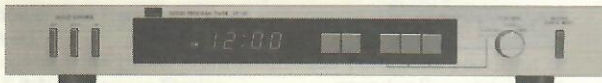


# AT-20

## OPERATING INSTRUCTIONS MODE D'EMPLOI BETRIEBSANLEITUNG MANUAL DE INSTRUCCIONES ISTRUZIONI PER L'USO



**WARNING:** To prevent fire or shock hazard, do not expose this appliance to rain or moisture.

- The Model No. and Serial No. of your unit are shown on its back panel.
- Do not use the Warranty Card that comes with your model No. and Serial No.

**ATTENTION:** Pour éviter les dangers d'incendie ou d'inondation, ne pas exposer cet appareil à la pluie ou à l'humidité.

- Le numéro du modèle et le numéro de série de votre appareil sont indiqués sur son panneau arrière.
- Ne pas utiliser la carte de garantie qui est fournie avec votre modèle et votre numéro de série.

**WARNUNG:** Gefahr des Brandes oder Stromschlaggefahr, wenn Regen oder Feuchtigkeit aus...

- Die Modell- und die Seriennummer Ihres Gerätes sind auf der Rückseite angegeben.
- Verwenden Sie bitte nicht den Garantiekarte, auf dem das Modell- und die Seriennummer Ihres Gerätes angegeben sind.

**AVISO:** Para evitar incendios y peligros eléctricos, no exponer este aparato a la lluvia ni a la humedad.

- El N.O. de modelo y el N.O. de serie de este aparato están impresos en el panel posterior.
- No exponer la tarjeta de garantía que viene a N.O. de modelo y el N.O. de serie del aparato.

**ATTENZIONE:** Per evitare pericoli d'incendio e scosse non esporre l'apparecchio alla pioggia e all'umidità.

- Il numero del modello e quello di serie dell'apparecchio si trovano sul pannello posteriore.
- Non portare la Garanzia con numero del modello e di serie.



**WARNING:** To prevent fire or shock hazard, do not expose this appliance to rain or moisture.

- The Model No. and Serial No. of your unit are shown on its back panel.
- Do not lose the Warranty Card that carries your unit's Model No. and Serial No.

**ATTENTION:** Pour éviter les dangers d'électrocution ou d'incendie, ne pas exposer cet appareil à la pluie ou à l'humidité.

- Le numéro du modèle et le numéro de série de l'appareil sont inscrits sur son panneau arrière.
- Ne perdez pas la carte de garantie où est indiquée le numéro du modèle et le numéro dans la série du type de l'appareil.

**WARNUNG:** Setzen Sie dieses Gerät zur Verhütung von Feuer- und Stromschlaggefahr weder Regen noch Feuchtigkeit aus.

- Die Modell- und die Seriennummer Ihres Gerätes sind auf der Geräterückseite angegeben.
- Verlieren Sie bitte nicht den Garantieschein, auf dem die Modell- und die Seriennummer dieser Einheit angegeben sind.

**AVISO:** Para evitar incendios y descargas eléctricas, no exponer este aparato a la lluvia ni a la humedad.

- El N.O de modelo y el N.O de serie de este aparato están impresos en el panel posterior.
- No extraviar la tarjeta de garantía que tiene el N.O de modelo y el N.O de serie del aparato.

**ATTENZIONE:** Per evitare pericoli d'incendio e scosse non esporre l'apparecchio alla pioggia e all'umidità.

- Il numero del modello e quello di serie dell'apparecchio si trovano sul pannello posteriore.
- Non perdere la Garanzia col numero del modello e di serie.

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We are grateful for your choice of this Sansui high fidelity product. Before you operate it, we suggest that you read this book once through carefully, familiarizing yourself with the important precautions, operational procedures and every one of the product's many features. It will help to ensure that you will avoid possible damage and that the product's superb performance will be yours to enjoy for many years to come.

## Precautions

\* Bear in mind the following points.

### Power plug

When disconnecting the power cord from the power outlet, always take hold of the plug, and not the wire, and pull free. Never connect or disconnect the power plug with wet hands since you may receive an electric shock.

### Power Line Voltage and Frequency

This unit's power line voltage and frequency are set to correspond to the values enforced at the destination area before the unit leaves the manufacturing plant.

This is usually no need, therefore, to make any changes. Nevertheless, if after purchasing the unit you move to an area where a different voltage and frequency are used, make sure that the switches on the unit's rear panel are set to their proper positions.

Incorrect setting of the power line voltage is extremely dangerous. Moreover, if the power line frequency is set improperly, the correct time will not be displayed.

For details, contact the dealer from whom you purchased your unit or your nearest SANSUI Service Station.

No power line frequency selector switch is provided on units destined for Europe.

### Do not remove the case and bottom panel

Any inspections or adjustments inside the unit may lead to malfunctions and electric shocks. Do not touch any of the inside parts. SANSUI's warranty is not effective if a deterioration in the unit's performance results from remodeling inside.

### Installation precautions

Do not install the unit in any of the following locations since this may result in a deterioration in performance or malfunction:

- \* Locations exposed to direct sunlight or near objects radiating heat such as heating appliances
- \* Locations exposed to moisture or humidity
- \* Locations with poor ventilation exposed to dust and dirt
- \* Locations which are unstable and not perfectly flat or which are susceptible to vibration
- \* On top of a high power output amplifier, audio components or any other product which radiates heat.

### Do not wipe with thinners

Wipe the panels and case from time to time with a soft cloth. Using any kind of thinner, alcohol or volatile liquid will mar the surface, cause blotching on the exterior and erase the markings and should therefore be avoided.

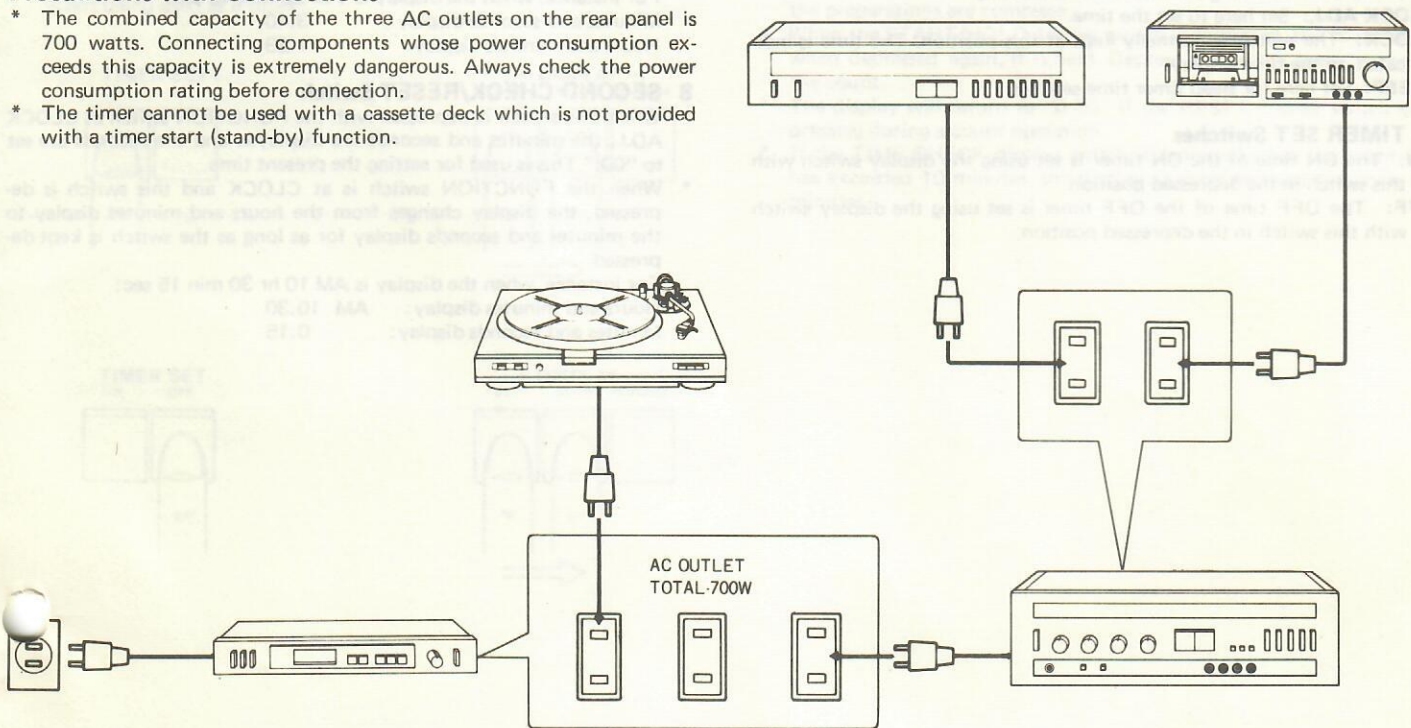
Do not use insecticide sprays in the vicinity.

## Connections

### Precautions with Connections

\* The combined capacity of the three AC outlets on the rear panel is 700 watts. Connecting components whose power consumption exceeds this capacity is extremely dangerous. Always check the power consumption rating before connection.

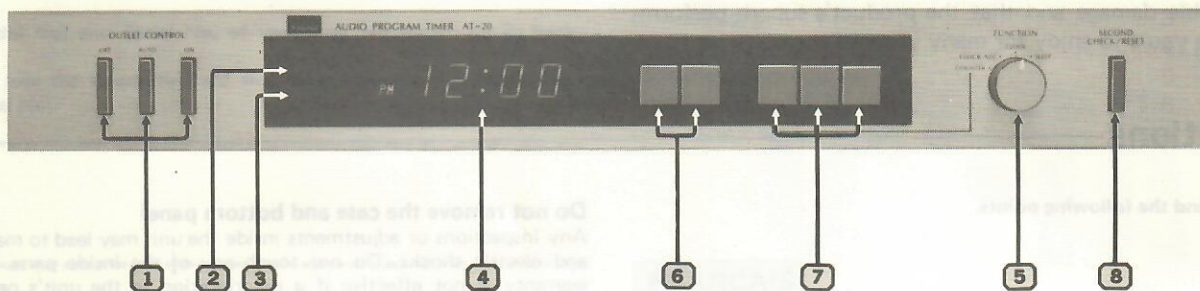
\* The timer cannot be used with a cassette deck which is not provided with a timer start (stand-by) function.



# Panel information

\* The photos and illustrations show a unit with a silver panel.

ENGLISH



## 1 OUTLET CONTROL Switches

These switches are used to turn ON and OFF the three rear panel AC outlets.

**OFF:** This sets the AC outlets OFF regardless of the time.

**AUTO:** This is depressed when the unit is being used as an ON/OFF timer or sleep timer.

**ON:** This sets the AC outlets ON regardless of the time.

## 2 AUTO Indicator

This lights when the AUTO outlet control switch is depressed to indicate that the unit is functioning as an ON/OFF timer or sleep timer.

## 3 OUTLET Indicator

This lights when the three rear panel AC outlets are ON.

## 4 Time Display

This normally displays the time in minutes and hours.

\* When the unit's power plug is connected to the AC outlet initially or when the power is restored after a power failure, the power failure display function is activated and the display repeatedly flashes. Normal operation resumes once the time is set.

## 5 FUNCTION Switch

**COUNTER:** Set here to use the unit in the counter mode. The display changes to indicating the minutes and seconds.

**CLOCK ADJ.:** Set here to set the time.

**CLOCK:** The switch is normally kept at this position. The time is indicated on the time display.

**SLEEP:** Set here for sleep timer time settings.

## 6 TIMER SET Switches

**ON:** The ON time of the ON timer is set using the display switch with this switch in the depressed position.

**OFF:** The OFF time of the OFF timer is set using the display switch with this switch in the depressed position.

## 7 DISPLAY Switches

These switches function as the time setting switches when the FUNCTION switch has been set to the CLOCK ADJ. or SLEEP position.

\* When the FAST switch is depressed, the time is advanced rapidly at about 1 hour every second.

\* When the SLOW switch is depressed, the time is advanced slowly at about 2 minutes every second.

\* When the FAST switch is depressed with the REVERSE switch in the depressed position, the time is reversed rapidly at about 1 hour every second.

\* When the SLOW switch is depressed with the REVERSE switch already pushed, the time is reversed in units of about 2 minutes each second.

\* The REVERSE switch does not work when the FUNCTION switch has been set to the SLEEP position.

When the FUNCTION switch has been set to the COUNTER position, the switches function as follows:

\* When the RESET switch is depressed, the display is reset to "0:00."

\* Every time the START/HOLD switch is depressed, the counter start and hold modes are switched alternately.

\* When the TIME CHECK switch is depressed, the counter display changes from minutes and seconds to hours and minutes for as long as the switch is kept depressed.

For instance, when the display is 1 hr 23 min 40 sec:

Minutes and seconds display: 3:40

Hours and minutes display: 1:23

## 8 SECOND CHECK/RESET Switch

\* When this switch is depressed with the FUNCTION switch at CLOCK ADJ., the minutes and seconds are displayed and the seconds are set to "00." This is used for setting the present time.

\* When the FUNCTION switch is at CLOCK and this switch is depressed, the display changes from the hours and minutes display to the minutes and seconds display for as long as the switch is kept depressed.

For instance, when the display is AM 10 hr 30 min 15 sec:

Hours and minutes display: AM 10:30

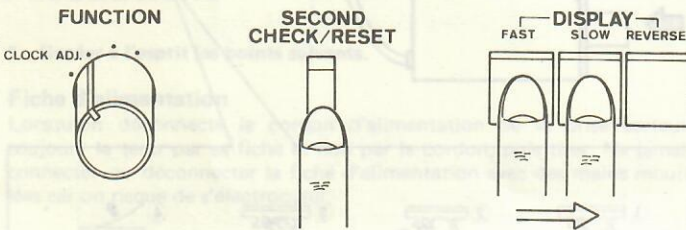
Minutes and seconds display: 0:15

# Operating procedures

## Setting the Present Time

Use the radio or TV time signal to set the present time.

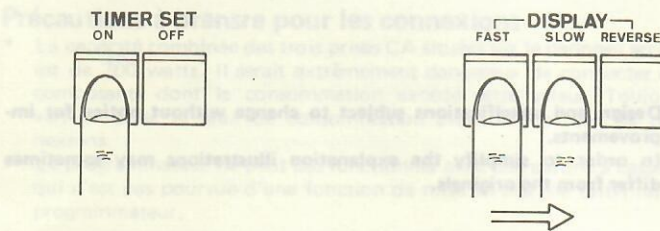
1. Set the FUNCTION switch to CLOCK ADJ.
2. Keep depressing the SECOND CHECK/RESET switch, set the seconds to "00," wait for the time signal and release the switch as soon as the signal is heard. The display changes to the hours and minutes but the second count now starts.
3. Now set the hours and minutes using the DISPLAY switches. This unit's time is based on the 12-hour system and so take care with AM and PM.
4. Return the FUNCTION switch to the CLOCK position.



## ON/OFF Timer

This unit can be used to switch on the components connected to it at the desired time and switch them off at the desired time. Once set, the operation is repeated every day.

1. Depress the ON outlet control switch.
  2. Switch on the power to the components connected to the unit and adjust them.
  3. Set the ON time using the DISPLAY switches while keeping the ON timer set switch in the depressed position.
  4. Set the OFF time using the DISPLAY switches while keeping the OFF timer set switch in the depressed position.
  5. Depress the OFF outlet control switch. This switches off the power to the connected components.
  6. Depress the AUTO outlet control switch. The AUTO indicator lights and power is supplied to the components at the ON time. The power is switched off at the OFF time.
- \* When the ON and OFF timer set switches are depressed, the ON and OFF times appear on the display and so can be checked.
  - \* Keep the ON or OFF outlet control switch depressed when the timer is not being used as a timer.



## Sleep Timer

The sleep timer functions to switch on the components at the set time and then switch off the power automatically after the set time range has elapsed. Any time can be set in a range up to 1 hour 59 minutes in minute units.

This function is convenient for listening to music before falling asleep.

1. Depress the ON outlet control switch.
  2. Switch on the power of the components connected to the unit and adjust them.
  3. Set the FUNCTION switch to SLEEP. The display now indicates the hours and minutes of the sleep timer.
  4. Set the sleep timer using the DISPLAY switches. The displayed time is counted down while this switch is depressed.
  5. Return the FUNCTION switch to CLOCK and depress the AUTO outlet control switch.
  6. Once the set time elapses, the power to the connected components is switched off.
- \* If the set times of the sleep timer and ON/OFF timer are shifted, for instance when using the unit as a sleep timer at night and as an ON/OFF timer in the morning, you can listen to music.
  - \* The sleep timer takes precedence when the sleep timer and ON/OFF timer set times overlap.  
To release the sleep timer in order to set the ON/OFF timer from the OFF mode, return the sleep time to "0:00" using the DISPLAY switches.
  - \* The sleep timer function works only once and is released when the sleep time elapses.

## OFF Timer

When the OFF timer and ON timer are set to the same time, the OFF timer function takes precedence. This means that operation is the same as the sleep timer when the timer is set from the ON mode but longer periods of time can be set compared with the sleep timer.

## Timer Counter

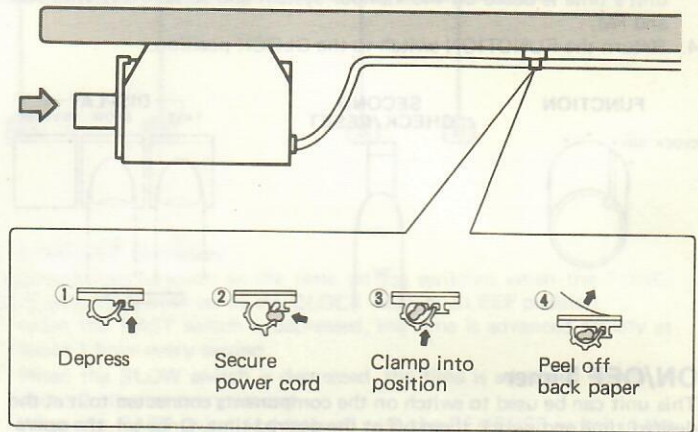
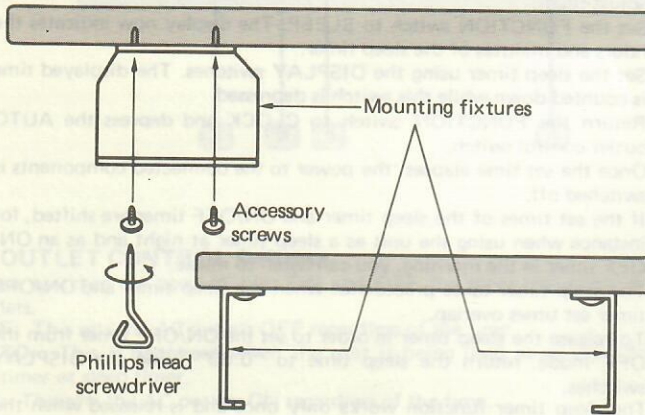
The unit can be used as a counter up to a maximum of 1 hr 59 min 59 sec. When recording tapes, you can easily find out the remaining time on the tape by subtracting the time elapsed from the tape's total time.

1. Set the FUNCTION switch to COUNTER. The display shows the minutes and seconds.
  2. Depress the START/HOLD display switch so that the counter display is held.
  3. Depress the RESET display switch. The display is reset to "0:00" and the preparations are complete.
  4. When the START/HOLD display switch is depressed, the count starts; when depressed again, it is held. Depress the switch again to resume the count.
- \* The display will return to "0:00" if the RESET display switch is depressed during a count operation.
  - \* If the TIME CHECK display switch is depressed when the count time has exceeded 10 minutes, the display changes to show the hours and minutes.

## Rack mounting

When mounting this unit in an audio rack, use the accessory mounting fixtures and proceed as follows:

- (1) Align the two mounting fixtures with the width of the unit and attach them to the rack with the wood screws.
- (2) Fit the unit into the mounting fixtures.
- (3) Use the accessory clamp to hold the unit's power cord so that it does not hang loose, peel off the back paper and affix to the shelf.



## Specifications

<b>Clock type</b> .....	12-hour digital clock
<b>Display accuracy</b> .....	Max. $\pm 10$ sec monthly error (synchronization with AC power supply)
<b>ON/OFF preset timer</b>	
Preset .....	ON, OFF times can be preset in 1-minute units
Timer accuracy .....	Set time +0.02 sec max.
<b>Sleep timer</b> .....	Any setting up to 1 hr 59 min in 1-minute units
<b>Time counter</b> .....	Max. 1 hr 59 min 59 sec, 1-second 1-count system, switching between minutes/seconds and hours/minutes

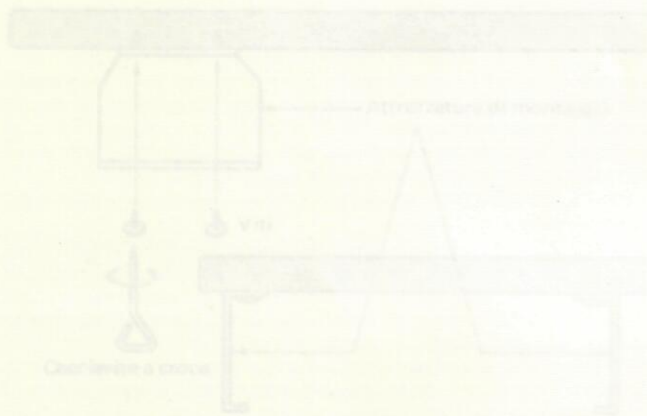
<b>AC outlets</b> .....	3, total capacity of 700 W
<b>Power requirements</b> .....	110 ~ 120, 220 ~ 240 V 50/60 Hz
<b>Power consumption</b> .....	5 W
<b>Dimensions</b> .....	430 mm (16-15/16") W 60 mm (2-3/8") H 136 mm (5-3/8") D
<b>Weight</b> .....	1.8 kg (4.0 lbs) net 2.2 kg (4.9 lbs) packed

- \* Design and specifications subject to change without notice for improvements.
- \* In order to simplify the explanation illustrations may sometimes differ from the originals.

## Montaggio su rack

Per montare questo apparecchio su rack, usare l'istruzioni di montaggio fornite e curate di installare nel rack seguente.

- (1) Allineare le due estremità del montaggio con la struttura del rack e attaccare le viti per installazione VIT.
- (2) Adattare l'apparecchio nell'attrezzatura di montaggio.
- (3) Usare il giravite speciale per tenere il cavo di alimentazione nella posizione in modo che non sia troppo rilassato, disposti le corde dietro e separati alla staffa.



## Dati tecnici

Tipo d'orologio	Digitali 12 ore
Precisione d'indicazione	Errore mensile massimo di ±10 secondi (senza alimentazione) e 1 settimana di reset
Regolazione dell'ora d'attesa/impugnatura del timer	1 ora d'ora con 15 minuti di intervallo
Regolazione	È regolabile in un'ora di 1 minuto
Precisione del timer	±0.02 sec./min. - qualità regolare
Spegnimento automatico col timer	Controllo automatico fino a 1 hr 59 min. programmabile
Consumo	1 hr 30 minuti per ora sistema di controllo di 1 secondo, adattamento tra i minuti per ogni 1 secondo

Altezza massima di parete	1 capacità totale di 2000mAh
Dimensione	110 x 100 x 220 mm (A x B x C)
Corrente	500mA
Consumo	5 W
Peso netto	430 g (A) x 138 (B) mm
Peso totale	1.2 kg
	2.2 kg

- \* Il presente è specificato soggetto a modifiche senza avviso a scopo di miglioramento.
- \* Per semplificare le operazioni le illustrazioni potrebbero a volte differire dagli originali.