TOPCON

FC200-NJT-499
User's Manual

Ver1.1

November 16, 2006

TOPCON

FCC Notices

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

> **(1) This device may not cause harmful interference, and**
>
> **(2) This device must accept any interference received, including interference that may cause undesired operation.**

CAUTION: Change or modification not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

CAUTION: In order to comply with FCC radio-frequency radiation exposure guidelines for an uncontrolled exposure, this device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules.
These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his or her own expense.

NOTE: The device to which FC200-NJT-499 is installed must display "Contains TX FCC ID: H5P-FC200NJT499".

IC Notices

CAUSION: *Operation is subject to the following two conditions:*

> *(1) this device may not cause interference, and*
>
> *(2) this device must accept any interference, including interference that may cause undesired operation of the device.*

CAUTION: The installer of this radio equipment must ensure that the antenna is located or pointed such that it does not emit RF field in excess of Health Canada limits for the general population; consult Safety Code 6, obtainable from Health Canada's website www.hc-sc.gc.ca/rpb

(1)   *Product Overview*

The FC200-NJT-499 is designed to provide wireless communication ability for the TOPCON's "FC" Field Controller families to communicate with other wireless LAN devices using the IEEE802.11b/11g MAC/Baseband Processing. It can be easily attached to "FC" Field Controller and easy to operate through the User Interface of "FC"

(2)   *Features*

Wireless Features

The FC200-NJT-499 is a compact wireless LAN communication module designed for TOPCON's "FC" Field Controller families

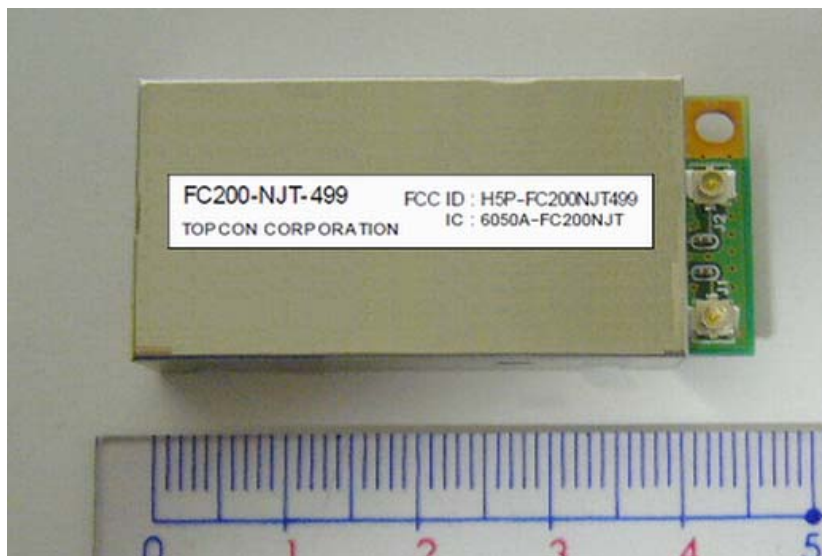|	
Tx and Rx Operation Frequency:	2412-2462 MHz
Modulation Method:	Direct Sequence Spectrum Spread (DSSS) and OFDM
Number of Channels:	11
Channel Intervals:	5 MHz
Bit rate:	1 Mbps (DBPSK/DSSS), 2 Mbps (DQPSK/DSSS), 5.5 Mbps (CCK/DSSS), 11 Mbps (CCK), 54Mbps (64-QAM/OFDM)

Physical Attributes

Size: 18mm (L) x 476mm (W) x 12mm (D)

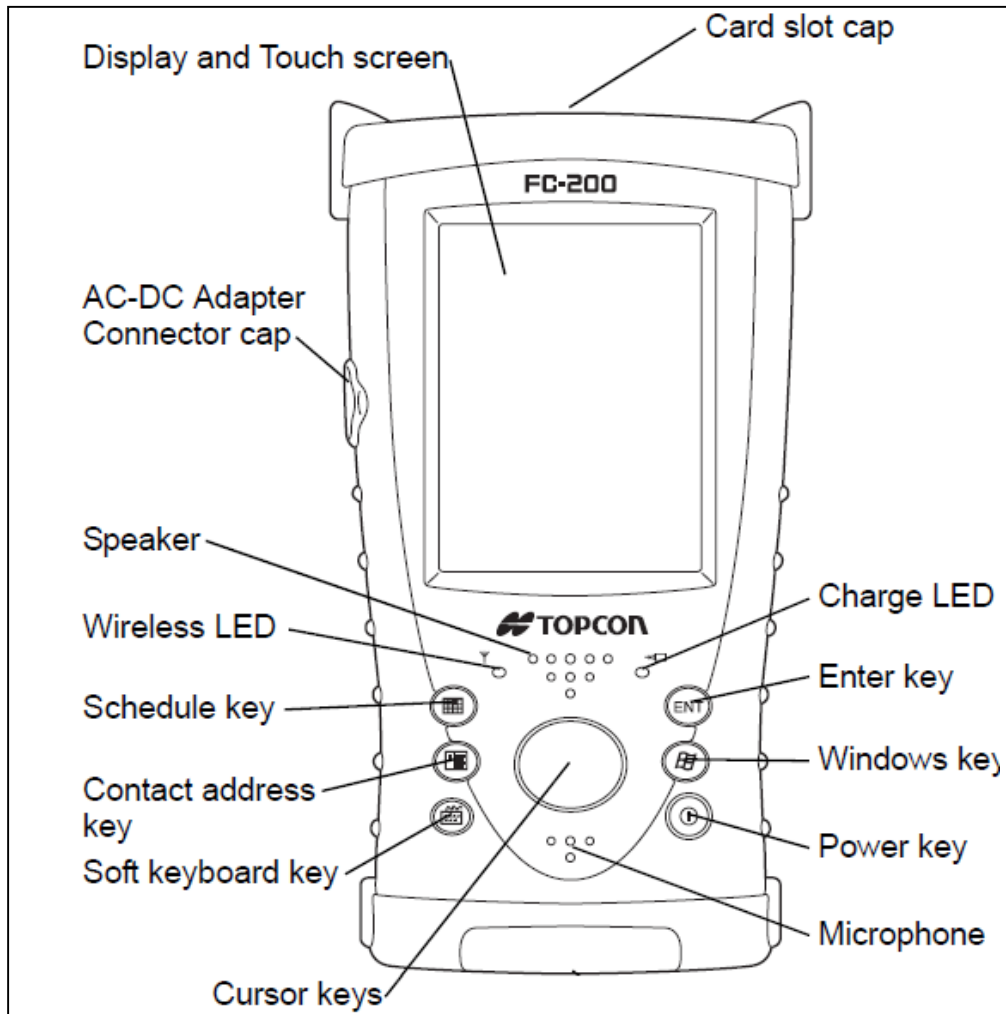Weight: 0.08 Kg

Operating Temperature: -20 deg. C to +50 deg. C

Power Requirements: 0.8 W @ +5.0 VDC from "FC" Field Controller

(3) *Operation*

To Equip the FC200-NJT-499 with "FC" Field Controller

This device is already equipped by TOPCON before shipping. The example of an equipped Field Controller "FC-200" is shown below.

Setting up FC200-NJT-499

The FC-200 has a wireless data communication function in the case FC200-NJT-499 is attached inside. Information can be exchanged between another instruments equipped with the wreless LAN function using IEEE802.11b/11g wireless technology. The FC200-NJT-499 is running on the operation system of FC-200, Windows Mobile 5.0 Pocket PC by Microsoft

Wireless LAN ON/OFF

Follow the procedure below to turn on the wireless LAN function.

(1) Tap **Start** > **Setting**s > **Connections** tab.

(2) On the [Wireless Manager] display, tap on the **[Wireless LAN]** icon.

(3) Select or clear the **Turn on and off Wireless LAN** check box

(4) When the Wireless LAN function is turned ON, the wireless LED will flash in green
color.

Set up a wireless LAN link

Ensure that the two devices are turned on, discoverable, and within close range.

(1) Tap **Start** > **Settings** > **Connections tab.**

(2) Tap **Wireless LAN** > **Devices tab** > **Search**. Your device searches for other
devices with Wireless LAN capabilities or access points, and displays them in the list.

(3) Tap the name or ESS ID of the access points or other device, and tap **Next**.

(4) If an encryption code would be requested you could put it to the encryption code
box in the display. Then tap **Next**

(5) Tap **Finish**

Make a device discoverable

Other devices with wireless LAN capabilities can detect your device and attempt to
beam information to it, establish a partnership, or use a wireless LAN service.

(1) Tap **Start** > **Settings** > **Connections tab**.

(2) Tap **Wireless LAN**

(3) Select the **Turn on Wireless LAN** check box, and then select the **Make this
device discoverable to other devices** check box

Other Wireless LAN-enabled devices can now detect your Field Controller and attempt
to establish a Wireless LAN link, or use a wireless LAN service.

*For more "How to and/or Help" on Wireless LAN, see the User's Manual of your
Field Controller;*

(4) Hints & Tips

(1) The FC200-NJT-499 may not work well where Microwave ovens and /or other
2.4GHz ISM devices like Bluetooth are working. Keep other wireless devices
away from FC200-NJT-499.

(2) If you no longer want your device to be discoverable, clear the "Make this device
discoverable to other devices" check box.

(3) For your safety operation, read carefully the user's manual of "FC" Field
Controller families, that you want to equip with, before equipping together with
this manual.

(4) The FC200-NJT-499 unit complies with Part 15 of the FCC Rules and RSS-210.
Read carefully the FCC notice and/or IC notice at beginning page of this manual
for legal and secure operation.

(5) Specification

Operation Voltage	2.97V to 3.63VDC	
Power Consumption	1.2W(Typical)	
Operation Temperature	-20 deg. C to +50 deg. C	
Size / weight	18mm (L) x 47mm (W) x 12mm (H) / 0.008 Kg	
Wireless LAN	Standard	IEEE802.11b/11g
	Output Class	80mW (Typical)
	Coverage	100m(Max)
	Type approval	FCC IC CE TELEC

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