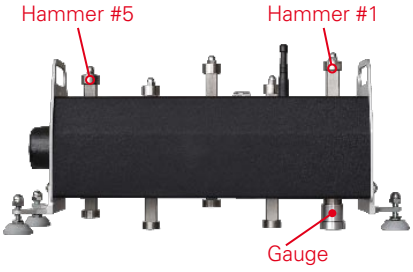
TM3 Tapping Machine

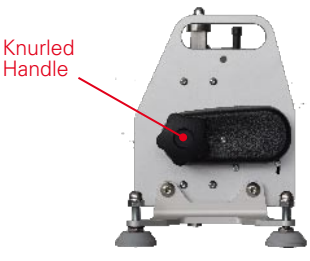
Impact Sound Insulation Measurement Source

TM3 Tapping Machine with Antenna, Remote Control, Gauge, Wrench and Battery Charger

TM3 front view



Hammer drop height adjustment



TM3 rear view

The TM3 Tapping Machine is a precision impact noise source for building acoustic measurements. It is typically used for the assessment of general impacts in dwellings that occur on floors or stairs in a building. The machine can be switched On/Off manually or via remote control. It is powered by a built-in battery, or from mains power.

Preparations

1. Rock the main switch to position 'ON'.
2. Connect the battery charger to mains power and to the corresponding plug on the machine's front panel. As soon as the charger is connected, the 'Status' LED will start flashing green ◉, while the 'Batt.' LED glows
   - ● amber: charging in progress
   - ● green: battery fully charged (→ *you may disconnect the charger to operate the tapping machine without mains power*)

Setup

1. Put the machine on a flat, stable ground.
2. Plug the antenna to the BNC connector on the control panel.

Hammer Fall Height Adjustment

1. Slowly turn the knurled handle counter-clockwise until hammer #1 falls down; then lift the hammer with one hand and turn back (clockwise) the handle a little bit, until the hammer is kept in its top position.
2. Adjust the hammer fall height by fitting the 40.8 mm gauge beneath the hammer with light friction evident. For this purpose, rotate the machine's feet clock- or anti-clockwise in order to raise or lower the machine, respectively.
3. Repeat steps 1. and 2. with hammer #5. Take care to maintain the horizontality of the machine by checking the spirit level.
4. Upon completion of the procedure, tighten the lock nuts of all three feet by using the wrench.

Hint *The setup procedure is explained in this instruction video: https://youtu.be/zdaYmEaqgWs*

TM3 Remote Control (sender)

Operation

Start / stop the tapping machine in either of the following modes.

1. Remotely: press the button of the remote control sender to switch the machine ON or OFF.
2. Manually: press the 'Operate' button on the control panel to switch the machine ON for a limited time.
   a) Short press (0.5 sec.): tapping machine runs for 5 minutes
   b) Long press (1-2 sec.): tapping machine runs for 20 minutes

Hint *The manual operation mode allows you to run the machine without using the remote control.*

After having completed your measurements, you may turn OFF the machine by rocking the main switch to position 'OFF'.

Specifications TM3

Standards	ISO 16283-2, ISO 717-2, ISO 10140-3/-4/-5, ISO 140-6/-7/-8 DIN 52210-6, ASTM E492, ASTM E1007
Power supply Input Output Consumption	 100 to 240 VAC, 50/60 Hz, 1.0 A 18 VDC, 2.22 A 40 W max.
Battery Type Charge time Continuous operation	 12 V, 3.2 Ah Lead-Acid gel (no maintenance required) approx. 8 hours up to 2 hours
Hammers Material Weight Diameter Distance between hammers Rated drop height	 Stainless steel, hardened 500 g ± 6 g (1.1 lbs ± 0.212 oz) 30 mm ± 0.2 mm 100 mm (3.94") 40 mm (1.575")
Dimensions L x W x H	650 x 215 x 275 mm (25.6" x 8.5" x 10.8")
Weight (including battery)	10.2 kg (22.5 lbs)
Temperature, humidity Storage Operation	 –20° to +70°C (–4° to 122°F) @ ≤ 90% RH (non-condensing) –10° to +50°C (14° to 158°F) @ ≤ 90% RH (non-condensing)
EMC conformity	EN 61326-1:2013 / CISPR11 / BS EN 55011:2009+A1:2010
Scope of supply (included)	• Carrying case • Battery charger • Drop height gauge • 17 mm wrench • RC sender & antenna • Calibration certificate
Order information	NTi Audio # 600 000 520 (433 MHz) NTi Audio # 600 000 529 (USA, 315 MHz) NTi Audio # 600 000 528 (Japan, without RC)

All information subject to change without notice.