//////ALPINE®

IMPRINT SOUND MANAGER KIT FOR PXA-H100

KTX-H100

IMPRINT

AUDYSSEY
MULTEQ XT

- OWNER'S MANUAL
  Please read before using this equipment.

- BEDIENUNGSANLEITUNG
  Lesen Sie diese Bedienungsanleitung bitte vor Gebrauch des Gerätes.

- MODE D'EMPLOI
  Veuillez lire avant d'utiliser cet appareil.

- MANUAL DE OPERACIÓN
  Léalo antes de utilizar este equipo.

- ISTRUZIONI PER L'USO
  Si prega di leggere prima di utilizzare il attrezzatura.

- ANVÄNDARHANDLEDNING
  Innan du använder utrustningen bör du läsa igenom denna användarhandledning.

- РУКОВОДСТВО ПО ЭКСПЛУАТАЦИИ
  Прочтите настоящее руководство перед началом использования оборудования.

- 使用手冊
  請在使用本設備之前先閱讀使用手冊。

- 用户说明书
  使用设备前请阅读本说明书。

- 取扱説明書
  ご使用の前によくお読みください。

[ENGLISH]
Caution on the installation in IMPRINT SOUND MANAGER

- If the earlier software version is installed in the personal computer, be sure to uninstall it, before installing the new software. Doing so may cause a malfunction.
- When IMPRINT SOUND MANAGER is activated in the new software version, you can select a MultEQ compatible device from a pull-down menu. If the MultEQ device used to measure differs from those selectable from the pull-down menu, note that you cannot perform the measurement.

[DEUTSCH]
Hinweis zur Installation von IMPRINT SOUND MANAGER

- Ist auf dem PC eine frühere Version der Software installiert, muss diese vor der Installation der neuen Software deinstalliert werden. Andernfalls könnte es zu einer Fehlfunktion kommen.
- Wenn IMPRINT SOUND MANAGER in der neuen Softwareversion aktiviert wird, können Sie aus einem Pulldown-Menü ein MultEQ -kompatibles Gerät auswählen. Ein MultEQ-Gerät, das nicht im Pulldown-Menü zur Auswahl steht, kann nicht für die Messung verwendet werden.

[FRANÇAIS]
Précautions lors de l'installation du programme IMPRINT SOUND MANAGER

- Si la version antérieure du logiciel est déjà installée sur votre ordinateur, vous devez la désinstaller avant d'installer la nouvelle version. Dans le cas contraire, vous risquez d'endommager le logiciel.
- Lorsque vous activez la nouvelle version du logiciel IMPRINT SOUND MANAGER, vous pouvez sélectionner un périphérique compatible MultEQ dans un menu déroulant. Si le périphérique MultEQ utilisé pour la mesure ne figure pas dans la liste déroulante, vous ne pouvez pas effectuer la mesure.

[ESPAÑOL]
Precaución al instalar en IMPRINT SOUND MANAGER

- Si hay instalada una versión anterior del software en el ordenador, es muy importante que la desinstale antes de instalar el nuevo software. Si no lo hace, la unidad podría no funcionar correctamente.
- Si se activa IMPRINT SOUND MANAGER en la nueva versión del software, podrá seleccionar un dispositivo compatible con MultEQ en el menú desplegable. Si el dispositivo MultEQ utilizado para la medición no es ninguno de los que aparecen en el menú desplegable, significará que no puede realizar la medición.

[ITALIANO]
Avvertenza sull'installazione di IMPRINT SOUND MANAGER

- Se sul computer è installata la versione del software precedente, accertarsi di disinstallarla prima di installare il nuovo software. Diversamente, si potrebbero causare problemi di funzionamento.
- Quando IMPRINT SOUND MANAGER è attivato nella nuova versione del software, è possibile selezionare un dispositivo compatibile MultEQ da un menu a discesa. Se il dispositivo MultEQ utilizzato per effettuare la misurazione è diverso da quelli selezionabili nel menu a discesa, non è possibile eseguire la misurazione.

[SVENSKA]
Att tänka på vid installation av IMPRINT SOUND MANAGER

- Om den äldre versionen av programvaran finns installerad på datorn, måste denna först avinstalleras innan det nya programmet kan installeras. Det kan orsaka funktionsstörningar.
- När IMPRINT SOUND MANAGER aktiveras i den nya programversionen kan du välja en MultEQ-kompatibel enhet i en rullgardinsmeny. Om den MultEQ-enhet som används för mätning skiljer sig från dem som finns att välja i rullgardinsmenyn, bör du notera att mätning inte kan utföras.

[РУССИЙ]
Предупреждение по установке в программе IMPRINT SOUND MANAGER

- Если на персональном компьютере уже установлена предыдущая версия программы, то обязательно удалите ее перед установкой новой версии программы. Это может привести к неисправности.
- Если IMPRINT SOUND MANAGER активирована в новой версии программы, то в раскрывающемся меню можно выбрать MultEQ-совместимое устройство. Если используемое для измерений устройство MultEQ отличается от устройств, которые можно выбрать в раскрывающемся меню, то измерение в этом случае выполнить не удастся.

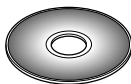## ［中文（繁）］
安裝 IMPRINT SOUND MANAGER 的注意事項

- 如果個人電腦中已安裝早期版本的軟體，在安裝新軟體之前，務必將其移除。否則可能造成故障。
- 在新版本軟體中啓動 IMPRINT SOUND MANAGER 時，您可以從下拉式選單中選擇 MultEQ 相容設備。如果用於測量的 MultEQ 設備與從下拉式選單中可選的不同，那麼請注意您無法執行測量。

［中文（简）］
安装 IMPRINT SOUND MANAGER 的注意事项

- 如果个人电脑中已安装早期版本的软件，在安装新软件之前，务必将其卸载。否则可能造成故障。
- 在新版本软件中启动 IMPRINT SOUND MANAGER 时，您可以从下拉菜单中选择 MultEQ 兼容设备。如果用于测量的 MultEQ 设备和从下拉菜单中可选的不同，那么请注意您无法执行测量。
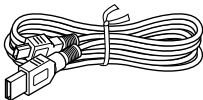
［日本語］
IMPRINT SOUND MANAGER インストール時の注意

- 旧ソフトウェアーバージョンがパソコンにインストールされている場合、必ずアンインストールを行ってから新ソフトウェアーのインストールを行ってください。動作不具合の原因となります。
- 新ソフトウェアーバージョンでは、IMPRINT SOUND MANAGER 起動時にプルダウンメニューから MultEQ 対応機器を選択する仕様になっております。計測する MultEQ 機器とプルダウンメニューから選択した機器が異なる場合は計測ができませんので注意してください。
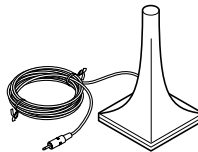
Accessories

CD-ROM   USB Cable (5m)   Sound Characteristics
Measurement Microphone (3m)

Installation

Caution before Installing
Install the IMPRINT SOUND MANAGER programme before connecting the PXA-H100 to your personal computer. If the programme is installed when the PXA-H100 connected to the PC, the programme may malfunction.

Operating System

This Programme runs under Microsoft® Windows® XP Service Pack-2 only. Make sure that this operating system is installed by referring to "System Properties" on your PC.
To use this programme, Microsoft.NET Framework 1.1 (or later) is required. If this application is not installed on your PC, the application is automatically installed with the programme.

Installing
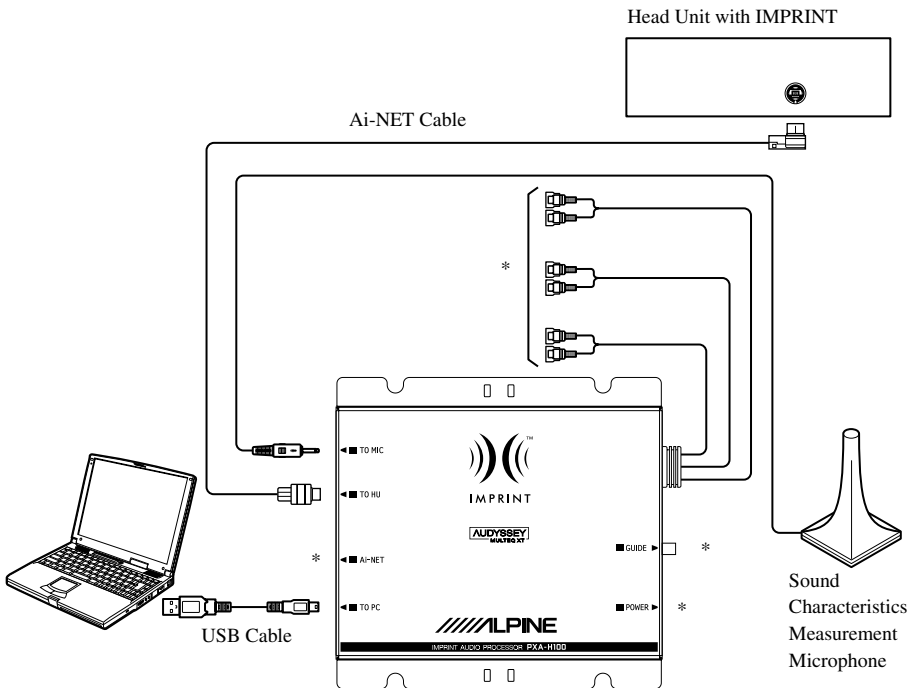
• *Before installing, all active programmes must be stopped.*

1 Insert the supplied CD-ROM into the CD-ROM drive. Run the setup.exe file in the IMPRINT folder. Follow the installation instructions on the screen.

2 Run the USB_setup.exe file in the DRIVER folder. Follow the onscreen instructions to complete the installation.

3 After completing the installation, restart your PC.

Connections

Before calibrating MultEQ, all other system connections must be complete and functional.

1 Install the IMPRINT compatible Alpine head unit (sold after November, 2007) and PXA-H100 into the vehicle.
  • Make the correct connection. For details, refer to the Owner's Manual of PXA-H100.

2 After completing all system connections, make sure that sound is output from all speakers.

3 Connect the USB Cable and Microphone to the PXA-H100.

4 Connect the USB Cable to a USB port of your PC.

Head Unit with IMPRINT

Ai-NET Cable

TO MIC

TO HU

Ai-NET

TO PC

USB Cable

GUIDE

POWER

Sound Characteristics Measurement Microphone

IMPRINT

AUDYSSEY MULTEQ XT

/////ALPINE

IMPRINT AUDIO PROCESSOR PXA-H100

   * Refer the Owner's Manual of the IMPRINT audio processor PXA-H100 (sold separately) to connect the cable.

• *Be sure the Imprint device is powered up before connecting the USB Cable to a PC. Failure to do so may result in communication error and measurement may not be possible.*

5   **Check all connections, start the MultEQ calibration.**

Before Calibrating MultEQ

⚠ WARNING

🚫   **While driving, do not set up MultEQ.**

NEVER try to calibrate MultEQ while driving. Road noise and vibration prevents any measurement from being anywhere close to accurate. Mic placement and the measurement test tone are critical to the accurate calibration of MultEQ. The slightest movement while driving and passengers sitting in the car (including the driver) all contribute to poor acoustical characterization. While all this is going on, the possibility of being distracted and causing an accident, is too obvious to even mention. Don't do it!

Read following provisions before calibrating MultEQ.

- Calibrate MultEQ in a setting with no background noises (or, at least very little). Turn off the engine, air-conditioner, heater and anything else that could make noises during testing. For example, a phone (any type as long as it can make noises to attract your attention) or dog (any breed for the same reason) shouldn't be left in or around the vehicle. Any extraneous noises prevent accurate characterization of the vehicle.
- Use only the microphone supplied with this unit for calibration. It has been specifically selected for optimum performance during the calibration procedure.
- If amplifiers are being used to drive any of the speakers in the system, make sure the gains are set at optimum levels for normal listening. Additional adjustments may be required if initial calibration is not satisfactory.
- If an amplifier is being used to drive satellites in a 2-way system (satellite/subwoofer), the high-pass filter used for the satellite amplifier must be turned off before running MultEQ calibration. If a low-pass filter is built into a powered subwoofer or subwoofer amplifier, turn it off (if possible) or set the cut-off frequency to the highest possible value.
- Once MultEQ calibration is completed, MX, X-OVER, Time Correction, User's EQ, Parametric EQ and Graphic EQ are adjusted according to MultEQ's parameters. While MultEQ is on, they cannot be adjusted independently.
- Storing the MultEQ settings in the PXA-H100 erases any data previously saved from earlier calibrations.

MultEQ Calibration

1   **Preparing for calibration**
- Park the vehicle in a quiet location.
- Close doors, windows, sunroof, etc.
- Turn off the engine of the vehicle.
- Set the air-conditioner and heater to OFF.

2   **Turn ignition switch of the vehicle to ACC (on).**

3-EN

- *If an air-conditioner or heater is turned on, turn it off. Measurement should not be performed if air-conditioner or heater noise is present.*

3 **Activate IMPRINT SOUND MANAGER installed on the PC, and then select PXA-H100.**
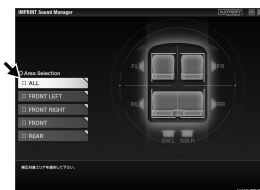

- *Strictly observe the Warnings and Cautions written by the manufacturers of your PC and peripheral equipment.*
- *We do not accept responsibility for data lost due to the incorrect operation of the IMPRINT SOUND MANAGER. We recommend you to back-up your important data regularly.*
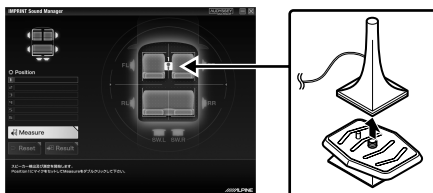
4 **Place the Measurement Microphone in the vehicle according to the IMPRINT SOUND MANAGER on screen instructions. Start the measurement.**

- *Perform PC operation outside the vehicle.*
- *If an error occurs during calibration, refer to the "Message List" at the end of this manual to help resolve the problem. Close the dialog box by double-clicking the OK button to exit the programme.*

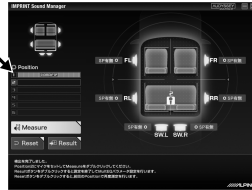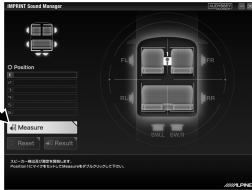**5** **From the IMPRINT SOUND MANAGER screen, double-click the Area Selection to be measured.**

6 **Follow the IMPRINT SOUND MANAGER on screen display for placement of the calibration microphone.**
Place the microphone in a vertical position, at ear level (a camera tripod is useful for this purpose).

7 **When microphone placement is complete, get out of the vehicle, and close all doors, windows and sunroof. Then, start measurement by double-clicking the Measure button on the IMPRINT SOUND MANAGER screen. Do not open the doors until "Complete" is displayed on the screen and signal sound is output from the speakers and sound characteristics are measured in the vehicle. If noise enters from outside during measurement, "Error" will be displayed on the screen. If displayed, measure again by double-clicking the Measure button.**
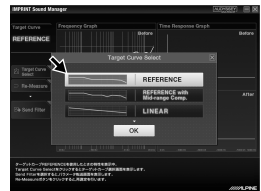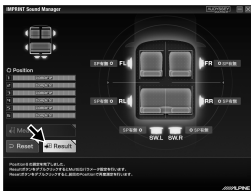

- *Perform PC operation outside the vehicle.*
- *Removing the microphone during calibration may cause an error.*

8 **After measuring the first microphone position, move the microphone to the next location indicated by the on the screen graphic. Repeat the procedure in step 7 following the on screen instructions.**
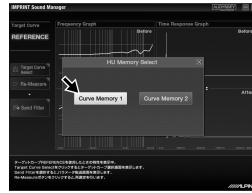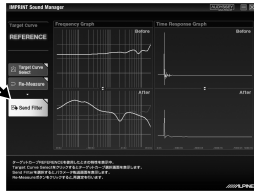

- *Preforming measurement from two locations in the car should be sufficient. If you want to finish after two measurement locations, double-clicking the Result button, and move to the Target Curve setting.*
- *For more precise measurement, 6 measurement locations are available; however, it will take approx. 20 minutes until all MultEQ measurements have been completed. In this case, be sure to perform MultEQ measurement with the vehicle connected to a car battery charger.*

9 **After all desired mic position measurements are complete, double-click the Result button to make the Target Curve selection. This curve sets the overall sound characteristics of the system. Select the Target Curve Select from the on screen choices.**

- *The measurement data cannot be stored on the PC hard disc, but can be memorized in the PXA-H100.*

10 After selecting a Target curve, double-click the **Send Filter** button to transfer the settings to the PXA-H100. Choose either **Curve Memory 1** or **Curve Memory 2** to store in PXA-H100 memory.
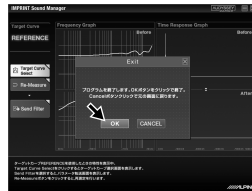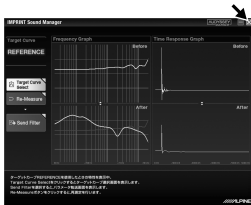

• *You can store two curve settings for one measurement result.*

11 If you are not satisfied with the measurement result, you can start from the procedure in step 7 by double-clicking the **Re-Measure** button.

• *If you perform the measurement again using the Re-Measure button, note that the previously stored settings in the PXA-H100 will be cleared and replaced by the new one.*

12 When the memory setting is complete, click **x** on the right side of the screen and double-clicking **OK** on the EXIT screen to close the IMPRINT SOUND MANAGER programme.

13 After you have finished the MultEQ calibration, disconnect the USB Cable from the PXA-H100.

14 Now, relax and enjoy the fruits of your labour with the newly, IMPRINT optimized system. By turning MultEQ on and off with this just calibrated Alpine head unit, the benefits of calibration are obvious.
For details on operating this IMPRINT compatible Alpine head unit, refer to its Owner's Manual.

About Trademark

• Audyssey MultEQ XT is a registered trademark of Audyssey Laboratories Inc.
• Microsoft and Windows are trademarks, or registered trademarks of Microsoft Corporation in the United States and/or other countries.

Message List

Message ID	Error Message
Error Code: E001	"MultEQ Error: The channel has been marked as undetected, and will be skipped."
Error Code: E002	"MultEQ Error: The bass management configuration selected is not supported by the device. Please consult the manufacturer's manual to determine a valid configuration."
Error Code: E003	"MultEQ Error: The speaker configuration specified is not valid. Please consult the manufacturer's manual to determine a valid configuration."
Error Code: E004	"MultEQ Error: Communication with the device failed. Please check the connection and try again."
Error Code: E005	"MultEQ Error: The device is not properly licensed."
Error Code: E006	"MultEQ Error: Device in use, try again in a few moments."
Error Code: E007	"MultEQ Error: The Maximum level was reached, without achieving an adequate signal. Please decrease the ambient noise and try again."
Error Code: E008	"MultEQ Error: The hardware sample format or bit depth is not supported."
Error Code: E009	"MultEQ Error: The action was cancelled by the user."
Error Code: E010	"MultEQ Error: The system was unable to calculate a filter for this response. Please try your measurements again. If this problem persists, contact technical support."
Error Code: E011	"MultEQ Error: The system was unable to determine the delay (speaker to microphone distance). Measure this value manually."
Error Code: E012	"MultEQ Error: The system may have been unable to determine the delay (speaker distance). Numbers given for this value should be checked manually."
Error Code: E013	"MultEQ Error: The input signal is too low. Check that the microphone is connected to the selected input, and check that the gain on the preamp or audio hardware input channel is properly set."
Error Code: E014	"MultEQ Error: The measured signal was too low, even though output was raised to the maximum available amplitude. Decrease ambient noise, and start over."
Error Code: E015	"MultEQ Error: The measured background noise exceeded allowable tolerances."
Error Code: E016	"MultEQ Error: An unspecified error has occurred."
Error Code: -1	MEASURE CANCEL
Error Code: -2	MEASURE COMMAND ERROR
Error Code: -3	FL SPEAKER NO DETECT
Error Code: -4	H.U NOISE MEASURE START ERROR
Error Code: -5	H.U MEASURE START ERROR
Error Msg: M001	"The MultEQ Pro application failed to communicate with the device. Please check the ALPINE Device configuration and try again."
Error Msg: M002	"The device is not properly licensed."

Message ID	Error Message
Error Msg: M003	"This action will reset the measurement system. Are you sure you want to continue?"
Error Msg: M004	"The license could not be verified."
Error Msg: M005	"No Speakers were detected. Please correct the system configuration."
Warning Msg: M006	"Do you wish to cancel measurement for this position so that you can correct these errors?"
Warning Msg: M007	"Do you wish to cancel measurement for this position so that you can correct this error?"
Error Msg: M008	"In order to continue with the calibration, you must correct any missing speakers or correct the zone configuration."
Error Msg: M009	"The attached device is not properly licensed. Filters will not be transferred."
Error Msg: M010	"The following error occurred while trying to save the calibration results file."