



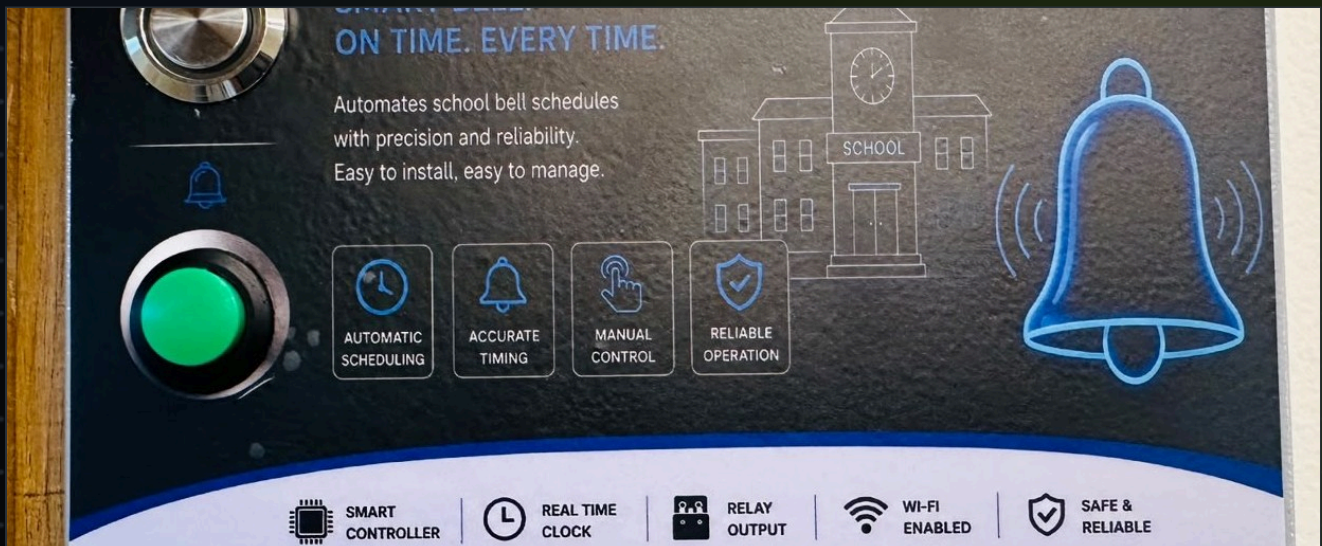
ANQAH TECH

■ PRODUCT BROCHURE
IOT · SCHOOL AUTOMATION

// IOT · SCHOOL AUTOMATION

AUTOMATIC SCHOOL BELL

A WiFi school bell controller that rings automatically on a preset schedule, skips weekends and holidays on its own, and is managed from a mobile app.



10

Scheduled bells per day

RTC

Keeps time through outages

WiFi

App control on the local network

0

Cloud services needed

WHY AUTOMATIC BELL?

THE CHALLENGE

Schools still depend on staff ringing the bell by hand, or on mechanical timers that can't skip holidays, adjust for exam days, or be changed without visiting the control box.

THE AUTOMATIC BELL SOLUTION

A relay wired into the bell's power circuit, controlled by an ESP32 with a real-time clock for accurate offline timekeeping, plus a mobile app that manages schedules, holidays and manual rings over the school network.

BUILT FOR

- Period and break bells without staff ringing them
- Skipping bells on public holidays and exam days
- Ringing manually for assemblies, drills or unscheduled events

WHAT YOU GET

- No more missed or late bells
- Timetable changes from a phone — no rewiring or reprogramming
- Keeps ringing on time through power cuts and WiFi outages

WHO USES IT

SCHOOLS

COLLEGES

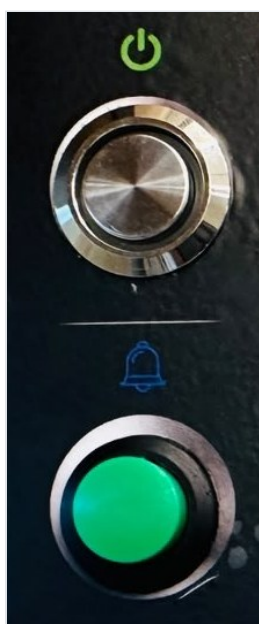
HOSTELS

MADRASAS

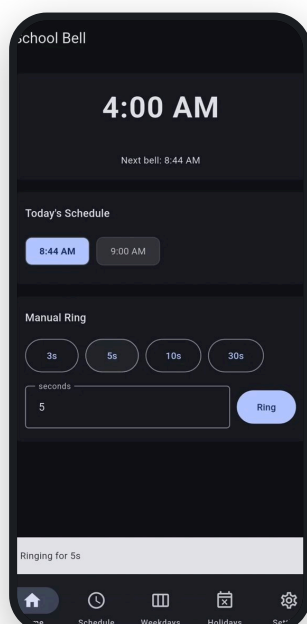
TRAINING CENTRES

FACTORIES

OFFICES



ON THE PANEL Power light and the one-touch manual ring button.



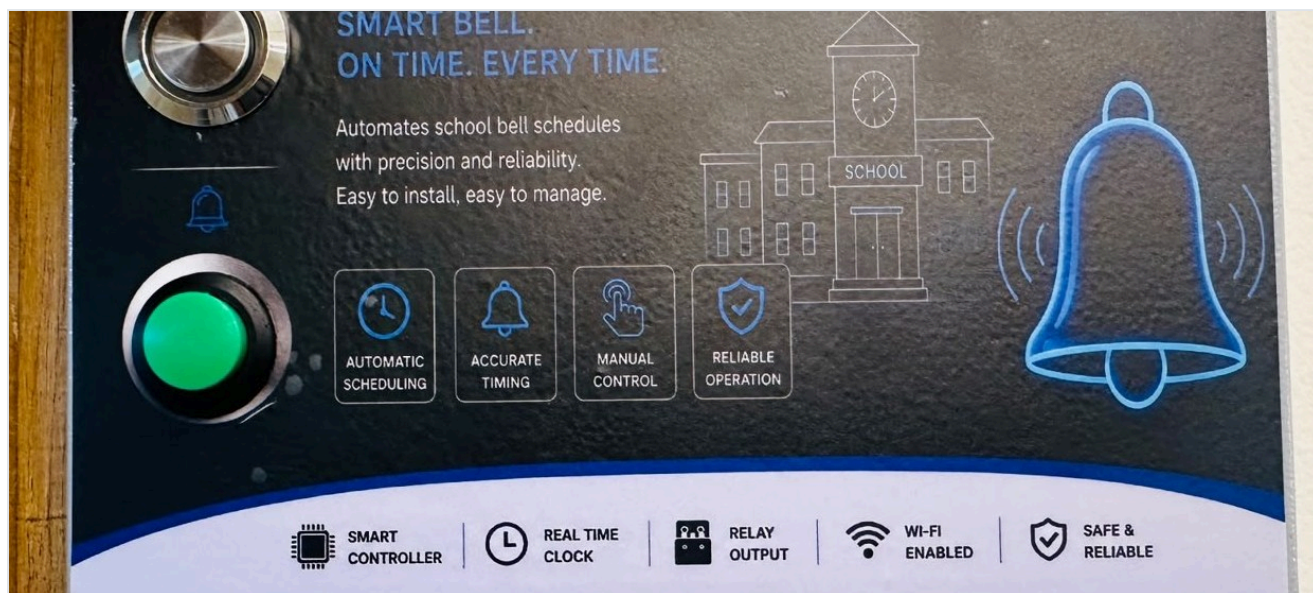
ON THE PHONE Ring for 3, 5, 10 or 30 seconds from the app.

TWO WAYS TO RING

Bells ring automatically on the timetable. For assemblies, drills or emergencies, ring by hand from the panel button or from the app on your phone.

THE BELL CONTROLLER

A wall-mounted controller wired into your existing bell circuit. It keeps its own time, rings on schedule and can be rung by hand.



INSTALLED CONTROLLER Power indicator, a one-touch manual ring button, and the controller inside the panel.

WHAT'S INSIDE

SMART CONTROLLER

An ESP32 microcontroller runs the schedule and serves the app over WiFi.

REAL-TIME CLOCK

A DS3231 clock keeps accurate time through power cuts and WiFi outages.

RELAY OUTPUT

Switches your existing bell on and off — wired in series with its power feed.

WIFI ENABLED

Joins the school network; falls back to its own setup hotspot if it can't connect.

MANUAL RING BUTTON

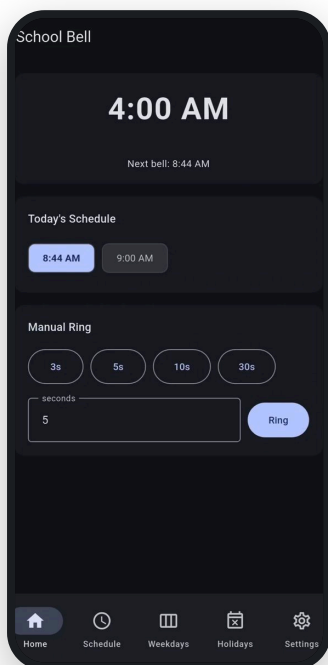
Ring instantly from the panel — or from the app — for assemblies and drills.

LOCAL ONLY

No cloud service: schedules, holidays and WiFi settings are stored on the device.

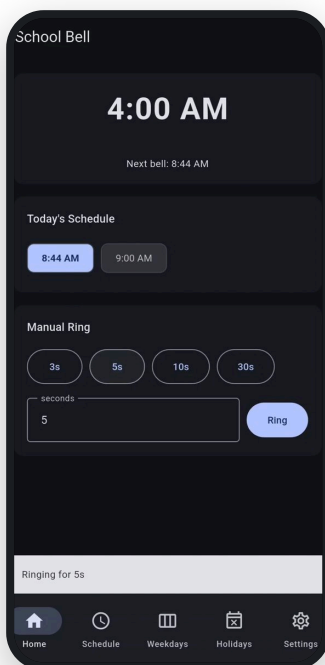
THE APP

Real screens from the School Bell app.



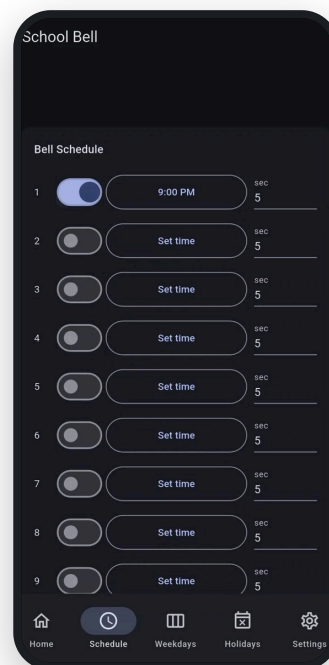
HOME

The current time, the next bell, today's schedule and a manual ring — all on one screen.



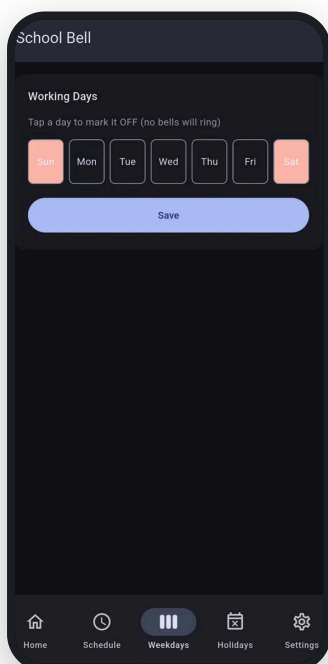
MANUAL RING

Pick 3, 5, 10 or 30 seconds — or type any duration — and tap Ring for assemblies, drills or emergencies.



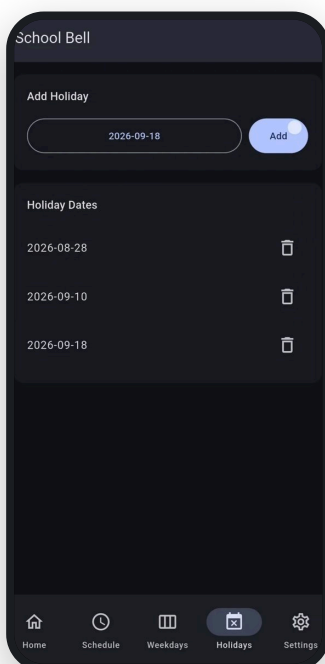
SCHEDULE

Up to 10 bells a day. Switch each one on or off, set its time and how many seconds it rings.



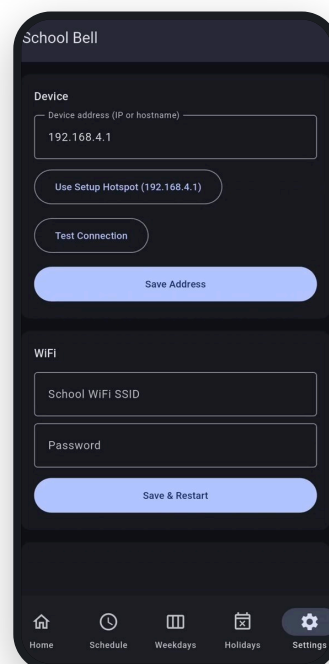
WEEKDAYS

Tap a day to mark it off — no bells ring on weekends or any day you switch off.



HOLIDAYS

Add dates once and the bell stays silent on those days, then carries on as normal.



SETTINGS

Point the app at the controller, test the connection and join it to the school network.

KEY FEATURES

01

AUTOMATIC SCHEDULE

Rings on a configurable daily timetable, up to 10 bells.

02

WEEKENDS & HOLIDAYS

Skips weekends and specific holiday dates automatically.

03

MANUAL RING

Ring from the app for assemblies, drills or emergencies.

04

ACCURATE OFFLINE

An onboard real-time clock keeps time through power and WiFi outages.

05

EASY WIFI SETUP

Falls back to its own setup hotspot if the network can't be reached.

HOW IT WORKS

01

The controller checks its clock every minute against the saved bell schedule.

02

When a bell is due — and it isn't a weekend or holiday — it switches the relay on the bell circuit.

03

The bell rings for the configured duration, then the relay releases automatically.

04

Schedules, holidays and WiFi settings are managed from the companion app.

INSTALLATION

We mount the controller near your existing bell, wire it into the bell's power circuit, join it to the school WiFi and enter your timetable. After that, every change is made from the app — no electrician needed.

NOT JUST SCHOOLS

Colleges, hostels, madrasas, training centres, factories and offices use the same system for periods, meals, shifts and breaks.

UNDER THE HOOD

// TECHNOLOGY

ESP32 microcontroller running Arduino-based firmware, a DS3231 real-time clock module, and a relay wired in series with the bell's power feed. The ESP32 serves a local HTTP API on the school WiFi, and a Flutter mobile app manages schedules, weekday and holiday exclusions, and device settings.

YOUR DATA

The device talks only over the local network and sends nothing to any cloud service. Schedules, holidays and WiFi credentials are stored on the device itself.

FREQUENTLY ASKED QUESTIONS

Does it work if the WiFi goes down?

Yes. The real-time clock keeps accurate time on its own, so scheduled bells keep ringing.

Can school staff change the schedule?

Yes. Schedules, holidays and settings are all managed from the mobile app — no electrician needed after installation.

GET AUTOMATIC BELL FOR YOUR BUSINESS

Talk to us for a demo, pricing and installation — we reply within 24 hours.

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