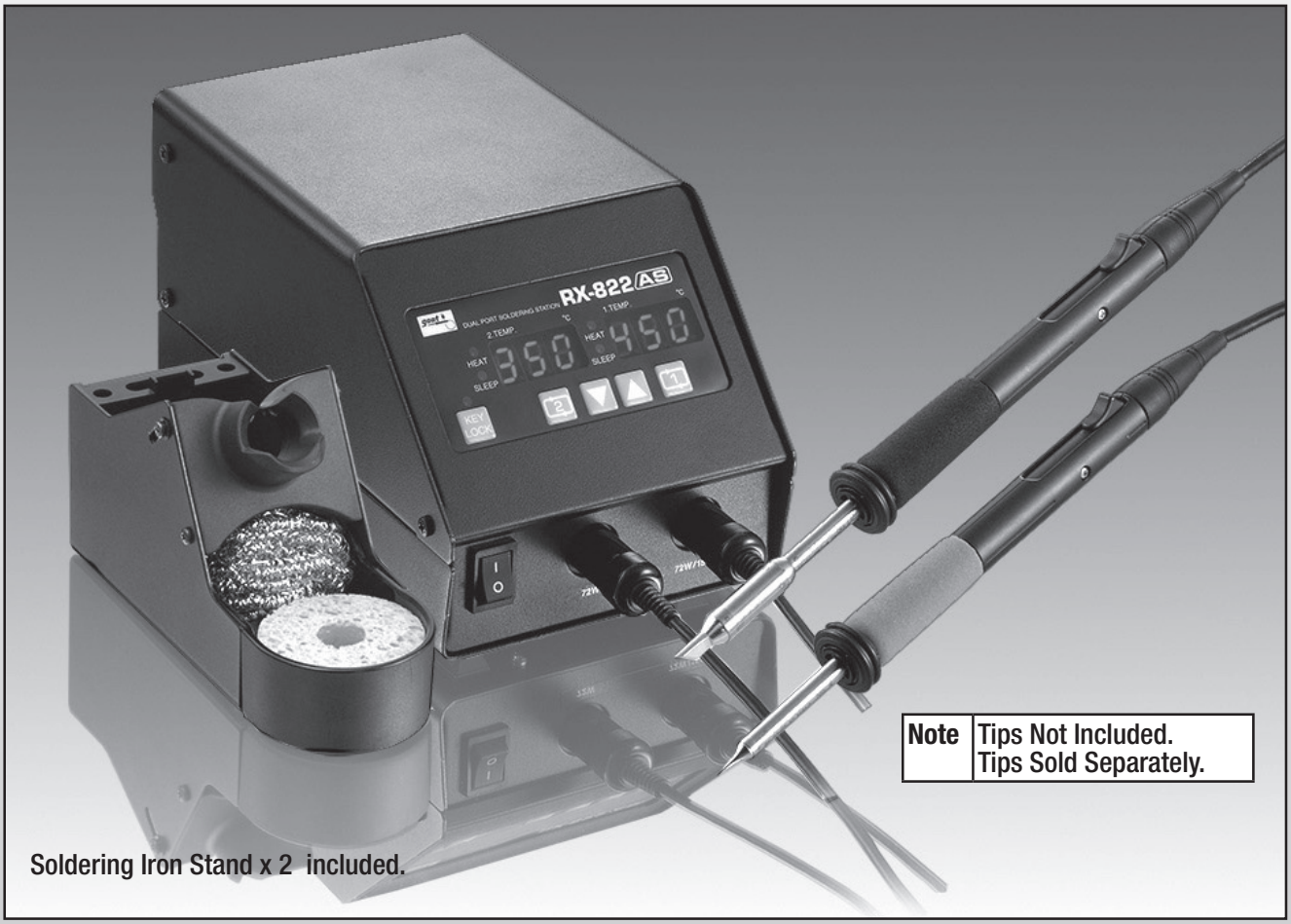
OPERATION MANUAL

TEMPERATURE CONTROLLED LEAD-FREE DUAL PORT SOLDERING STATION

RX-822AS

KEEP THIS MANUAL FOR FUTURE REFERENCE



Note	Tips Not Included. Tips Sold Separately.

Soldering Iron Stand x 2 included.

WARNING

Before using the soldering station, read the Operation Manual. Failure to follow the safety precautions and instructions in this manual could result in serious injury and property damage.

Thank you for buying a ***goot*** soldering station. Your new soldering station has been engineered and manufactured to ***goot***'s high standards of dependability, ease of operation, and operator safety. If you follow the instructions and safety precautions in this manual and use the soldering station properly and only for what it is intended, you will enjoy years of safe, reliable service. Thank you again for buying a ***goot*** soldering station.

Safety Mark Definitions

Follow all WARNINGS and **CAUTIONS** in this manual for the safe and correct use of the soldering station and to protect the operator and others from injury and damage to property. Please make sure you fully understand all parts of this manual.

WARNING

Failure to obey a safety warning could result in serious injury or death to yourself or to others. Always follow the safety precautions to reduce the risk of electric shock, fire or personal injury.

CAUTION

Failure to obey a safety caution may result in a minor or moderate injury to yourself or to others. Always follow the safety precautions to reduce the risk of electric shock, fire or personal injury.

Specifications

MODEL		RX-822AS
Voltage		110-120, 220-240V AC
Power Consumption		220–260W
Soldering Iron Voltage /Wattage	RX-85GAS: Soldering unit [1] side	24V AC / 150W
	RX-80GAS: Soldering unit [2] side	24V AC / 72W
Temperature Setting Range		50–450°C (122–842°F)
Dimensions	Control Unit	194(L) X 116(W) X 105(H)mm
	RX-85GAS: Soldering unit [1] side	174mm (with **RX-85HRT-5D**, w/o cord bushing)
	RX-80GAS: Soldering unit [2] side	158mm (with **RX-80HRT-B**, w/o cord bushing)
Weight	Control Unit	Approx. 4.9kg (w/o cord)
	RX-85GAS: Soldering unit [1] side	Approx.39g (with RX-85HRT-5D, w/o cord bushing)
	RX-80GAS: Soldering unit [2] side	Approx. 28g (with RX-80HRT-B, w/o cord bushing)
Control Unit to Soldering Unit Cord Length		**RX-85GAS** : 1.5m, **RX-80GAS** : 1.2m
AC Power Cord Length		1.5m 3 core cord (ground plug)
Leak Voltage		Less than 2mV
Ground Resistance		Less than 2Ω
Accessories		Soldering Iron Stand (**ST-21**) X 2

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Soldering Iron Stand ST-21 Instructions

WARNING

●High temperatures. Handle with care. ●To avoid injury, do not touch the metal part of the stand. ●To prevent fire, do not use the **ST-21** near flammable substances.

CAUTION

●Always place the stand on a stable worktable, or other stable location, to prevent injury or accident from dropping it. ●To avoid splattering solder scrap, do not swipe the tip of the iron across the brass wool. This is dangerous. ●To prevent fire or personal injury, be sure that the stand has cooled sufficiently before storing it.

INSTRUCTION FOR USE

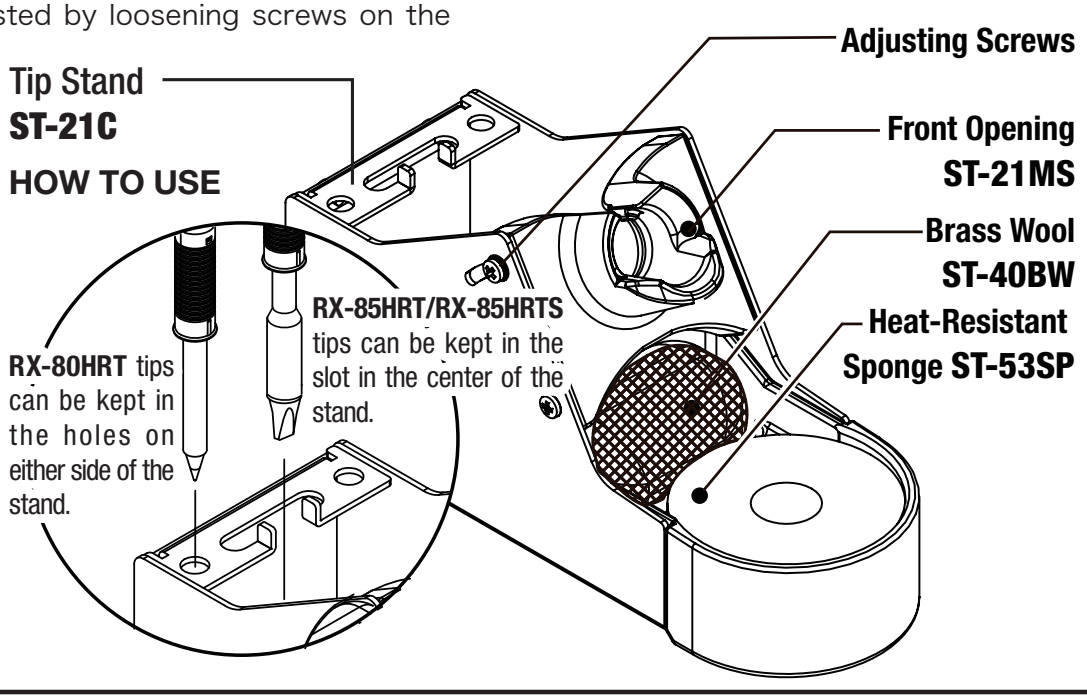
Rub the soldering-iron tip on the moistened sponge.

Use the hole of the sponge for better cleaning.

Alternatively, push the soldering-iron tip in and out of the brass wool a few times. Stab, not swipe.

●To avoid rust, do not pour water on the brass wool. ●Sponge tray and holding flange (of the front opening) are made of phenol. Be aware that extended tip-contact may result in their deterioration. ●Remove the collected solder scrap regularly.

The angle of the front opening can be adjusted by loosening screws on the side.



2 Introduction

2-1 Features of the RX-822AS

The **RX-822AS** includes 2 soldering units per one control unit for lead-free soldering. The tip is a long-life compact type with integrated heater.

1. **2 soldering irons can be used**

   Can be prepared with 2 different tip types. Therefore, you can do different types of work at the same time.

2. **150W and 72W soldering irons can be used simultaneously**

   Port [**1**] can be used for the 150W or 72W. **Port** [**2**] can be used for 72W only. You cannot use 150W in both parts.

3. **The 2 soldering irons can be set to different temperatures.**

   Port [**1**] and [**2**] can be set to different temperatures. The set temperature and condition can be checked easily with the separate temperature display.

4. **Excellent heat recovery**

   Achieved by combining a compact-high-output heater with a high-sensitivity-sensor. It makes difficult work that requires high heat capacity, easy.

5. **New ergonomic design soldering unit (PAT.)**

   Provides comfortable handling, flexible soldering unit cord and a shorter distance from the grip to the tip.

6. **Fastest in its class**

   Reaches 350˚C (662˚F) in approx. 6 seconds. (Equipped **RX-80HRT** series)

7. **Easy to replace tip without using tools (PAT.)**

   Slide-change tip. No tools or heat resistance pads needed.

8. **Thick iron plating for lead-free soldering**

   All tips have a thick iron plating to slow erosion caused by lead-free soldering.

9. **Key Lock function (PAT.)**

   Tamper-proof keypad lock using a password. No tools or cards are needed.

10. **Sleep function (PAT.)**

    The control unit automatically lowers the temperature when inactive for a preset period of time, preventing overheating. Time and temperature can be preset when inactive. Can be used with the shut down function.

11. **Sleep function release (PAT.)**

    Sleep mode can be exited by touching the wet sponge to cause temperature fluctuation.

12. **Calibration function (PAT.)**

    The calibration function digitally offsets the difference between the tip temperature and the tip thermometer temperature.

13. **Shutdown function**

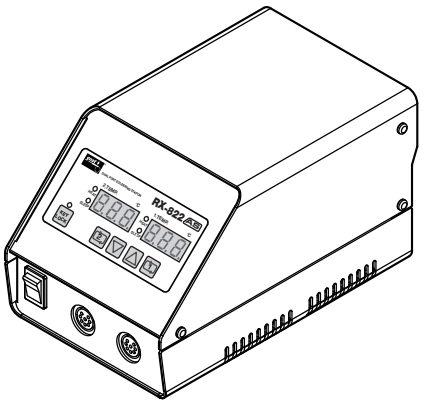
    When the unit is not used for a preset time, the unit enters shutdown mode automatically, to prevent any unexpected accidents.

2-2 Unpacking

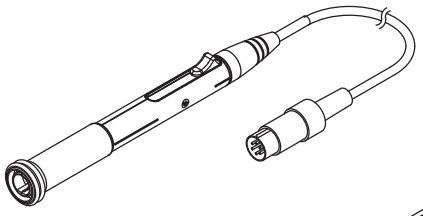
Please make sure that all the items listed below are included, and that the soldering station functions properly before throwing away the packaging.

Packing List

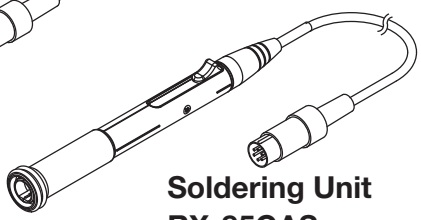
- Control Unit
- Soldering Unit (RX-85GAS, RX-80GAS)
- Soldering Iron Stand ST-21 x 2
- Power Cord
- Operation Manual



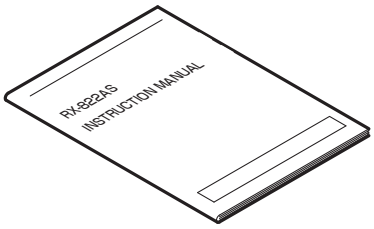
Control Unit



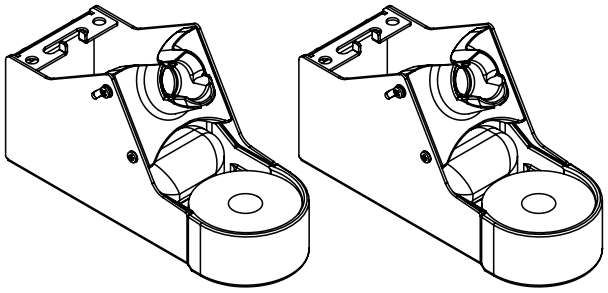
Soldering Unit RX-80GAS



Soldering Unit RX-85GAS

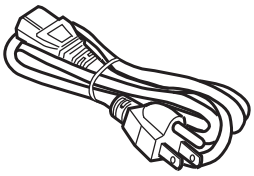


Operation Manual



Soldering Iron Stand ST-21

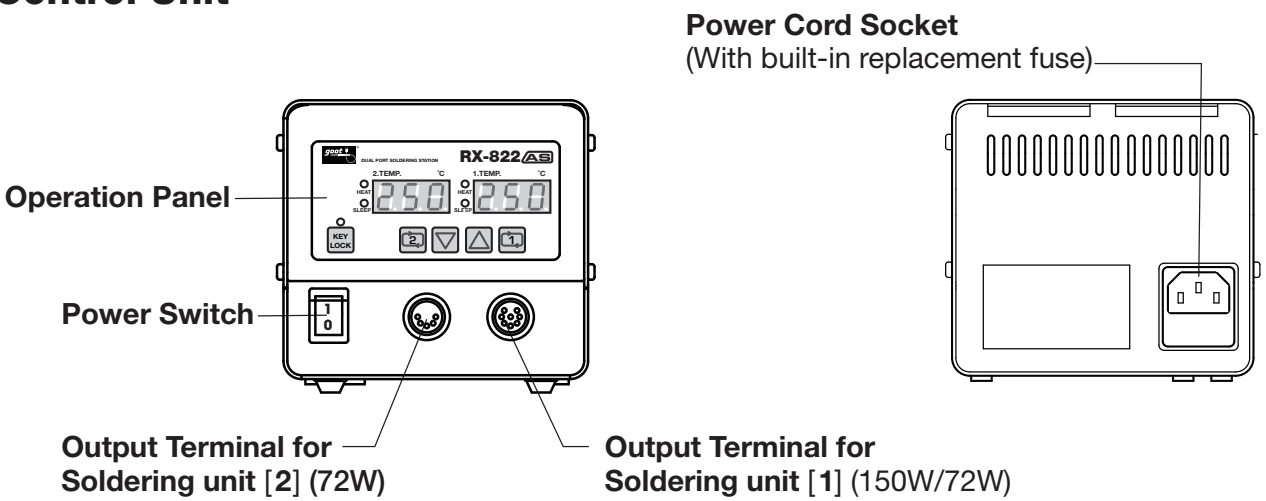
See instruction **p. 4**

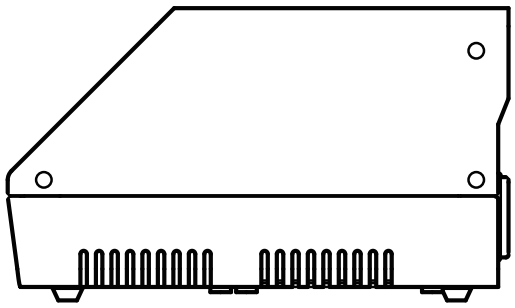


Power Cord

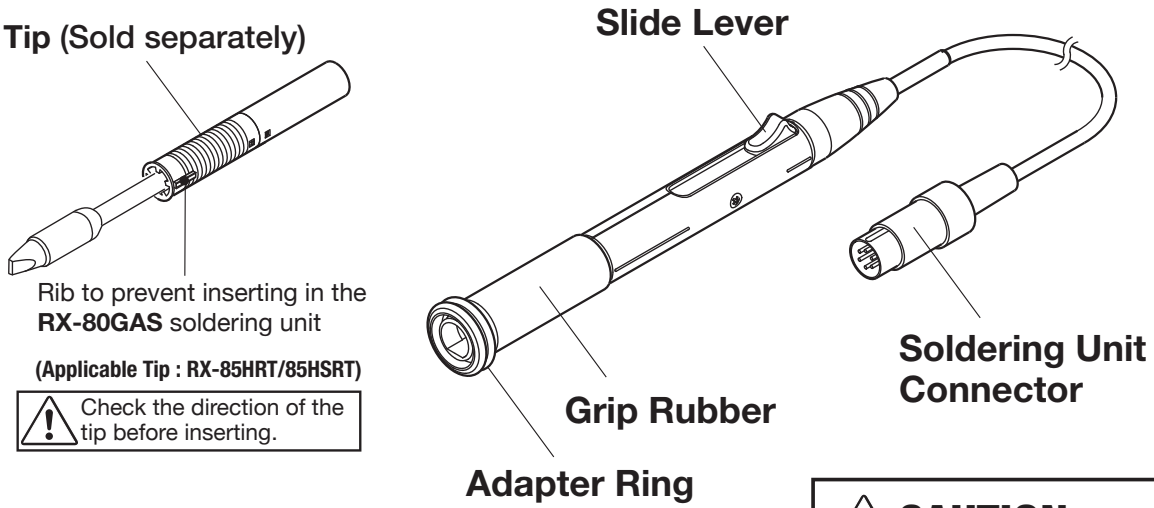
2-3 Name of Parts

Control Unit





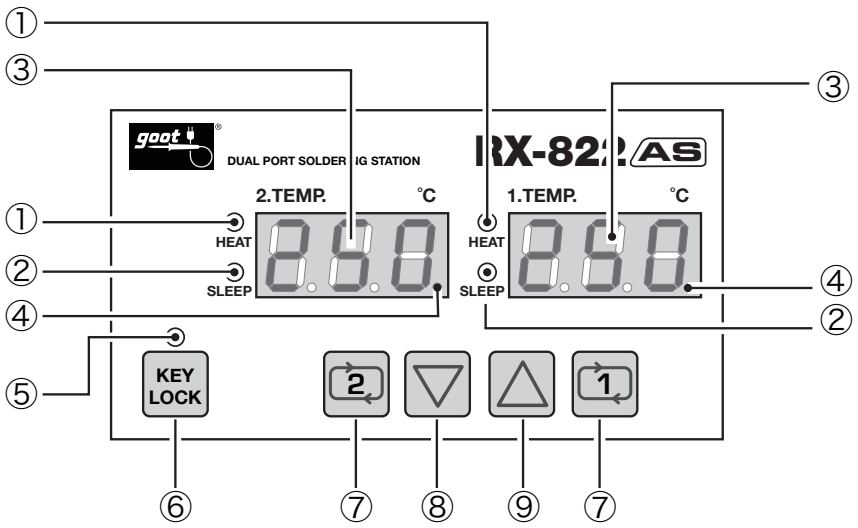
Soldering Unit



⚠ CAUTION

[4-3] calibration of the tip temperature is requires after attaching the tip. Otherwise, there may be some difference between the actual tip temperature add the set temperature of the unit.

■Operation Panel



1. HEAT lamp

Lights up when the heater is ON.

2. SLEEP lamp

Flashes while setting the SLEEP function. The flashing will get faster 30 seconds before going into SLEEP mode. Lights up when the unit enters SLEEP mode.

3. TEMP. display

When the power is turned ON or when SLEEP mode is exited, the TEMP display shows the tip temperature rise to the set temperature. The TEMP display shows the set temperature when it is reached.

4. ALARM lamp (to the right of the last digit in the temperature display)

Flashes when the tip temperature is within the DIF range.

Turns off when the tip temperature is out of the DIF range.

Flashes when the tip temperature is out of the upper and lower temperature limits.

5. KEY LOCK lamp

Flashes while setting the Key Lock function.

Flashes when the unit is in Key Lock mode.

6. KEY LOCK key

Use to set the Key Lock function.

Use to lock and unlock the keypad.

7. SETTING key

This key is used to set the temperature and parameters.

8. DOWN key

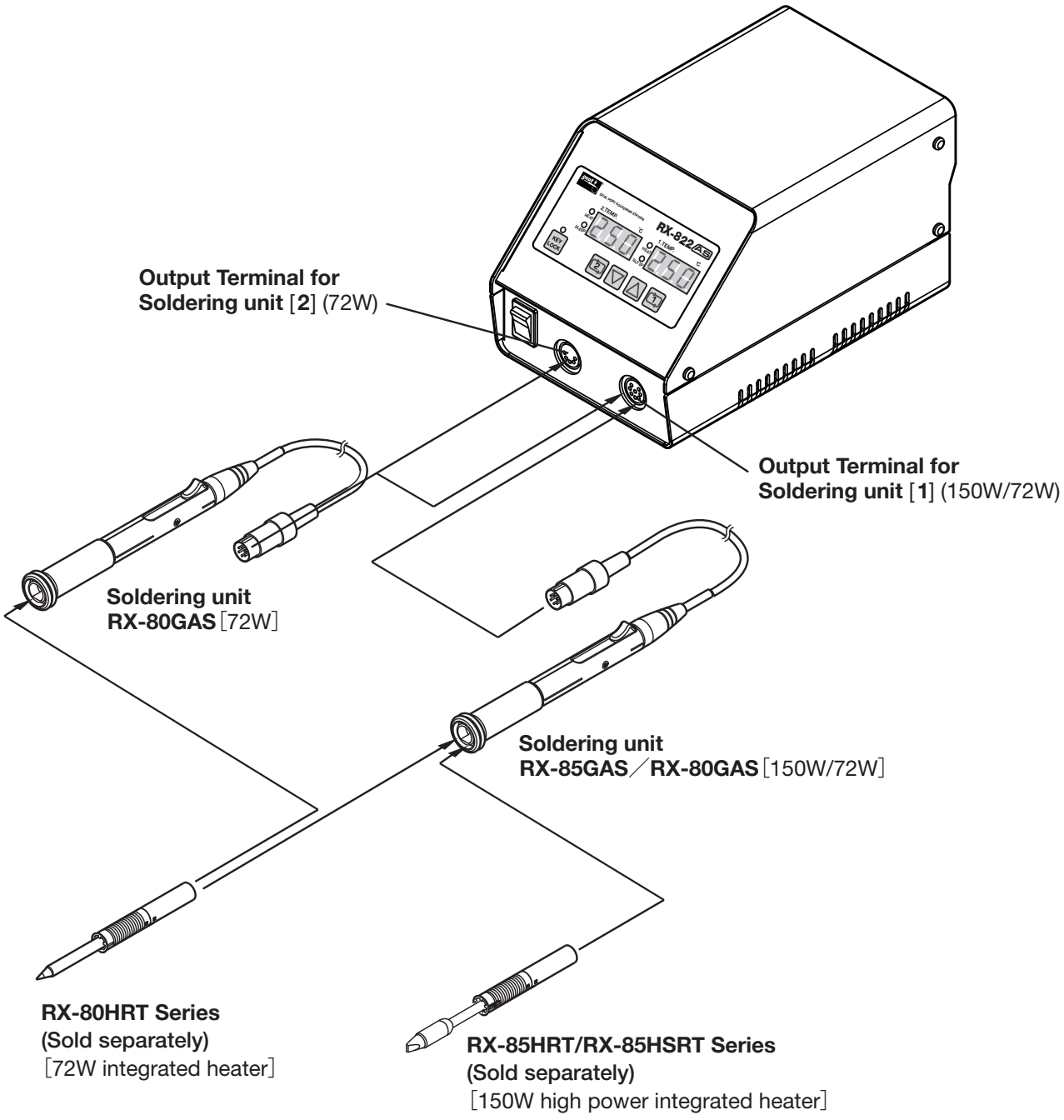
This key is used to reduce the temperature and change the parameter.

9. UP key

This key is used to increase the temperature and change the parameter.

2-4 Setup

Assemble according to following illustrations. Parts cannot be connected other than as shown. Connecting parts by force will result in breakage.



3 Rules for Safe Operation

WARNING

Do not operate the soldering station until you have read and understood the whole manual and safety instructions.

1. **KNOW YOUR SOLDERING STATION.**

   Do not attempt to operate this soldering station until you have read thoroughly and understood completely all instructions, safety, rules, etc. contained in this manual. Failure to comply may result in accidents involving fire or serious personal injury.

2. **DO NOT USE IN DANGEROUS ENVIRONMENTS.**

   Do not use the soldering station in damp or wet locations or expose it to external environmental conditions, particularly rain. Never use it in an explosive atmosphere. The heat from the heater can ignite fumes. Be sure that the work area is properly lit and well ventilated.

3. **KEEP CHILDREN AND BYSTANDERS AWAY FROM THE SOLDERING STATION.**

   Do not let bystanders touch the soldering station. All bystanders should be kept a safe distance from the work area.

4. **PROPERLY STORE THE SOLDERING STATION WHEN NOT IN USE.**

   When not in use, the soldering station should be stored in a dry and locked place. Keep out of the reach of children.

5. **USE FOR THE RIGHT JOB.**

   This soldering station is an electrical tool used to solder parts and melt solder. Do not use the soldering station for any other purpose. For example: The soldering station should never be used to warm water or other liquids.

6. **WEAR PROPER APPAREL, SAFETY GLASSES, GLOVES AND MASK.**

   Do not wear loose clothing (such as a necktie). Tie up long hair. Clothing or hair can burn on contact with the tip or surrounding heated parts.

7. **CONNECT TO THE SPECIFIED AC POWER SUPPLY.**

   The power voltage for this soldering station is indicated at the back of the control unit. Never plug the soldering station into any other voltage.

8. **DO NOT ABUSE THE POWER CORD AND INSPECT IT PERIODICALLY.**

   Never pull the power cord to disconnect it from the receptacle. Keep the power cord away from heat, oil and sharp edges. If it is damaged, contact the nearest distributor for a replacement.

9. USE STAND PROVIDED.

Be sure to use the soldering iron stand (ST-21) included with the soldering station. If this stand is not used, the plastic parts (adapter ring and/or soldering unit housing) of the soldering iron unit could become damaged. Position the soldering iron stand on a flat work-surface bench. Follow instructions included with the soldering iron stand to assemble it.

10. CONCERNING THE TIP.

Allow the tip to cool naturally. Never use any other method to cool it down. For example: Water should never be poured or sprinkled on the tip to cool it down.

11. The soldering iron is not intended for use by young children or infirm persons without supervision. Young children should be supervised to ensure that they do not play with the soldering iron.

WARNING

The **RX-822AS** is an anti-static model. Be sure to properly ground the soldering station using a grounded receptacle to prevent electric shocks and anti-static. If it is not properly grounded, electric shocks will occur.

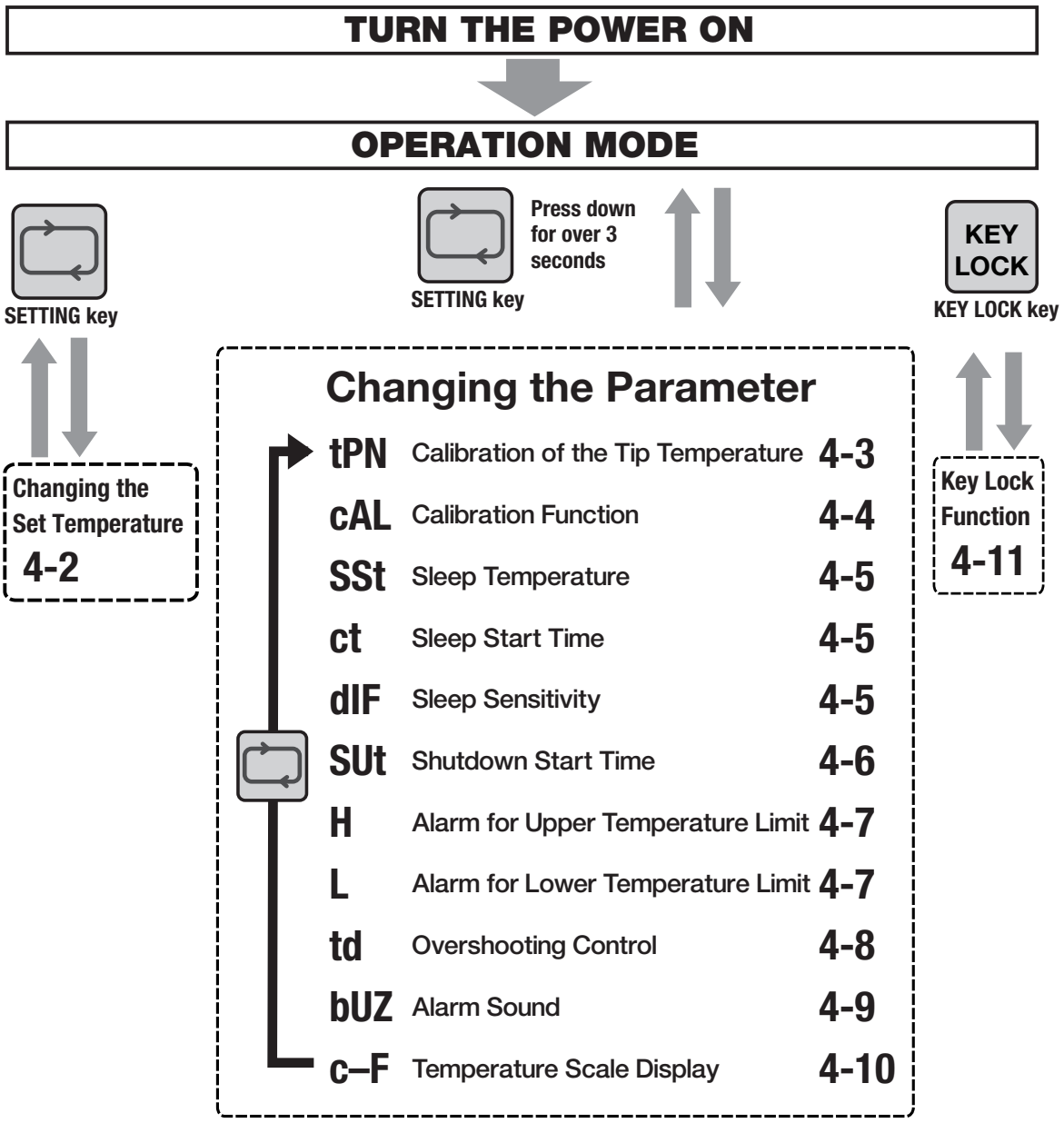
As the soldering station uses conductive materials, please be careful not to touch any electrical power source or a serious injury will result.

4 Operating Instructions

4-1 General Control Panel Operation Flow Chart

When the power is switched on the tip will start heating up.

Press the key for the temperature setting mode. Press down the key for over 3 seconds for the parameter changing mode. Press the KEY LOCK key for the key lock function setting / changing mode.



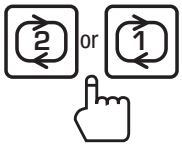
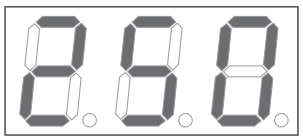
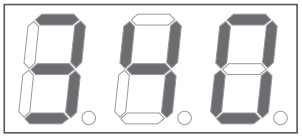
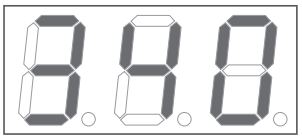
Note: If nothing is pressed for 30 seconds during setting the temperature/ parameters, the temperature / parameter display will record the new data, and the display will return to the normal conditions. If nothing is pressed for 30 seconds during setting / changing the code number, the code number will return to the prior settings.

4-2 Changing the Set Temperature (Each soldering unit can be set separately)

At the time of shipping the temperature is set at 250°C (482°F). The temperature can be set from 50°C (122°F) to 450°C (842°F). *The tip temperature will not become lower than ambient temperature.

*For the steps given in the operation instructions, only °C is used.

Example: Changing the temperature from **250**°C (482°F) to **340**°C (**644**°F).

	Key Operation	TEMP Display
1	 Press the [**SET.**] key of soldering unit you desire.	Displays flashes 
2	Press and hold the [**UP**] key to select **340**.	
3	Press the [**SET.**] key of soldering unit you changed. **Setting completed**	

Note: If nothing is pressed for 30 seconds during setting the temperature, the temperature display will record the new data and the display will return to the normal conditions.

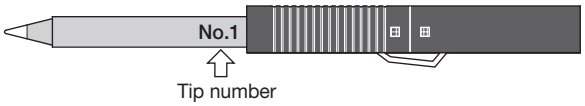
*The set temperature should be set at 50°C (90˚F) higher than the sleep temperature (see the section 4-5), otherwise you will not be able to set the set temperature value.

(Example: If the set temperature is set at 200°C (392˚F), the sleep temperature must be 150°C (302˚F) or lower.

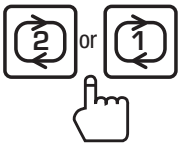
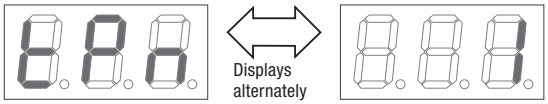
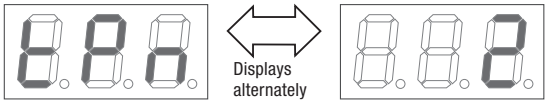
4-3 Calibration of the Tip Temperature (Each soldering unit can be set separately)

The temperature of the **RX-822AS** can be calibrated easily by inputting the tip number, which is engraved on the tip. When you change to a different type of tip, you will need to calibrate the tip temperature as below.

Shipping default setting: 1



How to set the TIP No. **Example:** When changing the tip used from tip number **1** to tip number **2**

Key Operation	TEMP Display
1  Press down the [**SET.**] key of soldering unit you desire for over 3 seconds.	
2 Press the [**UP**] key to select [**2**].	
3 Press down the [**SET.**] key of soldering unit you changed for over 3 seconds.	**Returns to the set temperature display.**
Setting completed	

Tip No. List (RX-85HRT Series)

MODEL	TIP NO.	MODEL	TIP NO.
RX-85HRT-B	L2	RX-85HRT-3D	L1
RX-85HRT-2BC	L1	RX-85HRT-5D	L1
RX-85HRT-3BC	L1	RX-85HRT-7D	L1
RX-85HRT-5BC	L1	RX-85HRT-6K	L1
RX-85HRT-7BC	L1		

Tip No. List (RX-85HSRT Series)

MODEL	TIP NO.	MODEL	TIP NO.
RX-85HSRT-B	L2	RX-85HSRT-2BC	L1
RX-85HSRT-1.6D	L1	RX-85HSRT-3BC	L1
RX-85HSRT-2.4D	L1	RX-85HSRT-4.5K	L1
RX-85HSRT-3.2D	L1		

Tip No. List (RX-80HRT Series)

MODEL	TIP NO.	MODEL	TIP NO.
RX-80HRT-SB	3	RX-80HRT-0.8D	2
RX-80HRT-B	1	RX-80HRT-1.2D	2
RX-80HRT-2B	1	RX-80HRT-1.6D	2
RX-80HRT-LB	2	RX-80HRT-2.4D	1
RX-80HRT-LBJ	2	RX-80HRT-3.2D	1
RX-80HRT-1C	4	RX-80HRT-5.4D	0
RX-80HRT-2C	4	RX-80HRT-3K	1
RX-80HRT-3C	2	RX-80HRT-4.5K	1
RX-80HRT-3BC	1	RX-80HRT-4.5KH	1
RX-80HRT-4C	1	RX-80HRT-5.5K	1
RX-80HRT-BM	1	RX-80HRT-0.5C	3
RX-80HRT-2CD	4	RX-80HRT-1BC	1
RX-80HRT-3CD	2	RX-80HRT-2.3BC	1
RX-80HRT-4.7C	0		

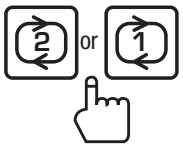
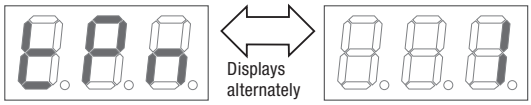
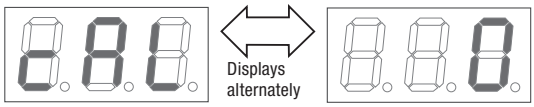
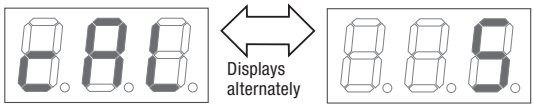
The above tip number (TIP NO.) may be changed without notice, due to design changes, etc.
Be sure to check the actual engraved tip number of your tip (at the base).

4-4 Calibration Function (Each soldering unit can be set separately)

The **RX-822AS** can be calibrated using a tip thermometer. Generally speaking, when measuring the tip temperature of the **RX-822AS** with a standard tip thermometer, the measured temperature will usually be lower than that of the actual tip temperature displayed on the **RX-822AS** control unit display. This could be because the tip is not coming into contact properly with the sensor of the tip thermometer. It could also be because once the tip thermometer comes into contact with the **RX-822AS** soldering tip, the metallic parts in the thermometer conduct heat which transfers away from the **RX-822AS** tip. This results in the thermometer indicating a slightly lower temperature than the one in the **RX-822AS** display.

How to Calibrate the Temperature

Example : Where the set temperature is 300°C (572°F), tip thermometer value is 295°C (563°F), and the calibration value to be input is 5°C (9°F).

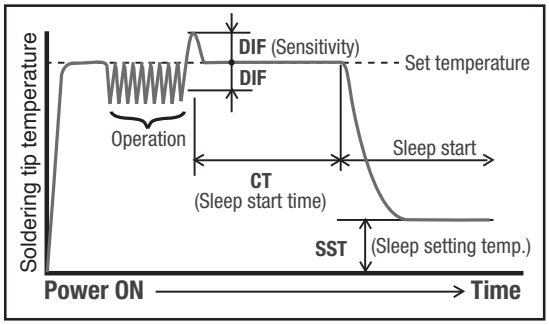
Key Operation	TEMP Display
1  Press down the [**SET.**] key of soldering unit you desire for over 3 seconds.	 Displays alternately
2 Press the [**SET.**] key to select [**cAL**].	 Displays alternately
3 Press the [**UP**] key to select [**5**].	 Displays alternately
4 Press down the [**SET.**] key of soldering unit you changed for over 3 seconds. **Setting completed**	**Returns to the set temperature display.**

Leave the CAL value at 0 if you don't calibrate. (Shipping default setting is 0)

4-3 Calibration of the Tip Temperature (P.14) should be done after calibration of the display.

4-5 Sleep Function (Each soldering unit can be set separately)

The sleep start timer (**CT**) function automatically lowers the temperature of the tip after a preset period of inactivity. This function lowers the tip temperature and it will be in standby condition. It helps reduce overheating and oxidation of the tip. The sleep function can be used with the **4-6 shut down function**.



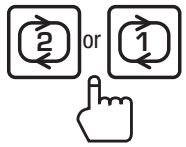
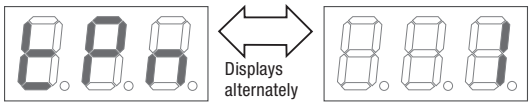
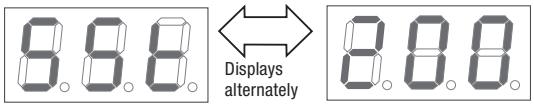
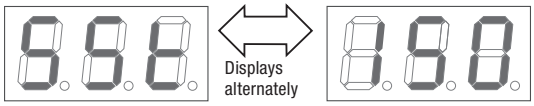
How to release the sleep mode

Sleep mode can be exited by touching the tip onto the wet sponge to cause temperature fluctuation. Also it can be exited by pressing any key on the control panel.

Note: Sleep mode cannot be exited by touching the wet sponge if the sleep temperature (**SST**) is set below 100 °C because there will be very little temperature fluctuation.

Setting the Sleep Temperature (**SST**) **Unit**: °C

Example : Changing the sleep temperature from **200**°C (**392**°F) to **150**°C (**302**°F).

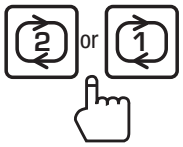
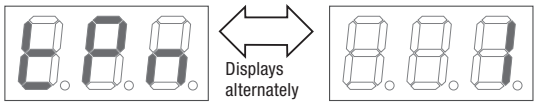
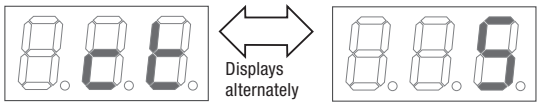
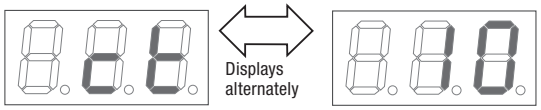
Key Operation	TEMP Display
1  Press down the [**SET**.] key of soldering unit you desire for over 3 seconds.	 Displays alternately
2 Press the [**SET**.] key to select [**SST**].	 Displays alternately
3 Press the [**DOWN**] key to set to **150**.	 Displays alternately
4 Press down the [**SET**.] key of soldering unit you changed for over 3 seconds. **Setting completed**	**Returns to the set temperature display.**

While setting the sleep function, the sleep lamp will flash. The flashing will get faster 30 seconds before going into sleep mode. When the soldering station has entered Sleep mode, the sleep lamp will change from flashing to continuously lit, and the display will alternate between "**SLP**" and the temperature. To use sleep function manually during operation: for soldering unit [**1**] press down the [**UP**] ▲ key for over 1 second and for soldering unit [**2**] press down the [**DOWN**] ▼ key for over 1 second. (Active Sleep Function)

Setting the Sleep Start Time (CT) Unit: mins.

(Each soldering unit can be set separately)

Example : Changing the sleep start time from **5** to **10** minutes.

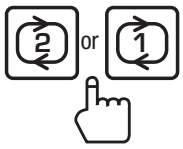
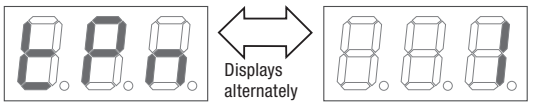
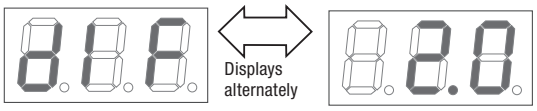
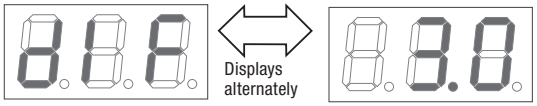
Key Operation	TEMP Display
1  Press down the [**SET**.] key of soldering unit you desire for over 3 seconds.	 Displays alternately
2 Press the [**SET**.] key to select [**CT**].	 Displays alternately
3 Press the [**UP**] key to change 5 to 10.	 Displays alternately
4 Press down the [**SET**.] key of soldering unit you changed for over 3 seconds. **Setting completed**	**Returns to the set temperature display.**

By setting the **CT** (Sleep start time) to 0, the sleep function will be turned off and the SLEEP lamp will turn off.

Setting the Sleep
Sensitivity (DIF) Unit : °C

(Each soldering unit can be set separately)

Example : Changing the Sleep Sensitivity value to **2** °C (**3.6**°F) to **3.0**°C (**5.4**°F).

Key Operation	TEMP Display
1  Press down the [**SET**.] key of soldering unit you desire for over 3 seconds.	 Displays alternately
2 Press the [**SET**.] key to select [**DIF**].	 Displays alternately
3 Press the [**UP**] key to set to 3.0	 Displays alternately
4 Press down the [**SET**.] key of soldering unit you changed for over 3 seconds. **Setting completed**	**Returns to the set temperature display.**

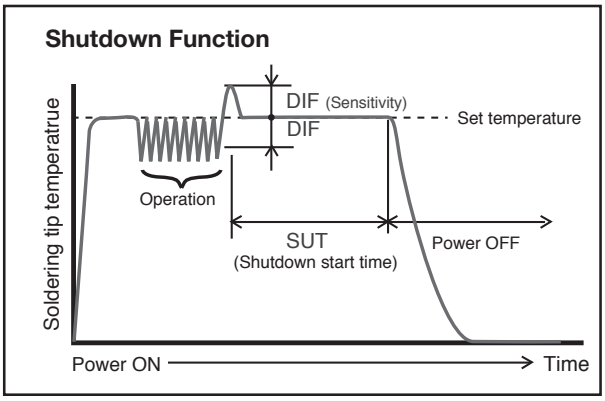
Note: *If the sleep sensitivity value (**DIF**) is set too high, there is a possibility that the sleep function will be activated even during soldering. If this happens, reduce the sleep sensitivity value.

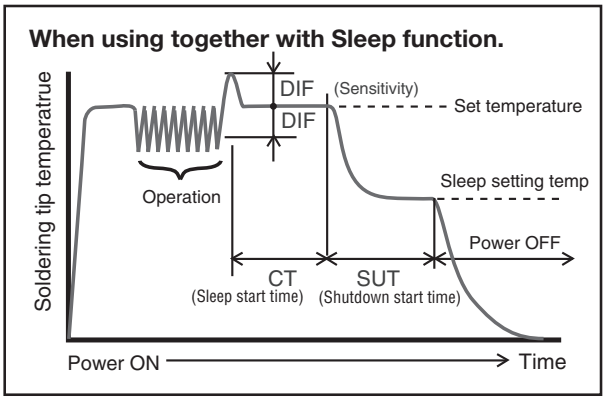
*Sleep sensitivity value (**DIF**) can be set anywhere between 0°C (0°F) and 20°C (36°F).

*If the sleep sensitivity value (**DIF**) is set too low, there is a possibility that the sleep function will not be activated even after passing the set sleep start time. If this happens, increase the sleep sensitive value.

4-6 Setting the Shutdown Function (Each soldering unit can be set separately)

When the unit is not operated during the preset time, the unit automatically shuts down. This function prevents operators forgetting to turn the power off.

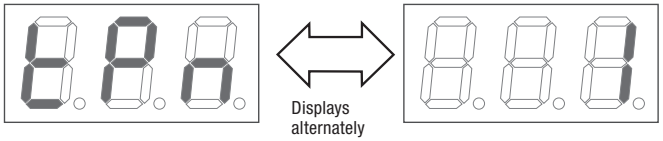
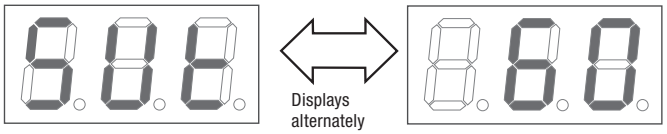
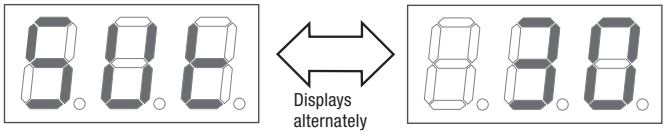




Setting the Shutdown start time (SUT)

Example : Changing the Shutdown start time from **60** to **30**.

Unit : mins

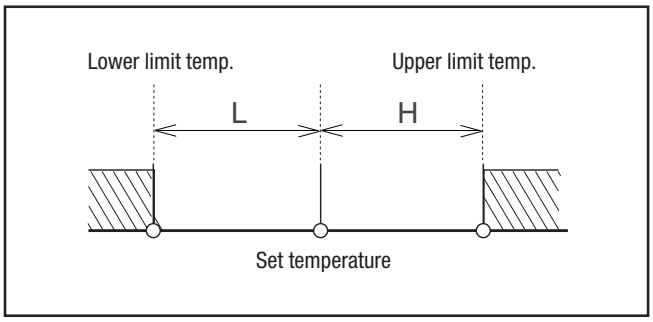
Key Operation		TEMP Display
1	Press down the [**SET**.] key of soldering unit you desire for over 3 seconds.	 Displays alternately
2	Press the [**SET**.] key to select [**SUT**].	 Displays alternately
3	Press the [**DOWN**] key to set to 30.	 Displays alternately
4	Press down the [**SET**.] key of soldering unit you changed for over 3 seconds. **Setting completed**	**Returns to the set temperature display.**

When the **SUT** (Shutdown Start Time) value is set to 0, the shutdown function is OFF. When the unit enters shutdown, **Sdn** and the temperature are displayed alternately. When the temperature drops below 50°C only a dot to the right of the last digit on the TEMP display remains lit.

To use the unit again after shutting down, turn the power switch OFF, wait a few seconds, and then switch ON again.

4-7 Setting the Temperature Range for the Alarm (Each soldering unit can be set separately)

This function warns the operator with an alarm, when the tip temperature exceeds the set parameters. The diagonal lines in the illustration on the right show when the alarm will sound.

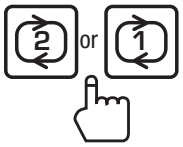
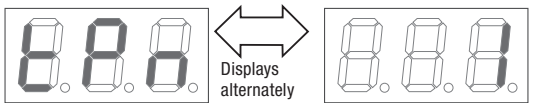
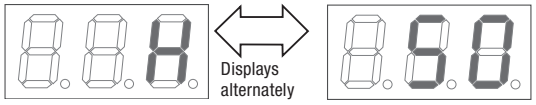
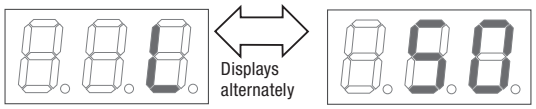
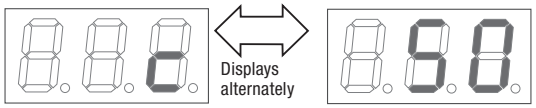


Both the upper and lower limit alarms can be set from 3˚C to 100˚C.

To turn off this function set both the upper and lower limit to 3˚C or lower. The display will then show [---].

Setting the alarm range (H,L)

Shipping Default Setting : 50˚C (Upper / Lower)

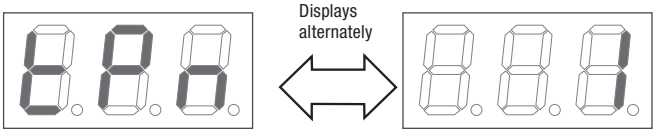
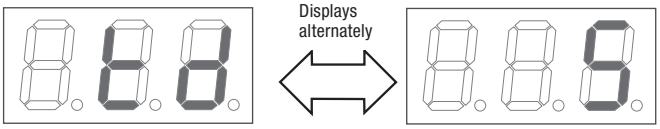
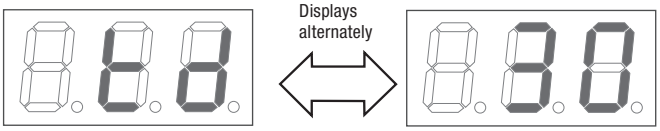
Key Operation	TEMP Display
1  Press down the [**SET**.] key of soldering unit you desire for over 3 seconds.	 Displays alternately
2 Press the [**SET**.] key to select [**H**] or [**L**].	 Displays alternately Upper Temperature Limit
3 Change the preset temperature by pressing the [**UP**] or [**DOWN**] key.	 Displays alternately Lower Temperature Limit  Displays alternately Lower Temperature Limit
4 Press down the [**SET**.] key of soldering unit you changed for over 3 seconds. **Setting completed**	**Returns to the set temperature display.**

4-8 Control function for overshooting (Each soldering unit can be set separately)

After soldering, the tip temperature may increase to higher than the set temperature depending on the tip type or the kind of work. (Overshoot)

"Overshoot" will often occur when using the **RX-85HSRT**, but "Overshoot" can be controlled by setting the parameters.

Setting the differential time (td) **Example** : Changing the differential time from **5** to **30**.

Key Operation	TEMP Display
1 Press down the [**SET.**] key of soldering unit you desire for over 3 seconds.	
2 Press the [**SET**.] key to select [**td**] .	
3 Press the [**DOWN**] key to set to 30.	
4 Press down the [**SET**.] key of soldering unit you changed for over 3 seconds. **Setting completed**	**Returns to the set temperature display.**

Standard of the differential time

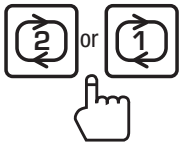
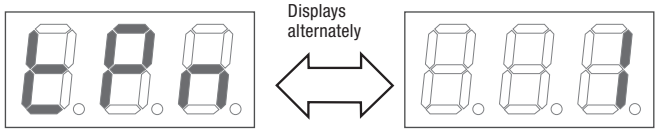
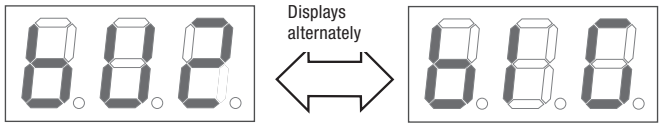
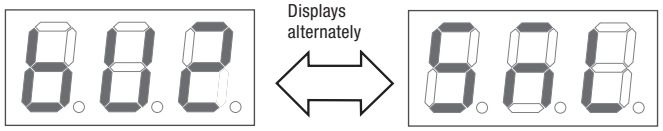
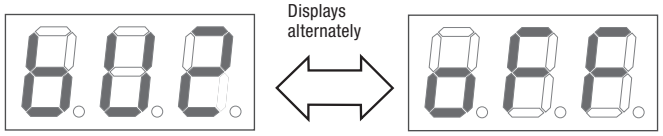
Tip type	Differential time
RX-80HRT series	**5**
RX-85HRT series	**5**
RX-85HSRT series	**30**

4-9 Setting the Alarm Sound

The volume of alarm in operation can be set to [**BIG**], [**SMALL**] or [**OFF**].

Setting the alarm sound

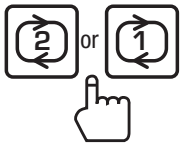
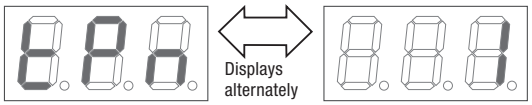
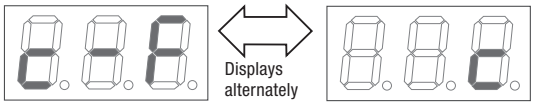
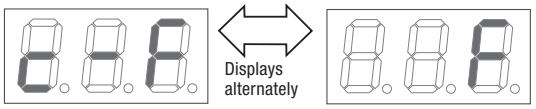
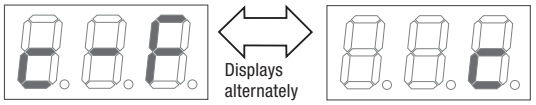
Shipping Default Setting : BIG

Key Operation	TEMP Display
1  Press down either of the [**SET**.] keys for over 3 seconds.	 Displays alternately
2 Press the [**SET**.] key to select [**BUZ**].	 Displays alternately
3 Press the [**DOWN**] key to select big [**biG**], small [**SmL**] or off [**oFF**].	 Displays alternately  Displays alternately
4 Press down the [**SET**.] key for over 3 seconds. **Setting completed**	**Returns to the set temperature display.**

4-10 Setting the Temperature Scale Display

The temperature can be displayed in either Celsius or in Fahrenheit.

Shipping Default Setting : Celsius (˚C)

Key Operation	TEMP Display
1  Press down either of the [**SET**.] keys for over 3 seconds.	 Displays alternately
2 Press the [**SET**.] key to select [**c -F**].	 Displays alternately
3 Press the [**UP**] key to select F. Press the [**DOWN**] key to select C.	 Displays alternately  Displays alternately
4 Press down the [**SET**.] key for over 3 seconds. **Setting completed**	**Returns to the set temperature display.**

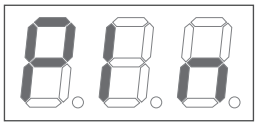
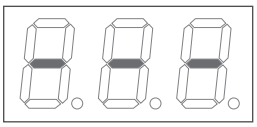
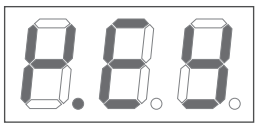
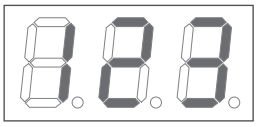
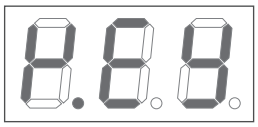
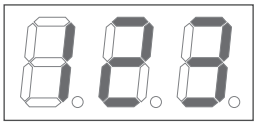
The temperature scale on the operation panel is printed in [˚C]. If you use Fahrenheit either cover up the [˚C] sign or ignore it.

4-11 Key Lock Function

The Key Lock function locks the temperature and parameter settings so that the temperature and parameters cannot be changed by unauthorized persons. Authorized personnel may use a code number to set, or release the Key Lock function. The code number is not set before shipping. The code number can be set using any three-digit number from 001 to 999. When the code number is set correctly, the number will flash 5 times. If an incorrect code number is input, the display will show 'NG', and return to the initial display.

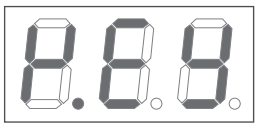
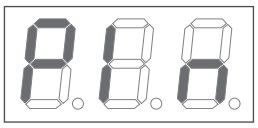
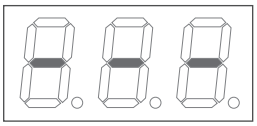
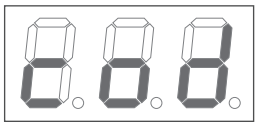
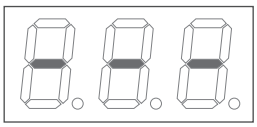
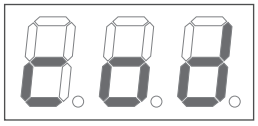
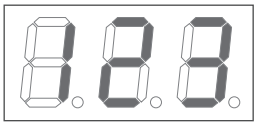
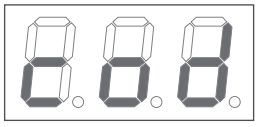
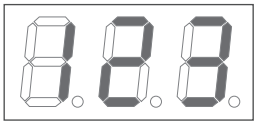
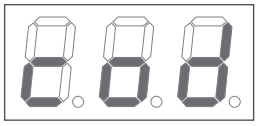
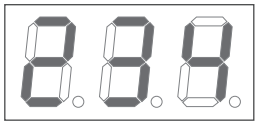
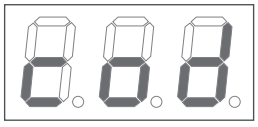
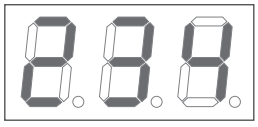
Setting and Releasing the Key Lock

Example : The code number is 123

Key Operation	TEMP Display
1 KEY LOCK Press the [**KEY LOCK**] key.	2 1  Flashes 2 times ↓ 
2 ▲ ▼ Input the desired code number using the [**UP**]/ [**DOWN**]keys.	2  1 
3 KEY LOCK Press the [**KEY LOCK**] key. **Setting completed**	2  1  Flashes 5 times ↓ **Returns to the set temperature display.**

The **KEY LOCK** is set and released by the same procedure.

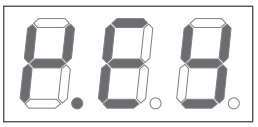
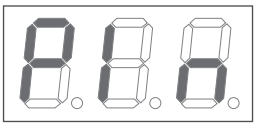
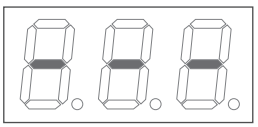
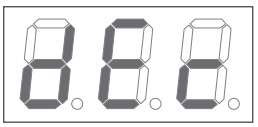
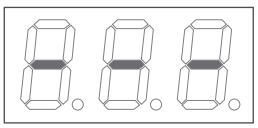
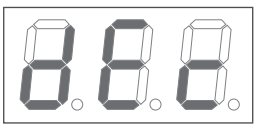
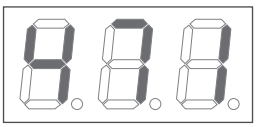
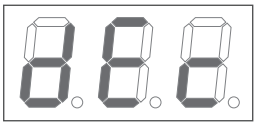
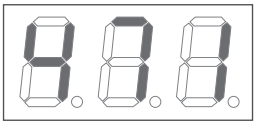
Changing the Code Number **Example** : When changing the code number from 123 to 234.

Key Operation	TEMP Display
1 KEY LOCK Press the [**KEY LOCK**] key.	2  1  Flashes 2 times ↓ 
2 KEY LOCK Press down the [**KEY LOCK**] key for over 3 seconds.	2  1 
3 ▲ ▼ Press the [**UP**][**DOWN**] keys to input the present code number.	2  1 
4 KEY LOCK Press the [**KEY LOCK**] key.	2  1  Displays flashes
5 ▲ ▼ Input the desired new code number using the [**UP**][**DOWN**] keys.	2  1 
6 KEY LOCK Press the [**KEY LOCK**] key. **Setting completed**	2  1  Flashes 5 times ↓ **Returns to the set temperature display.**

Resetting the Code Number

If you forget the code number, follow the procedure below to delete and reset the key lock.

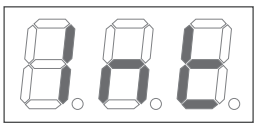
This procedure releases the key lock function which means that unauthorized persons can change the settings. Therefore, this manual should be given to authorized personnel only.

Key Operation	TEMP Display
1 KEY LOCK Press the [**KEY LOCK**] key.	2  1  Flashes 2 times ↓ 
2 Press down the [**SET KEY1**] key and [**UP**] key simultaneously for over 3 seconds.	2  1 
3 Input "**471**" using the [**UP**][**DOWN**] keys.	2  1 
4 KEY LOCK Press the [**KEY LOCK**] key. **Setting completed**	2  1  Flashes 5 times ↓ **Returns to the set temperature display.**

4-12 How to Restore Default Settings

The default shipping parameters can be restored by following the procedure below. This procedure releases the key lock function which means that unauthorized persons can change the settings. Therefore, this manual should be given to authorized personnel only.

How to Restore Default Settings

	Key Operation	TEMP Display
1	Press down these following keys simultaneously for over 5 seconds, while the preset temperature display is shown. [**SET KEY 2**] [**UP**] [**DOWN**] 	**The preset temperature display flashes.**
2	All settings are restored to the shipping default. **Setting completed**	 Flashes 5 times ↓ **Returns to the set temperature display.**

Though the key lock can be released with the procedure shown above, the code number cannot be reset.

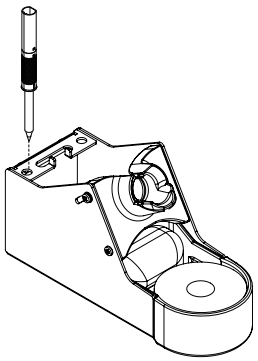
When you want to delete the code numbers, please follow the procedure "Resetting the Code Number".

5 Maintenance

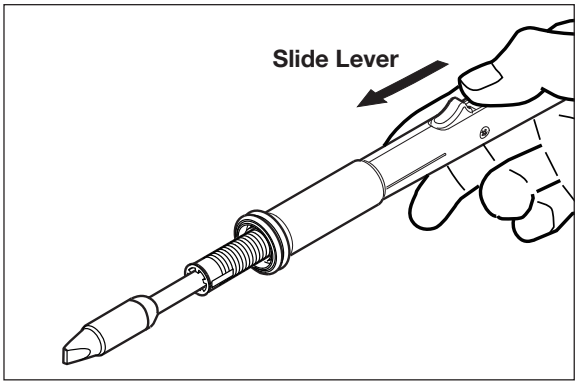
WARNING

The tip can be replaced without turning the power off. Take due care to avoid burns as the tip will be very hot. Leave the removed tip to cool (tip down) in the hole on the iron stand.

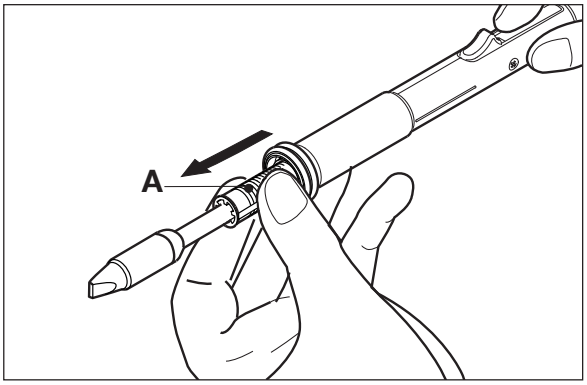
See instruction p.4.



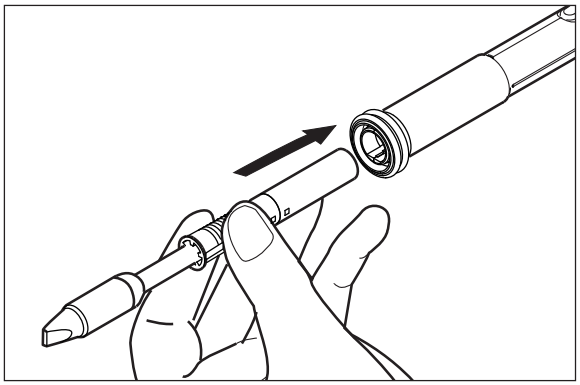
5-1 How to Change the Tip



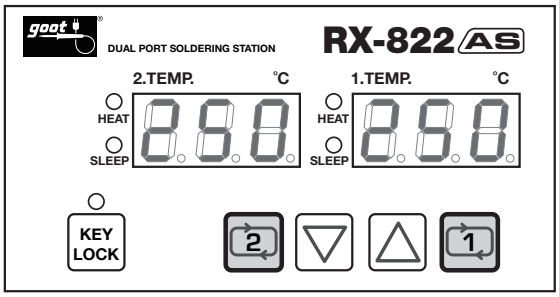
1. Slide the lever on the soldering unit in the direction shown.



2. Hold the part marked A and pull the tip out in the direction shown.



3. Insert the new tip after aligning it with the grip. Push the tip in firmly as far as it will go. The tip will not heat up at this point.

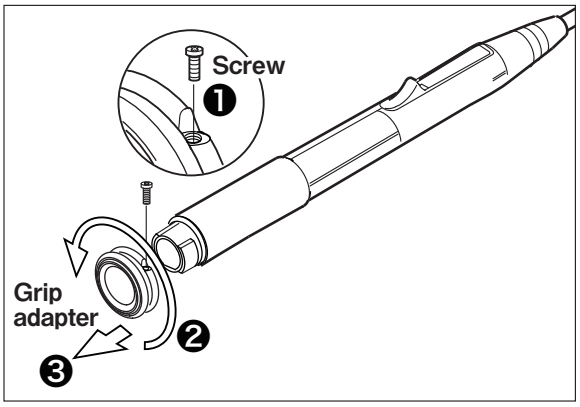


4. To heat the tip, press the [**SET.**] key of the relevant tip.

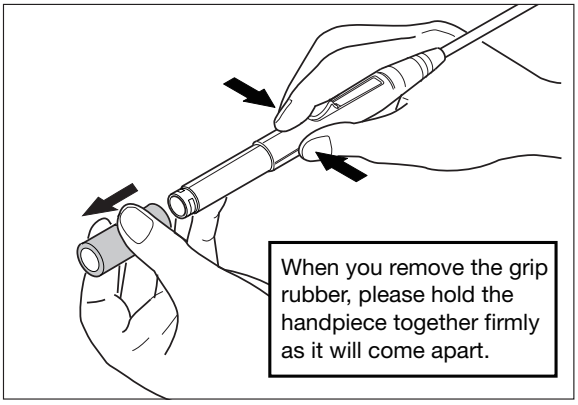
Note: When changing to a different type of tip, be sure to input the Tip No. (Refer to page 14)
Since the heater is integrated into the tip, replacement of only the heater or the tip is not possible.

5-2 How to Change the Grip Rubber

1. Remove the screw. Remove the grip adapter by turning counter clockwise.



2. Remove the old grip rubber and replace with new one.

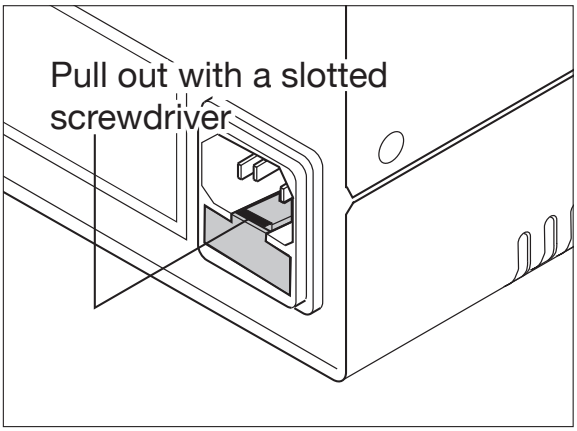


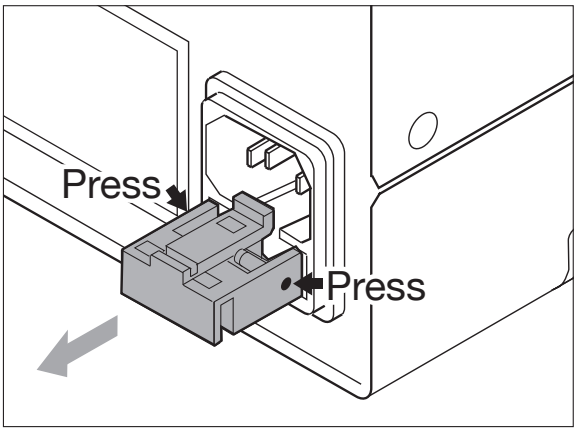
5-3 How to Change the Fuse

1. Place a slotted screwdriver in the slot to pull out the fuse box.

2. Press both sides of the fuse box to remove it.

   A spare fuse is stored on the other side of the fuse box. Therefore, turn the fuse box over or to the side to replace the fuse.





5-4 Housing Cleaning

At no time during cleaning allow gasoline, petroleum-based products, or penetrating oils, etc. to come into contact with the plastic parts. They contain chemicals that can damage, weaken, or destroy plastics. Remove dirt with a clean cloth.

5-5 How to Use, Clean, and Maintain a Lead-Free Soldering Iron

A lead-free soldering iron is more susceptible to oxidation, and it is more difficult to wet the tip with solder. Flux within the solder adheres to the tip, carbonizes and blackens. This cannot be stopped. However, if the user follows the instructions for use and maintenance below, the user will be able to easily wet the tip with solder consistently.

How to use, clean, and maintain the soldering iron

Recommended temperature
The lead-free soldering iron should be set at a low temperature. This slows down carbonization. Lead-free soldering irons have excellent heat recovery. Reducing the temperature will not affect the work being carried out. However even at lower temperatures, flux still carbonizes.

Cleaning tips
During and after use, rub the tip over the sponge or in and out of the tip cleaner metal shavings while hot. This will remove the blackened oxidized particles from the tip.

Applying solder
Be careful to keep the solder only in contact with the solder-coated area of the tip.

Using the soldering iron stand
The first time you plug in the soldering station after purchase, or when resting the iron in the stand during use, leave a coating of solder on the solder-coated area of the tip and place it into the soldering iron stand. Only a thin layer of solder is necessary. The tin surface of a lead-free soldering iron oxidizes easily. Coating it with solder reduces oxidation levels.

Oxidation starts as soon as the tool is plugged in and begins to heat. When operation is completed, tin the tip with solder before turning the power off. This protects the tip from oxidation when it starts heating up the next time it is in use.

What to do when the tip is blackened and not 'wettable'

Using a clean sponge, repeat the process of tinning and cleaning the tip several times. The tip surface of an iron that has been in use a short time, generally has a higher 'wettability' recovery level.

If this does not remove the discoloration, use a fine grit sandpaper (eg., #600 grit) to remove any black solid particles and tin it with solder once more.

Washing and replacement of the cleaning sponge

If the cleaning sponge appears black or brown, rinse out the stains in water. If rinsing doesn't remove the stains, replace the sponge.

6 Troubleshooting

In case of malfunction refer to the following checklist.

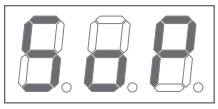
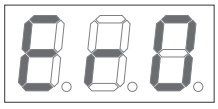
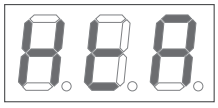
Will not switch ON.

➜ Check that the power cord is plugged in.

➜ Check that the fuse is not blown.

The soldering iron tip will not heat up.

➜ Check that the heater is not damaged.

Error message	Cause	Countermeasure
 **S o P**	The sensor or cord is damaged.	Replace the tip or soldering unit. This message is also displayed when changing the tip but this is not an error. Press any key on the panel.
 **E r O**	Memory error.	Password and parameters return to shipping default settings. These can be reset but if it is a recurring problem, please contact your nearest dealer.
 **HtA**	Sensor error, heater error.	The sensor in the tip and/or the heater may be damaged. Replace the tip with a new one. Turn the unit OFF and turn it ON again.
EHt	Sensor error.	There is a problem with the sensor. Replace the tip. Turn OFF the unit, and then turn the power switch ON again after changing the tip.

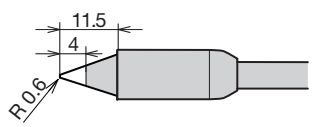
7 Replacement tips

RX-85HRT series [150W] Applicable Soldering Unit : RX-85GAS

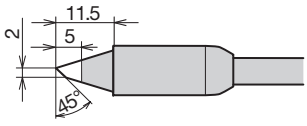
Note: Since the heater is integrated in the tip, replacement of only the heater or the tip is not possible.

RX-85HRT series

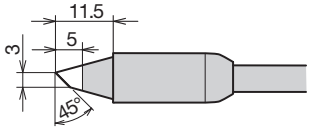
RX-85HRT-B



RX-85HRT-2BC



RX-85HRT-3BC



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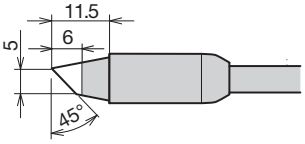

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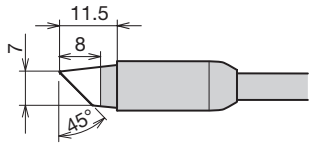

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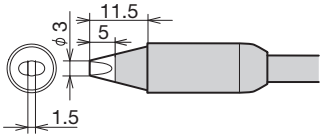

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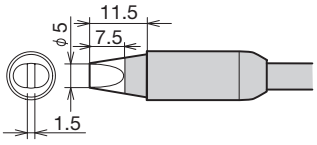
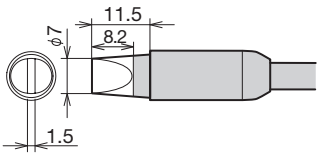


RX-85HRT-7D



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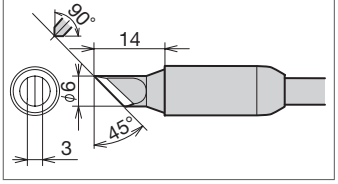
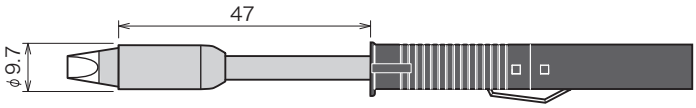
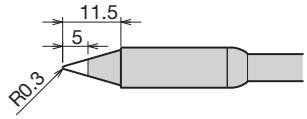




RX-85HSRT series

RX-85HSRT-B



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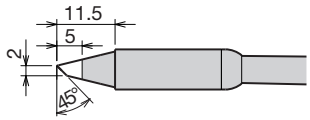
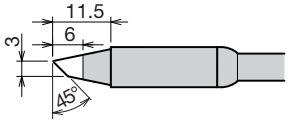
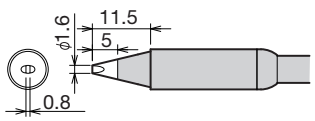


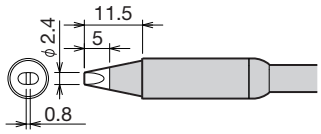
RX-85HSRT-3BC



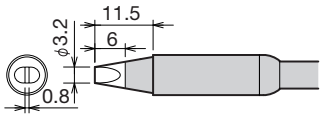
RX-85HSRT-1.6D



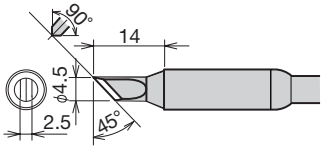
RX-85HSRT-2.4D

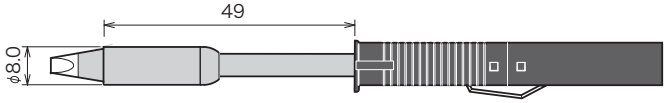


RX-85HSRT-3.2D



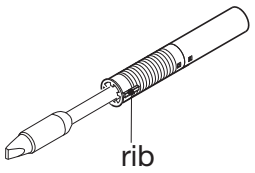
RX-85HSRT-4.5K





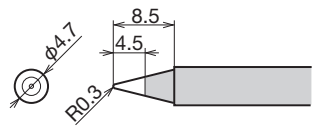
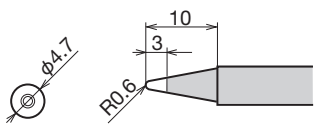
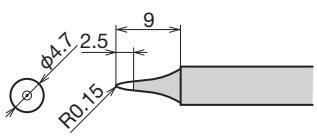
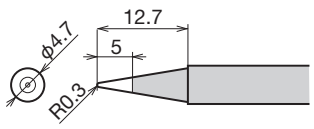
CAUTION

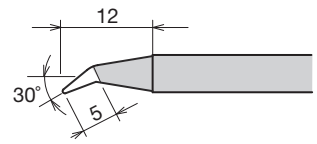
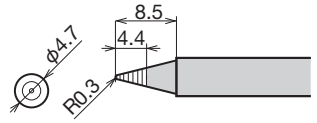
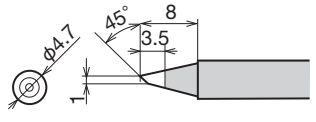
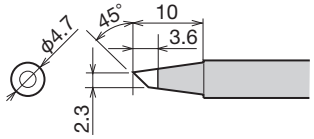
RX-85HRT replacement tips cannot be used with the **RX-802AS**. To prevent improper usage of these tips, a rib has been added to the **RX-85HRT** tips so that they cannot be inserted into the **RX-802AS** soldering unit. Attempting to use the **RX-85HRT** series tips in the **RX-802AS** will result in damaging the **RX-802AS**, because the electric current will exceed the capacity of the **RX-802AS**.

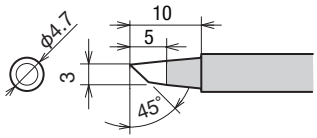
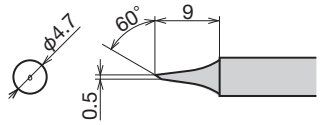
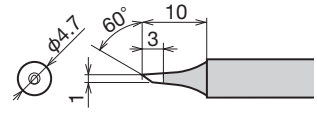
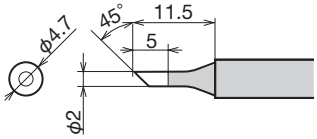


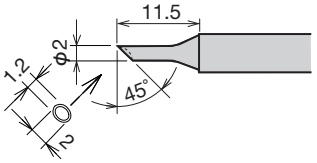
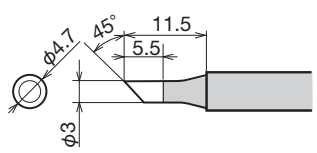
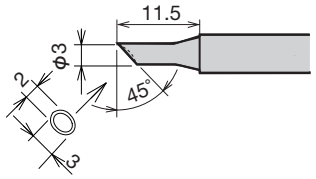
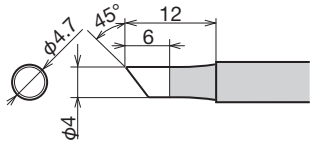
RX-80HRT series [72W] Applicable Soldering Unit : RX-85GAS/RX-80GAS

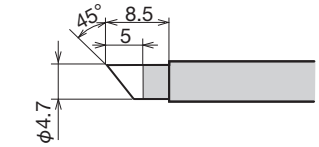
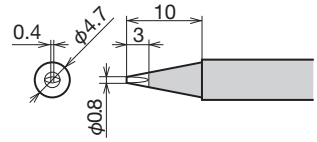
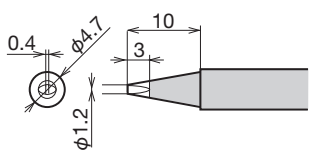
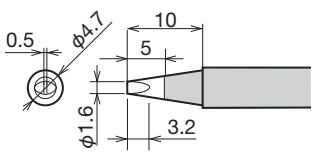
Note: Since the heater is integrated in the tip, replacement of only the heater or the tip is not possible.

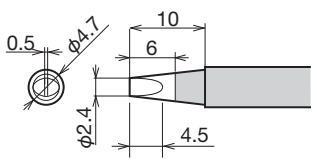
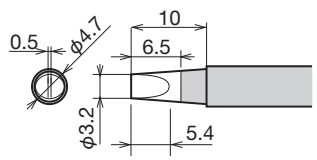
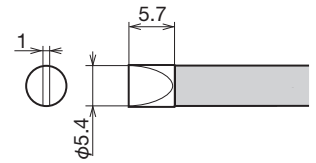
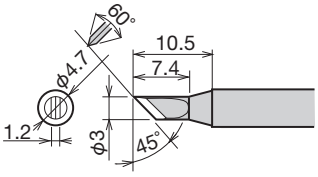
RX-80HRT-B	RX-80HRT-2B	RX-80HRT-SB	RX-80HRT-LB
			

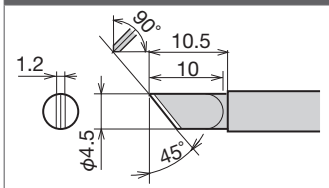
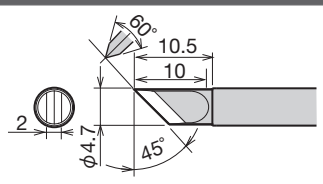
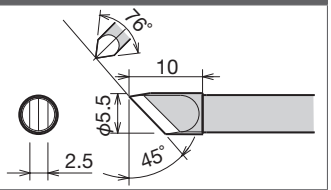
RX-80HRT-LBJ	RX-80HRT-BM	RX-80HRT-1BC	RX-80HRT-2.3BC
			

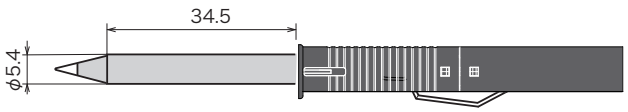
RX-80HRT-3BC	RX-80HRT-0.5C	RX-80HRT-1C	RX-80HRT-2C
			

RX-80HRT-2CD	RX-80HRT-3C	RX-80HRT-3CD	RX-80HRT-4C
			

RX-80HRT-4.7C	RX-80HRT-0.8D	RX-80HRT-1.2D	RX-80HRT-1.6D
			

RX-80HRT-2.4D	RX-80HRT-3.2D	RX-80HRT-5.4D	RX-80HRT-3K
			

RX-80HRT-4.5K	RX-80HRT-4.5KH	RX-80HRT-5.5K
		



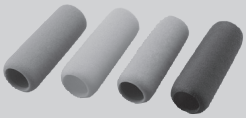
8 Replacement Parts

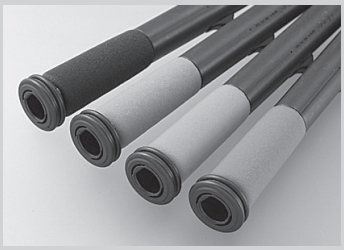
For replacement parts, contact a ***goot*** distributor.

NO.	Item	Parts No.	Note
1	**RX-852AS Soldering unit**	RX-85GAS	Tip is not included Used for port [1] (150W)
2	**RX-802AS Soldering unit**	RX-80GAS	Tip is not included Used for port [1] and [2] (72W)
2	Soldering Iron Stand	ST-21	
3	Soldering Iron Stand Sponge	ST-53SP	Replacement sponge for **ST-21**
4	Soldering Iron Stand Cleaner	ST-40BW	Replacement Brass shaving for ST-21 (2pcs./set)

Grip Rubber Selection

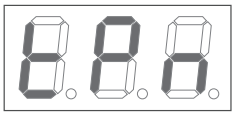
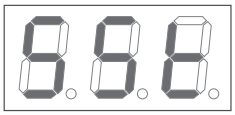
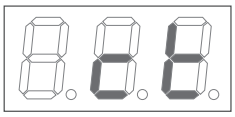
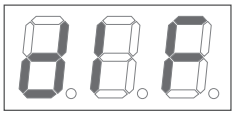
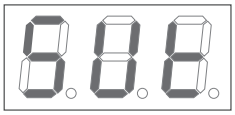
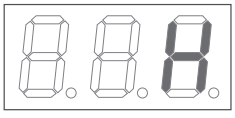
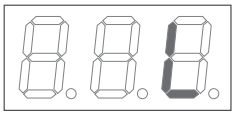
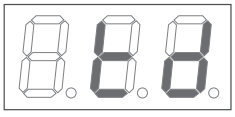
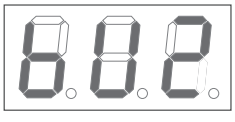
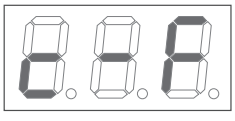
Four different colors available. Handy to differentiate stations being used for different tasks in the same workspace.





Grip rubber (gray)	RX-80RB	Anti-Static
Grip rubber (black)	RX-80RB-BK	
Grip rubber (orange)	RX-80RB-OR	
Grip rubber (green)	RX-80RB-GR	

9 Parameters

Term (display panel letters	Display Panel	Range	Unit	Shipping Default Setting
Set Temperature (PT)		(SSt+50) ～450	℃	250
Tip Number (tPn)		0～4, L1～L3	—	1
Temperature Calibration (cAL)		-50～50	℃	0
Sleep Set Temp (SSt)		0～(Pt—50)	℃	200
Sleep Timer (ct)		0.00～999	Minute	5
Sleep Sensitivity (diF)		0.0～20.0	℃	2.0
Shutdown Start time (SUt)		0～999	Minute	60
Upper Limit (H)		--- , 3～100	℃	50
Lower Limit (L)		--- , 3～100	℃	50
Differential Time (td)		0～100	cyc	5
Buzzer Sound		BIG/SML/OFF	—	BIG
Temperature Scale		c/F	—	c

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