ELM ®

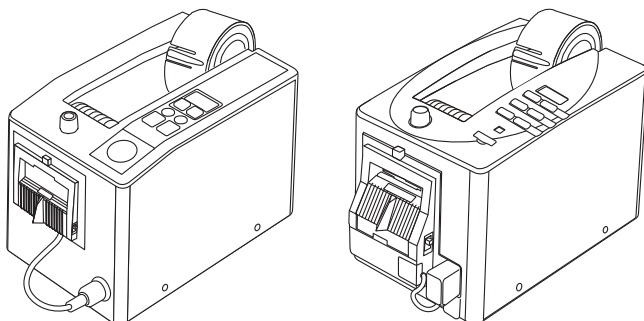## Electronic Tape Dispenser
M-1000/ M-2000
MS-1100/ MS-2200

Instruction Manual

Thank you very much for purchasing our "Electronic Tape Dispenser". Please read this instruction manual before using or when it's necessary.

MADE IN JAPAN

Contents

1 Notice

This instruction manual is for our tape dispensers, model No. M-1000, M-2000, MS-1100 and MS-2200.

Refer to following comparison for differences of each models:

1.1 Product comparison

Model No.	M-1000	M-2000	MS-1100	MS-2200
Automatic feed and cut	●	●	●	●
Length memory	——	●	——	●
Safety shutter	——	——	●	●

Refer to page 9 for details of length memory. `2000` `2200`
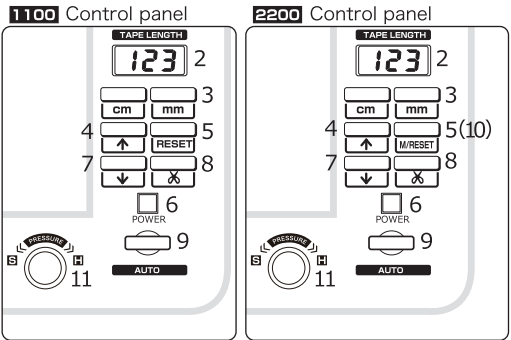Refer to page 7 for details of safety shutter. `1100` `2200`

1.2 ⚠Warning

Do NOT insert your fingers into cutting head.

1.3 ⚠Caution

Do NOT put flammable onto the unit.
Do NOT use the unit under unsteady place.
Do NOT use the unit in humid or dusty place.
Do NOT disassemble or modified the tape dispenser.
Make sure to pull the plug out when the unit is moved or replacing parts.
Do NOT insert bars or plates in to the tape outlet. This will damage blades.
Do NOT drop the unit or subject it to heavy shocks.
Do NOT use volatile liquids (thinner, benzene, etc.) to clean the unit. Wipe with dry cloths only.
Do NOT use damaged cable. This may cause a fire or electric failure.
Do NOT use the unit near volatile liquid.
Do NOT clean the unit by any flammable materials. Do not operate the unit near flammable materials (including flammable gas spray). Failure to do this may cause fire.
Do NOT disassemble, repair or modify the AC adaptor. It may cause fire, electric shock or malfunction.

2 Description of parts and function

2.1 For M-1000 / M-2000

Reel

Control panel

Feed roller

Pressure knob

Cutting head
(Auto feed cutter unit)

Sensor switch

Sensor plug

`1000` `2000`

1 — DC Jack

`1000` Control panel

TAPE LENGTH

123 2

cm mm 3

4 ↑ 20 5

7 ↓ ✂ 8

AUTO

PRESSURE
S — H
10   9

`2000` Control panel

TAPE LENGTH

123 2

cm mm 3

4※ 6 M 20 5

7 ↓ ✂ 8

AUTO

PRESSURE
S — H
10   9

1	Power switch	Press to turn power ON or OFF.
2	Tape length display	Shows tape length and error.
3	Length adjustment key	The last digit indicates " **mm** " (0 - 9mm) and the first two digits " **cm** " (20 – 990mm).
4	Reverse key	`1000` Feed roller reverses by pressing ↑. Use this key for changing tape. --- `2000` Feed roller reverses by pressing **M** + ↓. Use this key for changing tape.
5	20(reset)key	Resets length display reset and back to min set length of 20mm.
6	Memory key	`2000` Press and hold it till the LED display flashes for saving memory. Saved lengths can be selected by short pressing of this key.
7	Feed key	Tape dispenses as long as ↓ is pressed.
8	Cut key	Press ✂ to cut tape.
9	Auto Key	Press **AUTO** to feed tape to the preset length and cuts automatically.
10	Pressure knob	Adjust press (top) roller to change pressure on tape.

2.2 For MS-1100 / MS-2200

Reel
Control panel
Feed roller
Pressure knob
Safety shutter
Cutting head
(Auto feed cutter unit)
Sensor switch
Sensor plug

1100 2200

1   DC Jack

1100 Control panel
TAPE LENGTH
2
3
cm   mm
4   5   RESET
7   8
6 POWER
9 AUTO
PRESSURE S H
11

2200 Control panel
TAPE LENGTH
2
3
cm   mm
4   5(10) M/RESET
7   8
6 POWER
9 AUTO
PRESSURE S H
11

| 1	Power switch	Press to turn power ON or OFF
2	Tape length display	Shows tape length and error.
3	Length adjustment key	The last digit indicates " **mm** " (0-9mm) and the first two digits " **cm** " (30 – 990mm). **mm + cm :** Back to min set length of 30mm
4	Reverse key	Feed roller reverses by pressing ↑ . Use this key for changing tape.
5	Reset key (M/RESET for **2200**)	**RESET** Release error by pressing this key for 2 times.
6	Power LED	☐ Lamp goes on when the power is turned ON.
7	Feed key	Tape dispenses as long as ↓ is pressed.
8	Cut key	Press ✂ to cut tape.
9	Auto Key	Press **AUTO** to feed tape to the preset length and cuts automatically.
10	Memory key	**2200 M/RESET** Press and hold it till the LED display flashes for saving memory. Saved lengths can be checked by short pressing of this key.
11	Pressure knob	Adjust press (top) roller to change pressure on tape.

3 Operation

3.1 Setting up

⚠ Attention	Make sure power and sensor switches are OFF for safety purpose

① Plug sensor plug into the unit.

② Plug power cord in.

Turn OFF

③ Turn the power switch ON.
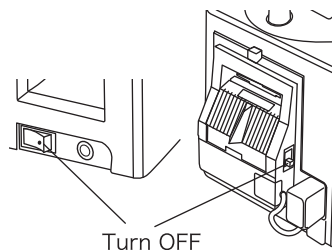
1000 **2000**
Min set length of 20 will be shown on the LED display.

LED display

`20`

1100 **2200**
Min set length of 30 will be shown on the LED display.

LED display

`30`

3.2 Loading tape

① Pull the reel out from the unit.
Load tape on the reel and place to the unit.

(Fig.)   Fold tape back

② Make sure to position the tape on the center of the reel.

Feed roller

③ Fold corner of the tape to form a trapezoide shape (Fig.). Stick the tape onto metal feed roller.

④ Press " ⬇ " until tape feeds through cutting head.
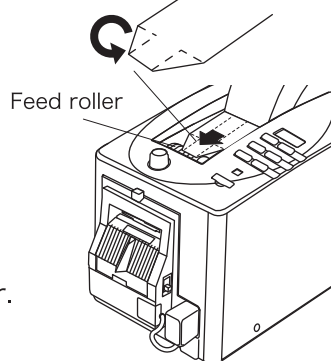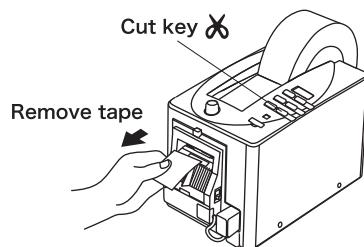
⑤ Adjust "Pressure knob" in accordance with tape.
● If tape curls up or slips,
   increase pressure.(clockwise)
● If tape creases,
   decrease pressure.(counter clockwise)

PRESSURE
S Soft   **H** Hard

⑥ Advance 3cm – 4cm of the tape out from
the cutting head.

Cut key ✂

Remove tape

⑦ Press " ✂ " to cut the tape.

⑧ Remove tape

3.3 Sets tape length

Make sure sensor switch is OFF.
Press " **mm** " and " **cm** " for setting length.

① Press " **mm** " to set length of 0-9mm(Last digit)

② Press " **cm** " to set length of **1000** **2000** 20 -990mm

/ **1100** **2200** 30 -990mm.(First two digits)

＊ Keep pressing button for quick change.
＊ Last setting length is saved even main power is turned OFF.

LED display

```
20
```
↓ **mm**
```
27
```
↓
```
27
```
↓ **cm**
```
457
```

3.4 Resets saved length

1000 **2000** Press " **20** " to reset and back to min
set length of 20mm.
```
20
```

1100 **2200** Press " **mm** + **cm** " to reset and
back to min set length of 30mm.
```
30
```

Make sure
sensor switch is OFF.
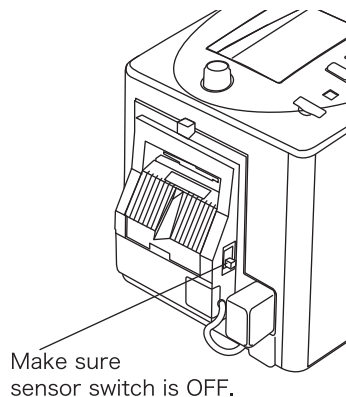
3.5 Using automatic feed

Remove a piece of tape

①Turn sensor switch ON.

② Tape will be fed set length and cut.

③ Remove a piece of tape from machine.

Automatically set length is fed and cut
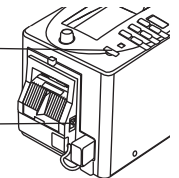
④ Another piece will be fed and cut.
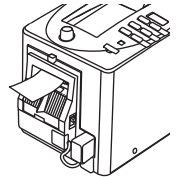
3.6 Using manual feed

① Turn sensor switch OFF.

② Press " **AUTO** " .

③ Whenever " **AUTO** " is pressed,

Press "Auto key"

set length is fed and cut.

Turn sensor switch OFF.

3.7 Safety shutter (Safety device) `1100` `2200`

Safety shutter system prevents activation of cutter when foreign objects are present.

※ When safety device is activated, show error
(Err) on the LED display.

※ " $---$ " error will be shown, if any keys are pressed while display shows " Err " error.

safety shutter activated

※ No safety shutter for `1000` and `2000` .

3.8 How to release " Err " " $---$ " error `1100` `2200`

① Remove cutting head from the unit.

② Remove jammed tape.

③ Move shutter and cutter by tool and back them to the right position(Fig.).

④ Press " **RESET** " (1st press)

⑤ LED display shows length.

(Fig.)

⑥ Press " **RESET** " again. (2nd press)

⑦ Error will be released.
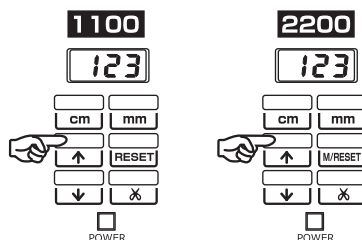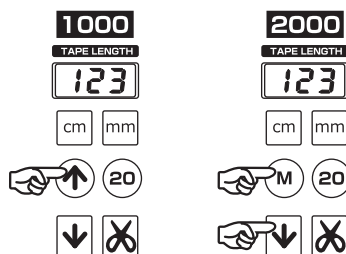   ※ Ask distributor or **ECT Inc.** in case error can't be released.
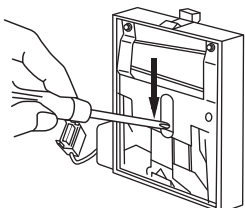
3.9 Changing tape

① Turn sensor switch OFF.

② Press " ⬆ " to reverse tape.
`2000` " M " + " ⬇ " .

The feed roller will rewind
the tape away from cutter area.

③ Remove whole reel out from the unit and
replace tape.

`1000`
TAPE LENGTH
`123`
cm mm
☞⬆ 20
⬇ ✂

`2000`
TAPE LENGTH
`123`
cm mm
☞M 20
☞⬇ ✂

`1100`
`123`
cm mm
☞ ⬆ RESET
⬇ ✂
▢ POWER

`2200`
`123`
cm mm
☞ ⬆ M/RESET
⬇ ✂
▢ POWER

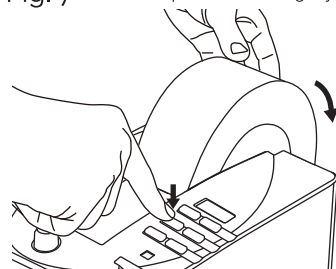## 3.10 How to remove jammed tape

① Press " ⬆ " to reverse tape.
" M " + " ⬇ " for reverse. `2000`
※ Hold the tape and wind it backward
slightly as per (Fig.) .

② Remove tape from metal roller.
③ Cut wrinkled part of tape.

● In case of heavy tape jam.

① Remove cutting head from the unit.
② Cut wrinkled part of tape.
③ Remove jammed tape by tweezers.
　※ In case tape is wrapped around any rollers,
　　those need to be cut by scissors.
　　Make sure roller wouldn't be damaged.

● If tape jammed in the cutting head.

① Remove cutting head from the unit.
② Check the gap of the blade on the back.
③ Remove jammed tape by tweezers.
　※ When its heavy jam, cutter spring need to be removed.
　　See details for page 12.

(Fig.) Wind the tape backward slightly

⚠ Attention	Make sure sensor switch is OFF for safety purpose.

3.11 Length memory function `2000` `2200`

Set preset lengths and select a mode.
3 different lengths can be saves, and 2 different modes are selectable.

Preset mode (on " 0 ")

On " 0 ", the machine will feed and cut the first set length until the

" **M** " is pressed, then it will feed the second length until

the " **M** " is pressed, and so on.

LED displey

0

Loop mode (on " 5 ")

On " 5 ", the machine will feed and cut the recorded length in series.

LED displey

5

recorded length1
▾
recorded length2
▾
recorded length3
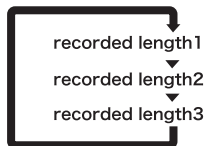
STEP.1 Save lengths

Press and hold

☞ Ⓜ
▼

20

`2000` Press and hold " **M** " (" `M/RESET` " for `2200`)
until the LED display START flashing.
※LED display flash = Setting mode

1st preset length (Memory 1)

recorded length1   e.g. length 50mm

Press " **mm** " , " **cm** " and set the length to resister memory 1.

`2000` Press " **M** " (`M/RESET` for `2200`) for
completing 1st length registration.

50
☞ cm mm
▼
☞ Ⓜ

▼

999
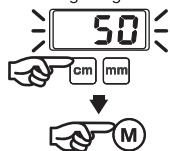
2nd preset length (Memory 2)

recorded length2   e.g. length 100mm
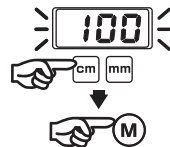
Press " **mm** " , " **cm** " and set the length to resister memory 2.
`2000` Press " **M** " (`M/RESET` for `2200`) for
completing 2nd length registration.
※If no need to resister 2nd preset length, leave " 999 " and
`2000` press " **M** " (`M/RESET` for `2200`).

100
☞ cm mm
▼
☞ Ⓜ
▼

999

3rd preset length (Memory 3)

Press " **mm** " , " **cm** " and set the length to resister memory 3.
※ If no need to resister 3rd preset length, leave " 999 ".

recorded length3 e.g. length 300mm

`300`
cm mm

`2000` Press " **M** " (`M/RESET` for `2200`) for
completing all registration.
Then "0" will be shown on the LED display.

`0`
M

STEP.2 Select the mode

On " 0 " : Preset mode	On " 5 " : Loop mode

`2000` Press and hold " **M** "
(" `M/RESET` " for `2200`)
 	
until the LED display STOP flashing.
1st preset length will be shown.
 	
Press and hold
M
 	
`50`
	Press " **mm** " .
	And " 0 " will be turned to " 5 ".
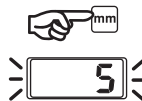	
	`5`
	
	`2000` Press and hold " **M** "
	(" `M/RESET` " for `2200`)
	until the LED display STOP flashing.
	1st preset length will be shown.
	
	mm
	Press and hold
	M
	
	`50`
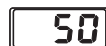
All setting for " Preset mode " has been completed.	**All setting for " Loop mode " has been completed.**

3.12 Changing saved preset lengths

● Change all

`2000` Press " **20** " for deletes all setting.

20

`2200` 1. Turn the main power OFF.

2. Turn the main power ON while keep pressing
" `M/RESET` " for deletes all setting.

OFF ON
M/RESET
Press and hold   **turn on**

● Change 1 or 2 preset lengths `2000` `2200`

① `2000` Press and hold " **M** " (" `M/RESET` " for `2200`) until the LED
display START flashing.

② `2000` Press " **M** " (" `M/RESET` " for `2200`) and find length,
you'd like to change.

③ Press " **mm** " " **cm** " keys and change length.

④ `2000` Press and hold " **M** " (" `M/RESET` " for `2200`) until the LED
display STOP flashing. 1st preset length will be shown and complete
changing preset length.

4 Maintenance

⚠ Caution	For safety reason, make sure to pull power cord out from power outlet for any maintenance.
⚠ Caution	Do NOT touch cutter blade!

4.1 Replacing separating roller unit

Rubber rings on "Separating roller unit" are consumable part.
Reguler replacement is required for keeping the best feeding condition.

①Remove cutting head.

②Unscrew ① and ②.

③Pinch centre of separating roller unit and pull it out.

④Replace with new unit.

Open knob

Front　　　Separating roller unit
①
②
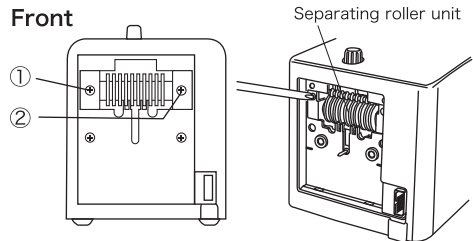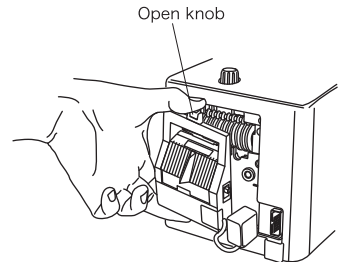
4.2 Maintenance of cutter blades

⚠ Caution	Remove the auto-feed cutter unit from the machine when using alcohol. Failure to do this may cause fire.

Although special coating is applied on our cutter blade, glue will be built up eventually.
In order to maintain the best cutting condition, remove accumulated glue regularly. Use alcohol for removal.
Then use enclosed "silicone oil" for less glue building up.
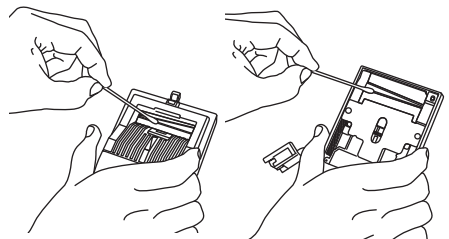
⚠ **Caution**	Pay extra attention when blades are replaced !!

4.3 Replacing cutter and cutter liner

Cutter and cutter liner are consuming part.
Reguler replacement of cutting head, (or cutter bledes, liners individualy)is required for keep the best cutting condition.

① Remove cutting head.

② Turn 2 screws and remove "cutter spring".

❗ **Attention**
Hold cutter spring when it's unscrewed, for preventing parts popping out.

③ Remove cutter blades.

④ Make sure the direction and replace " cutter liners ", if those are worn out.

⑤ Make sure the direction and replace cutter blades.

⑥ Put cutter spring back.

⑦ Fasten cutter spring by 2 screws.

`1000` `2000`   `1100` `2200`

Remove cutter spring

Remove upper and the lower blade.

Cutter liner

Make sure the right direction for blades.

Cutter   Cutter

Cut out
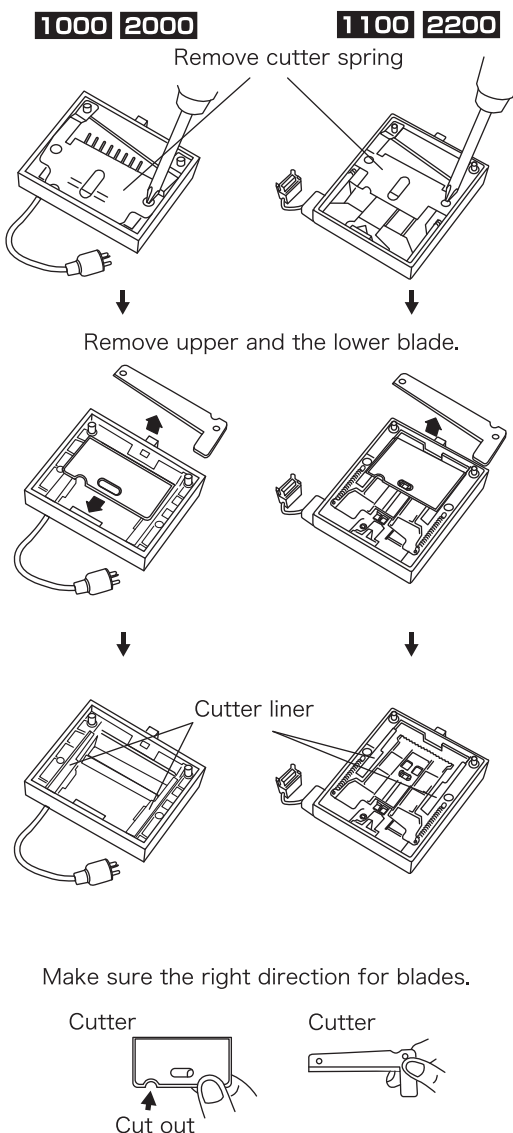
5 Specifications

Model No.	M-1000	M-2000	MS-1100	MS-2200
Display	3 digits LED			
Applicable Tape width	7 - 50mm ※ "Magnetic Tape Guide" as an option is suggested for 7 - 30mm width tape.			
Cut length	20 - 999mm		30 - 999mm	
Core (Reel) diameter	3-in-1 reel (25mm, 35mm, 76mm) (1", 1.4", 3")			
Max outside Dia. of tape	ϕ170mm (Larger reel stand is available as an option part)			

Usable tapes	Cellophane, Kraft, Cloth, PP, Double-sided, Filament, Creped, etc.
	※ Following kind of tapes are possibly affect for smooth feeding or cutting:
	  Curls, Strong adhesive, Black color, High transparency, Too thin, Slippery,
	  Generates much static			

Drive	DC motor for tape feeding and cut			
Power consumption	18W			
Power (MainUnit):	DC18V 1A (use dedicated AC adaptor)			
AC adaptor	Input: AC100 ~ 240V 50/60Hz 1.5A Output: DC 18V 2.5A Cord length: 1.8m			
Ambient illumination	Fluorescent : 3,000 lx or less LED lighting : 10,000 lx or less Sun light : 10,000 lx or less　　※Not for outdoor use.			
Ambient Temp and Humidity	5℃ - 40℃, 80% RH or less			
Size（W×L×H)	137×245×156mm	137×245×156mm	137×249×156mm	137×249×156mm
Weight	About 2.2kg (include AC Adaptor and reel)		About 2.3kg (include AC Adaptor and reel)	
Cabinet material	ABS plastic			
Country of origin	MADE IN JAPAN			

※ Accuracy of cut is about ±2mm (depends on tape).
※ Specifications are subject to change without notice.