

## REPLACEMENT STYLI

Audio-Technica grain-oriented diamond styli are carefully selected and polished for minimum wear to themselves and to your records. However, after an extended period of play, even the finest diamond stylus becomes worn. For this reason, it is best to have the stylus inspected annually, or whenever it appears that wear or damage may be a problem. The dealer from whom you purchased this cartridge is equipped and competent to inspect and evaluate the stylus.

Should a replacement stylus be required, accept only a genuine Audio-Technica replacement stylus. Only genuine Audio-Technica styli will provide the same level of performance found in the original cartridge stylus.

Cartridge Model	Replacement Stylus	Stylus Assembly Color
AT10	ATS10	Red
AT11	ATS11	Yellow
AT11E	ATS11E	Green
AT12E	ATS12	Blue
AT13E	ATS13	Orange
AT14S	ATS14	Burgundy

SPECIFICATIONS	AT10	AT11	AT11E	AT12E	AT13E	AT14S
Generating Element	Dual moving magnet					
Frequency Response (Hz)	20-20,000	15-25,000	15-28,000	15-30,000	10-45,000	5-45,000
Output at 5 cm/sec. (mV)	4.8	4.8	4.8	3.5	3.5	2.7
Channel Separation (1 KHz)	20	20	20	22	25	25
Channel Balance (dB)	2	2	2	2	2	1.5
Stylus Tip Size (mils)	.7 Spherical	.7 Spherical	.4 x .7 Elliptical	.4 x .7 Elliptical	.2 x .7 Elliptical	Multi-Radius Shibata
Stylus Assembly Color	Red	Yellow	Green	Blue	Orange	Burgundy
Tracking Force (grams)	2½-4	2-3	2-3	1¼-2	1-2	1½-2*
Vertical Tracking Angle	15°	15°	15°	15°	15°	15°
Load Impedance (ohms)	47,000	47,000	47,000	47,000	47,000	47,000
Cartridge Inductance (mH)	670	670	670	670	670	550
DC Resistance (ohms)	1300	1300	1300	1300	1200	500
Terminals (diameter)	.050"	.050"	.050"	.050"	.050"	.050"
Cartridge Weight (grams)	6.9	6.9	6.9	6.9	6.7	6.7
Dimensions	¾" x 1¼" x ¾"					
Mounting	½" centers					

\*Recommended tone arm adjustment. Because a Shibata tip contacts the groove over a larger area, actual groove pressure for these models is comparable to much lower tracking force with other styli.

## ELECTRICAL CONNECTIONS

Four terminals are provided at the rear of the cartridge—an output and ground connection for each stereo channel. For proper performance of your system, the correct wiring must be carried through to the amplifier inputs. Connect the turntable wiring to the cartridge, observing the lead designation furnished with the turntable. The cartridge pins are color coded, using a well-established standard in the turntable industry. DO NOT SOLDER TO THE CARTRIDGE TERMINALS. USE SLIP-ON LUGS TO WHICH TONE ARM WIRES HAVE BEEN SOLDERED BEFORE PLACING ON CARTRIDGE TERMINALS. Heat applied directly to the cartridge terminals will damage the internal cartridge connections.

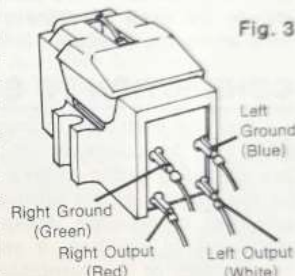


Fig. 3

For monaural operation, the left and right signal terminals should be connected to the monaural signal lead, and the left and right ground terminals should be connected to the ground lead. With