PSB7-PRO Spirit Box Rev2

SPIRIT BOX -ITC RESEARCH DEVICE



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Description



General Introduction

One of the exclusive features of the PSB7-PRO is the frequency overlap technique that is used during the sweep mode. The PSB7-PRO is the first ITC device of its type to offer user selectable frequency steps down to 10 kHz (FM) and 1 kHz (AM). This means that as you sweep, the smaller frequency steps will overlap around the stronger stations and blend together. This forms clusters of slightly detuned frequencies which in turn creates a strong opportunity for Spirit to distort the detuned waves around the stronger frequencies. Using the adjustable frequency step technique, you can sample as many as 10-12 "active" frequencies around the leading and trailing edges of the stronger dominant frequencies. In contrast, a typical sweep radio (P-SB7) scanning in 100 kHz steps may capture 2-3 samples around a strong dominant frequency. When you sample 10-12 steps you are essentially blending low, medium and high strength frequencies together which in turn creates a perfect environment for Spirit to respond more clearly with longer word profiles.

As the user of this ITC device, it is important to understand that creating the ideal conditions for Spirit to respond, by no means guarantees that Spirits will engage in communication with you.

You must learn how to distinguish and decipher responses as they occur in real time. And, as with any acquired skill, this takes time, practice and patience. Also, it is important to understand and realize that if Spirits are capable of manipulating radio frequencies to form words and sentences, they too are not perfect. There may be some radio bleed through, and other radio related sounds that you must learn to ignore or separate from their messages. Spirits have told me: "We Are Human in Spirit Form" so keep that in mind when using this ITC device.

Quick Set Up and Use Instructions

 Insert (3) AA Alkaline Batteries (Batteries Not Included) The battery power icon will appear in the top right corner of the LCD screen when batteries are inserted correctly (Image A).



Image A

2. Check the trigger sensor slide switches on the right side of the device.

Sensor switch should be in the OFF position, and Antenna switch in the ON position (Image B).





3. Press and Hold the POWER button for 3 seconds to turn the PSB7-PRO ON (Image C).



4. PSB7-PRO default screen will look like this (Image D).



Image D

Operating Sequence

Button Description



 Scan Step: Selects between 10kHz, 20kHz, 40kHz, 60kHz, 80kHz and 100kHz frequency steps while sweeping in FM. And, 01kHz, 02kHz, 04kHz, 06kHz, 08kHz and 10kHz frequency steps while sweeping in AM. When smaller steps are used, radio frequencies begin to overlap and blend together. This allows Spirits to manipulate and distort the smaller blended frequency segments easier resulting in better responses. It is best to experiment to see which setting configuration works best for you.

- Sweep Rate (AM/FM): Adjusts how fast or slow you would like to sweep between Radio frequencies. This is selectable between: 30ms (33.3steps/sec), 50ms (20 steps/sec), 70ms (14.3steps/sec), 90ms (11.11 steps/sec),110ms (9steps/sec), 130ms (7.69steps/sec), 150ms (6.66 steps/sec), 170ms (5.88 steps/sec), 190ms (5.26 steps/sec), 210ms (4.76 steps/sec), 230ms (4.34 steps/sec), 250ms (4.0 steps/sec), 270ms (3.7 steps/sec), 290ms (3.44 steps/sec), 310ms (3.22 steps/sec), 330ms (3 steps/sec) and 350ms (2.8 steps/sec).
- 3. Sweep FWD: Sweeps sequentially in a forward direction.
- 4. Sweep REV: Sweeps sequentially in a reverse direction.
- 5. AM/FM: Selects between AM and FM band.
- Back Light / Lamp: A momentary press will turn the backlight display ON/OFF and a 3sec press will turn the flashlight ON and OFF.
- 7. Vol +: Increases the Volume setting from 1 to 30.
- 8. Vol : Decreases the Volume setting from 30 to 1.
- 9. Temp Reset: A momentary press allows you to select between Ambient and Deviation Temperature measurement within the environment.
- 10. Alert °F/°C: Momentary press selects between degree °F and degree °C temperature units. A 3 sec press turns the audible alert ON, another 3 sec press turns the alert OFF. The audible alert announces with two beeps when the Temp sensor detects a rapid +/- 1°C temperature change in 2 seconds. It also alerts one beep when the REM and/or IR sensors are triggered automatically and the PSB7-PRO starts sweeping.
- 11. Sweep Off/Timer: This button activates the Off-delay timer and interactive features with the REM/IR- REM-IR sensor interface. When this is set to OFF (00s) and the sensor slide switch is set to OFF, the PSB7-PRO can only be activated manually using the function buttons.
- 12. Power: A 3 sec press will turn the Radio ON and OFF.

Interactive Sensors

REM: The PSB7-PRO uses a Capacitive sensor located under the top front cover. This sensor creates an electrostatic field that extends about 0.5" (12mm) above the front cover within the defined REM area. The output state of this field is analyzed in real time for any field disturbances and responds accordingly to control the sweep function (Image E).



Image E

Infrared Emitter/Receiver: Are located at the top of the PSB7-PRO. The Infrared detection operating principal consists of an IR source (Transmitter) which is used to emit radiation at a required wavelength. The radiation reaches an object and is then reflected back where the energy is received by an IR Receiver. The received IR radiation is then amplified and analyzed for intensity variations (Image F).



Image F

How To Use The Trigger Sensors

There are a few different ways that the REM and Infrared sensors, located on the right side of the PSB7-PRO can be used during your investigation. The user can select if the sensors are connected to an OFF-delay timer or set to instant ON/OFF trigger (Image G).





 Instant ON/OFF: In this mode, the sweep and LED light tube will react instantaneously when the sensor is activated and stop when the senor is deactivated. There is NO timer in this mode of operation. User can select which sensor/sensors you want to activate by using the sensor switch located on the right side of the PSB7-PRO select the REM/IR -REM or IR switch position and set your Sweep Off /Timer button to show "00s" on the LCD (Image H).



Image H

In this Instant mode the user can:

A) Activate the audible Alert which is loud enough to be heard throughout a large area. Press the Alert °C/°F buttonfor 3 sec to activate. When the audible Alert is used with only the REM sensor feature, it is possible to activate the audible Alert with and /or without sweeping. The sweep action depends on the induced signal strength and dwell time around the REM field. This creates an intentional challenging control situation for Spirit, and something the user can use during research and experimentation.

- B) Use the IR and REM field simultaneously and if the IR energy is interrupted the audible tone will be heard and then always followed by some momentary sweeping sound. As mentioned above, the REM field can be disturbed and the audible Alert activated with and without sweeping. This is done to help the user distinguish which field is potentially being manipulated by Spirit.
- C) Reduce the PSB7-PRO volume and turn the audible alert OFF so that only the LED light tube is used for binary interaction.
- D) Activating the "MUTE" button on the left side of the PSB7-PRO allows the PSB7-PRO to sit silently until a sensor is triggered. Once a sensor trigger is enabled, the sound comes ON and the device will sweep at whatever volume setting it is set at.
- E) Set scan step to 10 or 20kHz, Sweep speed 30 to 50ms, MUTE OFF and allow Spirit the opportunity to manipulate the device to find a detuned frequency to speak through.
- F) Tap the Sweep FWD or Sweep REV button to set the sweep direction.
- 2. OFF-Delay: In this mode the user can select a specific Off-delay timer from: 15s, 30s, 45s, 60s, 90s, and 120s (Image I). Once the REM and or Infrared sensor is triggered and the sweep starts, The PSB7-PRO will continue sweeping until another sensor interruption occurs. Or, if the Off-delay time is reached. Note: all other operating parameters can be adjusted as per A-F above.



Image I

3. Temperature Sensor Alert: when the Temp sensor detects a rapid +/- 1°C temperature change in 2 seconds, the Alert will beep two times. This will occur with or without the sensors being turned ON. The odds of this happening is unlikely, but it's there just in case the condition does occur.

Bluetooth Connection & Disconnection

1. Bluetooth Connection

Press the MUTE/BT button for 3 seconds, and the power led indicator (POWER/BT) turns from red to a blinking blue light, this means it is waiting for Bluetooth connection. When the power led indicator becomes a constant blue light, it means that the Bluetooth connected and paired with the other device successfully.

Important Note:

During the initial (first) pairing of the Bluetooth with your device, there will be a delay of 60 seconds. Once the initial pairing is successful, all subsequent connections with the same device will occur within 10-15 seconds.

2.Bluetooth Disconnection

Press the MUTE/BT for 3 seconds again, and the power led indicator (POWER/BT) will turn from blue to a red light. This indicates that the Bluetooth connection with your device has been turned off.

FM Suggested Sweep Speed vs Frequency Steps

Frequency Steps	Sweep Speed
10kHz-20kHz	030ms - 090ms
20kHz-40kHz	090ms - 130ms
40kHz-60kHz	130ms - 170ms
60kHz 80kHz &100kHz	170ms - 230ms

Note: The above setting configuration is just a suggestion. You will become more proficient with your PSB7-PRO over time. And, as you acquire more experience you will learn what settings work best for you based on your investigative style and environmental parameters.

Suggestions for Best Results

- 1. For best response results, use the PSB7-PRO in an area where radio reception is the strongest.
- 2. If sweeping in the FM mode, extend the telescopic antenna completely out.
- 3. When using the Infrared (IR) trigger sensor be aware that there could be interference caused by IR lighting, Sunlight, Camera's and other invisible radiation sources.
- 4. My Optimum PSB7-PRO configuration: Antenna Out/ON, FM, Sweep FWD, Scan Step 40kHz, Sweep Rate 170ms.

FCC STATEMENT This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-Reorient or relocate the receiving antenna. -Increase the separation between the equipment and receiver.

-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-Consult the dealer or an experienced radio/ TV technician for help.

FCC Radiation Exposure Statement: This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. The device has been evaluated to meet general RF exposure requirement. The device can beused in portable exposure condition without restriction.