

## **QBTLSK-P1200**

### **A) Circuit Description**

FM Pilot Transmitter uses DC12V/2.5A 60Hz as its DC Power Supply. If the power is input into the PCB, the voltage is separately input into U4 (78L05) and U5 (78L12).

U5 (78L12) supplies drive voltage to RF Tuner. U4 (78L05) supplies drive voltage to main PCB CPU and LCD Display. CPU drives address that is FM code division method. All data are stored in U1 (Pic 16c505) and are used according to AddressKey(1<sup>st</sup> - 1249<sup>th</sup>) . Code data are input into pin 14 of IC U1(Pic 16C74B) and go to Mixing circuit inside of IC and outputs 10uW of signal through output terminal of Pin17. This signal is input into RF/Tuner input terminal Q5(KRC114). Then it goes through 21.4MHz medium frequency filter and 26.9950MHz of Crystal oscillates.

Then 33dbm(2W) is output through TR output terminal. Then the signal finally is output through 27Mhz antenna.

### **B) System Programming:**

To enter programming mode, press the “SETUP” button and enter the password “3690” followed by “enter”. If the password is accepted, the display will show “use \* to scroll to menu options”.

*(Use the “\* / Menu” key to scroll through the different menu options or press “CANCEL” to exit the system programming menu.)*

#### **1. Setting the “Out of Range” (for coasters only) (Factory Default: OFF)**

*With this feature, the coasters will play a Beep- sound for 10minute when taken out of range of the transmitter to inform the guest that they are out of range and will miss their page. The Beep-sound will stop, when they return back within range.*

*Be sure that all coasters are returned before turning out of range on or off.*

**TURNING THE OUT OF RANGE ON**

- Remove all the coasters from the charging unit or unplug the power supply that is connected to the charging base
- At the “Out of Range” menu, press the “#/Select” key to turn the out of range ON.
- Press the “ENTER” key. After sending the signal, all the coasters will light up once to tell you that they received the new code.
- Press “CANCEL” key to exit the system programming menu.

To test the coasters with out of range on, unplug the power supply, that is connected to the transmitter. After 40 – 50 seconds, all the coasters will play a Beep-sound since they are not receiving a signal from the transmitter. Plug in the power supply back into the transmitter.

After a few seconds, all coasters will stop playing the Beep-sound. Return all the coasters to the charging base or plug the power supply. The coasters are ready to receive the page with the out of range feature turned on.

#### TURNING THE OUT OF RANGE OFF

- Remove all the coasters from the charging unit or unplug the power supply that is connected to the charging base
- At the “Out of Range” menu, press “#/Select” key to turn the out of range OFF.
- Press “ENTER” key. After sending the signal, all the coasters will light up once to tell you that they received the new code.
- Press “CANCEL” key to exit the system programming menu.

To test the coasters with out of range off, unplug the power supply, that is connected to the transmitter. After 45 - 50 seconds, all the coasters should not play the Beep-sound since the out of range were turned off. If all or some of the coasters are playing the Beep-sound, repeat the procedure above. If none of the coasters are playing the Beep-sound, return all the coasters to the charging base or plug the power supply. Plug the power supply of the transmitter. The coasters are ready to receive the page with the out of range feature turned off.

## 2. Set the Current Time

- At the “Set Current Time” menu, set the hour then press “ENTER” key.
- Set the minutes and press “ENTER” key.

- Use the “# /Select” key to select AM or PM.
- After the correct time is set, press the “ENTER” or “\* / Menu” key to return to the main menu or press the “CANCEL” key 2 times to exit the system programming menu.

### 3. Set Pager Alert (Factory Default: Vibration & Flash)

*With this feature you have the option of changing the way your coasters alert the guest.*

*Be sure that all coasters are returned before performing this procedure.*

To change the alert mode of your coasters follow these instructions:

- Remove all the coasters from the charging unit or unplug the power supply that is connected to the charging bases.
- At the “Set Pager Alert ” menu, press the “#/Select” key to scroll through the different alert options.
- After making a selection, press the “enter” key . After sending the code, the coasters will now respond with your new selection.
- Press “CANCEL” key to exit the system programming menu
- Return all the coasters to the charging base or plug the power supply. The coasters are ready to receive the page with the new alert.

*(3 type Option: Vibration & Flash / Vibration & Beep / Vibration only)*

### 4. Range Test (Factory Default : OFF)

*With this feature you can determine what distance your transmitter will cover.*

- Remove a couple of coasters from the charging stack.
- At the range test menu, press “#/Select” key to turn range test “ON”.
- Press “ENTER” to start the range test. As soon as range test is activated you’ll notice the coasters flash once every 3 seconds (if you use pagers they will vibrate). Walk around your property. When you reach the point where the coasters do not flash consistently, this is your maximum range.
- Press the “CANCEL” key to stop the range test. Press the “CANCEL” key again to exit the system programming menu.

## 5. program to pager

*Press Pager # to change the Number of Pager.*

- Connect the programmer to Hole-Pin of Coaster Pager.  
At the same time , Enter Pager # to modification, and then press the "ENTER" key,
- Verify OK sign: Beep sound & LED blinking.
- Press only Pager # to change the Number.

  

- Base ID & Group ID reserve a seat beforehand.(It is marked by numeral)

1. When a guest arrives, remove a coaster from the stack. It will alert for 10 seconds while you show them and explain what they will be looking for when they are paged. Write the coaster number next to the person's name on the wait list.

2. When their table becomes available, simply enter their coaster number into the transmitter and press "send".

### Example of Host/Guest Greeting

Host: Good evening Sir. Welcome to \_\_\_\_\_. How many are in your party tonight?

Guest: Hello, there will be 4 of us.

Host: Your name please.

Guest: Smith

Host: Thank you Mr. Smith, do you have a smoking preference?

Guest: Yes, non-smoking.

Host: OK Sir, that's the Smith party of 4 for a non-smoking table, correct?

Guest: Yes

Host: We currently have a 30 minute wait for a table. Here, please take one of our Coasters. (Remove a coaster from the stack... it signals... hand it to the guest.)

Host: Keep this coaster with you. It will flash / vibrate just like this when your table is ready. When it goes off, come back to the host stand and we will seat you. You may go to the bar if you'd like and use the coaster for your drink or you can sit out front on one of our benches. The coaster has a built in alarm that will "beep sound" if you have gone out of range and cannot be paged. If it starts to beep sound, simply walk

back towards the restaurant and it will stop singing when you get back into range.

Guest: WOW! This is great. What a neat idea! You guys really know how to take care of your guests.

Host: Thank you Mr. Smith, we'll see you in about 30 minutes.

#### GuestCall Troubleshooting

Charge light will not come on

- a. Make sure there is power to the outlet
- b. Try changing the position of the coasters on the stack. Make sure they are seated properly with the numbers facing front.
- c. Using a damp rag, clean metal contacts on coaster that will not light
- d. Check all connections on charger bases. If only one stack of coasters will not light on the charger,

There is probably a bad connection. Move wires and be sure they are all plugged into back of black coaster charger.

If you try all this and the coaster charging light will not come on you most likely have a blown power supply.

Transmitter will not display anything

- a. Make sure there is power to the outlet
- b. Check all connections.

If you try all this and the transmitter still wont power up your power supply may be bad.

If display is still blank, call NTN.

No range on coaster pagers

- a. Be sure transmitter is not near any large metal objects, fire walls, etc.
- b. Be sure antenna is connected properly and not broken.

Coasters are not paging or paging in a manner you did not program

Review Coaster modes and enter the code for the mode you would like. It probably has changed.

Coasters are not answering the page or acting strange

Make sure the Coaster has a full charge.