RACK CHARGER
TABLET CHARGING DEVICE

The document provides detailed information on the RACK CHARGER provided as part of Early Digital Learning Programme in the class rooms

EdCIL (INDIA) Limited
A Mini Ratna Category I CPSE Company
EdCIL House, 18 A, Sector 16 – A, NOIDA, Uttar Pradesh – 201301 (INDIA)
Tel: 0180 - 4500016 Fax: 0291 9825100372
email: edcil.support@edcil.co.in

USER MANUAL
# INDEX

1. Overview .......................................................................................................................... 3  
   1a. Purpose ......................................................................................................................... 3  
   1b. Components ............................................................................................................... 4  

2. Initial Setup ..................................................................................................................... 6  
   2a. Connecting Power Cord & Other Components ............................................................. 6  
   2b. Timer Configuration .................................................................................................... 9  

3. Charging the Tablets ........................................................................................................ 10  

4. Timer ............................................................................................................................... 12  
   4a. Timer Settings from AUTO to MANUAL....................................................................... 13  
   4b. Timer Settings from MANUAL to AUTO..................................................................... 14  

5. Finding the Rack Charger Serial Number ....................................................................... 15  

6. Safety Instructions .......................................................................................................... 16
1. Overview
1a. Purpose

The Rack Charger is provided to every classroom as part of the Early Digital Learning Programme. The purpose of the Rack Charger is to charge the Tablets (Learners Devices). The Rack Charger is connected to the main power source available in the classroom and the charging time is controlled by an in-built Timer.

NOTE: The Rack Charger shall be operated by the educator / authorized person only. The Rack Charger shall be strictly used for charging the Tablets.
1b. Components

The Rack Charger is divided into Two (02) compartments i.e.

a. Tablet Charging Compartment
b. Power Control Compartment

Both the compartments have access doors with safety locks.

a. Tablet Charging Compartment

Components in the Tablet Charging Compartment:

1. Tablet Holders: 10 Nos in each row, a total of 20 Tablets can be accommodated simultaneously for charging
2. Fans: Two fans (one in each row) for circulating air to keep inside temperature in control
3. Safety Locks: For ensuring safety of Students and securing the Tablets
4. Ball Catcher: For retaining the door alignment and to hold the door
5. Latch: for additional security to lock the door with Padlock
6. Lock Receiver Plate for holding lock
7. Front Caster Wheels (2 Nos) to support movement of Rack Charger
b. Power Control Compartment

Components in the Power Control Compartment

1. Power Cord: To connect the Rack Charger to the main power source
2. MCB: To protect the device from power surge
3. Timer: To operate charging activity during preset working hours
4. Power Sockets: 20 nos for every adaptor in the charging compartment, each power socket is numbered in serial for reference purpose
5. Adaptors with USB Cable Connectors : To connect with Tablets
6. Back Caster Wheels (2 Nos) to support movement of Rack Charger
7. Power Switches: For Fans, Adaptors power supply

**ALERT**: The Rack Charger components are directly connected to the power source. Do not access Rack Charger without proper authorization. While handling the Rack Charger maintain the best safety measures for Human and Machine safety.
2. Initial Setup
2a. Connecting Power Cord & other components

Power Cord is provided with the Rack Charger to be installed by running the Power Cord through Cable Gland and inserting into the IEC socket provided in the Rack Charger while the Power Cord plug is connected to the power socket with the main power source available in the classroom.

Step 01: Insert the Power Cord provided with the Rack Charger (run only through Cable Gland) in to the IEC socket
Step 02: Insert the power plug into the main power source socket
Step 03: Switch on main power source
Step 04: Turn on MCB switch
Step 05: Turn on the switch for Fans and Top and Bottom Row power controls
Power Adaptors provided along with the Tablets are to be connected to the power sockets in the Rack Charger as showcased above. Once the adaptor is inserted, USB cable provided shall be connected to the adaptor using USB connector pin and the cable to be passed to the Charging Compartment through access holes provided in the Rack Charger.
Once the Power Adaptors, USB cables are connected
Keep the MCB switch in ON mode
Keep the Fan switch in ON mode
Keep the Top Row and Bottom Row switches in ON mode

**ALERT:** The Power Cord shall be verified for visible damages. The USB connector cables shall only be connected the way showcased in this process through access holes provided on the partition wall between both Compartments. The power sockets in the Rack Charger should never be used for charging any other devices.
2b. Timer Configuration

Check Timer whether AUTO mode is in ON mode
The Timer shall always be kept in AUTO mode
Timer is preconfigured and calibrated for the preset timings

All the Timers in Rack Chargers are configured with the timings instructed by the Ministry for the charging of Tablets, which is currently 7:30 AM TO 9:00 AM & 3:30 PM TO 5:00 PM (Monday to Friday)
3. Charging the Tablets

The Rack Charger primary function is to charge the Tablets. The charging process is controlled by an in-built Timer with charging times configured as a program. The charging of the Tablets will be activated only during the times configured and calibrated in this timer while the AUTO mode is ON in the timer. In case of emergency the charging mode can be changed to Manual (refer Section 5 for process details). However, it is recommended to not to change the Timer setting to Manual.

- Step 01
  - Long press the Power Button
  - Shutdown Tablets with options pop up on the right side of the Home Screen
  - The window provides three options - Power off, Restart and Aeroplane mode
  - Click Power off

(Back to Index)
- Step 02: Remove the Keyboard Case USB pin from the port
- Step 03: Connect the Tablet with USB charging pins
- Step 04 & 05: Place the Tablets inside the Charging Compartment holders one by one as shown
- Step 06: Check the charging status on random Tablets for validation

**ALERT:** Never switch off the main power supply to the Rack Charger. Once the Tablets are connected to the charging adaptor pins and placed inside the compartments - please lock the door. Never open the backside door, in case of any challenges with Rack Charger the authorized person shall be informed for carrying out necessary interventions The Rack Charger shall be used only for the Tablets, other devices shall not be charged from the Rack Charger.
4. Timer

Timer based controller is the integral part of the Rack Charger, the controller’s purpose is to automate the charging timings of the Tablets.

The functional buttons on the Timer

1. MANUAL: To Select “ON, AUTO or OFF”
2. LED: To indicate the ON/ OFF status (indicator will glow if the Timer is in MANUAL mode or the Timer is activated in AUTO mode during preset timing)

**ALERT:** Functions available with Timer other than mentioned above are to be operated only by the technical support team. No one else should handle these buttons as the entire functionality of the Rack Charger depends on the calibration and configuration of the Timer.

**NOTE:** The Timer controls and provides power to the charging cabinet at the preset time intervals, however in case of any contingency or challenge the authorized personnel will operate the Timer in Manual mode and roll back to AUTO mode once the required charging process is complete.

(Back to Index)
4a. Timer Settings - from AUTO to MANUAL

The Rack Charger functioning is controlled by TIMER at pre-configured timelines instructed by the ministry. The AUTO mode is indicated by the Bar over AUTO. However, in the time of contingencies and in case of any other challenges the Timer settings can be changed to MANUAL from AUTO and roll back to AUTO once the process is over.

- Step 01: Press MANUAL button to move the status indicator bar over ON, and the indicator starts glowing.
4b. Timer Settings - from MANUAL to AUTO

If the timer is set to MANUAL mode as a contingency measure, once the challenge is resolved the timer mode shall be changed to AUTO.

- Step 01: Press MANUAL button, bar moves over Auto
- Step 02: Press MANUAL button, bar moves over OFF mode
- Step 03: Press MANUAL button, bar moves over AUTO mode
5. Finding the Rack Charger Serial Number

The Rack Charger Serial Number can be identified in three (03) ways.

01. On the inside panel of the Charging Compartment
02. On the Electrical Control Panel of the Power Control Compartment
03. On the external panel near the Cable Gland

The Serial Number starts with CR20T000***M

NOTE: The Serial Number is a critical part of all the processes as all the records, transactions are monitored based on serial number. It is advised to record the Serial Number for reference purposes.
### 6. Safety Instructions

<table>
<thead>
<tr>
<th>![Warning Icon]</th>
<th>Always keep Students away from the Rack Charger</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The Rack Charger must only be connected to a 220-240-Volt AC</strong></td>
<td></td>
</tr>
<tr>
<td><strong>NO LIQUIDS</strong></td>
<td>Keep the Rack Charger in a dry place away from water/ liquids which can conduct/ pass electricity</td>
</tr>
<tr>
<td>![Air Recycle Icon]</td>
<td>Ensure the Rack Charger has some free space around it to recycle the air inside the Rack Charger</td>
</tr>
<tr>
<td>![No Sharp Objects Icon]</td>
<td>Do not put any sharp items in the perforated holes of the Rack Charger</td>
</tr>
</tbody>
</table>

**NOTE:** The images, illustrations and other material used in this document are for the purpose of graphical representation and reference only. The actual product may differ.
That’s All Folks!