EXILE
TECHNOLOGIES

TECHSETTER 2

User Manual

Introduction

Thank you for purchasing the EXILE Technologies' Techsetter2.

Read this manual carefully before using the Techsetter2 and become familiar with the installation and listed operational procedures. If you find any mistakes, or have any questions, please let us know.

If this manual is lost or damaged, please send email request for a new one to **support@exiletech.co.uk**

After receiving this product, please check that:
- It has not been damaged during shipping.
- All accessories are present.
- If a damaged or abnormal part is found, please contact your local EXILE Technologies reseller or direct at **support@exiletech.co.uk** immediately.

Section 1: Safety Precautions

This manual contains health & safety statements to prevent hazardous operations. Never perform operations that are prohibited in either the User's manual or other leaflet information

1.1 Cautions for working environment & installation

> ⚠ **WARNING**
>
> Do not operate the Techsetter2 in an environment where volatile substances, are present, such as alcohol or solvents, or combustible gases.

> ⚠ **WARNING**
>
> Do not put any vessel containing water, or any metallic article on top of the Techsetter2. If water is spilt or a metallic piece enters the Techsetter2 a fire or electric shock can occur.

> ⚠ **WARNING**
>
> Do not cover ant exit vents for the Techsetter2. Doing so will not allow heat to escape from the Techsetter2, creating a potential fire hazard.

> ⚠ **WARNING**
>
> Do not insert or drop a metallic or flammable article inside through any ventilation hole. Doing so can cause a fire or an electric shock.

> ⚠ **WARNING**
>
> Provide an electrical mains point at an accessible place near the Techsetter2.

> ⚠ **CAUTION**
>
> Do not install Techsetter2 in either a damp, high humidity, or dusty areas. This can cause a fire, electric shock or failure. Do not install Techsetter2 in areas with either extremely low or high temperature.

> ⚠ **CAUTION**
>
> Do not install Techsetter2 on a non-secure stand, inclined floor, etc. It can fall or turn over and cause personal injury.

1.2 Handling the Techsetter2

⚠ WARNING
As it weighs approx. 55 kg (121ibs), it is dangerous for a single person to man handle the Techsetter2. Two people must take it out of the package, taking care not to injure their fingers or hands.

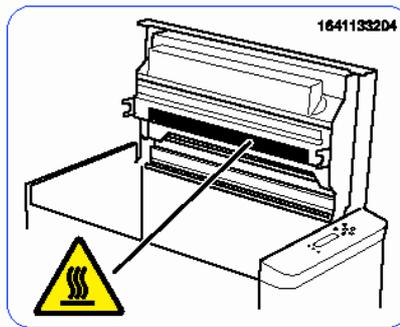| ⚠ WARNING |
|---|
| The thermal print head is heated while the Techsetter2 is operating. This is a normal function. It is heated to a high temperature.   **Never touch it** |

⚠ WARNING
Use only the power cable supplied with the Techsetter2. Be sure the electric socket to be used is grounded according to all relevant local regulations (resistance: less than 100 ohms). If the Techsetter2 cannot be grounded, consult the EXILE Technologies reseller or direct.

Note
If the surface of the thermal print head is touched directly with your hand, it may result in damage. If hard particles, such as sand, enter the print head, it can be damaged.

1.3 Safety warning labels and their location:

The warning labels are attached inside the Techsetter2 to prevent accidents and avoid danger. If the label peels off or it can't be seen, please immediately contact EXILE Technologies direct or the reseller.

1.4 Handling film before and after image output

Note
When handling film before image output: ● **Use film only specified by EXILE Technologies Limited.** ● **Avoid high temperature and high humidity, and store it in a cool and dark place.** ● **Do not touch the film with your hand.** ● **Finger prints can deteriorate the image printing quality.**

Note
When handling film after image output: ● **Store film avoiding direct sunlight or strong UV light or heat source.** ● **Store plates away from organic solvents such as solvents and alcohol.** ● **Avoid direct contact with hands.** ● **Finger prints can deteriorate the image printing quality.**

Section 2   Specifications

Item	Specification
Print system	Direct thermal system
Resolution	1203.8 DPI Dot pitch for horizontal direction : 0.0211mm Dot pitch for vertical direction : 0.0211mm
Film size	Width x Length 360mm x 60 metres
Max imaging width & length	360mm x 658mm
Print speed	Less than 45 seconds * Film size 360mm x 500mm * In case of 20℃ (68℉)with ambient temperature
Film output tray capacity	10 films
Buffer memory capacity	64M byte (for 1 image)
Interface	USB 2.0 (High speed)
Power supply	AC90～264V automatic change
Power consumption	Maximum power consumption less than 360W Standby power consumption less than 35W
Use environment	Temperature20～30℃(68-86℉), Humidity50～70% (No condensation)
Dimension	Height 385mm×Width 515mm×Depth 663mm (Body)
Weight	Approx 55kg(Body)

Section 3: Installation and Setup
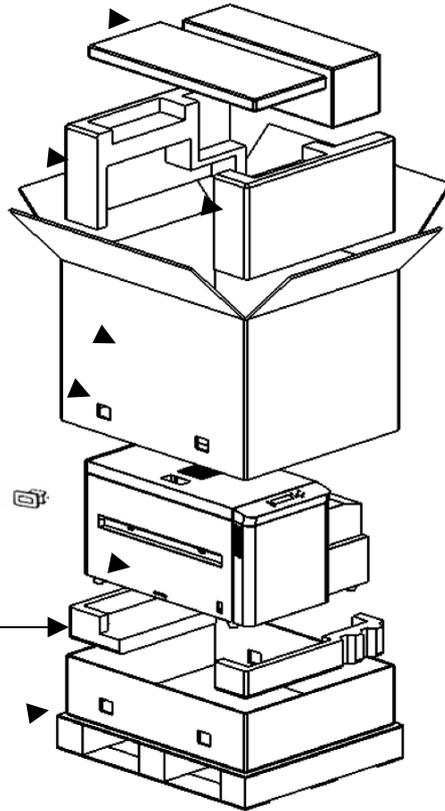
3.1 Unpacking

Accessories box

Cushion

Carton box (upper)

Joint (four places)

Techsetter2

Cushion

Carton box (lower)

Techsetter2 weighs approx. 55 kg (121 lbs.). Take care handling. When taking out and carrying, securely hold from underneath.

Do not discard the packaging materials. The box and protective inserts are required to transfer or transport the Techsetter2.Store them in a safe place.
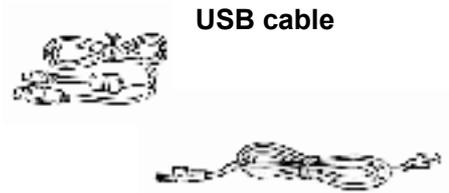
3.2 Checking the accessories

Take out the accessories from the box and inside of the Techsetter2. Check the following items are present.

Film Spooler

Flange (anti-gear side)

USB cable

Power cable
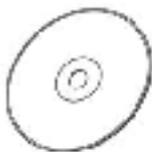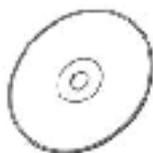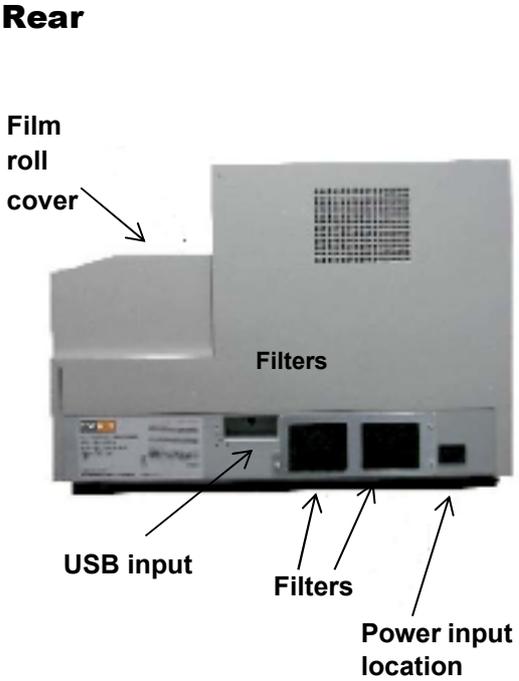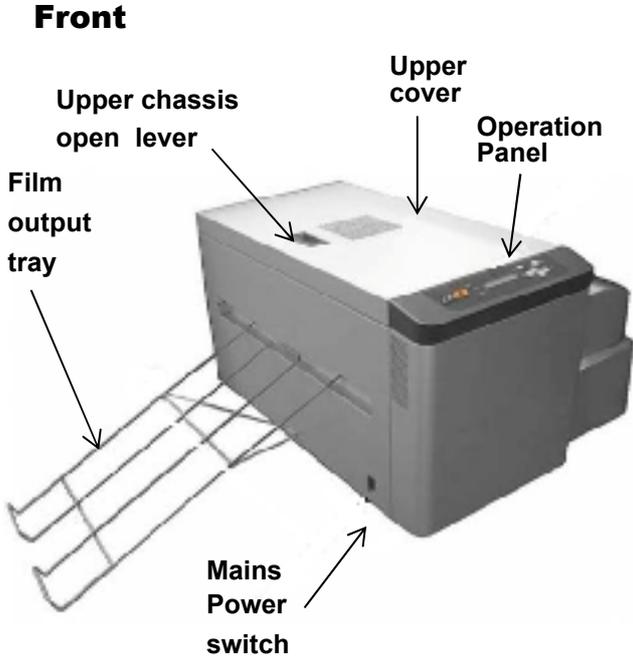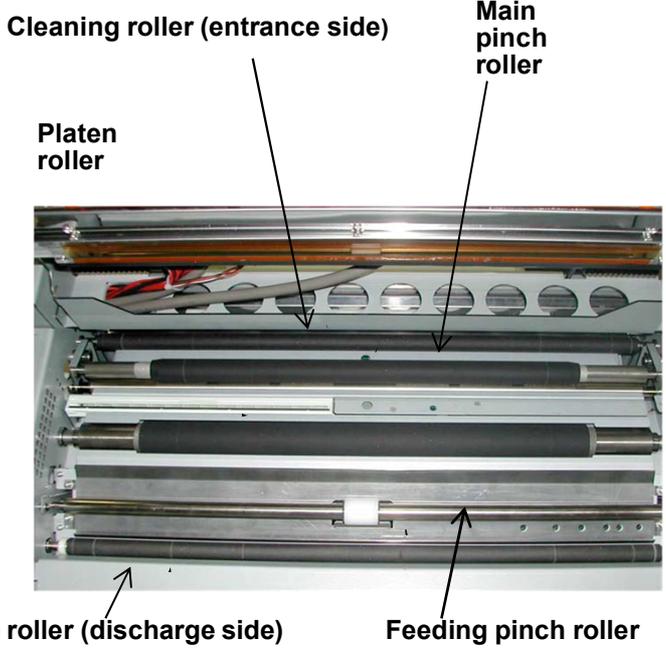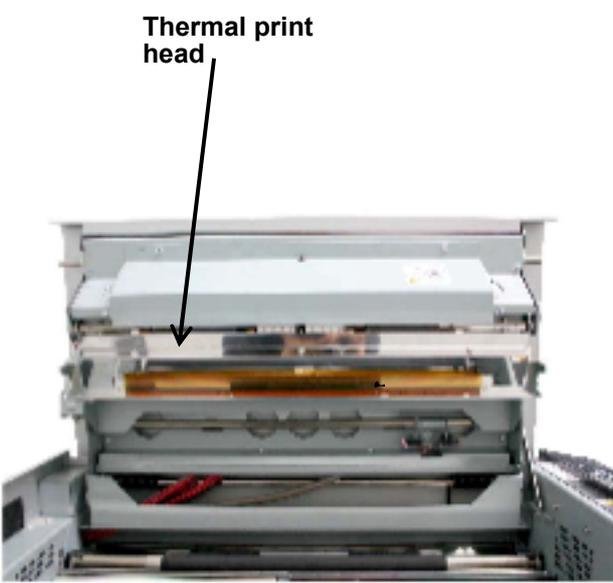
Techsetter2 DVD **Windows RIP DVD**

Film tray

If an accessory is missing, contact the EXILE Technologies reseller or direct.

# 3.3 Names and functions of parts

3.3.1 Names of parts

Front

Upper chassis open lever

Upper cover

Operation Panel

Film output tray

Mains Power switch

Rear

Film roll cover

Filters

USB input

Filters

Power input location

3.3.2 Inside the Techsetter2

Thermal print head

Cleaning roller (entrance side)

Main pinch roller

Platen roller

Cleaning roller (discharge side)

Feeding pinch roller

3.4 Connecting the input power cable

Insert the power cable supplied into the power input terminal at the back of the Techsetter2.

⚠ WARNING
Before connecting the power cable, ensure the power switch is **OFF**.

Power
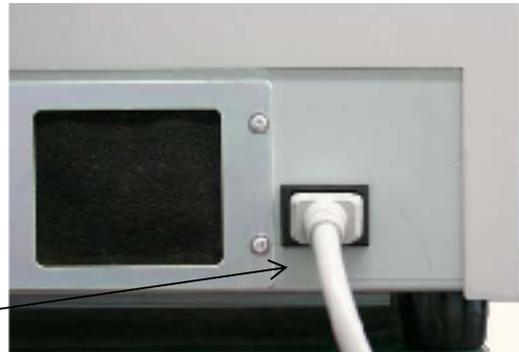
3.5 Connecting the USB cable

Connect the USB cable to your PC via the USB terminal at the back of the Techsetter2

USB cable
**[Product compatible with USB 2.0 standard]**

Techsetter2 side is a type B connector

| |
| --- |
| Before disconnecting the USB cable, make sure the Techsetter2 is in the stand by state. If disconnected during data transfer, the Techsetter2 can be damaged. |

3.6 Installing the **Film** output tray

⚠ WARNING
A film cutter is installed just inside the film exit port. Do not place your fingers here. Doing can cause personal injury.

1. *Insert one of the claws of the film output tray into the corresponding mounting hole for the film output tray.*

Film exit
Film output tray
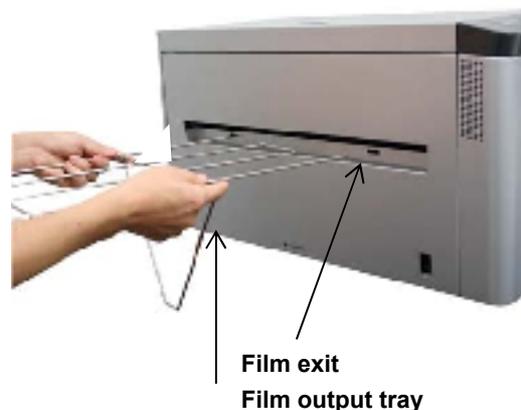
2. *While slightly widening the film output tray, insert the other claw into the other mounting hole.*
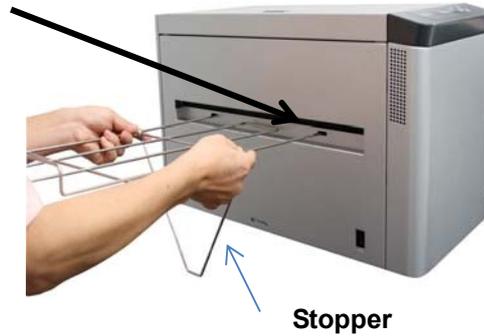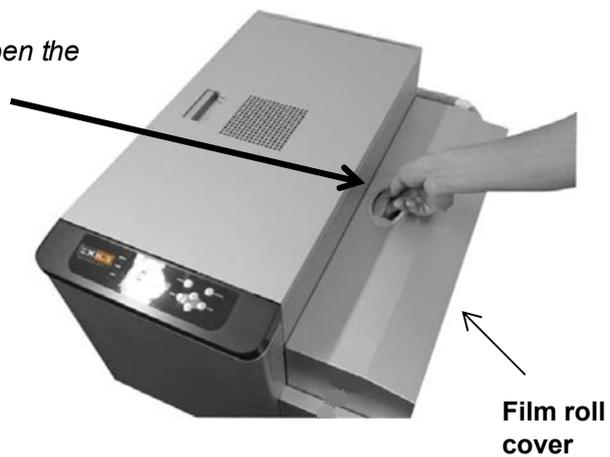
Stopper

3. *Secure the tray by inserting the bottom of the stopper into the stopper slit.*

> ⚠ **CAUTION**
>
> **Stacking quantity is up to 10 films on the film output tray**

3.7 Film loading

1. *By holding the opening lever , open the film roll cover.*

Film roll cover

> **Note**
>
> **Do not open the film roll cover extremely quickly or forcibly 90 degrees or more.**

2. *When there is any used film remaining, pull out the lead edge of the film and lift up the film roll with the spool, and take it out.*
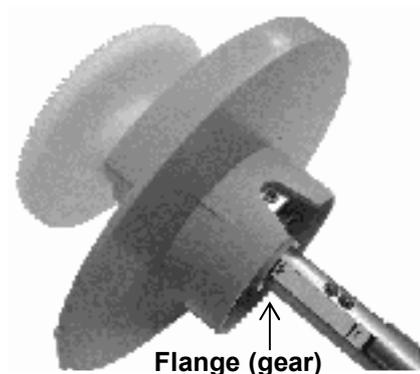
Film roll

> ⚠ CAUTION
>
> **A new XP film roll weighs approx. 10 kg (22 lbs). Handle with care.**

**3.** *Take out the new XP film roll from the black polybag.*

> ⚠ CAUTION
>
> **A new XP film roll weighs approx. 10 kg (22 lbs). Handle it carefully so as not to drop it. Dropping it is dangerous.**

4. *Ensure the flange (gear side) position of the spool is correct for XP Film roll. (Preset)*

Flange (gear)

5. *Insert the shaft of the spool into the core of the film roll and gently force the flange (gear side) of the spool on the side of the film.*

Film

**Spool
(Flange (gear side))**
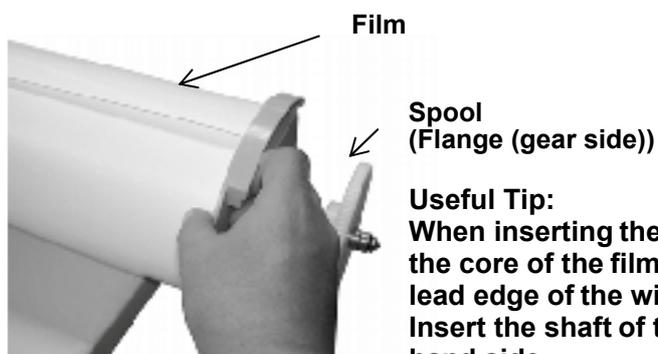
**Useful Tip:
When inserting the shaft of the spool into the core of the film roll, place the film so the lead edge of the winding film is upward. Insert the shaft of the spool from the right-hand side.**
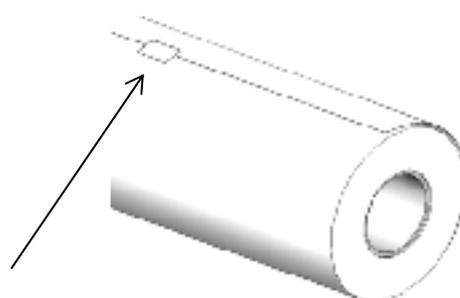
6. *Install and fit the flange (anti-gear side) to the end of the shaft on the opposite side of the film.*

Useful Tip:
The flange (anti-gear side) has a stopper notch and the shaft has stopper notches to prevent empty rotation. Check the directions of the spool stopper notch and notches on the shaft to fit the spool correctly.
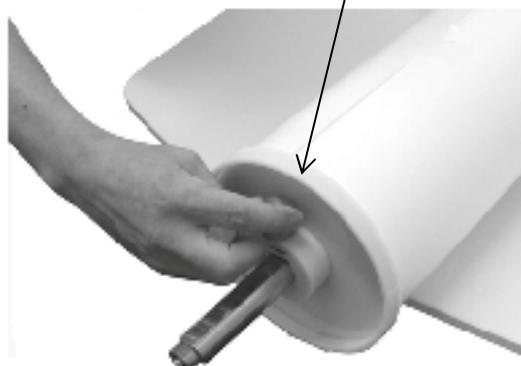
Flange (anti-gear side)

Stopper

7. *Tighten the screw to fix, forcing the flange (anti-gear side) on the side of the film, and fix the flange (anti-gear side).*

Screw to

⚠ CAUTION
Do not tighten the screw too much. It may damage flange.

8. *Install the film by placing the spool into the film box*

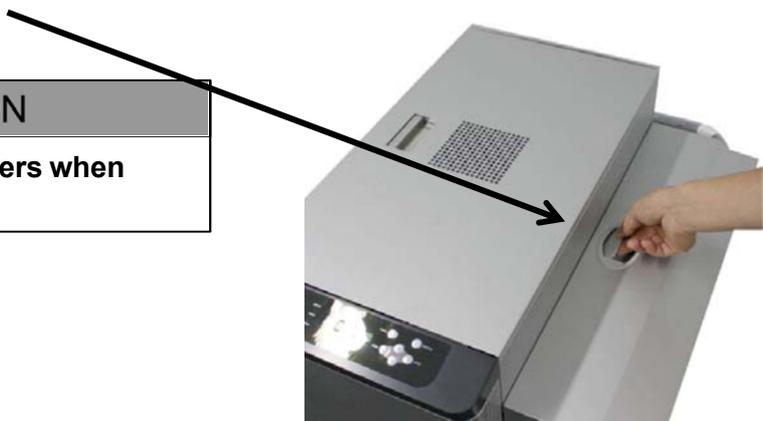| ⚠ CAUTION |
|---|
| **A new XP film roll weighs approx. 10 kg (22 lbs). Please handle it carefully so as not to drop it.** |

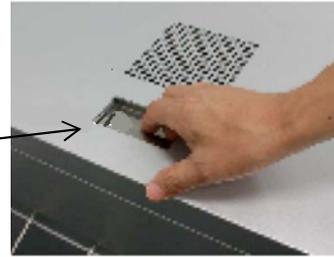**9.** *Slowly close the film cover.*

⚠ CAUTION
Be careful not to catch fingers when closing the film cover.

3.8 Cleaning the thermal head

1. *By holding the opening lever A on the top of the upper cover, open the upper cover.*

Opening lever A

Note
Do not open the upper cover extremely quickly or forcibly 90 degrees or more.

Upper cover

Useful Tip:
A locking lever is provided to the upper cover to prevent the cover from closing down. When opening the upper cover, be sure to open it to the position where the locking lever locks effectively.

Locking lever

Thermal Printhead

2.

| ⚠ CAUTION |
| --- |
| **The thermal head is hot just after printing:**

• **Do not touch it directly by hand.**
• **Fingerprints on the thermal head heating element can premature head failure.** |

3. *The dirt cannot be seen visually on the head, but you can see any streak image on the film.*

4. *Clean The heating element with a 99% alcohol sachet (IPA) only. Applying it overall and uniformly, and moving it from side to side*
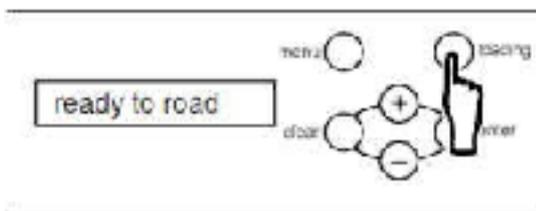
5. *If required, wipe the thermal head using the supplied lapping paper (3M Lapping film Aluminum Oxide 261X, (Grain size/ 3 micron (pink)) sheet) and remove the dirt completely.*
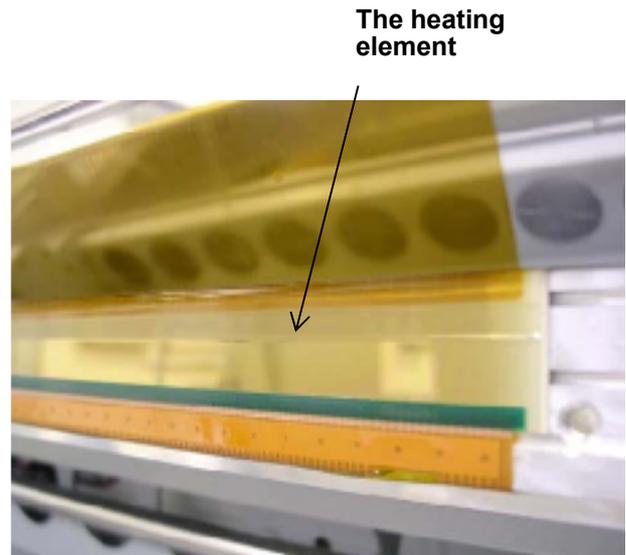
6. *Release the locking lever and close the upper cover slowly.*

Upper cover

Locking lever
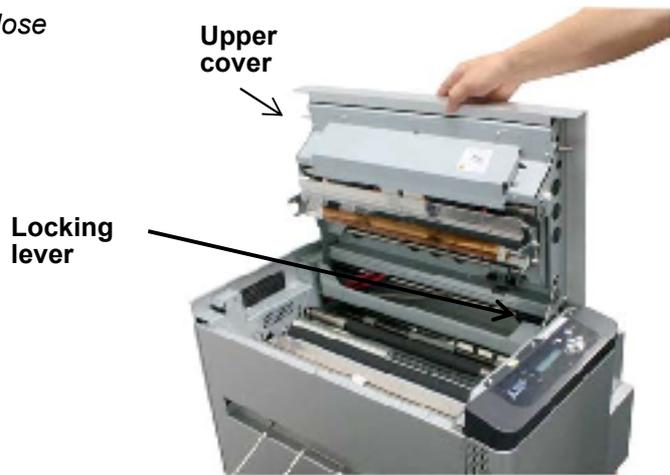
7. *Press the **loading** button on the operation panel.*

ready to road

Useful tip
If the size of the film placed in this machine does not match the film size set, the loading will not complete correctly. If an error occurs, check the size of the actual film and the film size set for this machine.

8. **Film moves back and forth, to set the film skew right. Suggest after any film loading send a couple of test files from Techsetter RIP software to complete this action**

Section 4: Use of Operation Panel

4.1 Operation panel

The buttons, LED lamps and LCD on the operation panel are explained below.
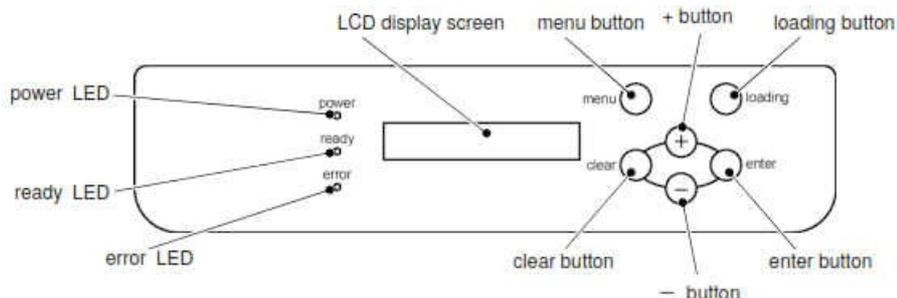
4.1.1 LED indications

LED indications are shown in the following table.

Name		Description
power LED	**Orange**	*This lamp is on when the power is on.*
ready LED	**Green**	*This lamp is on when the Techsetter2 is ready for printing.*
error LED	**Red**	*This lamp is on when the Techsetter2 has error'ed.*

4.1.2 Operation button

The functions of the operation buttons are shown in the following table.

	Function
loading button	Use this button to load a film roll. 1. When this button is pressed at Ready state, the film is fed for a certain length, cut off, and then moved to the set position. 2. When this button is pressed for more than 2 seconds at Ready state, the film is fed for a certain length and moved to the set position.
menu button	Use this button to select from the menu.
enter button	Use this button to save an operation or a setting to be run in User mode.
clear button	Use this button to exit the currently selected menu item in User mode.
+ button	Use this button to select an item from the menu in User mode.
- button	Use this button to select an item from the menu in User mode.

4.1.3 LCD indications

The LCD shows the Techsetter2 status as shown in the following table.

Data shown on the LCD display	Description
Initializing	*The Techsetter2 is being initialized.*
Booting up	*The firmware is being started.*
In the case of the film loaded after switch on □□ □□□×□□□ □□*m* *1 *2 *3	*The Techsetter2 is ready for printing.* **1．Selected Film size number is displayed.* **2．Set Film name (size) is displayed.* **3．The remaining length(m) of film left in the Techsetter2 is displayed*
Ready to load	*The Techsetter2 is ready for film loading as the film roll has been fitted and film positioned*
Receiving	*Data is being received.*
Printing	*The Techsetter2 is in printing operation.*
Cooling Down	*The thermal head is being cooled. Printing is temporarily suspended until the thermal head has cooled down.*
Warming Up	*The thermal head is being preheated. Printing is temporarily suspended until the thermal head has warmed up.*
Plate Loading	*Film is being loaded.*
Plate Reloading	*The end of the film is being fed to the standby position.*
Data Creating	*Test print data is being generated.*

4.2.1 Explanation of the User mode

*In User mode, the following selections are possible:*

Film Size	*Select the film size.*
Size Set	*Set a film size.*
Density	*Adjust the density of print.(80% to 140%, in increments of 1%)*
Firmware Version	*The firmware version can be checked.*
Plate	*Display film remaining, and resets film remaining counter.*
Counter	*Display print count, and resets print counter.*
Remains Sw	*Set on or off for display of film remaining*
Platen Cleaning	*Execute platen roller cleaning.*
Manage Count	*Display accumulated print distance.* *This message is displayed only when Manage Count Sw is set at ON (factory setting).*
Interval Set	*For Thermal Head Maintenance purpose*
Adjust Plate	Film length *adjustment*

4.2.2 Explanation of User mode

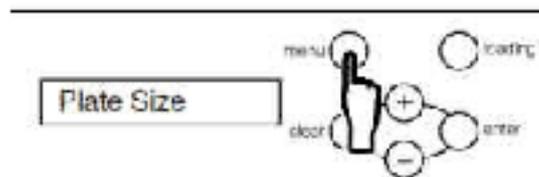**1.** To switch to User mode, press the **Menu** button in the ready state.

2. Pressing the **+** or **-** button repeatedly changes the Menu item available. Shown below.
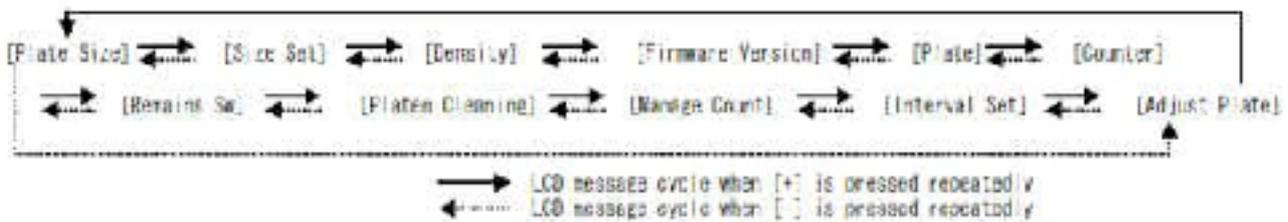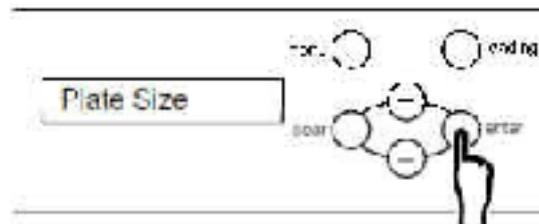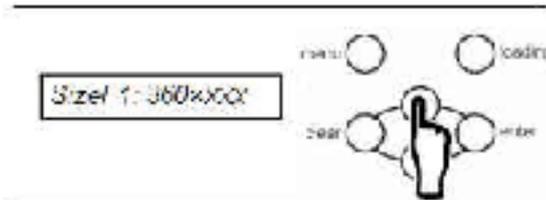

4.3.1 Selecting the Film Size

1. In the ready state, press the **menu** button until displays "**Plate Size**" on the LCD.

**2.** Press the **enter** button to select the operation for changing the film size.

3. Press the **+** or **-** button to display "**SizeF1**".
Press **Enter** to confirm.

4. Press the **clear** button repeatedly until the **ready** state is displayed.

## 4.3.2 Setup of Film roll remaining Sw (on/off)

1. *In the ready state, press the* **menu** *button once, press the* **+** *button 6 times, this displays "**Remains Sw***" on the LCD.*

Remains Sw

2. *Press the* **enter** *button, and display the setting state (on/off) of "**Remains Sw***" .*

Remains off

3. *If off press the* **+** *or* **-** *button to change the state to "**Remains on***".*

4. *Press the* **enter** *button to confirm the setting of "**Remains on***"*

Remains   on

5. *Press the* **clear** *button repeatedly until the "**ready state***" is displayed.*
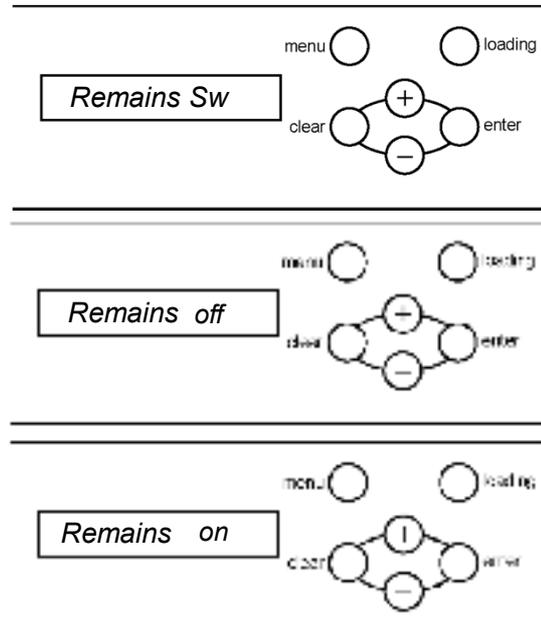
4.3.3 Display of film remaining, and Reset of film remaining counter

When a reset is performed, film counter is manually reset to 60m, and the printed length is subtracted in increments until reset is performed at the next film roll load.

1. *In the ready state, press the* **menu** *button once, press the* **+** *button 4 times, which displays "**Plate***" on the LCD.*

Plate

2. *Press the* **enter** *button, which displays the Film remaining.*

Plate   2m

3. *Press the* **enter** *button to display "**Reset***"*

Reset?

4. *Press the the* **+ or –** *key to reset film remaining counter to "**60m***"*

5. *Press the* **clear** *button repeatedly until the* **ready** *state is displayed.*
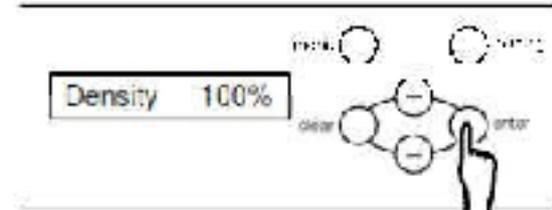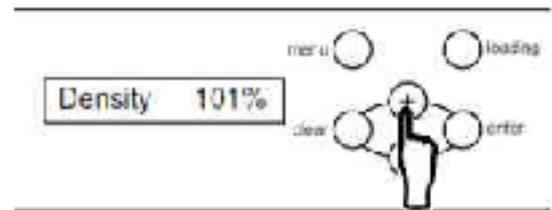
Plate 60m
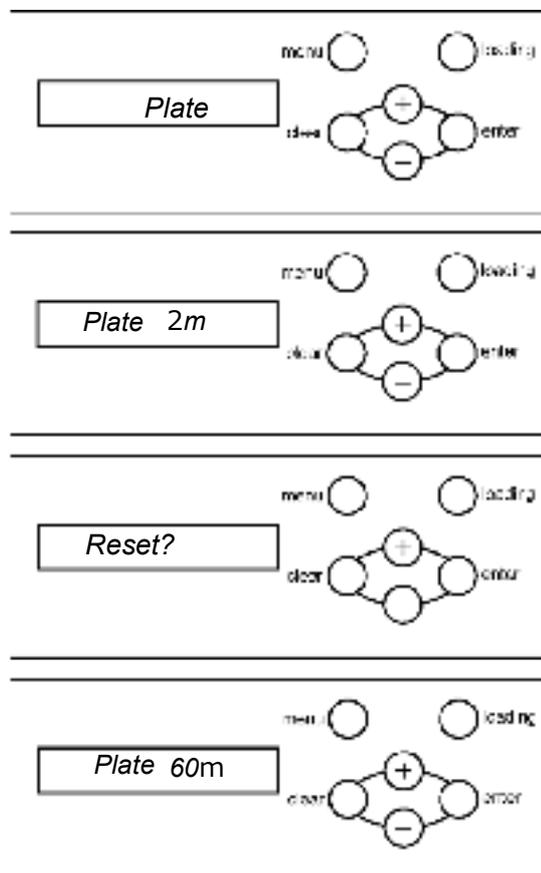
4.3.4   Adjusting the film print density

1. *In the ready state, press the **menu** button once, press the **+** button 2 times, should display "**Density**" on the LCD.*
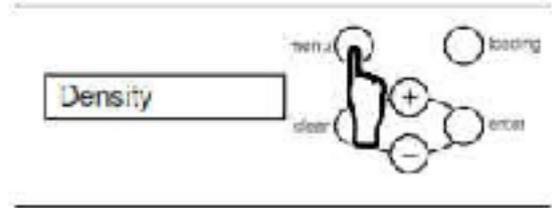
Density

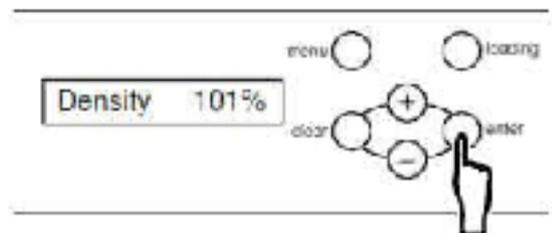**2.** *Press the **enter** button to select adjusting the print density.*

Density   100%

3. *Change the print density by pressing the **+** or **-** button.*

Density   101%

Useful Tip:
The density can be adjusted between 80% to 140%, in increments of 1%.

4. *Press the **Enter** button to confirm the adjusted density.*

Density   101%

**5.** *Press the **clear** button repeatedly until the **ready** state is displayed.*

4.4 Adjusting the film image length

To adjust the film length & film edge offsets for an incorrect image size. Please refer to diagram below:

Print Length :   *Adjust image length* **1**.

Top Offset: *Adjust the length that is from the film edge to the print end* **2**

Sensor Offset: Adjust the length that is from the print start to the film edge **3**
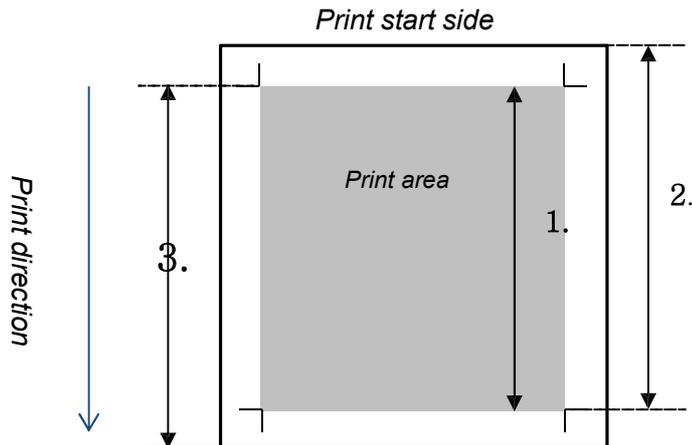
4.4.1 Test file generation

1. *Create a test document similar to above with register marks at corners. Document length should be 500mm. So image length is 460mm with top & bottom offsets 20mm to document edge.*
For negative film ensure the internal image area is 100% black color.

[Useful tip] :
On film arrow the print direction of the test image so that you correctly measure all items illustrated above

2. *Calculate the adjustment value using the following formula.*

3. **The Adjust value = "The target value" – "the measured value"**

- *The target value is 460mm if you use test image with register marks.*
- *The adjust value is* **"-1mm"** *if the measured value is "461mm".*

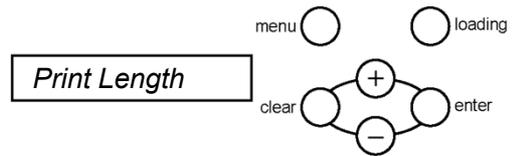## 4.4.2 Adjustment of image print length

1. *In the* **ready** *state, press the* **menu** *button once, press the* **+** *button 10 times, to display "Adjust Plate" on the LCD.*
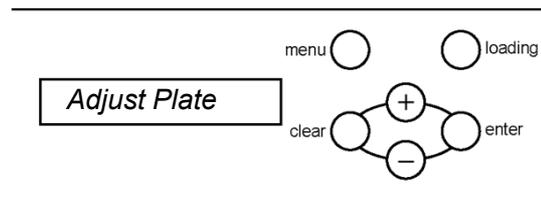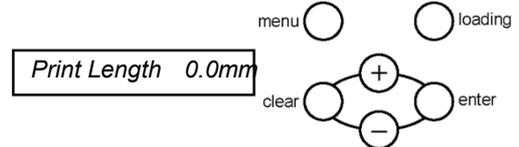
Adjustment of image print length continued

2. *Press the **enter** button, to display "**Print Length**" on the LCD.*

Print Length
menu ◯   ◯ loading
clear ◯ ⊕ ◯ enter
⊖

3. *Press the **enter** button, to display the current print length adjustment value.*

・**Factory setting is "0.0mm."**

Print Length   0.0mm
menu ◯   ◯ loading
clear ◯ ⊕ ◯ enter
⊖

4. *Press the **+**, **menu** or **-**, **loading** buttons to change print length adjustment value..*

5. *Press the enter button to confirm the setting new adjustment setting.*

Print Length   0.5mm
menu ◯   ◯ loading
clear ◯ ⊕ ◯ enter
⊖

6. *Press the **clear** button until the **ready** state is displayed.*
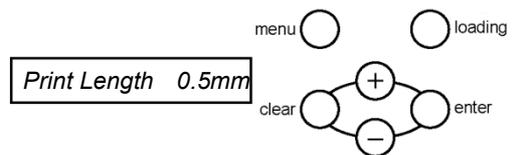
Useful tip: *Value can be set from -10.0 to +10.0 (mm),* **increments of 0.1(mm)**.

+ *button: +0.1*
menu *button: +1.0*

- *button: -0.1*
loading *button: -1.0*

4.4.3 Adjustment of Top Offset length

1. *In the ready state, press the **menu** button once, press the **+** button 10 times, and display "Adjust Plate" on the LCD.*
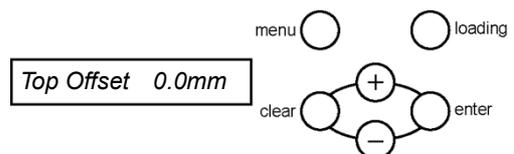
Adjust Plate
menu ◯   ◯ loading
clear ◯ ⊕ ◯ enter
⊖
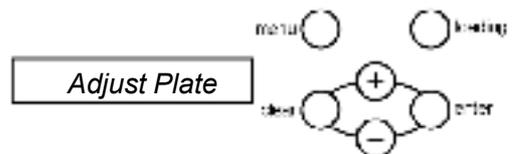
2. *Press the **enter** button to display "**Top Offset**" on the LCD,*

Top Offset
menu ◯   ◯ loading
clear ◯ ⊕ ◯ enter
⊖

3. *Press the **enter** button, to display current "**Top Offset**" adjustment value*

・*Factory setting is "0.0mm."*

Top Offset   0.0mm
menu ◯   ◯ loading
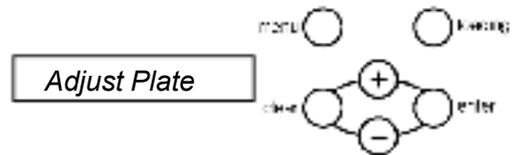clear ◯ ⊕ ◯ enter
⊖

4. *Press the* **+** *,* **menu** *or* **-, Loading** *button to change the value for the Top Offset adjustment value.*

5. *Press the* **enter** *button to confirm the setting of the adjustment value of Top Offset.*

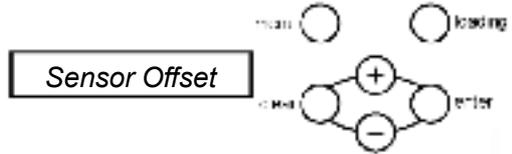**6.** *Press the* **clear** *button until the* **Ready** *state is displayed.*
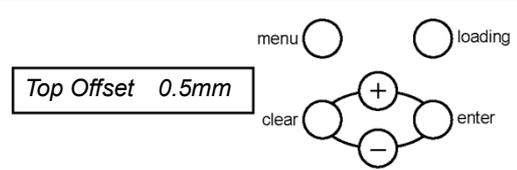
Top Offset   0.5mm

Useful tip: *It can be set from -10.0 to +10.0 mm* **increments of 0.1(mm).**

+ *button: +0.1*   **-** *button: -0.1*
menu *button: +1.0*   **loading** *button: -1.0*
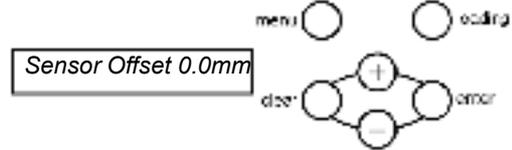
4.4.4 Adjustment of Sensor Offset length

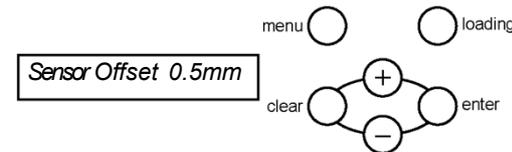**1.** *In the ready state, press the* **menu** *button once, press the* **+** *button 10 times, to display* ”**Adjust Plate**” *on the LCD.*

Adjust Plate

2. *Press the* **enter** *button, to display* “**Sensor Offset** “ *on the LCD*

Sensor Offset

3. *Press the* **enter** *button, to display the current* **Sensor Offset** *adjustment value*

· *Factory setting is "0.0mm."*

Sensor Offset 0.0mm

4. *Press the* **+** *,* **menu** *or* **-, Loading** *button to change the value for the Sensor Offset adjustment value.*

5. *Press the* **enter** *button to confirm the setting of the adjustment value of Sensor Offset.*

Sensor Offset 0.5mm

6. *Press the* **clear** *button until the* **Ready** *state is displayed.*

Useful tip: *It can be set from -10.0 to +10.0 mm* **increments of 0.1(mm)**.

+ *button: +0.1*   **-** *button: -0.1*
menu *button: +1.0*   **loading** *button: -1.0*