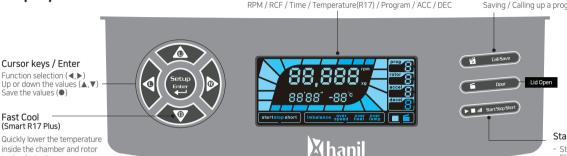
# **Smart R17 Plus / Smart 15 Plus**



Display Sceen

Program Save / Call

Saving / Calling up a program (Up to 10)





# Start / Stop / Short

- Start or stop the centrifugation
- Short run centrifugation

# **Setting Run Parameters**

(RPM / RCF / Time / Temperature (R17) / ACC / DEC)



Press the Setup / Enter button

Cursor keys / Enter

Save the values (
)

(Smart R17 Plus)

Fast Cool

Function selection (◀ ▶)

inside the chamber and rotor

to the desired temperature

Select a parameter to be changed (Press the ◀or▶ button) → Up or down the values (Press the ▲or ▼ button)

RPM setting mode: RPM flashes

RCF setting mode: RCF flashes Time setting mode: 00' 00" flashes Temperature setting mode: 00°C flashes ACC/DEC setting mode: Accel/Decel flashes

# Saving / Calling Up a Program



Press the Call / Save button Select the program number (Press the ▲or▼ button)

Enter button

Press the Setup /

Select the program number → Press the Enter button → Set the parameters → Press the Setup / Enter button

**Call up** Select the program number → Press Setup / Enter button

# Fast Cool (Smart R17 Plus)



Set the desired temperature (see 'Setting Run Parameters')



Press the Fast cool button more than 2 sec.



Set the desired Speed (see 'Setting Run Parameters') Press the short button more than 2 sec.



Serial No.

Press the Setup /

Enter button

Installation Date

# Quick Guide

# Smart R17 Plus / Smart 15 Plus

Cat. No.: SM-R17PL / SM-15PL

## **Cautions For Use**



Check the Chamber & Accessories

Inspect the chamber, rotor and accessories for foreign objects.



Check the Accessories for Abnormalities

Check the rotor, buckets and tubes are free of scratch and crack before operation.



Check the Balance

Load tubes symmetrically with identical amount



Keep the Chamber Dry

After Operation

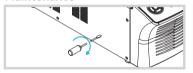
Wipe up the moisture in the chamber with a dry cloth after use. Keep the lid open when not in use.



Cleaning

Clean the centrifuge chamber and rotor by wiping with a cloth soaked in mild detergent and dry completely.

#### Maintenance



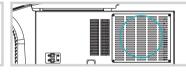
### Emergency Lid Open

If the centrifuge lid cannot be opened, insert the 'Emergenty release tool' into the emergency release hole on the left side of the device and turn it clockwise. (Before activating emergency open, switch off the device and wait for the rotor to stop.)



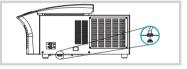
Allow a Safety Clearance of 30 cm

Allow a safety clearance of 30 cm around the centrifuge during operation.



#### Remove Dust

Remove any dust from the ventilation slits on the right side of the device. (Smart R17 plus)



#### **Empty the Condesation Water**

Empty the condesation water regularly by removing the drain cap at the bottom right of the device. (Smart R17 plus)

# **Flectrical** Safety



#### Check the Line Voltage

Connect the device to voltage sources, which correspond to the electrical requirements on the label attached to the device.



#### **Grounded Outlet**

Check the wall outlet is earth grounded, surge-protected and can supply enough power.



#### Switch Off the Device

Switch off the device after use Unplug the power plug before cleaning or unused for a long period of time.

### Rotor

A0.2M-32 32 x 0.2 mL / Max, 12.5K (Rotor ID.2)

**A2.0M-18** 18 x 1.5/2.0 mL / Max. 17K (R17), 15k (15) (Rotor ID.3)

**A2.0M-24/A2.0MP-24** 24 x 1,5/2,0 mL / Max, 15K (Rotor ID.1)

