

INTRODUCTION

We Are Team **Ajax**, wanted to come up with an innovative and completely new idea to tackle the problem.

Challenges in Present system

- 1. Difficult to find out how many **street lights are faulty.**
- 2. Not able to locate that, **which street light is not functioning particularly.**
- 3. CHS (Complain Handling system)

Difficult to find out how many street lights are faulty.

This problem is very common in our electric department. To find out how many street light is not working. Because there is still no perfect technology for this task and the **number of street lights is too large.**

Not able to locate that, which street light is not functioning particularly.

In current technology we cannot determine particularly which street light is working or not. Currently we are using **CCMS** (Centralised control and monitoring systems) which is only capable to display the power failure details of **a particular switching point** but it cannot show the data of a **particular street light.**

CHS (Complaint Handling System)

Accuracy of the CHS is not so good. Also CHS not have any filter, that's why the problem handling is high.

“OUR SOLUTION

- AUTOMATED ACKNOWLEDGEMENT SYSTEM INTEGRATED TO EACH POLE
- GIVES THE FEEDBACK OF LED'S STATUS TO ITS MASTER (CCMS).
- MONITORING SYSTEM FOR THE WHOLE ACKNOWLEDGEMENTS.
- DEFECTIVE LED POLES WITH THEIR SERIAL NUMBER AND ASSOCIATED ADDRESS

TECHNOLOGY USED

- **BUS TOPOLOGY** : Between master and slave modules.
- **EMBEDDED SYSTEM** :
 1. Atmega328 microcontroller
 2. Light Dependent Resistor
 3. AJAX-0N
- **SLIDING WINDOW PROTOCOL** : A feedback system for every predefined data set.
- **I2C PROTOCOL**

(CCMS)

MASTER
(AJAX-M)

ADDRESSING FORMAT

Polenumber + W + Wardnumber

Ex:- 01W20
02W05

DEMONSTRATION OF IDEA

01WX

02WX

03WX

04WX

AJAX-01

AJAX-02

AJAX-03

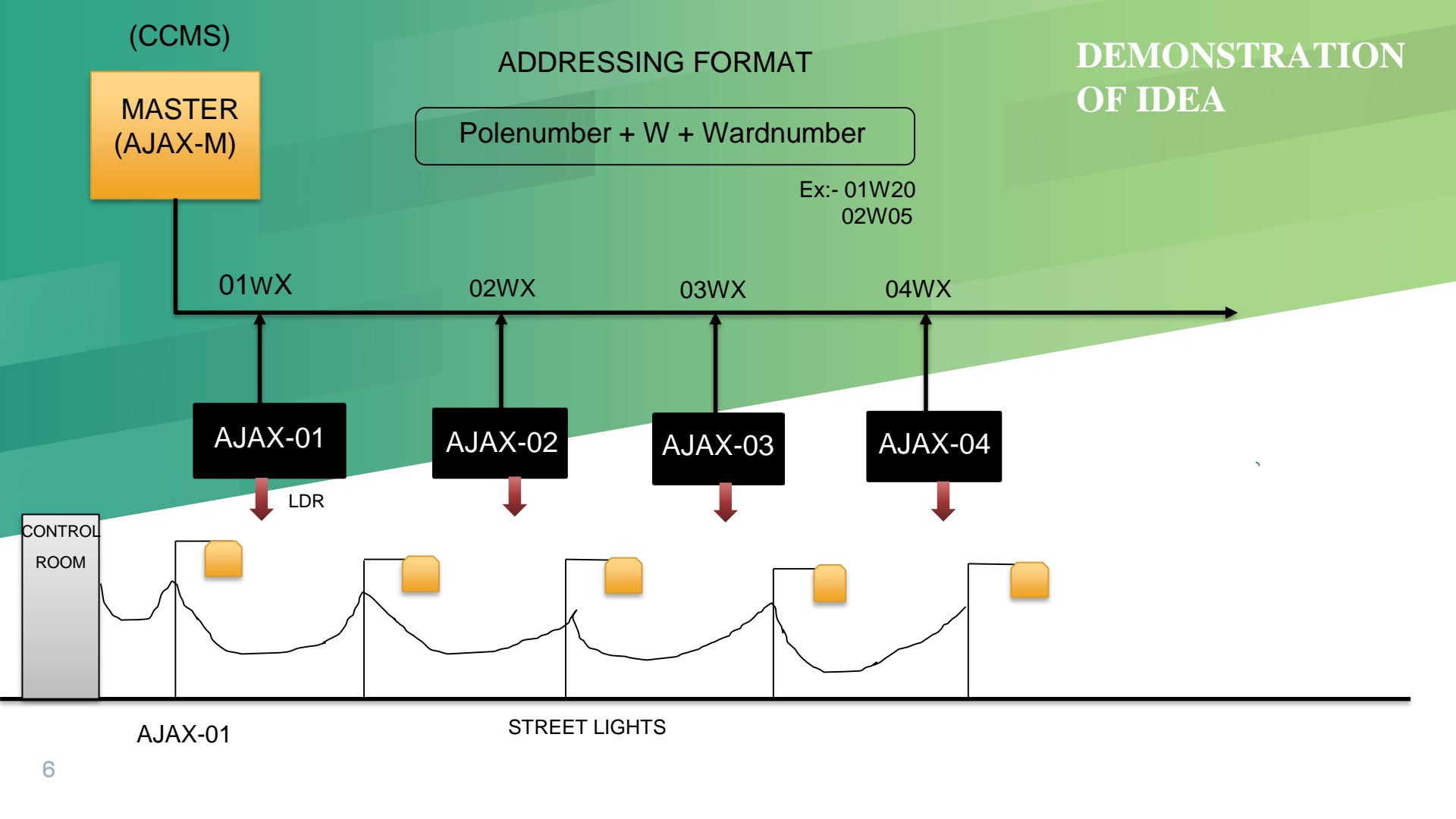
AJAX-04

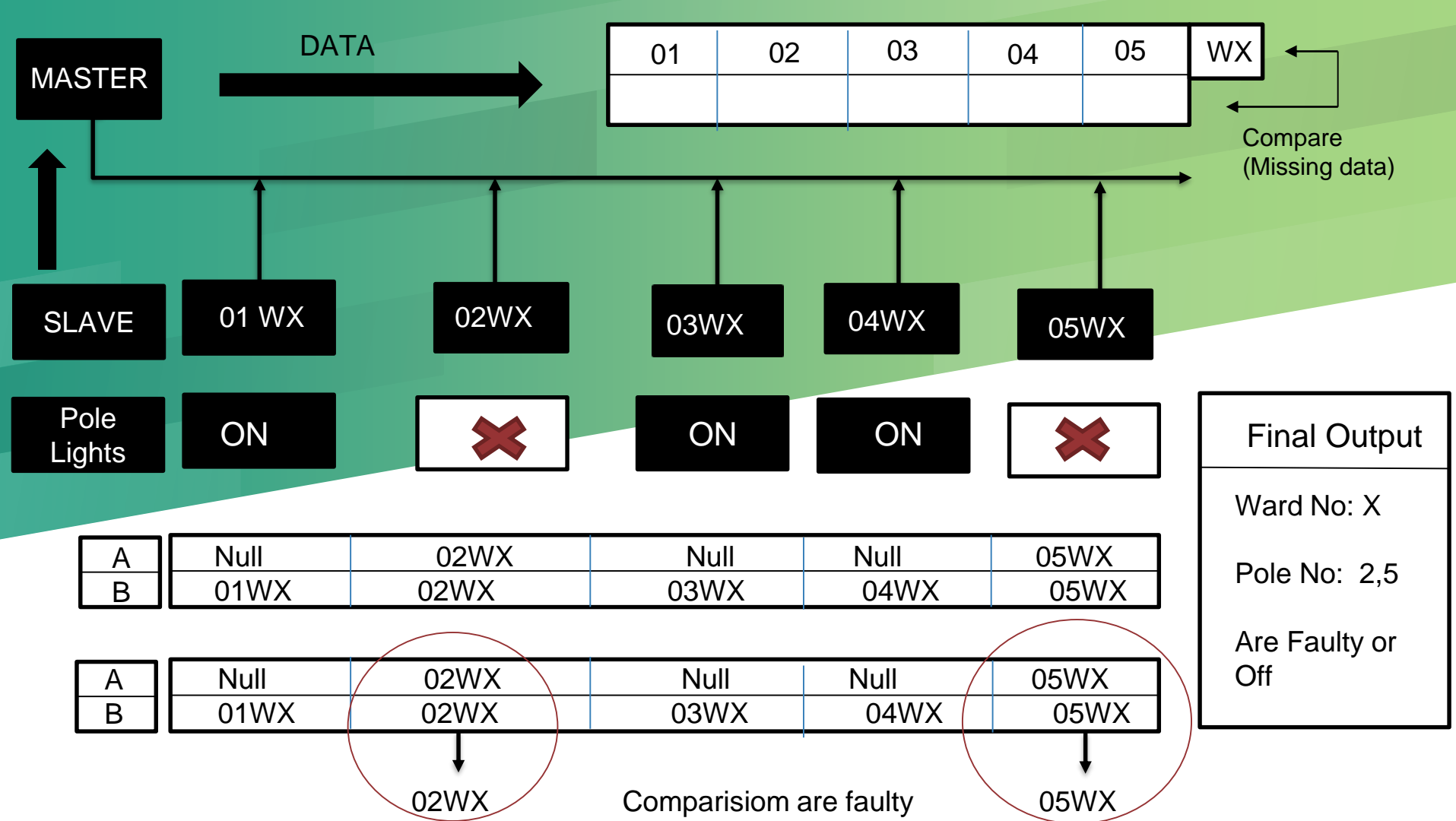
LDR

CONTROL
ROOM

AJAX-01

STREET LIGHTS





MAIN HIGHLIGHT

- AJAX-0N is Made in India
- Cost effective
- Highly accurate
- Flexible device
- Small in size
- Less Number of Component
- Real time Acknowledgement

