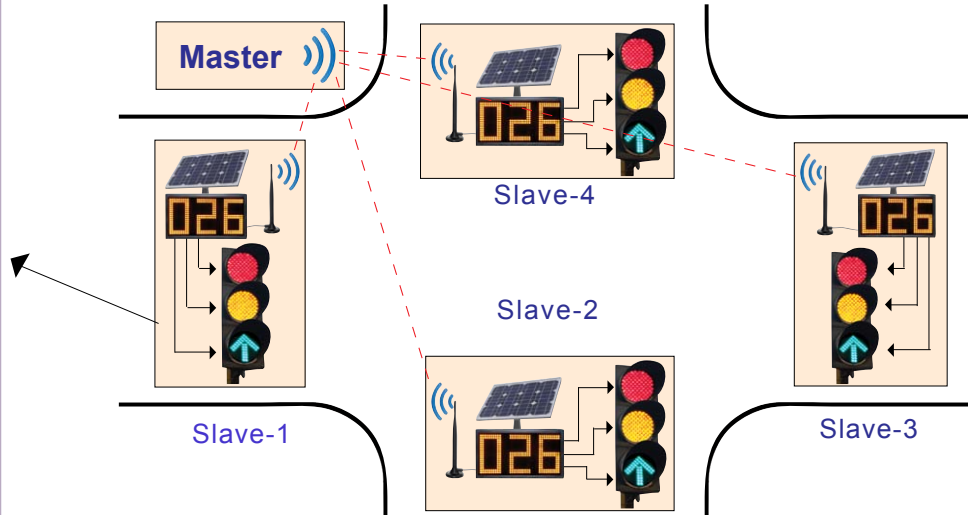
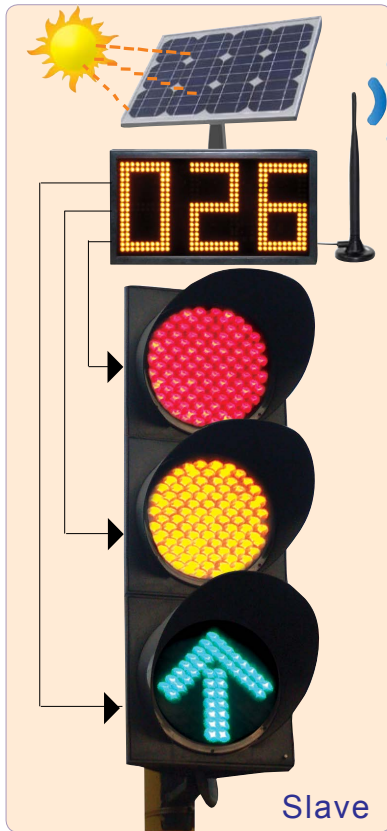


## WIRELESS ROAD TRAFFIC SIGNAL SYSTEM

This new **“Wireless Road Traffic Signal System”** is built with latest Technologies to **Eliminate** and **Overcome** difficulties faced in the earlier versions like

- Physical cabling between the Poles.
- Signal Failure during Power Supply failure.
- Central Monitoring and controlling of all Junctions
- Non-standard Time and Duration in a Sequence.
- More number of sequences to suite the traffic variations.
- Road Trenching.
- Synchronization between the junctions.
- Difficult to relocate in case of rearrangement.
- High Power Consumption.



### KEY ASSETS IN THE SYSTEM:

- ❖ Master Control Unit.
- ❖ Slave Unit with Count Down Timers.
- ❖ Red, Yellow & Green Arrow Lamps / 3 in 1 Lamp.
- ❖ Solar Panels & Battery Backup for Master and Slaves.

## UNIQUE FEATURES:

### 1. Eliminates Physical Cabling between all the poles and Road Trenching in a junction

- ❖ Uses Zigbee Wireless Communication between all the poles to eliminate communication wiring
- ❖ Solar Power Supply at each pole eliminates power supply wiring from one source (State Electricity Board).
- ❖ No other cables / wires required to be laid across the junction. Hence eliminates the Road Trenching.

### 2. Easy to relocate in case of rearrangement.

- ❖ Each pole uses Solar Power and Wireless Communication for Lamp Controlling. It is easy to relocate or rearrange them in case of road widening etc

### 3. Works even during the Power Supply Failures.

- ❖ Battery Backup for required number of hours, makes the system to work independent of Power Supply Failures.

### 4. Maintains Standard Time and Duration in a Sequence.

- ❖ Time synchronization with GPS clock to maintain International & Standard Time & Time Duration in a Sequence.

### 5. Reduced Power Consumption

- ❖ High Bright LEDs in lamps and Count Down timer for more reliability, longer view and low power consumption.

### 6. Synchronization between the junctions.

- ❖ Possibility to maintain the Synchronized Sequences in a series of Junctions for a given speed between the junctions.
- ❖ This helps to maintain the synchronization between the junctions for Free Flow of Traffic.

### 7. Hourly and daywise sequences.

- ❖ Provision to program hourly in a day and daywise in a week to suite the Traffic Variations in a junction.
- ❖ Provision to program 20 Holiday Sequences.

### 8. Central Monitoring and controlling (optional)

- ❖ GPRS / GSM connectivity to monitor the signal status from Central place.
- ❖ Each junction reports all the failures to the central place. i.e.
  - ♦ Any Lamp permanent ON or OFF.
  - ♦ Power Supply Failures
  - ♦ Communication Failures etc
- ❖ Mimic showing the functioning of Junctions Offline to understand the synchronization and sequence operations.

### 9. 3 in 1 Lamp

- ❖ “Red, Yellow & Green Arrow” all arranged in single retrofit.
- ❖ Cost effective.

# WIRELESS ROAD TRAFFIC SIGNAL



**Wireless Master Control Unit**



**Three in One Lamp**



**Slave with  
Count Down Timer**

## SPECIFICATIONS OF LAMPS & TIMER

*Specifications are subjected to change from time to time*

SPECIFICATIONS	RED LAMP	AMBER LAMP	GREEN ARROW LAMP	COUNT DOWN TIMER
LED Lens	Water clear	Water clear	Cyan with water clear	Amber / Red SMD water clear
Intensity	260cd	380cd	150cd	300cd
Number of LEDs	97	97	42	108 per digit
Retrofit make	Aluminium	Aluminium	Aluminium	MS
Operating Voltage range	18-36V DC supply	18-36V DC supply	18-36V DC supply	18-36V DC supply
Power consumption	<5W	<5W	<5W	<8W
Operating Temperature	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C
Protection	IP54	IP54	IP54	IP54
Lamp diameter	12"	12"	12"	9" Digit



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