ADDITIONAL

# Service Manual

PIONEER

AUDIO DIGITAL TIMER

# DT-32 YB,S,S/G

## 1. CONTRAST OF MISCELLANEOUS PARTS

*NOTES:*

- *Parts without part number cannot be supplied.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *For your Parts Stock Control, the fast moving items are indicated with the marks ★★ and ★.*
  *★★ GENERALLY MOVES FASTER THAN ★*
  *This classification shall be adjusted by each distributor because it depends on model number, temperature, humidity, etc.*

| Mark | Symbol & Description | Part No. | | | |
|---|---|---|---|---|---|
| | | NE type | YB type | S/G type | S type |
| | Timer assembly | GWX-525 | GWX-525 | GWX-526 | GWX-526 |
| | Switch assembly | GWS-255 | GWS-255 | GWS-256 | GWS-256 |
| ⚠ ★★ | RL1 Relay | ASR-501 | ASR-501 | ASR-506 | ASR-506 |
| ⚠ ★★ | S9 Line voltage selector | .... | .... | AKX-063 | AKX-063 |
| ⚠ ★★ | FU 1 Fuse (T2.5A) | AEK-403 | .... | .... | .... |
| ⚠ ★ | Power transformer (220V) | ATT-713 | .... | .... | .... |
| ⚠ ★ | Power transformer (240V) | .... | ATT-726 | .... | .... |
| ⚠ ★ | Power transformer (110, 120, 220 and 240V) | .... | .... | ATT-724 | ATT-724 |
| ⚠ ★★ | S7 Slide switch | ASH-501 | ASH-501 | .... | .... |
| ⚠ | AC socket (AC OUTLETS) | AKP-026 | AKP-044 | AKP-040 | AKP-040 |
| ⚠ | AC power cord | ADG-041 | ADG-051 | ADG-046 | ADG-046 |
| | Front panel assembly | ANM-222 | ANM-222 | ANM-223 | ANM-223 |
| | Operating instructions | ARE-044 | ARE-044 | ARB-500 | ARB-500 |
| | Packing case | AHE-058 | AHE-058 | AHE-059 | AHE-059 |

## 2. SPECIFICATIONS

### ■ YB type

Time display ..... Digital display with fluorescent display tube
Timer type ..... 24-hour type (24-hour display)
Timer setting .....Only one ON/OFF time setting in mininum units of minutes within a 24-hour period
Sleep timer .....Setting in minimum units of minutes up to 1 hour 59 minutes
Time accuracy .....Synchronized with line frequency
Timer accuracy .....Within ± 0.1 sec. of time displayed
Sleep timer accuracy .....Within 59 sec. of set time

### Power section, others

Power requirements ..... AC 240 V, 50 Hz
AC outlet capacity power ..... 500 W max. (inductive load)
Power consumption ..... 6 W

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## Other functions

- AC OUTLET "on" display (red LED lights)
- Timer operation display (green LED lights)
- Power failure display (time display winks)

Dimensions ..... 420 (W) x 50 (H) x 144 (D) mm
16-9/16 (W) x 2 (H) x 5-11/16 (D) in

Weight ..... 1.7 kg (3 lb 12 oz)

## Accessory

Operating Instructions ..... 1

*NOTE:*
*Specifications and design are subject to possible modification without notice due to improvements.*

# 3. PARTS LIST

*NOTES:*

- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*
  *Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J=5%, and K=10%).*
  *560Ω  56 × 10¹  561 ..... RD¼PS 5 6 1 J*
  *47kΩ  47 × 10³  473 ..... RD¼PS 4 7 3 J*
  *0.5Ω  0R5 ..... RN2H 0 R 5 K*
  *1Ω  010 ..... RS1P 0 1 0 K*
  *Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).*
  *5.62kΩ  562 × 10¹  5621 .... RN¼SR 5 6 2 1 F*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *For your Parts Stock Control, the fast moving items are indicated with the marks ★★ and ★ .*
  *★★ GENERALLY MOVES FASTER THAN ★*
  *This classification shall be adjusted by each distributor because it depends on model number, temperature, humidity, etc.*

## 3.1 TIMER ASSEMBLY (GWX-526)

### SWITCHES

| Mark | Part No. | Symbol & Description | |
|---|---|---|---|
| ★★ | ASG-163 | S2–S5 | Tact switch |
| ★★ | ASD-080 | S6 | Rotary switch |
| ★★ | ASH-024 | S8 | Slide switch |

### CAPACITORS

| Mark | Part No. | Symbol & Description |
|---|---|---|
| | CEA 101M 35L | C1, C2 |
| | CEA 221M 16L | C3 |
| | CEA 470M 50L | C4 |
| | CEA 470M 25L | C5 |
| | CKDYB 222K 50 | C6, C7 |
| | CCDSL 101J 50 | C8 |

### RESISTORS

*NOTE: When ordering resistors, convert the resistance value into code form, and then rewrite the part no. as before.*

| Mark | Part No. | Symbol & Description |
|---|---|---|
| | RD¼PM □□□J | R1–R10 |

### SEMICONDUCTORS

| Mark | Part No. | Symbol & Description |
|---|---|---|
| ★★ | MN6076 | Q1 |
| ★★ | 2SC1915 | Q2 |
| ★★ | 2SC945A | Q3 |
| ★ | 10E2 (1S1886) | D1, D2 |
| ★ | AEL-334 | D3 |
| ★ | AEL-330 | D4 |
| ★ | 1S2473 (1S2076) | D5–D7, D9 |
| ★ | MZ-150 (WZ-150) | D8 |

### OTHERS

| Mark | Part No. | Symbol & Description | |
|---|---|---|---|
| ★ | AAV-014 | V1 | Fluorescent indicator tube |

## 3.2 SWITCH ASSEMBLY (GWS-256)

| Mark | Part No. | Symbol & Description | |
|---|---|---|---|
| ★★ | ASG-258 | S1 | Push switch |



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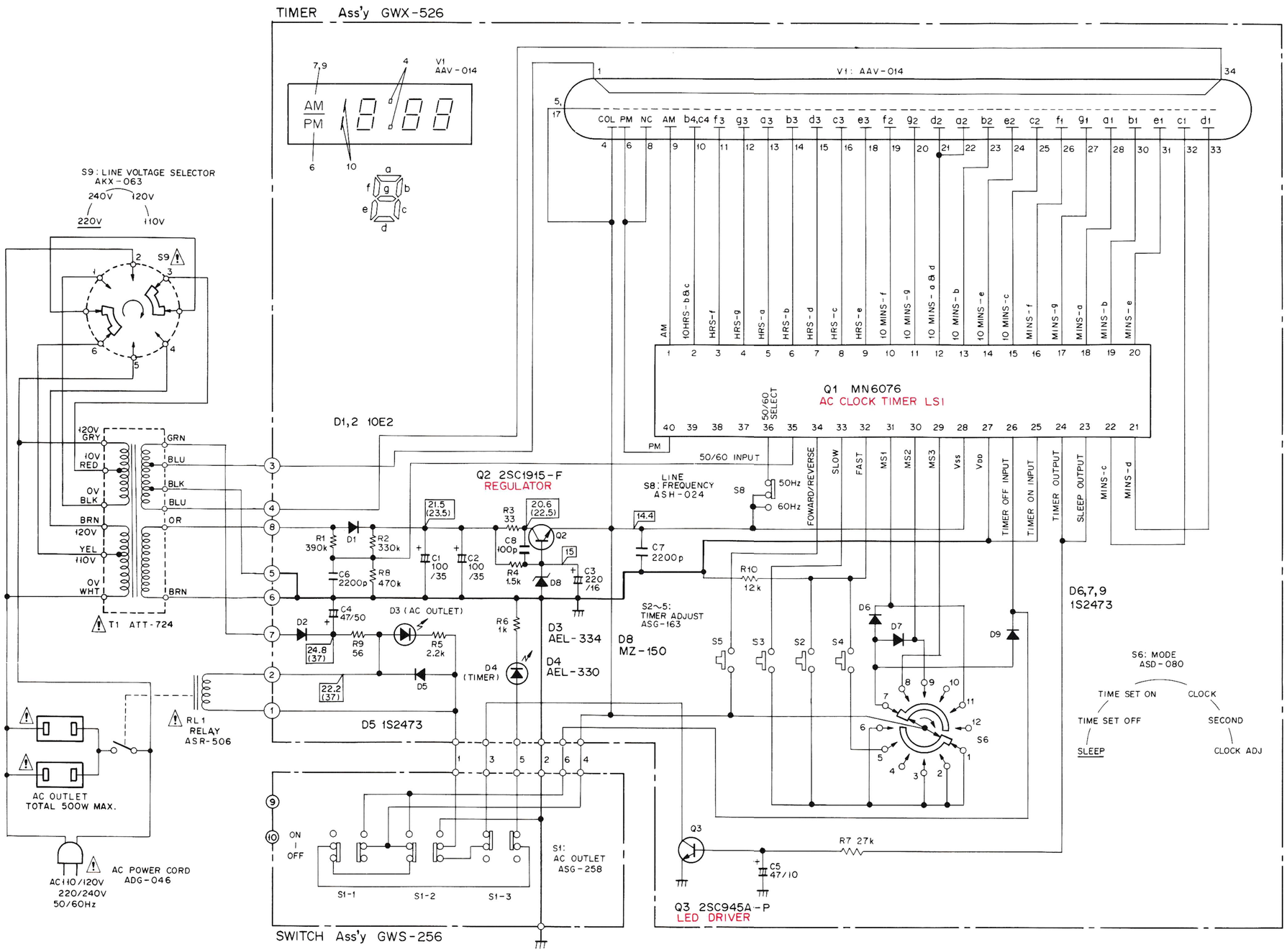
# 4. SCHEMATIC DIAGRAM




*NOTE:*
***The indicated semiconductors are representative ones only. Other alternative semiconductors may be used and are listed in the parts list.***

1. RESISTORS.
Indicated in Ω, ¼W, ⅛W, ±5% tolerance unless otherwise noted k; kΩ, M; MΩ, (F); ±1%, (G); ±2%, (K); ±10%, (M); ±20% tolerance

2. CAPACITORS:
Indicated in capacity (μF)/voltage (V) unless otherwise noted p; pF. Indication without voltage is 50V except electrolytic capacitor.

3. VOLTAGE
; DC voltage (V) at TIMER, RELAY ON
Value in ( ) is DC voltage at AC OUTLET OFF

4. OTHERS:
The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

SWITCHES:

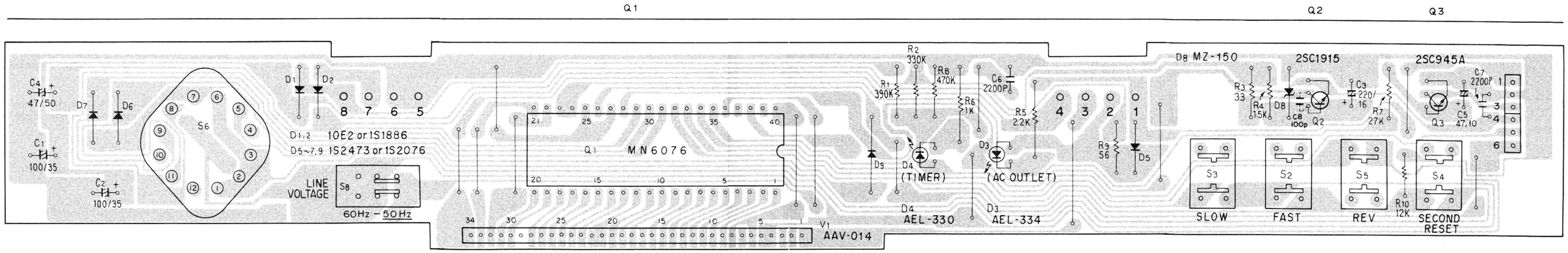
S1-1 : AC OUTLET (OFF) ON – OFF
S1-2 : AC OUTLET (ON) ON – OFF
S1-3 : AC OUTLET (TIMER) ON – OFF
S2 : TIME ADJUST (FAST) ON – OFF
S3 : TIME ADJUST (SLOW) ON – OFF
S4 : TIME ADJUST (SEC RESET) ON – OFF
S5 : TIME ADJUST (REV) ON – OFF
S6 : MODE
SLEEP – TIMER SET OFF – TIMER SET ON – CLOCK – SECOND – CLOCK ADJUST
S8 : LINE FREQUENCY 50Hz – 60Hz
S9 : LINE VOLTAGE SELECTOR
110V – 120V – 220V – 240V

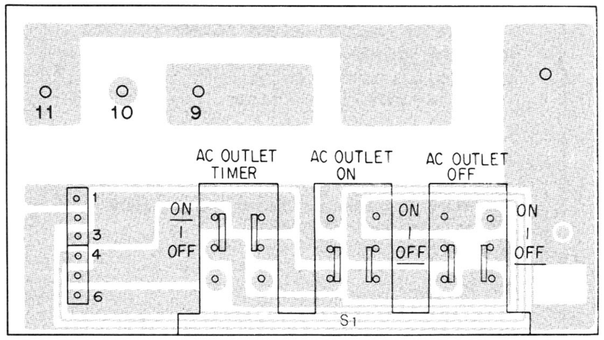
The underlined indicates the switch position.

This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.

# 5. P.C.BOARD PATTERNS

TIMER Ass'y (GWX-526)




SWITCH Ass'y (GWS-256)