



MT(PRE)/MK Database Printing

Firmware versions (minimum):

- MT(PRE)/MK v1.83

Description:

The system is able to print from a database. The user links contents to database fields. After each print the next database entry is loaded and fields copied to linked contents.

- The database is loaded from USB stick or via Ethernet (saved to internal memory). When loaded the database current entry pointer is reset. The database current entry pointer is stored in system and remembered between boots. It is possible to change/reset current entry pointer via Ethernet.

Requirements:

- The database must be a textfile like the excel "csv" (semicolon separated text file). With one line per database entry and fields separated with an ASCII char (default semicolon, but settable in system) and newline chars (ASCII CR+LF) after each entry.
- Database filename must be "database.csv".
- The database must be loaded before print start (via USB or Ethernet). When loaded the database is stored in internal memory, and USB/Ethernet is not needed before database is empty (or a new database is needed).
- Max 5 fields per database entry. Max $(2^{32})-1$ database entries.
- Database fields can only be linked de static contents.

Setup:

Static text object edit menu or Static content edit menu:

- Database content: On/Off (when On content name is automatically set to "dbobjN" N equals field).
- Database field: 1..5 (links content to a database field, if field is not present in database nothing is printed).
- Database separator: ASCII char (default ';'. This is a global setting affecting all database linked contents).

Monitoring:

Database info (level in %, remaining entries, etc.) is added to print menu in the Print display menu

For user print menu=On:

- **Prints left:** Number of entries remaining in database (when database loaded and active).
- **Time left:** Calculated time left based on number of remaining entries in database (when database loaded and active).
- **Database level:** Database level in % (when database loaded and active else "N/A").

For user print menu=Off (or MK):

- **Prints left:** Displayed when database is loaded and active.

Info messages:

- **"Reading Database"+%-progress:** Displayed in lower right corner when copying database from USB to internal memory.
- **"Initializing Database"+%-progress:** Displayed in lower right corner when initializing database (after a new database has been copied).
- **"Preparing Database"+%-progress:** Displayed in lower right corner when print is started and database is active.

Error messages:

- **"Database not found":** Displayed when print started and job has database contents and no database is found in memory (Print start is aborted).
- **"Database Empty":** Displayed when print started and job has database contents and database is empty (Print start is aborted).

Loading from USB:

1. Save database as text file to USB stick root, filename "database.csv".
2. Insert USB stick in MT.
3. MT will automatically copy database.csv to internal memory (overwriting any old database) and initialize database (reset and count number of entries).

Remote control:

A set of database commands are available to control the database remotely:

- **New database:** DBS:NEW;<filesize>, file is send via file port (as for other file transfers). The transmitted bytes are stored to memory with filename "database.csv" overwriting any old database.
- **Set separator char:** DBS:SEP;<separator char>. Sets separator char for all database linked contents.
- **Reset database:** DBS:RST. Resets current entry pointer to entry 1 of database in internal memory.
- **Set database entry:** DBS:SET;<entry 1..max>. Sets current entry pointer of database in internal memory.
- **Request status:** DBS:STA. Reply:
 - Ethernet: DAT:DBActive=<0|1>;DBLoaded=<0|1>;DBEntry=<1..max>;DAT:DBSize=<size>#"
 - Serial: Do:DBAct=<0|1>;DBLo=<0|1>;DBEnt=<1..max>;DBSize=<size>