

SHARP

MIKRO KOMPONENTEN SYSTEM
MICRO-CHAÎNE
SISTEMA MICRO
MIKRO KOMPONENT SYSTEM
MICRO SISTEMI
MICRO SYSTEEM
SISTEMA DE MICRO COMPONENTE
MICRO COMPONENT SYSTEM

MODELL
MODÈLE
MODELLO
MODELO
MODELL

XL-MP110H

BEDIENUNGSANLEITUNG
MODE D'EMPLOI
MANUAL DE MANEJO
BRUKSANVISNING

MANUALE DI ISTRUZIONI
GEBRUIKSAANWIJZING
MANUAL DE OPERAÇÃO
OPERATION MANUAL



CD-R/RW
Playable 5CD CHANGER

SAVING ENERGY
STAND-BY POWER CONSUMPTION 0.6W

MP3

Mikro Komponenten System XL-MP110H besteht aus XL-MP110H (Hauptgerät) und CP-MP110H (Lautsprecher-system).

Micro-chaîne XL-MP110H composée de XL-MP110H (appareil principal) et de CP-MP110H (enceinte acoustique).

Sistema micro XL-MP110H que consta de XL-MP110H (aparato principal) y CP-MP110H (sistema de altavoces).

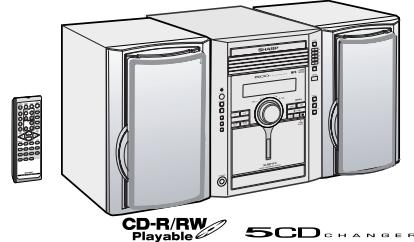
XL-MP110H mikro komponent system bestående av XL-MP110H (huvudenhet) och CP-MP110H (högtalarsystem).

Micro sistemi XL-MP110H composto da XL-MP110H (apparecchio principale) e CP-MP110H (sistema di diffusori).

XL-MP110H micro systeem bestaande uit XL-MP110H (hoofdtoestel) en CP-MP110H (luidsprekersysteem).

XL-MP110H Sistema de Micro Componente composto de XL-MP110H (unidad principal) e CP-MP110H (sistema de alto-falante).

XL-MP110H Micro Component System consisting of XL-MP110H (main unit) and CP-MP110H (speaker system).



DEUTSCH

... Siehe Seiten i bis vi und D-1 bis D-40.

FRANÇAIS

... Se reporter aux pages i à vi et F-1 à F-40.

ESPAÑOL

... Consulte las páginas i a vi y S-1 a S-40.

SVENSKA

... Hänvisa till sidorna i till vi och V-1 till V-40.

ITALIANO

... Leggere le pagine i a vi e I-1 a I-40.

NEDERLANDS

... Raadpleeg de bladzijden i t/m vi en N-1 t/m N-40.

PORTUGUÊS

... Favor consultar as páginas i a vi e P-1 a P-40.

ENGLISH

... Please refer to pages i to vi and E-1 to E-40.

**BESONDERE ANMERKUNGEN
REMARQUES SPÉCIALES
NOTAS ESPECIALES
SÄRSKILDA ANMÄRKNINGAR
NOTE PARTICOLARI
BIJZONDERR OPMERKINGEN
NOTAS ESPECIAIS
SPECIAL NOTES**

- Dieses Gerät entspricht den Anforderungen der EG-Richtlinien 89/336/EWG und 73/23/EWG mit Änderung 93/68/EWG.
- Ce matériel répond aux exigences contenues dans les directives 89/336/CEE et 73/23/CEE modifiées par la directive 93/68/CEE.
- Este aparato satisface las exigencias de las Directivas 89/336/CEE y 73/23/CEE, modificadas por medio de la 93/68/CEE.
- Denna utrustning uppfyller kraven enligt riktlinjerna 89/336/EEC och 73/23/EEC så som kompletteras av 93/68/EEC.
- Quest'apparecchio è conforme ai requisiti delle direttive 89/336/EEC e 73/23/EEC, come emendata dalla direttiva 93/68/EEC.
- **Dichiarazione di conformità**
La società SHARP ELECTRONICS EUROPE GmbH dichiara che il prodotto SHARP MICRO SISTEMI XL-MP110H è costruito in conformità alle prescrizioni del D.M.n°548 del 28/8/95, pubblicato sulla G.U.n°301 del 28/12/95 ed in particolare è conforme a quanto indicato nell'art. 2, comma 1 dello stesso decreto.
- Dit apparaat voldoet aan de eisen van de richtlijnen 89/336/EEG en 73/23/EEG, gewijzigd door 93/68/EEG.
- Este equipamento obedece às exigências das directivas 89/336/CEE e 73/23/CEE, na sua versão corrigida pela directiva 93/68/CEE.
- This equipment complies with the requirements of Directives 89/336/EEC and 73/23/EEC as amended by 93/68/EEC.

i

- Dette udstyr overholder kravene i direktiv nr. 89/336/EEC og 73/23/EEC med tillegg nr. 93/68/EEC.
- Dette produktet oppfyller betingelsene i direktivene 89/336/EEC og 73/23/EEC i endringen 93/68/EEC.
- Tämä laite täyttää direktiivien 89/336/EEC ja 73/23/EEC vaatimukset, joita on muutettu direktiivillä 93/68/EEC.
- Η εγκατάσταση αντή αγαποκρίνεται στις απαιτήσεις των οδηγών της Ευρωπαϊκής Ένωσης 89/336/EOK και 73/23/EOK, αυτοί συμπληρώθηκαν από την οδηγία 93/68/EOK.

- Bei Einstellung der ON/STAND-BY-Taste auf STAND-BY ist die Netzspannung immer noch im Gerät vorhanden. Wenn die ON/STAND-BY-Taste auf STAND-BY eingestellt wird, kann das Gerät unter Verwendung der Timer-Betriebsart oder Fernbedienung in Betrieb gesetzt werden.

Warnung:

In diesem Gerät sind keine vom Benutzer wartbaren Teile vorhanden. Niemals Abdeckungen entfernen, außer wenn Sie dafür qualifiziert sind. In diesem Gerät sind gefährliche Spannungen vorhanden. Vor Ausführung von irgendwelchen Kundendienstarbeiten oder bei längerer Nichtverwendung des Gerätes stets den Netzstecker aus der Netzsteckdose ziehen.

- Lorsque la touche ON/STAND-BY est mise en STAND-BY, l'appareil est toujours sous tension. Lorsque la touche ON/STAND-BY se trouve sur la position STAND-BY, l'appareil est prêt à fonctionner par la minuterie ou la télécommande.

Avertissement:

Cet appareil contient des pièces non réparables par l'utilisateur. Personne non qualifiée n'enlèvera jamais les couvercles. L'appareil contenant des organes portés à haute tension, débrancher l'appareil avant toute réparation ou en période de non-utilisation.

03/12/16

- Cuando el botón ON/STAND-BY está puesto en la posición STAND-BY, todavía hay tensión dentro del aparato.
Cuando el botón ON/STAND-BY está puesto en la posición STAND-BY, el aparato puede ponerse en funcionamiento utilizando el modo del temporizador o el controlador remoto.
- Advertencia:**
Tenga en cuenta que dentro de este aparato no hay piezas que pueda reparar. No quite nunca las tapas a menos que se esté cualificado para hacerlo. Este aparato tiene en su interior tensiones peligrosas.
Desenchufe siempre la clavija de la red del tomacorriente antes de realizar cualquier servicio de mantenimiento y cuando no se use el aparato durante un largo período de tiempo.
- När ON/STAND-BY knappen är i läge STAND-BY, finns nätpåslag i apparaten.
Med ON/STAND-BY knappen i läge STAND-BY kan apparaten startas med timerfunktion eller fjärrkontrollen.
- Varning:**
Apparaten innehåller inga delar som kan åtgärdas av kunden. Hölj fast endast öppnas av kvalificerad personal. Apparaten innehåller farliga spänningar.
Stickkontakten ska därför dras ut från nättuttaget före reparationsarbeten och bör dras ut om apparaten inte ska användas på mycket långt.
- Quando il tasto ON/STAND-BY si trova in posizione STAND-BY, all'interno dell'apparecchio c'è ancora la corrente.
Se il tasto ON/STAND-BY si trova nella posizione STAND-BY, l'unità può essere accesa con il modo timer o con il telecomando.
- Avvertenza:**
L'apparecchio non contiene parti riparabili dall'utente.
Non togliere mai i coperchi, a meno di non essere qualificati per farlo. All'interno dell'apparecchio ci sono tensioni pericolose, per cui si deve sempre staccare la spina del cavo d'alimentazione dalla presa di corrente prima di qualsiasi intervento di manutenzione e quando non si usa l'apparecchio per un lungo periodo di tempo.

- Wanneer de ON/STAND-BY toets in de STAND-BY stand staat, loopt er nog steeds stroom (netspanning) in het toestel. Wanneer de ON/STAND-BY toets in de STAND-BY stand staat, kan het toestel ingeschakeld worden via de timerfunctie of de afstandsbediening.
- Waarschuwing:**
Dit toestel bevat geen door de gebruiker te repareren onderdelen. Verwijder de behuizing nooit tenzij u deskundig bent op dit gebied. In het toestel loopt een gevaarlijke spanning; haal de stekker altijd uit het stopcontact alvorens onderhoud uit te voeren of wanneer het toestel voor langere tijd niet gebruikt wordt.
- Quando o botão ON/STAND-BY estiver ajustado na posição STAND-BY, a voltagem de alimentação ainda se encontra presente dentro do aparelho.
Quando o botão ON/STAND-BY estiver ajustado na posição STAND-BY, o aparelho pode ser colocado em operação através do modo de programação horária ou pelo controle remoto.
- Advertência:**
Neste aparelho não há partes que podem ser consertadas pelo usuário. Nunca retire a tampa, a menos que você tenha qualificação para tal. Este aparelho contém voltagens perigosas. Remova sempre o cabo de alimentação da tomada antes de efetuar qualquer conserto ou quando deixar o aparelho muito tempo fora de uso.
- When the ON/STAND-BY button is set at STAND-BY position, mains voltage is still present inside the unit.
When the ON/STAND-BY button is set at STAND-BY position, the unit may be brought into operation by the timer mode or remote control.
- Warning:**
This unit contains no user serviceable parts. Never remove covers unless qualified to do so. This unit contains dangerous voltages, always remove mains plug from the socket before any service operation and when not in use for a long period.

● Når ON/STAND-BY-knappen er sat i STAND-BY positionen, er der stadig netspaending til stede i apparatet. Når ON/STAND-BY-knappen er sat i STAND-BY position, kan apparatet startes v.hj.a. timer-funksionen eller fjernbetjeningen.

Advarsel:
Apparatet indeholder ingen dele, der kan repareres af brugeren selv. Fjern aldrig kabinetet med mindre De er kvalificeret hertil. Apparatet indeholder farlig strømspaending. Træk altid stikket ud af stikkontakten før der foretages reparationer, eller hvis apparatet ikke er i brug i længere tid.

PŘED SEJMUTÍM KRYTU NUTNO VYJMOUT VIDLICI ZE SÍŤOVÉ ZÁSUVKY.

PRED ZLOŽENÍM KRYTU JE NUTNÉ ODPOJIŤ PRÍSTROJ ZO SIETE.

DENNA APPARAT ÄR ANSLUTEN TILL 230 V VÄXELSTRÖM NÄR STICKPROPPEN ÄR INSKJUTEN I VÄGGUTTAGET. FÖR ATT FULLSTÄNDIGT KOPPLA IFRÅN APPARATEN, V.G. DRAG UT STICKPROPPEN.

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- Audio-visual material may consist of copyrighted works which must not be recorded without the authority of the owner of the copyright. Please refer to relevant law in your country.

● Vorsicht: Das Gerät weder Tropf- noch Spritzwasser aussetzen. Ansonsten besteht die Gefahr eines Brandes oder elektrischen Schlages. Es dürfen keine mit Flüssigkeiten gefüllten Gegenstände wie Vasen auf dem Gerät abgestellt werden.
● Attention: Pour éviter un incendie ou une secousse électrique, mettre l'appareil à l'abri de l'eau (éclaboussure, goutte). Ne pas poser sur l'appareil un récipient contenant du liquide.
● Advertencia: Para evitar incendios y descargas eléctricas, no exponga el aparato a goteo o salpicadura de líquidos. No deberán ponerse encima del aparato objetos que estén llenos de líquido, como por ejemplo un florero.
● Varning: Utsätt inte enheten för dropp eller stänk för att förhindra brand eller elektriska stötar. Inga vätskefylda föremål såsom vaser får placeras på enheten.
● Attenzione: Per prevenire incendi o scosse elettriche, non fare gocciolare nessun liquido sull'apparecchio e non bagnarlo. Non collocarvi sopra nessun oggetto riempito d'acqua, come per esempio vasi.
● Waarschuwing: Stel het toestel niet bloot aan druipend of spattend water om brand en elektrische schokken te voorkomen. Met vloeistoffen gevulde voorwerpen, zoals vazen, mogen niet op het toestel geplaatst worden.
● Cuidado: Para evitar incêndio ou choque elétrico, não exponha este aparelho a gotejamento ou salpicamento de água. Não coloque objetos com água como, por exemplo, um vaso de flores, em cima do aparelho.
● Warning: To prevent fire or shock hazard, do not expose this appliance to dripping or splashing. No objects filled with liquids, such as vases, shall be placed on the apparatus.

● Advarsel: Til at forbygge ild og stød risiko, lad være med at undsaette denne indretning for drypning eller overstaenkning. Der må ikke anbringes nogen genstande fyldt med vand, som for eksempel vaser, på dette apparat.
● Advarsel: For å unngå brann eller kortslutning, utsett ikke produktet for vann eller fuktighet. Gjenstander som inneholder væske, feks. en blomstervase, må ikke plasseres oppå apparatet.
● Varoitus: Älä vie läitettä sateeseen tai kosteisiin tiloihin. Jos laite on kostunut, anna sen kuivua ennen kuin käytät sitä verkkovirralla. Nestettä sisältävä astioita kuten esim. kukkamaljakoida ei saa asettaa laitteen päälle.
PŘÍSTROJ NEVYSTAVUJTE KAPAJÍCÍ NEBO STRÍKAJÍCÍ VODE.
PŘÍSTROJ NEVYSTAVUJTE KVAPKAJÚCEJ ALEBO STRIEKAJÚCEJ VODE.
Urządzenie należy chronić przed zalaniem i wilgocią.
● Dieses Produkt ist ein Laserprodukt der Klasse 1.
● Ce produit est classifié comme étant un LASER DE CLASSE 1.
● Este producto está clasificado como un PRODUCTO LÁSER DE CLASE 1.
● Denna produkt klassificeras som KLASS 1 LASERPRODUKT.
● Questo prodotto è classificato come CLASS 1 LASER PRODUCT.
● Dit product is geclassificeerd als een KLASSE 1 LASER PRODUCT.
● Este produto é classificado como PRODUTO LASER DE CLASSE 1.
● This product is classified as a CLASS 1 LASER PRODUCT.
● Dette produktet er klassifisert som et KLASSE 1 LASERPRODUKT.
● Detta produkt er klassificeret som et KLASSE 1 LASERPRODUKT.
● Tämä laite on luokiteltu LUOKAN 1 LASERLAITTEEKSI.
● Denna produkt klassificeras som KLASS 1 LASERAPPARAT.
● Tento výrobek je klasifikován jako LASEROVÝ VÝROBEK TŘÍDY 1.
● Tento výrobok je klasifikovaný ako LASEROVÝ VÝROBOK TRIEDY 1.

XL-MP110H

iv

03/12/16

● VORSICHT

Verwendung von Regelungen oder Einstellungen bzw. Durchführung von anderen Verfahren als die hierin angegebenen kann zum Aussetzen gefährlicher Strahlung führen.

Da der in diesem Compact Disc Player verwendete Laserstrahl für die Augen schädlich ist, ist das Gehäuse unter keinen Umständen zu zerlegen.
Wenden Sie sich für Wartungsarbeiten nur an berechtigten Fachhändler.

● ATTENTION

Respecter les indications données relatives à la manipulation, au réglage et au fonctionnement. En cas de non-respect, on s'exposera à une radiation dangereuse.

Éviter absolument de démonter l'appareil, qui utilise un rayon laser nuisible aux yeux. Pour toute réparation, s'adresser à une personne qualifiée.

● PRECAUCIÓN

El uso de los controles, ajustes o ejecución de procedimientos distintos de los especificados podría causar la exposición a radiación peligrosa.

No intente desmontar la caja ya que el haz de láser usado en este reproductor de discos compactos es perjudicial para los ojos. Para el servicio de reparación, consulte a una persona cualificada.

● OBSERVERA

Användning av reglage eller justeringar eller handhavande på annat sätt än som anges kan leda till farlig bestrålning.

Försök inte ta isär höljet eftersom CD-spelarens laserstråle är skadlig för ögonen. Overlät service endast till kvalificerad personal.

● ATTENZIONE

L'uso dei comandi e l'effettuazione di regolazioni e procedimenti diversi da quelli specificati nel manuale possono provocare una pericolosa esposizione alle radiazioni.

Poiché il raggio laser usato in questo giradischi può danneggiare gli occhi, non smontare l'apparecchio. Per le riparazioni rivolgersi a personale specializzato.

● LET OP

Gebruik van regelaars, het maken van instellingen, gebruik of handelingen anders dan in deze gebruiksaanwijzing vermeld, kan gevaarlijke straling blootleggen.

De laserstraal in deze CD-speler kan de ogen beschadigen. Probeer derhalve de ombouw niet te verwijderen. Laat reparaties alleen over aan erkend onderhoudspersoneel.

● CUIDADO

O uso de controles, ajustes ou a execução de procedimentos além daqueles especificados aqui pode resultar em perigosa exposição à radiação.

Como os raios laser usados neste player de CD são perigosos para os olhos, não tente desmontar o aparelho. Solicite o conserto somente para pessoas especializadas.

● CAUTION

Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

As the laser beam used in this compact disc player is harmful to the eyes, do not attempt to disassemble the cabinet. Refer servicing to qualified personnel only.

VÝSTRAHA: VÝROBEK JE VYBAVEN LASEREM.
PŘI NESPRÁVNÉ MANIPULACÍ S PŘÍSTROjem V ROZPORU S TÍMTO NÁVODEM MŮže DOJÍT K NEBEZPEČNÉMU OZÁREní.
NEOTVÍREJTE A NESNÍMEJTE PROTO ŽÁDNÉ KRYTY A PŘÍSTROj NEOPRAVUJTE. OPRAVU A SERVIS SVĚRTÉ ODBORNÉmu SERVisu.

VÝSTRAHA: VÝROBOK JE VYBAVENÝ LASEROM.
PRI NESPRÁVNOM MANIPULOVANÍ S PRÍSTROJOM V ROZPORE S TÝMTO NÁVODOM MÔŽE DÔJST K NEBEZPEČNÉMU OŽIARENIU. NEODKRÝVAJTE PRETO ŽIADNE KRYTY A PRÍSTROJ NEOPRAVUJTE. OPRAVU A SERVIS PRENECHAJTE ODBORNÉmu SERVisu.

Eigenschaften der Laserdiode

Material: GaAlAs
Wellenlänge: 795 nm
Emissionsdauer: kontinuierlich
Laser-Ausgang: max. 0,6 mW

Caractéristiques de la diode laser

Matière: GaAlAs
Longueur d'onde: 795 nm
Durée d'émission: ininterrompue
Puissance de sortie laser maximale: 0,6 mW

Características del diodo láser

Material: GaAlAs
Longitud de onda: 795 nm
Duración de emisión : continua
Salida de láser: máx. 0,6 mW

Laserdiodens egenskaper

Material: GaAlAs
Väglängd: 795 nm
Ustrålningsvaraktighet: kontinuerlig
Lasereffekt: max. 0,6 mW

Proprietà del diodo laser

Materiale: GaAlAs
Lunghezza d'onda: 795 nm
Durata di emissione: continua
Uscita massima del laser: 0,6 mW

Laser diode specificaties

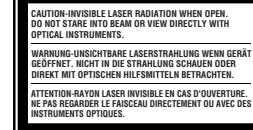
Material: GaAlAs
Golflepte: 795 nm
Stralingsduur: doorlopend
Laseruitgang: max. 0,6 mW

Propriedades do diodo laser

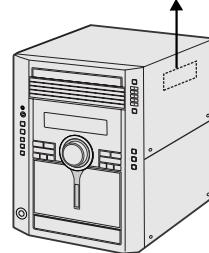
Material: GaAlAs
Comprimento de onda: 795 nm
Duração da emissão: contínua
Saída de laser: máx. 0,6 mW

Laser Diode Properties

Material: GaAlAs
Wavelength: 795 nm
Emission Duration: continuous
Laser Output: max. 0.6 mW



XL-MP110H



ADVERSEL-SYNLIG OG USYNLIG LASERSTRÅLING VED ÅBNING.
SE IKKE IND I STRÅLEN-HELLER IKKE MED OPTISKE INSTRUMENTER.

VARO! AVATTAESSA OLET ALTTIINA NÄKYVÄLLE JA NÄKYMÄTTÖMÄLLE
LASERSÄTEILYLLÉ ÄLÄ TUJOTA SÄTEESEEN ÄLÄKÄ KATSO SITÄ
OPTISEN LAITTEEN LÄPI.

WARNING-SYNLIG OCH OSYNLIG LASERSTRÅLING NÄR DENNA
DEL ÄR OPPNAD. STIRRA EJ IN I STRÅLEN OCH BETRAKTA EJ
STRÅLEN GENOM OPTISKT INSTRUMENT.

VAROITUS! LAITTEEN KÄYTÄMINEN MUULLA KUIN TÄSSÄ
KÄYTTÖOHJEESSA MAINITULLA TAVALLA SAATTAA
ALTISTAA KÄYTÄJÄN TURVALLISUUSLUOKAN 1
YLITTÄVÄLLE NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLÉ.

WARNING - OM APPARATEN ANVÄNDS PÅ ANNAT SÄTT ÄN
I DENNA BRUKSANVISNING SPECIFICERAS. KAN
ANVÄNDAREN UTSÄTTAS FÖR OSYNLIG LASER-
STRÅLING, SOM ÖVERSKRIDER GRÄNSEN FÖR
LASERKLASS 1.

vi

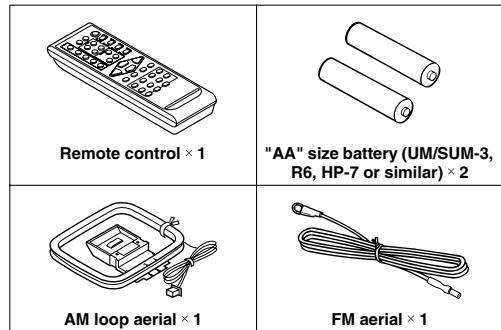
03/12/16

Introduction

Thank you for purchasing this SHARP product. To obtain the best performance from this product, please read this manual carefully. It will guide you in operating your SHARP product.

Accessories

Please confirm that the following accessories are included.



Note:

Only the above accessories are included.

ENGLISH

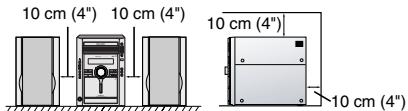
Contents

	Page
■ General Information	
Precautions	2
Controls and indicators	3 - 6
■ Preparation for Use	
System connections	7 - 9
Remote control	10
■ Basic Operation	
General control	11
Setting the clock	12
■ CD or MP3/WMA disc Playback	
Listening to a CD or MP3/WMA disc	13 - 16
Advanced CD or MP3/WMA disc playback	17 - 19
■ Radio	
Listening to the radio	20 - 21
■ Tape Playback	
Listening to a cassette tape	22 - 23
■ Tape Recording	
Recording on a cassette tape	23 - 25
■ Advanced Features	
Using the Radio Data System (RDS)	26 - 31
Timer and sleep operation	32 - 35
Enhancing your system	36 - 37
■ References	
Troubleshooting chart	37 - 39
Maintenance	39
Specifications	40

Precautions

■ General

- Please ensure that the equipment is positioned in a well-ventilated area and ensure that there is at least 10 cm (4") of free space along the sides, top and back of the equipment.



- Use the unit on a firm, level surface free from vibration.



- Keep the unit away from direct sunlight, strong magnetic fields, excessive dust, humidity and electronic/electrical equipment (home computers, facsimiles, etc.) which generate electrical noise.
- Do not place anything on top of the unit.
- Do not expose the unit to moisture, to temperatures higher than 60°C (140°F) or to extremely low temperatures.
- If your system does not work properly, disconnect the AC power lead from the wall socket. Plug the AC power lead back in, and then turn on your system.
- In case of an electrical storm, unplug the unit for safety.



- Hold the AC power plug by the head when removing it from the wall socket, as pulling the lead can damage internal wires.



- Do not remove the outer cover, as this may result in electric shock. Refer internal service to your local SHARP service facility.**



- The ventilation should not be impeded by covering the ventilation openings with items, such as newspapers, tablecloths, curtains, etc.
- No naked flame sources, such as lighted candles, should be placed on the apparatus.
- Attention should be drawn to the environmental aspects of battery disposal.
- The apparatus is designed for use in moderate climate.
- This unit should only be used within the range of 5°C - 35°C (41°F - 95°F).

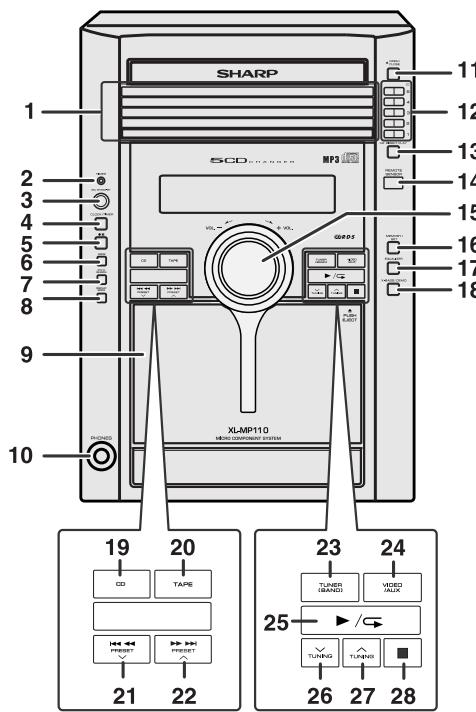
Warning:

The voltage used must be the same as that specified on this unit. Using this product with a higher voltage other than that which is specified is dangerous and may result in a fire or other type of accident causing damage. SHARP will not be held responsible for any damage resulting from use of this unit with a voltage other than that which is specified.

■ Volume control

The sound level at a given volume setting depends on speaker efficiency, location and various other factors. It is advisable to avoid exposure to high volume levels, which occurs whilst turning the unit on with the volume control setting up high, or whilst continually listening at high volumes.

Controls and indicators

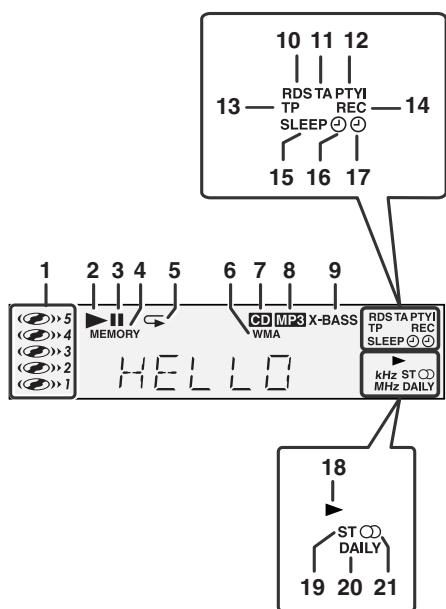


Front panel

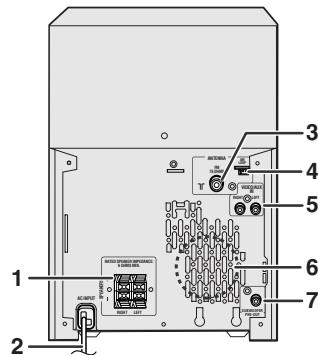
	Reference page
1. Disc Trays	14
2. Timer Indicator	33
3. On/Stand-by Button	11
4. Clock/Timer Button	12, 32, 35
5. Tape Record Pause Button	24, 39
6. RDS ASPM (Auto Station Programme Memory) Button	27
7. RDS Programme Type/ Traffic Information Search Button	29
8. RDS Display Mode Select Button	26
9. Cassette Compartment	22
10. Headphone Socket	36
11. Disc Tray Open/Close Button	13
12. Disc Number Select Buttons	13
13. Disc Direct Play Button	17
14. Remote Sensor	10
15. Volume Control	11
16. Memory/Set Button	12, 32
17. Equalizer Mode Select Button	11
18. Extra Bass/Demo Mode Button	11, 39
19. CD Button	13
20. Tape Button	22
21. Disc Track Down or Fast Reverse, Tape Rewind, Tuner Preset Down, Time Down Button	12, 15, 21, 23, 32
22. Disc Track Up or Fast Forward, Tape Fast Forward, Tuner Preset Up, Time Up Button	12, 15, 21, 23, 32
23. Tuner (Band) Button	20, 27
24. Video/Auxiliary Button	36
25. Disc Play or Repeat, Tape Play Button	13, 15, 23
26. Tuning Down Button	20, 39
27. Tuning Up Button	20, 21
28. Disc or Tape Stop Button	15, 23

■ Display

	Reference page
1.Disc Number Indicators	17
2.Disc Play Indicator	14
3.Disc Pause Indicator	15
4.Memory Indicator	21
5.Disc Repeat Play Indicator	18
6.WMA Indicator	14
7.CD Indicator	14
8.MP3 Indicator	14
9.Extra Bass Indicator	11
10.RDS Indicator	26
11.Traffic Announcement Indicator	26
12.Dynamic PTY Indicator	26
13.Traffic Programme Indicator	26
14.Tape Record Indicator	24
15.Sleep Indicator	35
16.Timer Play Indicator	33
17.Timer Recording Indicator	33
18.Tape Play Indicator	22
19.FM Stereo Mode Indicator	20
20.Daily Timer Indicator	33
21.FM Stereo Receiving Indicator	20

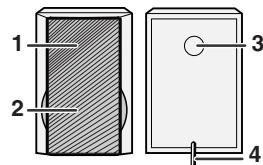


Controls and indicators (continued)



■ Rear panel

	Reference page
1. Speaker Terminals	8
2. AC Power Lead	9
3. FM 75 Ohms Aerial Socket	9
4. AM Loop Aerial Socket	8
5. Video/Auxiliary (Audio Signal) Input Sockets	36
6. Cooling Fan	9
7. Subwoofer Pre-output Socket	37

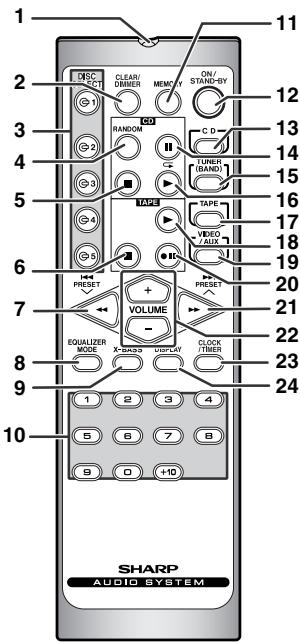


■ Speaker system

- 1. Tweeter
- 2. Woofer
- 3. Bass Reflex Duct
- 4. Speaker Wire

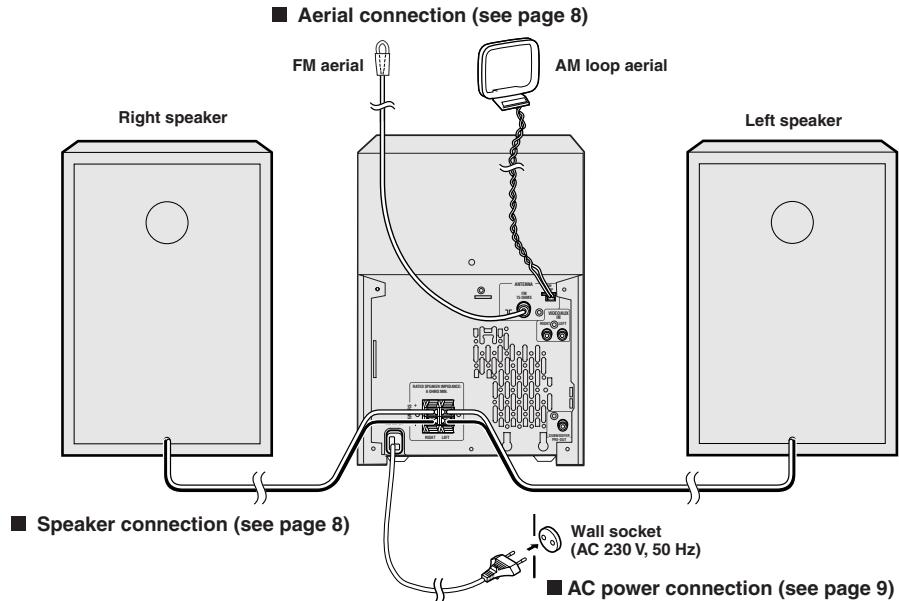
■ Remote control

	Reference page
1. Remote Control Transmitter	10
2. Disc Clear/Dimmer Button	11, 19
3. Disc Number Select Buttons	13
4. Disc Random Button	18
5. Disc Stop Button	15
6. Tape Stop Button	23
7. Disc Track Down or Fast Reverse, Tape Rewind, Tuner Preset Down, Time Down Button	12, 15, 21, 23
8. Equalizer Mode Select Button	11
9. Extra Bass Button	11
10. Disc Direct Search Buttons	17
11. Memory Button	12, 19, 21, 32, 35
12. On/Stand-by Button	11
13. CD Button	13
14. Disc Pause Button	15
15. Tuner (Band) Button	20, 29
16. Disc Play or Repeat Button	13, 18
17. Tape Button	22
18. Tape Play Button	22
19. Video/Auxiliary Button	36
20. Tape Record/Pause Button	24, 25
21. Disc Track Up or Fast Forward, Tape Fast Forward, Tuner Preset Up, Time Up Button	12, 15, 21, 23
22. Volume Up and Down Buttons	11
23. Clock/Timer Button	12, 32, 35
24. MP3/WMA Display Button	16



System connections

Make sure to unplug the AC power lead before any connections.



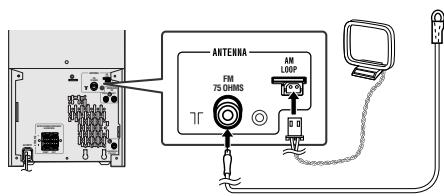
■ Aerial connection

Supplied FM aerial:

Connect the FM aerial wire to the FM 75 OHMS terminal and position the FM aerial wire in the direction where the strongest signal can be received.

Supplied AM loop aerial:

Connect the AM loop aerial to the AM LOOP socket. Position the AM loop aerial for optimum reception. Place the AM loop aerial on a shelf, etc., or attach it to a stand or a wall with screws (not supplied).

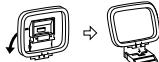


Note:

Placing the aerial on the unit or near the AC power lead may cause noise pickup. Place the aerial away from the unit for better reception.

Installing the AM loop aerial:

< Assembling >

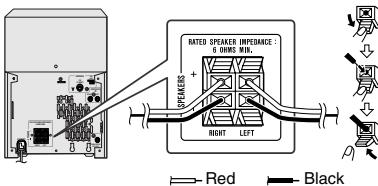


< Attaching to the wall >



■ Speaker connection

Connect the black wire to the minus (-) terminal, and the red wire to the plus (+) terminal.



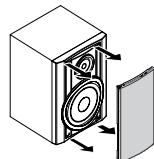
Caution:

- Use speakers with an impedance of 6 ohms or more, as lower impedance speakers can damage the unit.
- Do not mistake the right and the left channels. The right speaker is the one on the right side when you face the unit.
- **Do not let the bare speaker wires touch each other.**
- Do not allow any objects to fall into or to be placed in the bass reflex ducts.
- Do not stand or sit on the speakers. You may be injured.



■ Speaker grilles are removable

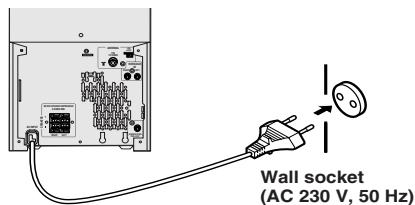
Make sure nothing comes into contact with the speaker diaphragm when you remove the speaker grilles.



System connections (continued)

■ AC power connection

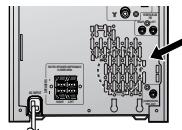
After checking all the connections have been made correctly, plug the AC power lead of this unit into the wall socket. If you plug in the unit first, the unit will enter the demonstration mode.

**Notes:**

- The unit will start the tape initialisation when plugged in to the AC socket. During this process, initialising sound will be heard and the unit cannot be turned on. Wait until the process is finished.
- Unplug the AC power lead from the wall socket if the unit will not be in use for a prolonged period of time.

Cooling fan:

This main unit is built with a cooling fan at the rear of the unit for improved cooling. Please do not cover the opening of the fan with any obstacles, as this will block proper ventilation.



E-9

■ Demonstration mode

The first time the unit is plugged in, the unit will enter the demonstration mode. You will see words scroll.

HELLO

To cancel the demonstration mode:
When the unit is in the power stand-by mode (demonstration mode), press the X-BASS/DEMO button. The unit will enter the low power consumption mode.



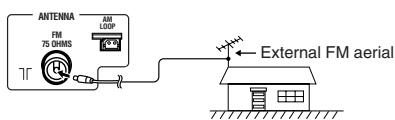
To return to the demonstration mode:
When the unit is in the power stand-by mode, press the X-BASS/DEMO button again.

Note:

When the power is on, the X-BASS/DEMO button can be used to select the extra bass mode.

■ External FM aerial

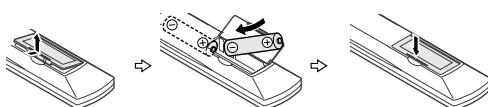
Use an external FM aerial if you require better reception. Consult your dealer.



Remote control

■ Battery installation

- 1 Open the battery cover.
- 2 Insert the supplied batteries according to the direction indicated in the battery compartment.
When inserting or removing the batteries, push them towards the \ominus battery terminals.
- 3 Close the cover.



Precautions for battery use:

- Replace all old batteries with new ones at the same time.
- Do not mix old and new batteries.
- Remove the batteries if the unit will not be used for long periods of time. This will prevent potential damage due to battery leakage.

Caution:

- Do not use rechargeable batteries (nickel-cadmium battery, etc.).
- Installing the batteries incorrectly may cause the unit to malfunction.

Battery removal:

Open the battery cover and pull up the battery to take out.

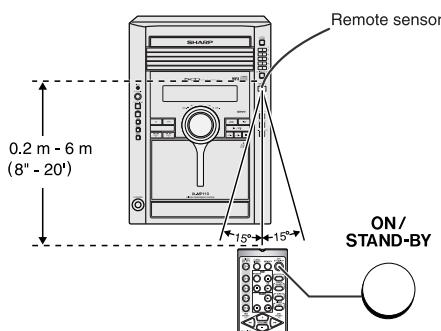
Notes concerning use:

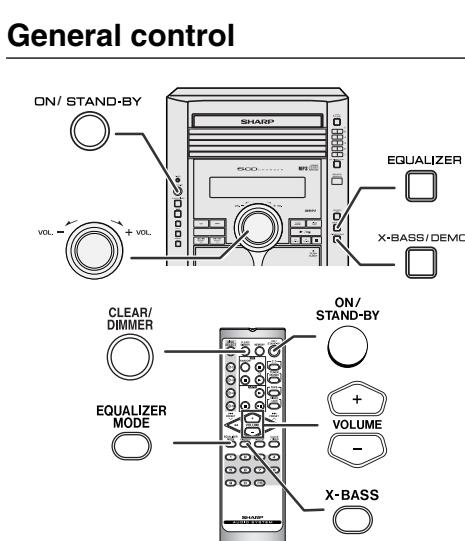
- Replace the batteries if the operating distance is reduced or if the operation becomes erratic. Purchase 2 "AA" size batteries (UM/SUM-3, R6, HP-7 or similar).
- Periodically clean the transmitter on the remote control and the sensor on the unit with a soft cloth.
- Exposing the sensor on the unit to strong light may interfere with operation. Change the lighting or the direction of the unit if this occurs.
- Keep the remote control away from moisture, heat, shock, and vibrations.

■ Test of the remote control

Check the remote control after checking all the connections (see pages 7 - 9). Point the remote control directly at the remote sensor on the unit.

The remote control can be used within the range shown below:
Press the ON/STAND-BY button. Does the power turn on? Now, you can enjoy music.





■ To turn the power on

Press the ON/STAND-BY button to turn the power on.

After use:

Press the ON/STAND-BY button to enter the power stand-by mode.

■ To change the display brightness

You can switch the display brightness by pressing the CLEAR/DIMMER button more than 2 seconds.

■ Volume auto fade-in

If you turn off and on the main unit with the volume set to 27 or higher, the volume starts at 16 and fades in to the last set level.

■ Volume control

Main unit operation:

When the VOL + / - control is turned clockwise, the volume will increase. When it is turned anti-clockwise, the volume will decrease.

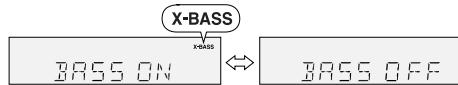
Remote control operation:

Press the VOLUME (+ or -) button to increase or decrease the volume.



■ Bass control

When the power is first turned on, the unit will enter the extra bass mode which emphasises the bass frequencies, and "X-BASS" will appear. To cancel the extra bass mode, press the X-BASS/DEMO (X-BASS) button.

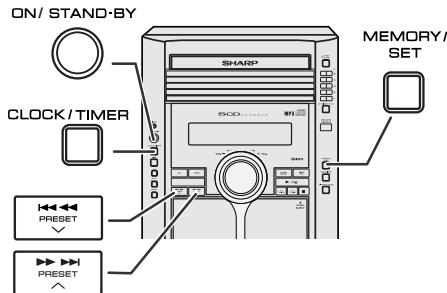


■ Equalizer

When the EQUALIZER (EQUALIZER MODE) button is pressed, the current mode setting will be displayed. To change to a different mode, press the EQUALIZER (EQUALIZER MODE) button repeatedly until the desired sound mode appears.

FLAT	No equalisation.
ROCK	For rock music.
CLASSIC	For classical music.
POPS	For pop music.
VOCAL	Vocals are enhanced.
JAZZ	For jazz.

Setting the clock



In this example, the clock is set for the 24-hour (0:00) display.

- 1** Press the ON/STAND-BY button to turn the power on.
- 2** Press the CLOCK/TIMER button.
- 3** Within 10 seconds, press the **◀◀◀◀ or ▶▶▶▶** button to select "CLOCK", and press the MEMORY/SET button.

- 4** Press the **◀◀◀◀ or ▶▶▶▶** button to select 12-hour or 24-hour display and then press the MEMORY/SET button.


"0:00"	→ The 24-hour display will appear. (0:00 - 23:59)
"AM 12:00"	→ The 12-hour display will appear. (AM 12:00 - PM 11:59)
"AM 0:00"	→ The 12-hour display will appear. (AM 0:00 - PM 11:59)

- 5** Press the **◀◀◀◀ or ▶▶▶▶** button to adjust the hour and then press the MEMORY/SET button.



Press the **◀◀◀◀ or ▶▶▶▶** button once to advance the time by 1 hour. Hold it down to advance continuously.

- 6** Press the **◀◀◀◀ or ▶▶▶▶** button to adjust the minutes and then press the MEMORY/SET button.



Press the **◀◀◀◀ or ▶▶▶▶** button once to advance the time by 1 minute. Hold it down to change the time in 5-minute intervals.

To confirm the time display:

[When the unit is in the stand-by mode]
Press the CLOCK/TIMER button.

The time display will appear for about 10 seconds.

[When the power is on]
Press the CLOCK/TIMER button.

Within 10 seconds, press the **◀◀◀◀ or ▶▶▶▶** button to display the time.
The time display will appear for about 10 seconds.

Note:

The "CLOCK" will appear or time will flash to confirm the time display when the AC power supply is restored after a power failure or unplugging the unit. If incorrect, readjust the clock as follows.

To readjust the clock:

Perform "Setting the clock" from step 1. If the "CLOCK" does not appear in step 3, step 4 (for selecting the 12-hour or 24-hour display) will be skipped.

To change the 12-hour or 24-hour display:

- 1 Clear all the programmed contents. [Refer to "Clearing all the memory (reset)" on page 39 for details.]
- 2 Perform "Setting the clock" from step 1.

Note:

The clock can also be set with the remote control.

XL-MP110H

ENGLISH

Listening to a CD or MP3/WMA disc

This system can play back a standard CD, CD-R/RW in the CD format and CD-R/RW with MP3 or WMA files, but cannot record on them. Some audio CD-R and CD-RW discs may not be playable due to the state of the disc or the device that was used for recording.

MP3:

MP3 is a form of compression. It is an acronym which stands for MPEG Audio Layer 3.
MP3 is a type of audio code which is processed by significant compression from the original audio source with very little loss in sound quality.

- This system supports MPEG 1 Layer 3, MPEG 2 Layer 3, and VBR files.
- During VBR file playback, time counter in the display may differ from its actual playback time.

WMA:

WMA files are Advanced System Format files that include audio files which are compressed with Windows Media Audio codec.
WMA is developed by Microsoft as an audio format file for Windows Media Player.

Notes:

- "MP3" or "WMA" indicator will light up after the unit reads information on an MP3 or WMA disc.

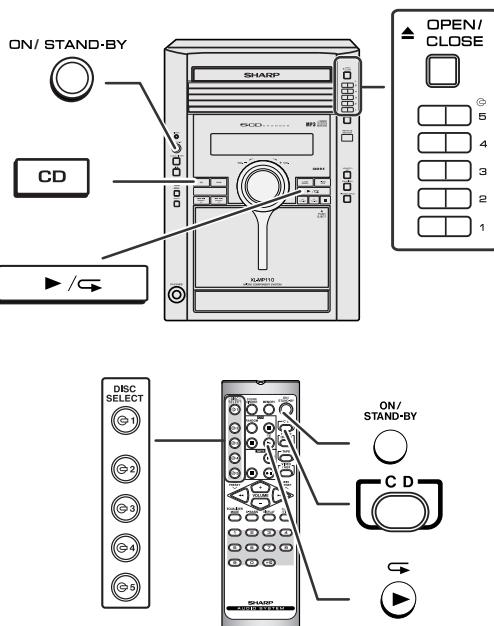
Auto power on function:

When you press any of the following buttons, the unit turns on.

- CD button (main unit and remote control): The unit turns on and the "CD" function is activated.
- CD ▶ / ⊞ button on the remote control: The unit turns on and CD playback starts (regardless of the last function).
- ▶ / ⊞ button on the main unit: The unit turns on and playback of the last function starts (CD, TAPE, TUNER, VIDEO/AUX).

Auto power off function:

In the stop mode of CD, MP3 or WMA operation, the main unit enters the stand-by mode after 15 minutes of inactivity.



1 Press the ON/STAND-BY button to turn the power on.

2 Press the CD button.

3 Press the \odot 1 button and within 5 seconds, press the Δ OPEN/CLOSE button to open the disc tray 1.

4 Place the disc on the disc tray 1, label side up.
Be sure to place 8 cm (3") disc in the middle of the disc trays.

5 Press the Δ OPEN/CLOSE button to close the disc tray 1.

[CD] CD indicator Total number of tracks on the disc Total playing time of the disc	[MP3/WMA] MP3 indicator WMA indicator Total number of track
---	---

● Due to the structure of the disc information, it takes longer to read an MP3/WMA disc than a normal CD (approximately 20 to 90 seconds).

6 You can place discs on the trays 2 - 5 by following steps 3 - 5.

7 Press the \triangleright / \triangleleft button to start playback.

Disc play indicator

- Playback will begin from track 1 on DISC 1. After that disc finishes playing, the next disc will automatically play.
- After the last track on the fifth disc is played, the unit will stop automatically.
- When there is no disc in one of the disc trays (1 - 5), the empty tray will be skipped to the next tray with a disc.

To exchange other discs whilst playing a disc:

Press one of the \odot 1 - \odot 5 buttons for the stopped disc and within 5 seconds, press the Δ OPEN/CLOSE button and exchange discs.

To remove the discs:

In the stop mode, press the \odot 1 - \odot 5 button and within 5 seconds, press the Δ OPEN/CLOSE button.

Caution:

- Do not place two discs in one disc tray.
- Do not play discs of special shapes (heart, octagon, etc). It may cause malfunctions.
- Do not push the disc tray whilst it is moving.
- If the power fails whilst the tray is open, wait until the power is restored.
- If the disc tray is stopped with force, "ER-CD20" will appear on the display for 3 seconds and the unit will not function. If this occurs, press the ON/STAND-BY button to enter the power stand-by mode and then turn the power on again.
- If TV or radio interference occurs during CD operation, move the unit away from the TV or radio.
- If a disc is damaged, dirty, or loaded upside down, the disc will skip or not play.

Listening to a CD or MP3/WMA disc (continued)

■ Various disc functions

Function	Main unit	Remote control	Operation
Play			Press in the stop mode.
Stop			Press in the playback mode.
Pause			Press in the playback mode. Press the button to resume playback from the paused point.
Track up/ Track down			Press in the playback or stop mode. If you press the button in the stop mode, press the button to start the desired track.
Fast forward/Fast reverse			Press and hold down in the playback mode. Release the button to resume playback.

Notes for CD:

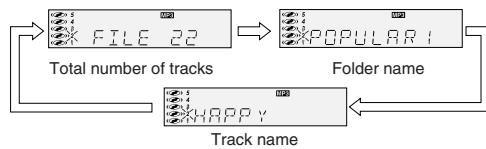
- Track up/track down is possible only within individual discs.
- Fast forward/fast reverse is possible only within individual discs.
- When the end of the last track is reached during fast forward, "END" will appear on the display and CD operation will be paused. When the beginning of the first track is reached during fast reverse, the unit will enter the playback mode.

Notes for MP3/WMA discs:

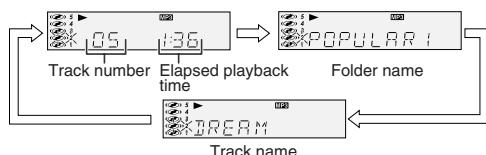
- Track up/track down is possible only within individual discs.
- The sound is heard during fast forward/fast reverse with a CD, but not with an MP3/WMA disc. For fast forward or fast reverse of an MP3/WMA disc, refer to playback time on the display.
- Fast forward/fast reverse is possible only within individual tracks.
- When the end of the track is reached during fast forward, the next track will be played. Playback of the track will begin when its beginning is reached during fast reverse.

■ To change the display (MP3/WMA discs only)
Whilst in the stop mode or playback mode, press the DISPLAY button.
Each time the button is pressed, the display will change as follows.

[When in the stop mode]



[When in the playback mode]



■ To select the desired folder or track by name (MP3/WMA discs only)

- 1 Whilst in the stop mode, press the DISPLAY button to display the folder name.



- 2 Select the desired folder by pressing the \blacktriangleleft (\blacktriangleleft) or \triangleright (\triangleright) button.

- 3 Press the DISPLAY button to display the track name.



- 4 Select the desired track by pressing the \blacktriangleleft (\blacktriangleleft) or \triangleright (\triangleright) button.

- 5 Press the \triangleright (\triangleright) button to begin playback.



Note:

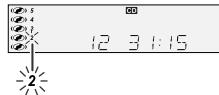
After selecting a disc with one of the $\odot 1$ - $\odot 5$ buttons, the display will not change even if the DISPLAY button is pressed, and neither the folder nor track name is displayed.

Advanced CD or MP3/WMA disc playback

■ To specify a disc to play

You can play a disc by specifying the disc number.

1 Press one of the ① - ⑤ buttons to select the desired disc.



Selected disc number

2 Within 5 seconds, press the CD DIRECT PLAY button on the main unit.



CD DIRECT PLAY

- Playback will begin from track 1 on the chosen disc.
- After the last track on the chosen disc is played, the unit stops automatically.

Note:

If a disc tray with no disc is selected, playback will not start and the disc indicator will go out.

To stop playback:

Press the ■ (CD ■) button.

■ Direct track search

By using the direct search buttons, the desired tracks on the current disc can be played.

Use the direct search buttons on the remote control to select the desired track whilst playing the selected disc.

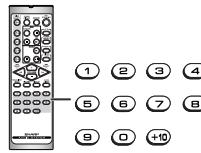


Selected track number

- The direct search buttons allow you to select up to number 9.
- When selecting number 10 or higher, use the "+10" button.

A. For example, to choose 13

- 1 Press the "+10" button once.
- 2 Press the "3" button.



B. For example, to choose 30

- 1 Press the "+10" button three times.
- 2 Press the "0" button.

If the direct search buttons are pressed whilst the disc is stopped, press the ▶ / ⏪ button to start the desired track on the current disc.

Notes:

- A track number higher than the number of tracks on the disc cannot be selected.
- During random play, direct search is not possible.

■ Repeat play

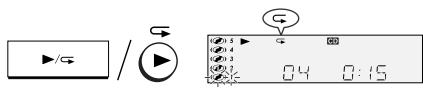
Repeat play can play all 5 discs, all tracks on a chosen disc, or a programmed sequence continuously.

To repeat all tracks on up to 5 discs:

Press the $\blacktriangleright/\llcorner$ button twice.

To repeat desired tracks:

Perform steps 1 - 6 in "Programmed play" section on page 19 and then press the $\blacktriangleright/\llcorner$ button twice.

**To cancel repeat play:**

Press the $\blacktriangleright/\llcorner$ button again.
"llcorner" will go out.

To repeat all tracks on the chosen disc:

- 1 Press one of the $\odot 1 - \odot 5$ buttons.
- 2 Within 5 seconds, press the CD DIRECT PLAY button.

**To cancel repeat play:**

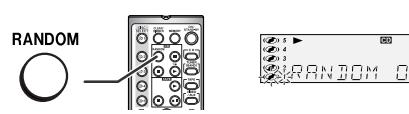
Press the CD DIRECT PLAY button again.
"llcorner" will go out.

■ Random play

The tracks on the disc(s) can be played in random order automatically.

To random play all tracks on up to 5 discs:

Press the RANDOM button on the remote control.

**To cancel random play:**

Press the $\blacktriangleright/\llcorner$ (CD $\blacktriangleright/\llcorner$) button.
"NORMAL" will appear for 2 seconds.

To random play all tracks on the chosen disc:

- 1 Press one of the $\odot 1 - \odot 5$ buttons.
- 2 Within 5 seconds, press the CD DIRECT PLAY button.
- 3 Press the RANDOM button on the remote control.

**To cancel random play:**

Press the CD DIRECT PLAY button.
"NORMAL" will appear for 2 seconds.

Notes:

- If you press the $\blacktriangleright/\llcorner$ button during random play, you can move to the next track by the random operation. On the other hand, the $\blacktriangleleft/\blacktriangleright$ button does not allow you to move to the previous track. The beginning of the track being played will be located.
- In random play, the unit will select and play tracks automatically. (You cannot select the order of the tracks.)

Caution:

After performing repeat or random play, be sure to press the \blacksquare (CD \blacksquare) button. Otherwise, the disc(s) will play continuously.

Advanced CD or MP3/WMA disc playback (continued)

■ Programmed play

You can choose up to 32 selections for playback in the order you like.

- Whilst in the stop mode, press the MEMORY/SET (MEMORY) button to enter the programming save mode.

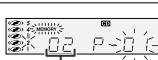


- Press one of the $\odot 1$ - $\odot 5$ buttons to select the desired disc.



Selected disc number

- Press the direct search buttons on the remote control to select the desired track.



Selected track number

You can also select a track by pressing the \blacktriangleleft or \triangleright button.

- Press the MEMORY/SET (MEMORY) button to save the track number.



- Repeat steps 2 - 4 for other tracks. Up to 32 tracks can be programmed.

If you make a mistake, the programmed tracks can be cleared by pressing the CLEAR/DIMMER button.

- Press the \blacksquare (CD \blacksquare) button.

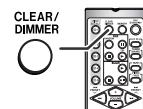
The total number of memory will appear.



- Press the \triangleright / \square button to start playback.

To clear the programmed selections:

Press the CLEAR/DIMMER button on the remote control whilst the "MEMORY" indicator is flashing. Each time the button is pressed, one track will be cleared, beginning with the last track programmed.



To cancel the programmed play mode:

Whilst in the stop mode and the "MEMORY" indicator is lit, press the CLEAR/DIMMER button on the remote control. The "MEMORY" indicator will disappear and all the programmed contents will be cleared.

Adding tracks to the programme:

If a programme has been previously stored, the "MEMORY" indicator will be displayed. Then follow steps 1 - 6 to add tracks. The new tracks will be stored after the last track of the original programme.

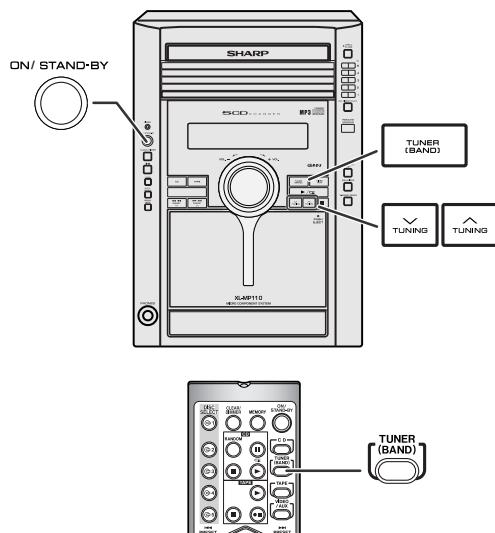
To check which tracks are programmed:

Whilst the unit is stopped in the programmed play mode, press the \blacktriangleleft or \triangleright button.

Notes:

- When a disc with programmed tracks is ejected, the programme is automatically cancelled.
- Even if you press the ON/STAND-BY button to enter the stand-by mode or change the function from CD to another, the programmed selections will not be cleared.
- During the programme operation, random play is not possible.
- During programmed play, the CD DIRECT PLAY button will not work.

Listening to the radio



Auto power on function:

- When you press any of the following buttons, the unit turns on.
- TUNER (BAND) button (main unit and remote control): The unit turns on and the "TUNER" function is activated.
 - ▶ / ← button on the main unit: The unit turns on and playback of the last function starts (CD, TAPE, TUNER, VIDEO/AUX).

■ Tuning

- 1 Press the ON/STAND-BY button to turn the power on.
- 2 Press the TUNER (BAND) button repeatedly to select the desired frequency band (FM or AM).
- 3 Press the TUNING (▽ or △) button to tune in to the desired station.

Manual tuning:

Press the TUNING button as many times as required to tune in to the desired station.

Auto tuning:

When the TUNING button is pressed for more than 0.5 seconds, scanning will start automatically and the tuner will stop at the first receivable broadcast station.

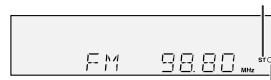
Notes:

- When radio interference occurs, auto scan tuning may stop automatically at that point.
- Auto scan tuning will skip weak signal stations.
- To stop the auto tuning, press the TUNING button again.
- When an RDS (Radio Data System) station is tuned in, the frequency will be displayed first, and then the RDS indicator will light. Finally, the station name will appear.
- Full auto tuning can be achieved for RDS stations "ASPM", see page 27.

To receive an FM stereo transmission:

- Press the TUNER (BAND) button to display the "ST" indicator.
- "ST" will appear when an FM broadcast is in stereo.
 - If the FM reception is weak, press the TUNER (BAND) button to extinguish the "ST" indicator. The reception changes to monaural, and the sound becomes clearer.

FM stereo mode indicator



FM stereo receiving indicator

Listening to the radio (continued)

■ Memorising a station

You can store 40 AM and FM stations in memory and recall them at the push of a button. (Preset tuning)

- 1 Perform steps 1 - 3 in "Tuning" on page 20.**
 - 2 Press the MEMORY/SET (MEMORY) button to enter the preset tuning saving mode.**
- 
- 3 Within 30 seconds, press the PRESET (▽ or △) button to select the preset channel number.**
Store the stations in memory, in order, starting with preset channel 1.
 - 4 Within 30 seconds, press the MEMORY/SET (MEMORY) button to store that station in memory.**
- 
- If the "MEMORY" and preset number indicators go out before the station is memorised, repeat the operation from step 2.
- 5 Repeat steps 1 - 4 to set other stations, or to change a preset station.**
When a new station is stored in memory, the station previously memorised for that preset channel number will be erased.

Note:

The backup function protects the memorised stations for a few hours should there be a power failure or the AC power lead become disconnected.

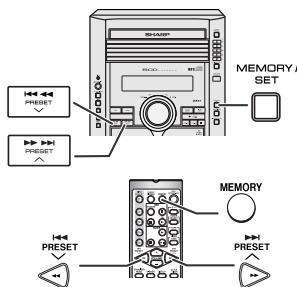
■ To recall a memorised station

Press the PRESET (▽ or △) button for less than 0.5 seconds to select the desired station.

■ To scan the preset stations

The stations saved in memory can be scanned automatically. (Preset memory scan)

- 1 Press the PRESET (▽ or △) button for more than 0.5 seconds. The preset number will flash and the programmed stations will be tuned in sequentially, for 5 seconds each.
- 2 Press the PRESET (▽ or △) button again when the desired station is located.



■ To erase entire preset memory

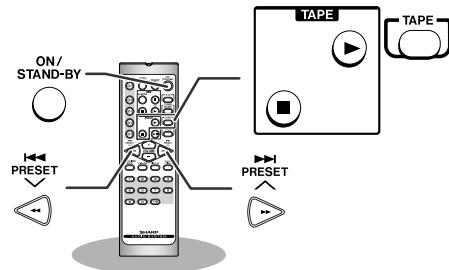
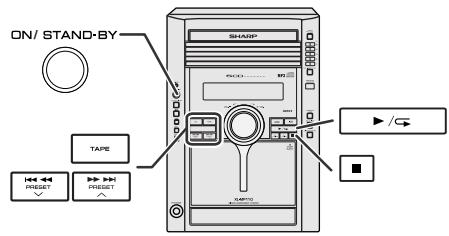
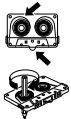
- 1 Press the ON/STAND-BY button to enter the stand-by mode.
- 2 Whilst pressing down the ■ button and the X-BASS/DEMO button, press the TUNING ▲ button until "TUNER CL" appears.



Listening to a cassette tape

Before playback:

- For playback, use normal or low-noise tapes for the best sound. (Metal or CrO₂ tapes are not recommended.)
- Do not use C-120 tapes or poor-quality tapes, as they may cause malfunctions.
- Before loading a tape into the cassette compartment, tighten the slack with a pen or a pencil.

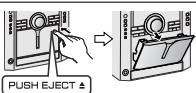


Tape playback

1 Press the ON/STAND-BY button to turn the power on.

2 Press the TAPE button.

3 Open the cassette door by pushing the area marked "▲ PUSH EJECT".



4 Load a cassette into the cassette compartment with the side to be played on facing you.



5 Press the ▶ / ◀ (TAPE ▶) button.



Auto power on function:

When you press any of the following buttons, the unit turns on.

- TAPE button (main unit and remote control): The unit turns on and the "TAPE" function is activated.
- TAPE ▶ button on the remote control: The unit turns on and playback starts (regardless of the last function).
- ▶ / ◀ button on the main unit: The unit turns on and playback of the last function starts (CD, TAPE, TUNER, VIDEO/AUX).

Auto power off function:

In the stop mode of tape operation, the main unit enters the stand-by mode after 15 minutes of inactivity.

Tape Playback**Listening to a cassette tape (continued)****■ Various tape functions**

Function	Main unit	Remote control	Operation
Playback			Press in the stop mode.
Stop			Press in the playback, fast forward or rewind mode.
Fast forward/ Rewind	 	 	Press in the playback or stop mode.

Caution:

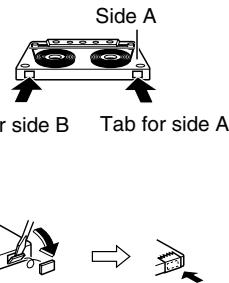
- To remove the cassette, press the ■ (TAPE ■) button, and then open the compartment.
- If a power failure occurs during tape operation, the tape head will remain engaged with the tape and the cassette door will not open. In this case, wait until the power is restored.

Recording on a cassette tape**Before recording:**

- When recording important selections, make a preliminary test to ensure that the desired material is properly recorded.
- SHARP is not liable for damage or loss of your recording arising from malfunction of this unit.
- The volume and sound controls can be adjusted with no effect on the recorded signal (Variable Sound Monitor).
- For recording, use only normal tapes. Do not use metal or CrO₂ tapes.**

Erase-prevention tab of cassette tapes:

- When recording on a cassette tape, make sure that the erase-prevention tabs are not removed. Cassettes have removable tabs that prevent accidental recording or erasing.
- To protect the recorded sound, remove the tab after recording. Cover the tab hole with adhesive tape to record on the tape without the tab.



■ Recording from a CD or MP3/WMA disc

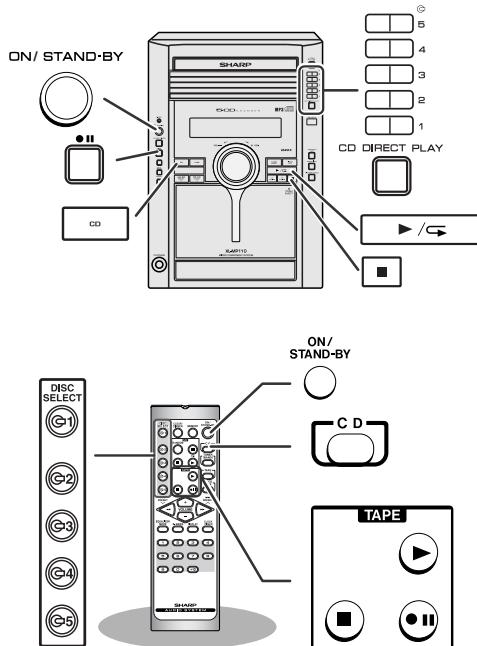
You can record the desired disc using the CD DIRECT PLAY button.

- 1 Press the ON/STAND-BY button to turn the power on.
- 2 Press the CD button.
- 3 Load a cassette into the cassette compartment with the side to be recorded on facing you.
Wind past the leader of the tape, on which recording cannot be performed.
- 4 Press the **●II** button.
Recording will be paused.
- 5 Press one of the **○ 1 - ○ 5** buttons to select the desired disc.
- 6 Within 5 seconds, press the CD DIRECT PLAY button to start recording.
 - Recording is started from the selected disc. When the playback of the last track is finished or the end of the tape is reached, the disc and the cassette will stop automatically.
 - Playback of the disc will start approximately 7 seconds after the tape starts.

To stop recording:

Press the **■ (TAPE ■)** button.

The disc and tape will stop.



Recording on a cassette tape (continued)

Recording from several CDs continuously:

- 1 Perform steps 1 - 5 in "Recording from a CD or MP3/WMA disc" on page 24.
- 2 Within 5 seconds, press the ▶ / ⏪ (TAPE ▶) button to start recording.

To perform programmed recording:

- 1 Programme discs and tracks (see page 19).
- 2 Press the ■ (TAPE ■) button.
- 3 Press the ▶ / ⏪ (TAPE ▶) button to start recording.

To stop recording:

Press the ■ (TAPE ■) button.
The CD and tape will stop.

■ Recording from the radio

- | | |
|----------|--|
| 1 | Tune in to the desired station (see page 20). |
| 2 | Load a cassette into the cassette compartment with the side to be recorded on facing you.
Wind past the leader of the tape, on which recording cannot be performed. |
| 3 | Press the ■ (TAPE ■) button.
Recording will be paused. |
| 4 | Press the ▶ / ⏪ (TAPE ▶) button to start recording. |



To interrupt recording:

Press the ■ (TAPE ■) button.
To resume recording, press the ▶ / ⏪ (TAPE ▶) button.

To stop recording:

Press the ■ (TAPE ■) button.

Note:

If you hear a whistling noise whilst recording an AM station, move the AM loop aerial.

■ Erasing recorded tapes

- 1 Press the TAPE button.
- 2 Follow steps 2 - 4 in "Recording from the radio".

Using the Radio Data System (RDS)

RDS is a broadcasting service which a growing number of FM stations provide. These FM stations send additional signals along with their regular programme signals. They send their station names, and information about the type of programme such as sport, music, etc.

When tuned to an RDS station, "RDS" and the station name will be displayed.

"TP" (Traffic Programme) will appear on the display when the received broadcast carries traffic information, and "TA" (Traffic Announcement) will appear whilst a traffic information is on air.

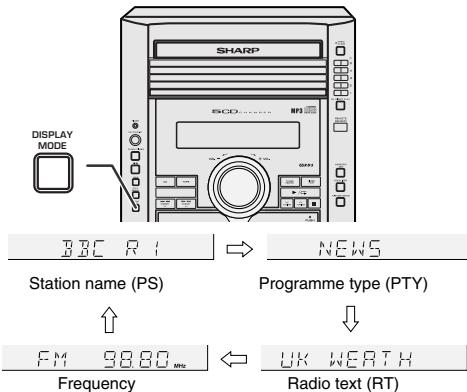
"PTYI" (Dynamic PTY Indicator) will appear whilst the Dynamic PTY station is received.



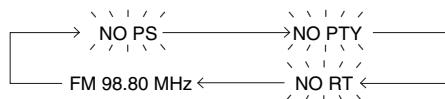
You can control the RDS by using the buttons on the main unit only.

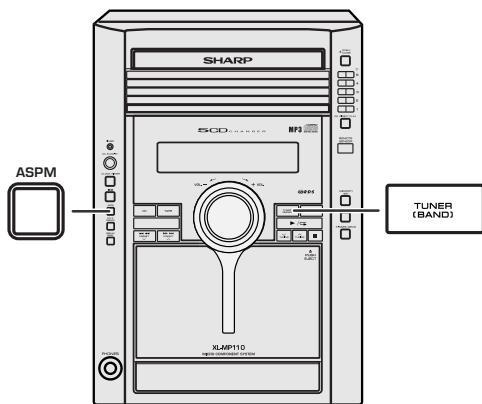
■ Information provided by RDS

Each time the DISPLAY MODE button is pressed, the display will switch as follows:



When you are tuning in to a station other than an RDS station or to an RDS station which sends weak signal, the display will change in the following order:





Using the Radio Data System (RDS) (continued)

■ Using the Auto Station Programme Memory (ASPM)

Whilst in the ASPM operation mode, the tuner will automatically search for new RDS stations. Up to 40 stations can be stored. If you have already stored some stations in memory, the number of new stations you can store will be less.

- 1 Press the TUNER (BAND) button to select the FM band.

- 2 Press and hold down the ASPM button for at least 3 seconds.

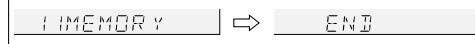
- 1 After "ASPM" has flashed for about 4 seconds, scanning will start (87.50 - 108.00 MHz).



- 2 When an RDS station is found, "RDS" will appear for a short time and the station will be stored in memory.



- 3 After scanning, the number of stations stored in memory will be displayed for 4 seconds, and then "END" will appear for 4 seconds.



To stop the ASPM operation before it is complete:

Press the ASPM button whilst it is scanning for stations.
The stations which are already stored in memory will be kept there.

Notes:

- If the same station is broadcasting on different frequencies, the strongest frequency will be stored in memory.
- Any station which has the same frequency as one stored in memory will not be stored.
- If 40 stations have already been stored in memory, the scan will be aborted. If you want to redo the ASPM operation, erase the preset memory.
- If no stations have been stored in memory, "END" will appear for about 4 seconds.
- If the RDS signals are very weak, station names may not be stored in memory.

To erase all of the contents of preset memory:

- 1 Press the ON/STAND-BY button to enter the power stand-by mode.
- 2 Whilst pressing down the **III** button and the X-BASS/DEMO button, press the TUNING \wedge button until "TUNER CL" appears.
- After performing this operation, all of the preset memory information will be erased.

To store a station name again if the wrong name was stored in memory:

It may be impossible to store station names in memory using the ASPM function if there is lots of noise or if the signal is too weak. In this case, perform as follows.

- 1 Press the PRESET (\vee or \wedge) button to check whether the names are correct.
- 2 If you find a wrong name during receiving the station, wait until the correct name will be displayed. And then press the MEMORY/SET button.
- 3 Within 30 seconds, press the MEMORY/SET button whilst the preset channel number is flashing.
- The new station name has been stored in memory correctly.

Notes:

- The same station name can be stored in different channels.
- In a certain area or during certain time periods, the station names may temporarily be different.

■ Notes for RDS operation

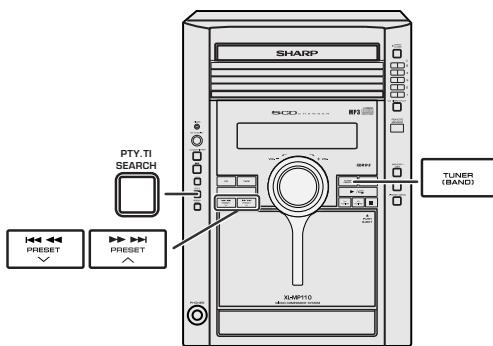
If any of the following events occur, it does not mean that the unit is faulty:

- "PS", "NO PS" and a station name appear alternately, and the unit does not operate properly.
- If a particular station is not broadcasting properly or a station is conducting tests, the RDS reception function may not work properly.
- When you receive an RDS station whose signal is too weak, information like the station name may not be displayed.
- "NO PS", "NO PTV" or "NO RT" will flash for about 5 seconds, and then the frequency will be displayed.

Notes for radio text:

- The first 8 characters of the radio text will appear for 4 seconds and then they will scroll across the display.
- If you tune in to an RDS station which is not broadcasting any radio text, "NO RT" will be displayed when you switch to the radio text position.
- Whilst radio text data is received or when the text contents change, "RT" will be displayed.

Using the Radio Data System (RDS) (continued)



■ To recall stations in memory

To specify programmed types and select stations (PTY search):

You can search a station by specifying the programme type (news, sports, traffic programme, etc. ... see pages 30 - 31) from the stations in memory.

1 Press the TUNER (BAND) button to select the FM.

2 Press the PTY.TI SEARCH button.

SELECT ⇔ **PTY TI**

"SELECT" and "PTY TI" will appear alternately for about 6 seconds.

3 Within 6 seconds, press the PRESET (▽ or △) button to select the programme type.

NEWS

Each time the button is pressed, the programme type will appear. If the button is held down for more than 0.5 seconds, the programme type will appear continuously.

4 Whilst the selected programme type is flashing (within 6 seconds), press the PTY.TI SEARCH button again.

NEWS ⇒ **SEARCH**

After the selected programme type has been lit for 2 seconds, "SEARCH" will appear, and the search operation will start.

Notes:

- If the display has stopped flashing, start again from step 2. If the unit finds a desired programme type, the corresponding channel number will flash for about 4 seconds, and then the station name will flash for 7 seconds, which will remain lit.
- If you want to listen to the same programme type of another station, press the PTY.TI SEARCH button whilst the channel number or station name is flashing. The unit will look for the next station.
- If no station can be found, "NOT FOUND" will appear for 4 seconds.

If you select the traffic programme:

If you select the traffic programme (TP) in step 3, "TP" will appear. (This does not mean that you can listen to the traffic information at that time.)

When the traffic information is broadcast, "TA" will appear.

To specify station names and select stations manually:

You can select a station by specifying the name (BBC R1, BBC R2, etc.) from the stations stored in memory.

Before starting this operation, you must store one or more station names in memory.

- 1 Press the TUNER (BAND) button to select the FM band.
- 2 Press the PRESET (\wedge or \vee) button to select a desired station.
- 3 The station name will be displayed for 6 seconds. Then the display will change.

Descriptions of the PTY (Programme Type) codes, TP (Traffic Programme) and TA (Traffic Announcement).

You can search for and receive the following PTY, TP and TA signals.

NEWS	Short accounts of facts, events and publicly expressed views, reportage and actuality.
AFFAIRS	Topical programme expanding or enlarging upon the news, generally in different presentation style or concept, including debate, or analysis.
INFO	Programmes whose purpose is to impart advice in the widest sense.
SPORT	Programme concerned with any aspect of sport.
EDUCATE	Programme intended primarily to educate, of which the formal element is fundamental.
DRAMA	All radio plays and serials.
CULTURE	Programmes concerned with any aspect of national or regional culture, including language, theatre, etc.
SCIENCE	Programmes about the natural sciences and technology.
VARIETY	Used for mainly speech-based programmes usually of light-entertainment nature, not covered by other categories. Examples include: quizzes, panel games, personality interviews.
POP M	Commercial music, which would generally be considered to be of current popular appeal, often featuring in current or recent record sales charts.
ROCK M	Contemporary modern music, usually written and performed by young musicians.
EASY M	Current contemporary music considered to be "easy-listening", as opposed to Pop, Rock or Classical, or one of the specialised music styles, Jazz, Folk or Country. Music in this category is often but not always, vocal, and usually of short duration.

Using the Radio Data System (RDS) (continued)

LIGHT M	Classical music for general, rather than specialist appreciation. Examples of music in this category are instrumental music, and vocal or choral works.
CLASSICS	Performances of major orchestral works, symphonies, chamber music, etc., and including Grand Opera.
OTHER M	Musical styles not fitting into any of the other categories. Particularly used for specialist music of which Rhythm & Blues and Reggae are examples.
WEATHER	Weather reports and forecasts and meteorological information.
FINANCE	Stock Market reports, commerce, trading, etc.
CHILDREN	For programmes targeted at a young audience, primarily for entertainment and interest, rather than where the objective is to educate.
SOCIAL	Programmes about people and things that influence them individually or in groups. Includes: sociology, history, geography, psychology and society.
RELIGION	Any aspect of beliefs and faiths, involving a God or Gods, the nature of existence and ethics.
PHONE IN	Involving members of the public expressing their views either by phone or at a public forum.
TRAVEL	Features and programmes concerned with travel to near and far destinations, package tours and travel ideas and opportunities. Not for use for announcements about problems, delays, or roadworks affecting immediate travel where TP/TA should be used.
LEISURE	Programmes concerned with recreational activities in which the listener might participate. Examples include, Gardening, Fishing, Antique collecting, Cooking, Food & Wine, etc.
JAZZ	Polyphonic, syncopated music characterised by improvisation.
COUNTRY	Songs which originate from, or continue the musical tradition of the American Southern States. Characterised by a straightforward melody and narrative story line.
NATION M	Current Popular Music of the Nation or Region in that country's language, as opposed to International 'Pop' which is usually US or UK inspired and in English.
OLDIES	Music from the so-called "golden age" of popular music.
FOLK M	Music which has its roots in the musical culture of a particular nation, usually played on acoustic instruments. The narrative or story may be based on historical events or people.
DOCUMENT	Programme concerned with factual matters, presented in an investigative style.
TEST	Broadcast when testing emergency broadcast equipment or receivers.
ALARM !	Emergency announcement made under exceptional circumstances to give warning of events causing danger of a general nature.
NONE	No programme type (receive only).
TP	Broadcasts which carry traffic announcements.
TA	Traffic announcements are being broadcast.

Timer and sleep operation

Timer playback:

The unit turns on and plays the desired source (CD, tuner, tape) at a preset time.

Timer recording:

The unit turns on and starts recording from the tuner at the preset time.

This unit has 2 types of timer: ONCE TIMER and DAILY TIMER.

Once timer: Once timer play or once timer recording works for one time only at a preset time.

For example, if you are away but want to record a programme on a radio station.

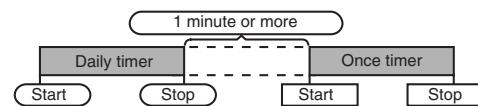
Daily timer: Daily timer play or daily timer recording works at the same preset time every day.

For example, set the timer as a wake-up call every morning.

Using the once timer and daily timer in combination:

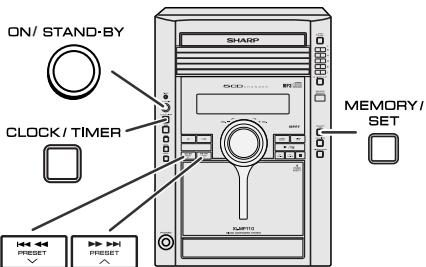
For example, use the once timer to record a radio programme, and use the daily timer to wake up.

- 1 Set the daily timer (pages 32 - 34).
- 2 Set the once timer (pages 32 - 34).



Note:

When set times for the daily timer and once timer overlap, the once timer takes priority. Allow an interval of at least 1 minute between operations.



■ Timer playback or timer recording

Before setting timer:

- 1 Check that the clock is set to the correct time (refer to page 12). If it is not set, you cannot use the timer function.
- 2 For timer playback: Load a cassette or discs to be played. For timer recording: Load a cassette for recording in the cassette compartment.



- 1 Press the ON/STAND-BY button to turn the power on.

- 2 Press the CLOCK/TIMER button.

- 3 Within 10 seconds, press the $\blacktriangleleft\blacktriangleright$ or $\blacktriangleright\blacktriangleright$ button to select "ONCE" or "DAILY", and press the MEMORY/SET button.

ONCE \leftrightarrow **DAILY**

Set the clock to the correct time if "ONCE" or "DAILY" does not appear.

Continued to the next page

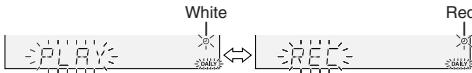
E-32

Timer and sleep operation (continued)

- 4** Within 10 seconds, press the **◀◀◀◀** or **▶▶▶▶** button to select "ONCE SET" or "DAILY SET", and press the MEMORY/SET button.



- 5** Press the **◀◀◀◀** or **▶▶▶▶** button to select "PLAY" or "REC", and press the MEMORY/SET button.



The illustrations show the daily timer setting.

- 6** Press the **◀◀◀◀** or **▶▶▶▶** button to adjust the hour and then press the MEMORY/SET button.



The illustrations show the timer playback setting in the daily timer mode.

- 7** Press the **◀◀◀◀** or **▶▶▶▶** button to adjust the minutes and then press the MEMORY/SET button.



- 8** Set the time to finish as in steps 6 and 7 above.

- 9** Switch input with the **◀◀◀◀** or **▶▶▶▶** button, and then press the MEMORY/SET button.

To select the timer playback source: CD, TUNER or TAPE.

To select the timer recording source: TUNER.

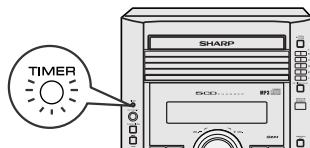
- When you select the tuner, select a station by pressing the **◀◀◀◀** or **▶▶▶▶** button, and then press the MEMORY/SET button.
- If a station has not been programmed, "NO P.SET" will be displayed and timer setting will be cancelled.

- 10** Adjust the volume using the VOLUME control, and then press the MEMORY/SET button.

Do not turn the volume up too high.

- 11** Press the ON/STAND-BY button to enter the power stand-by mode.

The "TIMER" indicator lights up and the unit is ready for timer playback or timer recording.



Continued to the next page

12 When the preset time is reached, playback or recording will start.

The volume will increase gradually until it reaches the preset volume.

13 When the timer end time is reached, the system will enter the power stand-by mode automatically.**Once timer:**

The timer will be cancelled.

Daily timer:

The timer will operate at the same time every day. It will continue until the daily timer setting is cancelled. Cancel the daily timer when it is not in use.

Note:

When performing timer playback or recording using another unit connected to the VIDEO/AUX IN socket, select "VIDEO" in step 9. This unit will turn on or enter the power stand-by mode automatically, however, the connected unit will not turn on or off.

Checking the timer setting in the timer stand-by mode:

- 1 Press the CLOCK/TIMER button.
 - 2 Within 10 seconds, press the $\blacktriangleleft\blacktriangleright$ or $\blacktriangleright\blacktriangleright$ button to select "ONCE" or "DAILY", and press the MEMORY/SET button.
 - 3 Within 10 seconds, press the $\blacktriangleleft\blacktriangleright$ or $\blacktriangleright\blacktriangleright$ button to select "ONCE CAL" or "DAILY CAL", and press the MEMORY/SET button.
- The unit returns to the timer stand-by mode after displaying the settings in order.

Cancelling the timer setting in the timer stand-by mode:

- 1 Press the CLOCK/TIMER button.
 - 2 Within 10 seconds, press the $\blacktriangleleft\blacktriangleright$ or $\blacktriangleright\blacktriangleright$ button to select "ONCE" or "DAILY", and press the MEMORY/SET button.
 - 3 Within 10 seconds, press the $\blacktriangleleft\blacktriangleright$ or $\blacktriangleright\blacktriangleright$ button to select "ONCE OFF" or "DAILY OFF", and press the MEMORY/SET button.
- Timer will be cancelled (the setting will not be cancelled).

Reusing the memorised timer setting:

The timer setting will be memorised once it is entered. To reuse the same setting, perform the following operations.

- 1 Turn the power on and press the CLOCK/TIMER button.
- 2 Within 10 seconds, press the $\blacktriangleleft\blacktriangleright$ or $\blacktriangleright\blacktriangleright$ button to select "ONCE" or "DAILY", and press the MEMORY/SET button.
- 3 Within 10 seconds, press the $\blacktriangleleft\blacktriangleright$ or $\blacktriangleright\blacktriangleright$ button to select "ONCE ON" or "DAILY ON", and press the MEMORY/SET button.
- 4 Press the ON/STAND-BY button to enter the power stand-by mode.

Note:

The timer can also be set with the remote control.

Timer and sleep operation (continued)

■ Sleep operation

The radio, compact disc and cassette tape can all be turned off automatically.

1 Play back the desired sound source.

2 Press the CLOCK/TIMER button.

3 Within 10 seconds, press the $\blacktriangleleft\triangleleft$ or $\triangleright\triangleright$ button to select "SLEEP", and press the MEMORY/SET button.

SLEEP

4 Press the $\blacktriangleleft\triangleleft$ or $\triangleright\triangleright$ button to select the time.

(Maximum: 3 hours - Minimum: 1 minute)

- 3 hours - 5 minutes → 5-minute intervals
- 5 minutes - 1 minute → 1-minute intervals

5 Press the MEMORY/SET button.

"SLEEP" will appear.



6 The unit will enter the power stand-by mode automatically after the preset time has elapsed.

The volume will be turned down 1 minute before the sleep operation finishes.

To confirm the remaining sleep time:

- 1 Whilst "SLEEP" is indicated, press the CLOCK/TIMER button.
 - 2 Within 10 seconds, press the $\blacktriangleleft\triangleleft$ or $\triangleright\triangleright$ button to select "SLEEP X : XX".
- "X : XX" is sleep remaining time.
- The remaining sleep time is displayed for about 10 seconds.
 - You can change the remaining sleep time whilst it is displayed by pressing the MEMORY/SET button (steps 4 - 5).

To cancel the sleep operation:

Press the ON/STAND-BY button whilst "SLEEP" is indicated. To cancel the sleep operation without setting the unit to the stand-by mode, proceed as follows.

- 1 Whilst "SLEEP" is indicated, press the CLOCK/TIMER button.
- 2 Within 10 seconds, press the $\blacktriangleleft\triangleleft$ or $\triangleright\triangleright$ button to select "SLEEP OFF", and press the MEMORY/SET button.

■ To use timer and sleep operation together

Sleep and timer playback:

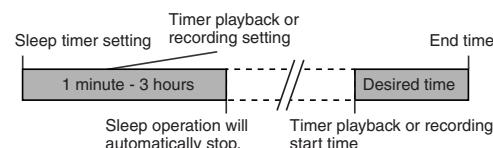
For example, you can fall asleep listening to the radio and wake up to CD in the next morning.

Sleep and timer recording:

For example, you can fall asleep listening to the CD and record radio programmes whilst sleeping.

- 1 Set the sleep time (see left, steps 1 - 5).

- 2 Whilst the sleep timer is set, set the timer playback or recording (steps 2 - 10, pages 32 - 33).

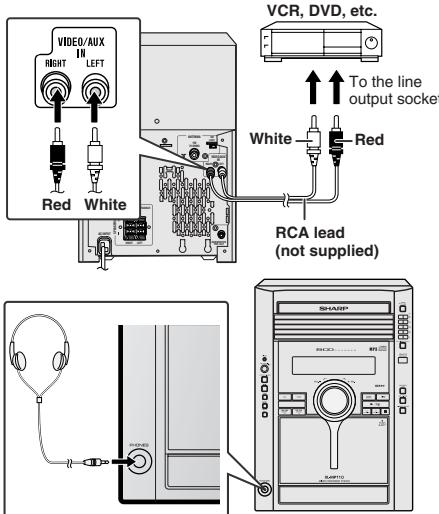


Caution:

When using the cassette deck, be sure the tape length is long enough to perform both functions. If you want to sleep and wake up listening to a tape, and the length of the tape is shorter than the sleep timer setting, timer playback or recording will not be possible.

Enhancing your system

The connection lead is not included. Purchase a commercially available lead as shown below.



Auto power on function:

- When you press any of the following buttons, the unit turns on.
- VIDEO/AUX button (main unit and remote control): The unit turns on and the "VIDEO" function is activated.
 - ▶ / ◁ button on the main unit: The unit turns on and playback of the last function starts (CD, TAPE, TUNER, VIDEO/AUX).

■ Listening to the playback sounds from VCR, DVD, etc.

- 1 Use a connection lead to connect the VCR, DVD, etc. to the VIDEO/AUX IN socket.
- When using video equipment, connect the audio output to this unit and the video output to a television.
- 2 Press the ON/STAND-BY button to turn the power on.
- 3 Press the VIDEO/AUX button.
- 4 Play the connected equipment.

Note:

To prevent noise interference, place the unit away from the television.

■ To record on a tape

- 1 Insert a cassette in the cassette compartment.
- 2 Press the VIDEO/AUX button.
- 3 Press the ■ button.
- 4 Press the ▶ / ◁ (TAPE ▶) button.
- 5 Play the VCR, DVD, etc.

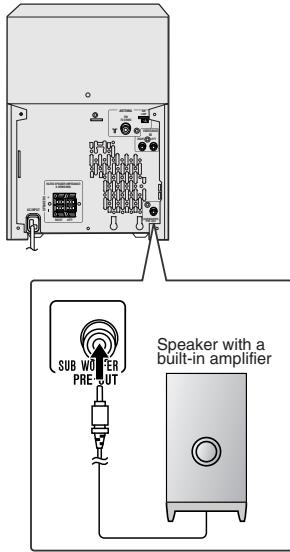
■ Headphones

- Before plugging in or unplugging the headphones, reduce the volume.
- Be sure your headphones have a 3.5 mm (1/8") diameter plug and impedance between 16 and 50 ohms. The recommended impedance is 32 ohms.
- Plugging in the headphones disconnects the speakers automatically. Adjust the volume using the VOLUME control.

Enhancing your system (continued)

■ Subwoofer connection

When a commercially available speaker with a built-in amplifier is connected to this unit, you can enjoy sound with emphasised bass. Connect an RCA lead from a commercially available speaker with a built-in amplifier to the SUBWOOFER PRE-OUT socket.



Troubleshooting chart

Many potential problems can be resolved by the owner without calling a service technician.

If something is wrong with this product, check the following before calling your authorised SHARP dealer or service centre.

■ General

Symptom	Possible cause
• The clock is not set to the correct time.	• Did a power failure occur? Reset the clock.
• When a button is pressed, the unit does not respond.	• Set the unit to the power stand-by mode and then turn it back on. • If the unit still malfunctions, reset it.
• No sound is heard.	• Is the volume level set to "0"? • Are the headphones connected? • Are the speaker wires disconnected?

■ CD player

Symptom	Possible cause
• Playback does not start. • Playback stops in the middle or is not performed properly.	• Is the disc loaded upside down? • Does the disc satisfy the standards? • Is the disc distorted or scratched?
• Playback sounds are skipped, or stopped in the middle of a track.	• Is the unit located near excessive vibrations? • Is the disc very dirty? • Has condensation formed inside the unit?

■ Cassette deck

Symptom	Possible cause
● Cannot record.	● Is the erase-prevention tab removed?
● Cannot record tracks with proper sound quality.	● Is it a normal tape? (You cannot record on a metal or CrO ₂ tape.)
● Cannot erase completely.	
● Sound skipping.	● Is there any slack? ● Is the tape stretched?
● Cannot hear treble.	● Are the capstans, pinch rollers, or heads dirty?
● Sound fluctuation.	
● Cannot remove the tape.	● If a power failure occurs during playback, the heads remain engaged with the tape. Do not open the compartment with great force.

■ Remote control

Symptom	Possible cause
● The remote control does not operate.	● Is the AC power lead of the unit plugged in? ● Is the battery polarity correct? ● Are the batteries dead? ● Is the distance or angle incorrect? ● Does the remote control sensor receive strong light?

■ Tuner

Symptom	Possible cause
● The radio makes unusual noises continuously.	● Is the unit placed near the TV or computer? ● Is the FM aerial or AM loop aerial placed properly? Move the aerial away from the AC power lead if it's located nearby.

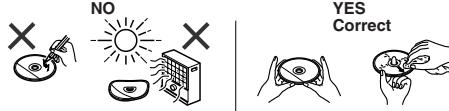
■ Condensation

Sudden temperature changes, storage or operation in an extremely humid environment may cause condensation inside the cabinet (CD pickup, tape heads, etc.) or on the transmitter on the remote control. Condensation can cause the unit to malfunction. If this happens, leave the power on with no disc (or cassette) in the unit until normal playback is possible (about 1 hour). Wipe off any condensation on the transmitter with a soft cloth before operating the unit.

■ Care of compact discs

Compact discs are fairly resistant to damage, however mistracking can occur due to an accumulation of dirt on the disc surface. Follow the guidelines below for maximum enjoyment from your CD collection and player.

- Do not write on either side of the disc, particularly the non-label side from which signals are read. Do not mark this surface.
- Keep your discs away from direct sunlight, heat, and excessive moisture.
- Always hold the CDs by the edges. Fingerprints, dirt, or water on the CDs can cause noise or mistracking. If a CD is dirty or does not play properly, clean it with a soft, dry cloth, wiping straight out from the centre, along the radius.



Troubleshooting chart (continued)

■ If trouble occurs

When this product is subjected to strong external interference (mechanical shock, excessive static electricity, abnormal supply voltage due to lightning, etc.) or if it is operated incorrectly, it may malfunction.

If such a problem occurs, do the following:

- 1 Set the unit to the stand-by mode and turn the power on again.
- 2 If the unit is not restored in the previous operation, unplug and plug in the unit, and then turn the power on.

Note:

If neither operation above restores the unit, clear all the memory by resetting it.

■ Clearing all the memory (reset)

- 1 Press the ON/STAND-BY button to enter the power stand-by mode.
- 2 Whilst pressing down the **●II** button and the X-BASS/DEMO button, press the TUNING \swarrow button until "CLEAR AL" appears.



Caution:

This operation will erase all data stored in memory including clock, timer settings, tuner preset, and CD programme.

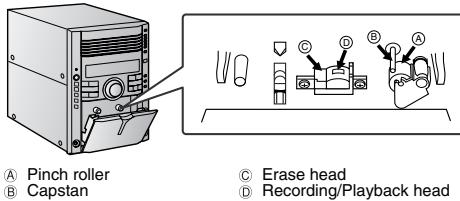
■ Before transporting the unit

Remove all CDs from the unit. Make sure there is no CD in the disc tray. Then, set the unit to the power stand-by mode. Carrying the unit with discs left inside can damage the unit.

Maintenance

■ Cleaning the tape-handling parts

- Dirty heads, capstans or pinch rollers can cause poor sound and tape jams. Clean these parts with a cotton swab moistened with commercial head/pinch roller cleaner or isopropyl alcohol.
- When cleaning the heads, pinch rollers, etc., unplug the unit which contains high voltages.



- After long use, the deck's heads and capstans may become magnetised, causing poor sound. Demagnetise these parts once every 30 hours of playing/recording time by using a commercial tape head demagnetiser. Read the demagnetiser's instructions carefully before use.

■ Cleaning the cabinet

Periodically wipe the cabinet with a soft cloth and a diluted soap solution, then with a dry cloth.

Caution:

- Do not use chemicals for cleaning (petrol, paint thinner, etc.). It may damage the cabinet finish.
- Do not apply oil to the inside of the unit. It may cause malfunctions.

Specifications

As part of our policy of continuous improvement, SHARP reserves the right to make design and specification changes for product improvement without prior notice. The performance specification figures indicated are nominal values of production units. There may be some deviations from these values in individual units.

■ General

Power source	AC 230 V, 50 Hz
Power consumption	Power on: 100 W Power stand-by: 0.6 W(*)
Dimensions	Width: 185 mm (7-1/4") Height: 260 mm (10-1/4") Depth: 307 mm (12")
Weight	6.1 kg (13.4 lbs.)

(*)This power consumption value is obtained when the demonstration mode is cancelled in the power stand-by mode. Refer to page 9 to cancel the demonstration mode.

■ Amplifier

Output power	PMPO: 364 W (total) MPO: 182 W (91 W + 91 W) (DIN 45 324) RMS: 100 W (50 W + 50 W) (DIN 45 324) RMS: 76 W (38 W + 38 W) (DIN 45 500)
Output terminals	Speakers: 6 ohms Headphones: 16 - 50 ohms (recommended: 32 ohms) Subwoofer pre-out (audio signal): 200 mV/10 k ohms at 70 Hz
Input terminals	Video/Auxiliary (audio signal): 500 mV/47 k ohms

■ CD player

Type	5-disc multi-play compact disc player
Signal readout	Non-contact, 3-beam semiconductor laser pickup
D/A converter	1-bit D/A converter
Frequency response	20 - 20,000 Hz
Dynamic range	90 dB (1 kHz)

■ Tuner

Frequency range	FM: 87.5 - 108 MHz AM: 522 - 1,620 kHz
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■ Cassette deck

Frequency response	50 - 14,000 Hz (normal tape)
Signal/noise ratio	50 dB (recording/playback)
Wow and flutter	0.35 % (DIN 45 511)

■ Speaker

Type	2-way type speaker system 5 cm (2") tweeter 13 cm (5-1/8") woofer
Maximum input power	100 W
Rated input power	50 W
Impedance	6 ohms
Dimensions	Width: 185 mm (7-1/4") Height: 260 mm (10-1/4") Depth: 205 mm (8-1/16")
Weight	2.4 kg (5.3 lbs.)/each



TINSEA143AWZZ
04M R KI ①

03/12/17 XL-MP110_BACK.fm

TINSEA016AWZZ