



Infinity INFDSP4425 4-Channel Class A/b 200W Digital Signal Processing Amplifier Owner's Manual

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Infinity INFDSP4425 4-Channel Class A/b 200W Digital Signal Processing Amplifier Owner's Manual



THANK YOU FOR YOUR PURCHASE . . .

Your product has been designed to provide you the performance and ease of operation you expect from Infinity. Take time to read this manual before operating or installing your amplifier. This manual describes general installation guidelines and operation instructions. Please note that proper installation of mobile audio components requires qualified experience with mechanical and electrical procedures. If you do not have the knowledge and tools to perform this installation, we strongly recommend consulting an authorized Infinity dealer about your installation options.

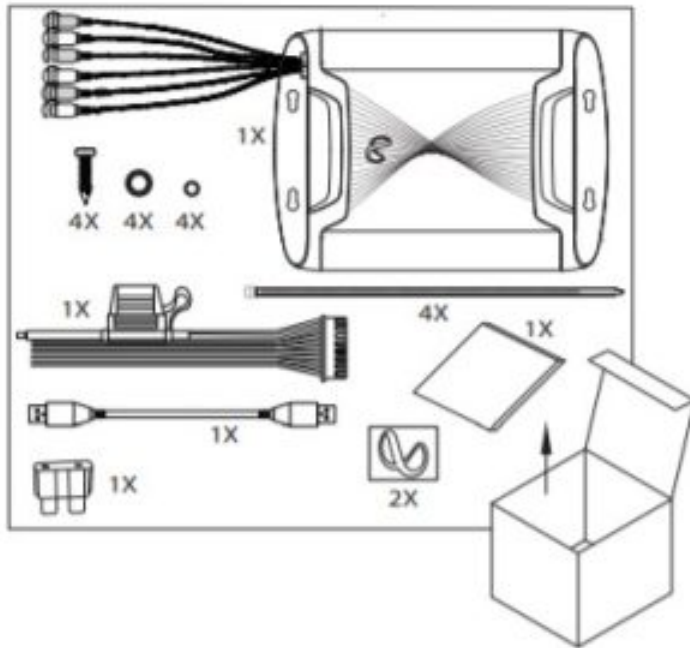
PRODUCT DESCRIPTION

The Infinity DSP Amplifier is an audio processor for fine-tuning of aftermarket audio systems. It is a self-contained audio system with 4-channel powered audio outputs and 2-channel preamp outputs, an easy-to-use tuning interface a novice can understand, and detailed tuning capabilities to satisfy even experienced

installers. With a USB connection to access the tuning interface using a Windows PC, you can control fully variable crossovers, selectable 0-to-48 dB slopes, time delay, 31-band parametric or graphic EQ adjustment, assignable input-to-output mixer with input channel summing, channel gain, master volume control, clipping indicator to ensure the audio output is not distorted, and ability to save up to 10 presets.

WHAT'S IN THE BOX

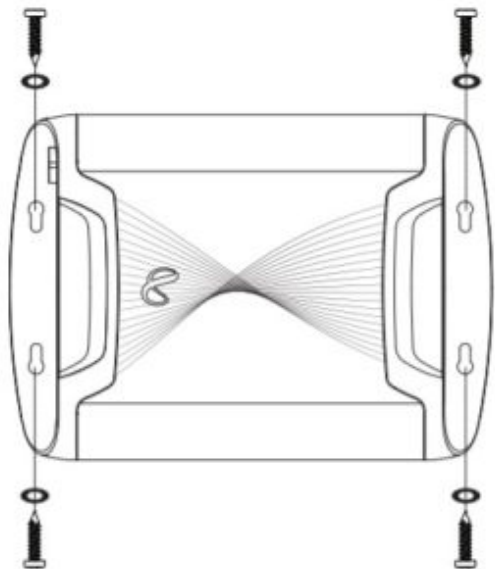
1x amplifier 4x tie wraps 1x power/speaker
cable Stainless steel
mounting hardware
1x spare fuse 1x USB to PC cable
2x Infinity stickers 1x owner's manual



INSTALLATION AND WIRING

IMPORTANT: Disconnect the vehicle's negative (–) battery terminal before beginning the installation.

- Wear protective eyewear when using tools.
- Choose a safe mounting location. Check clearances on both sides of the location. Be sure that screws will not puncture brake or fuel lines or wiring harnesses, and that wire routing will not interfere with vehicle operation. Use caution when drilling or cutting.
- When making electrical connections, make sure they are secure and properly insulated.
- Do not mount the amplifier with the heat sink facing downward, as this interferes with cooling.
- Using the amplifier as a template, mark the locations of the holes on the mounting surface.
- Drill pilot holes in the mounting surface.
- Attach the amplifier to the mounting surface with the included sheet metal screws and washers.

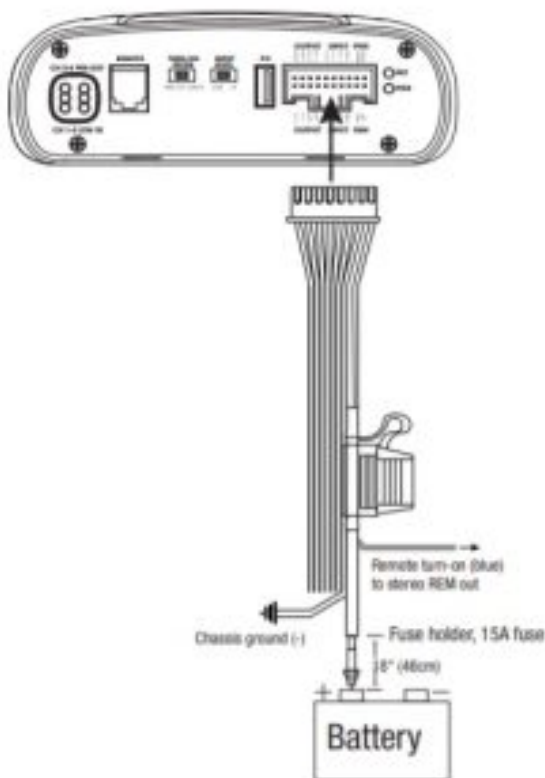


Power and Ground Connections

- **Power:** Connect the yellow +12V power wire to the positive terminal of the vehicle's battery. Make sure the 15A fuse and fuse holder are within 18" (457mm) of the battery.
- **Ground:** Connect the black GND wire to the negative terminal of the vehicle's battery, or to the vehicle's chassis near the battery with a screw. NOTE: If possible, remove any paint from the chassis for best contact. It is recommended to use a star washer below the ring connector for a secure connection.
- **Remote-In:** Connect the red remote turn-on wire to the "Remote Out" lead of the source unit, if using low-level signal inputs with an aftermarket stereo. NOTE: If you are using high-level signal inputs (your vehicle's speaker wires), you can choose to have the 12-volt DC offset feature turn the amplifier on when you turn on the vehicle power, or the audio-sensing feature turn on the amplifier when it detects audio signal. In either case, you will not have to connect the remote turn-on wire and can tape or cap it off to prevent the introduction of noise.
- **Remote-Out:** Connect the blue remote-out wire to external devices that require 12V turn-on after the Infinity INFDSP4425.
This connection will allow turn-on of 12V devices after the amplifier wakes from turn-on by 12V remote-in, DC offset or audio signal sensing input.
- When all connections are made, plug the harness into the amplifier.

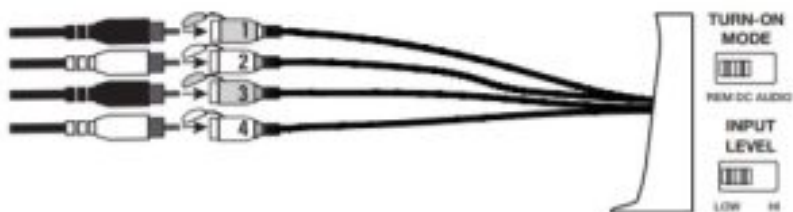
Power/Protect indicators

The power light will illuminate in green when the amplifier is getting power and playing. The protect light will illuminate in red if the amp enters protect mode in the event of conditions such as over/under voltage, amplifier output circuit failure, or excessive heat.



Signal input

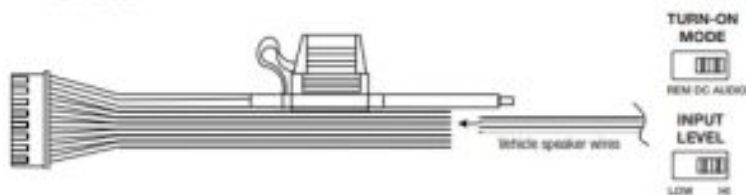
-
- Line-level inputs: If your source unit offers front and rear preamp outputs, connect them to the front and rear line-level inputs on the wire harness using RCA patch cables.
Note: when using low-level signals and remote turn-on lead, set the “Turn-on Mode” switch to “REM” and the “Input Level” switch to “LOW”.



Connecting the remote bass level control (sold separately)

The INFDSP4425 is compatible with the optional Infinity RBC remote bass level controller, available at your local Infinity dealer.

To connect it, plug into the appropriate input on the control panel of the INFDSP4425. Mount the remote in a convenient location, such as under the dash, using sheet metal screws.



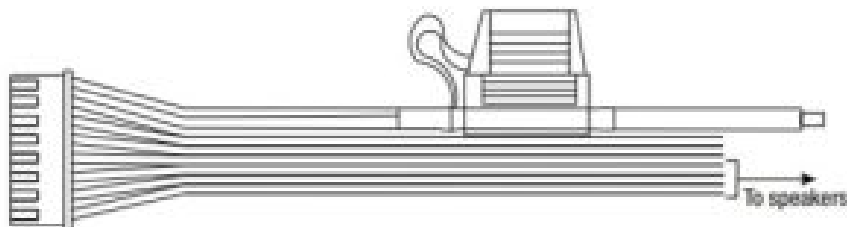
Wire color	High-level input
Orange	Front left +
Orange/Black	Front left –
Blue	Front right +
Blue/Black	Front right –
Red	Rear left +
Red/Black	Rear left –
Yellow	Rear right +
Yellow/Black	Rear right –

NOTE: When using high-level signals, set the “Turn-on Mode” switch to “DC” (to turn on when it receives battery power) or “AUDIO” (to turn on when it senses signal from your source unit), and the “Input Level” switch to “HI”.

Speaker Output Connections

Connect your speakers to the wires of the speaker output wiring harness, observing proper polarity: connect each positive (+) lead to the appropriate positive (+) speaker terminal, and negative (-) lead to the appropriate negative (-) speaker terminal. Then plug the speaker output wiring harness into the DSP Amplifier.

IMPORTANT: None of the speaker output channels can be bridged.

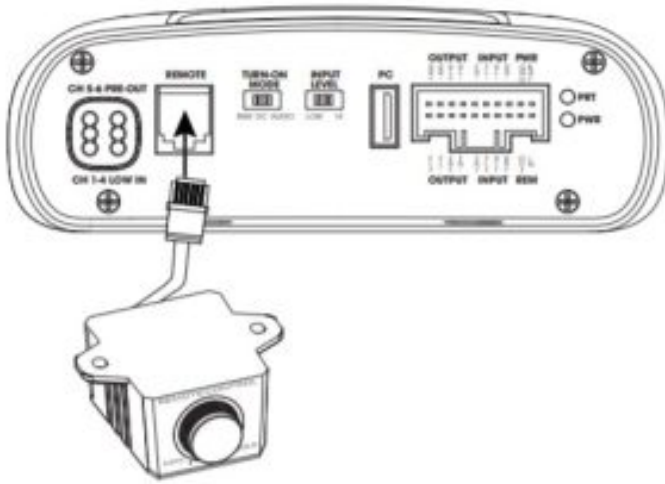


Wire color	Output channel
White	Front left +
White/Black	Front left –
Gray	Front right +
Gray/Black	Front right –
Green	Rear left +
Green/Black	Rear left –
Purple	Rear right +
Purple/Black	Rear right –

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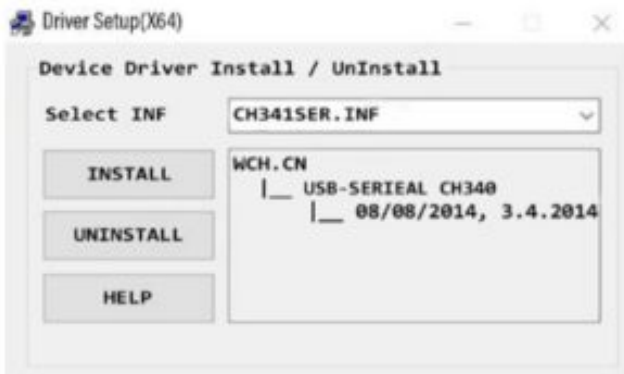
To connect it, plug into the appropriate input on the control panel of the INFDSP4425. Mount the remote in a convenient location, such as under the dash, using sheet metal screws.



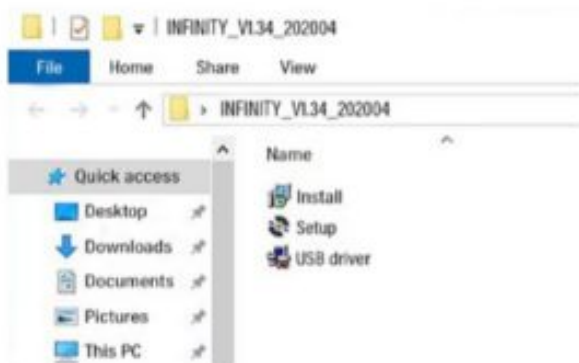
SETTING THE SOUND

Download the tuning software from Infinity.com

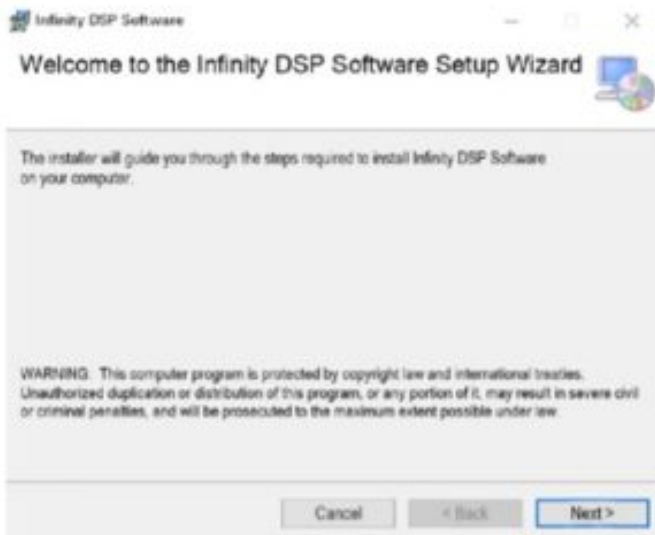
1. Connect to internet with your Windows PC or laptop and go to Infinity.com and download the Graphic User Interface for the INF DSP4425 Amplifier.
2. Complete the software installation setup wizard before you connect your computer to your Infinity DSP Amplifier.
3. Double-click “Infinity DSP software” from its saved location.



4. Double-click “USB driver” and click install
NOTE: Make sure to allow it to make changes to your computer if your anti-virus software requests it.



5. **Double-click “setup.exe”.**
NOTE: Make sure to allow it to make changes to your computer if your anti-virus software requests it.



6. Click “Next” in the Infinity DSP Software Setup Wizard.



7. Select preferred installation folder, or click “next” to choose the default location



8. Click “Next” to confirm installation. Again, make sure that your anti-virus protection allows installation to be completed.

9. Sit back and wait while software installation completes

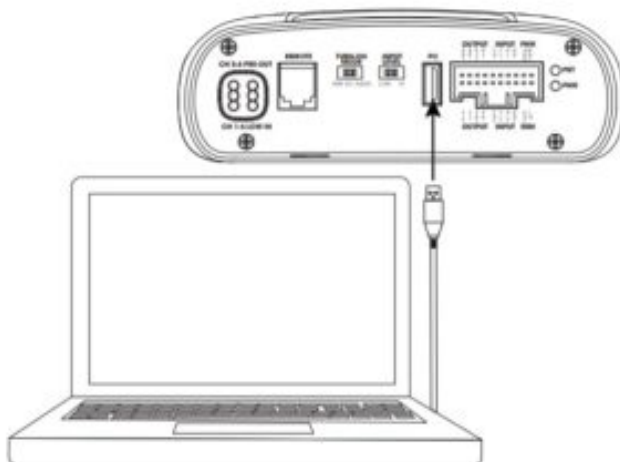


10. Installation Complete! Close setup wizard and continue to next section. You should see this icon on your computer screen.



Connecting Infinity DSP Amplifier to your Windows PC

1. Connect your Windows PC to the INF DSP4425 with the included USB cable



2. Make sure to turn your audio source down to a low volume level before powering your Infinity DSP Amplifier.
3. Activate/power your audio system and make sure all parts are operating.
NOTE: The INF DSP4425 will come with pre-flashed EQ profile that will act as "EQ Off" or preset 1.
4. With your PC connected to the Infinity DSP Amplifier, doubleclick Infinity software icon on your PC and open DSP tuning software.



NOTE: If the software appears with a window showing “No Comm Port Available”, close the software, disconnect the USB cable from your computer, and return to step 4. Otherwise, proceed to step The DSP software will function when not connected to the amplifier if you would like to familiarize yourself with the software and create a pre-configured audio system setup.



5. Connection complete! Continue on to Tuning Procedure...

User Interface Functions



The Infinity tuning software features the following controls:

1. Connected and Disconnected. With this feature, you can determine if the amplifier is communicating with your Windows PC.
2. Low and High. With this feature, you can determine if the amplifier is set to lo-level input or hi-level input on the amplifier control panel.
3. Assign speaker locations to channels. With this feature, you can designate the type of speaker and location in the car each output channel of the DSP is connected to.
4. Individual channel volume control and muting. You can raise and lower the relative volume level of each channel individually to ensure perfect level-matching and output.
5. 0°/180° phase adjustment. You can set the phase of each channel individually for balanced, dynamic performance.
5. Linking of paired channels. You can link paired channels to apply volume and tone controls evenly.
6. Clipping indicator. Each channel features a clipping indicator to let you know if 10% or greater distortion is present. If it is, lower the volume level of the clipping channel until the indicator turns off. For best results, measure with a 100Hz and 1kHz @ 0dB sine wave.

7. Time delay. With time delay, you can adjust the focal point of the sound field to your desired location in the car. The closer a speaker is to your desired focal-point location, the longer its delay should be. To adjust, drag the slider to the right to increase the delay, and to the left to decrease it.
8. Information display. This display shows you the following statistics:
 - a. The master volume value
 - b. The current subwoofer volume level for channel 5 or 6, and adjustable from -30dB to +6dB when using the remote bass control.
 - c. The voltage the amplifier is reading at the power input
 - d. The amplifier's current operating temperature
 - e. Your current system configuration.
9. X-OVER. You can adjust the crossover points of the highpass and low-pass crossovers for each channel to maximize the performance efficiency of each speaker connected to the DSP Amplifier. The selectable crossover slope for each channel can be set to 0/6/12/18/24/30/36/42/48dB.
10. Speaker location view. This shows which amplifier channels are in use, and the locations of the corresponding speakers in the vehicle.
11. Master Volume. You can raise or lower the volume of the entire system, or mute the entire system. Drag the slider up to raise the volume, and down to lower it. Click the speaker icon to mute the audio system.
12. Write/Delete. "Write" lets you save up to 10 preferred audio settings as presets, which you can apply to the amplifier. Click "write", then click a preset number to save a preset. Click "delete", then click a preset number to delete a preset.
13. Input Mixer. The Input Mixer feature lets you assign the audio signal from an input channel to a specific output channel. You can also sum the signals of multiple input channels and apply the resulting signal to a specific output channel, usually to allow a speaker to play the widest range of frequencies possible when using speaker-level input signals.
14. EXAMPLE: If you have connected a tweeter (high-frequency response only) to input channel 1 and a midrange speaker (midrange-frequency response only) to channel 2, you can sum the signals of each of these inputs, and assign the new, full-range signal to a full-range speaker you have connected to output channel 1.
15. Save File. This allows you to save saving a preferred audio system configuration to a folder on your computer for use later. It also allows you to retrieve a previous configuration from your computer and apply it to your connected amplifier.
16. Settings. You can control the following options in the "Settings" menu:
 - a. Language selection for the software: choose from English, Spanish, French, Chinese, and Japanese
 - b. Power settings for delaying the amplifier turn-on/off should your vehicle require either option
 - c. Firmware upgrades and resetting the software to original factory settings
17. Reset Output. This button lets you reset the type of speaker, and location in the vehicle, of each output channel.
18. EQ Mode. This lets you choose either a 31 band parametric or graphic EQ to adjust for each channel.
19. Parametric or Graphic EQ. You can apply custom EQ curves to each channel you have connected. To increase the level of a given frequency, drag the slider up. To lower it, drag the slider down.
20. EQ Setup. This EQ setup feature lets you click to select the channels to which you want to apply EQ curves. NOTE: The FREQ, GAIN, and Q fields shows the values of the changes made by moving the EQ sliders. Only Gain is adjustable when in Graphic EQ Mode. Frequency, Gain, and Q are all adjustable in Parametric EQ Mode. These adjustments can be made using the sliders or entering specific values in the F, G, and Q fields.
21. Bypass EQ and Restore EQ. "Bypass EQ" allow you to return your EQ settings to flat so you can hear the differences made during your tuning. "Restore EQ" returns all EQ adjustments to the previous settings.
22. Reset EQ – This button returns the EQ to factory settings.

SPECIFICATIONS

- RMS Power Output (Watts x Channel) @ 4-ohm: 25W x 4
- RMS Power Output (Watts x Channel) @ 2-ohm: 35W x 4
- Amplifier Class: Class A/B
- Battery Voltage Range (Volts): 8V to 16V
- Selectable Turn-on Modes: 12V, Audio Signal Sense, DC Offset, 12V remote output
- LED Indicator: red/green
- Frequency Response: 10Hz to 22kHz @ -3dB
- Signal-to-Noise Ratio: >80dB
- Signal-to-Noise Ratio (CEA-2006): 68dB
- THD+N @ 4-ohm: <10%
- Input Sensitivity, selectable: High-level or low-level

- Input Sensitivity – Low Level: 680mV to 6V
- Input Sensitivity – High Level: 1.6V to 15V
- Channel 5 & 6 pre-out voltage: 4V
- Variable Crossovers: All Channels: HPF, LPF, Band-pass w/ selectable 0 to 48dB slope
- Gain, variable: All Channels with PC
- Subwoofer level, variable: Channels 5 & 6 in PC software or using accessory remote control from -30dB to +6dB
- Fuse Rating: 15A
- Minimum Recommended Power/Ground Wire Gauge: 8awg
- Speaker Level Inputs: Yes
- Remote Bass Control: Yes, Infinity RBC sold separately
- Length: 9-3/8" (237.5mm)
- Width: 5-11/16" (144mm)
- Height: 1-15/16" (49.5mm)
- Weight: Approx. 1000g
- Protection: DC, OVP, UVP, OCP, OTP

TROUBLESHOOTING

No audio and POWER INDICATOR is off.

- No voltage at BATT+ and/or REM terminals, or bad or no ground connection. Check voltages at amplifier terminals with VOM. No audio and PROTECT INDICATOR flashes
- DC voltage on amplifier output. Amplifier may need service; see enclosed warranty card for service information. No audio and PROTECT and POWER INDICATORS flash.
- Voltage less than 9V on BATT+ connection. Check vehicle charging system. No audio and PROTECT INDICATOR is on.
- Amplifier is overheated. Make sure amplifier cooling is not blocked at mounting location. Verify that speaker-system impedance is within specified limits. Or, there may be voltage greater than 16V (or less than 8V) on BATT+ connection. Check vehicle charging system. Amplifier fuse keeps blowing.
- The wiring is connected incorrectly or there is a short circuit. Review installation precautions and procedures. Check wiring connections. Distorted audio.
- Gain is not set properly. Check Individual Channel Volume and/ or Master Volume settings. Check speaker wires for shorts or grounds. Amplifier or source unit may be defective. Distorted audio and PROTECT INDICATOR flashes.
- Short circuit in speaker or wire. Remove speaker leads one at a time to locate shorted speaker or wire, and repair. Music lacks dynamics or "punch."
- Speakers are not connected properly. Use 0°/180° phase adjustment, and check speaker connections at amplifier and speaker.

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 INF DSP4425, 4-Channel Class A b 200W Digital Signal Processing Amplifier

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[Manuals+](#),

[**Midea MU138SWAR1RC1 Convertible Upright Refrigerator User Manual**](#)

MU138SWAR1RC1 Convertible Upright Refrigerator Upright Freezer Power supply: 115 V Frequency: 60Hz en
USER MANUAL Warning: Before using...

[**XPOWER XD-85LH Low Grain Refrigerant Dehumidifier Owner's Manual**](#)

XD-85LH Low Grain Refrigerant Dehumidifier Model / Modelo / Modèle: XD-85LH, XD-85L2 (115V 60Hz) Low Grain
Refrigerant Dehumidifier...

[**milwaukee 2540-20 M12 23GA Pin Nailer User Manual**](#)

2540-20 M12 23GA Pin Nailer OPERATOR'S MANUAL MANUEL de L'UTILISATEUR MANUAL del OPERADOR
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