



PWD-X5

DSP Subwoofer

with built-in 4 Channel Amplifier

Owner's Manual



EN

DE

FR

ES

IT

RU

Table of Contents

Operating Instructions

WARNING

WARNING	3
CAUTION	3
PRECAUTIONS	3

Getting Started

How To Read This Manual	4
Function List	4
Accessory List	4

Mobile Phone App

Mobile Phone App Instructions	5
Home Screen	5
Adjust the Volume	5
Switch Input Source	5
Preset (Save and Recall)	5
App sync	6
Professional User Interface	6
Change Output Channel	6
Set Equalizer	6
Reset / Restore Equalizer	7
Output Level, Phase and Mute	7
Set Crossover (XOver)	7
Channel Linking	7
Time Correction	8
Balance/Fader	8

Software for PC

Software Instructions	9
PC Software System Requirements	9
Control Interface	9
PC Interface	10
Mine, Save, Open	10

Call and Store Preset	11
Adjust the Master Volume	11
Time Correction	11
Set Output Channel EQ	11/12

Remote Commander

Adjusting the Volume and	
Subwoofer Level	13
Switching Sources	13
Selecting Preset	13

Connection Diagram

14/15

Technical Parameter Indicators

Technical Specifications	16
Functional Parameters	16

Operating Instructions

WARNING



WARNING

This symbol means important instructions. Failure to heed them can result in serious injury or death.

HALT USE IMMEDIATELY IF A PROBLEM APPEARS.

Return it to your authorized Alpine dealer or the nearest Alpine Service Center for repairing.

DO NOT OPERATE ANY FUNCTION THAT TAKES YOUR ATTENTION AWAY FROM SAFELY DRIVING YOUR VEHICLE.

Any function that requires your prolonged attention should only be performed after coming to a complete stop. Always stop the vehicle in a safe location before performing these functions. Failure to do so may result in an accident.

KEEP THE VOLUME AT A LEVEL WHERE YOU CAN STILL HEAR OUTSIDE NOISES WHILE DRIVING.

Excessive volume levels that obscure sounds such as emergency vehicle sirens or road warning signals (train crossings, etc.) can be dangerous and may result in an accident.

LISTENING AT LOUD VOLUME LEVELS IN A CAR MAY ALSO CAUSE HEARING DAMAGE.

DO NOT DISASSEMBLE OR ALTER.

Doing so may result in an accident, fire or electric shock.

KEEP SMALL OBJECTS SUCH AS BOLTS AND SCREWS OUT OF THE REACH OF CHILDREN.

Swallowing them may result in serious injury. If swallowed, consult a physician immediately.

USE THIS PRODUCT FOR MOBILE 12V APPLICATIONS.

Use for other than its designed application may result in fire, electric shock or other injury.



CAUTION

This symbol means important instructions. Failure to heed them can result in injury or material property damage.

PRECAUTIONS

PRODUCT CLEANING

Use a soft dry cloth for periodic cleaning of the product. For more severe stains, please dampen the cloth with water only. Anything else has the chance of dissolving the paint or damaging the plastic.

TEMPERATURE

Be sure the temperature inside the vehicle is between +60°C and -20°C before turning your unit on.

MAINTENANCE

If you have problems, do not attempt to repair the unit yourself. Return it to your Alpine dealer or the nearest Alpine Service Station for servicing.

INSTALLATION LOCATION

Make sure PWD-X5 will not be installed in a location subjected to:

- Direct sun and heat
- High humidity and water
- Excessive dust
- Excessive vibrations



CAUTION

Alpine accepts no responsibility for lost data, etc., even if data, etc. is lost while using this product.

The BLUETOOTH® word mark and logos are owned by the BLUETOOTH SIG, Inc. and any use of such marks by Alpine Electronics, Inc. is under license.

How To Read This Manual

Getting Started

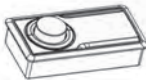
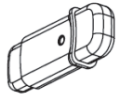
PWD-X5 machine is supplied with the wired controller. Using the wired controller could easily control PWD-X5 machine, or using the mobile phone app or software to adjust or set the audio effect of PWD-X5 machine. These three control methods are varied and thus they will be described individually in the following chapters. Functions are listed as follows:

Function List

Item		Page		
		Phone App	PC	Wired Controller
Basic Operation	Switch Input Source	4	10	13
	Adjust Volume	4	11	13
	Preset	4	11	13
	Pro Mode	5	-	-
Channel Operation	Switch Output Channel	5	11	-
	Set Equalizer	6	11	-
	Set Crossover	7	11	-
	Time Correction	7	11	-
	Balance and Fader	7	11	-

Note: Priority: Music Play: Bluetooth>High Level, Low Level;
Data Connections: Mobile Phone App, Software for PC > Wired Controller.

Accessory List

Accessory	Quantity	Mount × 4	Mounting Screws×4	USB3.0 extension cable×1
Mount and Screws	4 (pieces)			
USB3.0 extension cable	1 (piece)			
Remote Commander	1 (set)	Remote Commander × 1	USB Bluetooth×1	Amplifier screws×4
USB Bluetooth	1 (set)			
Owner's Manual	1(booklet)			

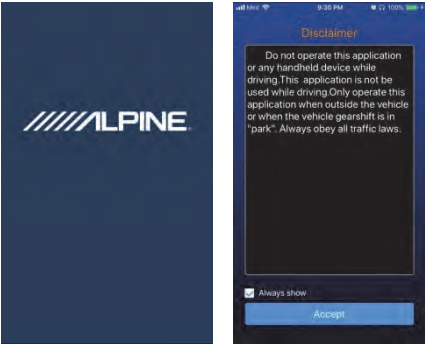
Mobile Phone App Instructions

Android users can search and download the PWD-X5 app from the Google Play store

For iPhone users can search and download PWD-X5 app from iPhone App Store.

- 1. Connect the USB Bluetooth
- 2. Turn On the PWD-X5 unit
- 3. Turn Bluetooth ON on the smartphone.
- 4. Search for DSP-HD-XXXXX
- 5. Select DSP-HD-XXXXX
- 6. Launch the Alpine PWD-X5 APP on your smartphone

Go to Alpine page →Read the Disclaimer carefully and click “Accept” to go to the homepage.



Home Screen



Adjust the Volume

- Master volume, Subwoofer level, source select, mute button.



Switch Input Source

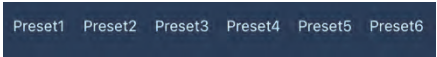
- 1. Click the [Source BT] source setting to flexibly select the type of input source.



Hi-Level, Aux, Bluetooth

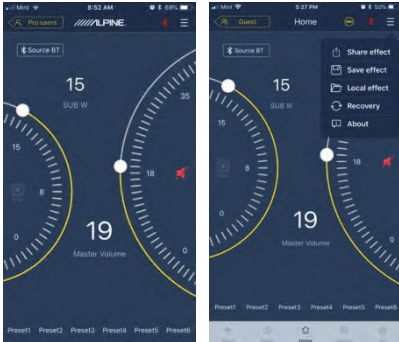
Preset (Save and Recall)

Save to a preset by selecting a preset number



App Sync

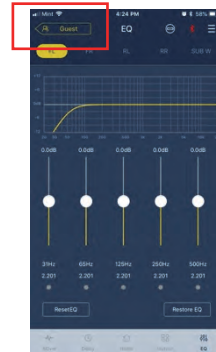
1. Select the [🔗] to begin pairing to the PWD-X5. [🔗] will show when paired, which represents that app could control the main machine to play music and set data.



2. If you are a general user, click [🔗] to enter [Share Sound Effects] [About] or [Exit].
 - Share Sound Effects: Share your existing sound effects with your friends through the mobile phone app.
 - About: View the version of the machine.
 - Exit: Close the mobile phone app.
3. If you are a professional user, click [🔗] to enter [Share Sound Effects] [Save Sound Effects] [Local Sound Effects] [One-click Recovery] [About] or [Exit].
 - Share Sound Effects: Share your existing sound effects with your friends through the mobile phone app.
 - Save Sound Effects: Save the adjusted EQ to your mobile phone.
 - Local Sound Effects: Open the saved file and use it in your current device.
 - One-click Recovery: Restore to factory settings.
 - About: View the version of the machine.
 - Exit: Close the mobile phone app.

Professional User Interface

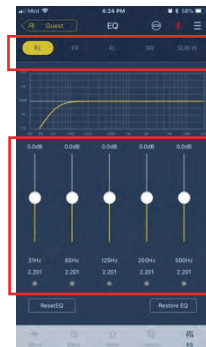
1. Click [Pro users] to change DSP functions



User Password: 8888

Change Output Channel

1. Select the desired output channel along the top



Set Equalizer

1. Press the values to adjust the frequency and Q-factor. Gain can also be adjusted with the slider

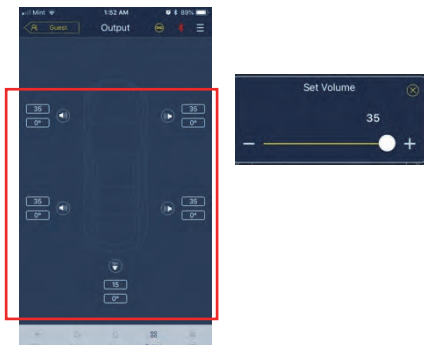
Reset / Restore Equalizer

1. Click [Reset EQ] to reset all EQ parameters to the default values
2. Click [Restore EQ] to toggle between EQ on/off



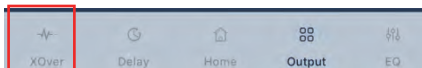
Output Level, Phase and Mute

1. Set levels by pressing the channel volume, Then +/- to adjust the output level
2. Change the phase from 0° to 180°
3. Press the speaker to MUTE the channel

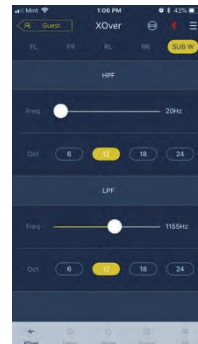


Set Crossover (XOver)

1. Select Xover from the settings menu.



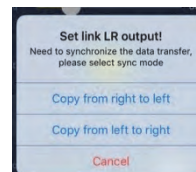
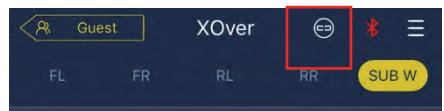
2. Use the slider to change the HPF/LPF crossover frequency.



3. Select a slope (ch1-4 6/12db/oct, ch 5 6/12/18/24 db/oct)

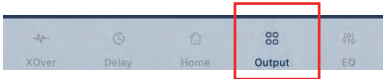
Channel Linking

1. Select the link button to link left and right channels
2. Select which channel to copy to/from

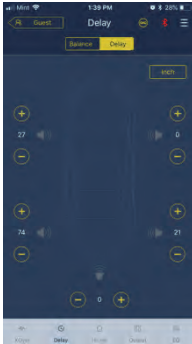


Time Correction

1. Select Output



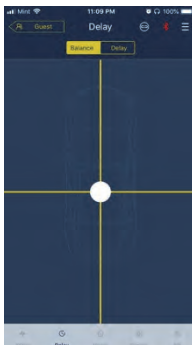
2. Select Delay



3. Select unit of measure (ms,inch,cm)

4. Use the +/- buttons to change the value.

Balance/Fader



1. Press the dot and slide to change the balance and fader.

Software Instructions

Download PWD-X5 software for PC from Alpine Electronics website. After PWD-X5 software is installed, tune PWD-X5 machine via the PC.

Note: The functions of app are the same as software. So, please refer to the instructions for software for mobile devices.

PC Software System Requirements

- Software is run on a Microsoft® Windows® system.
Recommended Specifications
Operating System: Windows XP, Windows Vista, Windows 7, Windows 8, Windows 10.
CPU: 1.6GHz or higher.
Memory Card: 1GB or higher.
Hard Disk: 512MB or more space.
PC Resolution: 1280*768 or higher.
- Before connecting PWD-X5 main machine to PC, please install PWD-X5 software

PC Interface

Control Interface

PWD-X5 PC software has two interfaces for controlling master tuning: EQ and crossover.

Click on the EQ curve graph to enter the EQ and crossover interface.



PC Interface



EN

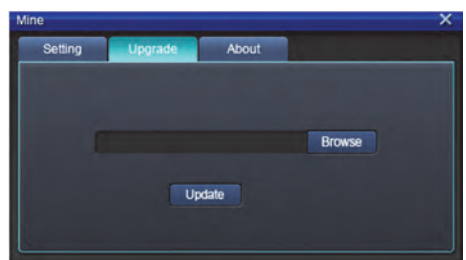
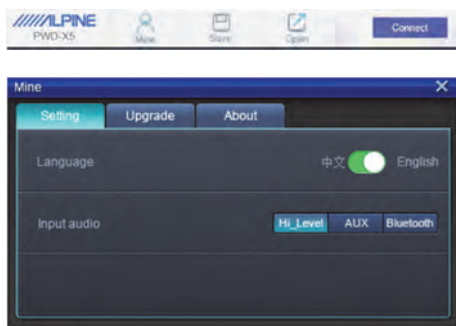
PC Connection

1. Connect the USB and launch program.
2. Press Connect

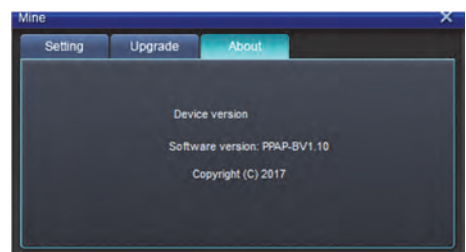
2. Select [Upgrade] to perform new updates provided by Alpine Electronics.

Mine, Save, Open

1. Select Mine to show language and input mode.



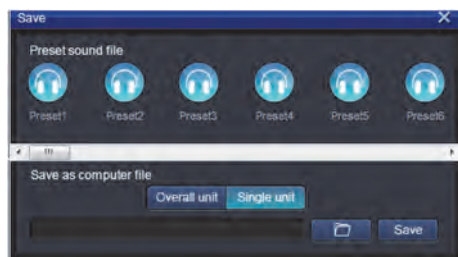
3. Click [About] to view the device version.



a. Switch between Chinese and English

Call and Store Preset

1. Call and store preset sound effect. Click [Save] to set 15 preset sound effects.



Adjust the Master Volume

1. Adjust the master volume



2. Select Balance to drag the desired balance and fader position.
3. Adjust the output level of each channel , phase or mute channel



Time Correction

1. Select Delay
2. A window will popup where you can adjust the units, and value per channel.



Set Output Channel EQ

1. Select the channel to adjust by clicking on the speaker



2. Click on the EQ graph to reveal the EQ menu.



3. Adjust EQ Gain, Frequency, Q factor by entering the desired values.



4. Adjust HPF/LPF and Slope (ch1-4 6/12db/oct, ch 5 6/12/18/24 db/oct) for the channel.



output signals.

Remote Commander Operating Instructions

Connect PWD-X5 wired controller to PWD-X5 machine and power on properly.

Note: *The controller will not work if PC/BT is connected*

Adjusting Volume and Subwoofer Level

1. Turn the knob to adjust the master volume, press the knob once to change subwoofer level.



2. Press and hold 2-3 seconds to mute the output.



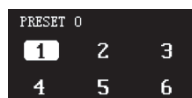
Switching Sources

1. Press the knob to change input source active.
2. Turn to select and press once to select.



Selecting Preset

1. Long press the knob (≥ 5 seconds) to select preset.

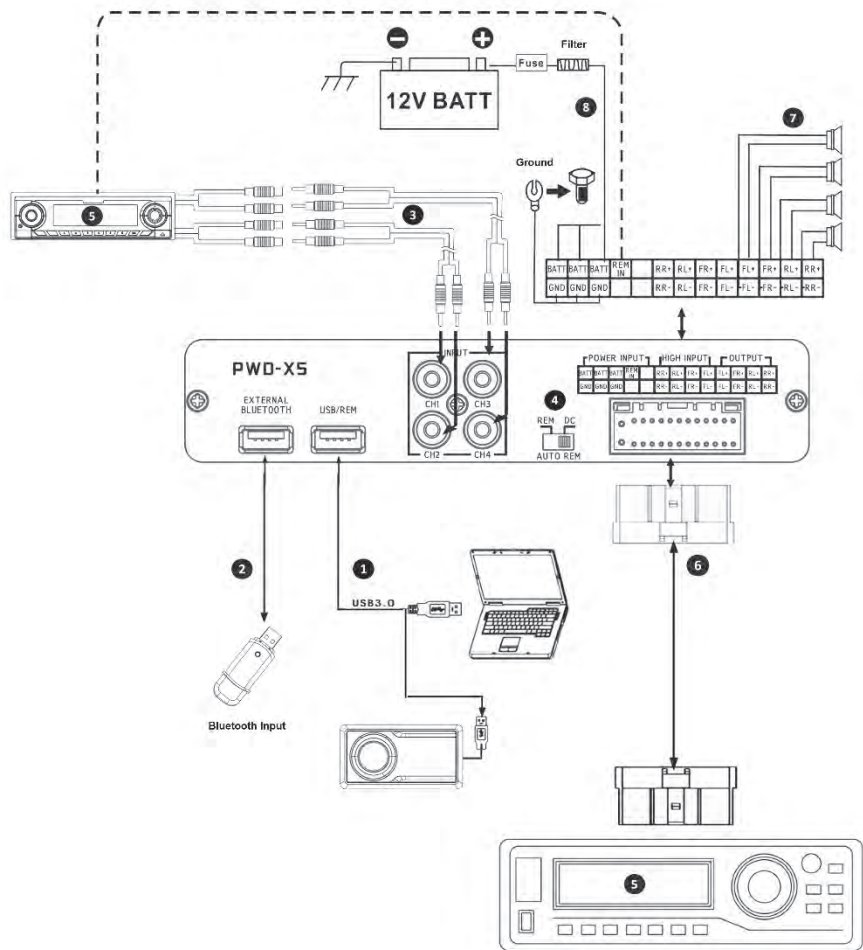


2. Select the preset and press once to load.



Connection Diagram

EN



Connection Diagram

- ① Main machine USB port connects to the computer via USB3.0 cord. Start PWD-X5 software to switch sound sources of main machine and perform such functions as data storage, calling and EQ. USB port connects to the wired controller via USB3.0 cord and perform functions including switching sound source, data calling and adjusting master volume via the wired controller.
- ② The main machine is equipped with an external Bluetooth interface to play lossless music via the external digital Bluetooth and connect to PWD-X5 app. After the Bluetooth is connected, the indicator light will be on.
- ③ AUX input interface connects to in-vehicle CD or DVD low-level output, switches the machine sound source to AUX input and plays low-level signals.
- ④ REM input switch. When the switch is placed on the "REM"-end, REM will start the machine. If the switch is placed on the "DC"-end, the high-level input signal will start the machine.
- ⑤ In-vehicle CD or DVD main machine.

- ⑥ High-level input and power input interface connects to in-vehicle CD or DVD. If the sound source switches to high-level, the machine will play high-level signals.

POWER INPUT				HIGH INPUT				OUTPUT			
BATT	BATT	BATT	REM IN	RR+	RL+	FR+	FL+	FL+	FR+	RL+	RR+
GND	GND	GND		RR-	RL-	FR-	FL-	FL-	FR-	RL-	RR-

- ⑦ The amplifier output of the main machine connects to the speaker
- ⑧ The machine is connected to the power supply.

Notes:

- Original cables for designated vehicles only.
- High-level REM input (HOST): for these two high-level input cables of H1+/H3+.

Technical Parameter Indicators

1. Technical Specifications

Max. output power	Rated power: 25W x4 +165W; peak power: 50W x4 +240W
Signal-to-noise ratio	≥80dB
Bass boost	-12dB to +12dB
Frequency response	20Hz to 20KHz
Input impedance	Low-level input: 20kΩ; high-level input: 100Ω
Phase	0°/180°
Method of activation	DC high-level /REM input activation
Operating temperature	-10 to 60°C
Storage temperature	-40 to 85°C
Power source	DC 14.4V (9V to 16V) negative ground
Activate REM input	Options of high-level activation (H1+/H3+) and ACC activation for selection
Activate REM output	+12V activation voltage output (0.5A)
Stand-by current	750mA
Net weight	5.35kg
Dimensions (L x W x H)	350 x 245 x 80mm

2. Functional Parameters

Type of input signals	Options: 4-channel high-level, 4-channel stereophonic low-level, Bluetooth
Output position	4-channel amplifier output (4Ω 25W x4)
Output signal gain	Master volume: 0~35; ultra-low volume: 0~15
Filter slope	CH1 to CH4: 6 or 12 dB/oct CH5: 6,12,18 or 24 dB/oct
Q value	0.404 to 28.85
Delay	0.0 to 5.4ms [0.0 to 187cm / 0.0 to 74inch]
Scenario operation	The machine could save 15 presetting music scenarios.

**Information on disposal of old electrical and electronics equipment and batteries
(applicable for countries that have adopted separate waste collection systems)**



If you want to dispose this product, do not mix it with general household waste. There is a separate collection system for used electronic products in accordance with legislation that requires proper treatment, recovery and recycling. Contact your local authority for details in locating a recycle facility nearest to you. Proper recycling and waste disposal will help conserve resources whilst preventing detrimental effects on our health and the environment.

The BLUETOOTH® word mark and logos are owned by the BLUETOOTH SIG, Inc. and any use of such marks by Alpine Electronics, Inc. is under license.

Hereby, ALPINE declares that this device is in compliance with the essential requirements and other provisions of the following EU directives:

- 2014/53/EU (RED)
- 2011/65/EU (RoHS)
- 2014/30/EU (EMC, incl. EN50498: 2010)

You can view the Declaration of Conformity at www.alpine-europe.com.

2.4 GHz - Bluetooth BR/EDR and BLE

Frequency range: 2.400 to 2.484 MHz

Maximum power: 4.51 dBm / 2.82mW (EIRP)

The control software for the PWD-X5 can be found in the respective app store for iOS and Android. The apps are free of charge.

The full owner's manual can be found in the support section of your local Alpine website.



ALPINE ELECTRONICS MARKETING, INC.

1-7, Yukigaya-Otsukamachi, Ota-ku,
Tokyo 145-0067, JAPAN
Phone: 03-5499-4531

ALPINE ELECTRONICS OF AMERICA, INC.

19145 Gramercy Place, Torrance,
California 90501, U.S.A.
Phone 1-800-ALPINE-1 (1-800-257-4631)

ALPINE ELECTRONICS OF AUSTRALIA PTY. LTD.

161-165 Princes Highway, Hallam
Victoria 3803, Australia
Phone 03-8787-1200

ALPINE ELECTRONICS GmbH

Wilhelm-Wagenfeld-Str. 1-3,
80807 München, Germany
Phone 089-32 42 640

ALPINE ELECTRONICS OF U.K. LTD.

Alpine House
Fletchamstead Highway, Coventry CV4 9TW, U.K.
www.alpine.co.uk

ALPINE ELECTRONICS France S.A.R.L.

184 allée des Erables
CS 52016 – Villepinte
95 945 Roissy CDG cedex
FRANCE
Phone : + 33(0)1 48 63 89 89

ALPINE ITALIA S.p.A.

Viale Cristoforo Colombo, 8
20090 Trezzano sul Naviglio MI, Italy
Phone +39 02 484781

ALPINE ELECTRONICS DE ESPAÑA, S.A.

Portal de Gamarra 36, Pabellón, 32
01013 Vitoria (Alava)-APDO 133, Spain
Phone 945-283588