

R Series ALS/ Plus In-service Script



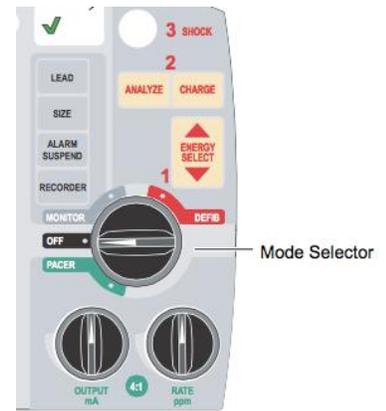
Device

-**Color Coded Operating System:** Start with the **dial**. Three different colored coded areas. **RED** for Defib, **GREEN** for Pacing, **GREY** for monitoring.

-Setup on Code Cart

-An Adult OneStep CPR Electrode should **ALWAYS** be connected to the therapy cable.

-This allows “Code-Readiness” and allows the device to pass its Automated Daily Test.



-Power LED lights

1. Battery Indicator: **GREEN**=Charged, **AMBER**=Charging
FLASHING=Problem (Battery Check)
2. A/C Power Indicator **GREEN**=Device is plugged in
3. No lights=Not plugged in

-**Code Readiness Indicator:**



GREEN Check mark= Code Ready



RED “X”= Not Code Ready

-**Self Test-** Every device



24 hours, the device will do a 100 point test and



will display a if the

is ready for use, or

if it failed a part of the test.

-**Failed Test-** The device will display “Readiness Test Failed” on the screen and will highlight what needs to be fixed.

-These are usually easily fixable problems (No pads plugged in, no battery, no A/C power, etc)

-If the device reads “DEFIB FAILURE”, call BioMed.

-**Battery-** Indicator lights show 30 min. incriminates for total of 4 hours of runtime.

- If orange light appears on “?” section of battery, call BioMed

-Recorder Tray

Press button to open door, insert the paper with the black arrow facing towards the back of the device. Pull a strip or two forward and let paper drop. Then close the door on top of the strip.

-Cables/Caps

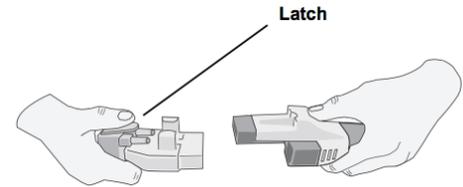
1. Electrotherapy Cable- (Is bolted down)
2. SpO2 (Blue/If Applicable)
3. 3 Lead EKG/One-Step Cable
4. EtCO2 (Yellow/If Applicable)
5. NIBP- Non-Invasive Blood Pressure (Black/If Applicable)
6. Cable Compartment for all cables attached.

One-Step Cable: Comes out the side and is 8 feet in length.

Using the Device- Everything will be pre connected and ready for use. This means it is ready for a **CODE** and **TESTING**.

Connecting and Disconnecting Pads

Locking lever holds pads and cable into place. Press on the far end of the lever to release.



Using the Pads

It is important to prep the skin as best as you possibly can.

Wipe the patient down, remove as much hair as possible, “press and roll” the pad into place.

-Pads: Used for anterior and posterior positions and have a built in 3-lead (if Applicable)

-Placement

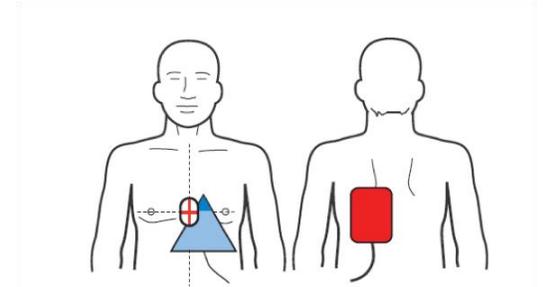
1. **Posterior Pad (RED)** Place 1st

2. **Anterior Pad (BLUE)** Place 2nd

RED is placed posterior **sub-scapular** to the left.

BLUE is placed with the **CPR sensor- Mid Sternal/Mid Nipple** in the center of the sternum

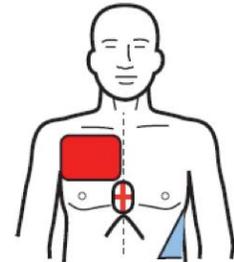
Placing- Take the pad from packaging and then “**Press and Roll**” the pad in to place



Alternate Placement: A/A Positioning (If A/P is not applicable)

1. **Posterior Pad- Put Posterior Pad in Anterior position**

2. **Anterior Pad- Position in the Lateral position (under arm), tear CPR sensor from pad and place in center of chest**



Pediatric Pads: 0-8 Years and >25kg (55lbs) Any defibrillation that is done will be adjusted by the device by an internal algorithm. (50J, 70J, 85J)



Integrated 3-Lead

-The OneStep CPR Electrode (Adults Only) has an integrated 3-Lead for pacing needs. No need to attach a separate cable to your patient

-If attempting to Pace in A/A placement, it is recommended to attach a separate 3-Lead when using the OneStep Pads as the ECG signal may be faint

Converting To Manual Mode (R Series Plus Model ONLY)

- Depending on how your facility configures the device, you can convert the R Series Plus in to Manual Mode by one of the two ways:
 1. Press the Manual Mode Key (bottom left corner)
 2. Press the Manual Mode key, and then the Confirm Key (bottom right corner)

Defibrillation Mode- Red Zone- (Simulator should be turned to "VT HI")

-Can be used as AED or Manual Defib
-AED (Automated External Defibrillator)

1. Turn to **DEFIB** mode,
2. Press "**ANALYZE**",
3. Upon a shockable rhythm, the "**SHOCK**" button will illuminate red, clear, press shock.

-**Auto Escalation**- The device will increase the energy automatically

-Energy will start at **120J**, then to **150J**, then to **200J** for Adult Patients

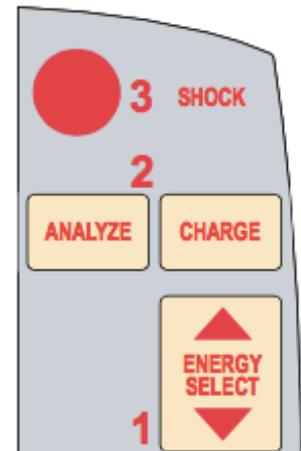
-Energy for Pediatrics starts at **50J, 70J, 85J**

-**Energy Select Key**- Changes energy level

Note: if you manually change the energy, you will have to **manually** change it again for the next energy level/shock

-**Manual Mode- To do a Manual Defibrillation**

1. **ENERGY SELECT**
2. **CHARGE**
3. **SHOCK**



CPR Sensor, Compressions, and Feedback

CPR Sensor: Is built in to the pad

CPR Feedback: Lets us know how we are doing with our compressions based on **RATE**, **DEPTH**, and **RECOIL**

Idle Timer: Will display after 3 seconds on inactivity in the "Purple" Zone of the monitor.

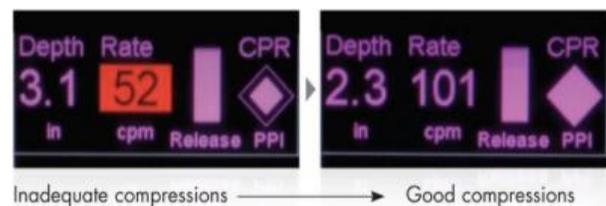
Rate and Depth Numerical Values: Will display once you start compressions.

Release Bar: Checks the status of your release and recoil off the chest. Full Bar=Great!

Diamond/PPI (Perfusion Performance Index): Mimics perfusion pressure and will begin to fill up.

What we want to see:

1. **Rate** (compressions per minute) **100-120 CPM**
2. **Depth:** **At least 2.0-2.4 inches for adults**
3. **Recoil:** **Release Bar needs to be full**



-**Scenario 1)** Not doing fast compressions to proper rate

-The device will begin to sound. Match the metronome to get back to the right rate of 100cpm.

-**Scenario 2)** Not going deep enough

-The device will say "Push Harder" to get you above 2 inches in depth.

Positive Confirmation: Once you have sufficient depth, the device will say "Good Compressions".

Pediatric Feedback: Will only display Rate and Depth- you will not hear the “Push Harder” voice prompt.

BLS USERS ARE NOW EXCUSED FROM TRAINING

See-Thru CPR Technology (Simulator is Changed to VF Artifact)

-Two Wave Forms

- 1) **Raw EKG**-Same waveform with artifact
- 2) **Filtered EKG**- Internal algorithm that filters out any artifact allowing you to see the underlying rhythm.

-As you are doing compressions, you can analyze the rhythm without letting off the chest.

-Allows you

to charge WHILE doing

compressions.



Pacing-Green Zone (Simulator is changed to “3rd”)

-Leads are built in to the pads (Only One Step Complete Pacing Pads)

-Pacing zone is labeled **GREEN**

-Dials: Two dials

1. Output
2. Rate

-Default Settings: 0mA and 70PPM

-What we see: Downward pacing markers

-How can we see capture?: We should see **Pacer Marker followed by widened QRS.**

-How do we confirm capture? Check the pulse of the patient.

-Capture 40-80mA. (Good starting point)

- 10% **above** the threshold.

-Underlying Rhythm: Press and hold the 4:1 button at the bottom of the screen

-4:1 Button: Suppresses the pacer to 1/4 the set rate allowing us to see the underlying rhythm w/out losing capture.

Cardioversion- (Synchronized Cardioversion) (Simulator should be in “AFIB”)

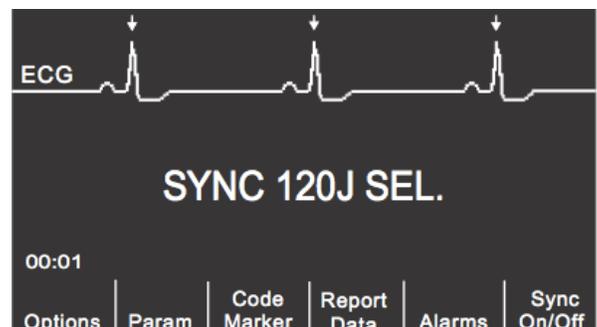
-We need to be Synchronized

-Dial: Should be in the **RED Zone (Defib)**

-Sync: Press Sync button which is located to the far right of screen

-Arrow: Wait to see SYNC indicators on top of the “R” wave

-Charge and Shock- When we shock on a Cardioversion, we need to “Press and Hold” until the device shocks



Monitor Mode

-**Lead Key:** Can change the lead by pressing lead- Circulates through Lead I-III and PADS

-**Size Key:** The gain of the trace. Makes the waveform bigger or smaller.

-**Alarm Suspend:** Alarms a default to be "Off". (Unless otherwise Configured)

1. **Alarm Off-** Press and hold for 3-4 seconds and the alarm will be SILENCED until otherwise activated by the user.

2. **Temporary Silence-** Press alarm suspend and it will be temp disabled (15 for Lethal and 90 for non-lethal).

3. If the patient is in VFib, Vtac, or Asystole, the alarms will automatically sound after 5 seconds.

-**Recorder:** Starts or stops the paper recorder at anytime.

-**Soft-keys**

1. **Options:** Includes:

- QRS Vol On: Turns tone on or off.

- Low Bright: Adjust Screen Brightness

- Traces: Waveforms you can bring up. Options—Traces—Trace 2,3.

- More: Reveals "Clock Set" to change time the Defib displays.

2. **Param: To deploy EtCO2, place Single Patient Airway Adapter in to place**

-No Need to ZERO between each use

-No need to warm-up

-Everything happens automatically... "Plug and Play"

-To Bring up the waveform: Options—Traces—Trace 3—

—EtCO2

-NIBP: Param—Setting—Auto Interval (set time for Auto Interval)

3. **Code Marker:** Varies with which zone you are in (Defib, Pacer, Monitor)

-Allows you to time stamp different clinical actions and retrieve

later on.

4. **Report Data:** Transcript of the entire code start to finish

Print Chart: All codes start to finish, including waveforms during the code.

Print Range: Select and print specific event.

Print Log: Time stamp of everything that has happened since the device has been on for the current code and previous codes that are stored

Test Log: Holds the last 1000 tests performed and can be retrieved here.

5. **Alarms:** Set highs and lows for different parameters.

-The alarms will be defaulted back once the device is off for 8 Seconds.

NIBP Key (If purchased)- One, NIBP reading. Press again to abort reading.

-Press and hold for 2 Seconds for Auto Interval reading



Data Transfer and Test Log

It is very important to transfer the code data after an event as you have a limited amount of time (30 min to 3 days per hospital configuration) before the R Series will erase all content. Follow these steps for WiFi Transfer or Compact Flash Card Transfer:

WiFi Transfer

- Monitor Mode——Report Data——Transfer Mode——Report to WiFi

Compact Flash Card

- Monitor Mode——Report Data——Transfer Mode——Report to Card

Test Log

The R Series can hold the last 999 Tests performed (manual or automatic) and can be reviewed/printed out for verification at anytime. Test Log will never become “full” as once the memory reaches 999 and a new test is entered, the oldest test will be deleted to make room. Follow the steps to review the Test Log:

- Monitor Mode——Report Data——Test Log