

Technics SP10

Description

The SP10 started life in 1970 as a servo-controlled motor unit designed for studio use.

In 1975 the much improved SP10 mkII (1975-81) was introduced with Quartz-locked speed control and external power supply; this is the version which found its way into many studios, replacing ageing Garrard 401s and the like.

The unit was also made available to the public as the high-end SL1000 mkII system which included the SH-10B3 Obsidian base and EPA100, and later the EPA500 tonearm.

For serious professional use the SP10 mkIIP version (as used by the BBC) provided full, wired remote control of start/stop and speed functions and added a stepped pitch control.

The mkIIA (1983-87) was a minor update to the original mkII, with simplified circuitry.

The final version was the SP10 mk3 (1981-87) - this behemoth sported a 10kg platter and sophisticated power supply with digital readout of pitch, and an even heavier SH10B7 Obsidian plinth (also made available for the mkII).

The mk3 version is rarely seen outside of Japan and commands very high prices on the used market.

Power supplies for the mk2 versions of the deck are external. The correct versions for each model are as follows: mkII - SH10-E, mkIIa - SH-10EA, mkIIP - SH-10EP

Technics all new SP-10 mk2 represents a standard of accuracy and quality in disc reproduction that has never been attained before; this truly outstanding three speed package unquestionably constitutes a new reference against which professional systems will have to be measured for years to come.

Just glance at some of these amazing features: almost total absence of speed drift; immeasurably small wow and flutter; extreme quietness; enormously high torque; and practically instantaneous starting and stopping.

Other features include modular circuit construction for ease of servicing and a specially designed rubber mat on the underside of the platter for vibration damping.

Specifications

SP-10 mk1

Platter: 300mm 6lb aluminium diecast

Motor: 20-poles, 60-slots, ultra low speed electronic commutator motor (15V, 85mA)

Speeds: 33 and 45rpm

Speed change method: electrical change

Fine speed control: +-2% by variable resistor

Wow and flutter: less than 0.03% WRMS

Rumble: better than -60dB

Build up time: within 1/2 rotation at 33 rpm

Dimensions: 14" X 14" x 4"

Weight: 20lb

SP-10 mk2

Motor: brushless DC motor, electronic rectification, quartz-controlled phase-locked servo circuit

Plater: 320mm 2.9kg aluminium

Speeds: 33, 45 and 78rpm

Pitch control: 10% (mk2P)

Starting torque: 6kg-cm

Build up time: 0.25s to 33rpm

Braking time: 0.3s from 33rpm

Speed fluctuation by load changes: 0% within 5kg-cm

Wow and flutter: 0.025% WRMS (JIS C5521)

Rumble: -73dB (DIN 45539B)

Dimensions: 102.5 x 368.5 x 368.5mm

Weight: 9.5kg

SP-10 mk2A

Motor: brushless DC motor, electronic rectification, quartz-controlled phase-locked servo circuit

Plater: 320mm 2.9kg aluminium

Speeds: 33, 45 and 78rpm

Starting torque: 6kg-cm

Build up time: 0.25s to 33rpm

Braking time: 0.3s from 33rpm

Speed fluctuation by load changes: 0% within 5kg-cm

Wow and flutter: 0.02% WRMS (JIS C5521)

Rumble: -86dB (IEC 98A weighted)

Dimensions: 102.5 x 368.5 x 368.5mm

Weight: 9.5kg

SP-10 mk3

Motor: brushless DC motor, electronic rectification, quartz-controlled phase-locked servo circuit

Plater: 320mm, 10kg copper/aluminium

Speeds: 33, 45 and 78rpm

Pitch control: 20%

Starting torque: 16kg-cm

Build up time: 0.25s to 33rpm

Braking time: 0.3s from 33rpm

Speed fluctuation by load changes: 0% within 10kg-cm

Wow and flutter: 0.015% WRMS (JIS C5521)

Rumble: -92dB (IEC 98A weighted)

Dimensions: 369 x 113 x 369mm

Weight: 18kg

Review

The Technics SP10 Mk II has a superb technical specification which it meets on all counts. The craftsmanship and design skills lavished on it have me reaching for all the superlatives; As a test bed for my own evaluation work, I have no hesitation in choosing this new turntable without reservation - Gramophone March 1977

As one would expect at this price, the motor results proved to be at the threshold of measurement, and simply consist of a list of excellents for wow and flutter, rumble, stability, loading, overshoot, start-up and torque - £1000 (mk2 inc SH10-B3 base and EPA100 arm) HiFi Choice 1978

The SP-10mk3 is offered by Technics as being the best turntable that they make; it is certainly among the best turntables offered by anyone. If you are in the market for a rugged, heavy duty turntable which would hold up well in day after day use and has broadcast type professional features, you should check it out - \$1700 (SH-10B5 base \$800) Audio February 1985

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[mkIIP \(RP 2/9\) service manual](#) 

mkII brochure 

mk3 brochure 

mkIIP (RP 2/9) HFW upgrade 

mkII diy corian plinth 

mkII motor clamping plate 

mk2A service manual 

mk1 schematics 

mk1 service manual 

mkIIP/L service manual  - abtsound

mk3 instruction/owners manual  - jjones3

mk3 mounting template  - jjones3

mk3 service manual (alt scan)  - jjones3

mkII mounting template  - jjones3

mk1 instruction/owners manual     - muusial

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Technics Direct Drive Turntables



SL-QX300



SL-V5



SP15



SP25

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Comments

service manual

Posted Mon, 07/04/2011 - 00:38 by David Machida

Gentleman:

Is it possible to purchase a Service Manual/schematics and adjustments for Technics SH-10E power unit.

This is for Technics SP-10MKII direct drive motor Studio Turntable.

Regards,
David Machida
(Machida Computer Systems)

SP10 mkII Service Manual

Posted Mon, 07/04/2011 - 01:37 by JaS

The Technics SP10 mkII service manual listed above covers the motor unit and power supply. AFAIK there isn't a separate manual for the power supply.

Regards,
JaS

Technics SP10 MKII P/L

Posted Mon, 04/18/2011 - 22:49 by mike222

Looking for service manual for this model. It's definitely differs from MKII. And it has SH-10C control unit that needs to be connected to some kind of remote? Wasn't able to find any info about it...

SH-10C / SH-10R

Posted Wed, 09/22/2010 - 22:02 by graphicsound

the sp-10mk2 p/l i own comes with an interface unit called a sh-10c.

the sp-10 (with 2 breakout leads) first connects to the sh-10c that connects to the sh-10e psu.

i would like to acquire a sh-10r remote start/stop unit if ever possible.

am i right to assume the sh-10r remote start/stop unit connects just directly to the sh-10c (to the available sh-10c's CN911 port)?

cheers.

SP10mk2A

there is an (a) model with only one circuit board ,i am looking for the service manual ,thanks...mike..

mk2a

Posted Fri, 12/19/2008 - 17:14 by JaS

The Technics SP10 mk2A service manual is now available for free download

SH-10E (SP10Mk2 power supply)SERVICE MANUAL

Posted Sun, 02/28/2010 - 05:31 by colrich1

How do I get this manual???

Power Supply Cable

Posted Mon, 08/23/2010 - 06:56 by mschaniel

Do you know where I can purchase the power supple cable for the Technics SH-10E power supply for the SL-1000mkII Turntable and do you know the part number for this cable?

Panasonic Parts

Posted Mon, 08/23/2010 - 08:04 by JaS

Hi,
From the manual above

DC cable - SFDJ102-01E Plug

AC cable - RJA10A AC cord

Panasonic (Technics) can be searched on their parts site:

<http://www.pstc.panasonic.com/EpartR/PartsListChoice.asp>

Regards,
JaS

Power Supply

Posted Sun, 02/28/2010 - 09:28 by JaS

The service information for the SH-10E is in the mk2 service manual listed above

service manual listed above

Posted Mon, 08/23/2010 - 06:59 by mschaniel

service manual listed above will not download

FAQ

Hi,
The manual downloads and opens fine.

If you have trouble downloading files please read the FAQ for possible solutions.

Regards,
JaS

SP-10mk2a Info Needed...

Posted Mon, 02/22/2010 - 19:24 by djken

Greetings,

I have this system and haven't ever used it, (got it used years ago and never built the home studio to install it)...

Technics SP-10mk2A Direct Drive Turntable (33, 45, 78 rpm)

Technics SH-10EA Power Supply (for the SP-10mk2A)

Technics EPA-A501ETonearm R&B Series

Technics EPA-B500 R&B Series Tonearm Gimbal

Shure RXT6 Cartridge (on seperate headshell)

Urei Model 1122 Transcription (phono) Preamplifier

I'm interested in selling it to someone who will use it and give it a good home, but I have no idea what any of it is worth at fair market value. I will only sell it as a complete system, I even have several other new-in-box cartridges that will go with it.

Keep on Rockin',

Ken

A Budhist walks up to a hotdog vendor and says "Make me one with everything" --Robin Williams