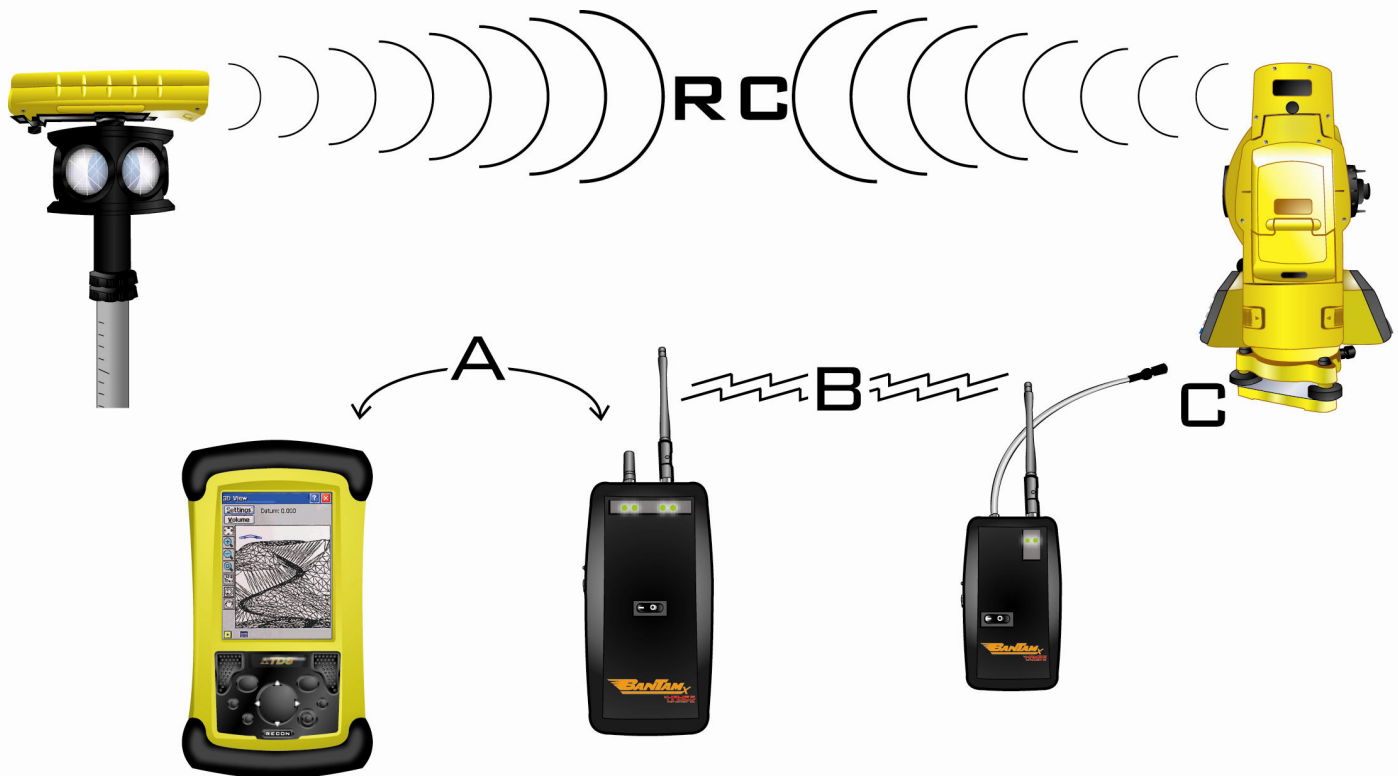


## The BanTamX Setup Guide for Recon

**Concepts**— This document outlines the setup instructions to connect the Recon to a Topcon Robot using the Hayes BanTamX Communication System. Many of these steps only need to be done during the initial setup or when the system configuration changes.

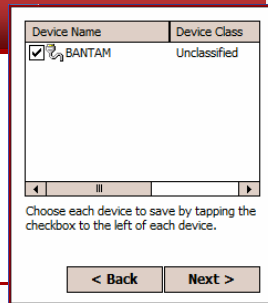
There are 4 communication links to setup in addition to the Robotic profile in Survey Pro: **(A)** Recon to Rover Radio, **(B)** Rover Radio to Instrument Radio, **(C)** Instrument Radio to Robotic, and **(D)** the RC2II setup used for Quicklock.



## Step 9

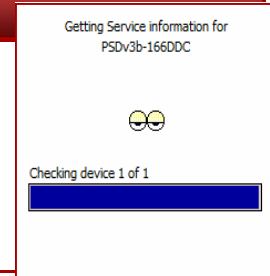
The BanTamX will appear in the device table.

Check the box and press **[Next]**.



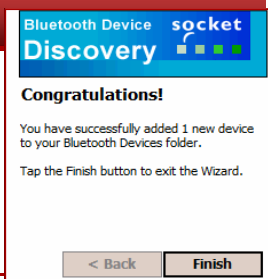
## Step 10

The recon will make the Connection partnership.



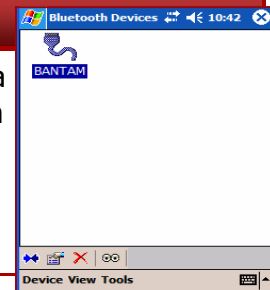
## Step 11

Press the **[Finish]** button.



## Step 12— Finished

The partnership will appear as a connection icon in the bluetooth manager. Press the (X) in the upper right corner.



## (B) BanTamX Rover Radio to BanTamX Instrument Radio Connection.

This connection is predefined and configured at Hayes Instrument Company so that the radio pair will only recognize each other.

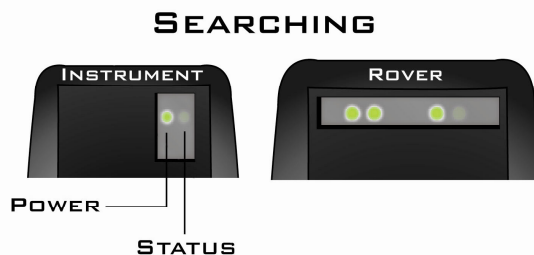
The connection is established automatically when both radios are powered on.

The status of the radio connection can be determined by the status of LED lights.



Status light will flash when searching.

Status light will stay solid when linked.



**(C)** Total Station Setup— The link to the BanTamX Instrument radio is setup onboard the Topcon 800X Robot.

Connect the BanTamX Bluetooth Radio to the total station via the 6-pin Hirose radio cable and turn the radio on.

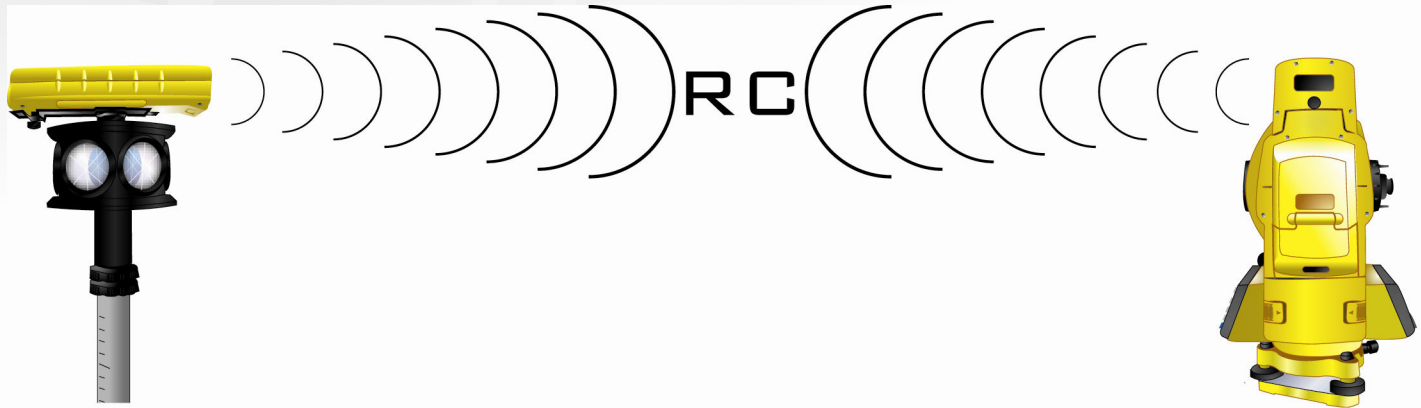
## 1. From the main total station menu:

- Select the Para Menu **[F6]**
- Select the Communication Menu **[F2]**
- Select Serial Port RS232C/RC **[F1]**
- Select **<RC>** using the **[F3/F4]** keys
- Press Set **[F1]** then YES **[F5]**
- Select Set RC **[F3]**
- Verify the following settings:
  - \* Channel **[1]**
  - \* V.Search **[15]**
  - \* RC **[S]**
  - \* Retry **[Std]**
  - \* Delimit **[ETX]**
  - \* REC-A/B **[B]**
  - \* NEZ-REC **[Std]**
  - \* TrkState **[ON]**
  - \* B.Rate **[4800]**
  - \* Data.L **[8]**
  - \* Parity **[None]**
  - \* Stop Bit **[1]**
- Press SET **[F1]** then YES **[F5]**
- Press **[ESC]** back to the main total station menu.



## 2. From the Main Total Station Menu:

- Press **Prog [F1]** then **MORE [F6]**
- Press **EXT.LINK [F3]**
- Press **2. Setting [F2]**
- Select **1. CABLE/RADIO MODEM/RC [F1]**
- Using the Up/Down **[F3/F4]** arrow keys, select **RADIO MODEM SATEL 3ASd.**
- Press SET **[F1]**
- At the Setting menu, Select **4.PARAMETER (RADIO MODEM) [F4]**
- Select **1.SELECT PARAMETERS [F1]**
- Using the Up/Down arrow keys, select **<REC-B>**. Press **SET [F1]**
- Press **[ESC]**
- Select **1. Execute [F1]**



**(RC) RC-2II— Quick Lock Setup**— The RC-2II can be used as a redundant communication mode (see RC-2II only setup guide) but when used with the BanTamX Hayes Communication System the RC-2II acts as a Quicklock assist to help the gun acquire lock to the prism.

### RC-2II

1. Open the battery chamber and remove the batteries. Locate the dip-switch block at the bottom of the battery chamber and verify that dip-switch 3 is to the right. The other switches should be set to the left.
2. Put in fresh batteries if unsure about their age (typical battery life is 40 hrs).

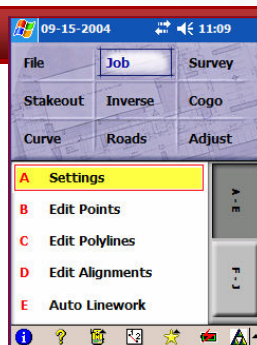


## Survey Pro Setup—

This process will set up a Robotics profile in Survey Pro and only needs to be done once. Run Survey Pro and open a job for work.

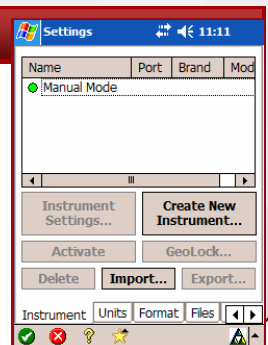
### Step 1—Start

From the main menu.  
Go to **[Job]** - **[Settings]**



### Step 2

Press  
**[Create New Instrument]**

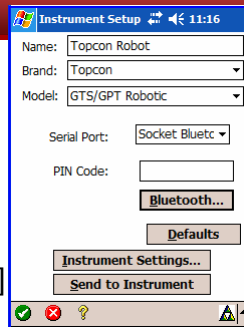


# Hayes BanTamX Setup Guide



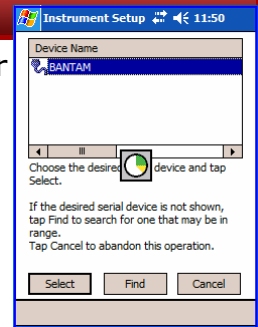
## Step 3

- Type a name for your profile.
- Set the Brand to **<Topcon>**
- Set the Model to **<GTS/GPT Robotic>**
- Set the Serial Port to **<Socket Bluetooth>**
- Press [**Instrument Settings**]



## Step 4

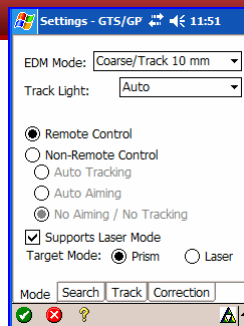
The windows bluetooth manager will popup. Select BANTAM and press [**Select**].



## Step 5

Check the  **Remote Control** option.  
Check the  **Supports laser mode** if your gun supports reflectorless technology.

Select the {**Search**} tab.

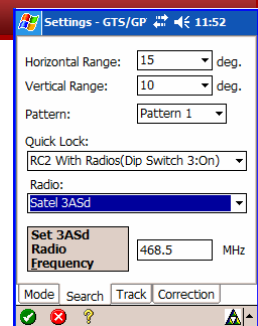


## Step 6

Set Quick Lock to **<RC2 with Radios (Dip Switch 3:On)>**.

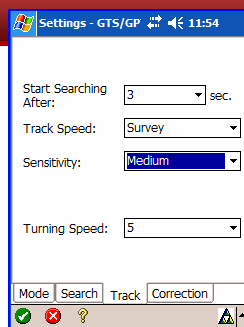
Set Radio to **<Satel 3ASd>**

Select the {**Track**} tab.



## Step 7

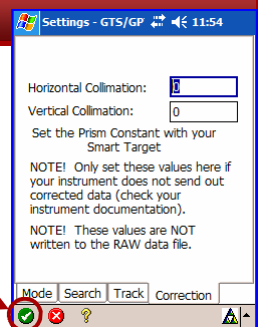
For GTS 800/802/815 models, set the Track Speed to **<Machine Control>**.  
For GTS 802/GPT 8000 series, set the Track Speed to **<Survey>**.  
Select the {**Correction**} tab.



## Step 8

Ensure the Horizontal and Vertical Collimation values are set to **0**.

Press the "Green Check" at the bottom of the dialog.

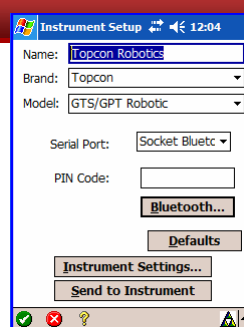


## Step 9

Press [**Send to Instrument**]

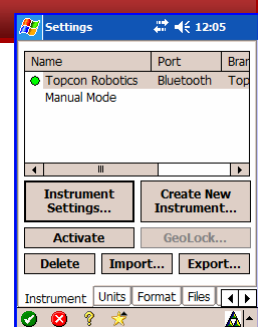
The recon should chime back with the "happy" sound.

Press the "Green Check" at the bottom of the dialog.



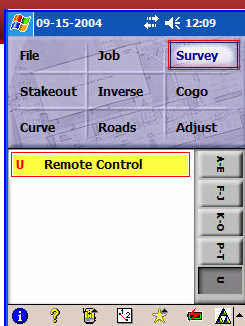
## Step 10

Exit the Settings dialog by pressing the "Green Check" at the bottom of the dialog to exit to the main Survey menu.



## Step 11

From the main Survey menu, select [**S**urvey] and [**R**emote Control]



## Step 12

Press the [**QLock**] button on the Recon followed by pressing the "yellow" lock button on the RC2 unit. The gun should turn and lock to the prism.

You are now ready to Survey.

