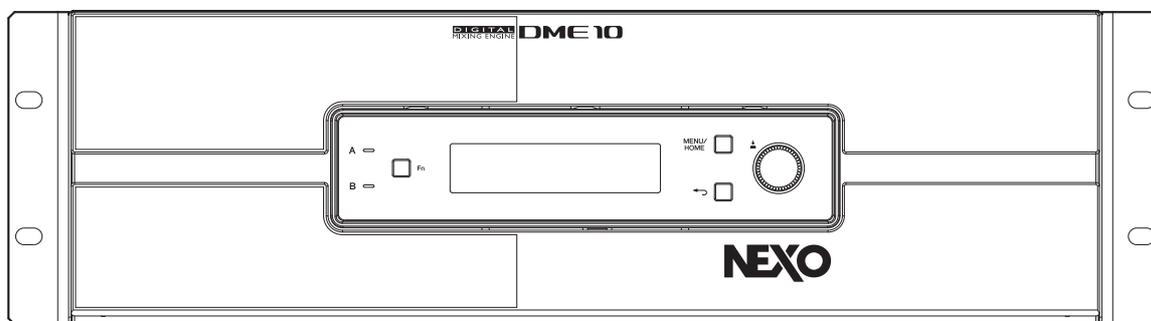


# NEXO

## SIGNAL PROCESSOR

### DME 10



SIGNAL PROCESSOR / PROCESSEUR DE SIGNAUX AUDIO

PROCESADOR DE SEÑAL / PROCESSADOR DE SINAL / СИГНАЛЬНЫЙ ПРОЦЕССОР

信号处理器 / 訊號處理器 / シグナルプロセッサー

- EN** Setup Guide
- DE** Installationsanleitung
- FR** Manuel de configuration
- ES** Manual de Instalación
- PT** Guia de Configuração
- IT** Guida alla configurazione
- RU** Руководство по установке
- ZH-CN** 设置指南
- ZH-TW** 設定指南
- KO** 설치 가이드
- JA** セットアップガイド

English

Deutsch

Français

Español

Português

Italiano

Русский

简体中文

繁體中文

한국어

日本語

## FCC INFORMATION (U.S.A.)

### 1. IMPORTANT NOTICE: DO NOT MODIFY THIS UNIT!

This product, when installed as indicated in the instructions contained in this manual, meets FCC requirements. Modifications not expressly approved by Yamaha may void your authority, granted by the FCC, to use the product.

### 2. IMPORTANT:

When connecting this product to accessories and/or another product use only high quality shielded cables. Cable/s supplied with this product MUST be used. Follow all installation instructions. Failure to follow instructions could void your FCC authorization to use this product in the USA.

### 3. NOTE:

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

(529-M03 FCC class A 01)

### COMPLIANCE INFORMATION STATEMENT (Supplier's declaration of conformity procedure)

Responsible Party : Yamaha Corporation of America

Address : 6600 Orangethorpe Avenue, Buena Park, CA. 90620, U.S.A.

Telephone : 714-522-9011

Type of Equipment : Signal Processor

Model Name : DME10

This device complies with Part 15 of the FCC Rules.

Operation is subject to two following conditions:

- 1) this device may not cause harmful interference, and
- 2) this device must accept any interference received, including interference that may cause undesired operation.

(529-M02 FCC sdoc YCA 02)

# PRECAUZIONI

## LEGGERE ATTENTAMENTE PRIMA DI CONTINUARE

Conservare questo manuale in un luogo sicuro per future consultazioni.



### AVVERTENZA

Attenersi sempre alle precauzioni di base indicate di seguito per evitare il rischio di lesioni gravi o addirittura di morte dovuto a scosse elettriche, cortocircuiti, danni, incendi o altri pericoli. Tali precauzioni includono, fra le altre, quelle indicate di seguito:

#### Anomalie

- Se si verifica uno dei problemi riportati di seguito, spegnere immediatamente il prodotto e scollegare la spina elettrica dalla presa.
    - La spina o il cavo di alimentazione è danneggiato.
    - Vengono emessi odori insoliti o fumo.
    - Alcuni oggetti o dell'acqua sono caduti nel prodotto.
    - Si verifica un'improvvisa scomparsa del suono durante l'utilizzo del prodotto.
    - Il prodotto presenta crepe o altri danni visibili.
- Richiedere quindi l'assistenza o la riparazione da parte di un tecnico autorizzato NEXO.

#### Alimentazione

- Non posizionare il cavo di alimentazione in prossimità di fonti di calore, quali radiatori o caloriferi. Non piegarlo eccessivamente né danneggiarlo. Non posizionare oggetti pesanti sul cavo, né collocarlo in luoghi dove potrebbe essere calpestato.
- Utilizzare solo la tensione corretta specificata per il prodotto. La tensione necessaria è indicata sulla piastrina del nome del prodotto.
- Utilizzare solo la spina elettrica/il cavo di alimentazione in dotazione o specificato.
 

Se si intende utilizzare il prodotto in un paese diverso da quello di acquisto, il cavo di alimentazione fornito potrebbe non essere utilizzabile. Per ulteriori informazioni, contattare il rivenditore NEXO.
- Non utilizzare il cavo/la spina in dotazione per altri prodotti.
- Controllare periodicamente la spina elettrica ed eventualmente rimuovere la sporcizia o la polvere accumulata.
- Assicurarsi di inserire completamente la spina elettrica per evitare scosse elettriche o un incendio.
- Questo prodotto è alimentato da più fonti. Prima di installare il prodotto, assicurarsi che la presa CA utilizzata sia facilmente accessibile. In caso di guasti o malfunzionamenti, spegnere immediatamente l'unità e scollegare tutte le spine elettriche dalle prese di corrente. Anche quando l'interruttore di alimentazione è spento, a condizione che il cavo di alimentazione non sia staccato dalla presa CA, il prodotto non si disconnette dalla sorgente di alimentazione.



- Se si prevede di non utilizzare il prodotto per un lungo periodo di tempo, rimuovere la spina dalla presa elettrica.
- Non toccare il prodotto o la spina elettrica durante una tempesta elettrica.
- Collegare il cavo a una presa appropriata dotata di messa a terra. Una messa a terra non corretta potrebbe causare scosse elettriche, incendi o danni.

#### Non aprire

- Questo prodotto non contiene componenti riparabili dall'utente. Non tentare di smontare o modificare in alcun modo i componenti interni.

#### Esposizione all'acqua

- Non esporre il prodotto alla pioggia, non usarlo vicino all'acqua o in ambienti umidi o bagnati né sistemare su di esso contenitori di liquidi (ad es. tazze, bicchieri o bottiglie) che possano riversarsi in una qualsiasi delle aperture.
- Non inserire o rimuovere la spina elettrica con le mani bagnate.

#### Esposizione al fuoco

- Non posizionare oggetti accesi o fiamme vive in prossimità del prodotto per evitare il rischio di incendio.

#### Danni all'udito

- Prima di collegare il prodotto ad altri dispositivi, spegnere tutte le unità del sistema. Inoltre, prima di accendere o spegnere tutti i dispositivi, impostare al minimo tutti i livelli di volume. In caso contrario, è possibile danneggiare il proprio udito, subire una scossa elettrica o danneggiare i dispositivi.
- Quando si accende il sistema audio, accendere sempre l'amplificatore/il prodotto PER ULTIMO, per evitare danni all'udito e all'altoparlante. Analogamente, quando si spegne il sistema audio, l'amplificatore deve essere spento PER PRIMO.

#### Batteria

- Ricaricare entro gli intervalli di temperatura specificati. La ricarica a una temperatura al di fuori dell'intervallo può causare perdite, surriscaldamento, esplosioni o danni.
- Non smaltire le batterie nel fuoco.
 

Non esporre la batteria a condizioni estreme di pressione atmosferica bassa, freddo o calore (ad .es. luce solare diretta o fuoco) ovvero livelli eccessivi di polvere o umidità. Ciò potrebbe causare l'esplosione della batteria, incendi o lesioni.
- Non smontare una batteria. La mancata osservanza di queste indicazioni può provocare incendi, surriscaldamento, esplosioni o malfunzionamenti. Se il contenuto della batteria viene a contatto con le mani o gli occhi, può causare cecità o ustioni chimiche.



## ATTENZIONE

**Attenersi sempre alle precauzioni di base elencate di seguito per evitare la possibilità di lesioni personali o ad altre persone. Tali precauzioni includono, fra le altre, quelle indicate di seguito:**

### Alimentazione

- Per scollegare il cavo di alimentazione dal prodotto o dalla presa elettrica, afferrare sempre la spina e non il cavo, per evitare di danneggiarlo.

### Posizione e collegamento

- Non collocare il prodotto in posizione instabile o soggetta a vibrazioni eccessive, per evitare che cada e che causi eventualmente lesioni.
- Tenere il prodotto fuori dalla portata dei bambini. Questo prodotto non è adatto per l'uso in luoghi in cui potrebbero essere presenti dei bambini.
- Non ostruire le prese d'aria. Questo prodotto dispone di prese di ventilazione frontali/posteriori che impediscono il surriscaldamento interno dell'unità. In particolare, non appoggiare il prodotto sui lati, né in posizione capovolta. Una ventilazione non adeguata può causare surriscaldamento, con conseguenti danni al prodotto o incendi.
- Per garantire una corretta dissipazione del calore del prodotto, durante l'installazione:
  - Non coprire il prodotto con un panno.
  - Non installare il prodotto su un tappeto o sulla moquette.
  - Assicurarsi che la superficie superiore sia rivolta verso l'alto; non installare il prodotto posizionandolo sui lati, né capovolgendolo.
  - Non utilizzare il prodotto in locali angusti e scarsamente ventilati.

Una ventilazione non adeguata può causare surriscaldamento, con conseguenti danni al prodotto o incendi. Assicurarsi di lasciare spazio sufficiente intorno al prodotto: almeno 10 cm sui lati e 15 cm nella parte posteriore.

- Se il prodotto viene montato in un rack EIA standard, leggere attentamente la sezione "Precauzioni per l'installazione in rack" a pagina 57. Una ventilazione non adeguata può causare surriscaldamento, con conseguenti danni al prodotto, malfunzionamenti o incendi.  
Se si intende utilizzare il prodotto in uno spazio ristretto diverso da un rack EIA standard, assicurarsi che vi sia spazio sufficiente intorno al prodotto stesso: almeno 10 cm sui lati e 15 cm nella parte posteriore.
- Non collocare il prodotto in una posizione che comporti il rischio di contatto con gas corrosivi o aria salmastra per evitare possibili malfunzionamenti.
- Prima di spostare il prodotto, scollegare tutti i cavi.

### Manutenzione

- Durante la pulizia del prodotto, rimuovere la spina elettrica dalla presa CA.

### Precauzioni di utilizzo

- Non introdurre le dita o le mani nelle aperture del prodotto (prese d'aria).
- Non appoggiarsi al prodotto né collocarvi sopra oggetti pesanti.

### Batteria di backup

- Non sostituire autonomamente la batteria di backup. Tale operazione potrebbe causare un'esplosione e/o danni ai prodotti.

Quando la batteria di backup deve essere sostituita, sul display sarà visualizzato il messaggio "Low Battery" (Batteria quasi scarica) o "No Battery" (Batteria scarica). In questo caso rivolgersi al rivenditore NEXO per fare in modo che un tecnico autorizzato NEXO sostituisca la batteria di backup.

## AVVISO

Attenersi sempre alle precauzioni di base indicate di seguito per evitare il rischio di guasti/danni al prodotto o ad altri elementi, così come la perdita dei dati.

### ■ Gestione e manutenzione

- Non collegare il prodotto alla rete Wi-Fi pubblica e/o direttamente a Internet. Collegare il prodotto a Internet solo per mezzo di un router a cui è possibile accedere tramite una valida password. Consultare il manuale del proprio router per maggiori informazioni sulla sicurezza.
- Non utilizzare il prodotto vicino a TV, radio e qualsiasi altra unità elettrica. In caso contrario, il prodotto o tali unità potrebbero generare disturbi e interferenze.
- Per evitare la deformazione dei pannelli, un funzionamento instabile e danni ai componenti interni, non esporre il prodotto a troppa polvere o vibrazioni, né a temperature estreme.
- Non installare in ambienti con grandi escursioni di temperatura. In caso contrario, la condensa che si formerebbe all'interno o sulla superficie del prodotto potrebbe causarne il danneggiamento.
- Nel caso in cui si sospetti la formazione di condensa, per evitare guasti si raccomanda di non accendere il prodotto per diverse ore, o comunque fino all'avvenuta evaporazione della condensa.
- Non collocare oggetti di vinile, plastica o gomma sul prodotto, dato che ciò potrebbe causare la deformazione o lo scolorimento del pannello.
- Pulire il prodotto utilizzando un panno asciutto e morbido. Non pulire le superfici del prodotto con ipoclorito di sodio, alcol, benzene, diluenti per vernici, liquidi per la pulizia o panni impregnati di sostanze chimiche, che potrebbero causare lo scolorimento o modificare le caratteristiche della superficie.
- Utilizzare un cavo USB type-C (da USB-A a USB-C oppure da USB-C a USB-C) non più lungo di 3 metri.



#### **Avvertenza**

L'utilizzo dell'apparato in ambienti residenziali può causare interferenze radio.

## Informazioni

### ■ Informazioni sui diritti d'autore

- Sono espressamente vietate la copia del software o la riproduzione totale o parziale del presente manuale con qualsiasi mezzo senza il consenso scritto del produttore.

### ■ Note su funzioni/dati inclusi con il prodotto

- Questo prodotto utilizza un modulo Dante fornito da Audinate Pty. Ltd. È possibile utilizzare Dante Controller per visualizzare le informazioni sul modulo Dante utilizzato in questo prodotto.  
Per ulteriori informazioni sulla licenza software open source applicabile a ciascun modulo Dante, visitare il sito Web di Audinate.  
<https://www.audinate.com/software-licensing>

### ■ Note sul manuale

- Le immagini e le schermate riprodotte nel presente manuale sono puramente a titolo esemplificativo.
- NEXO S.A. non rilascia alcuna dichiarazione o garanzia in merito all'uso del software e della documentazione e non può essere ritenuta responsabile dei risultati dell'uso di questo manuale e del software.
- I nomi di aziende e di prodotti menzionati nel presente manuale sono marchi commerciali o marchi registrati appartenenti ai rispettivi proprietari.
- Il software può essere soggetto a revisioni e aggiornamenti senza ulteriore preavviso.

### ■ Note sullo smaltimento

- Questo prodotto contiene componenti riciclabili.  
Per lo smaltimento dell'unità, contattare gli enti locali preposti.

NEXO non potrà essere ritenuta responsabile per i danni causati dall'uso improprio o dalle modifiche apportate al prodotto, né per l'eventuale perdita o danneggiamento dei dati.

Il numero di modello e quello di serie, i requisiti di alimentazione e altre informazioni del prodotto si trovano sulla piastrina o vicino alla stessa. La piastrina del prodotto si trova nella parte superiore dell'unità. Annotare il numero di serie nello spazio indicato di seguito e conservare il manuale come documento di comprovazione dell'acquisto; in tal modo, in caso di furto, l'identificazione sarà più semplice.

#### **Numero del modello**

---

#### **Numero di serie**

---

(1003-M06 plate top it 01)

# Introduzione

---

Grazie per aver scelto il processore di segnale NEXO DME10. Questo prodotto può elaborare una vasta gamma di segnali audio. Questa Guida alla configurazione spiega come configurare le varie impostazioni di base durante l'installazione. Per assicurarsi di poter utilizzare correttamente tutte le funzioni del prodotto, è necessario leggere questa Guida alla configurazione prima di utilizzarlo. Dopo aver letto la Guida alla configurazione, conservarla per riferimenti futuri.

## Caratteristiche

---

- **Processore di segnale programmabile per l'elaborazione di sistemi audio in una vasta gamma di applicazioni**

Il DME10 è un processore altamente configurabile che offre funzionalità sofisticate e una qualità audio eccezionale per un'ampia gamma di applicazioni. Oltre alle classiche funzionalità, come ad esempio matrice/missaggio, equalizzatore, delay, compressore e gate, l'unità include molti componenti per il supporto di altre applicazioni, come ad esempio auto-mixer e room combiner. L'unità supporta anche sistemi audio di grande scala composti da 256 × 256 canali di ingressi/uscite Dante.

- **Il software applicativo Yamaha ProVisionaire Design consente di progettare un sistema audio completo.**

Il software applicativo ProVisionaire Design consente di programmare varie funzioni di elaborazione audio del DME10. Consente inoltre di progettare un sistema audio integrato completo, compresi ingressi/uscite e amplificatori.

- **Il software applicativo Yamaha AFC Image Controller consente di creare un ambiente sonoro coinvolgente in qualsiasi spazio.**

È possibile utilizzare il software applicativo AFC Image Controller per configurare e controllare un sistema AFC Image. Può creare un'esperienza acustica immersiva consentendo agli utenti la flessibilità di controllare la posizione percepita delle immagini sonore all'interno di uno spazio in un'ampia varietà di applicazioni, come teatri, sale d'opera, sale da concerto, installazioni sonore e parchi a tema.

- **Supporto per i controller esterni Yamaha**

Il DME10 supporta tutti i pannelli di controllo DCP da incasso a parete. Supporta inoltre l'applicazione ProVisionaire Control PLUS per Windows, che può essere utilizzata per personalizzare i progetti. Il DME10 supporta anche la personalizzazione degli ambienti operativi in base alle applicazioni specifiche delle apparecchiature. ProVisionaire Control PLUS consente di inviare l'output all'app ProVisionaire Kiosk per Windows e iOS e di utilizzarla come app dedicata per il funzionamento in loco.

## Sommario

---

Introduzione.....	56	Installazione dei connettori Euroblock .....	58
Caratteristiche .....	56	Collegamento del cavo di alimentazione .....	58
Contenuto della confezione (si prega di verificare) .....	56	Accensione e spegnimento.....	58
Manuali inclusi.....	57	Installazione del gancio di tenuta.....	59
Software Yamaha ProVisionaire Design.....	57	Impostazioni dell'unità principale .....	59
Yamaha AFC Image .....	57	Ripristino (reinizializzazione) delle impostazioni	
Driver USB Yamaha Steinberg .....	57	predefinite di fabbrica .....	61
Aggiornamento del firmware.....	57	Specifiche tecniche generali .....	62
Precauzioni per l'installazione in rack.....	57	Dimensioni.....	116

## Contenuto della confezione (si prega di verificare)

---

- Guida alla configurazione (questo manuale) × 1
- Connettori Euroblock (a 16 pin, passo 3,50 mm) × 2
- Cavi di alimentazione × 2
- Gancio di tenuta × 1

## Manuali inclusi

---

- **Guida alla configurazione del DME10 (questo manuale)**  
Spiega in dettaglio la procedura di configurazione, dal collegamento del cavo di alimentazione alle impostazioni del sistema.
- **Manuale di riferimento del DME10 (HTML)**  
Spiega come configurare i parametri e il funzionamento del sistema.
- **Guida per l'utente Yamaha ProVisionaire Design (HTML)**  
Spiega come utilizzare il software ProVisionaire Design per controllare il DME10 tramite un computer.  
<https://manual.yamaha.com/pa/pv/pvd/>
- **Guida per l'utente Yamaha AFC Image Controller (HTML)**  
Spiega come usare il software AFC Image Controller per controllare da un computer AFC Image, un componente acquistabile.  
[https://manual.yamaha.com/audio/apps\\_software/afc\\_image\\_controller](https://manual.yamaha.com/audio/apps_software/afc_image_controller)

## Software Yamaha ProVisionaire Design

---

Questa applicazione software per Windows integra impostazioni per dispositivi come processori di segnale, amplificatori di potenza e interfacce audio.

È possibile scaricare ProVisionaire Design dal seguente sito web:

<https://www.yamahaproaudio.com/>

Per maggiori informazioni, consultare la Guida per l'utente ProVisionaire Design (HTML).

## Yamaha AFC Image

---

Si tratta di un sistema di controllo dell'immagine sonora che consente una produzione acustica immersiva in un'ampia varietà di applicazioni, come teatri, sale d'opera, sale da concerto e altre installazioni.

Per scaricare il software applicativo AFC Image Controller utilizzabile per il controllo dell'immagine sonora, visitare il seguente sito web.

<https://www.yamahaproaudio.com/>

Per maggiori informazioni, consultare la Guida per l'utente AFC Image Controller (HTML).

## Driver USB Yamaha Steinberg

---

Il software del driver USB Yamaha Steinberg consente di connettere via USB il DME10 a un computer.

È possibile interfacciarsi con il software DAW e altri dispositivi utilizzando fino a 8 ingressi e 8 uscite audio.

È possibile scaricare il driver dal seguente sito web:

<https://www.yamahaproaudio.com/>

## Aggiornamento del firmware

---

È possibile aggiornare il firmware dell'unità principale per migliorare il funzionarne il funzionamento, aggiungere funzionalità e correggere bug.

Quando un aggiornamento è disponibile, le relative informazioni saranno pubblicate sul seguente sito web.

<https://www.nexo-sa.com/>

Fare riferimento alla Guida per l'utente ProVisionaire Design (HTML) per la procedura di aggiornamento e le impostazioni dell'unità principale.

### NOTA

In alcuni casi, l'aggiornamento può essere richiesto per consentire la compatibilità con altri dispositivi in base alla versione delle unità incluse nella rete Dante. Per maggiori informazioni, consultare la tabella di compatibilità firmware sul sito web NEXO sopra riportato.

## Precauzioni per l'installazione in rack

---

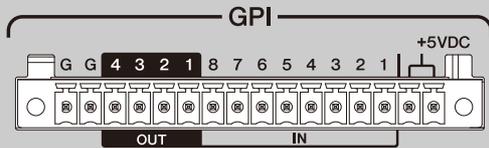
Il prodotto può essere usato in ambienti in cui la temperatura è compresa tra 0 e 40 °C. Nel caso si intendano utilizzare solo unità DME10, queste possono essere installate in un rack EIA standard senza lasciare alcuno spazio tra i moduli. Se installato in un rack EIA standard insieme a unità differenti, il calore generato da queste potrebbe impattare negativamente sulle prestazioni del DME10 a causa delle temperature elevate all'interno del rack. Per evitare il surriscaldamento all'interno del prodotto, assicurarsi di installarlo in modo da soddisfare le seguenti condizioni.

- Se installato insieme a un amplificatore di potenza o altri dispositivi in grado di generare calore, lasciare almeno una unità rack di spazio tra il prodotto e altri dispositivi. Inoltre, per garantire un'adeguata ventilazione, installare un pannello di ventilazione in tali spazi vuoti, oppure lasciarli del tutto aperti.
- Il DME10 è progettato per aspirare l'aria dalle prese di ventilazione frontali e per espellerla dal retro. Evitare quindi di installarlo insieme ad altri dispositivi che aspirano aria dal retro espellendola dal davanti.
- Lasciare il retro del rack aperto e posizionare lo stesso ad almeno 10 cm di distanza dal muro o dal soffitto. Nel caso non sia possibile lasciare aperto il retro del rack, utilizzare un kit di ventilazione disponibile in commercio o un sistema di ventilazione forzata simile. Installando un kit di ventilazione, in alcuni casi è possibile dissipare in modo più efficace il calore in eccesso chiudendo il retro del rack. Per maggiori informazioni, fare riferimento ai manuali di istruzione del rack e del kit di ventilazione.

# Installazione dei connettori Euroblock

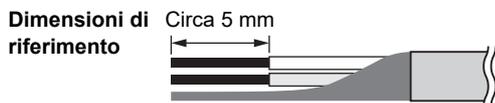
Utilizzare i connettori Euroblock in dotazione per collegare i terminali [GPI].

3,5 mm  
Euroblock a 16 pin



## Preparazione e impiego dei cavi

Spellare il cavo da collegare al connettore Euroblock come mostrato nell'immagine seguente e collegare i cavi conduttori. Si noti che la sovrapposizione o la vibrazione dei cavi connessi all'Euroblock possono causare la rottura dei conduttori dovuta alla sollecitazione dei metalli.

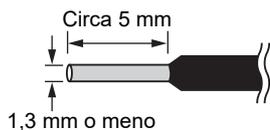


### Attenzione

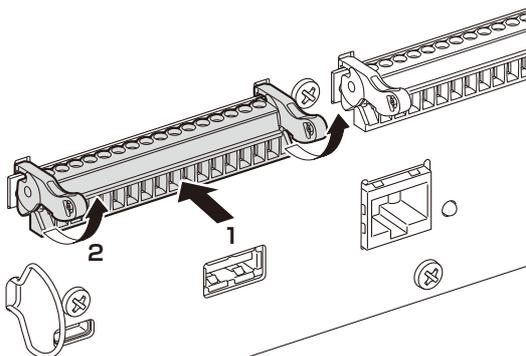
Se Euroblock è connesso con fili conduttori, non saldarne le estremità.

Se i collegamenti vengono inseriti e disinseriti frequentemente, si consiglia di utilizzare terminali pin dotati di manicotti di isolamento. Utilizzare i connettori pin come quello di seguito mostrato.

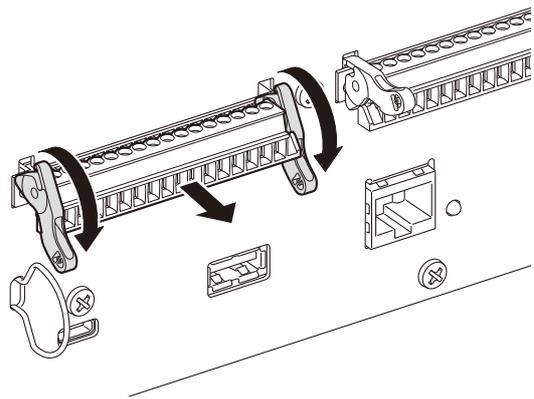
Utilizzare un modello con un diametro massimo di 1,3 mm e lunghezza di circa 5 mm (come ad esempio il modello A10, 5-6WH prodotto da Phoenix Contact).



1. Inserire il connettore Euroblock completamente nel connettore [GPI] principale fino a toccare il lato più in basso. Quindi, alzare i fermi sui lati sinistro e destro.



2. Per scollegare un connettore Euroblock, abbassare i fermi sinistro e destro ed estrarre il connettore.



## Collegamento del cavo di alimentazione



### Avvertenza

Utilizzare sempre il cavo di alimentazione in dotazione. Non utilizzare cavi di alimentazione forniti con altri prodotti. In caso contrario, è possibile che si verifichino guasti, surriscaldamento, incendi o altri problemi.



### Attenzione

Assicurarsi di SPEGNERE l'unità prima di collegare o scollegare il cavo di alimentazione.

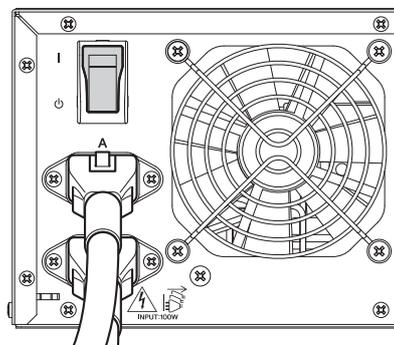
1. Collegare il cavo di alimentazione in dotazione. Innanzitutto, collegare il cavo di alimentazione all'unità principale; quindi, inserire la spina del cavo nella presa di corrente.

### NOTA

- Per scollegare il cavo di alimentazione, eseguire la procedura sopra descritta in senso inverso.
- Premere il fermo del cavo di alimentazione per scollegare il cavo.

## Accensione e spegnimento

1. Premere l'interruttore sul pannello posteriore in posizione ON (I) per accendere oppure OFF (⏻) per spegnere.



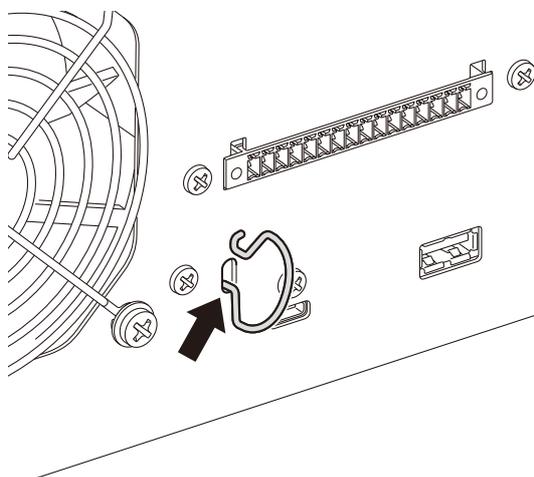
### AVVISO

- Accendere e spegnere in rapida successione potrebbe causare malfunzionamenti all'unità. Dopo aver spento l'alimentazione, attendere almeno sei secondi prima di riaccenderla.
- Una minima quantità di corrente continua a fluire nell'unità anche quando è spenta. Assicurarsi di scollegare il cavo di alimentazione dalla presa di corrente se non si intende usare l'unità per un periodo di tempo prolungato.

## Installazione del gancio di tenuta

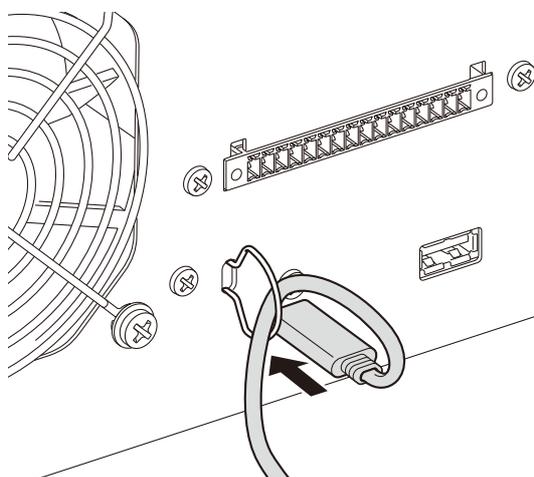
È presente un gancio di tenuta che impedisce al cavo USB di staccarsi accidentalmente. Per fissare il gancio di tenuta, procedere come segue.

1. Inserire un'estremità del gancio di tenuta nella parte bassa dello slot di sicurezza, situato in basso a sinistra sul pannello posteriore.



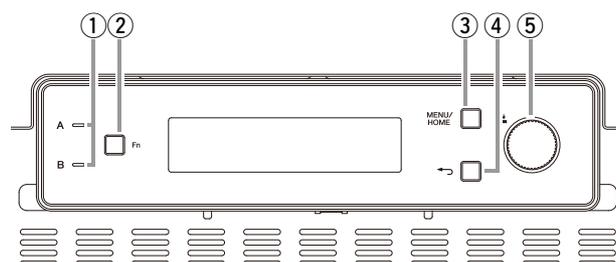
2. Inserire l'altra estremità del gancio di tenuta nella parte alta dello slot di sicurezza.

3. Far passare il cavo USB attraverso il gancio di tenuta e collegarlo alla porta USB.



## Impostazioni dell'unità principale

### Panoramica del pannello frontale



#### ① Indicatore [A/B]

L'indicatore [A/B] mostra quale terminale [A]/[B] AC IN (ingresso alimentazione) è connesso all'alimentazione. Si illumina in verde quando l'unità è accesa.

#### ② Tasto [Fn]

Premere il tasto [Fn] per visualizzare la schermata [Device Mute]. Premerlo nuovamente per visualizzare la schermata [Control Function].

#### ③ Tasto [MENU/HOME]

Premere il tasto [MENU/HOME] per alternare tra le schermate [Menu] e [Home].

#### ④ Tasto [↶] (indietro)

Premere il tasto [↶] (indietro) per visualizzare la schermata precedente.

#### ⑤ Manopola principale

Ruotare la manopola principale per selezionare i parametri o modificarne l'impostazione. Premere la manopola per applicare l'impostazione.

### Impostazione PANEL LOCK/UNLOCK

Tenendo premuti i tasti [MENU/HOME] e [↶] (indietro) per almeno due secondi, è possibile bloccare o sbloccare il pannello dei comandi.

Quando il pannello è bloccato, nella schermata [Home] viene mostrata l'icona di una chiave.

## Impostazione dell'ID dell'unità

Nel caso in cui si desideri collegare più unità DME10, assicurarsi che ogni unità abbia un numero di ID differente.

1. Nella schermata [Menu], ruotare la manopola principale per selezionare [Settings], premere quindi la manopola per applicare l'impostazione.

Viene mostrata la schermata [Unit ID].



2. Nella schermata [Unit ID], premere la manopola principale per attivare la modalità Edit.



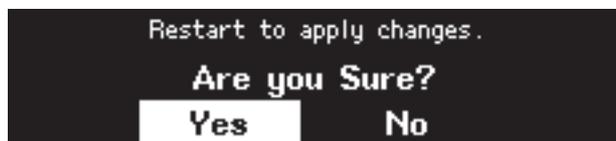
3. Ruotare la manopola per selezionare l'ID desiderato.

Cambiando l'impostazione del parametro Unit ID, il valore inizia a lampeggiare.

L'intervallo di valori è compreso tra 01 e FE in esadecimale.

4. Una volta selezionato l'Unit ID da modificare, premere la manopola principale.

Appare un messaggio che invita a riavviare l'unità.

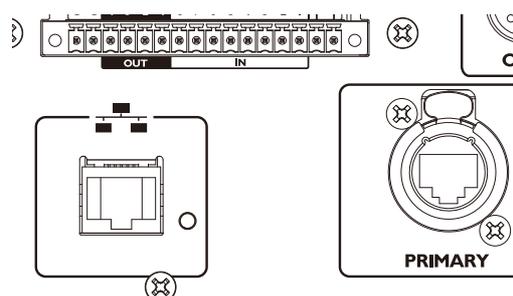


5. Ruotare la manopola principale per selezionare [Yes], quindi premerla per applicare l'impostazione.

Il nuovo Unit ID viene attivato dopo il riavvio dell'unità.

## Collegamento a Yamaha ProVisionaire Design

Collegare il computer su cui è stato installato il software ProVisionaire Design direttamente al connettore di rete o Dante Primary sul retro dell'unità principale, o tramite uno switch di rete.

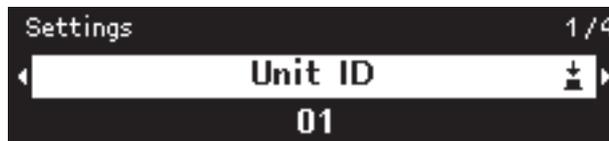


## Impostazione dell'indirizzo IP

L'indirizzo IP specifica la porta (DME Control Port1, DME Control Port2) utilizzata per comunicare con Yamaha ProVisionaire Design.

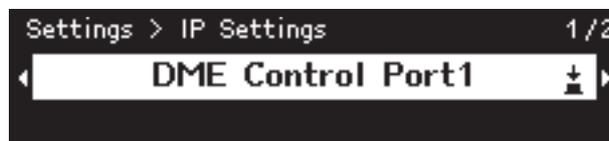
1. Nella schermata [Menu], ruotare la manopola principale per selezionare [Settings], premere quindi la manopola per applicare l'impostazione.

Viene mostrata la schermata [Unit ID].



2. Ruotare la manopola principale per selezionare [IP Settings], quindi premerla per applicare l'impostazione.

Viene mostrata la schermata [DME Control Port1].



3. Nella schermata [DME Control Port1], premere la manopola principale per selezionare la schermata [Network Mode].



4. Premere la manopola principale per attivare la modalità di modifica.

5. Ruotare la manopola principale per selezionare [Unit ID], quindi premerla nuovamente per applicare la selezione.



Questo determinerà l'impostazione dell'indirizzo IP su 192.168.0.x (dove "x" indica lo Unit ID) e della maschera di sottorete su 255.255.255.0.

Sia l'indirizzo IP che la maschera di sottorete sono espressi in formato decimale.

### NOTA

Per impostazioni in modalità DHCP o con IP statico, fare riferimento alla Guida per l'utente Yamaha ProVisionaire Design.

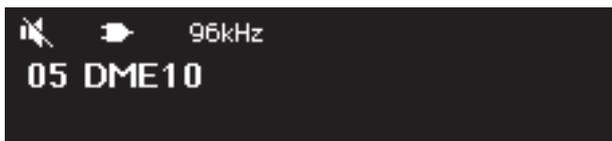
## Attivazione/Disattivazione del mute

1. Premere il tasto [Fn] per visualizzare la schermata [Device Mute].



2. Ruotare la manopola principale per selezionare [Yes], quindi premerla per applicare la selezione.

Lo stato ON/OFF di mute può essere visualizzato in base alle icone che appaiono nella parte superiore della schermata [Home].



Per annullare lo stato di mute, premere nuovamente il tasto [Fn].

### NOTA

Premendo due volte di seguito il tasto [Fn], è possibile visualizzare la schermata di controllo ON/OFF. È possibile specificare l'impostazione nella stessa maniera descritta in precedenza.

## Ripristino (reinizializzazione) delle impostazioni predefinite di fabbrica

È possibile inizializzare il prodotto in due modi.

### Selezionando [Settings] e poi [Initialize Settings]

Non spegnere l'unità durante l'operazione di inizializzazione.

1. Nella schermata [Menu], ruotare la manopola principale per selezionare [Settings], premere quindi la manopola per applicare l'impostazione.

Viene mostrata la schermata [Unit ID].



2. Ruotare la manopola principale per selezionare [Initialize Settings], quindi premerla nuovamente per applicare la soluzione.



Viene visualizzata una schermata che consente di selezionare l'impostazione da inizializzare.

3. Ruotare la manopola principale per selezionare l'impostazione da inizializzare, quindi impostare su On solo quell'impostazione.



Oltre alle impostazioni del processore di segnale, è possibile scegliere On per inizializzare anche i seguenti parametri.

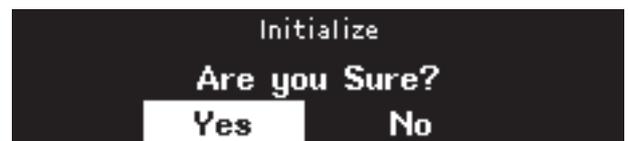
IP Settings
Unit ID/ Device Name
Dante Settings
Stored Files

### NOTA

Questo tipo di inizializzazione non ha effetto sul PIN dell'amministratore di sistema né sulle informazioni relative all'attivazione della licenza.

4. Una volta terminata la selezione delle impostazioni, ruotare la manopola principale per scegliere [Initialize] e premere la manopola.

Viene mostrata una schermata per la conferma dell'inizializzazione.



5. Ruotare la manopola principale per selezionare [Yes], quindi premerla per applicare la selezione.

Il sistema viene automaticamente riavviato alla fine dell'inizializzazione.

## Forzando l'inizializzazione se si dimentica il codice PIN

Nel caso in cui si dimentichi il codice PIN per il blocco del pannello o il PIN dell'amministratore, e non sia quindi possibile selezionare [Initialize] nella schermata [Settings], è possibile usare la seguente procedura per forzare l'inizializzazione.

### NOTA

L'inizializzazione forzata non rimuove le informazioni sull'attivazione della licenza, ma ripristina tutte le altre impostazioni ai valori di fabbrica.

1. Tenere premuti i tasti [Fn], [MENU/HOME] e [ ← ] (indietro) e ACCENDERE l'unità.

2. Continuare a tenere premuti i tre tasti fino a quando sullo schermo non appare il logo NEXO e la schermata di inizializzazione.

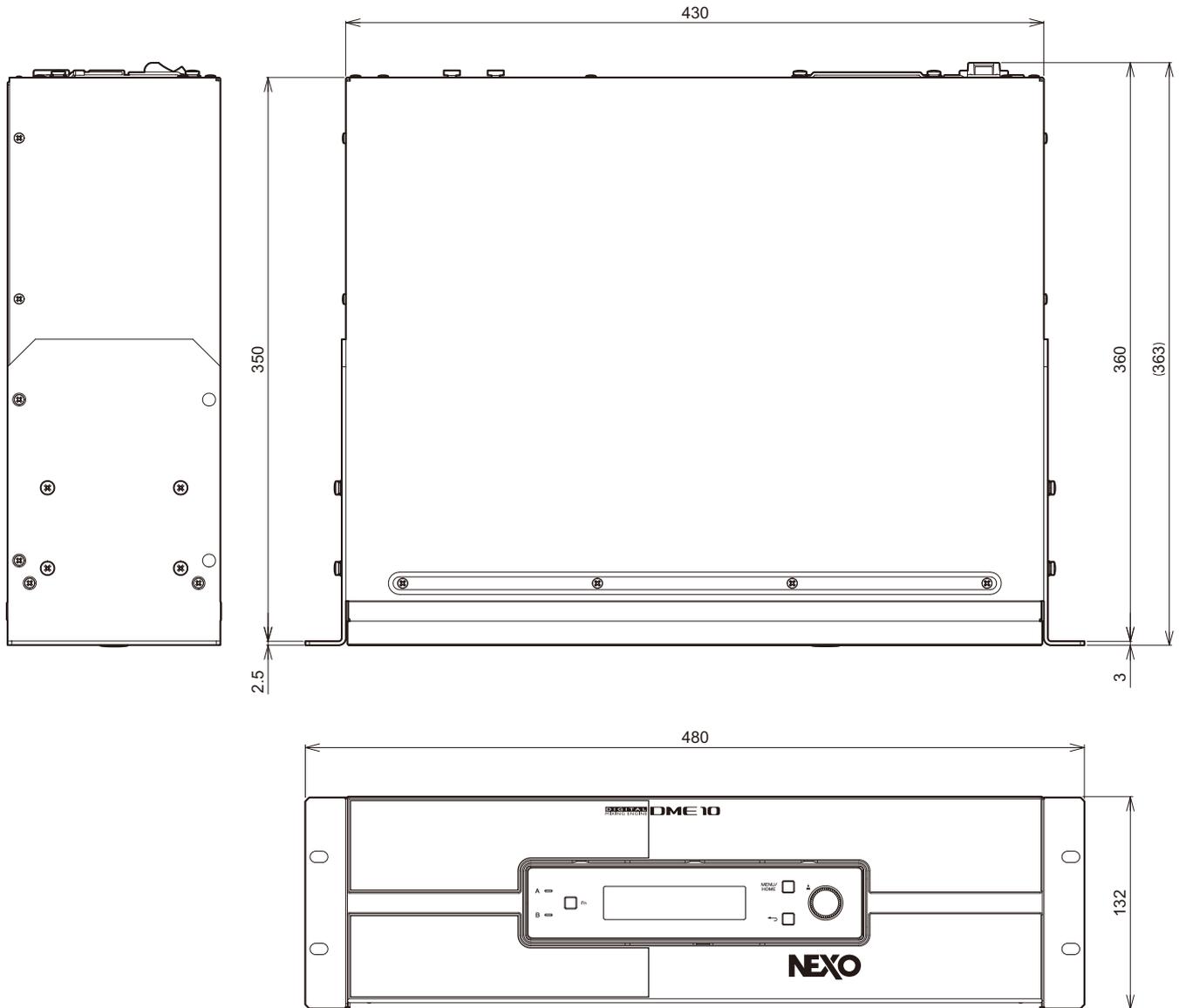
Il sistema viene automaticamente riavviato alla fine dell'inizializzazione.

## Specifiche tecniche generali

<b>Interfaccia Dante</b>	Numero di canali	256 ingressi 256 uscite, ridondanti
	Frequenza di campionamento	44,1/48/88,2/96 kHz
	Risoluzione in bit	24/32 Bit
<b>Audio USB</b>	Numero di canali	8 IN, 8 OUT con SRC
	Frequenza di campionamento	44,1/48/88,2/96 kHz
<b>Connettori</b>	Dante	etherCON × 2 (PRIMARY / SECONDARY) 1000Base-T
	DCP	RJ45 × 1
	USB TO HOST	USB 2.0 di tipo C (Audio USB)
	USB TO DEVICE	USB 2.0 di tipo A (per salvataggio file)
	Rete	RJ45 × 1 100Base-TX
	GPIO	Euroblock 16 pin (mini) × 2 (GPI × 16, GPO × 8, alimentazione +5 V × 4)
	MIDI	DIN 5 pin × 2 (IN, OUT)
	AC IN	Presca CA (IEC, V-Lock) × 2
	<b>Requisiti alimentazione elettrica</b>	Da 100 V a 240 V; 50 Hz/60 Hz
<b>Consumo elettrico</b>	100 W	
<b>Temperatura di esercizio</b>	Da 0 °C a +40 °C	
<b>Temperatura di stoccaggio</b>	Da -20 °C a +60 °C	
<b>Dimensioni (L × A × P)</b>	480 × 132 × 363 mm (3U)	
<b>Peso netto</b>	9,5 kg	
<b>Contenuto della confezione</b>	Guida alla configurazione (questo manuale), connettori Euroblock (16 pin, passo 3,50 mm) × 2, cavi di alimentazione × 2, gancio di tenuta × 1	

\* Il contenuto del presente manuale si applica alle ultime specifiche tecniche a partire dalla data di pubblicazione. Per ottenere la versione più recente del manuale, accedere al sito Web NEXO e scaricare il file corrispondente.

**Dimensions/Abmessungen/Dimensionen/Dimensiones/Dimensões/  
Dimensioni/Размеры/尺寸/尺寸/치수/寸法図**



Unit: mm

# Apache License Version 2.0, January 2004

<http://www.apache.org/licenses/>

## TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

### 1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-

exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

(a) You must give any other recipients of the Work or Derivative Works a copy of this License; and

(b) You must cause any modified files to carry prominent notices stating that You changed the files; and

(c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and

(d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions. Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service

marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

## END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");  
you may not use this file except in compliance with the License.

You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

## BSD License

Copyright (c) The Regents of the University of California.

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the University nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

## GNU GENERAL PUBLIC LICENSE

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.

51 Franklin Street, Fifth Floor, Boston, MA 02110-1301, USA

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

### Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software—to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Lesser General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

### TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either

the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.
- b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.
- c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a stor-

age or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

- a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT

HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### END OF TERMS AND CONDITIONS

#### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

one line to give the program's name and an idea of what it does.  
Copyright (C) yyyy name of author

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301, USA.

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

Gnomovision version 69, Copyright (C) year name of author  
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w`. This is free software, and you are welcome to redistribute it under certain conditions; type `show c` for details.  
The hypothetical commands `show w` and `show c` should show the appropriate parts of the General Public License. Of course, the commands you use

may be called something other than "show w" and "show c" they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the program "Gnomovision" (which makes passes at compilers) written by James Hacker.

signature of Ty Coon, 1 April 1989  
Ty Coon, President of Vice

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this License.

## GNU GENERAL PUBLIC LICENSE

Version 3, 29 June 2007

Copyright © 2007 Free Software Foundation, Inc.  
<<http://fsf.org/>>

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

### Preamble

The GNU General Public License is a free, copyleft license for software and other kinds of works.

The licenses for most software and other practical works are designed to take away your freedom to share and change the works. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change all versions of a program--to make sure it remains free software for all its users. We, the Free Software Foundation, use the GNU General Public License for most of our software; it applies also to any other work released this way by its authors. You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for them if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs, and that you know you can do these things.

To protect your rights, we need to prevent others from denying you these rights or asking you to surrender the rights. Therefore, you have certain responsibilities if you distribute copies of the software, or if you modify it: responsibilities to respect the freedom of others.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must pass on to the recipients the same freedoms that you received. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

Developers that use the GNU GPL protect your rights with two steps: (1) assert copyright on the software, and (2) offer you this License giving you legal permission to copy, distribute and/or modify it.

For the developers' and authors' protection, the GPL clearly explains that there is no warranty for this free software. For both users' and authors' sake, the GPL requires that modified versions be marked as changed, so that their problems will not be attributed erroneously to authors of previous versions.

Some devices are designed to deny users access to install or run modified versions of the software inside them, although the manufacturer can do so. This is fundamentally incompatible with the aim of protecting users' freedom to change the software. The systematic pattern of such abuse occurs in the area of products for individuals to use, which is precisely where it is most unacceptable. Therefore, we have designed this version of the GPL to prohibit the practice for those products. If such problems arise substantially in other domains, we stand ready to extend this provision to those domains in future versions of the GPL, as needed to protect the freedom of users.

Finally, every program is threatened constantly by software patents. States should not allow patents to restrict development and use of software on general-purpose computers, but in those that do, we wish to avoid the special danger that patents applied

to a free program could make it effectively proprietary. To prevent this, the GPL assures that patents cannot be used to render the program non-free.

The precise terms and conditions for copying, distribution and modification follow.

### TERMS AND CONDITIONS

#### 0. Definitions.

"This License" refers to version 3 of the GNU General Public License.

"Copyright" also means copyright-like laws that apply to other kinds of works, such as semiconductor masks.

"The Program" refers to any copyrightable work licensed under this License. Each licensee is addressed as "you". "Licensees" and "recipients" may be individuals or organizations.

To "modify" a work means to copy from or adapt all or part of the work in a fashion requiring copyright permission, other than the making of an exact copy. The resulting work is called a "modified version" of the earlier work or a work "based on" the earlier work.

A "covered work" means either the unmodified Program or a work based on the Program.

To "propagate" a work means to do anything with it that, without permission, would make you directly or secondarily liable for infringement under applicable copyright law, except executing it on a computer or modifying a private copy. Propagation includes copying, distribution (with or without modification), making available to the public, and in some countries other activities as well.

To "convey" a work means any kind of propagation that enables other parties to make or receive copies. Mere interaction with a user through a computer network, with no transfer of a copy, is not conveying.

An interactive user interface displays "Appropriate Legal Notices" to the extent that it includes a convenient and prominently visible feature that (1) displays an appropriate copyright notice, and (2) tells the user that there is no warranty for the work (except to the extent that warranties are provided), that licensees may convey the work under this License, and how to view a copy of this License. If the interface presents a list of user commands or options, such as a menu, a prominent item in the list meets this criterion.

#### 1. Source Code.

The "source code" for a work means the preferred form of the work for making modifications to it. "Object code" means any non-source form of a work.

A "Standard Interface" means an interface that either is an official standard defined by a recognized standards body, or, in the case of interfaces specified for a particular programming language, one that is widely used among developers working in that language.

The "System Libraries" of an executable work include anything, other than the work as a whole, that (a) is included in the normal form of packaging a Major Component, but which is not part of that Major Component, and (b) serves only to enable use of the work with that Major Component, or to implement a Standard Interface for which an implementation is available to the public in source code form. A "Major Component", in this context, means a major essential component (kernel, window system, and so on) of the specific operating system (if any)

on which the executable work runs, or a compiler used to produce the work, or an object code interpreter used to run it.

The “Corresponding Source” for a work in object code form means all the source code needed to generate, install, and (for an executable work) run the object code and to modify the work, including scripts to control those activities. However, it does not include the work’s System Libraries, or general-purpose tools or generally available free programs which are used unmodified in performing those activities but which are not part of the work. For example, Corresponding Source includes interface definition files associated with source files for the work, and the source code for shared libraries and dynamically linked subprograms that the work is specifically designed to require, such as by intimate data communication or control flow between those subprograms and other parts of the work.

The Corresponding Source need not include anything that users can regenerate automatically from other parts of the Corresponding Source.

The Corresponding Source for a work in source code form is that same work.

## 2. Basic Permissions.

All rights granted under this License are granted for the term of copyright on the Program, and are irrevocable provided the stated conditions are met. This License explicitly affirms your unlimited permission to run the unmodified Program. The output from running a covered work is covered by this License only if the output, given its content, constitutes a covered work. This License acknowledges your rights of fair use or other equivalent, as provided by copyright law.

You may make, run and propagate covered works that you do not convey, without conditions so long as your license otherwise remains in force. You may convey covered works to others for the sole purpose of having them make modifications exclusively for you, or provide you with facilities for running those works, provided that you comply with the terms of this License in conveying all material for which you do not control copyright. Those thus making or running the covered works for you must do so exclusively on your behalf, under your direction and control, on terms that prohibit them from making any copies of your copyrighted material outside their relationship with you.

Conveying under any other circumstances is permitted solely under the conditions stated below. Sub-licensing is not allowed; section 10 makes it unnecessary.

## 3. Protecting Users' Legal Rights From Anti-Circumvention Law.

No covered work shall be deemed part of an effective technological measure under any applicable law fulfilling obligations under article 11 of the WIPO copyright treaty adopted on 20 December 1996, or similar laws prohibiting or restricting circumvention of such measures.

When you convey a covered work, you waive any legal power to forbid circumvention of technological measures to the extent such circumvention is effected by exercising rights under this License with respect to the covered work, and you disclaim any intention to limit operation or modification of the work as a means of enforcing, against the work’s users, your or third parties’ legal rights to forbid circumvention of technological measures.

## 4. Conveying Verbatim Copies.

You may convey verbatim copies of the Program’s source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice; keep intact all notices stating that this License and any non-permissive terms added in accord with section 7 apply to the code; keep intact all notices of the absence of any warranty; and give all recipients a copy of this License along with the Program.

You may charge any price or no price for each copy that you convey, and you may offer support or warranty protection for a fee.

## 5. Conveying Modified Source Versions.

You may convey a work based on the Program, or the modifications to produce it from the Program, in the form of source code under the terms of section 4, provided that you also meet all of these conditions:

- \* a) The work must carry prominent notices stating that you modified it, and giving a relevant date.
- \* b) The work must carry prominent notices stating that it is released under this License and any conditions added under section 7. This requirement modifies the requirement in section 4 to “keep intact all notices”.
- \* c) You must license the entire work, as a whole, under this License to anyone who comes into possession of a copy. This License will therefore apply, along with any applicable section 7 additional terms, to the whole of the work, and all its parts, regardless of how they are packaged. This License gives no permission to license the work in any other way, but it does not invalidate such permission if you have separately received it.
- \* d) If the work has interactive user interfaces, each must display Appropriate Legal Notices; however, if the Program has interactive interfaces that do not display Appropriate Legal Notices, your work need not make them do so.

A compilation of a covered work with other separate and independent works, which are not by their nature extensions of the covered work, and which are not combined with it such as to form a larger program, in or on a volume of a storage or distribution medium, is called an “aggregate” if the compilation and its resulting copyright are not used to limit the access or legal rights of the compilation’s users beyond what the individual works permit. Inclusion of a covered work in an aggregate does not cause this License to apply to the other parts of the aggregate.

## 6. Conveying Non-Source Forms.

You may convey a covered work in object code form under the terms of sections 4 and 5, provided that you also convey the machine-readable Corresponding Source under the terms of this License, in one of these ways:

- \* a) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by the Corresponding Source fixed on a durable physical medium customarily used for software interchange.
- \* b) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by a written offer, valid for at least three years and valid for as long as you offer spare parts or customer support for that product model, to give anyone who possesses the object code either (1) a copy of the Corresponding Source for all the software in the product that is covered by this License, on a durable physical medium customarily used for software interchange, for a price no more than your reasonable cost of physically performing this conveying of source, or (2) access to copy the

Corresponding Source from a network server at no charge.

\* c) Convey individual copies of the object code with a copy of the written offer to provide the Corresponding Source. This alternative is allowed only occasionally and noncommercially, and only if you received the object code with such an offer, in accord with subsection 6b.

\* d) Convey the object code by offering access from a designated place (gratis or for a charge), and offer equivalent access to the Corresponding Source in the same way through the same place at no further charge. You need not require recipients to copy the Corresponding Source along with the object code. If the place to copy the object code is a network server, the Corresponding Source may be on a different server (operated by you or a third party) that supports equivalent copying facilities, provided you maintain clear directions next to the object code saying where to find the Corresponding Source. Regardless of what server hosts the Corresponding Source, you remain obligated to ensure that it is available for as long as needed to satisfy these requirements.

\* e) Convey the object code using peer-to-peer transmission, provided you inform other peers where the object code and Corresponding Source of the work are being offered to the general public at no charge under subsection 6d.

A separable portion of the object code, whose source code is excluded from the Corresponding Source as a System Library, need not be included in conveying the object code work.

A “User Product” is either (1) a “consumer product”, which means any tangible personal property which is normally used for personal, family, or household purposes, or (2) anything designed or sold for incorporation into a dwelling. In determining whether a product is a consumer product, doubtful cases shall be resolved in favor of coverage. For a particular product received by a particular user, “normally used” refers to a typical or common use of that class of product, regardless of the status of the particular user or of the way in which the particular user actually uses, or expects or is expected to use, the product. A product is a consumer product regardless of whether the product has substantial commercial, industrial or non-consumer uses, unless such uses represent the only significant mode of use of the product.

“Installation Information” for a User Product means any methods, procedures, authorization keys, or other information required to install and execute modified versions of a covered work in that User Product from a modified version of its Corresponding Source. The information must suffice to ensure that the continued functioning of the modified object code is in no case prevented or interfered with solely because modification has been made.

If you convey an object code work under this section in, or with, or specifically for use in, a User Product, and the conveying occurs as part of a transaction in which the right of possession and use of the User Product is transferred to the recipient in perpetuity or for a fixed term (regardless of how the transaction is characterized), the Corresponding Source conveyed under this section must be accompanied by the Installation Information. But this requirement does not apply if neither you nor any third party retains the ability to install modified object code on the User Product (for example, the work has been installed in ROM).

The requirement to provide Installation Information does not include a requirement to continue to provide support service, warranty, or updates for a work that has been modified or installed by the recipient, or for the User Product in which it has been modified or installed. Access to a network may be denied

when the modification itself materially and adversely affects the operation of the network or violates the rules and protocols for communication across the network.

Corresponding Source conveyed, and Installation Information provided, in accord with this section must be in a format that is publicly documented (and with an implementation available to the public in source code form), and must require no special password or key for unpacking, reading or copying.

#### 7. Additional Terms.

"Additional permissions" are terms that supplement the terms of this License by making exceptions from one or more of its conditions. Additional permissions that are applicable to the entire Program shall be treated as though they were included in this License, to the extent that they are valid under applicable law. If additional permissions apply only to part of the Program, that part may be used separately under those permissions, but the entire Program remains governed by this License without regard to the additional permissions.

When you convey a copy of a covered work, you may at your option remove any additional permissions from that copy, or from any part of it. (Additional permissions may be written to require their own removal in certain cases when you modify the work.) You may place additional permissions on material, added by you to a covered work, for which you have or can give appropriate copyright permission.

Notwithstanding any other provision of this License, for material you add to a covered work, you may (if authorized by the copyright holders of that material) supplement the terms of this License with terms:

- \* a) Disclaiming warranty or limiting liability differently from the terms of sections 15 and 16 of this License; or
- \* b) Requiring preservation of specified reasonable legal notices or author attributions in that material or in the Appropriate Legal Notices displayed by works containing it; or
- \* c) Prohibiting misrepresentation of the origin of that material, or requiring that modified versions of such material be marked in reasonable ways as different from the original version; or
- \* d) Limiting the use for publicity purposes of names of licensors or authors of the material; or
- \* e) Declining to grant rights under trademark law for use of some trade names, trademarks, or service marks; or
- \* f) Requiring indemnification of licensors and authors of that material by anyone who conveys the material (or modified versions of it) with contractual assumptions of liability to the recipient, for any liability that these contractual assumptions directly impose on those licensors and authors.

All other non-permissive additional terms are considered "further restrictions" within the meaning of section 10. If the Program as you received it, or any part of it, contains a notice stating that it is governed by this License along with a term that is a further restriction, you may remove that term. If a license document contains a further restriction but permits relicensing or conveying under this License, you may add to a covered work material governed by the terms of that license document, provided that the further restriction does not survive such relicensing or conveying.

If you add terms to a covered work in accord with this section, you must place, in the relevant source files, a statement of the additional terms that apply to those files, or a notice indicating where to find the applicable terms.

Additional terms, permissive or non-permissive, may be stated in the form of a separately written license, or stated as exceptions; the above requirements apply either way.

#### 8. Termination.

You may not propagate or modify a covered work except as expressly provided under this License. Any attempt otherwise to propagate or modify it is void, and will automatically terminate your rights under this License (including any patent licenses granted under the third paragraph of section 11).

However, if you cease all violation of this License, then your license from a particular copyright holder is reinstated (a) provisionally, unless and until the copyright holder explicitly and finally terminates your license, and (b) permanently, if the copyright holder fails to notify you of the violation by some reasonable means prior to 60 days after the cessation.

Moreover, your license from a particular copyright holder is reinstated permanently if the copyright holder notifies you of the violation by some reasonable means, this is the first time you have received notice of violation of this License (for any work) from that copyright holder, and you cure the violation prior to 30 days after your receipt of the notice.

Termination of your rights under this section does not terminate the licenses of parties who have received copies or rights from you under this License. If your rights have been terminated and not permanently reinstated, you do not qualify to receive new licenses for the same material under section 10.

#### 9. Acceptance Not Required for Having Copies.

You are not required to accept this License in order to receive or run a copy of the Program. Ancillary propagation of a covered work occurring solely as a consequence of using peer-to-peer transmission to receive a copy likewise does not require acceptance. However, nothing other than this License grants you permission to propagate or modify any covered work. These actions infringe copyright if you do not accept this License. Therefore, by modifying or propagating a covered work, you indicate your acceptance of this License to do so.

#### 10. Automatic Licensing of Downstream Recipients.

Each time you convey a covered work, the recipient automatically receives a license from the original licensors, to run, modify and propagate that work, subject to this License. You are not responsible for enforcing compliance by third parties with this License.

An "entity transaction" is a transaction transferring control of an organization, or substantially all assets of one, or subdividing an organization, or merging organizations. If propagation of a covered work results from an entity transaction, each party to that transaction who receives a copy of the work also receives whatever licenses to the work the party's predecessor in interest had or could give under the previous paragraph, plus a right to possession of the Corresponding Source of the work from the predecessor in interest, if the predecessor has it or can get it with reasonable efforts.

You may not impose any further restrictions on the exercise of the rights granted or affirmed under this License. For example, you may not impose a license fee, royalty, or other charge for exercise of rights granted under this License, and you may not initiate litigation (including a cross-claim or counterclaim in a lawsuit) alleging that any patent claim is infringed by making, using, selling, offering for sale, or importing the Program or any portion of it.

#### 11. Patents.

A "contributor" is a copyright holder who authorizes use under this License of the Program or a work on which the Program is based. The work thus licensed is called the contributor's "contributor version".

A contributor's "essential patent claims" are all patent claims owned or controlled by the contributor, whether already acquired or hereafter acquired, that would be infringed by some manner, permitted by this License, of making, using, or selling its contributor version, but do not include claims that would be infringed only as a consequence of further modification of the contributor version. For purposes of this definition, "control" includes the right to grant patent sublicenses in a manner consistent with the requirements of this License.

Each contributor grants you a non-exclusive, worldwide, royalty-free patent license under the contributor's essential patent claims, to make, use, sell, offer for sale, import and otherwise run, modify and propagate the contents of its contributor version.

In the following three paragraphs, a "patent license" is any express agreement or commitment, however denominated, not to enforce a patent (such as an express permission to practice a patent or covenant not to sue for patent infringement). To "grant" such a patent license to a party means to make such an agreement or commitment not to enforce a patent against the party.

If you convey a covered work, knowingly relying on a patent license, and the Corresponding Source of the work is not available for anyone to copy, free of charge and under the terms of this License, through a publicly available network server or other readily accessible means, then you must either (1) cause the Corresponding Source to be so available, or (2) arrange to deprive yourself of the benefit of the patent license for this particular work, or (3) arrange, in a manner consistent with the requirements of this License, to extend the patent license to downstream recipients. "Knowingly relying" means you have actual knowledge that, but for the patent license, your conveying the covered work in a country, or your recipient's use of the covered work in a country, would infringe one or more identifiable patents in that country that you have reason to believe are valid.

If, pursuant to or in connection with a single transaction or arrangement, you convey, or propagate by procuring conveyance of, a covered work, and grant a patent license to some of the parties receiving the covered work authorizing them to use, propagate, modify or convey a specific copy of the covered work, then the patent license you grant is automatically extended to all recipients of the covered work and works based on it.

A patent license is "discriminatory" if it does not include within the scope of its coverage, prohibits the exercise of, or is conditioned on the non-exercise of one or more of the rights that are specifically granted under this License. You may not convey a covered work if you are a party to an arrangement with a third party that is in the business of distributing software, under which you make payment to the third party based on the extent of your activity of conveying the work, and under which the third party grants, to any of the parties who would receive the covered work from you, a discriminatory patent license (a) in connection with copies of the covered work conveyed by you (or copies made from those copies), or (b) primarily for and in connection with specific products or compilations that contain the covered work, unless you entered into that arrangement, or that patent license was granted, prior to 28 March 2007.

Nothing in this License shall be construed as excluding or limiting any implied license or other defenses to infringement that may otherwise be available to you under applicable patent law.

## 12. No Surrender of Others' Freedom.

If conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot convey a covered work so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not convey it at all. For example, if you agree to terms that obligate you to collect a royalty for further conveying from those to whom you convey the Program, the only way you could satisfy both those terms and this License would be to refrain entirely from conveying the Program.

## 13. Use with the GNU Affero General Public License.

Notwithstanding any other provision of this License, you have permission to link or combine any covered work with a work licensed under version 3 of the GNU Affero General Public License into a single combined work, and to convey the resulting work. The terms of this License will continue to apply to the part which is the covered work, but the special requirements of the GNU Affero General Public License, section 13, concerning interaction through a network will apply to the combination as such.

## 14. Revised Versions of this License.

The Free Software Foundation may publish revised and/or new versions of the GNU General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies that a certain numbered version of the GNU General Public License "or any later version" applies to it, you have the option of following the terms and conditions either of that numbered version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of the GNU General Public License, you may choose any version ever published by the Free Software Foundation.

If the Program specifies that a proxy can decide which future versions of the GNU General Public License can be used, that proxy's public statement of acceptance of a version permanently authorizes you to choose that version for the Program.

Later license versions may give you additional or different permissions. However, no additional obligations are imposed on any author or copyright holder as a result of your choosing to follow a later version.

## 15. Disclaimer of Warranty.

THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

## 16. Limitation of Liability.

IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MODIFIES AND/OR CONVEYS THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

## 17. Interpretation of Sections 15 and 16.

If the disclaimer of warranty and limitation of liability provided above cannot be given local legal effect according to their terms, reviewing courts shall apply local law that most closely approximates an absolute waiver of all civil liability in connection with the Program, unless a warranty or assumption of liability accompanies a copy of the Program in return for a fee.

## END OF TERMS AND CONDITIONS

### How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively state the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

```
<one line to give the program's name and a brief
idea of what it does.>
Copyright (C) <year> <name of author>
```

This program is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program. If not, see <http://www.gnu.org/licenses/>.

Also add information on how to contact you by electronic and paper mail.

If the program does terminal interaction, make it output a short notice like this when it starts in an interactive mode:

```
<program> Copyright (C) <year> <name of
author>
This program comes with ABSOLUTELY NO WAR-
RANTY; for details type `show w'.
This is free software, and you are welcome to redi-
stribute it under certain conditions; type `show c'
for details.
```

The hypothetical commands `show w` and `show c` should show the appropriate parts of the General

Public License. Of course, your program's commands might be different; for a GUI interface, you would use an "about box".

You should also get your employer (if you work as a programmer) or school, if any, to sign a "copyright disclaimer" for the program, if necessary. For more information on this, and how to apply and follow the GNU GPL, see <http://www.gnu.org/licenses/>.

The GNU General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this License. But first, please read <http://www.gnu.org/philosophy/why-not-lgpl.html>.

# GNU LESSER GENERAL PUBLIC LICENSE

Version 2.1, February 1999

Copyright (C) 1991, 1999 Free Software Foundation, Inc.

51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

[This is the first released version of the Lesser GPL. It also counts as the successor of the GNU Library Public License, version 2, hence the version number 2.1.]

## Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public Licenses are intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users.

This license, the Lesser General Public License, applies to some specially designated software packages--typically libraries--of the Free Software Foundation and other authors who decide to use it. You can use it too, but we suggest you first think carefully about whether this license or the ordinary General Public License is the better strategy to use in any particular case, based on the explanations below.

When we speak of free software, we are referring to freedom of use, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish); that you receive source code or can get it if you want it; that you can change the software and use pieces of it in new free programs; and that you are informed that you can do these things.

To protect your rights, we need to make restrictions that forbid distributors to deny you these rights or to ask you to surrender these rights. These restrictions translate to certain responsibilities for you if you distribute copies of the library or if you modify it.

For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link other code with the library, you must provide complete object files to the recipients, so that they can relink them with the library after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

We protect your rights with a two-step method: (1) we copyright the library, and (2) we offer you this license, which gives you legal permission to copy, distribute and/or modify the library.

To protect each distributor, we want to make it very clear that there is no warranty for the free library. Also, if the library is modified by someone else and passed on, the recipients should know that what they have is not the original version, so that the original author's reputation will not be affected by problems that might be introduced by others.

Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that any patent license obtained for a version of the

library must be consistent with the full freedom of use specified in this license.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs.

When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

## TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License Agreement applies to any software library or other program which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Lesser General Public License (also called "this License"). Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifica-

tions and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

1. You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the Library.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- The modified work must itself be a software library.
- You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.
- You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.
- If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.  
(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library"

with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

a) Accompany the combined library with a copy of the same work based on the Library, uncom-

bined with any other library facilities. This must be distributed under the terms of the Sections above.

b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

8. You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

9. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Library or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.

10. Each time you redistribute the Library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties with this License.

11. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

12. If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add

an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

13. The Free Software Foundation may publish revised and/or new versions of the Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.

14. If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

15. BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### END OF TERMS AND CONDITIONS

##### How to Apply These Terms to Your New Libraries

If you develop a new library, and you want it to be of the greatest possible use to the public, we recommend making it free software that everyone can redistribute and change. You can do so by permitting redistribution under these terms (or, alternatively, under the terms of the ordinary General Public License).

To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

one line to give the library's name and an idea of what it does.

Copyright (C) year name of author

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with this library; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA

Also add information on how to contact you by electronic and paper mail.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the library, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the library 'Frob' (a library for tweaking knobs) written by James Random Hacker.

signature of Ty Coon, 1 April 1990  
Ty Coon, President of Vice  
That's all there is to it!

## GNU LESSER GENERAL PUBLIC LICENSE

Version 3, 29 June 2007

Copyright © 2007 Free Software Foundation, Inc.  
<<http://fsf.org/>>

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

This version of the GNU Lesser General Public License incorporates the terms and conditions of version 3 of the GNU General Public License, supplemented by the additional permissions listed below.

#### 0. Additional Definitions.

As used herein, "this License" refers to version 3 of the GNU Lesser General Public License, and the "GNU GPL" refers to version 3 of the GNU General Public License.

"The Library" refers to a covered work governed by this License, other than an Application or a Combined Work as defined below.

An "Application" is any work that makes use of an interface provided by the Library, but which is not otherwise based on the Library. Defining a subclass of a class defined by the Library is deemed a mode of using an interface provided by the Library.

A "Combined Work" is a work produced by combining or linking an Application with the Library. The particular version of the Library with which the Combined Work was made is also called the "Linked Version".

The "Minimal Corresponding Source" for a Combined Work means the Corresponding Source for the Combined Work, excluding any source code for portions of the Combined Work that, considered in isolation, are based on the Application, and not on the Linked Version.

The "Corresponding Application Code" for a Combined Work means the object code and/or source code for the Application, including any data and utility programs needed for reproducing the Combined Work from the Application, but excluding the System Libraries of the Combined Work.

#### 1. Exception to Section 3 of the GNU GPL.

You may convey a covered work under sections 3 and 4 of this License without being bound by section 3 of the GNU GPL.

#### 2. Conveying Modified Versions.

If you modify a copy of the Library, and, in your modifications, a facility refers to a function or data to be supplied by an Application that uses the facility (other than as an argument passed when the facility is invoked), then you may convey a copy of the modified version:

- \* a) under this License, provided that you make a good faith effort to ensure that, in the event an Application does not supply the function or data, the facility still operates, and performs whatever part of its purpose remains meaningful, or
- \* b) under the GNU GPL, with none of the additional permissions of this License applicable to that copy.

#### 3. Object Code Incorporating Material from Library Header Files.

The object code form of an Application may incorporate material from a header file that is part of the

Library. You may convey such object code under terms of your choice, provided that, if the incorporated material is not limited to numerical parameters, data structure layouts and accessors, or small macros, inline functions and templates (ten or fewer lines in length), you do both of the following:

- \* a) Give prominent notice with each copy of the object code that the Library is used in it and that the Library and its use are covered by this License.
- \* b) Accompany the object code with a copy of the GNU GPL and this license document.

#### 4. Combined Works.

You may convey a Combined Work under terms of your choice that, taken together, effectively do not restrict modification of the portions of the Library contained in the Combined Work and reverse engineering for debugging such modifications, if you also do each of the following:

- \* a) Give prominent notice with each copy of the Combined Work that the Library is used in it and that the Library and its use are covered by this License.
- \* b) Accompany the Combined Work with a copy of the GNU GPL and this license document.
- \* c) For a Combined Work that displays copyright notices during execution, include the copyright notice for the Library among these notices, as well as a reference directing the user to the copies of the GNU GPL and this license document.
- \* d) Do one of the following:
  - o 0) Convey the Minimal Corresponding Source under the terms of this License, and the Corresponding Application Code in a form suitable for, and under terms that permit, the user to recombine or relink the Application with a modified version of the Linked Version to produce a modified Combined Work, in the manner specified by section 6 of the GNU GPL for conveying Corresponding Source.
  - o 1) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (a) uses at run time a copy of the Library already present on the user's computer system, and (b) will operate properly with a modified version of the Library that is interface-compatible with the Linked Version.
- \* e) Provide Installation Information, but only if you would otherwise be required to provide such information under section 6 of the GNU GPL, and only to the extent that such information is necessary to install and execute a modified version of the Combined Work produced by recombining or relinking the Application with a modified version of the Linked Version. (If you use option 4d0, the Installation Information must accompany the Minimal Corresponding Source and Corresponding Application Code. If you use option 4d1, you must provide the Installation Information in the manner specified by section 6 of the GNU GPL for conveying Corresponding Source.)

#### 5. Combined Libraries.

You may place library facilities that are a work based on the Library side by side in a single library together with other library facilities that are not Applications and are not covered by this License, and convey such a combined library under terms of your choice, if you do both of the following:

- \* a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities, conveyed under the terms of this License.
- \* b) Give prominent notice with the combined library that part of it is a work based on the

Library, and explaining where to find the accompanying uncombined form of the same work.

#### 6. Revised Versions of the GNU Lesser General Public License.

The Free Software Foundation may publish revised and/or new versions of the GNU Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library as you received it specifies that a certain numbered version of the GNU Lesser General Public License "or any later version" applies to it, you have the option of following the terms and conditions either of that published version or of any later version published by the Free Software Foundation. If the Library as you received it does not specify a version number of the GNU Lesser General Public License, you may choose any version of the GNU Lesser General Public License ever published by the Free Software Foundation.

If the Library as you received it specifies that a proxy can decide whether future versions of the GNU Lesser General Public License shall apply, that proxy's public statement of acceptance of any version is permanent authorization for you to choose that version for the Library.

### Information for users on collection and disposal of old equipment and used batteries:



These symbols on the products, packaging, and/or accompanying documents mean that used electrical and electronic products and batteries should not be mixed with general household waste. For proper treatment, recovery and recycling of old products and used batteries, please take them to applicable collection points, in accordance with your national legislation.



By disposing of these products and batteries correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling.



For more information about collection and recycling of old products and batteries, please contact your local municipality, your waste disposal service or the point of sale where you purchased the items.

#### For business users in the European Union:

If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.



#### Information on Disposal in other Countries outside the European Union:

These symbols are only valid in the European Union. If you wish to discard these items, please contact your local authorities or dealer and ask for the correct method of disposal.

#### Note for the battery symbol (bottom two symbol examples):

This symbol might be used in combination with a chemical symbol. In this case it complies with the requirement set by the EU Battery Directive for the chemical involved.

Cd

(58-M03 WEEE battery en 01)

### Informations concernant la collecte et le traitement des piles usagées et des déchets d'équipements électriques et électroniques



Les symboles sur les produits, l'emballage et/ou les documents joints signifient que les produits électriques ou électroniques usagés ainsi que les piles usagées ne doivent pas être mélangés avec les déchets domestiques habituels.

Pour un traitement, une récupération et un recyclage appropriés des déchets d'équipements électriques et électroniques et des piles usagées, veuillez les déposer aux points de collecte prévus à cet effet, conformément à la réglementation nationale.



En vous débarrassant correctement des déchets d'équipements électriques et électroniques et des piles usagées, vous contribuerez à la sauvegarde de précieuses ressources et à la prévention de potentiels effets négatifs sur la santé humaine qui pourraient advenir lors d'un traitement inapproprié des déchets.

Pour plus d'informations à propos de la collecte et du recyclage des déchets d'équipements électriques et électroniques et des piles usagées, veuillez contacter votre municipalité, votre service de traitement des déchets ou le point de vente où vous avez acheté les produits.



#### Pour les professionnels dans l'Union européenne :

Si vous souhaitez vous débarrasser des déchets d'équipements électriques et électroniques, veuillez contacter votre vendeur ou fournisseur pour plus d'informations.



#### Informations sur la mise au rebut dans d'autres pays en dehors de l'Union européenne :

Ces symboles sont seulement valables dans l'Union européenne. Si vous souhaitez vous débarrasser de déchets d'équipements électriques et électroniques ou de piles usagées, veuillez contacter les autorités locales ou votre fournisseur et demander la méthode de traitement appropriée.

#### Note pour le symbole « pile » (deux exemples de symbole ci-dessous) :

Ce symbole peut être utilisé en combinaison avec un symbole chimique. Dans ce cas, il respecte les exigences établies par la directive européenne relative aux piles pour le produit chimique en question.

Cd

(58-M03 WEEE battery fr 01)

## Informationen zur Rückgabe von Elektro -und Elektronikgeräten, Lampen und Batterien, gültig für Deutschland

Elektro- und Elektronische Altgeräte beinhalten eine Vielzahl von wertvollen und wiederverwendbaren Rohstoffen und gehören im Falle einer Entsorgung nicht in die Restmülltonne, sondern Altgeräte sind getrennt zu sammeln und zu entsorgen. Besitzer von Altgeräten tragen damit zur sicheren Entsorgung bei und helfen, mögliche umwelt- oder gesundheitsschädlichen Folgen zu vermeiden.

Zerstörungsfrei entnehmbare Altbatterien und Altakkumulatoren sowie Lampen, sind vor der Entsorgung zu entfernen und getrennt zu behandeln. Alte oder defekte Batterien und Akkus können überall dort, wo Batterien verkauft werden, kostenfrei zurückgegeben werden. Ebenso die kommunalen Wertstoffhöfe nehmen alte Batterien und Akkus zurück. Das Symbol mit der durchgestrichenen Mülltonne weist darauf hin, dass Batterien und/oder Akkus getrennt vom Hausmüll gesammelt und entsorgt werden müssen.

Wenn die Batterie oder der Akku mehr als die in der europäischen Batterie-Richtlinie spezifizierten Werte für Blei (Pb), Quecksilber (Hg) und/oder Kadmium (Cd) enthält, werden die chemischen Symbole für Blei (Pb), Quecksilber (Hg) und/oder Kadmium (Cd) unter dem Symbol mit der durchgestrichenen Mülltonne angezeigt.

Indem Sie Batterien separat sammeln, tragen Sie zur sicheren Entsorgung von Produkten und Batterien bei und helfen damit, mögliche umwelt- oder gesundheitsschädliche Folgen zu vermeiden. Bringen Sie dazu alle Batterien und/oder Akkus zu Ihrem örtlichen Wertstoffhof oder einem Geschäft bzw. einer Einrichtung, wo diese Geräte zur umweltfreundlichen Entsorgung gesammelt werden.

Batterien und Akkus können bei unsachgemäßer Handhabung Risiken für Mensch und Umwelt bedeuten. Insbesondere bei Lithium handelt es sich um ein sehr reaktionsfreudiges und brennbares Metall, dass in Batterien oder Akkus bei unsachgemäßem Umgang Sicherheitsrisiken birgt, wie z. B. Kurzschlussgefahr, Hitzeentwicklung, Brand oder Austritt von umweltgefährdenden Stoffen. Lithium-Akkus müssen aus Sicherheitsgründen vor der Entsorgung gesichert werden. Kleben Sie die Anschlüsse mit Isolierband ab.



Hinweis zur Verpflichtung von Vertreibern zur unentgeltlichen Rücknahme von Altgeräten in Bezug auf Elektrogesetz §17 Absatz 1 und 2:

Rücknahmepflicht größerer Elektrofachmärkte (also Elektro-Fachgeschäfte, mit einer Verkaufsfläche für Elektro- und Elektronikgeräte von mindestens 400 m<sup>2</sup>),

**Cd**

Rücknahmepflicht für Lebensmitteläden mit einer Gesamtverkaufsfläche von mindestens 800 m<sup>2</sup>, die mehrmals pro Jahr oder dauerhaft Elektro- und Elektronikgeräte anbieten und auf dem Markt bereitstellen.

Diese Händler müssen bei der Abgabe eines neuen Elektrogeräts an einen Endnutzer ein Altgerät der gleichen Art kostenfrei zurücknehmen (1:1-Rücknahme); dies gilt auch für Lieferungen an private Haushalte.

Diese Händler sind verpflichtet von Endnutzern bis zu drei kleine Altgeräte (keine äußere Abmessung größer als 25 cm) kostenfrei im Einzelhandelsgeschäft oder in unmittelbarer Nähe zu diesem zurückzunehmen, ohne dass dies an einen Neukauf geknüpft werden darf (0:1-Rücknahme).

Diese Rücknahmepflichten gelten auch für den Versandhandel, wobei die Pflicht zur 1:1-Rücknahme im privaten Haushalt nur für Wärmeüberträger (Kühl-/Gefriergeräte, Klimageräte u.a.), Bildschirmgeräte und Großgeräte gilt; für die die 1:1-Rücknahme von Lampen, Kleingeräten und kleinen ITK-Geräten durch Endnutzer sowie die 0:1-Rücknahme müssen Versandhändler Rückgabemöglichkeiten in zumutbarer Entfernung zum Endverbraucher bereitstellen.

Als Hersteller informieren wir darüber, dass Altgeräte privater Haushalte (B2C Geräte) an einer dafür vorgesehenen Sammelstelle zurückgegeben werden können. Für Details wenden Sie sich an Ihre örtliche Behörden. Weiterführende Informationen finden Sie hier: <https://www.stiftung-ear.de/de/startseite> oder hier: <https://e-schrott-entsorgen.org/>.



Achtung: Die Verantwortung für das Löschen von personenbezogenen Daten, die sich auf dem zu entsorgenden Gerät befinden, liegt beim Endnutzer!

Das Symbol mit der durchgestrichenen Mülltonne weist darauf hin, dass Produkte, deren Batterien/Akkumulatoren und/oder Verpackungen getrennt vom Hausmüll gesammelt und entsorgt werden müssen. Der schwarze Balken zeigt an, dass das Produkt nach dem 13. August 2005 auf den Markt gebracht wurde.

Die Sammel- und Recyclingquoten der Bundesrepublik Deutschland können auf der Seite des Bundesumweltministeriums eingesehen werden: <https://www.bmu.de/themen/wasser-ressourcen-abfall/kreislaufwirtschaft/statistiken/elektro-und-elektronikaltgeraete>.

(58-M02 WEEE de 03)

English

Deutsch

Français

Español

Português

Italiano

Русский

简体中文

繁體中文

한국어

日本語

### Información para usuarios sobre la recogida y eliminación de los equipos antiguos y las pilas usadas



Estos símbolos en los productos, embalajes y documentos anexos significan que los productos eléctricos y electrónicos y sus pilas no deben mezclarse con los desperdicios domésticos normales.

Para el tratamiento, recuperación y reciclaje apropiados de los productos antiguos y las pilas usadas, llévelos a puntos de reciclaje correspondientes, de acuerdo con la legislación nacional.

Al deshacerse de estos productos y pilas de forma correcta, ayudará a ahorrar recursos valiosos y a impedir los posibles efectos desfavorables en la salud humana y en el entorno que de otro modo se producirían si se trataran los desperdicios de modo inapropiado.

Para obtener más información acerca de la recogida y el reciclaje de los productos antiguos y las pilas, póngase en contacto con las autoridades locales, con el servicio de eliminación de basuras o con el punto de venta donde adquirió los artículos.

#### Para los usuarios empresariales de la Unión Europea:

Si desea desechar equipos eléctricos y electrónicos, póngase en contacto con su vendedor o proveedor para obtener más información.

#### Información sobre la eliminación en otros países fuera de la Unión Europea:

Estos símbolos solamente son válidos en la Unión Europea. Si desea desechar estos artículos, póngase en contacto con las autoridades locales o con el vendedor y pregúnteles el método correcto.

#### Nota sobre el símbolo de pila (dos ejemplos de símbolos en la parte inferior):

Este símbolo se puede utilizar en combinación con un símbolo químico. En este caso, cumple el requisito establecido por la Directiva de la UE sobre pilas correspondiente a la sustancia química utilizada.

Cd

(58-M03 WEEE battery es 01)

### Informações para os usuários relativas à coleta e à eliminação de baterias e equipamentos usados



Os símbolos ilustrados, presentes em produtos, embalagens e/ou incluídos na documentação associada, indicam que as baterias e os produtos elétricos e eletrônicos usados não devem ser descartados juntamente com os resíduos domésticos em geral.

O procedimento correto consiste no tratamento, na recuperação e na reciclagem de produtos e baterias usados, que devem ser levados aos pontos de coleta adequados, em conformidade com a legislação nacional em vigor.

O descarte desses produtos e baterias de forma adequada permite poupar recursos valiosos e evitar potenciais efeitos prejudiciais para a saúde pública e para o ambiente, associados ao processamento incorreto dos resíduos.

Para obter mais informações relativas à coleta e à reciclagem de baterias e produtos usados, contate as autoridades locais, o serviço de descarte de resíduos ou o ponto de venda onde foram adquiridos os itens relevantes.

#### Informações para usuários empresariais na União Europeia:

Para descartar equipamentos elétricos e eletrônicos, contate o seu revendedor ou fornecedor para obter informações adicionais.

#### Informações relativas ao descarte em países não pertencentes à União Europeia:

Estes símbolos são válidos exclusivamente na União Europeia. Caso pretenda descartar esses tipos de itens, contate as autoridades locais ou o seu revendedor e informe-se sobre o procedimento correto de descarte.

#### Nota relativa ao símbolo referente a baterias (os dois exemplos de símbolos na parte inferior):

Este símbolo poderá ser apresentado juntamente com um símbolo químico. Nesse caso, ele estará em conformidade com os requisitos estabelecidos na diretiva da UE sobre baterias no âmbito do elemento químico relacionado.

Cd

(58-M03 WEEE battery pt-BR 01)

### Informazioni per gli utenti sulla raccolta e lo smaltimento di vecchia attrezzatura e batterie usate



Questi simboli sui prodotti, sull'imballaggio e/o sui documenti che li accompagnano, indicano che i prodotti elettrici ed elettronici e le batterie non devono essere mischiati con i rifiuti generici.

Per il trattamento, il recupero e il riciclaggio appropriato di vecchi prodotti e batterie usate, si prega di portarli ai punti di raccolta designati, in accordo con la legislazione locale.

Smaltendo correttamente questi prodotti e batterie si potranno recuperare risorse preziose, oltre a prevenire potenziali effetti negativi sulla salute e l'ambiente che potrebbero sorgere a causa del trattamento improprio dei rifiuti.

Per ulteriori informazioni sulla raccolta e il riciclaggio di vecchi prodotti e batterie, si prega di contattare l'amministrazione comunale locale, il servizio di smaltimento dei rifiuti o il punto vendita dove sono stati acquistati gli articoli.

#### Per utenti imprenditori dell'Unione europea:

Se si desidera scartare attrezzatura elettrica ed elettronica, si prega di contattare il proprio rivenditore o il proprio fornitore per ulteriori informazioni.

#### Informazioni sullo smaltimento negli altri Paesi al di fuori dell'Unione europea:

Questi simboli sono validi solamente nell'Unione Europea; se si desidera scartare questi articoli, si prega di contattare le autorità locali o il rivenditore e richiedere informazioni sulla corretta modalità di smaltimento.

#### Note per il simbolo della batteria (in basso due esempi del simbolo):

È possibile che questo simbolo sia usato in combinazione con un simbolo chimico. Questo caso è conforme al requisito stabilito dalle Direttive UE sulle batterie relative agli elementi chimici contenuti.

Cd

(58-M03 WEEE battery it 01)



台灣山葉音樂股份有限公司

YAMAHA MUSIC & ELECTRONICS TAIWAN CO., LTD.

<https://tw.yamaha.com>

總公司： (02) 7741-8888 新北市板橋區遠東路1號2樓

客服專線：0809-091388

原產地： 中國

NEXO S.A.  
Parc d'Activité  
Du Pré de la Dame Jeanne  
B.P.5  
60128 Plailly  
France

Tel : +33 (0)3 44 99 00 70  
Fax : +33 (0)3 44 99 00 30  
E-mail : [info@nexo.fr](mailto:info@nexo.fr)  
<https://www.nexo-sa.com>

**NEXO**

© 2025 NEXO S.A.  
Published 05/2025  
2025年 5月 发行  
IPES-A0



VHY8260