

CAN Context Filter

2x CAN HS 500kB

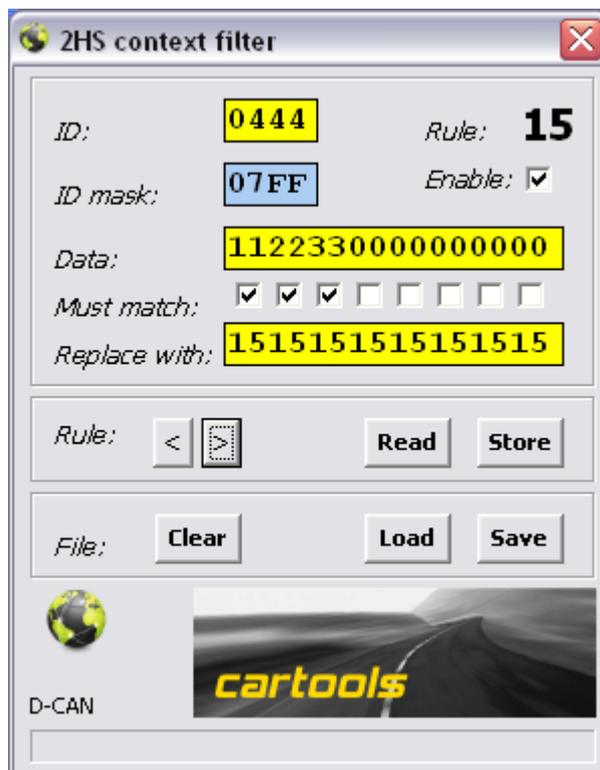
For message data filtering & modify

Highlights:

For configuring must use D-CAN USB adapter from www.cartools.su connected to CAN HS1, jumper 1 must be shorted.

It is possible to apply 16 different context filter rules. Reason of filter rule is to find and replace message data (not ID!) transmitted from CAN HS2 to CAN HS1.

Supported CAN bus speed: 500kb, standard ID's supported (11 bit). Extended ID's are not supported.



How to configure rule:

Enable:

Allows or disables rule.

ID, ID mask:

Mask allows to detect ID's by range. By default mask is **7FF** what means all ID bits must match. In this case filter rule applies only to one defined ID. If mask is **7F0** for example and ID is set to **456** filter rule will apply to all ID's starting from **450** up to **45F**.

If ID match criteria, data is checked:

Data: data for compare

Must match: defines which bytes must match to apply filter

Replace with: data for substitution, only bytes marked by “must match” will be replaced.

Example:

data:	00 22 34 56 78 99 00 00
must match:	x o x x x o o x
replace with:	11 22 33 44 55 66 77 88

Message from CAN HS2: 00 66 34 56 78 29 45 00

Message match criteria, that's why some bytes will be replaced before transmitting it to CAN HS1:

11 66 33 44 55 29 45 88

If message doesn't match criteria, it is retransmitted from HS2 to HS1 unchanged.
Direction HS1 to HS2 no any rules apply, filter is transparent.

Useful:

- Don't forget about line terminators, sometimes they are necessary. Must place solder joint on board to activate them.
- FlashROM is guaranteed to be operating only for about 1000 rewrites. By pressing button “Store” part of it is rewritten.
- If red LED goes on (it means buffer overflow) must check CAN wiring and terminators.
- It is highly recommended to remove LED's from board after installation (just to avoid overheating).

