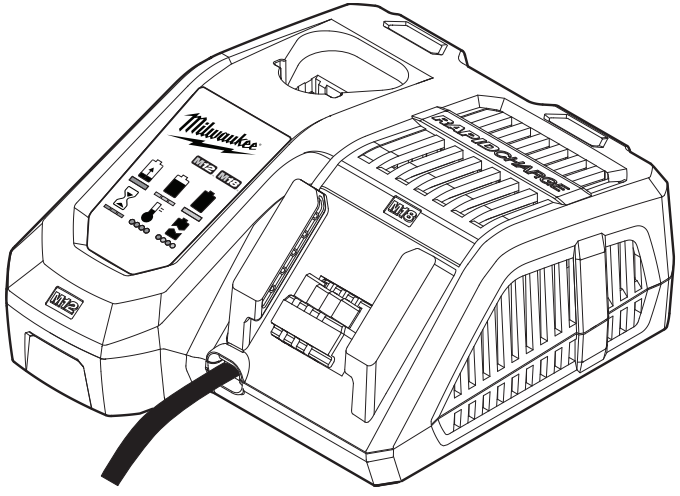
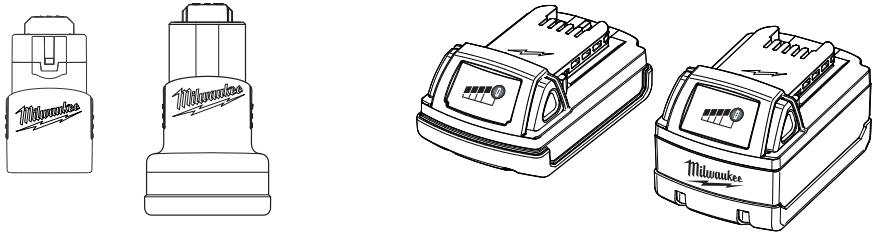
OPERATOR'S MANUAL
MANUEL de L'UTILISATEUR
MANUAL del OPERADOR





Cat. No. / No de Cat.
48-59-1808

M18™ AND M12™ RAPID CHARGER
M18™ AND M12™ LI-ION BATTERY PACKS
CHARGEUR RAPIDE M18™ ET M12™
BLOCS DE BATTERIES LI-ION M18™ ET M12™
CARGADOR RÁPIDO M18™ Y M12™
BATERÍAS DE IONES DE LITIO M18™ Y M12™

New batteries must be charged before first use.
Les batteries neuves doivent être chargées avant leur utilisation initiale.
Las baterías nuevas se deben cargar antes de usarlas por primera vez.

WARNING **To reduce the risk of injury, user must read and understand operator's manual.**
AVERTISSEMENT **Afin de réduire le risque de blessures, l'utilisateur doit lire et bien comprendre le manuel.**
ADVERTENCIA **Para reducir el riesgo de lesiones, el usuario debe leer y entender el manual.**

IMPORTANT SAFETY INSTRUCTIONS - SAVE THESE INSTRUCTIONS -

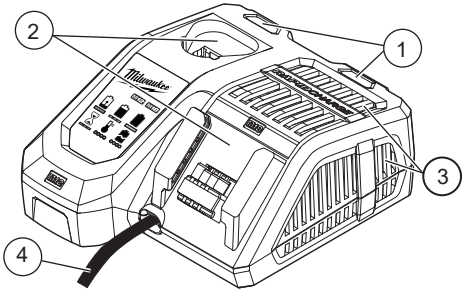
⚠WARNING ***READ AND UNDERSTAND ALL INSTRUCTIONS.*** Failure to follow all instructions listed below, may result in electric shock, fire and/or serious personal injury.

1. ***SAVE THESE INSTRUCTIONS* - This manual contains important safety and operating instructions for the MILWAUKEE Li-Ion charger and MILWAUKEE Li-Ion batteries.**
2. **Before using the battery and charger, read this operator's manual, tool's operator's manual, and all labels on the battery, charger and tool.**
3. **⚠CAUTION Use MILWAUKEE Li-Ion batteries only on recommended MILWAUKEE Li-Ion products (i.e., M18™ batteries with M18™ charger/tools, M12™ batteries with M12™ charger/tools). Do not use counterfeit, aftermarket, or "knockoff" batteries or chargers. Other battery types could explode. Do not wire a battery to a power supply plug or car cigarette lighter.**
4. **Keep batteries out of the reach of children.**
5. **Avoid dangerous environments.** Do not expose to or charge in rain, moisture, snow, damp, or wet locations. Do not use battery or charger in the presence of explosive atmospheres (gaseous fumes, dust or flammable materials). Sparks may be generated when inserting or removing battery, possibly causing fire.
6. **Only charge in a well ventilated area and within the Recommended Ambient Charging Temperature range.** Do not block vents; keep them clear for proper ventilation. Do not allow smoking or open flames near a charging battery. Vented gases may explode.
7. **Maintain charger cord.** Pull plug rather than cord to unplug. Never carry charger by its cord. Keep cord from heat, oil and sharp edges. Ensure cord will not be stepped on, tripped over, damaged, or stressed. Do not use charger with damaged cord or plug. Replace damaged cords immediately.
8. **Avoid using an extension cord when possible.** When unavoidable, use an extension cord in good electrical condition with the proper wire gauge and length for the current rating of the charger. The pin size and shape must match the pins on the charger cord**.**
9. **Charger is rated for 120 V AC ONLY.** Charger must be plugged into an appropriate receptacle.
10. **Use only recommended attachments.**
11. **Unplug charger and remove batteries** when not in use.
12. **Always unplug charger before cleaning or maintenance.** Do not allow water to flow into AC/DC plug. Use a Ground Fault Circuit Interrupter (GFCI) to reduce shock hazards.
13. **Do not burn, incinerate, or expose batteries to fire or excessive temperatures above 265°F (130°C).** Batteries may explode. Toxic fumes and materials are created when batteries are burned.
14. **Do not crush, drop, shred, modify, or damage battery. Always securely contain batteries during transport.** Do not use a battery that has received a sharp blow, been dropped, run over, or damaged in any way (e.g., pierced with a nail, hit with a hammer, stepped on, in a vehicle accident). Do not use or charge batteries that appear damaged or swollen, or are not functioning properly. Damaged or modified batteries may exhibit unpredictable behavior.
15. **Do not disassemble or attempt to repair batteries or chargers.** No internal serviceable parts. Take batteries/chargers that have been damaged, broken, or need repair to a MILWAUKEE service facility to ensure the safety of the product is maintained.
16. **Battery chemicals cause serious burns.** Never allow contact with skin, eyes, or mouth. If a damaged battery leaks battery chemicals, use rubber or neoprene gloves to dispose of it. If skin is exposed to battery fluids, wash with soap and water and rinse with vinegar. If eyes are exposed to battery chemicals, immediately flush with water for 20 minutes and seek medical attention.
17. **Do not short circuit.** A short-circuited battery pack may cause fire, personal injury, and product damage. A battery pack will short circuit if a metal object makes a connection between the positive and negative contacts on the battery pack. Do not place a battery pack near anything that may cause a short circuit (e.g., coins, keys, nails, or small metal objects in a pocket, toolbox, or drawer).
18. **Do not allow fluids to flow into battery pack.** Corrosive or conductive fluids, such as seawater, certain industrial chemicals, and bleach or bleach-containing products, etc., can cause a short circuit. Do not use battery packs that have been exposed to these types of fluids.
19. **Battery packs marked as Resistant** are suitable for environments where incidental contact or exposure to oils, greases, and solvents can occur. These packs are not resistant to acids or other corrosive chemicals. Never immerse or allow fluids to penetrate the battery pack.
20. **Always use a side handle when using a HIGH OUTPUT or HIGH DEMAND battery pack 6.0 Ah or above;** the output torque of some tools may increase. If your drill/driver did not come with a side handle, visit the MILWAUKEE TOOL website for the appropriate accessory handle.
21. **Store the battery pack and charger** in a cool, dry place. Do not store where temperatures may exceed 120°F (50°C) such as in direct sunlight, a vehicle, or metal building during the summer.
22. **Always ship Li-Ion batteries in accordance with the current regulations governing the chosen mode of transport (e.g. ground, air, sea).** When in doubt, contact MILWAUKEE, the carrier or other trained Dangerous Goods professional to determine applicable regulations.
23. **Maintain labels and nameplates.** These carry important information. If unreadable or missing, contact a MILWAUKEE service facility for a replacement.

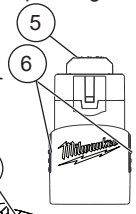
SPECIFICATIONS

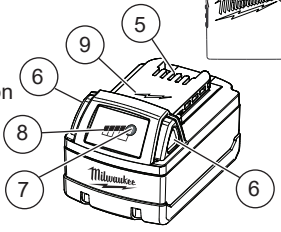
Cat. No.	**48-59-1808**
Input Volts	120 AC
Max Input Amps	2.75 AC
Output Volts	12 DC 18 DC
Max Output Amps	4.5 DC 6.0 DC
Recommended Ambient Charging Temperature	40°F to 104°F (5°C à 40°C)
M18™ Li-Ion Battery Packs	18 V DC
M12™ Li-Ion Battery Packs	12 V DC

FUNCTIONAL DESCRIPTION



1. Charger light indicators:
   - Continuous red: Charging
   - Slow flashing green: Approaching full charge
   - Continuous green: Charging is complete
   - Fast flashing red: Battery and/or charger is too hot/cold - Charging will begin when battery and/or charger reach correct charging temperature
   - Slow flashing red: Battery charge is pending - Charging will begin when the first pack is fully charged
   - Flashing red/green: Damaged or faulty battery pack and/or charger
2. Bays
3. Vents
4. Cord
5. Battery contacts
6. Release buttons
7. Fuel gauge button
8. Fuel gauge
9. Rapid charge-capable pack indicator





SYMBOLOGY

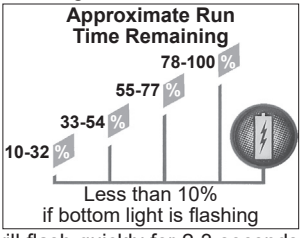
V	Volts
⎓	Direct Current
~	Alternating Current
⧈	Double Insulated
	Properly Recycle Batteries
BFP	Backfeed Protected
Hz	Hertz
A	Amps
UL	UL Listing for Canada and U.S.

BATTERY OPERATION

Fuel Gauge

Compared to NiCd battery pack types, MILWAUKEE Li-Ion battery packs deliver fade-free power for their entire run time. The tool will not experience a slow, gradual loss of power during use.

Use the fuel gauge to determine the battery pack's remaining run time. Press the fuel gauge button to display the lights. The fuel gauge will light up for 2-3 seconds. To signal the end of discharge, 1 light on the fuel gauge will flash quickly for 2-3 seconds and the tool will not run. Charge the battery pack.



An alternating blinking pattern indicates that an error or overtemperature state was encountered. Allow the battery pack to cool and reinsert. If the pattern continues, contact a MILWAUKEE service facility.

If the fuel gauge doesn't appear to be working, place the battery pack on the charger and charge as needed.

Immediately after using the battery pack, the fuel gauge may display a lower charge than it will if checked a few minutes later. The battery cells "recover" some of their charge after resting.

Battery Pack Protection

To protect itself from damage and extend its life, the battery pack's intelligent circuit monitors current draw and temperature. In extremely high torque, binding, stalling, and short circuit situations, the battery pack will turn OFF the tool if the current draw becomes too high. All the fuel gauge lights will flash. Release the trigger and restart.

Under extreme circumstances, the internal temperature of the battery could become too high. If this happens, the fuel gauge lights will flash in an alternating pattern and the product will not run. Allow the battery to cool down.

Fuel Gauge Lights	Diagnosis	Solution
Lights 1 - 4 Solid	Remaining run time	Continue working
1 Light, flashing slowly	Less than 10% run time left	Prepare to charge pack
1 Light, flashing quickly	End of discharge	Charge pack
Lights 1-4, flashing quickly	Current draw too high	Release trigger and restart, reduce pressure
Lights 1&3 / 2&4, flashing alternatingly	Battery temperature too high	Release trigger and allow battery to cool

Cold Weather Operation

MILWAUKEE Li-Ion battery packs are designed to operate in temperatures below freezing. When the battery pack is too cold, it may need to warm up before normal use. Put the battery on a product and use the product in a light application.
It may “buzz” for a short time until it warms up. When the buzzing stops, use the tool normally.

Transport

The regulations pertaining to the transport of Li-Ion batteries are affected by whether the battery is transported in a personal vehicle or offered for shipment via a commercial carrier. Always ship Li-Ion batteries in accordance with the current regulations governing the chosen mode of transport (e.g. ground, air, sea). When in doubt, contact MILWAUKEE, the carrier or other trained Dangerous Goods professional to determine applicable regulations.
The personal transport of Li-Ion battery packs is allowed when done in accordance with these warnings and instructions. When shipping Li-Ion batteries with a commercial carrier, they are shipped under classification UN 3480 (battery only) or UN 3481 (batteries contained in or packed with equipment). The proper packaging, labeling, marking, and documentation requirements are generally dependent upon whether the particular batteries are rated greater than or less than 100 Wh. Often, Li-Ion batteries rated 100 Wh or less are “excepted” from certain shipping regulations. In the U.S., products shipped via ground transport may be “excepted” from certain hazardous material shipping regulations if they are under 300Wh.

⚠WARNING To reduce the risk of injury or explosion, never burn or incinerate a battery pack even if it is damaged, dead, or completely discharged. When burned, toxic fumes and materials are created.

Disposing of MILWAUKEE Li-Ion Battery Packs

MILWAUKEE Li-Ion battery packs are more environmentally friendly than some other types of battery packs (e.g., nickel-cadmium). Always dispose of battery packs according to federal, state and local regulations. Contact a local recycling agency for recycling locations.
Even discharged battery packs contain some energy. Before disposing, use electrical tape to cover the terminals to prevent the battery pack from shorting, which could cause a fire or explosion.

RBRC Battery Recycling Seals

The RBRC™ Battery Recycling Seals (see the Symbology section) on battery packs indicates that MILWAUKEE has arranged for recycling with the Rechargeable Battery Recycling Corporation (RBRC). At the end of its useful life, return the battery pack to a MILWAUKEE Branch Office/Service Center or a participating retailer. For more information, visit the RBRC web site at www.rbrc.org.

CHARGER OPERATION

⚠WARNING Charge only MILWAUKEE M18™ and M12™ Li-Ion batteries in this MILWAUKEE Li-Ion charger. Other types of batteries may cause personal injury and damage.

When to Charge the Battery Pack with this MILWAUKEE Charger

Remove the battery pack from the product for charging when convenient for you and your job. MILWAUKEE batteries do not develop a "memory" when charged after only a partial discharge. It is not necessary to run down the battery pack before placing it on the charger.

- Use the fuel gauge to determine when to charge your MILWAUKEE Li-Ion battery pack.
- The battery pack's charge can be "Topped-Off" before starting a big job or long day of use.
- The only time it is necessary to charge the MILWAUKEE Li-Ion battery pack is when the battery pack has reached the end of its charge. To signal the end of charge, power to the product will drop quickly, allowing enough power to finish the operation. Charge the battery pack as needed.

How to Charge the Battery Pack

Align the battery pack with the bay and slide the battery pack into the charger as far as possible. The red light will come on, either flashing quickly (battery pack or charger is too hot or cold), flashing slowly (communication between pack and charger) or continuous (pack is charging).

- Charge time depends on capacity of battery pack. Heavily cycled batteries may take longer to charge completely.
- On M18™ battery packs, the fuel gauge lights are displayed as the pack is being charged, indicating how fully charged the pack is. The fuel gauge will turn off when charging is complete.
- After charging is complete, the continuous green light will come on.
- The charger will keep the battery pack fully charged if it is left on the charger. The light indicator will be same as normal charging.
- The next pack inserted in the charger will begin charging when the previous pack is fully charged.
- If the light indicator flashes red and green or does not come on, check that the battery pack is fully seated into the bay. Remove the battery pack and reinsert. If the problem persists, remove pack(s) and unplug charger for at least 2 minutes. After 2 minutes, plug charger back in and insert pack. If the problem continues, contact a MILWAUKEE service facility.

Charging a Hot or Cold Battery Pack

The charger has advanced electronics that adjust the charge rate based on battery temperature. Hot or cold batteries may take longer to charge. When the battery pack temperature is outside the normal charging range, the red light will flash and the battery will not charge. Once the battery pack is within the acceptable range, normal charging will take place and the red light will be continuous. This optimizes charge time and battery life.

Battery Pack Temperature	Red Charger Indicator Light	Charging Status
Too Hot	Fast Flashing	Not charging
Normal Range	Continuous	Normal charging
Too Cold	Fast Flashing	Not charging

Powering the Charger with an Inverter or Generator

The charger will operate with most generators and inverters rated at 350 Watts or higher.

Mounting to the Wall

Use the wall mount guides to mark the hanging points.

MAINTENANCE

⚠WARNING To reduce the risk of fire, personal injury, and product damage due to a short circuit, never immerse a tool, battery pack or charger in fluid or allow a fluid to flow inside them. Corrosive or conductive fluids, such as seawater, certain industrial chemicals, and bleach or bleach containing products, etc., can cause a short circuit.

Always unplug the charger and remove the battery from the charger before performing any maintenance. Never disassemble the battery or charger. Contact a MILWAUKEE service facility for ALL repairs.

Do not expose battery packs, chargers or tools to fluids, water, or rain, or allow them to get wet. This could damage the tool, charger, and/or battery pack. Clean out dust and debris from tool, charger and battery vents and electrical contacts by vacuuming or brushing. Clean housings with a damp, soapy cloth, keeping away from all electrical contacts. Certain cleaners and solvents, such as gasoline, turpentine, lacquer thinner, paint thinner, bleach, chlorinated cleaning solvents, ammonia and household detergents containing ammonia, are harmful to plastics and other insulated parts; plastic casings will become brittle and crack. Never use flammable or combustible solvents around batteries, charger, or tools.

Storage

As a general practice, it is best to unplug chargers and remove battery packs when not in use, however, no damage to the battery pack will occur. Store at room temperature away from moisture. Store batteries upright. Do not store in damp locations where corrosion of terminals may occur. Storing in high temperatures (over 120°F) for long periods can result in permanent capacity loss for any battery. Charge before use after storing for long periods.

Repairs

No serviceable parts.

SERVICE - UNITED STATES

1-800-SAWDUST (1.800.729.3878)

Monday-Friday, 7:00 AM - 6:30 PM CST

or visit **www.milwaukeetool.com**

Contact Corporate After Sales Service Technical Support with technical, service/repair, or warranty questions.

Email: metproductsupport@milwaukeetool.com

Become a Heavy Duty Club Member at www.milwaukeetool.com to receive important notifications regarding your tool purchases.rtant notifications regarding your tool purchases.

SERVICE - CANADA

Milwaukee Tool (Canada) Ltd

1.877.948.2360

Monday-Friday, 7:00 AM - 4:30 PM CST

or visit www.milwaukeetool.ca

LIMITED WARRANTY USA & CANADA

Every MILWAUKEE Battery Pack (sold with cordless product and/or as a replacement battery pack) is warranted to the original purchaser from an authorized MILWAUKEE distributor only to be free from defects in material and workmanship. Subject to certain exceptions, MILWAUKEE will repair or replace a battery pack which, after examination, is determined by MILWAUKEE to be defective in material or workmanship for the stated warranty period from date of purchase. Return of the battery pack to a MILWAUKEE factory Service Center location or MILWAUKEE Authorized Service Station, freight prepaid and insured, is required. For the proper shipping procedure of battery packs, contact 1.800.SAWDUST (1.800.729.3878), or go to www.milwaukeetool.com. A copy of the proof of purchase should be included with the return product. This warranty does not apply to damage that MILWAUKEE determines to be from repairs made or attempted by anyone other than MILWAUKEE authorized personnel, misuse, alterations, abuse, normal wear and tear, lack of maintenance, or accidents.

Battery Pack Cat. No.	Chemistry	Warranty Period (from date of purchase)
48-11-1812, 48-11-1813, 48-11-1828 (Serial number prefix "B41E" and later), 48-11-1840, 48-11-1850, 48-11-1850R, 48-11-1860, 48-11-1861, 48-11-1865, 48-11-1880, 48-11-1881, 48-11-1890, 48-11-2402, 48-11-2440, 48-11-2450, 48-11-2460, 48-11-2830 (Serial number prefix "C71")	LITHIUM-ION	Three (3) Years
48-11-0490, 48-11-1815, 48-11-1820, 48-11-1835, 48-11-2001, 48-11-2330, 48-11-2401, 48-11-2420, 48-11-2425, 48-11-2430	LITHIUM-ION	Two (2) Years
48-11-1828 (Serial number prefix "B41D" and earlier), 48-11-1830 (Serial number prefix "A95"), 48-11-2830 (Serial number prefix "A71")	LITHIUM-ION	Two (2) Years - plus, Three (3) Years Pro-Rata (prorated)*
48-11-0100, 48-11-1024, 48-11-1830 (Serial number prefix "E95"), 48-11-1970, 48-11-2230	Nickel-Cadmium (Ni-Cd), Nickel-Metal-Hydride (Ni-MH), LITHIUM-ION	One (1) Year

*The warranty period for MILWAUKEE M18™ 48-11-1828 (with the serial number prefix "B41D" and earlier), V18™ 48-11-1830 (with the serial number prefix "A95"), and V28™ 48-11-2830 (with the serial number prefix "A71") is five (5) years / 2000 charges from the date of purchase, whichever first occurs. The first 1000 charges or 2 years of the warranty, whichever first occurs, are covered through free replacement of the defective battery. This means that for the earlier of the first 1000 charges or two (2) years from the date of purchase/first charge, a replacement battery will be provided to the customer for any defective battery free of charge. Thereafter, the remaining charges up to a total of 2000 or the remainder of the five (5) year period from the date of purchase, whichever first occurs, will be covered on a pro rata basis. This means that every customer gets an additional 1000 charges or three (3) years of pro rata warranty on the these battery packs, depending upon the amount of use. MILWAUKEE M18™ 48-11-1828 (with the serial number prefix "B41E" and later), V18™ 48-11-1830 (with the serial number prefix "E95"), and M28™ 48-11-2830 (with the serial number prefix "C71") have different warranty periods, as listed.