

If you have questions or comments, contact us.
 Pour toute question ou tout commentaire, nous contacter.
 Si tiene dudas o comentarios, contáctenos.
1-800-4-DEWALT • www.dewalt.com

INSTRUCTIVO DE OPERACIÓN, CENTROS DE SERVICIO
 Y POLIZA DE GARANTÍA. ADVERTENCIA: LEASE ESTE
 INSTRUCTIVO ANTES DE USAR EL PRODUCTO.

INSTRUCTION MANUAL
 GUIDE D'UTILISATION
 MANUAL DE INSTRUCCIONES

DEWALT®

DCT414
12V Max* Cordless IR Thermometer
Thermomètre IR sans fil, 12 V max*
Termómetro IR Inalámbrico 12 V Max*

DEWALT Industrial Tool Co., 701 East Joppa Road, Baltimore, MD 21286
 (APR10) Part No. N062212 DCT414 Copyright © 2010 DEWALT

The following are trademarks for one or more DEWALT power tools: the yellow and black color scheme; the "D" shaped air intake grill; the array of pyramids on the handgrip; the kit box configuration; and the array of lozenge-shaped humps on the surface of the tool.

Definitions: Safety Guidelines

The definitions below describe the level of severity for each signal word. Please read the manual and pay attention to these 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.

NOTICE: indicates a practice not related to personal injury which, if not avoided, may result in property damage.

IF YOU HAVE ANY QUESTIONS OR COMMENTS ABOUT THIS OR ANY DEWALT TOOL, CALL US TOLL FREE AT: 1-800-4-DEWALT (1-800-433-9258).

 **WARNING:** To reduce the risk of injury, read the instruction manual.

General Power Tool Safety Warnings

 **WARNING!** Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

WORK AREA SAFETY

- Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

PERSONAL SAFETY

- Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
- Use personal protective equipment. Always wear eye protection. Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- Prevent unintentional starting. Ensure the switch is in the off position before connecting to power source and/or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or energizing power tools that have the switch on invites accidents.
- Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts.

POWER TOOL USE AND CARE

- Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
- Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
- Use the power tool, accessories and tool bits, etc. in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.

BATTERY TOOL USE AND CARE

- Recharge only with the charger specified by the manufacturer. A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
- Use power tools only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.
- When battery pack is not in use, keep it away from other metal objects like paper clips, coins, keys, nails, screws, or other small metal objects that can make a connection from one terminal to another. Shorting the battery terminals together may cause burns or a fire.
- Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.

SERVICE

- Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

Safety Information for Lasers and IR Thermometers

▲WARNING: Laser Radiation Exposure. Do not disassemble or modify the IR thermometers. There are no user serviceable parts inside. Serious eye injury could result.


▲WARNING: Hazardous Radiation. Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

- Do not operate the IR thermometers in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. Power tools create sparks which may ignite the dust or fumes.
- Use the IR thermometer only with the specifically designated DEWALT batteries. Use of any other batteries may create a risk of fire.
- Store the IR thermometer out of reach of children and other untrained persons. Lasers are dangerous in the hands of untrained users.
- Tool service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel may result in injury. To locate your nearest DEWALT service center call 1-800-4-DEWALT (1-800-433-9258) or go to <http://www.dewalt.com> on the Internet.
- Do not use optical tools such as a telescope or transit to view the laser beam. Serious eye injury could result.
- Do not place the IR thermometer in a position which may cause anyone to intentionally or unintentionally stare into the laser beam. Serious eye injury could result.
- Do not disassemble the IR thermometer. There are no user serviceable parts inside.
- Do not modify the IR thermometer in any way. Modifying the tool may result in hazardous laser radiation exposure.

- Do not operate the IR thermometer around children or allow children to operate the IR thermometer. Serious eye injury may result.
- Do not remove or deface warning labels. Removing labels increases the risk of exposure to radiation.
- Do not use IR thermometer for testing temperatures of cooked or uncooked food.
- Do not use for taking of humans or animals body temperature.

▲CAUTION: Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

- The label on your tool may include the following symbols.

V volts
 mW milliwatts
 Laser warning symbol
 nm wavelength in nanometers
 2 Class 2 Laser
 3a Class 3a Laser

WARNING LABELS

For your convenience and safety, the following label is on your IR thermometer (Fig. 1).
▲WARNING: LASER RADIATION DO NOT STARE INTO BEAM CLASS 2 LASER PRODUCT MAXIMUM OUTPUT POWER <1mW.

▲WARNING: ALWAYS use safety glasses. Everyday eyeglasses are NOT safety glasses. Also use face or dust mask if cutting operation is dusty. ALWAYS WEAR CERTIFIED SAFETY EQUIPMENT:

- ANSI Z87.1 eye protection (CAN/CSA Z94.3)

▲WARNING: This product contains chemicals known to the State of California to cause cancer, and birth defects or other reproductive harm.

▲CAUTION: When not in use, place tool on its side on a stable surface where it will not cause a tripping or falling hazard. Some tools with large battery packs will stand upright on the battery pack but may be easily knocked over.

Important Safety Instructions for All Battery Packs

When ordering replacement battery packs, be sure to include catalog number and voltage. Consult the chart at the end of this manual for compatibility of chargers and battery packs.

The battery pack is not fully charged out of the carton. Before using the battery pack and charger, read the safety instructions below. Then follow charging procedures outlined.

READ ALL INSTRUCTIONS

- Do not charge or use battery in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Inserting or removing the battery from the charger may ignite the dust or fumes.
- NEVER force battery pack into charger. DO NOT modify battery pack in any way to fit into a non-compatible charger as battery pack may rupture causing serious personal injury. Consult the chart at the end of this manual for compatibility of batteries and chargers.
- Charge the battery packs only in DEWALT chargers.
- DO NOT splash or immerse in water or other liquids.
- Do not store or use the tool and battery pack in locations where the temperature may reach or exceed 105°F (40°C) (such as outside sheds or metal buildings in summer).

▲WARNING: Fire hazard. Never attempt to open the battery pack for any reason. If battery pack case is cracked or damaged, do not insert into charger. Do not crush, drop or damage battery pack. Do not use a battery pack or charger that has received a sharp blow, been dropped, run over or damaged in any way (i.e., pierced with a nail, hit with a hammer, stepped on). Damaged battery packs should be returned to service center for recycling.

▲WARNING: Fire hazard. Do not store or carry battery so that metal objects can contact exposed battery terminals. For example, do not place battery in aprons, pockets, tool boxes, product kit boxes, drawers, etc., with loose nails, screws, keys, etc. **Transporting batteries can possibly cause fires if the battery terminals inadvertently come in contact with conductive materials such as keys, coins, hand tools and the like.** The US Department of Transportation Hazardous Material Regulations (HMR) actually prohibit transporting batteries in commerce or on airplanes (i.e., packed in suitcases and carry-on luggage) UNLESS they are properly protected from short circuits. So when transporting individual batteries, make sure that the battery terminals are protected and well insulated from materials that could contact them and cause a short circuit.

SPECIFIC SAFETY INSTRUCTIONS FOR LITHIUM ION (LI-ION)

- Do not incinerate the battery pack even if it is severely damaged or is completely worn out. The battery pack can explode in a fire. Toxic fumes and materials are created when lithium ion battery packs are burned.
 - If battery contents come into contact with the skin, immediately wash area with mild soap and water. If battery liquid gets into the eye, rinse water over the open eye for 15 minutes or until irritation ceases. If medical attention is needed, the battery electrolyte is composed of a mixture of liquid organic carbonates and lithium salts.
 - Contents of opened battery cells may cause respiratory irritation. Provide fresh air. If symptoms persists, seek medical attention.
- ▲WARNING: Burn hazard. Battery liquid may be flammable if exposed to spark or flame.**

The RBRC™ Seal

The RBRC™ (Rechargeable Battery Recycling Corporation) Seal on the nickel cadmium, nickel metal hydride or lithium ion batteries (or battery packs) indicate that the costs to recycle these batteries (or battery packs) at the end of their useful life have already been paid by DEWALT. In some areas, it is illegal to place spent nickel cadmium, nickel metal hydride or lithium ion batteries in the trash or municipal solid waste stream and the RBRC program provides an environmentally conscious alternative.



RBRC™ in cooperation with DEWALT and other battery users, has established programs in the United States and Canada to facilitate the collection of spent nickel cadmium, nickel metal hydride or lithium ion batteries. Help protect our environment and conserve natural resources by returning the spent nickel cadmium and nickel cadmium, nickel metal hydride or lithium ion batteries to an authorized DEWALT service center or to your local retailer for recycling. You may also contact your local recycling center for information on where to drop off the spent battery.

RBRC™ is a registered trademark of the Rechargeable Battery Recycling Corporation.

Important Safety Instructions for All Battery Chargers

SAVE THESE INSTRUCTIONS: This manual contains important safety and operating instructions for battery chargers.

- Before using charger, read all instructions and cautionary markings on charger, battery pack, and product using battery pack.
- ▲WARNING: Shock hazard. Do not allow any liquid to get inside charger. Electric shock may result.**

▲CAUTION: Burn hazard. To reduce the risk of injury, charge only DEWALT rechargeable batteries. Other types of batteries may burst causing personal injury and damage.

NOTICE: Under certain conditions, with the charger plugged in to the power supply, the charger can be shorted by foreign material. Foreign materials of a conductive nature such as, but not limited to, grinding dust, metal chips, steel wool, aluminum foil, or any buildup of metallic particles should be kept away from charger cavities. Always unplug the charger from the power supply when there is no battery pack in the cavity. Unplug charger before attempting to clean.

- DO NOT attempt to charge the battery pack with any chargers other than the ones in this manual. The charger and battery pack are specifically designed to work together.
- These chargers are not intended for any uses other than charging DEWALT rechargeable batteries. Any other uses may result in risk of fire, electric shock or electrocution.
- Do not expose charger to rain or snow.
- Pull by plug rather than cord when disconnecting charger. This will reduce risk of damage to electric plug and cord.
- Make sure that cord is located so that it will not be stepped on, tripped over, or otherwise subjected to damage or stress.
- Do not use an extension cord unless it is absolutely necessary. Use of improper extension cord could result in risk of fire, electric shock, or electrocution.
- When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.
- An extension cord must have adequate wire size (AWG or American Wire Gauge) for safety. The smaller the gauge number of the wire, the greater the capacity of the cable, that is 16 gauge has more capacity than 18 gauge. An oversized cord will cause a drop in line voltage resulting in loss of power and overheating. When using more than one extension to make up the total length, be sure each individual extension contains at least the minimum wire size. The following table shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.

		Minimum Gauge for Cord Sets				
		Volts	Total Length of Cord in Feet (meters)			
Ampere Rating		120V	25 (7.6)	50 (15.2)	100 (30.5)	150 (45.7)
		240V	50 (15.2)	100 (30.5)	200 (61.0)	300 (91.4)
More Than	Not More Than	AWG				
0	6	18	16	16	14	
6	10	18	16	14	12	
10	12	16	16	14	12	
12	16	14	12	Not Recommended		

- Do not place any object on top of charger or place the charger on a soft surface that might block the ventilation slots and result in excessive internal heat. Place the charger in a position away from any heat source. The charger is ventilated through slots in the top and the bottom of the housing.
- Do not operate charger with damaged cord or plug.
- Do not operate charger if it has received a sharp blow, been dropped, or otherwise damaged in any way. Take it to an authorized service center.
- Do not disassemble charger; take it to an authorized service center when service or repair is required. Incorrect reassembly may result in a risk of electric shock, electrocution or fire.
- Disconnect the charger from the outlet before attempting any cleaning. This will reduce the risk of electric shock. Removing the battery pack will not reduce this risk.
- NEVER attempt to connect 2 chargers together.
- The charger is designed to operate on standard 120V household electrical power. Do not attempt to use it on any other voltage. This does not apply to the vehicular charger.

Chargers

Your tool uses a DEWALT charger. Be sure to read all safety instructions before using your charger. Consult the chart on the back cover of this manual for compatibility of chargers and battery packs.

Charging Procedure (Fig. 3)

1. Plug the charger into an appropriate outlet before inserting battery pack.
2. Insert the battery pack (C) into the charger, as shown in Figure 3, making sure the pack is fully seated in charger. The red (charging) light will blink continuously indicating that the charging process has started.
3. The completion of charge will be indicated by the red light remaining ON continuously. The pack is fully charged and may be used at this time or left in the charger.

Charge Indicators

Some chargers are designed to detect certain problems that can arise with battery packs. Problems are indicated by the red light flashing at a fast rate. If this occurs, re-insert battery pack into the charger. If the problem persists, try a different battery pack to determine if the charger is OK. If the new pack charges correctly, then the original pack is defective and should be returned to a service center or other collection site for recycling. If the new battery pack elicits the same trouble indication as the original, have the charger tested at an authorized service center.

HOT/COLD PACK DELAY

Some chargers have a Hot/Cold Pack Delay feature: when the charger detects a battery that is hot, it automatically starts a Hot Pack Delay, suspending charging until the battery has cooled. After the battery has cooled, the charger automatically switches to the Pack Charging mode. This feature ensures maximum battery life. The red light flashes long, then short while in the Hot/Cold Pack Delay mode.

LEAVING THE BATTERY PACK IN THE CHARGER

The charger and battery pack can be left connected with the red light glowing indefinitely. The charger will keep the battery pack fresh and fully charged.

NOTE: A battery pack will slowly lose its charge when kept out of the charger. If the battery pack has not been kept on maintenance charge, it may need to be recharged before use. A battery pack may also slowly lose its charge if left in a charger that is not plugged into an appropriate AC source.

WEAK BATTERY PACKS: Chargers can also detect a weak battery pack. Such batteries are still usable but should not be expected to perform as much work. The charger will indicate to replace battery pack.

Important Charging Notes

1. Longest life and best performance can be obtained if the battery pack is charged when the air temperature is between 65°F and 75°F (18°- 24°C). DO NOT charge the battery pack in an air temperature below +40°F (+4.5°C), or above +105°F (+40.5°C). This is important and will prevent serious damage to the battery pack.
2. The charger and battery pack may become warm to touch while charging. This is a normal condition, and does not indicate a problem. To facilitate the cooling of the battery pack after use, avoid placing the charger or battery pack in a warm environment such as in a metal shed, or an uninsulated trailer.
3. If the battery pack does not charge properly:
 - a. Check operation of receptacle by plugging in a lamp or other appliance;
 - b. Check to see if receptacle is connected to a light switch which turns power off when you turn out the lights;
 - c. Move charger and battery pack to a location where the surrounding air temperature is approximately 65°F - 75°F (18°- 24°C);
 - d. If charging problems persist, take the tool, battery pack and charger to your local service center.
4. The battery pack should be recharged when it fails to produce sufficient power on jobs which were easily done previously. DO NOT CONTINUE to use under these conditions. Follow the charging procedure. You may also charge a partially used pack whenever you desire with no adverse affect on the battery pack.
5. Foreign materials of a conductive nature such as, but not limited to, grinding dust, metal chips, steel wool, aluminum foil, or any buildup of metallic particles should be kept away from charger cavities. Always unplug the charger from the power supply when there is no battery pack in the cavity. Unplug charger before attempting to clean.
6. Do not freeze or immerse charger in water or any other liquid.

⚠ WARNING: Shock hazard. Don't allow any liquid to get inside charger. Electric shock may result.

⚠ CAUTION: Never attempt to open the battery pack for any reason. If the plastic housing of the battery pack breaks or cracks, return to a service center for recycling.

Storage Recommendations

1. The best storage place is one that is cool and dry away from direct sunlight and excess heat or cold.
2. Long storage will not harm the battery pack or charger. Under proper conditions, they can be stored for 5 years or more.






SAVE THESE INSTRUCTIONS FOR FUTURE USE

Laser Information

The Infrared Thermometer (IR thermometer) is a class II laser product and complies with 21 CFR 1040.10 and 1040.11 except for deviations pursuant to laser notice No. 50, dated June 24, 2007.

COMPONENTS (Fig. 1, 2)

⚠ WARNING: Never modify the power tool or any part of it. Damage or personal injury could result.

- A. Measurement trigger
- B. Battery release button
- C. DEWALT 12V Max* Lithium Ion Battery
- D. Main handle
- E. IR sensor
- F. Laser/pointer beam
- G. LCD screen
- H.  Alarm mode button: is used to select the type of alarm and to set the high (HAL) and low (LAL) temperature limits for the alarm.
 - Alarm 1 – temperature has reached the set limit, indicated by the red/blue LED (M)
 - Alarm 2 - temperature has reached the set limit, indicated by a beeper sound
 - Alarm 3 – temperature has reached the set limit, indicated by both the LED and the beeper
- I.  Min/Max/Avg Mode Button: Displays either the lowest, highest or average temperature.
- J.  Adjustment Button: Used with each mode button to set desired value.
- K.  EMS Mode Button: Set emissivity value.
- L.  C/F Mode Button: Used to set temperature units of measure (Celsius or Fahrenheit).
- M. LED Indicator - Active in Alarm 1 and Alarm 3 modes.
 - Blue: serves as alarm to show that temperature has reached the set **minimum**.
 - Red: serves as alarm to show that temperature has reached the set **maximum**.
- N. Battery charger

SCREEN ICONS: (FIG. 2)

Hold – Will display after you release the trigger to let you know the last temperature read.

Scan – Will display while you hold the trigger down looking for differing temperatures.

Alarm setting - this icon will let you know what alarm you have chosen to display; color indicator, beep or both.

F or C – Indicates units of measure for temperature

Battery – will indicate how much charge is remaining on the battery.

NOTE: The low battery indicator is located directly above the temperature reading on the screen. The bars on low battery indicator will indicate the strength of the battery. The IR Thermometer may continue to operate for a short time while the batteries continue to drain, but the beams will quickly dim. After fresh batteries are installed, and the IR Thermometer is turned on again, the IR Thermometer will return to its full brightness.

INTENDED USE

The IR Thermometer measures surface temperatures by measuring the amount of infrared emitted off the object. This type of measurement is a non-contact measurement of the surfaces temperature. This tool comes fully assembled. This tool has been designed with features that allow for quick and easy set-up.

Belt Hook (Fig. 1) (Optional Accessory)

⚠ WARNING: To reduce the risk of serious personal injury, DO NOT suspend tool overhead or suspend objects from the belt hook. ONLY hang tool's belt hook from a work belt.

⚠ WARNING: To reduce the risk of serious personal injury, ensure the screw (P) holding the belt hook is secure.

IMPORTANT: When attaching or removing the belt hook, use only the screw (P) that is provided.

The belt hook (O) can be attached to either side of the tool using only the screw (P) provided, to accommodate left- or right- handed users. If the hook is not desired at all, it can be removed from the tool.

To move belt hook, remove the screw (P) that holds the belt hook in place then reassemble on the opposite side.

OPERATION

⚠ WARNING: To reduce the risk of serious personal injury, turn tool off and disconnect battery pack before making any adjustments or removing/installing attachments or accessories.

Installing and Removing the Battery Pack (Fig. 4)

NOTE: Make sure your battery pack is fully charged.

To install the battery pack (C) into the tool handle, align the battery with the rails inside the tool's handle and slide it firmly into the handle until you hear the lock snap into place.

To remove the battery pack from the tool, press the release button (B) and firmly pull the battery pack out of the tool handle. Insert it into the charger as described in the charger section of this manual.

Select Operating Mode

Read the following steps before operating the IR thermometer.

CHOOSE UNITS OF MEASUREMENT

Turn the unit on by engaging the trigger. Once the screen comes on push the C/F button until the units of measurement is on the correct setting for the application.

CHOOSE EMISSIVITY

Turn the unit on by engaging the trigger, once the screen comes on push the EMS button for emissivity adjustment. When then EMS is flashing on the screen, use the up or down arrow buttons to choose the emissivity. Please refer to the chart in order to choose the correct emissivity. Remember, emissivity is adjustable by 0.01.

FIG. 1

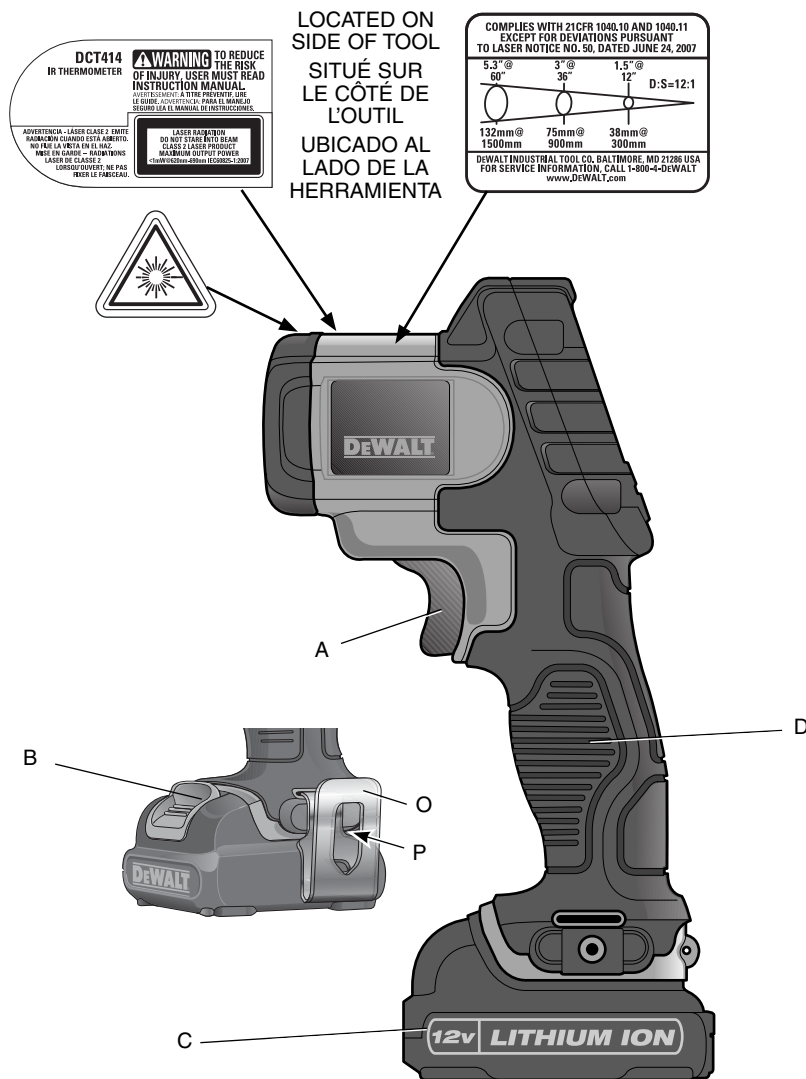


FIG. 2

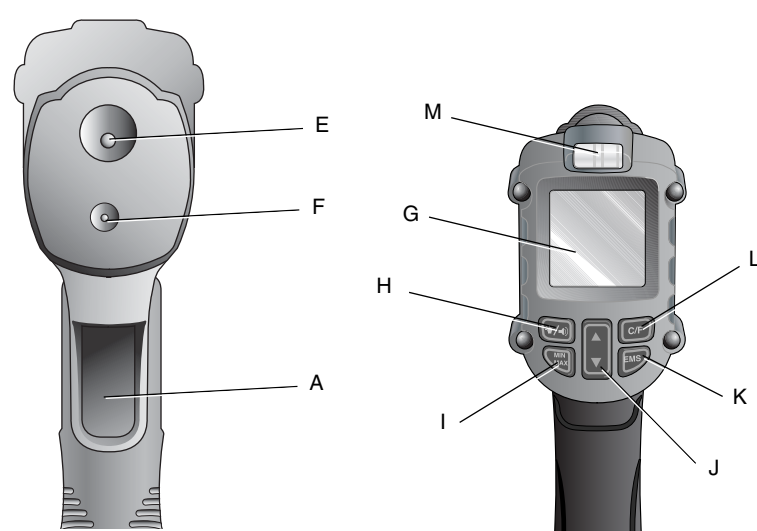


FIG. 3

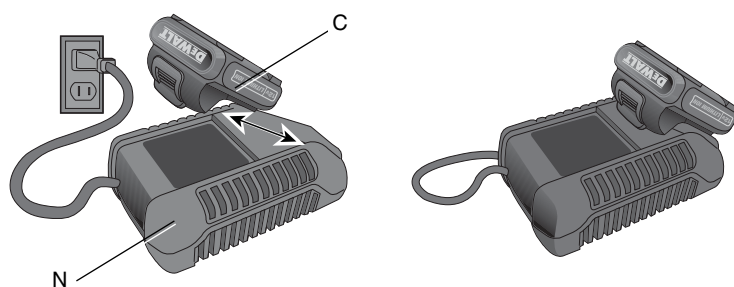


FIG. 4

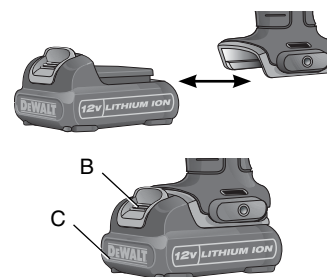
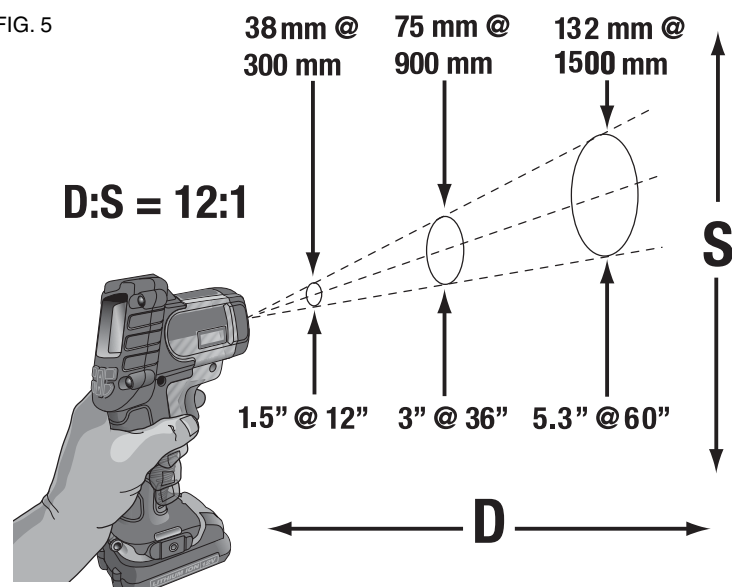


FIG. 5



NOMINAL EMISSIVITY MANUAL			
MATERIAL	VALUE	MATERIAL	VALUE
Default****	0.95	Lead*	0.50
Aluminum*	0.30	Oil	0.94
Asbestos	0.95	Paint	0.93
Asphalt	0.95	Plastic**	0.95
Brass*	0.50	Rubber	0.95
Ceramic	0.95	Sand	0.90
Concrete	0.95	Steel*	0.80
Copper*	0.60	Water	0.93
Glass (plate)	0.85	Wood***	0.94
Iron*	0.70		

* Oxidized
 ** Opaque, over 20 mils
 *** Natural
 **** Factory Setting

CHOOSE ALARM SETTINGS AND HIGH/LOW TEMPERATURES

1. Engage the trigger to turn the unit.
2. Push the ALM button.
3. When the ALM is flashing on the screen use the up and down arrows to select the alarm type.
 - Alarm 1 – temperature has reached the set limit, indicated by the red/blue LED (M)
 - Alarm 2 – temperature has reached the set limit, indicated by a beeper sound
 - Alarm 3 – temperature has reached the set limit, indicated by both the LED and the beeper
4. Push the ALM button again to confirm selection.
5. The HAL (high alarm) will now flash. Use the up and down arrows to select the high temperature limit. When the temperature is exceeded, the alarm will activate.
6. Push the ALM button. The LAL (low alarm) is now flash. Use the up and down arrows to select the low temperature limit. When the temperature has descended, the alarm will activate.
7. Press ALM button again for the main screen.
8. Temperature readings can now be taken.

DISTANCE TO SPOT (FIG. 5)

IR Thermometers have a "Cone Effect" where the further the thermometer is from the object, the larger the area being measured. The IR Thermometer has a 12:1 distance to spot (12:1) ratio, for every 12" (305 mm) away from the object it will measure 1" (25 mm). The object that is being tested needs to be larger than the spot size to ensure accurate readings.

KEY NOTES IF HAVING TROUBLE TAKING MEASUREMENT

1. Make sure to apply masking tape to surfaces that are highly reflective.
2. Make sure to have the correct emissivity for the material you are testing.
3. Clean the material before testing if there is heavy dirt, grease, etc.

