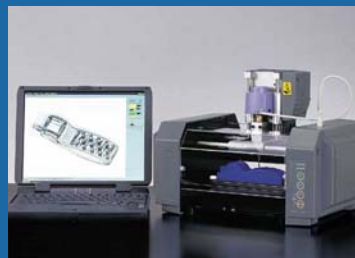


MAIN FEATURES

1

Easy-to-Use, Compact Design

The MDX-20/15's stylish good looks and compact size make it an attractive addition to your desktop. Yet, it is also a very powerful performer, one that is surprisingly easy to use, even for first time users. Just plug it in to your computer as you would a desktop printer with an RS-232C cable. By following the simple instructions included in PDF format, even a beginner can be scanning and milling in minutes.



2

Choose from Two Models

MDX-20 Maximum work area:
203.2mm(X) x 152.4mm (Y) x 60.5mm (Z)
8 in. (X) x 6 in. (Y) x 2-3/8 in. (Z)

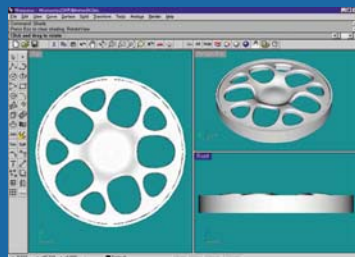
MDX-15 Maximum work area:
152.4 mm (X) x 101.6 mm (Y) x 60.5 mm (Z)
6 in. (X) x 4 in. (Y) x 2-3/8 in. (Z)



3

Compatible with Popular Software

Adding to its functionality, the MDX-20/15 works with a variety of popular 3D CAD and computer graphics software programs, including SolidWorks®, Rhinoceros®, VectorWorks®, LightWave®, VisualMill and 3d Studio Max®, allowing you to design in the program you're most comfortable with.



4

3D Scanning and Milling in One

The MDX-20/15 is the culmination of over ten years of innovative product development in scanning and milling by Roland engineers. Utilizing innovative Roland Active Piezo Sensor (R.A.P.S.) technology, the MDX-20/15 is a precision 3D scanner, capable of scanning objects at 4 to 15 mm per second with a resolution of up to 0.05 mm (0.002"). Selecting the sensor unit with the spindle turns the MDX-20/15 into a powerful CNC mill capable of cutting light metals, including aluminum and brass.



SPECIFICATIONS

	MDX-20	MDX-15
XY table size	220 mm (X) x 160 mm (Y) (8-5/8 in. x 6-1/4 in.)	170 mm (X) x 110 mm (Y) (6-11/16 in. x 4-5/16 in.)
Max. operation area	203.2 mm (X) x 152.4 mm (Y) x 60.5 mm (Z) (8 in. (X) x 6 in. (Y) x 2-3/8 in. (Z))	152.4 mm (X) x 101.6 mm (Y) x 60.5 mm (Z) (6 in. (X) x 4 in. (Y) x 2-3/8 in. (Z))
Max. table load weight	1000 g (2.2 lb.)	500 g (1.1 lb.)
Interface	Serial (RS-232C)	
Control keys	STANDBY key, VIEW key, TOOL-UP key, TOOL-DOWN key	
LED	SCANNING MODE LED, MODELING MODE LED, VIEW LED	
Power Pack	Exclusive AC adapter (DC+19V 2.1 A)	
Acoustic noise level	Standby mode : under 35 dB (A) Operation mode (not cutting) : under 70 dB (A) (According to ISO 7779)	
External dimensions	476.8 mm (W) x 381.6 mm (D) x 305 mm (H) (18-13/16 in. (W) x 15-1/16 in. (D) x 12-1/16 in. (H))	426 mm (W) x 280 mm (D) x 305 mm (H) (16-13/16 in. (W) x 11-1/16 in. (D) x 12-1/16 in. (H))
Weight (unit only)	13.7 kg (30.2 lb.)	9.6 kg (21.2 lb.)
Operation temperature	5 to 40°C (41 - 104°F)	
Operation humidity	35 to 80 % (no condensation)	
Accessories	AC adapter: 1, power code: 1, Roland Software Package CD-ROM: 1, spindle unit: 1, sensor unit: 1, cap screw M4x15 : 4, tool:1, set screw M3x3 : 2, double-sided tape: 1, front cover: 1, hexagonal wrench (size : 3 mm) :1, hexagonal wrench (size : 1.5 mm): 1, positioning pins: 3, clay: 1, MDX-20/15 user's manual: 1	

*The MDX-20/15 includes PS-6 (a spindle unit with a jaw diameter of 6 mm) as standard accessory. The MDX-20/15 for U.S. and Canada includes PS-1/8 instead of PS-6.

Modeling Functions		
Tool chuck	6 mm or 1/8 in. tool chuck included	
Spindle motor	10W (DC motor)	
Software resolution	0.025 mm/step (0.000984 in./step)	
Mechanical resolution	0.00625 mm/step (0.000246 in./step)	
Revolution speed	6500 rpm	
Feed rate	0.1 to 15 mm/sec. (0.00393 to 9/16 in./sec.)	
Acceptable material	Wood, Plaster, Resin (modeling wax, styrenorm), Chemical wood, Aluminum (A5052 according to JIS), Brass	
Acceptable tool	End mill, Drill	

OPTIONS

Spindle unit with tool chuck

Product number	Applicable tool shank diameter	Quantity per package
PS-3	3 mm	1 pce.
PS-4	4 mm	1 pce.
PS-5	5 mm	1 pce.
PS-6	6 mm	1 pce.
PS-1/8	3.175 mm (1/8")	1 pce.
PS-1/4	6.35 mm (1/4")	1 pce.

*The MDX-20/15 includes PS-6 (a spindle unit with a jaw diameter of 6 mm) as standard accessory. The MDX-20/15 for U.S. and Canada includes PS-1/8 instead of PS-6.

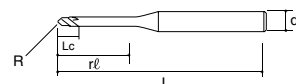
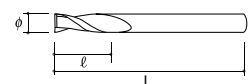
Engraving tool

Product number	Specifications (unit = mm)	Quantity per package	Required spindle unit
ZEC-100	dia = 6, 50L	1 pce.	PS-6
ZEC-A2013	dia = 3.175, 114(L) x 0.127(W) (for plastic)	1 pce.	PS-1/8
ZEC-A2025	dia = 3.175, 114(L) x 0.254(W) (for plastic)	1 pce.	PS-1/8
ZEC-A2051	dia = 3.175, 114(L) x 0.508(W) (for plastic)	1 pce.	PS-1/8
ZEC-A2076	dia = 3.175, 114(L) x 0.762(W) (for plastic)	1 pce.	PS-1/8
ZEC-A2150	dia = 3.175, 114(L) x 1.52(W) (Parallel, for plastic)	1 pce.	PS-1/8
ZEC-A2190	dia = 3.175, 114(L) x 1.91(W) (Parallel, for plastic)	1 pce.	PS-1/8
ZEC-A2230	dia = 3.175, 114(L) x 2.29(W) (Parallel, for plastic)	1 pce.	PS-1/8
ZEC-A2320	dia = 3.175, 114(L) x 3.175(W) (Parallel, for plastic)	1 pce.	PS-1/8
ZEC-A2013-QR	dia = 3.175, 114(L) x 0.13(W) (Quarter round, for plastic)	1 pce.	PS-1/8
ZEC-A2025-QR	dia = 3.175, 114(L) x 0.25(W) (Quarter round, for plastic)	1 pce.	PS-1/8
ZEC-A2013-BAL	dia = 3.175, 114(L) x 0.13(W) (for aluminum and brass)	1 pce.	PS-1/8
ZEC-A2025-BAL	dia = 3.175, 114(L) x 0.25(W) (for aluminum and brass)	1 pce.	PS-1/8

End mill

Description	Product number	Specifications (unit = mm)	Quantity per package	Required spindle unit
Square end mill Made of high speed steel	ZHS-100	dia = 1, 3 ℓ x 6d x 50L x 2NT	1 pce.	PS-6
	ZHS-200	dia = 2, 6 ℓ x 6d x 50L x 2NT	1 pce.	PS-6
	ZHS-300	dia = 3, 10 ℓ x 6d x 50L x 2NT	1 pce.	PS-6
	ZHS-400	dia = 4, 12 ℓ x 6d x 50L x 2NT	1 pce.	PS-6
	ZHS-500	dia = 5, 15 ℓ x 6d x 55L x 2NT	1 pce.	PS-6
	ZHS-600	dia = 6, 15 ℓ x 6d x 55L x 2NT	1 pce.	PS-6
Square end mill Made of cemented carbide	ZHS-3015	dia = 3, 15 ℓ x 6d x 50L x 2NT	2 pce.	PS-6
	ZUS-300	dia = 3, 15 ℓ x 3d x 60L x 2NT	1 pce.	PS-3
	ZUS-400	dia = 4, 20 ℓ x 4d x 60L x 2NT	1 pce.	PS-4
	ZUS-500	dia = 5, 25 ℓ x 5d x 60L x 2NT	1 pce.	PS-5
	ZUS-600	dia = 6, 25 ℓ x 6d x 60L x 2NT	1 pce.	PS-6
	ZCB-150	R1.5 15 ℓ x 2.4Lc x 65L x 6d x 2NT	1 pce.	PS-6
Ball end mill Made of cemented carbide	ZCB-200	R2 25 ℓ x 3.2Lc x 70L x 6d x 2NT	1 pce.	PS-6
	ZCB-300	R3 30 ℓ x 4.8Lc x 80L x 6d x 2NT	1 pce.	PS-6

*Please use a spindle unit for the desired shank diameter.



Replacement spindle motor

Product number	Specifications	Quantity per package
MM-40	Motor unit, 10 W / DC motor	1 pce.

*The spindle motor of the MDX-20/15 is consumptive. It is recommended to exchange the whole assembly for every 700 hour usage.

Modeling wax

Product number	Specifications
ZW-200	175 mm(W) x 75 mm(D) x 38 mm(H), 10 pcs.

Safety cover for MDX-15 only

Product number	Specifications
ZBX-15	550 mm(W) x 450 mm(D) x 462 mm(H) (21-11/16"(W) x 17-3/4"(D) x 18-1/4"(H))

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AUTHORIZED DEALER:

Printed in Japan. RDG90083 '06 JUL. B-3 C-C

<http://www.rolanddg.com/>



Desktop 3D Scanning and Milling

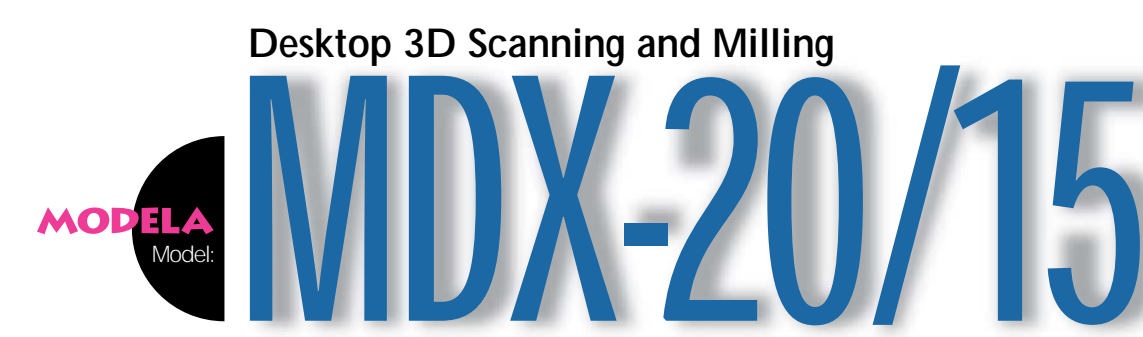
MODEL
Model:

MDX-20/15

Transforming Ideas into Reality: Roland Revolutionizes 3D CAD



Modeling & Scanning



Seeing your ideas take shape has always been the dream of the 3D designer. Today's powerful, lower-cost CAD workstations and software help make this dream a reality as never before. The reality is, however, it can still take days or weeks to go from a CAD drawing to having a part, mold, or prototype. But not any longer. Now Roland's MDX-20 and MDX-15 put you in control with the power of 3D scanning and milling on your desktop.

The image displays two views of the Modela 3D printer. The left view shows the front-left side, highlighting the orange 3D-printed part on the bed and the control panel with four buttons (power, stop, start, and a fourth unlabeled button) and a yellow warning label. The right view shows the front-right side, providing a different angle of the same machine and its components.

Model: MDX-15
Max operation area : 152.4 mm (X) x 101.6 mm (Y) x 60.5 mm (Z)

