MODERN RESTAURANTS ATOMIZATION FOR WIRELESS MENU
DISH ORDERING USING TOUCH PANEL AND ZIGBEE

ABSTRACT

This project uses a resistive touch screen interfaced with a controller which decodes the coordinates and output serial data at 9600 bps. The data can be fed to the controller or PC for further process. This resistive touch screen can be used with a stylus or fingertip and is easy to use with a microcontroller. You can put it over a paper overlay for a touch control panel or attach it to an LCD to DIY a touch-activated display. We can control any device by pressing on the screen. It eliminates normal hard keys. Compared to hard keys, touch screens are more reliable.

ZIGBEE is a specification for a suite of high level communication protocols using small, low-power digital radios based on the IEEE 802.15.4-2003 standard for Low-Rate Wireless Personal Area Networks (LR-WPANs). ZIGBEE is targeted at radio-frequency (RF) applications that require a low data rate, long battery life, and secure networking. ZIGBEE protocols are intended for use in embedded applications requiring low data rates and low power consumption. ZIGBEEs current focus is to define a general-purpose, inexpensive, self-organizing mesh network that can be used for industrial control, embedded sensing, medical data collection, smoke and intruder warning, building automation, home automation, etc. The resulting network will use very small amounts of power.

This project uses regulated 5V, 500mA power supply. 7805 three terminal voltage regulator is used for voltage regulation. Bridge type full wave rectifier is used to rectify the ac output of secondary of 230/12V step down transformer.

APPLICATIONS:

- Industrial applications
- Control systems
BLOCK DIAGRAM:
TRANSMITTER SECTION:

<table>
<thead>
<tr>
<th>Power Supply</th>
<th>X_BEEE TRANSCIVER</th>
<th>Driver IC Max-232</th>
<th>TOUCH SCREEN</th>
</tr>
</thead>
</table>

RECEIVER SECTION:

<table>
<thead>
<tr>
<th>Power Supply</th>
<th>X_BEEE TRANSCIVER</th>
<th>Max232</th>
<th>Driver IC Max-232</th>
</tr>
</thead>
</table>

POWER SUPPLY BLOCK DIAGRAM:

Step down Transformer → Bridge Rectifier → Filter → Regulator → Output