The Call ID (and Prop ID) easy with Multipsk (4.16)   F6CTE (Patrick Lindecker) the 26th of Nov. 2009

Introduction and main use
This document explains how to use the Call ID, the Prop ID or the Message ID.
This "Call ID" ("Call" for "Call sign") identifier can be, automatically, detected and located. It can be :
- any Call sign (formatted or free),
- Call sign 6 characters + Locator 6 characters ,
- a « Prop ID » : Call sign 6 characters + Locator 4 characters « + » + power level, antenna type and directivity,
- a Message ID : message of 9 characters maximum.

The Call ID is always detected at -13 dB (first decodings at -18 dB), so with a sensitivity better than the PSK31 one. The central frequency of the identifier (which is also the central frequency of the transmission), is determined with a precision of +/- 2.7 Hz. As soon as this identifier (without any error) is received, Multipsk:
- either display the formatted call sign (possibly preceded by "CQ " and followed by "Emergency!" (and a short ring))
  or display the free call sign,
  or display the call sign (possibly preceded by "CQ ") and the Locator 6 characters on the waterfall,
  or display the call sign (possibly preceded by "CQ "), the Locator 4 characters « + », the power level (in Watts), antenna type or gain and directivity of the antenna (see last page of this document),
- display the time of reception, the same pieces of information as above and the Signal to Noise ratio in the Call ID window,
- switch on the received frequency (optional),
- display the position of the Locator on a map (optional).

This identifier is transmitted in 3.3 sec and has a bandwidth of 172 Hz. It is composed of a RS ID (code 153) followed by a sequence of 56 bits of data and 24 bits of CRC.

Notes about the help in Multipsk:
- To bring up the text help (contextual one), click on the right button of the mouse, with the focus over a button, « RX Call ID », for example).
- Also use the button hints (wait a fraction of second over a button).
Further are several snapshots which explain how to use the Call ID (main functions).
Refer to the help for more advanced options (beacon, CALL_ID.TXT storage file...).

Preparation of the Call ID

RX/TX screen Patrick LINDECKER (F6CTE) 4, avenue du Square BURES-SUR-YVETTE 91440 FRANCE

Configuration Adjustments Tools Panoramic Help

TCP/IP Multidem Transceiver Country/Loc World QSO Mail Tune Beacon ID CPU Level: 0 % BPSK31 63 125 250 FEC31 PSK10 MT63

Where? Number? Search Click on "ID" to get Where?
Call Name Freq Mhz the ID configuration Locator QTH
window

Call ID RS ID Video ID QRGs RX RS ID RX Call ID Panoramic 0 bau
TX: BPSK31 MODE RX: BPSK31 Auto mode

TX frequency RX frequency Fr. difference Squelch
1000.2 Hz 1000.2 Hz 0.0 Hz On 10

200 500 1000

Management of the identifiers (ID): 1) RS ID (mode) 2) Call ID

My personal data

| <MY CALL> | <MY NAME> | <MY QTH> | <MY LOCATOR> |
| F6CTE | Patrick | Bures-sur-Yvette | JN18CQ |

| <WEB ADDRESS> | <WEB SITE> | <RIG> |
| f6cte@free.fr | http://f6cte.free. | TS440S, 30 watts output |

| <ANTENNA> | <COMPUTER> | <SOFTWARE> |
| Broad-Band antenna | Pentium 2200 MHz | Multipsk |

| <NOTE1> | <NOTE 2> | <NOTE 3> | <NOTE 4> |
| | | note 3 | note 4 |

Cancel Save Help

RS ID (mode and frequency automatic detection) and Call ID (Call sign/Locator detection)

Search bandwidth
○ 500 Hz
○ 1000 Hz
● The whole band

Detection mode
○ On demand
● Continuous

Ring on detection
● No ring
○ Duration of 0.2 sec
○ Duration of 2 sec

Help on RS ID Standard pa. Quit

UTC time Mode Hz

RX time + callsign + mode

Options and commands specific to Call ID

Commands (TX)
● Transmission of your formatted call sign ☐ Emergency
● Transmission of your call sign, in a free way: ABCDEFGHIJ
○ Transmission of your call sign (6 characters max) + Locator (6)
○ Prop ID: callsign+Locator(4+) 50 W Dipole NE
☐ Beacon 60 s ◄ ► ☑ CQ
F6CTE Check Personal

UTC time Call(+Locator) dB Hz

Options relative to Call ID (area delimited by the black line)

Click on "Personal" and fill the <MY CALL> and <MY LOCATOR> fields which are considered by the Call ID

Options (RX)
☑ Switch of the frequency on Call ID See the hidden map
☑ Automatic positioning of the call on map if Locator received
☐ Call ID ---> CALL ID.TXT ☐ QSO fields ☐ --> Spot

Help on Call ID Paramètres standard

Video identifier (text transmitted in CMT-HELL which appears in the waterfall)

Font
● Hell 80 double (standard)
○ FELD Hell double, normal
○ Hell 80 double, bold

Orientation and options
● Horizontal
○ Vertical (2 characters / line)
○ Vertical (1 character / line)
☑ Vertical, up towards down display

Information to be sent (20 char. max) - "Personal" button
Mode	User call	Locator
Note 3	User name	QTH
Note 4	Personal	

Help on the video ID Standard parameters Quit

Snapshot Print Fonts Clear Ø Double Auto TX Height 33 TX STOP RX 18/12/08 21:40:52 UTC SpotC. Off Commander

Démarrer C:\RXTXMULTIPSK... Microsoft Word C:\RXTXMULTIPSK... RX/TX screen ... Management of th... My personal data Liens 22:40

Buttons to push to start automatic decoding or to transmit a Call ID

RX/TX screen Patrick LINDECKER (F6CTE) 4, avenue du

Configuration Adjustments Tools Pano To

To send a Call ID, click on unt decode QSO
the "Call ID" button, which Call IDs,
text becomes red for the push this uested Whe
3.3 sec of transmission. button R S Loca
31

| Call ID | RS ID | Video ID | QRGs | RX RS ID | RX Call ID | Panoramic |

TX: BPSK31   MODE   RX: BPSK31   Auto mod

To maintain this button pushed,
select "Continuous" in the options.

Reception of a Call ID (call sign + Locator) on the RX/TX screen

ce Squelch   IMD=
           0   F Reset n="
              1000

X=631 Y=0   Lat=69^02.00' N Long=027^02.00' E S. X=2684 km   E. Y=4215 km

3.3 sec Call ID

CQ F6CTE-JN18CQ

| CALL | NORMAN | 3 NORMANDI |
| Repeat UTC | NORMANDIE | Louise |

The group "call sign + the Locator" is automatically detected, tuned and displayed on the waterfall

Automatic positioning of the call sign on the map, according to the Locator

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Log book of the Call Ids

Logbook of the Call ID detections (UTC time, call sign+Locator, Signal-to-Noise ratio (dB), AF frequency)

Preparation of the Prop ID

┌─Commands (TX)───┐
│ ○ Transmission of your formatted call sign   ☐ Emergency │
│ ○ Transmission of your call sign, in a free way (10 char. max) │
│ ○ Transmission of your call sign (6 characters max) + Locator (6) │
│ ● Prop ID: callsign+Locator(4+) 50 W ⇅ Dipole ⇅ NE ⇅ │
│ ☑ Beacon   60 s ◄ ►   ☐ CQ │
│   F6CTE-JN18 50 W Dipole NE   [Check] [Personal] │
└───┘

Preparation of the scanning on 4 frequencies

| m Transceiver | Country/Loc | World | QSO | Mail | Tune | Beacon | ID |

mander (or HRD) software   _ ▢ ✕

h Commander (or HRD)   22/04/09 23:07:36 UTC

+1	+10	+100	+1 KHz	+10 KHz	+100 KHz	+1 MHz	+10 MHz	+ Band
-1	-10	-100	-1 KHz	-10 KHz	-100 KHz	-1 MHz	-10 MHz	- Band
+5 KHz	+12.5 KHz	+25 KHz	CW	USB	FM	RTTY	AM
-5 KHz	-12.5 KHz	-25 KHz	CW-R	LSB	WBFM	RTTY-R	PKT

┌─Management of the four available memories ("M1" to "M4")─────┐
│ M1: [Store] 14 075,000 KHz USB [Forward]   **TX** │
│ M2: [Store] 10 148,000 KHz USB [Forward] │
│ M3: [Store]   7 037,000 KHz USB [Forward]   **RX** │
│ M4: [Store]   3 587,000 KHz USB [Forward] │
└───┘
| **M1 to M4 RX scanning** | Monitoring time on a channel: 60 s ◄ ► |

Attention to the relays which should click. If so, try: ☑ "Split" mode

M1 to M4 memories scanning, monitoring a determined time on each channel

Reception of the Prop ID

1000   1500

F6CTE-JN18GM 50 W Dipole NE

2) Call ID 3) Video ID (mode)   _ ▢ ✕

on) and Call ID (Call sign/Locator detection)

| UTC time | Mode | Hz |

UTC time	Call (+Locator)	dB	Hz
23:49:51	F6CTE-JN18GM	+ 8	1000 Hz
	50 W Dipole NE 3.587 MHz		

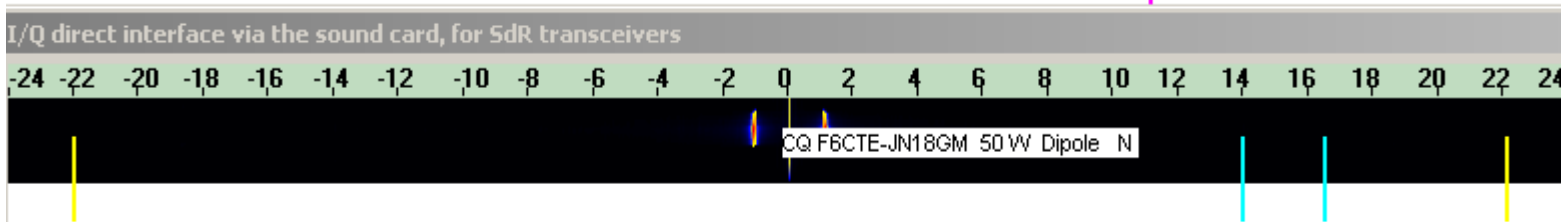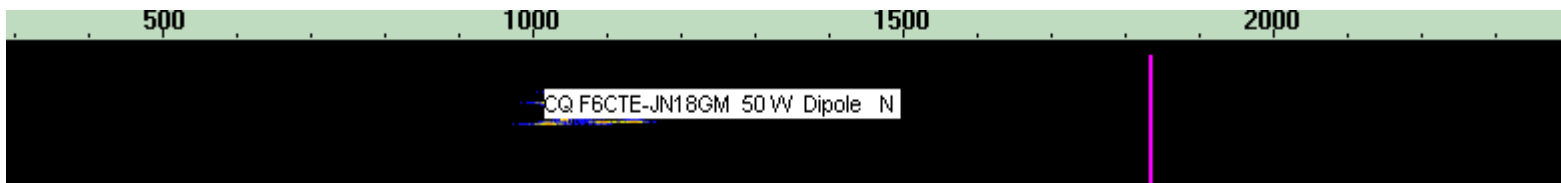**Positioning of the call sign from the 4 characters Locator**

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Call ID and SdR reception

From the Multipsk SdR window ("Direct via the sound card" button), it is proposed to detect any RS ID, Call ID (or Prop ID) on a 44 KHz bandwidth (between the yellow vertical dashes) and to display the RS ID or the Call ID in the SdR spectrum.

For example, with a SdR receiver tuned to a central frequency of 14.091 MHz, it will be possible to detect any Call ID on all the 14 MHz digital band, i.e. from 14.070 to 14.112 MHz.

```
UTC time   Call(+Locator)      dB       Hz
20:55:45 CQ F6CTE-JN18GM     +11   1000 Hz
         50 W   Dipole    N
20:55:45 CQ F6CTE-JN18GM     + 9    14.0921 M
         50 W   Dipole    N
```

Message ID
It is possible to send a message of 9 characters maximum in background. It is not related to any specific mode. Message IDs are not considered as true Call ID and are not stored.

The main use is simply to send a short message in case in difficulty during a QSO ("PSE PSK10", for example, to ask "To switch to PSK10" or "QRM +1K" for "There is QRM, I increase the dial frequency by 1 KHz" or "STIL HERE" to say that "I'm still here, even if communication seems impossible".

It will be efficient to use Q code and Ham abbreviations and to use punctuations to limit the number of characters:
- "?" question (a confirmation is required),
- "!" a strong demand is done by the Ham with who you are in QSO (an action is required),
- ">" or "-" for "to increase the frequency",
- "<" or "-" for "to increase the frequency",
- "=" at the beginning without following space for "PSE " or "Please "
- "+" at the end of the message for "I wait for an answer"
and why not net general smileys as ":-)" for "Smile"