PLUG AND PLAY COMPATIBLE WITH ADVISOR

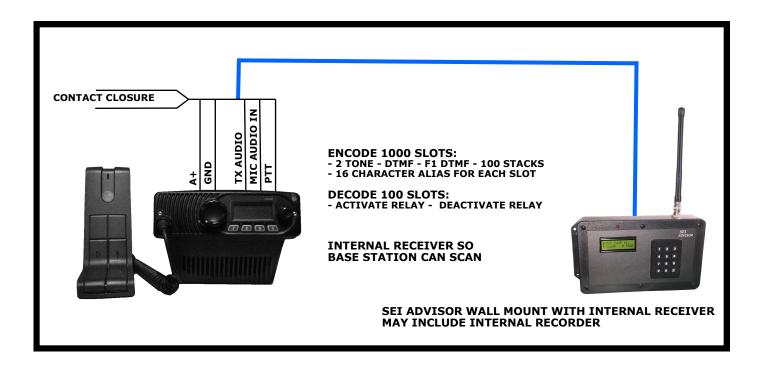
WALL MOUNT DECODE ONLY INTERNAL RECEIVER WAKE UP SEQUENCE



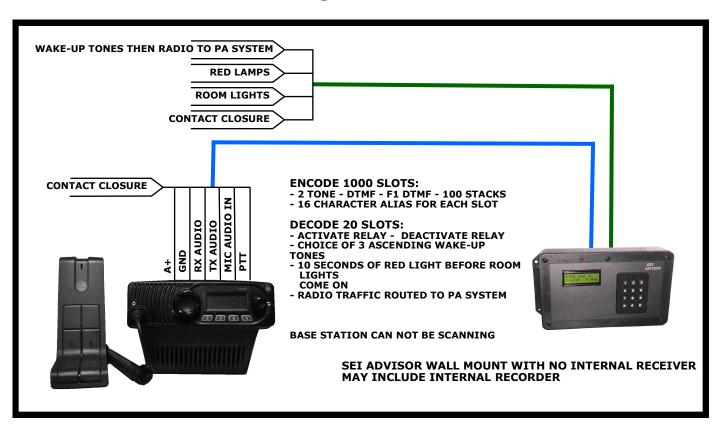
WALL MOUNT ENCODE/DECODE NO SCAN



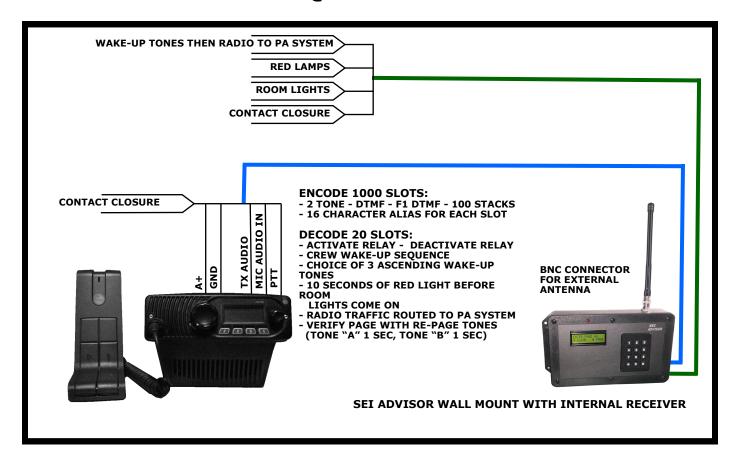
WALL MOUNT ENCODE/DECODE SCANNING



WALL MOUNT ENCODE/DECODE CREW WAKE-UP SEQUENCE NO SCAN



WALL MOUNT ENCODE/DECODE CREW WAKEUP SEQUENCE SCANNING



PROGRAMMABLE RELAY SEQUENCES ARE INCLUDED IN ALL OF THE DECODE UNITS 3 SEQUENCES ANY COMBINATION OF 3 RELAYS

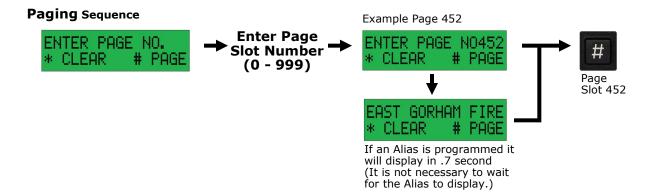
THE SEI RECORDER AND / OR RECEIVER CAN BE INCLUDED INTERNALLY IN THE WALL MOUNT CONFIGURATIONS





ENCODER OPERATION

Each Encoder Slot can contain a Two Tone Page, Group Call Page, DTMF Page, Knox F1 DTMF Page or a Stack Page.



DECODER OPERATION

When a Two Tone Page is Received and Decoded, it is compared to the Pages Programmed into the Decoder Slots.

If a match is made then the Advisor performs the functions programmed for that Slot.

Up to 19 Decoder Slots can be programmed. Slot 20 is triggered by an external input.

Each Decoder Slot can be Programmed for one or more of the following Functions:

Activate Alert Relay

Deactivate Alert Relay

Activate Wake Up Sequence with Tone Sequence One

Activate Wake Up Sequence with Tone Sequence Two

Activate Wake Up Sequence with Tone Sequence Three

(Wake Up Sequence - Activate a Red Lamp, Send Tone Sequence over the PA System, Send Base Radio Audio to the PA System, Turn Room Lights on after 4 second - Programmable time out)

Re-page slot 999

Activate relay sequences (1 and/or 2 and/or 3)

MANUAL ACTIVATION OF ALERT RELAY

OFF

ON





CUSTOM CONFIGURATIONS AND CAPABILITIES ARE AVAILABLE 603 447 3925

WARRANTY

The SEI Products are warranted to be free from defects in material or workmanship for a period of 1 year from the date of purchase. Damage due to misuse or modification is not covered under this warranty. The unit must be returned to the factory and we will repair or replace it (at our option) at no charge.

SMART EQUIPMENT INNOVATORS LLC

603 447 3925 info@seinnovators.com

seinnovators.com



240523A