



Installation and operating manual

MAD T3S - Coin-operated slot machine with voucher printer and turnstile, 230 V

BASIC TECHNICAL DATA

Coins accepted:	1; 2; 5; 10; 20; 50 CZK 0.1; 0.2; 0.5; 1; 2 € token ZT 2
Power supply:	230 V, 50 Hz
Power input:	idle 6 VA, when accepting coins 12 VA, up to 80 VA when printing
Control contact load:	max. 230 V, 6 A at ohmic load 499 CZK
Product website:	MAD T3S

Coin-operated slot machine functions

- The MAD T3S coin-operated slot machine is intended for paid unlocking of a turnstile passage. The user inserts the required amount of money and is issued with a voucher (always, or after pressing the button, or never, depending on the setting) and the entry device is opened. If the user inserts a lower sum than required, entry is not permitted, the voucher is printed and the paid amount displayed on the bottom line so that it is clear at first sight that the correct value has not been paid. If a higher sum has been paid, entry is permitted and the paid amount displayed on the bottom line as well. The machine adds up the coins, not returning the possible excess payment, but printing out the really paid sum.
- If a ZT 2 token is inserted (the token value must be set to CZK 10 on the switch), the entry device is unblocked and no voucher is issued. This token is not included anywhere.

Assembly:

1. Use suitable anchoring material to hang the machine on the wall or on the upper surface of the turnstile. When installed outdoors, the machine must be protected from rain - e.g. by a canopy.
2. Install a door lock in the door frames (install a turnstile).
3. Connect the exit to an electric lock or other device blocking the entrance (turnstile).
4. Place in the money-box. Without placing in the money-box, the machine will not work.
5. Turn on the power supply.
6. Set the required parameters.

Description of function

- The device operates in 3 basic modes.
 1. The door is closed - operating mode - the machine accepts coins/card payments and issues tickets.
 2. The door is open and the money-box is removed - a statement of **all transactions** (coins and card payments) since the last withdrawal is automatically issued. The crowns and euros are summed up separately. For proper operation, the money-box must always be emptied after its removal - it is automatically reset to zero and a new withdrawal is printed in case of repeated removal of the money-box. An additional PM4 coin counter is used to **display the number of coins in the money-box**.
 3. The money-box placed in - Door open - it is possible to set the required parameters or replace the paper. For easier insertion it is advisable to cut the end of the paper diagonally. The paper must be loaded so



that its pre-printed description is on the left - the unprinted side of the paper is active. No toner is needed to operate the printer; the paper is heat sensitive and text is burned into it.

The operating mode can be used in 3 variants

- printing of the voucher after the sum is inserted - opening the door immediately after payment is received
- conditional voucher printing - after the required sum has been inserted, the door opens and the voucher can be printed.
- no printing - the door is opened after the sum has been inserted, the voucher is printed only when the button is pressed after inserting the insufficient amount of money

SETTINGS

A) Setting the type of coins accepted

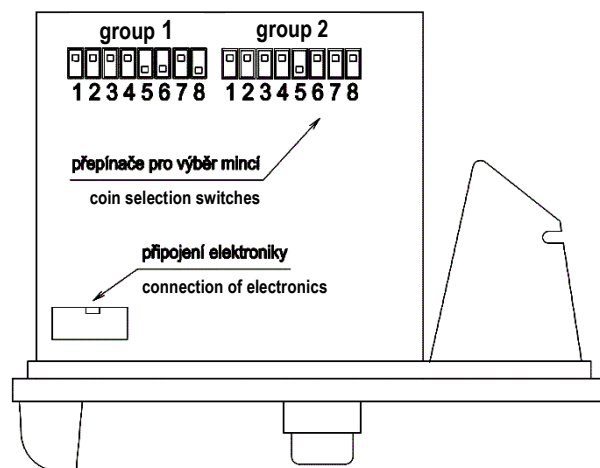
- Accepted coins are set by shifting the switches according to the table below. The switches for coins to be accepted **must be in the lower position**.
- Note: The "On" position on the coin box means - **blocking the coin**.

group 1 - crown coins (blocking)								group 2 - euro coins (blocking)							
2	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
CZK 1	CZK 2	CZK 5	CZK 10	CZK 20	CZK 50	token	token - crowns	€ 0.05**	€ 0.1	€ 0.2	€ 0.5	€ 1.0	€ 2.0	token	token - euro
on	on	on	on	on	on	CZK 20	on	on	on	on	on	on	on	€ 0.5	on
off	off	off	off	off	off	CZK 10	off	off	off	off	off	off	off	€ 1.0	off

** coins worth € 0.05 must be blocked, the machine only accepts coins from € 0.1

Explanatory note:

- Shifting the switch no.5 of group 1 to the off position, the machine will accept coins worth CZK 20. Shifting the switch no. 5 of group 2 to the off position, the machine will accept coins worth € 1.0. In addition, you can, for example, turn switch no. 8 to the lower position (off) and the machine will accept coins and tokens. In total, the machine will accept coins of CZK 20, € 1 and the token will be assigned a value of CZK 10 or 20 (€ 0.5 or € 1) depending on the position of switch no. 7. Coins or tokens not selected using the switches will not be accepted and will be returned.
- If the coin-operated machine is not accepting coins, the sensors in the coin path are probably dirty. After removing the front panel with coin box, the white button on the front of the coin box must be pressed. A door opens on the side of the coin box, which can be opened by hand up to a right angle in relation to the coin box. The area behind the door and the inside of the door can be cleaned with a damp - not wet - cloth.
- Aggressive solvents (acetone, toluene, etc.) must never be used.
- Clean the coin box only when the power is switched off.





B) Setting of coin-operated machine electronics

- Settings are possible via three adjusting buttons.
- The adjusting buttons are accessible by opening the top door. The description of the settings is shown in the "settings tree", which is included in the appendix.
- **Meaning of symbols:** ● button pressed ○ button not pressed
- **Underlined text is the inscription on the display, non-underlined text means the explanatory notes.**

Warning

- Before commissioning, an initial inspection of the electrical equipment must be carried out in accordance with ČSN 33 2000-6-61 and ČSN 33 1500.
- When running, the operator is obliged to perform regular inspections of electrical equipment.
- The machine is only intended for indoor operation and dry areas without aggressive fumes.

Caution! Under no circumstances may the coin-operated machine be operated without a protective conductor connected.

Turnstile function and technical description

- A turnstile is a mechanical device, the essential part of which is a control unit that blocks or releases the rotation of the barrier head. The control unit can be of RIGHT / LEFT design according to the desired blocking method. Determination of the direction of rotation: when viewed from the front of the rotating head - clockwise rotation is the right-hand version, anti-clockwise rotation is the left-hand version. It is advisable to make the actual specification when ordering. Alternatively, it is possible to set the direction of passage on the spot. see setting of passage direction)
- The turnstile consists of a stainless steel cabinet with a control unit and a rotary head.
- The TRM 02 turnstile is also equipped with an automatic arm drop function. The arm will be folded to the vertical position automatically in case of power failure. It is returned to its original position manually (the turnstile must be energized).

Turnstile maintenance

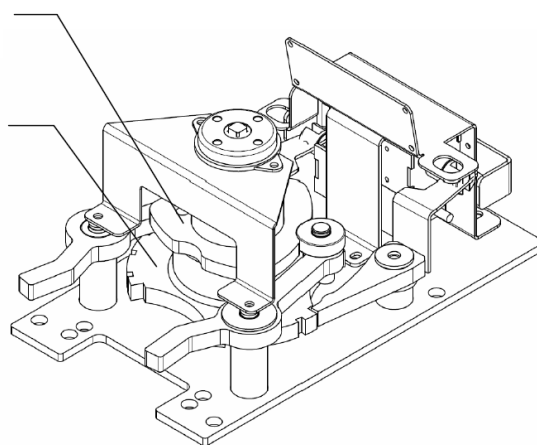
- The turnstile mechanics is designed as a complex mechanical device with rotating parts. Maintenance is therefore very important to ensure the proper operation of the turnstile. The maintenance and adjustment must be carried out by an experienced person trained by the manufacturer, or preferably directly by the manufacturer. A service check must be carried out every 6 months or after approximately 20,000 passes.
- In addition, rough mechanical damage and exposure to aggressive agents (alkalis, corrosives) must be avoided.

Lubrication of turnstile mechanics

- To ensure the smooth operation of the turnstile and to reduce the wear and tear of the material, it is essential to lubricate all mechanical components of the turnstile (see the following picture) with a special Vaseline; ordinary lubricants must not be used.

Shaped
cam

Brake
wheel



Spring adjustment

- If it is necessary to increase its stiffness, insert a washer between the spring and the position lever.

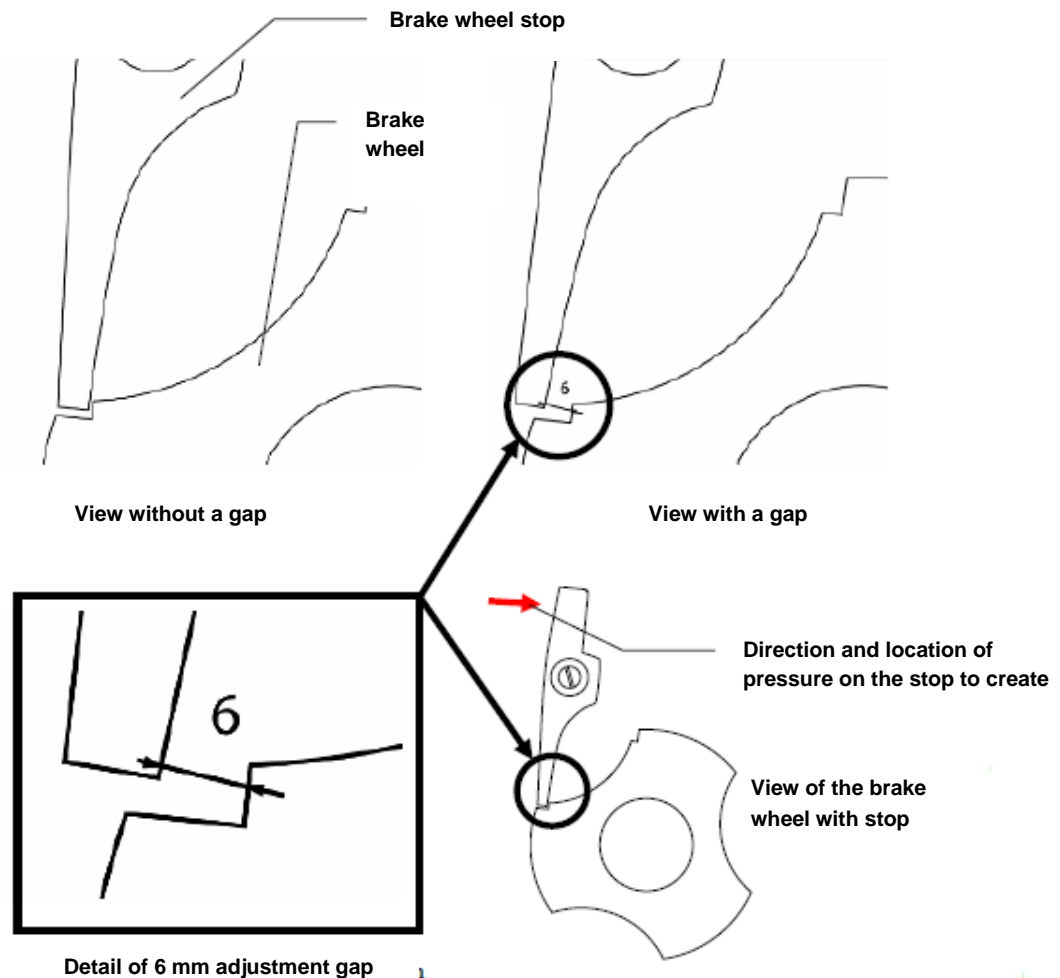


Setting the direction of passage

- Set the desired direction by loosening or tightening the locking screw, being located under the brake wheel stop. Care must be taken to set the sensor correctly (see following chapter).

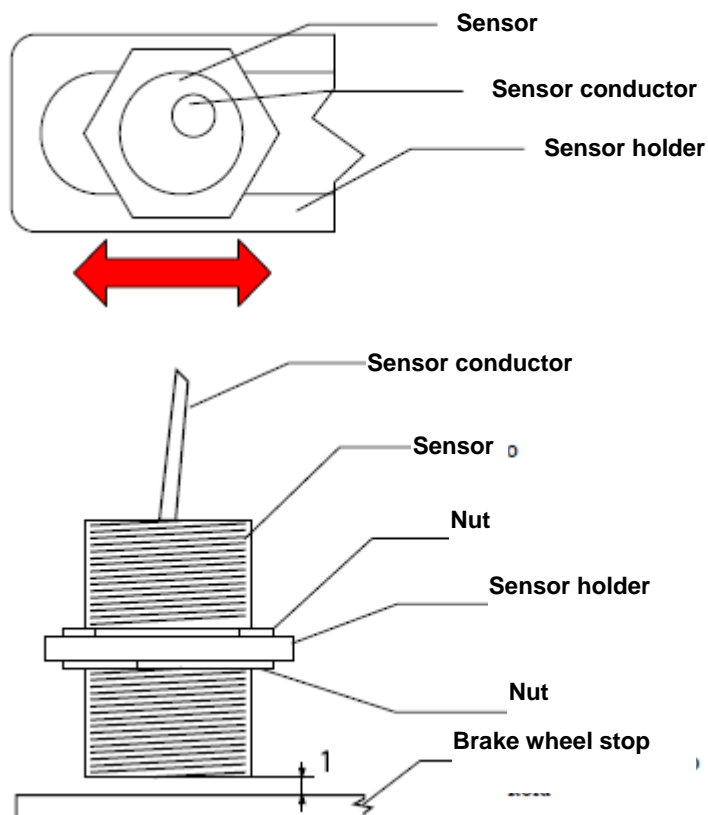
Sensor adjustment

- The sensor is needed for the correct function of unlocking and locking the rotary barrier. The sensor must be checked at least once every 3 months. Adjustment in case of malfunction of the turnstile. Take extra care when tightening, do not force the sensor as this may cause damage.
- When adjusting, set the rotary turnstile barrier to the "Closed both directions" position. The gap between the brake wheel and the brake wheel stop is important for the adjustment and should be 6 mm. Create the gap by applying slight hand pressure to the stop at the solenoid.



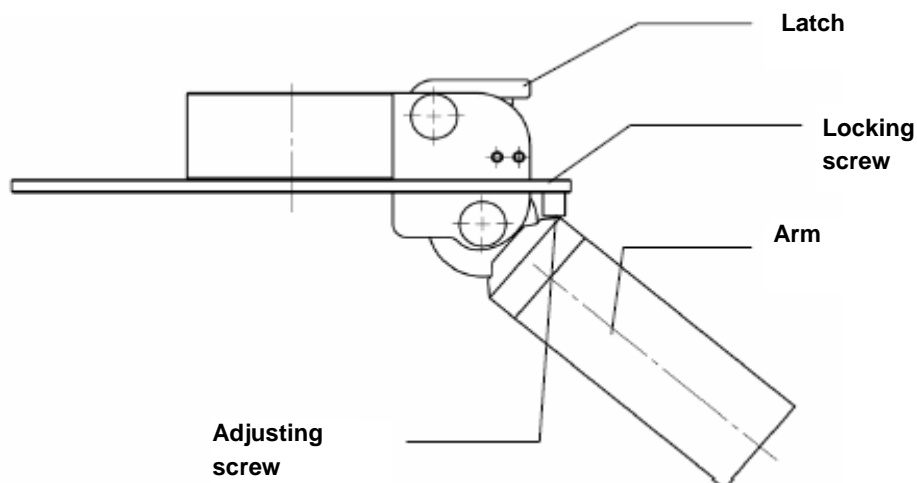


- When the rotary barrier is in the "Closed both directions" position, the LED lamp on the sensor is illuminated. When the 6mm gap is reached the indicator lamp must go out. If it does not go out, the sensor must be adjusted. The sensor is adjusted by moving it on the holder in the required direction.
- It is essential to maintain a 1 mm gap between the sensor and the brake wheel stop for all sensor adjustments.



Adjusting the drop arms

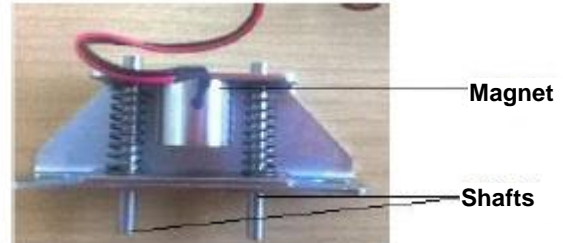
- The drop arms allow free passage through the turnstile in case of danger and evacuation (anti-panic function). It is essential to check the correct functioning of the arms at least once every 3 months. If the arm does not fall of itself when the anti-panic function is activated (when the electrical circuit is interrupted), it must be adjusted so that it has sufficient clearance for tilting.
- Adjust the arm using the locking and adjusting screw. Press the latch to lower the arm to the vertical position and loosen the locking screw. If the arm clearance is too large, the adjusting screw must be loosened. If more clearance is needed, tighten the adjusting screw. Tighten then the locking screw. Move the arm back to the horizontal position and rotate. Test the arm function again and readjust if needed.





Cleaning the drop arms

When cleaning the drop arms of the turnstile, it is essential to lubricate the shafts with special Vaseline and clean the area around the drop arm magnet of any dirt. The drop arms of the turnstile require to be cleaned once every 3 months, or more often if needed.



Forbidden manipulations

1. It is forbidden to intervene in the turnstile unit in any way during the warranty period and to dismantle the drive unit by yourself. In the event of a breach of this condition within the warranty period, the operator of the equipment shall lose the right to warranty repair.
2. Do not use force when manipulating the turnstile barriers in the blocked position in an attempt to enter an area with defined access rights.
3. It is forbidden to hang on to the turnstile arm.

Operation safety

- Persons designated to operate the equipment must be properly and demonstrably instructed and familiarised with the equipment being operated and the hazards that may arise during operation. In particular, they must be instructed in first aid for accidents, mandatory measures in case of fire, etc.

Cleaning and maintenance

- The device is made of stainless steel of quality according to ČSN 17 240 (AISI 304), therefore it must not be operated in a chemically aggressive environment.
- **!! For its cleaning never use chlorine-containing products !!**
- Recommended WÜRTH detergents:
 - cleaner- art. no. 893 121 1
 - preservation- art. no. 0893 121 K.



Settings guide for MAD 3

Financial balance ●○○ Current balance ○○○ receipt with current balance and month balance is printed ○○○ Finish entering

●○○ Cash withdrawal ○○○ receipt with current balance is printed and cash counter is set to zero. The same case, when cashbox is put out and put back.

●○○ Month balances ○○○ Balance: month before ○○○ (●○○) listing in last 12 months ○○○ Print chosen month balance ○○○ Finish entering

●○○ Automat STOP – yes - no (if is „yes“, which is impossible to change, automat is blocked automatically because of wrong setting. Firstly remove malfunction, after that unblock automat)

●○○ Printer ○○○ Paper initiation ○○○ if paper is missing, insert it in the beginning of printer and paper is accepted automatically and initial receipt ***** is printed out; if not Printer OK

○○○ Setting the roller beginning ○○○ the beginning of roller is set This operation is carry out always when new paper roller is put in.

●○○ Check receipt ○○○ check receipt printed in zero sum, door is not opened

●○○ Check cut ○○○ check cut done

●○○ Printer ON ○○○ Always ○○○ confirmed - receipt is printed always after inserting coins, door is open after inserting demanded credit

○○○ Activation by button ○○○ confirmed, - receipt is printed only after inserting coins and pressing the button, door is open after inserting demanded credit

○○○ Turn off ○○○ confirmed, - receipt is printed only after inserting insufficient credit and pressing the button, door is open after inserting demanded credit

●○○ Mode without printer

Financial balance ●○○ User menu ○○○ Setting the date ○○○ display the date ○○○ choose position for change ●○○ change done ○○○ Saved OK

●○○ Setting time ○○○ display time ○○○ choose position for change ●○○ change done ○○○ Saved OK

●○○ Taxes ○○○

●○○ VAT ○○○ display in % ○○○ choose position for change ●○○ change done ○○○ Saved OK

●○○ Tax in LVL ○○○ display tax ○○○ choose position for change ●○○ change done ○○○ Saved OK

●○○ Tax in EUR ○○○ display tax ○○○ choose position for change ●○○ change done ○○○ Saved OK

●○○ Capacity of roller ○○○ 000144000 ○○○ choose position for change ●○○ change done

note.: value 144 000 is valid for delivered paper (55g/m² d 50/200) and determine number of lines, which can be printed on roll. This value must be change for different paper type.

●○○ Set the roller beginning ○○○ 000144000 or other set roller capacity is set as beginning value

●○○ Blocking cutter ○○○ Cutter blocked No ●○○ Cutter blocked Yes ○○○ receipts will not be cut, will be issued as continuous strip

●○○ Input ○○○ Input lines ○○○ Number ○○○ set the number of lines with input text (max. 10) ○○○ number of input lines



●○○ Lines in the end ○○○ free end lines ●○○ free end lines 00 ○○○ choose position for change ●○○ change done ○○○ OK
note.: free lines are used, if e.g. bar code has not enough space or for advertisement

●○○ Edit title ○○○ Line choice: 1 ●○○ choice the line ○○○ accept choice ○○○ choose position for change ○○○ confirm choice ○○○ (○○○) change of chosen mark ○○○ OK

●○○ Initiate printer – set yes, no is for net work

●○○ End of setting

Financial balance ●○○ Service menu ○○○ Service menu 0000 set password 8685

○○○ Set prod. no – not used

●○○ Time for contact ○○○ display contact time (in ms) of output relay ○○○ choose position for change ●○○ change done ○○○ OK

●○○ Print intensity ○○○ display set intensity 0 – 3 ●○○ change done ○○○ OK (intensity 3 is max. - 2 is recommended)

●○○ Zero cutter ○○○ display number of cuts ○○○ Saved OK ○○○ set 0

●○○ Zero number print ○○○ display number of tickets ○○○ Saved OK ○○○ set 0

●○○ To unblocking – do not change, must be 9999

●○○ Choice of encoding – not used in this application

●○○ Network address - used only in groups of automats operated by central computer

●○○ Production password – must be entered another password – access is permitted only to producer and authorized technicians – zero all values

***** Attention – firstly confirm Paper initiation by button on the bottom – title insert paper is displayed, afterthat paper should be inserted into printer while top panel is covered. Paper is initiated automatically. If paper is inserted into printer while title Paper initiation is displayed, it does not come to automatical initiation.