eXact iDip®
SMART PHOTOMETER SYSTEM
with Bluetooth® SMART

TEST YOUR WATER

SMART DIGITAL WATER TESTING

QUICK START GUIDE

WELCOME

WELCOME TO YOUR NEW EXACT IDIP®. LET US SHOW YOU AROUND.

This guide shows you the technical details on your iDip®, helps you set it up, and gets you started with tips for the tests you will use daily.

Your eXact iDip® comes with:
Cleaning Brush
Quick Start Guide
6 Strips each of: Free Chlorine (DPD-1), Combined/Total Chlorine (DPD-3), pH, and Total Alkalinity

You will need Four (4) AAA batteries, a Phillips head screwdriver, and a compatible smart device to start testing your water.

Compatible smart devices:
Apple iPad® (Mini, Mini Retina, 3rd gen, 4th gen, Air)
Apple iPhone® (4s, 5, 5c, 5s)
Apple iPod touch® (5th gen)

We are constantly adding new devices, check out our full list at sensafe.com/idip.

YOUR NEW EXACT IDIP® IS IDEAL FOR TESTING DRINKING WATER, POOLS & SPAS, PONDS & AQUARIUMS, FOOD & BEVERAGE PROCESS WATER, NVIRONMENTAL WATERS, AND MORE

waterproof IP67

INSTALL "AAA" BATTERIES (NOT INCLUDED)

1. Use a Phillips head screwdriver to remove the screw from the base of your iDip®.
2. Remove the base.
3. Install 4 new AAA batteries as illustrated inside your iDip®. We recommend using high quality batteries.
4. Replace the base firmly with pressure while tightening the screw. The meter will turn on automatically.

DOWNLOAD THE APP

Using your Smart Device, download the eXact iDip® app. Because the eXact iDip® application is the brain for this system, all you have to do is download the latest update to have the most current version with the latest tests and features available. We are constantly improving and welcome your suggestions to help make our product even better. Please
be sure to visit www.sensafe.com/idip or send feedback to exactidip@sensafe.com.

SCAN FOR APP DOWNLOAD

Download on the App Store

HOME SCREEN

SETTINGS:
Opens menu for easy access to all app features

History:
Accesses all previously saved results which can be sorted, edited, and emailed

CALENDAR:
Displays your schedule/ appointments

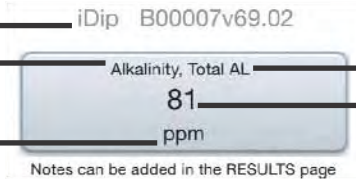
CUSTOMERS:
Attaches results to people and/or locations from your smart device contacts

STORE:
Opens store to unlock additional tests

TEST:
Initiates water testing

RESULTS:
Accesses temporary results that have not been saved to history

TEST RESULT SCREEN



BLUETOOTH DEVICE

BOTTLE LABEL ABBREVIATION

TESTING PARAMETER

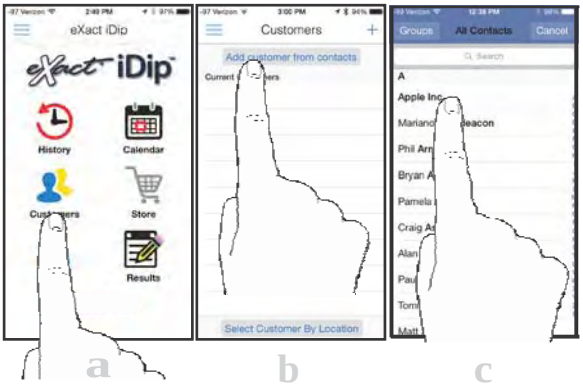
TEST RESULT

PARAMETER UNITS

ALL RESULTS ARE ATTACHED TO A CONTACT AND LOCATION. ENSURE YOUR CONTACT INFORMATION (INCLUDING ADDRESS) IS ENTERED INTO YOUR DEVICE'S CONTACT LIST.

1

a. Select 'Customers' from the 'Home' screen.
b. Tap 'Add Customers From Contacts.'
c. Select a contact from your list.



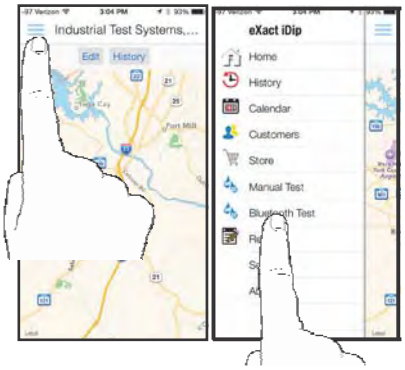
2

Power on the eXact iDip® hand-held photometer.

ZERO/ON

3

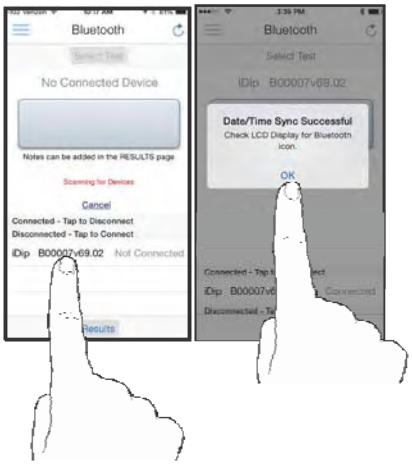
Tap '☰' and select 'Bluetooth Test' on the slide out screen.



Select your iDip from the bottom of the screen. Verify it has connected and tap 'OK'. *

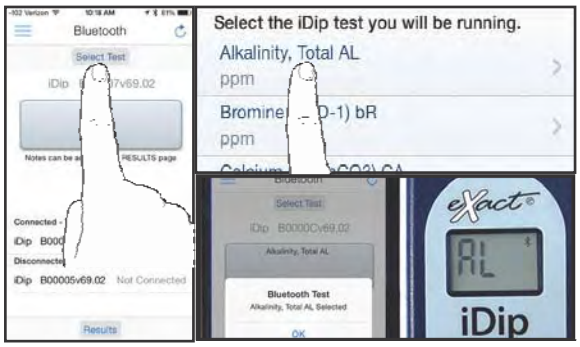
4

** Refer to the back of your iDip® to determine the serial number for your device. This will also be the serial number for the bluetooth connection.*



Tap '**SELECT** Test' at the top (e.g. Alkalinity, Total). The iDip and app will both display the test being run.

5



6 Rinse the cell 3 times with the water sample to be tested and **FILL** to the top to begin test.

7 Press ZERO/ON and the iDip® display reads 0_{PPM} indicating the meter is ready to test. **For Standard Liquid Method**, place Cell Cover on CELL before zeroing.

Standard Strip Method Tests (count-up if required):

- Alkalinity, Total
- Bromide (as NaBr)
- Bromine
- Calcium (as $CaCO_3$)
- Chloride (as NaCl)
- Chlorine Dioxide
- Chlorine, Free
- Chlorine, Total
- Chlorine, Total - High (120 sec)
- Chromium (VI) (240 sec)
- Copper (120 sec)
- Hardness, Total - Low
- Hardness, Total - High
- Hydrogen Peroxide - Low (120 sec)
- Hydrogen Peroxide - Mid (100 sec)
- Hydrogen Peroxide - High
- Iodine
- Magnesium Hardness
- Nitrate (as NO_3) (600 sec)
- Nitrite (as NO_2) (360 sec)
- Ozone
- Peracetic Acid
- Permanganate
- pH
- Phosphate (120 sec)
- Sulfate
- Sulfide

Standard Liquid Method Tests (# of drops / count-up if required):

- Cyanuric Acid (5 drops / 60 sec)
- Metals (2 drops / 120 sec)

For non-standard test methods and detailed test instructions visit www.sensafe.com/idip/.

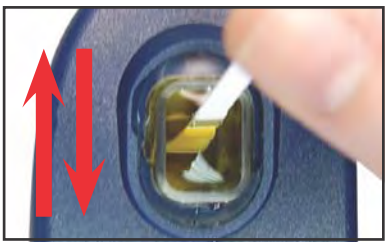
STANDARD STRIP METHOD

Remove one eXact Strip Micro (e.g. Total Alkalinity) and set in a dry, convenient place.

8a

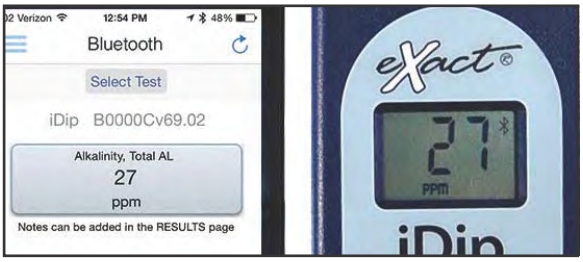
PRESS READ to initiate a 20 second countdown and simultaneously **DIP** the test strip by submerging all pads in the sample then use a gentle constant back and forth motion (2 strokes per second) until the timer displays "1". Remove and discard the strip. Wait for count-up time if required.

9a



READ result displayed on the iDip® and in the app. To run additional tests, repeat steps 5-9. To save your results and make available for emailing, continue on page 11.

10a



8b

Shake the bottle of eXact Reagent (e.g. Cyanuric Acid) and add drops according to the list on page 8. Keep reagent bottle vertical while adding drops.

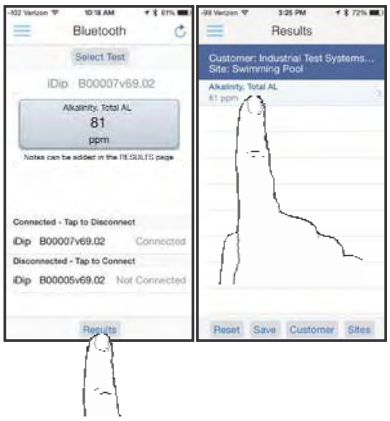
9b

Place the Cell Cover onto the CELL. Press READ and a 20 second countdown begins. Turn the meter upside-down repetitively during the 20 seconds. When the timer displays "1", place the iDip® on a flat surface. Wait for count-up time.

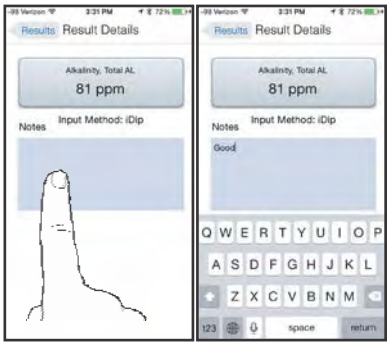
10b

READ result displayed on the iDip® and in the app. To run additional tests, repeat steps 5-10. To save your results and make available for emailing, continue on next page.

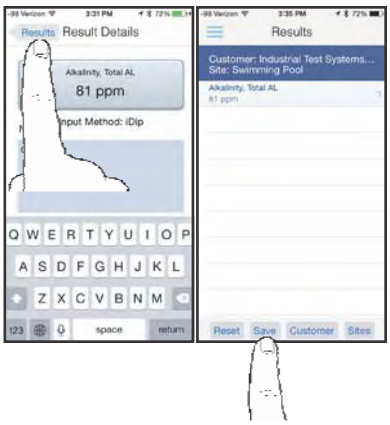
When all tests have been performed, tap 'Results' at the bottom of the screen. To add notes tap the desired test result.



Type notes in the 'Notes' box, which are automatically saved.

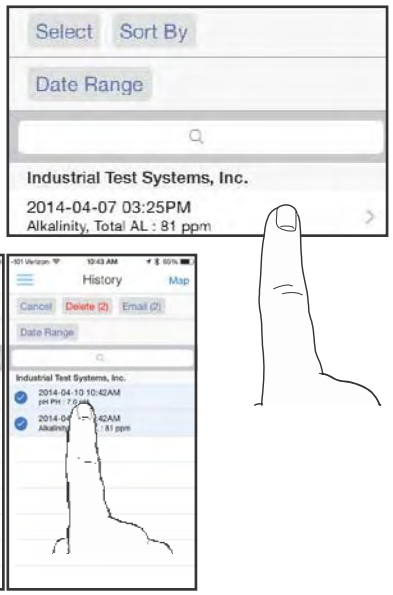


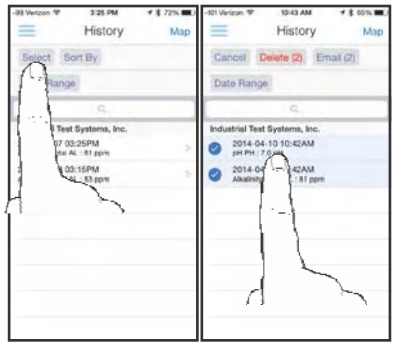
Go back to 'Results' screen and tap 'Save' to store into 'History'.



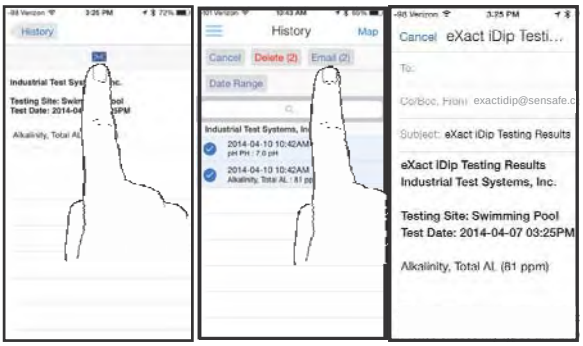
In History, you can edit, select, and email your results.

To email, you can either tap an individual result, or use the 'Select' button to access multiple data points.





Press the blue envelope icon if a single result is selected. Tap 'Email' at the top if multiple tests are selected. Additional notes can be added to the email body. Add recipients to your e-mail and tap send to complete.



- The meter has a 3 minute automatic shutdown timer by default. To change this, go to Settings in the slide out menu.
- Before testing, rinse the meter sample cell with the sample water 3 times.
- Always fill the cell to capacity (4ml).
- Test immediately after filling the cell with the water sample.
- To obtain optimal accuracy when testing outdoors (sunlight), use the Cell Cover when zeroing and reading the sample.
- Due to the strip slitting process, you may find one or two strips that are noticeably smaller or larger in width than the normal strips in the bottle. These should be discarded. Using these strips may give unreliable results.
- Meter is not compatible for use with powder pillows, tablets, and liquids from other manufacturers.
- Dip strip for entire countdown.
- Each eXact Strip Micro is valid for ONLY one test. Discard strip after use.
- Dry the outside of the meter before storage.
- Remove batteries before storing for prolonged periods.
- Store the meter and test materials out of direct sunlight and away from chemical storage areas.
- Minimize exposure of meter and test reagents to heat above 90°F (32°C).
- When installing batteries, make sure that the O-ring is still attached to the screw before tightening.
- Cleaning the cell with water and brush after each test is recommended for best accuracy and prior to storage of unit. Use Distilled White Vinegar to clean the cell after testing for Phosphate or Iron to remove reagent deposits from cell wall.

TROUBLESHOOTING

Issue	Cause	Solution
No response from iDip	Low battery	Replace batteries
	Chip failure	Contact ITS.
Dim screen on iDip	Low battery	Replace batteries
"Er1" on iDip LCD	No result sent to iDip from app	Disconnect/reconnect to iDip (see pg. 7)
"Er2" on iDip LCD	No connection to app	Connect to iDip (see pg. 7)
	Lost connection to app	Reconnect to iDip
"LO" on iDip LCD while zeroing	Low battery	Replace batteries
	Dirty cell	Clean cell (see pg.15)
	Cloudy sample	Dilute sample or use sieve
	Bad LED	Contact ITS.
"HI" on iDip LCD while reading	Result above detection level	Rerun test to verify result
"LO" on iDip LCD while reading	Result below detection level	Rerun test to verify result
"AbS" on iDip LCD	Start-up screen	Continue with testing

ACCURACY OF THE EXACT IDIP®

Combined with your smart device, the eXact iDip® is designed to test your water for multiple water quality parameters. Download the free eXact iDip® app and sync to your smart device running Bluetooth® Smart Technology.

All tests have been calibrated using certified reference standards and analytical spectrophotometric methods. The algorithms in the app reflect the best correlation of the eXact iDip® against the AWWA, USEPA, DIN and ISO reference test methods for chlorine. Independent studies verify the eXact iDip® repeatedly agrees with a USEPA compliant reference method greater than 99% (R2= 0.99948, 0-5.00 ppm). The eXact iDip® has been factory calibrated and will stay valid because of the exceptional quality. We are so confident in the eXact iDip®, we offer an industry leading 2-year warranty.

We built the eXact iDip® to be easy, accurate and environmentally friendly. We have achieved this by utilizing our patented eXact Strip Micro Technology, which uses at least 60% less water and chemistry than alternative methods. Instead of using a 10mL water sample, eXact Strip Micro uses a 4mL water sample. The accuracy of the meter is maintained by designing the sample cell with a 11mm path length.

BLUETOOTH TECHNOLOGY

Bluetooth® is a low-power wireless networking standard which uses short radio waves to allow electronic devices to communicate with each other wirelessly. The eXact iDip® comes standard with the latest Bluetooth® 4.0 technology (www.bluetooth.com/Pages/Bluetooth-Smart. aspx), a class 2 device with a wireless working distance of up to 30 feet (10 meters) and a 2.1 Mbps data transfer rate. This allows a seamless transfer of data between a smart device and the eXact iDip®.

ABOUT THE BUILT IN SAMPLE CELL

The built-in sample cell is made of transparent plastic; the sturdy cell design will last for over 20,000 readings. Scratches on the cell will not compromise the accuracy of your results because of the cell's fixed position.

CLEANING THE CELL

Fill the cell with water and use the enclosed cleaning brush to scrub the CELL thoroughly. Rinse the CELL. You can use dish soap or distilled white vinegar for cleaning the CELL if needed. NEVER use solvents such as acetone.

SCAN FOR FLYER

SCAN FOR TEST DEMO VIDEO

COMPLIANCE TESTING FOR FREE AND TOTAL CHLORINE

This DPD test system is accepted by most health departments because this test is USEPA (DIN Standard 38 408 G4, ISO 7393/2) accepted for testing requirements for Free and Total Chlorine. The eXact iDip® meter uses a wavelength of 525nm; and the compliance requirement is that the colorimeter wavelength is between 490 and 530nm. The eXact Strip Micro CL (DPD-1) uses the same reagents AWWA (American Water Works Association) method 4500-Cl G. It should be understood that the USEPA does not "approve" commercial DPD delivery systems such as reagent powder pillows, tablets,dispensers, or eXact Strip DPD delivery devices. The eXact Strip Micro CL (DPD-1) for Free Chlorine, and the eXact Strip Micro CL (DPD-3) or the eXact Strip Micro CL (DPD-4) for Total Chlorine meet your reportable testing requirements because the eXact Strip Micro CL delivers the same chemicals in identical proportions (see table below); therefore, the system is compliant. Likewise, AWWA proportions are followed as required for Total Chlorine measurements using Potassium Iodide.

COMPONENT (FREE CHLORINE)	AWWA 4500-CL G	EXACT® DPD-1
Anhydrous DPD sulfate	1.5%	1.5%
Anhydrous Na_2HPO_4	33.4%	33.4%
Anhydrous $KH_2PO_4Na_2$	64.0%	64.0%
EDTA	1.1%	1.1%

WARRANTY (2 YEARS)

Registration of your eXact photometer must be received within 30 days from date of purchase to activate the warranty. The eXact photometer is warranted to be free from defects in materials and workmanship for a period of two (2) years from the date of purchase by the customer. ITS will repair or replace, at its discretion, product which is deemed to be faulty due to manufacturing defect. Warranty does not cover product damage caused by abuse (such as crushing a tablet in the cell), battery corrosion damage, or improper use. If the meter is faulty or otherwise defective contact ITS by phone (+1-803-329-9712 Ext. 0) or email (its@sensafe.com) to describe the problem and obtain a return authorization form before returning the photometer to ITS. Damage caused by improper packing of the photometer for return shipment to ITS will not be covered by the warranty. Customer is responsible for shipping charges to ITS. ITS pays postage when photometer is returned to customer. A maximum processing fee of $75 will be charged for repair or replacement of non-registered photometers and damages not covered by this warranty. Registration is available over the phone (+1-803-329-9712 Ext. 0) or online at http://www.sensafe.com/micro/warranty/ (Personal data is kept confidential). The repair or replacement of the photometer will not extend or renew the period of guarantee. This warranty does not affect your statutory rights. The warranty is not transferable.

TECHNICAL SUPPORT

Please visit www.sensafe.com/idip for the latest technical information and how-to videos.

For additional technical support, call (803) 329-9712 or send us an email at exactidip@sensafe.com.

AVAILABLE TESTS & REAGENTS

Test Parameter	Part #	Range	# of Tests
eXact iDip® (1) Bulk meter, 6 foils of each: FC, CC, AL, pH, (1) cleaning Brush, (1) instruction booklet	486101	As Below	6
eXact Pool Refill Kit AL, pH, DPD-1, DPD-3, CA, CY	486211	As Below	As Below
eXact Well Refill Kit pH, Fe, NO_3, AL, THH	486212	As Below	As Below
eXact Tap Refill Kit pH, AL, THH, DPD-1, DPD-4, HR Cl, Metals	486213	As Below	As Below
eXact Process Refill Kit pH, DPD-1, DPD-4, HR Cl, MR H_2O_2, Glycine	486214	As Below	As Below
eXact iDip™ Carrying Case	481661-ID	N/A	N/A
Alkalinity, Total	486641	11 - 200 ppm	100
Bromide (as NaBr)	486659	19 - 400 ppm	25
Bromine (DPD-1)	486636	0.07 - 17 ppm	100
Calcium (as $CaCO_3$)	486629	19 - 550 ppm	50
Chloride (as NaCl) Salt	486757	3 - 600 ppm	25
Chloride, High Range (as NaCl)**	486757	347 - 9975 ppm	25
Chlorine Dioxide (DPD-1)**	486633	0.04 - 15 ppm	100
Chlorine, Free (DPD-1)	486637	0.05 - 12 ppm	100
Chlorine, High Range	486672	1 - 280 ppm	50
Chlorine, Combined (DPD-3)* **	486638	0.05 - 12 ppm	100
Chlorine, Total (DPD-4)	486670	0.05 - 12 ppm	100
Chromium (VI)	486614	0.01 - 2 ppm	50
Copper (Cu^{+2})	486632	0.6 - 11 ppm	50
Cyanuric Acid	481652-II	3 - 110 ppm	60
Hardness, Total HR (as $CaCO_3$)	486656	60 - 900 ppm	50
Hardness, Total LR (as $CaCO_3$)	486630	1 - 125 ppm	100
Hydrogen Peroxide LR	486616	0.02 - 3.5 ppm	50
Hydrogen Peroxide MR	486648	1 - 130 ppm	50
Hydrogen Peroxide HR	486676	16 - 4200 ppm	100
Iodine (DPD-1)	486627	Coming Soon	100
Iron, Total (TPTZ)**	486650	0.03 - 8 ppm	50
Magnesium Hardness	486610	2 - 400 ppm	50
Manganese**	486606	0.03 - 2.6 ppm	24
Metals	486604	1 - 1.75 ppm	24
Molybdate**	486653	0.02 - 5 ppm	50
Nitrate (as NO_3)	486655	0.25 - 32 ppm	50
Nitrite (as NO_2)	486623	0.02 - 4 ppm	50
Ozone (DPD-4)	486634	0.01 - 2 ppm	100
Peracetic Acid (DPD-4)	486674	0.05 - 11 ppm	100
Permanganate (DPD-1)	486626	0.02 - 6 ppm	100
pH	486639-II	6.0 - 8.5 pH	100
Phosphate	486814	0.02 - 5 ppm	50
Sulfate	486608	1 - 270 ppm	50
Sulfide (as H_2S)	486646	Coming Soon	50
Turbidity**	N/A	24 - 780 NTU	N/A

*Combined Chlorine DPD-3 Test requires Free Chlorine DPD-1 (486637) to be run first.
For resellers and distributors - products sold in case quantities (12 units per case).
**Test uses a non-standard test method. Visit sensafe.com/idip for details.

R050914

US Designed and Patent-Protected by Industrial Test Systems, Inc. 1875 Langston Street, Rock Hill, SC USA
Manufactured by Metertech Inc. 63-2, Cheng Gong Road, Sec. 1, NanGang, Taipei, Taiwan, R.O.C. Tel.:+886-2-2783-2854 Fax:+886-2-2783-1764 E-mail:info@metertech.com.tw

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The Bluetooth® word mark and logos are owned by Bluetooth SIG and any use of such marks is under license.

FEDERAL COMMUNICATIONS COMMISSION INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limit s 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 of f 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.

CAUTION:

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.