

CNC FILER For Android

A DataBase administrator for Part Program filing.

V. 1.0

www.logicdata.it

APP's philosophy

This APP creates a way to store and retrieve Part Programs (from now on PP), from it's archive using informations stored in a DB.

In this DB, every PP has his own record(row) and a PP cannot be stored without opening a new record in DB. This is to allow single PP documentation.

In every record you can store the information you need to search for the PP. They are useful to document the PP as well.

The APP state can be: No PP active or PP active. In the first state only search for PP or create a NEW PP can be done. When a PP is active you can edit (and write from scratch as well), receive and transmit from CNC. **Only our "bluetooth to RS232" adapter** is supported at this time for this use, it can be bought on our web site. See http://www.logicdata.it

PP DB structure.

The record contains:

- **Customer name**: 1st level information(for contractors companies this can be customer's name). This is the coarse table to get a simple classification of the PP's.
- **Design** #(the number of the project).
- A PP Description, just to get an immediate idea about what can be done with the PP.
- **Tool ID** gives a way to bound the PP to a particular Tool.
- **Memo pad** is a free style blackboard were you can write whatever information you need to execute PP also after years. Our customers use this data to memorise correctors.

How to install this APP

A minimum of 1MB RAM, 8GB memory and Android 4+. A free disk space of 5MB is required for the APP alone. DB and PP text. If you need more archive space install a SD card.

After APP download from Google Play©, start it in a Internet served zone.

An "EULA" contract is shown, read it and approve by checking a checkbox under the text. Press Go on. Pressing Cancel you will stop registration process and you will not be able to use the APP. A panel is show to enter customer data. Complete with a valid email. The panel could be larger than screen, so you can move around to show the whole content. If you confirm, an Email is sent to the address entered in panel. Exit APP. Look for email in your favourite program. Click on "link" blue word in email. After a few seconds you will get confirmation of the action. If something is wrong pls write to info@logicdata.it .

In case you get no email, you have two chances:

- 1. You have failed to enter the correct address. In this case uninstall APP and install again.
- 2. You have some issue in your email server. After some time ask from main menu another mail. (Reg. Mail). After registration this menu item will disappear.

Launch the APP again, connected to the internet, the APP is now usable everywhere. In case you need to change some customer data, pls. open the left side menu(fig. 2) and click on Account to modify any information.

If email address is modified, the APP is blocked again till the new email sent is confirmed.

In case of program unistallation, every information, like DB and PP text, is lost.

KNOW ISSUE!

On some Android device(mostly 4.4+), the external SD is not recognised from normal state APP's and we cannot create the needed file structure directly. In this case (and in case no SD is mounted) you will see this message:

Seems there is no SD mounted.
In case there is one, I'm unable to detect it.
If you want to use SD, press CANCEL button and create a folder name:
/Android/data/it.logicdata.cncfiler in the SD, using a Android utility, like FileManager.
In case you want to use Internal memory, simply press GO ON INIT

Follow instruction or you won't be able to work with SD. After creation of folder restart APP and you will be able to use SD, if you want.

HOW TO...

Create a new PP card

Click on the simbol left top. If pressed for mistake press it again to close.

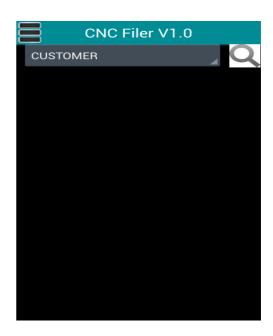
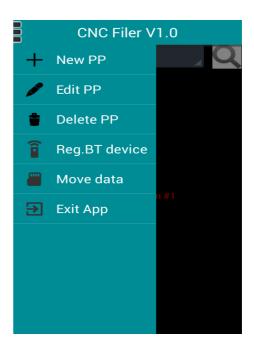


Fig. 1

A menu will popup on screen left. Touch New PP.

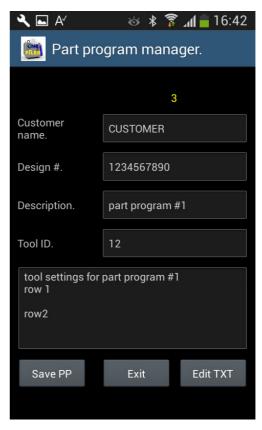
Fig. 2



A screen like this will popup. Enter the needed data

The press Save PP. This will create the new PP. The APP will go back to the starting screen. The added PP is now editable.

Fig.3



Edit a stored PP

From this screen choose the first level data. To open the list click on the triangle. Click on the name you need, from the list that will appear clicking on the bar. If you click on the small magnifier a right, a new screen will open, which allows to chose more complex searches. See Page 11 for more details.



Fig. 4

This will open a list of PP's related to the selected customer. Browse the list till you find the needed PP. The PP are ordered by Design #.

Click on the row you must select.

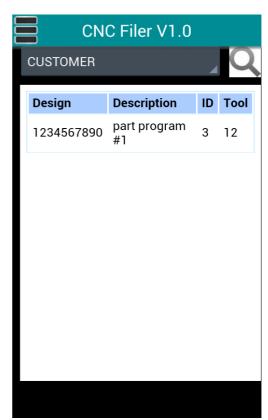


Fig. 5

Click on the simbol top left. This will open a menu.

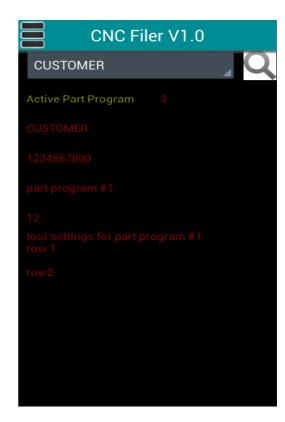
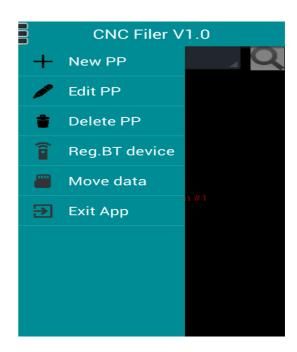


Fig. 6

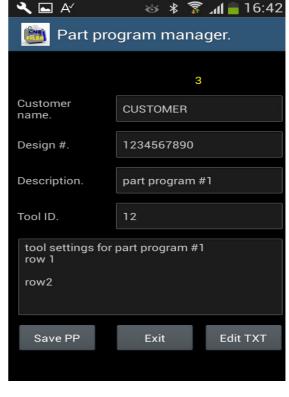
Click on Edit PP. This will open the Edit mask.





In this panel you can change the identities of the PP (remember to click Save PP, if you want to change permanently). The number in yellow top of Customer name is progressive PP number. This will be useful in future program version to directly access it. Press Edit TXT, to edit PP text in another panel.

Fig. 8



This is Editor's page. You can edit the PP by end or press Send/Recv to activate the Terminal panel.

In the Terminal panel you can send and receive the PP from the CNC. To do that you must buy at least a Bluetooth / RS232 converter on our web site. Only our converters can run on CNC FILER Remote.

Fig.9

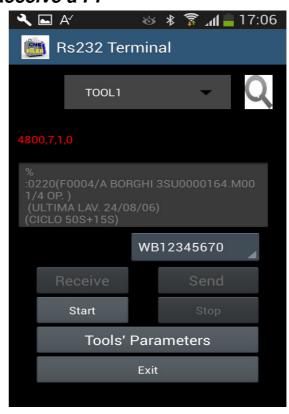


Send and Receive a PP

The first time you use the BT/RS232 converter you must activate it. On Internet active activate menu(Fig. 1) and then click on Reg. BT device. This will start a process. I everything is OK and the device is recognised by the system the interface is ready to work.

The first time you need to create a CNC tool profile. Press Tools' Parameters. This will allow to create a new profile or edit it.



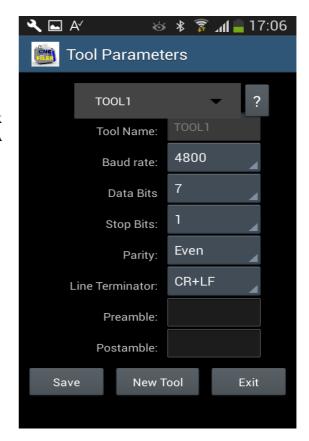


If you need to create a new CNC profile, select New Tool. Write tool's name, then you'll be able to edit using this Tool Parameters panel.

Only Baud rate >= 1200 are allowed. Preamble and postamble can contain a Hex string to be sent before and after PP text. A few CNC need this feature, but this allows to complete file transfer in such cases. For example use 0C0A for CRLF.

ONLY XON/XOFF protocol is allowed a present. Future versions may allow hardware protocols.

Fig. 11



To activate the interface choose from drop down box the correct Tool(use magnifier to select).

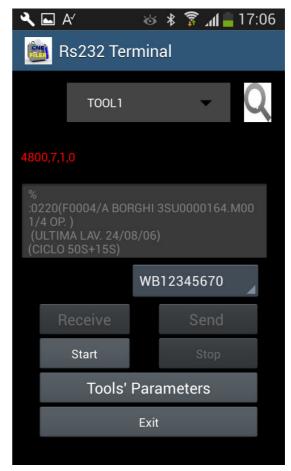
There is also a list of all enabled interfaces, chose the right interface if you have many. Start is now enabled. Press it to program converter. After a short time, an advice will tell you if the initialisation is correct or not. If not repeat it.

Stop, Receive and Send are now enabled. Press the correct action but remember:

- Before Send, CNC must be put in receive mode. (Never switch before initialise termination, or you could get spurious characters on CNC)
- ❖ Before Receive: Press the button and **after** start transmitting from CNC. After the count running on the screen stops, press the button STOP to terminate receive and reset communication.

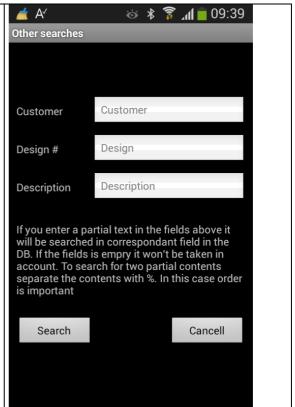
After transmission or reception you can go back to edit screen with button Exit.

The APP asks if the received text must be saved. Respond Yes or NO according to your need. If an old PP exists it will be overwritten by the new one in case YES, it will be untouched in case of no and the received PP will be lost.



Complex Search

This screen allows to initiate a complex search. You can fill the fields of your interest and don't fill the others, so unused ones won't be taken in account. Some hint: To search for Customer "Meccanica ltd" you can put "canica" in field customer. This allows to find whatever entry with "canica" everywhere in name. If you want to search for two or more partial contents: "me%ica%td" this will match whatever content can be represented by the percent signs(from 0 to n characters). For example the last entry will match "metallica ptd" as well. If you enter two or three fields every condition must be verified to display the entry in the list. Customer is not case sensitive. The Design and Description are case sensitive. Using 'A' or 'a' gets different results.



Logic Data Bluetooth/RS232 adapter

Packing Contents:

BT/RS-232 adapter x 1
Battery power line and connector x 1
USB Cable x 1
External Dipole Antenna x 1



2. Before using the adapter

- 2.1 Fasten the external antenna, if present to the adapter before performing Quick Guide 3.1
- 2.2 Power input (Please chose one): Mini USB cable (Default) or DB9 connector Pin 9 (VCC, 5VDC,
- 1.5A Max.) or external battery (3~3.7 VDC Li-Polymer Battery or 3 units standard A, AA or AAA

battery)

2.3 Most built-in Bluetooth is in class 2, the 10 meters range, for PC or NB. You will need use the class 1 adapters on both sides if you need to reach over 100 meters range. Class 1 is rarely present on Android devices.

3. Quick Guide

- 3.1 Using the USB cable provided in the package, plug the mini USB connector into the Bluetooth RS-232 adapter then connect it to the power adapter with USB or PC
- 3.2 Turn on the power from the slide switch. The red LED power is on. Blue light will blink.

If connected to the Tablet/Smartphone the blue blinking LED will became steady.

For CNC Filer you need to switch S/M switch to S and "N/G G" to N/G. We set them during tests, but check again them before use.

Our optional Cables are built for DCE(F) configuration(see the side switch on left right).

Pin 9 of the adapter's DB9 is normally connected to pin 25 of the DB25, so it can be directly powered by CNC(use DB9-Pin9 on right switch).

If no V.+5 is present on DB25, you can power via USB(the connector at right) using a Power Bank, like a cellular phone. In this case you can easily recharge it and use two Power Banks, one under charge and one in use.

You can use a power pack of any kind as well, connected by the included cable. It must give at last 4V.



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