SkyScan EWS-PRO
- Manual -

INTRODUCTION

EWS-Pro gives you advance weather warning technology you can use at home, indoors or out, and take wherever you go, for any kind of outdoor activity.

Your **EWS-Pro** offers you the ability to detect the presence of lightning / thunderstorm activity occurring within 40 miles of your location. **EWS-Pro** detects the characteristic electromagnetic emissions from individual lightning strokes and uses patented technology to determine the distance to the detected stroke. The distances are indicated in four ranges: 0-3 miles; 3-8 miles; 8-20 miles; and 20-40 miles. This allows you to track the approach of dangerous storm activity.

IMPORTANT! EWS-Pro uses the latest electronic and computer technology to provide the most accurate information possible. However, thunderstorms are a dangerous and rapidly changing weather phenomenon, The information about storm activity obtained from your **EWS- Pro** should always be used in conjunction with information from your local weather professionals. Common sense and extreme caution should always be used when confronting lightning and thunderstorm activity.

GENERAL DESCRIPTION

Each time EWS-Pro detects a lightning stroke, it emits an audible warning tone (if this feature has been turned on by the user; see "TONE SWITCH" in Basic Operation) and lights the Range Indicator column. The full column stays lit for approximately 3 seconds. The single indicator corresponding to the range of detected stroke will then blink for approximately 25 seconds. This feature allows you to quickly see the distance to the last, closest detected stroke without waiting for EWS-Pro to detect a new stroke.

VERY IMPORTANT! Because the average stroke of lightning is 6 miles long, and because thunderstorms can move at speeds of up to 25 mph or more, you are in immediate danger any time there is detected lightning activity within 8-10 miles of your location. You must also remember that EWS-Pro does not predict where the next lightning stroke might occur. Thunderstorms are unpredictable and should be considered extremely dangerous. BE AWARE THAT STORMS CAN FORM DIRECTLY OVER YOUR LOCATION, OFFERING LITTLE OR NO ADVANCE WARNING EVEN WHEN USING A EWS-PRO.

IMPORTANT! Whenever thunderstorms are present, take immediate shelter and obtain more information from your local or regional weather professionals.

Your EWS-Pro may also identify certain types of especially strong storms. These storms can produce dangerous winds, heavy rains or tornadoes. When EWS-Pro detects lightning patterns indicating the presence of these storms, it activates the Severe Thunderstorm Alarm and emits a distinctive 15-second continuous audible tone different from the detection of normal lightning activity.

Once activated, the Severe Thunderstorm Alarm remains on for approximately 15 minutes. At the end of this special period, the EWS-Pro checks again for the indications of severe storm activity. If none is detected, the Severe Thunderstorm Alarm is turned off. If severe thunderstorm conditions are still detected, the indicator remains on for another 15 minutes, accompanied by another 1 5-second tone.

IMPORTANT! There are two types of lightning produced by a thunderstorm, cloud-to-ground and cloud-to-cloud. For any user on the ground the cloud-to-ground is the most dangerous. EWS-Pro is designed to detect cloud-to-ground lightning strokes. While it may detect cloud- to-cloud lightning strokes, there may be occasions where storms will produce cloud-to-cloud lightning strokes that are not detected by the EWS-Pro. User should therefore still exercise extreme caution when exposed to lightning storms.

EWS-Pro is designed to operate in a vertical position. The case is designed for proper orientation when placed on a flat, stable surface. If the EWS-Pro is used in any other fashion, loss of accuracy and sensitivity may result.

Your EWS-Pro contains hardware and software protection against false triggering. False triggering is defined as displaying strikes that are not real. Certain electronic products and other devices (TVs, computer displays, motors, gasoline engines, radio transmitters, or other high power communications equipment) emit high levels of electromagnetic noise that can interfere with the normal detection of lightning/storm activity, and will cause the unit to false trigger. This is particularly true of some brands of older TVs and computer equipment. EWS-Pro has the ability to identify this type of problem and alert you by continuously cycling all of the indicators on the unit, as it does when the unit is first turned on.

IMPORTANT! The false triggering alert process takes approximately 60 seconds to initiate. During this time, the EWS-Pro may continue to display false triggers as if they were lightning strokes. When the noise source has been identified as coming from something other than Lightning, the EWS-Pro will start the cycling of its indicators. Turn the EWS-Pro OFF, move the unit to a different location, turn it ON.

BASIC OPERATION

CHARGING THE BATTERY

The EWS-Pro will need charging before use. Plug the charger into a 110-volt wall outlet and then plug the charger connector into the jack, located just beneath the warning horn. This jack is used for charging the unit only. Make sure the EWS-Pro is turned off and is not in use while charging. Generally, an overnight charge of 8-10 hours will restore the battery to full power. The EWS- Pro will operate for several days on a single charge, depending on the amount of lightning activity detected during that period. The charger provided with the EWS-Pro is designed so that it will not over-charge the battery. However, the unit should not be left charging for more than a 24-hour period. Do not use any other charger to charge the EWS-Pro battery. Use of another charger may damage the product and void your warranty.

IMPORTANT! Always recharge the battery as soon as the Low Battery Indicator comes on. As battery power drops, the EWS-Pro loses accuracy and sensitivity.

POWER ON/OFF SWITCH

Pressing the switch turns the unit on or off. When the EWS-Pro is turned on, the indicators cycle once, beginning with the severe thunderstorm indicator and ending with the On/Off Indicator. This allows the user to be certain that all indicators are functioning. After several seconds, the On/Off Indicator will begin to blink. The EWS-Pro is now operating normally.

EWS-Pro is programmed to automatically turn off if left unattended, and if no storm activity is detected for a period of 5 hours. This automatic turn-off feature can be deactivated by using the Battery Save Switch described in "BATTERY SAVE SWITCH."

RANGE SELECT SWITCH

Range Select allows you to choose the distance at which detected lightning strokes will trigger the Audible Warning Tone.

IMPORTANT! It is recommended you use the Audible Warning Tone at maximum range whenever possible.

To activate the Range Select function, press the switch repeatedly until the desired range category indicator is on. Do not touch the switch for a period of 3 seconds, and this range will be entered in the computer. To change the selected range, simply repeat the process.

TONE SWITCH

The Audible Warning Tone sounds for approximately 1 second each time the EWS-Pro detects a lightning stroke. The Audible Warning Tone can be turned on or off by pressing the Tone Switch. When the Tone indicator is blinking, the Tone is operational. When the indicator is off the Tone has been deactivated.

IMPORTANT! The Tone function must always be turned on by the user when the EWS-Pro is turn on. ALWAYS check to see that the Tone Indicator is blinking to be sure it is active.

BATTERY SAVE SWITCH

The Battery Save feature allows you to extend the operational life of the battery by deactivating most of the EWS-Pro visual indicators. To activate the Battery Save feature, simply press the Battery Save Switch once. The Battery Save Indicator will blink, and all other indicators on the EWS-Pro will turn off. Activating the Battery Save feature automatically turns on the Audible Tone, even if this function has been previously turned off. Once in Battery Save mode, the EWS-Pro continues to detect lightning strokes. Now, however, each detected strike is indicated only by a 1 second warning tone at the range set by the user (see "RANGE SELECT SWITCH"). To return the EWS-Pro to normal visual display of detected lightning strokes, simply press the Battery Save switch once.

IMPORTANT! If the Audible Tone was deactivated before selecting Battery Save it will be disabled when the EWS-Pro is returned to normal display mode.

Pressing the Battery Save Switch twice in quick succession turns off the automatic 5-hour turn-off feature. To indicate activation of this feature, the On/Off Indicator stays on continuously, without blinking.

Even In Battery Save mode, the Severe Thunderstorm Indicator will illuminate whenever this type of storm has been identified by the EWS-Pro.

CARE AND MAINTENANCE

EWS-Pro has been manufactured of the highest quality materials and components. It should provide you with years of service with minimum maintenance. A few important tips will maximize the operational life of your EWS-Pro.

Remember, EWS-Pro is weather-resistant, but it is NOT waterproof. Your EWS-Pro should NEVER be immersed in water.

If EWS-Pro is to be stored for an extended period of time, the unit should be stored away from high temperature, high humidity, or corrosive substances.

IMPORTANT! Your EWS-Pro contains no user serviceable parts and is not intended to be opened. Opening the case will void the Product Warranty.

CUSTOMER SERVICE & SUPPORT

As a EWS-Pro customer, we are committed to your satisfaction for the life of your EWS-Pro product. The EWS-Pro service and customer support system is designed to ensure fast and friendly solutions to any problems you may have with this quality EWS-Pro product.

ONE-YEAR LIMITED WARRANTY

Xtreme Research Corporation, SkyScan Division, P.O. Box 336, Port Richey FL 34673-0336 agrees to repair or replace this product for one year from the original date of purchase absolutely free. This warranty does not include any physical damage to the unit or any of its accessory items and does not cover damage to the EWS-Pro unit resulting from the use of accessories not manufactured or authorized for use by EWS-Pro. Any modifications or repairs by unauthorized service personnel will void this warranty. The warranty card included in the product package MUST be completed and returned to Xtreme Research Corp. in Port Richey, Florida within 30 days of purchase to validate the warranty. If the warranty card included has not been completed and returned to Xtreme Research when a unit is presented for warranty service, a copy of the original sales receipt will be required. You are responsible for all shipping charges to Xtreme Research Corp. Xtreme Research Corp. will pay for ground UPS back to the customer.

NO OTHER EXPRESS WARRANTY HAS BEEN MADE OR WILL BE MADE WITH RESPECT TO THE UNIT AND NO PERSON IS AUTHORIZED TO PROVIDE ANY OTHER WARRANTY IN CONNECTION WITH THE SALE OF OUR PRODUCTS BEYOND THE DESCRIPTION ON THE FACE HEREOF. IMPLIED WARRANTIES, INCLUDING ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED TO ONE YEAR FROM THE DATE OF ORIGINAL PURCHASE. XTREME RESEARCH CORP. RESERVES THE RIGHT TO PERFORM MODIFICATIONS OR IMPROVEMENTS ON ITS PRODUCTS WITHOUT INCURRING THE OBLIGATION TO INSTALL THE CHANGES ON UNITS PREVIOUSLY SOLD, DELIVERED OR SERVICED. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. XTREME RESEARCH CORP.'S LIABILITY SHALL BE LIMITED TO THE COST OF REPAIR OR REPLACEMENT OF THE UNIT AND XTREME RESEARCH CORP. SHALL IN NO EVENT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATIONS OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

SERVICE POLICY

    This Service Policy is valid in the United States only. This applies to EWS- Pro units returned to our factory in Port Richey, Florida, and is subject to change without notice.

    EWS-Pro reserves the right to deem any product un-serviceable when replacement parts are no longer reasonable available or impossible to obtain. After the original warranty period, a standard service charge will be assessed for each repair (physical damage and missing parts are not included). Please call our Customer Support Department to verify the service charge for your unit. The standard service charge includes UPS or Parcel Post freight only. If charges are not prepaid, the unit will be returned C.O.D. Repairs are warranted for ninety (90) days.

FACTS ABOUT LIGHTNING AND THUNDERSTORMS

- Thunderstorms and the associated lightning cause an average of 200 deaths and many times more injuries in the US. every year. Most of these deaths and injuries could be prevented by the warning provided by EWS-Pro.
- The average lightning stroke is 5-6 miles long. A lightning stroke is incredibly powerful; up to 30-million volts at 100,000 amps flow in less than 1/10 of a second.
- The average thunderstorm is 6-10 miles wide and moves at a rate of 25 miles per hour.
- Once the leading edge of a thunderstorm approaches to within 10 miles, you are at immediate risk due to the possibility of lightning strokes coming from the storm's overhanging anvil cloud. This is the reason many lightning deaths and injuries occur with clear skies overhead.
- On average, the thunder from a lightning stroke can only be heard over a distance of 3-4 miles, depending on the terrain, humidity and background noise around you. By the time you can hear the thunder, the storm has already approached to within 3-4 miles!
- The sudden cold wind that many people use to gauge the approach of a thunderstorm is the result of down drafts and usually extends less that 3 miles from the storm's leading edge. By the time you feel the wind, the storm can be less than 3 miles away!
- Approximately 100,000 thunderstorms occur in the US. each year. Approximately 10% of all thunderstorms are severe enough to produce high winds, flash floods and tornadoes.