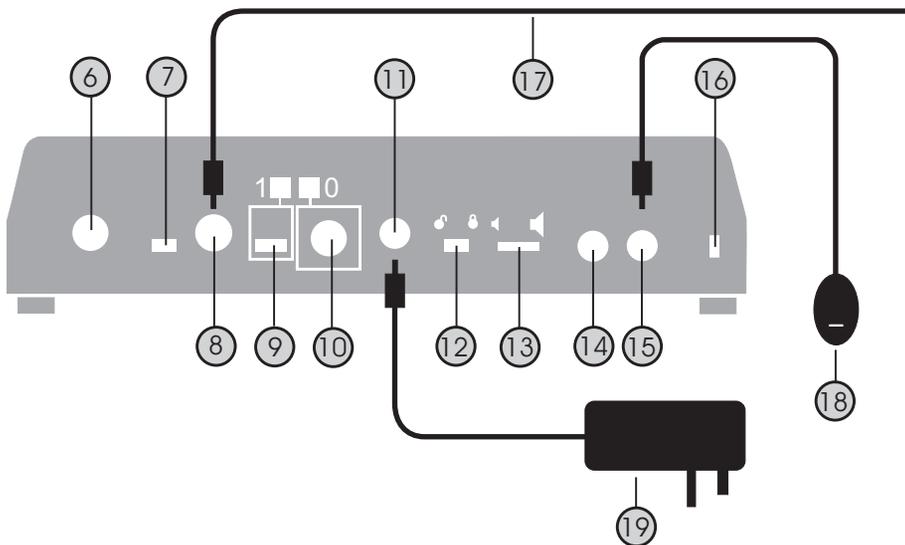
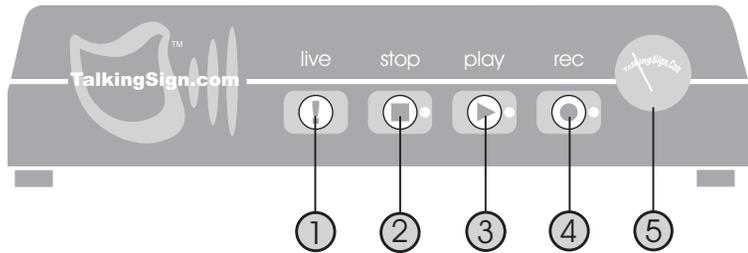


TS100 Layout



TS100 Layout

- ① LIVE press to transmit audio continuously from MIC or LINE input.
- ② STOP press to stop transmitting or recording.
- ③ PLAY press to transmit stored audio message (repeats forever).
- ④ REC press to start recording audio message up to 8 minutes.
- ⑤ TUNING METER visual indicator to show transmit signal strength.
- ⑥ TUNING CONTROL used to tune the transmitter for maximum signal strength. Used in conjunction with the tuning meter.
- ⑦ ANTENNA SELECTOR used to select between 3m wire antenna (included) or a 50 ohm external device. FOR CORRECT OPERATION, ALWAYS HAVE SWITCH IN '3M WIRE' POSITION. (FACTORY DEFAULT = 3M WIRE).
- ⑧ ANTENNA CONNECTOR: wire antenna connects here.
- ⑨ 'HUNDREDS' transmit frequency selector. (FACTORY DEFAULT = 6).
- ⑩ 'TENS' transmit frequency selector. (FACTORY DEFAULT = 1).
- ⑪ 12 VOLT DC power input from AC wall adapter or vehicle battery.
- ⑫ FRONT PANEL LOCK switch prevents accidental erasing of recorded message. Flashing lights indicate controls are unlocked, solid lights indicate controls are locked. (FACTORY DEFAULT = UNLOCKED).
- ⑬ SPEAKER VOLUME THUMBWHEEL sets level of internal monitor speaker.
- ⑭ LINE IN input for connecting devices such as CD or tape player for recording or live usage. (LINE IN and MIC IN are mixed internally and may be used together).
- ⑮ MIC IN input for connecting microphone for recording or live usage. (LINE IN and MIC IN are mixed internally and may be used together).
- ⑯ ANTI THEFT slot for attaching security device (optional) to prevent theft of transmitter and AC wall adapter.
- ⑰ WIRE ANTENNA
- ⑱ MICROPHONE
- ⑲ AC WALL ADAPTER

Overview

The TalkingSign™ TS100 is a premium AM microbroadcaster capable of transmitting to any AM radio receiver with audio quality comparable to commercial radio stations. The user can broadcast 'live' or from a recording stored in the unit's digital storage center. This stored message repeats continuously with no 'dead air' time and can be from 2 seconds to 8 minutes in length.

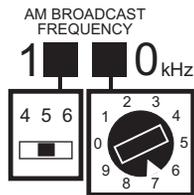
Coverage is approximately 100 to 1000 metres radius depending on obstructions, atmospheric conditions and antenna height. The TS100 has been quality-engineered throughout using the latest technology, making it compact and rugged. Intended uses are for information broadcasting in such applications such as real estate, businesses, schools, churches, drive-thrus, track meets etc. Operation is simple, no technical knowledge is required. The unit may be operated without a license anywhere in the U.S.A. or Canada.

Getting Started

Step 1 Setting the Transmit Frequency

Before you choose one of the 30 channels from 1400kHz to 1690kHz, make sure it is clear by listening on your car radio in the area in which you are going to use the transmitter. You should just hear 'static', no music or talking; if you want to use the transmitter at night, make sure the channel is clear at night too. Radio signals travel further at night as they bend around the Earth's surface causing distant signals to make it into your area. The TS100 is a low power transmitter and as such, any 'competition' with another transmitter will reduce the effective range of your transmission.

Two switches are used to select a channel; a 3 position slide for the 'hundreds' (9) and a 10 position rotary for the 'tens' (10).



The example shown above would be the setting for 1570kHz. The slide switch is set to the center position '5' and the rotary switch to '7'.

Step 2 Placing the Antenna

Appropriate positioning is required when placing the wire antenna. Placing it near to metal such as aluminum siding, metal garage doors, wire mesh under ceramic floors and behind stucco walls etc. will effectively shield your signal and reduce the transmit range.

Sometimes it is best to place the antenna in the middle of the house - experiment for best performance. Often a good place in a house is the upstairs bedroom nearest to the street (where people stop to listen). Place the TS100 on the floor and run the antenna along the floor near the baseboard.

After installation, check the transmit range in different directions with your car radio. **DON'T FORGET** to make sure the yard sign frequency matches the unit frequency!

Step 3 Tuning the Antenna

IMPORTANT! Make sure the antenna selector switch (7) is set to 3M WIRE before starting.

Turn tuning control (6) in either direction (it rotates continuously):



Until a maximum reading is seen on the tuning meter (5).



Step 4 Recording Messages

There are 2 inputs to the TS100: MIC IN (15) for microphones and LINE IN (14) for CD, tape players and other line level devices (these may be used simultaneously). Applications include recording your voice with a music background or recording a professionally prepared message from a tape. The following example is how to record your own message:

TIP...

Best recordings are those made when unwanted noises are eliminated. The TS100 has silent front panel controls for 'clickless' recordings and uses a sensitive lapel microphone to minimize handling sounds. To prevent distortion, do not talk directly into the microphone.

Plug the microphone (18) into MIC IN (15) and attach it to your clothing about 15cm (6") from your mouth (like on TV talk shows).

A little practice goes a long way; find a quiet place with good acoustics (no echoes) and for best results, read in a normal voice from a previously prepared script - take your time. Try to vary your voice in an interesting/exciting way rather than a constant monotone. Imagine what you would like to hear if you were a listener.

The TS100 supports dual messages. This allows you to record a permanent message and add more to the end of this message later. For example, a realtor might choose to have a local bank sponsor mentioned in the first message and details of the property for sale in the second message. The second message changes as the TS100 is moved between different homes, but the sponsor message always remains the same.

SET THE SPEAKER VOLUME THUMBWHEEL (13) TO MINIMUM BEFORE RECORDING TO PREVENT MICROPHONE FEEDBACK SQUEAL.

Make sure the front panel controls are unlocked (blinking).

RECORDING THE FIRST MESSAGE

Recording starts from the beginning of the message chip.

Hold down the RECORD button (about 3 seconds) until the RECORD light starts flashing RAPIDLY.

As soon as the light starts flashing, you can let go of the button and record your message.

Press STOP when done.

RECORDING THE SECOND MESSAGE

Recording starts directly after the end of the first message.

Press the RECORD button momentarily and the RECORD light starts flashing SLOWLY.

As soon as the light starts flashing, you can let go of the button and record your message.

Press STOP when done.

NOTE...

If you want to change your first message, you will have to re-record your second message again.

IF YOU ONLY NEED ONE MESSAGE, you can record a very short "dummy" first message with no sound (disconnect the microphone or line input source to prevent any sound from being picked up). Hold down the RECORD button (about 3 seconds) until the RECORD light starts flashing RAPIDLY and then immediately press STOP. A short soundless message will have been recorded. Then record your second message as normal. On playback, you will only hear the one message.

If you forget to record a first message, you will not hear the second one. You **MUST** have a first message of some sort.

REMEMBER: always keep the front panel locked to prevent tampering and accidental erasing of your messages!

Press STOP (2) when finished.

Lock front panel controls (12) to prevent accidental erasing of message.

Step 5 Reviewing Recorded Message

Once your message is recorded it is a good idea to hear how it sounds. Make sure the front panel controls are unlocked (blinking).

Press PLAY (3).

The TS100 has a built-in monitor speaker that plays whatever is being transmitted. (Note: the TS100 is now broadcasting so you can also listen to your message on a radio tuned to the TS100 frequency).

The monitor speaker volume is controlled by the SPEAKER VOLUME THUMBWHEEL (13).

For example: if the TS100 is being used to broadcast information about a house for sale, the monitor speaker may be left on for the benefit of those inside the house taking the tour.

Step 6 Broadcasting a Recorded Message

Your pre-recorded message is now playing. Regardless of length, the message repeats immediately with no 'dead air' time. Since the storage is digital, there are no moving parts and nothing to wear out; the unit can remain on indefinitely.

Lock front panel controls (12) to prevent accidental erasing of message.

Note: whenever TS100 is powered on, it always begins playing the recorded message.

Step 7 Stop Broadcasting

Make sure the front panel controls are unlocked (blinking).

Press STOP (2) and all audio stops being transmitted to receiving radios.

Note: transmitter is still on but no audio is heard.

Explanation: When a radio is tuned to a 'clear' frequency all that is heard is 'static'. When the TS100 is set to that frequency and STOP (2) is pressed, the radio becomes 'quiet'. This 'quieting' is an indication that the transmission channel is 'open' even though no audio is heard.

Broadcasting Live (extra TS100 feature)

The TS100 can function like a conventional radio station with the record feature bypassed. For example a microphone can be connected to MIC IN (15) and music from a CD player can be fed to LINE IN (14). Both signals mix inside the unit and are heard simultaneously on the receiving radios.

Make sure front panel controls are unlocked (12).

Press LIVE (1).

Audio fed into MIC IN (15) and LINE IN (14) are transmitted directly on-air.

For more complex applications, an external mixer may be used to allow for gradual fading of signals. In this application MIC and LINE devices connect to the mixer and the mixer output is connected to LINE IN (14) of the TS100.

Specifications

- ▣ Transmit range: 100 to 1000* metres radius
- ▣ Channels: 30 (1400 to 1690 AM)
- ▣ Frequency stability: 30ppm
- ▣ Frequency Control: PLL quartz synthesizer
- ▣ Message Length: up to 8 minutes
- ▣ Message Storage: Non-volatile digital flash chips
- ▣ Microphone: sensitive lapel type
- ▣ Line input: 1Vpp (0dBm) nominal for 85% modulation
- ▣ Audio Mixer: built-in for MIC and LINE inputs
- ▣ Internal monitor speaker with volume control
- ▣ Final Input Power: 100mW average
- ▣ Power Requirements: 12VDC 200mA
- ▣ Power jack: 2.4mm centre positive
- ▣ Antenna: 3 metre soft vinyl flexi
- ▣ Dimensions: 9.1"x 5.3"x2" (230mm x 135m x 55mm)
- ▣ Weight: 2.2lb (1kg)
- ▣ Approvals: FCC Part 15, Canada RSS-210, UL, CSA, CE
- ▣ No licence required to operate

* May vary depending on obstructions, atmospheric conditions and antenna height.

Compliance Statement

AM Transmitter
Model: TS100
FCCID: PEPTS100
CANADA: 3897104143

This device complies with Part 15 of the FCC rules and RSS-210 of Industry Canada.

Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference that may cause undesired operation of the device.

Ce dispositif est conforme au CNR-210 d'industrie Canada.

L'utilisation de ce dispositif est autorisée seulement aux conditions suivantes:

- (1) il ne doit pas produire de brouillage et
- (2) l'utilisateur du dispositif doit être prêt à accepter tout brouillage radioélectrique reçu, même si ce brouillage est susceptible de compromettre le fonctionnement du dispositif.

This device generates and uses radio frequency energy and if not used properly may cause interference to radio and television reception. It has been tested and found to comply with the limits set by the FCC which are designed to provide reasonable protection against such interference.

CAUTION:

FCC Regulations state that changes or modifications to this product not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Electrical Safety Approvals
UL1950, CSA, CE

WARNING:

To prevent fire or electric shock, only use in a dry location!
No adjustments or user-serviceable parts within unit.

Limited Warranty

ChezRadio (the company) warrants to the original purchaser of this TalkingSign™ transmitter that should this TalkingSign™ transmitter be proven defective in material or workmanship within 1 (one) year from the date of original purchase, such defects will be repaired or replaced (at the company's option) without charge for parts or labor.

This warranty does not apply to a TalkingSign™ transmitter or part thereof which has been damaged through alterations, mishandling, misuse, neglect or accident.

The company is not responsible or liable for indirect, special or consequential damages arising out of or in connection with the use or performance of the TalkingSign™ transmitter or damages with respect to any economic loss, loss of revenues or profits, installation or other consequential damages of whatsoever nature.

Some provinces/states may or may not allow the exclusion or limitation of incidental or consequential damages. Accordingly, the above limitation may not apply to you.

This warranty gives you specific legal rights and you may also have other rights which vary from province/state to province/state.

For servicing, contact us at:

info@chezradio.com

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