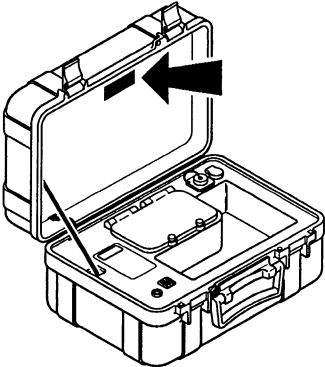
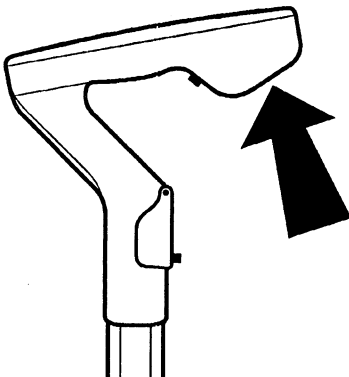


SERVICE SUPPORT

SERIAL NUMBER RECORD

Record the serial numbers and date of purchase of your Subsite® components in the spaces below.

Date of purchase:	
Receiver serial number:	
Transmitter serial number:	
Accessory model & serial number	
Accessory model & serial number	
Accessory model & serial number	



SERVICE SUPPORT PROCEDURE

Notify your dealer immediately of any malfunction or failure of Ditch Witch® equipment.

Always give model, serial number, and approximate date of your equipment purchase. This information should be recorded and placed on file by owner at time of purchase.

Return damaged parts to dealer for inspection and Warranty consideration.

Order genuine Ditch Witch replacement or repair parts from your authorized Ditch Witch dealer. Use of another manufacturer's parts may void Warranty.

RELATED SERVICES

Ditch Witch Training Center

At the Ditch Witch training center, dealers, customers, and operators review theory and operation and gain hands-on experience. During Subsite training seminars, Ditch Witch training personnel cover the theory and technique behind locating underground utilities. During directional boring seminars, training personnel cover the entire boring procedure including the use of Subsite tracking equipment. For information about the training seminar that's right for you, contact your Ditch Witch dealer.

FOREWORD

This manual is an important part of your equipment. It provides safety information and operation instructions to help you use and maintain your Ditch Witch equipment.

Read this manual before using your equipment. Keep it with the equipment at all times for future reference. If you sell your equipment, be sure to give this manual to the new owner.

If you need a replacement copy, contact your Ditch Witch dealer. If you need assistance in locating a dealer, write to the following address:

The Charles Machine Works, Inc.
PO Box 66
Perry, OK 73077-0066
USA

The descriptions and specifications in this manual are subject to change. The Charles Machine Works, Inc. reserves the right to improve equipment. Some product improvements may have taken place after this manual was published. For the latest information on Ditch Witch equipment, contact your Ditch Witch dealer.

Thank you for buying and using Ditch Witch equipment.


Operator's Manual

75R/T

Issue No. 1/OP-4/95

Part Number 754-032

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by The Charles Machine Works, Inc.,
Perry, Oklahoma, 73077-0066

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Pierce Arrow is a registered trademark of Oklahoma Arrow, Inc.

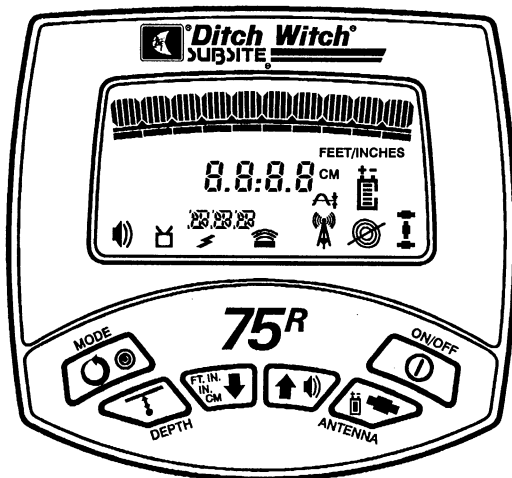
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RECEIVER

The Subsite 75R is designed to be used for locating buried pipes and cables. Optional frequencies and modes of operation are available to suit your specific locating needs. The available passive modes include: 50Hz and 60Hz Power, Radio, and 31K CATV. The available active mode includes 1K, 8K, 29K, and 80K for use with Subsite transmitters. Two beacon frequencies, 29K and 33K, are available for use with Subsite beacons which can be used for locating plastic pipes.



ss1016.tif

Six keypad buttons are provided for operation of the 75R. Descriptions of the buttons and symbols follow.

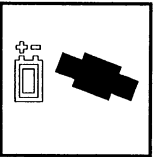
CONTROLS (SINGLE KEY)

The following frequently used functions require only a single key press.



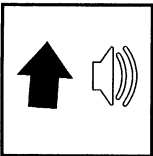
si1000.tif

On/Off - turns unit on and off.



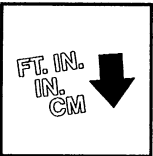
si1001.tif

Antenna - selects single, twin, or null antenna modes.



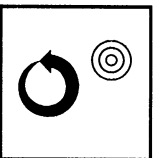
si1039.tif

Up - raises gain/squelch (increases signal).



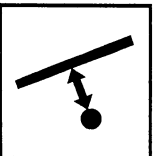
si1003.tif

Down - reduces gain/squelch (decreases signal).



si1004.tif

Mode - selects operating frequency.

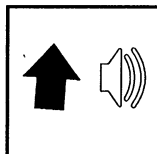


si1005.tif

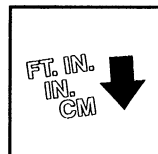
Depth - estimates depth of properly located signal source. See "System Operation" section for information on locating signals.

CONTROLS (DOUBLE KEY)

Up + Down - sets gain at approximately 50%.



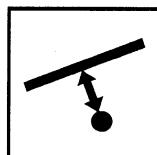
si1039.tif



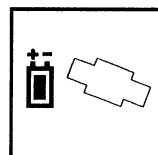
si1003.tif

The following less used functions require holding down Depth key and pressing another key.

Depth + Antenna - shows battery level.

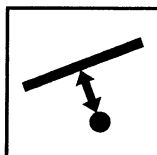


si1005.tif

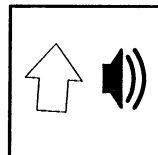


si1038.tif

Depth + Up - changes volume.

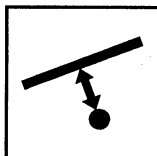


si1005.tif

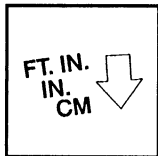


si1002.tif

Depth + Down - changes depth units.

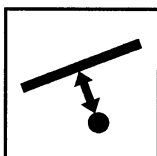


si1005.tif

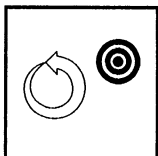


si1040.tif

Depth + Mode - estimates target line current and compares most recent current readings to target reading.

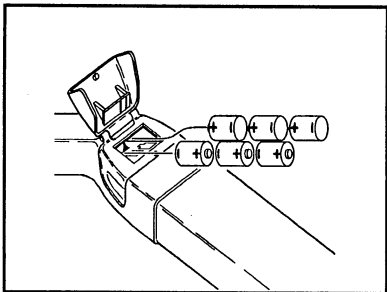


si1005.tif



si1041.tif

SET-UP



ss1002.tif

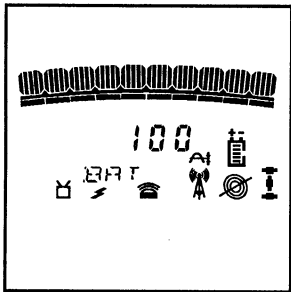
Install Batteries

Use 6 C-cell alkaline batteries in receiver. To install:

- unscrew battery cover
- insert batteries as indicated
- close cover and tighten screw
- check operation

CHECK OPERATION

Always check that receiver operates before leaving for jobsite and after every battery change. To check operation:



ss1003.tif

- turn on receiver
- entire display will light briefly
- battery level will be shown in numeric display
- last used settings will be displayed

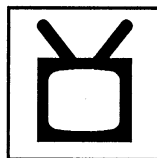
DISPLAY

Mode

The receiver can be configured to operate in five modes: cable TV, power, beacon, radio, and transmitter. Currently selected mode is shown along bottom of display. Your unit might not contain all the options listed below.

Cable TV

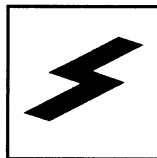
Allows receiver to trace 31K cable TV lines.



si1006.tif

Power

Allows receiver to trace live 50Hz or 60Hz power lines when power is being drawn from line.



si1007.tif

Beacon

Allows receiver to trace nonmetallic pipes and conduits with 29K or 33K beacon.



si1008.tif

Radio

Allows receiver to trace lines that pick up, concentrate, and radiate radio waves.



si1009.tif

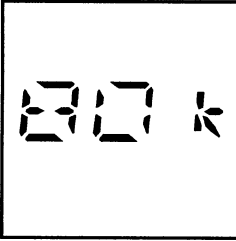
Transmitter

Allows receiver to trace lines that have had a 1K, 8K, 29K, or 80K signal placed on them by a transmitter.



si1010.tif

Frequency

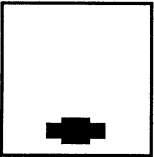


ss1004.tif

The receiver recognizes four transmitter frequencies: 1K, 8K, 29K, or 80K. Selected frequency is displayed in alphanumeric display above mode symbols.

Antenna

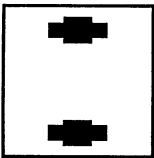
Receiver has three antenna modes: single, twin, and null. Antenna mode is shown in lower right corner of display.



si1011.tif

Single antenna

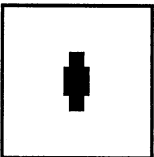
Picks up signals in congested areas and deeper signals. Signal strength peaks when over line, but is less precise than other two modes.



si1012.tif

Twin antenna

Gives sharper location than single antenna. Signal strength peaks when over line. Twin antenna allows unit to estimate depth.



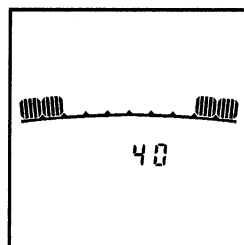
si1013.tif

Null antenna

Gives precise response when over a line in uncongested area. Signal drops to minimum strength when over line. In congested areas, confirm location by using single or twin peak antenna.

Signal Strength

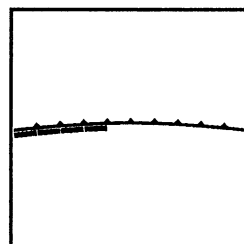
Signal strength is shown graphically on bars at top of display and in numeric display.



ss1005.tif

Gain/Squelch

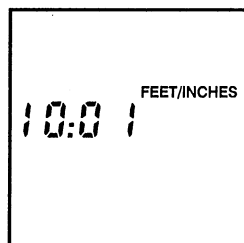
Gain (amount of signal amplification) is shown on bars below signal strength indicator. Gain increases to the right, but squelch (used only in R2 mode) increases to the left. Unit will not respond in squelch mode unless a minimum signal strength is present.



ss1006.tif

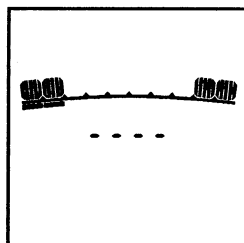
Depth

Estimated depth is shown in numeric display when Depth button is held down. Receiver can display in three units of measurement: feet/inches, inches, or cm. To select units, hold down Depth and press Down button.



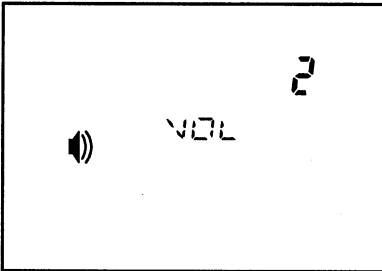
ss1007.tif

If four dashes appear in the display, signal appears to be above receiver, and unit cannot estimate depth. This message is usually caused by interfering signals. Try relocating target signal



ss1082.tif

Volume Level

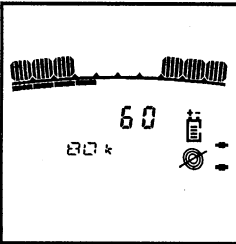


ss1008.tif

Receiver has four volume levels: vol 0 (off), vol 1 (low), vol 2 (med), and vol 3 (high). Select setting by holding down Depth and pressing Up button. Lower volume to conserve battery life.

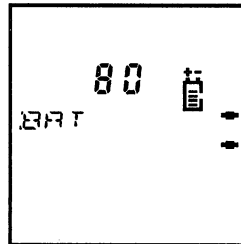
Receiver Battery Level

Receiver battery level is shown graphically to right of numeric display. Five segments mean battery is at full power. One segment means batteries are at low power. Hold down Depth and press Antenna button to see numeric display of battery power.



ss1009.tif

80% battery level
during regular operation

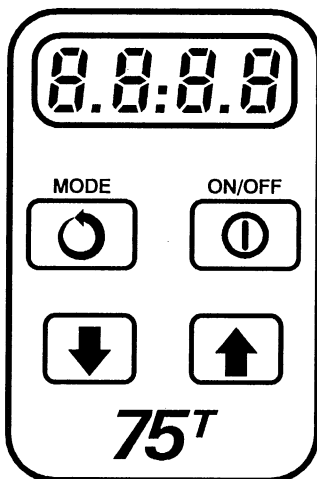


ss1010.tif

80% battery level
during battery check

TRANSMITTER

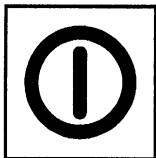
The Subsite 75T transmitter is designed to place signals on target lines. It can be configured to send 1K, 8K, 29K, 80K, and dual (8K and 29K) frequencies. It places signal on line through either direct connection, induction clamping, or broadcast modes.



ss1017.tif

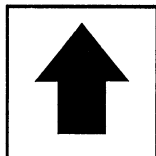
The transmitter features a simple, easy to use keypad with four buttons and a display window. Descriptions of the buttons and displays follow.

CONTROLS



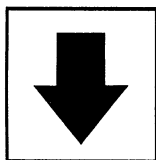
si1017.tif

On/Off - turns unit on and off.



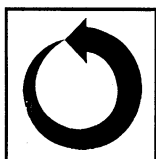
si1014.tif

Up - raises frequency, power level, or shutoff time depending on which mode unit is in.



si1015.tif

Down - lowers frequency, power level, or shutoff time depending on which mode unit is in.



si1016.tif

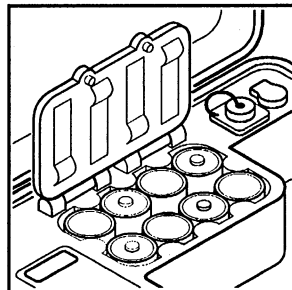
Mode - selects one of three modes: frequency, power level, or shutoff time.

SET-UP

Install Batteries

Use 8 D-cell alkaline batteries in transmitter. To install:

- unscrew battery cover
- insert batteries
- close and tighten battery cover
- check operation

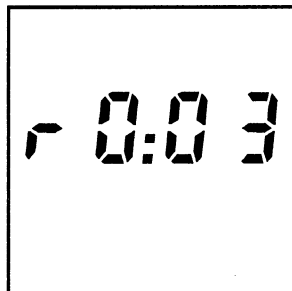


ss1011.tif

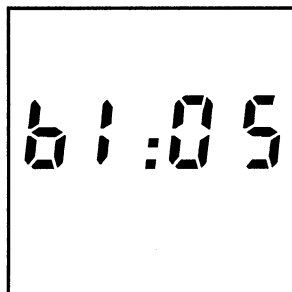
CHECK OPERATION

Always check that transmitter operates before leaving for jobsite and after every battery change. To check operation, turn on transmitter and check for the following:

- transmitter will beep
 - display will show revision level ("r0:03") briefly
 - last used setting for timer ("t") will light
 - display will show battery level
 - last used setting for frequency will light
- 05 means full battery power
- 00 means no battery power

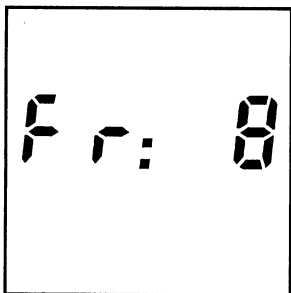


ss1012.tif



ss1079.tif

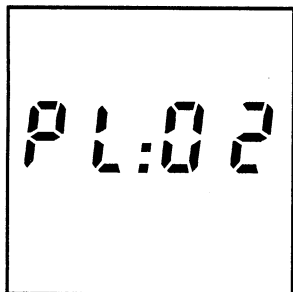
DISPLAY



ss1013.tif

Frequency

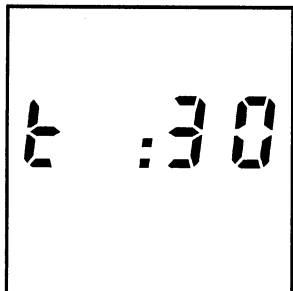
The transmitter can send four signal frequencies: 1K, 8K, 29K, and 80K. Dual frequency (F1:F2) transmits both 8K and 29K signals. Frequency is displayed in alphanumeric display.



ss1014.tif

Power Level

The transmitter has ten power levels. When direct connecting, a tone indicates satisfactory connection. The lower the tone and the higher the number, the more current is flowing into the target line. If tone goes off, transmitter is overloaded. This dramatically reduces battery life. Lower power level to lowest usable level to conserve battery life.



ss1015.tif

Timer

The transmitter will shut off at either 30 minutes, 1 hour, 2 hours, or 4 hours. To select shutoff time, press Mode button until "t" is displayed. Then use Up or Down buttons to set time.

SAFETY




This safety alert symbol appears in this book. When you see this sign, carefully read and follow what it says. **YOUR SAFETY IS AT STAKE.**


Follow these guidelines before operating equipment:


- Read and follow all safety precautions.
- Do not operate equipment unless you have completed proper training and read the operator's manual.
- Use equipment only as directed.
- Wear personal protective gear.
- Contact your local One-Call or utility company. Have all underground lines and cables located and marked before sweeping area.
- Check that equipment is in good condition, and test leads are clean and have no cracked insulation.
- Contact your Ditch Witch dealer if you have any question about operation, maintenance, or equipment use.

CLASSIFICATIONS

You will see the following safety symbols:

 **DANGER** indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

 **WARNING** indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

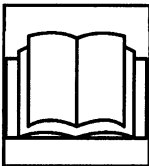
 **CAUTION** indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

In this book, you should look for two other words: **NOTICE** and **IMPORTANT**.

NOTICE can keep you from doing something that might damage the machine or someone's property. It may also be used to alert against unsafe practices.

IMPORTANT can help you do a better job or make your job easier in some way.

ALERTS



pages.tif

⚠ WARNING Incorrect procedures could result in death, injury, or property damage. Learn to use equipment correctly.

NOTICES:

- Electric shock or equipment damage can result if transmitter is connected to live cable. Have qualified utility personnel disconnect both ends of cable before working.
- Turn off transmitter when connecting or moving ground probe.
- If target depth and location are critical, confirm by hand-digging.



phone.tif

⚠ WARNING Jobsite hazards could cause death or serious injury. Use correct equipment and work methods. Use and maintain proper safety equipment.



iso141.tif

⚠ WARNING Explosion possible. Do not operate transmitter near explosive devices or blasting operations.



exclaim.tif

⚠ WARNING Moving traffic - hazardous situation. Death or serious injury could result. Avoid moving vehicles, wear high visibility clothing, post appropriate warning signs.

SYSTEM OPERATION

This section contains basic information about choosing signal type, selecting antenna configuration, avoiding and correcting common signal problems, active locating, and passive locating.

SIGNAL TYPES

Two types of signals can be detected with Subsite locating equipment. Active signals are placed on a target line with a transmitter and read by receiver, while passive signals are present on target line naturally and read by receiver. Another type of active signal, from a beacon, is an active signal that the receiver reads.

Active

Three ways to place active signals on a target line with a transmitter are **direct connection, induction, and broadcast**. Direct connection (preferred method) requires a connection to be made directly onto target line. Induction requires placing an optional induction clamp around target line. Broadcast method sends current into lines near transmitter.

Beacon

Beacon signals allow nonmetal pipe tracing and bore tracking.

Passive

Some utility lines pick up signals from the environment and carry them as detectable signals. These passive signals can be power signals or radio signals.

ANTENNA CONFIGURATIONS

Subsite receivers can have three antenna configurations: single peak, twin peak, and null. The advantages and disadvantages of each are listed in the following chart.

Antenna Set-up	Advantages	Disadvantages
Single	More range	Less precise
Twin	Most precise	Less range
Null	Sharp response	Easily distorted in congested area

Single Peak

Single peak antenna mode uses one horizontal antenna to detect signal. Response is highest at strongest signal.

Twin Peak

Twin peak antenna mode uses two horizontal antenna to detect signal. Response is highest at strongest signal.

Null

Null antenna mode uses a vertical antenna to detect signal. Response is lowest at strongest signal.

FREQUENCY CHOICES

The 75T transmitter can be configured to send the following signals: 1K, 8K, 29K, 80K, and F1:F2 (8K and 29K dual). Keep the following general statements in mind when selecting frequency:

- lower frequencies travel farther than higher frequencies
- higher frequencies couple onto lines more easily
- higher frequencies couple onto lines other than target line more easily

Many Subsite receivers can be configured to display information in the following frequencies: 31K (CATV), 50Hz (power), 60Hz (power), 29K (beacon), 33K (beacon), radio, and the five transmitter frequencies.

COMMON SIGNAL PROBLEMS

Distortions in the electromagnetic field around a line can affect location and depth accuracy. Tees, bends, parallel lines, crossing lines, or large metallic objects can distort signals. The two basic kinds of distortion are shadows and false signals. Another common problem when locating beacon is ghost signals.

NOTICE: If target depth and location are critical, confirm by hand-digging.

Shadows

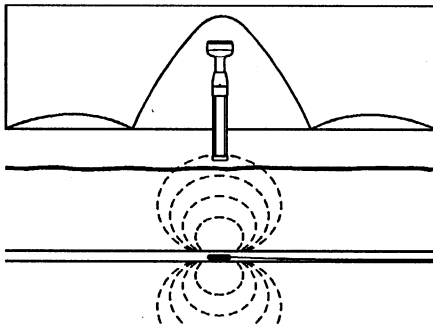
Shadows or blind spots often happen when a metallic object partially obstructs signal, or a signal from a parallel line interferes with target signal.

False Signals

False signals describe situations where receiver indicates line location where there is no line. False signals often happen when line tees or bends, when a line runs parallel to target line, and when a line crosses target line. Generally, receiver shows less distortion in twin peak antenna configuration.

Secondary (Ghost) Signals

Typical beacon signal pattern shows a main signal and two weaker secondary signals. Pinpoint beacon location at main signal. Familiarity with beacon signal pattern will lessen the effect of ghost signals.



ACTIVE LOCATION

Set-up

Direct Connection

To set up transmitter for direct connection:



ss1024.tif

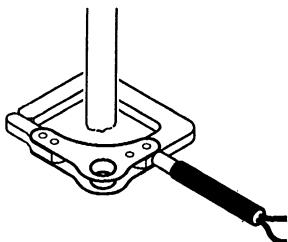
NOTICE: Electric shock or equipment damage can result if transmitter is connected to live cable. Have qualified utility personnel disconnect both ends of cable before working.

1. Hook clamp to line.
2. Plug cable into transmitter.
3. Drive ground stake.
4. Turn on transmitter.
 - check battery level
 - select frequency
 - select shutoff time

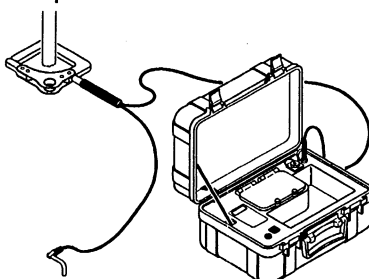
NOTICE: Turn off transmitter when connecting or moving ground probe.

Induction Clamp

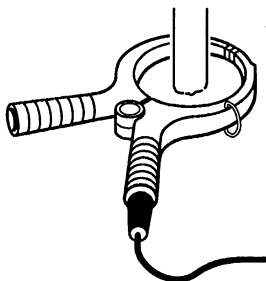
To use transmitter with induction clamp:



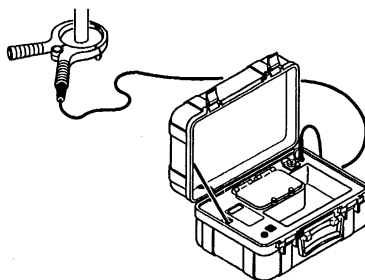
ss1022.tif



ss1023.tif



ss1074.tif



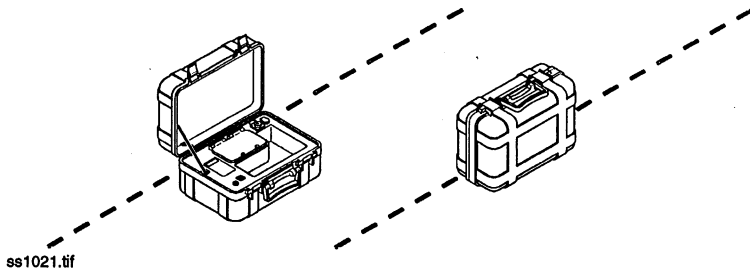
ss1075.tif

NOTICE: Electric shock or equipment damage can result if transmitter is connected to live cable. Have qualified utility personnel disconnect both ends of cable before working.

1. Place clamp around power line.
2. Plug cable into transmitter.
3. Drive ground stake (where included).
4. Turn on transmitter.
 - check battery level
 - select frequency
 - select shutoff time

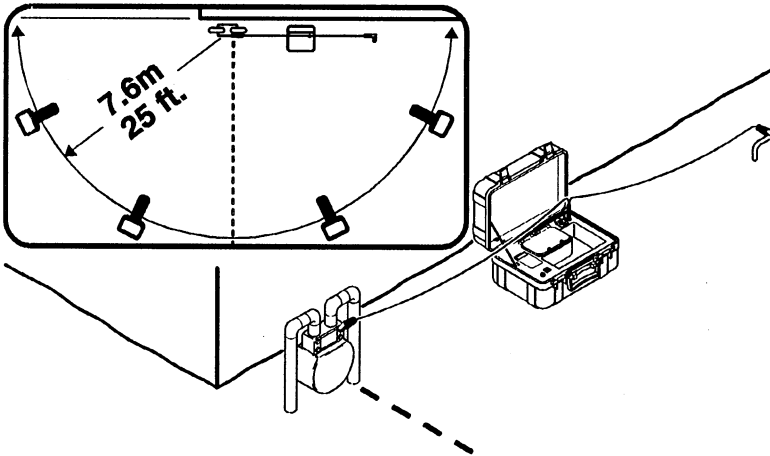
Broadcast Induction

To set up transmitter for broadcast induction:



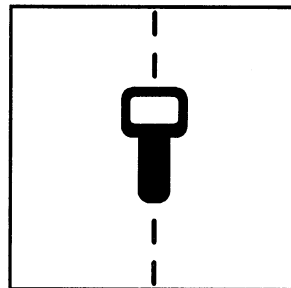
1. Remove cable, stake, clamp and any other metal objects from storage compartment.
2. Place transmitter lid parallel to suspected line.
3. Turn on transmitter.
 - check battery level
 - select frequency
 - select shutoff time

Technique



ss1073.tif

1. Walk in arc twenty-five feet around transmitter. Hold receiver so that **handle points to transmitter**.
2. Pinpoint location of line by finding spot with strongest signal response.
3. Rotate receiver to determine which direction line runs. Receiver indicates strongest signal when **handle lines up with target line**.
4. Press Depth button once line has been located.
5. Initialize Target Identifier by holding down Depth and pressing Mode button.
6. Continue to trace line and take depth estimates and current readings every few feet.
7. Retrace line and mark with paint.



ss1080.tif

Special Situations

If signal is lost, walk in circle to detect tee or bend in line.

If signal is unstable, mark as hand dig area.

If you suspect interference from power line, sweep area with 50Hz or 60Hz Power mode. If receiver gives strong signal response, a power line is interfering with transmitter signal.

If receiver gain is set too high, receiver will not function properly. Lower gain to locate line.

If transmitter power level is too high, signal will flood area. Use lowest usable power level.

If target line has connections to other lines, disconnect target line from other lines or use induction clamp to focus signal on target line.

If signal is transferring to other lines, try one of the following:

- lower frequency
- lower power level
- use direct connection, if possible, or use induction clamp
- move ground stake away from target line and away from other buried lines
- apply signal at point where target line is farthest from other lines

BEACON LOCATION

Trace plastic pipes or conduits by locating and following beacon signal. Large metal objects and other signals (such as railroad signals or overhead power lines) can distort signal.

Set-up

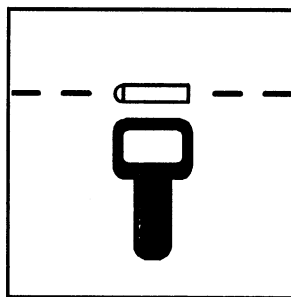
To set up for beacon location:

1. Follow beacon manufacturer's instructions on battery installation and testing beacon operation.
2. Attach beacon to plumber's snake or flex rod.

Technique

1. Turn on receiver and set antenna configuration and signal source, and select beacon frequency.
2. Place beacon into pipe and move down pipe.
3. Locate beacon by circling over approximate location of beacon in pipe.
4. Pinpoint location of beacon by finding spot with strongest signal response.
5. Rotate receiver to determine which direction beacon runs. Receiver indicates strongest signal when **handle is perpendicular to beacon**.
6. Press Depth button.

NOTICE: When estimating depth with beacon in nonmetallic pipe, depth shown will be to center of beacon, not to top of pipe.



ss1081.tif

7. Continue to track beacon and take depth readings. Mark pipe location with paint.

PASSIVE LOCATION

To set up for passive location, turn on receiver and select the following:

- mode and frequency
- antenna configuration

Always check receiver battery level at start up.

NOTICE: Lines with no current flowing through them are dangerous and hard to detect. To locate, turn on an appliance to cause current flow, use active search method, and use radio search method.

Technique

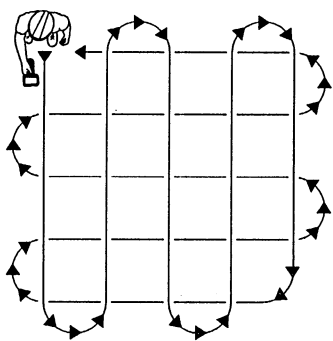
Survey

Make visual check of area for signs of buried lines such as:

- recent trenching
- buried line markers
- overhead lines that run down pole and underground
- gas meters
- valve sights
- drains or manhole covers

Sweep

Search site by walking a grid pattern while holding receiver close to the ground. Keep receiver vertical.



ss1076.tif

Pinpoint

Move receiver over detected signal to find strongest signal response. If using a peak antenna mode, rotate receiver until signal is strongest. Strongest signal indicates line direction.

Trace

Walk along suspected path while moving receiver back and forth across area. Keep receiver **handle parallel to suspected line path**.

Continue

Sweep, pinpoint, and trace all detected signals in the area. Mark line paths with colored paint or flags. The standard color markings for line locations are:

Utility	Color	Marking Symbol
Electric	Red	-E-
Gas/Oil	Yellow	-G-
Communications	Orange	-TEL- or -TV-
Water	Blue	-W-
Sewer	Green	-S-

Special Situations

If signal is lost, walk in circle to detect tee or bend in line.

If signal is unstable, mark as hand dig area.

If gain is set too high, receiver will not operate properly. Lower gain to locate line.

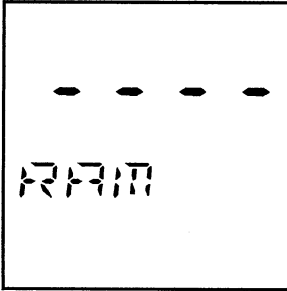
CARE AND ERROR CODES

Under normal operating conditions, receiver needs only minor maintenance. Following these care instructions can ensure longer equipment life.

GENERAL CARE

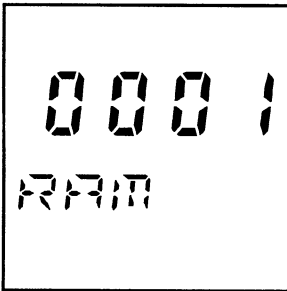
- Do not drop the equipment.
- Do not expose the equipment to high heat (such as in the rear window of a car).
- Clean equipment with a damp cloth and mild soap. Never use scouring powder.
- Do not immerse in any liquid.
- Inspect housing daily for cracks or other damage. If housing is damaged, contact your Ditch Witch dealer for replacement.

ERROR CODES



ss1077.tif

If the receiver detects an internal problem when turned on, it sounds two beeps and displays "RAM." This indicates that an internal memory error has occurred. Pressing any key turns receiver off. For service and repair information, contact your Ditch Witch dealer.



ss1078.tif

If RAM 0000 through 0005 is displayed, the unit cannot verify information in the permanently stored memory (gain, antenna, depth units, frequency, and volume settings). The receiver will still work, but factory defaults are used. Some readjusting of settings might be needed before use. If these errors continue to appear, have receiver serviced.

SPECIFICATIONS

75R RECEIVER

Dimensions:

Length: 12 in (30.5 cm)

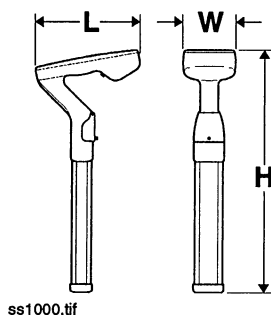
Height: 28 in (71.1 cm)

Width: 5.5 in (14 cm)

Operating Weight: 4.4 lb (2 kg)

Operating Temperature Range:

-4°F to 122°F (-20°C to 50°C)



Antenna Configurations: Single Peak, Twin Peak, Null

Audio Output: Speaker, Headphones (optional)

Operating Modes and Frequencies:

ACTIVE: 1K, 8K, 29K, 80K, and dual (8K and 29K)

PASSIVE: 31K CATV, 50Hz and 60Hz power, and radio

BEACON: 33K, 29K

Locating Range: 15 ft (4.6 m) LINES; 10 ft (3 m) BEACONS

Depth Calibration Tolerances:

ACTIVE: $\pm 3\%$ at 10 ft (3 m) and $\pm 5\%$ at 15 ft (4.6 m)

PASSIVE: $\pm 5\%$ at 5 ft (1.5 m) and $\pm 10\%$ at 15 ft (4.6 m)

BEACON: $\pm 3\%$ at 10 ft (3 m)

Batteries: 6 C alkaline or rechargeable

Battery Life (continuous use):

approximately 16 hours with alkaline

approximately 2-4 hours with Nicad

Battery Saver: unit shuts off after 5 minutes if no key is pressed

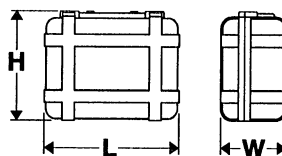
75T TRANSMITTER

Dimensions:

Length: 13.4 in (34 cm)

Height: 8.9 in (22.6 cm)

Width: 5.6 in (14.2 cm)



Operating Weight: 12.5 lb (5.7 kg)

Operating Temperature Range:

-4°F to 122°F (-20°C to 50°C)

ss1072.tif

Frequencies: 1K, 8K, 29K, 80K, and dual (8K and 29K)

Batteries: 8 D alkaline

Battery Life (continuous use):

approximately 15 hours

Timer: unit shuts off after running selected time

(either 30 minutes, 1 hour, 2 hours, or 4 hours)

**Ditch Witch® Subsite® Locating
Equipment & Accessories
LIMITED WARRANTY POLICY**

Effective 01/01/93

The following Limited Warranty covers only Subsite Locating Equipment & Accessories that are manufactured and distributed by Charles Machine Works, Inc. ("CMW").

**SUBSITE EQUIPMENT & ACCESSORIES
LIMITED WARRANTY**

1. Subsite Equipment & Accessories Covered.

The following Subsite Equipment & Accessories are covered by this Limited Warranty:

Transmitters

Receivers

Beacons

Accessories:

Rechargeable Batteries

Battery Chargers

Head Phones

Night Lights

Cables & Clamps

Remote Antennas

2. Warranty Periods.

- a. For a period of one year, beginning on date of delivery of any such new product to original purchaser, Subsite transmitters and receivers are warranted for defects in material or workmanship.
- b. For a period of 90 days, beginning on date of delivery of any such new product to original purchaser, Subsite Beacons, Rechargeable Batteries, Battery Chargers, Head Phones, Night Lights, Cables & Clamps, and Remote

Antennas are warranted for defect(s) in material or workmanship.

- c. The above-stated warranty periods are strictly enforced.
- 3. Defect(s) will be determined by inspection by CMW or an authorized repair center. Original purchaser must make the defective item available for inspection within 30 days of the date the part fails.
- 4. Warranty is limited to replacement of defective part. The replacement part may be new or remanufactured. Installation will be at no charge when product or item is delivered to CMW or an authorized repair center, freight prepaid. For item(s) that contain a defect in material or workmanship, CMW or an authorized repair center will return the product or item freight prepaid. Contact your local Subsite dealer for service and repair information.
- 5. These warranty periods do not represent the useful life of Subsite Equipment & Accessories.
- 6. Exclusions from Limited Warranty.

The following are specifically excluded from this Limited Warranty:

- a. All defects, damages or injuries caused by misuse, abuse, improper operation, alteration, neglect, or uses other than those for which the product was intended.
- b. All defects, damages, or injuries caused by improper or inadequate training, operation, or servicing of product inconsistent with manufacturer's recommendations.
- c. All incidental or consequential damages.
- d. Transportation and labor charges associated with inspection of product upon which no defect is found.
- e. Any product or item that has evidence of an attempt to repair on behalf of owner or non-authorized repair center.
- f. All implied warranties not expressly stated herein, including any warranty of fitness for a particular purpose and merchantability.

7. If Subsite products are purchased for commercial purposes, as defined by the Commercial Code, no warranties extend beyond the specific terms set forth in this Limited Warranty. No implied warranties of any kind exist. All other provisions of this Limited Warranty apply, including the duties imposed.
8. Subsite products have been tested to deliver acceptable performance in most conditions. Therefore, to assure suitability, products should be operated under anticipated working conditions prior to purchase.
9. This Limited Warranty applies to original purchaser only. Some states or jurisdictions do not allow exclusion or limitation of incidental or consequential damages, so above limitation may not apply. Further, some states or jurisdictions do not allow exclusion or limitation of how long an implied warranty lasts, so the limitation may not apply. This Limited Warranty gives original purchaser specific legal rights and the original purchaser may also have other rights which vary from state to state or jurisdiction to jurisdiction.

For information regarding this Limited Warranty, contact CMW's Technical Service Department, P.O. Box 66, Perry, OK USA 73077-0066, or contact your selling dealer.