

Operational Instructions

Model B-3700 Marine Recorder.

Introduction:

Model B-3700 Marine Recorder has been designed to record important safety information such as weather reports, vessel traffic, Coast Guard warnings or May-Days from VHF or SSB radios. The device contains a solid state digital recorder chip with non-volatile memory. Information is retained even if power is interrupted. At no time should device be used to record personal conversations without the knowledge of the person being recorded. At no time should any recordings be re-transmitted. This device is designed to complement your existing safety equipment such as VHF or SSB radios.

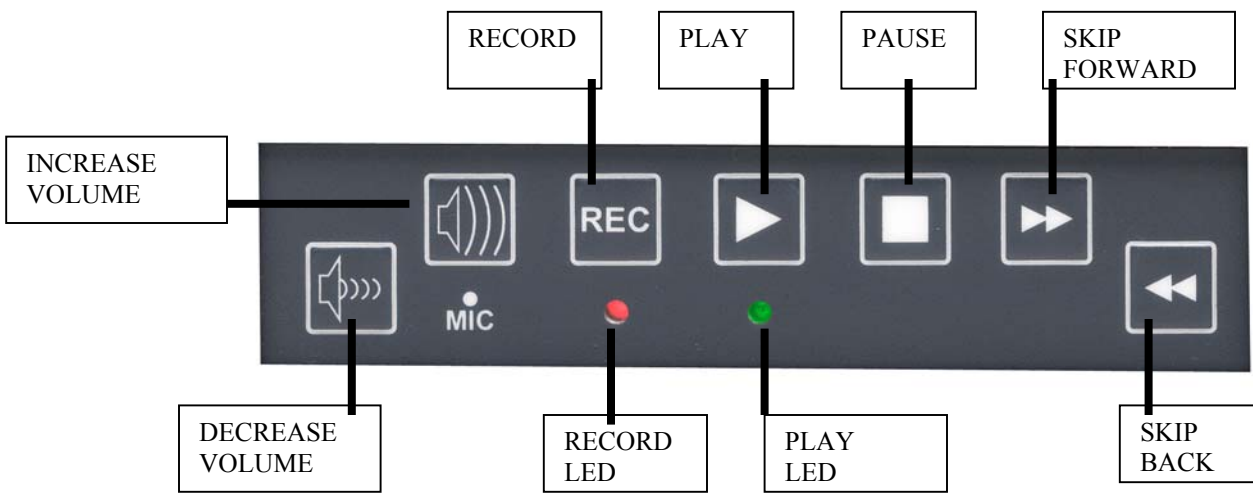
Installation:

Connect recorder to a 10 to 16 VDC power source with “red” fused wire connected to “positive” and black wire connected to “negative”. The recorder is also equipped with a microphone and input jack (AUX-IN) for direct connection to radio output. See diagram below, instructions, and jumper wire configuration of AUX-IN feature. AUX-IN plug is equipped with a vinyl cap. If plug is not used, leave cap in place.

Two 3.5mm MONO speaker outputs, labeled SP-1 and SP-2, are located in back of the unit. Both outputs are identical with separate, independent amplifiers. One output can be used for local speaker while the second can be used for remote speaker located at the helm. This feature is very helpful when using AUX-IN. Plug the supplied speaker into SP-1. The second output SP-2 is provided with weatherproof plug when not being used.

Very High Bond Dual Lock tape is provided for mounting recorder. This has the advantage of not requiring any holes to be drilled in recorder or mounting surface, such as VHF radio while still allowing the recorder to be removed for future connections to back panel. It is suggested that several locations be tested before permanently mounting the recorder. See attached instructions for applying Dual Lock tape system.

NOTE: MUST DEPRESS PLAY AND RECORD SIMULTANEOUSLY TO START RECORDING



Operation:

The recorder has been designed for simple operation with 7 tactile membrane switches.

Volume keys increase or decrease the volume by 7 steps during playback. The lowest level will provide very low volume to indicate the recorder is in Play mode. On power up, recorder defaults to lowest setting.

Total recording time is 13 minutes. To begin a recording depress the (REC) and (PLAY) keys simultaneously. In heavy seas it will be easier to depress and maintain (REC) key then depress (PLAY).

Red record light will illuminate indicating the recording has started. Depressing (PAUSE) will stop recording. Recordings will always start at the beginning memory register and write over existing information. Any recorded information should be transcribed to charts or logs as soon as possible.

Depressing (PLAY) key will start play from the beginning of a recording. Depressing "SKIP FORWARD (SF)" or "SKIP BACK (SB)" will skip forward or back 10 seconds respectively. These keys can be depressed several times skip over unwanted information. Double beep will indicate beginning of recording (SB) or end of memory (SF). The (PAUSE) key will stop play at current memory register. Depressing (PAUSE) key a second time will restart recording at same memory register. This is a useful feature when transcribing information to charts or log. See TABLE ONE for description of mode and key operations.

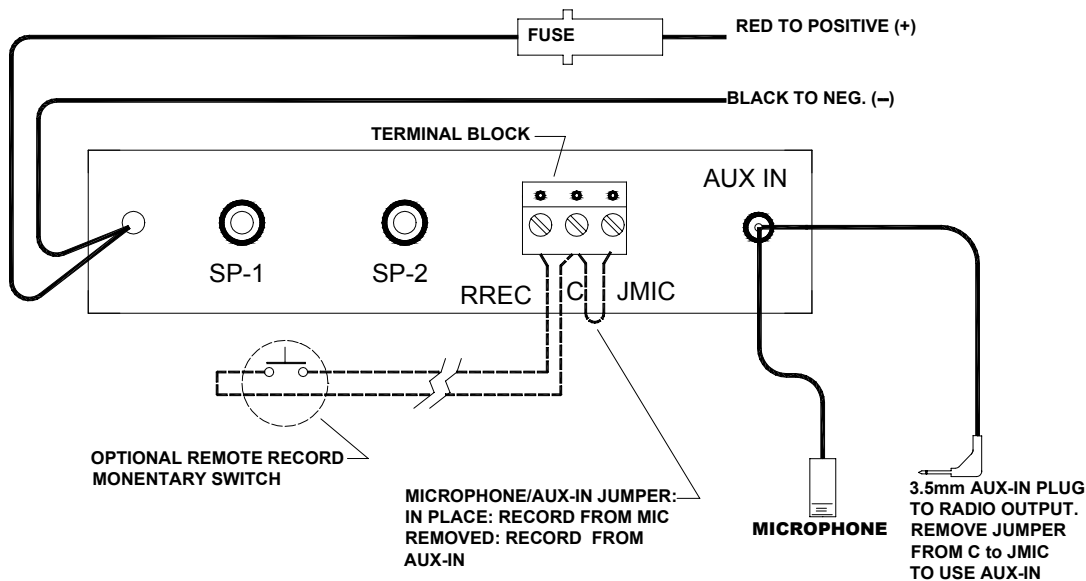
TABLE ONE

OPERATIONAL MODES

	PLAYING	RECORDING	PAUSED
PLAY ▶	RESET TO BEGINNING AND START PLAY AGAIN	NO FUNCTION	RESET TO BEGINNING AND START PLAY
REC*	RESET AND START RECORD	RESET AND START RECORD	RESET AND START RECORD
PAUSE ■	STOP AT CURRENT MEMORY REGISTER	STOP RECORDING	RESTART PLAY AT LAST MEMORY REGISTER
SF ▶▶	SKIP AHEAD 10 SEC RESUME PLAY.	NO FUNCTION	SKIP AHEAD 10 SEC AND PLAY
SB ◀◀	SKIP BACK 10 SEC RESUME PLAY.	NO FUNCTION	SKIPBACK 10 SEC AND PLAY

*Both "REC" and "PLAY" must be depressed at the same time to start recording

RECORDER REAR VIEW



Remote Record Option:

Terminal block located on back side of the recorder can be used for connection of remote record switch. Connection of a momentary switch between terminals “RREC” and “C” will allow recordings to be started from a remote location, such as helm. Depressing the switch once will start the record function and is signified by a “beep” from the speaker. Recording must be stopped at the Recorder front panel by depressing (PAUSE) key.

Connection of Radio Input Option AUX IN:

Information to be recorded can come from two different sources, internal microphone or AUX-IN. As shipped, a jumper wire connected to Terminals “C” and “JMIC” selects microphone input. Removing this jumper wire will select AUX IN input. *Note: after removing or replacing jumper the unit must be powered off and then back on.* To use AUX IN the provided 3.5mm mono male jack must be plugged into radio external speaker out. In most cases this will be a 3.5mm mono female jack. Some radios are supplied with a RCA type connector or wire pair. See description and connections below. Unfortunately, most radios will drop their internal speaker when a plug is inserted. The recorder is designed to allow source signal to feed through the recorder’s speaker. Two volume settings are now possible, the radio and the recorder. Best method is to set the recorder to mid range and adjust radio volume as needed. The recorder is equipped with automatic gain control for record volume. A reasonable listening volume should be sufficient for quality recordings.

Using AUX IN can cause some confusion. Are you listening to a recording or live broadcast? During playback of a recording the green play light will be illuminated. During live broadcast the green play light will be off.

RECORDER SPECIFICATIONS

POWER:

Fuse: 1 amp, AGC .25"x 1.25"

Reverse polarity protection: Yes

Over voltage protection: Yes, set to 17VDC

Voltage Range: 10 to 16 VDC negative ground.

Current Draw at 12.5VDC:

Stand By: 26mA

Play with two speakers
Max volume: 200mA

Record: 35mA

RECORDING:

Total recording time: 13.1 min.

Sampling Rate: 5.3 KHz

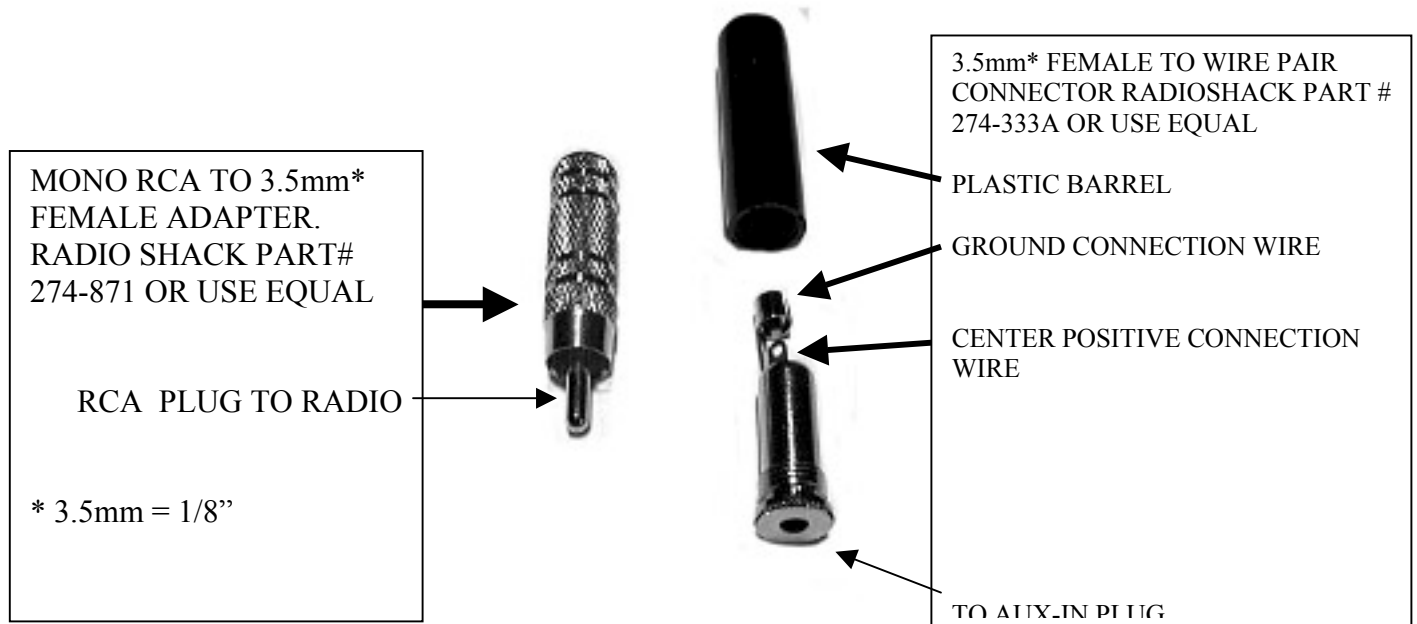
Recording cycles: Greater than 100,000

Message retention
Power off: 100 Years.

PLAY:

Two independent amplifiers
Each output into 8 ohms: 2 watts.

RCA OR WIRE PAIR CONNECTIONS FOR AUX-IN FOR USE IF RADIO IS NOT 3.5mm JACK



DUAL LOCK TAPE INSTALLATION

Eight 1"x1" 3M Dual Lock strips are provided for mounting the recorder. Lock tape strips together, forming four pairs. Clean surfaces of oil, water and dirt. Temperature should be above 60F. The recorder can be mounted on the top or bottom. Remove protective film from adhesive and attach to each corner of the recorder. Remove film from top layer of each pair and press recorder on mounting surface. Hold in place with constant pressure for a few seconds. The tape should be allowed to stand for at least 24 hours before attempting to unlock the system.. If mounting on oiled wood, mechanical fasteners such as #4 wood screws can be used on the tape system. Do not drill holes or drive screws into the recorder case. Try several locations before permanently mounting the recorder with tape system .

WARRANTY

Borel Manufacturing Inc. warrants this product against defects in material and workmanship for a period of 1 year from original date of purchase. Borel Manufacturing has the option to repair or replace defective item. Contact Borel for return instructions. This warranty shall be void if the product has been modified, or damaged by accident, abuse or misuse.

DISCLAIMER OF LIABILITY

Borel Manufacturing Inc. is not responsible for special, incidental or consequential damages resulting from any breach of warranty or under any legal theory. Including lost of profits, downtime, goodwill, damage to or replacement of equipment or property. The use of stored information in this device is the sole responsibility of person(s) using the product.