MT128

128 Track Digital Audio Recorder Playback and Play out system

Reference manual

This document describes the functions of the MT128 Software application, MT64-Standard and MT32-SPLite.

WARNING

This Document is a Non-contractual document.
Functions and features described in this manual are subject to change without notice.

TABLE OF CONTENTS

INTRODUCTION:

Congratulations to purchase this Multi-Track digital audio recorder and player.

The MT-128 is an easy to use and secure hard disc multi track recording; player and play out system, designed for professional users. It is delivered as a computer based turnkey system or as integrated software in a piece of hardware (like mixing console). All controls of the MT-128 can be done by at least a 15“-Touch-TFT.

The graphic user interface (GUI) is designed to provide an adapted overview of status information and allows quick access to main functions in whatever kind of operational situations.

The system can be configured with up to 128 Channels of digital audio I/O, available in MADI, AES-3, ADAT®, Ethersound, and whatever audio interface format handled by ASIO Driver. Endowed with professional audio devices, it supports Wordclock- and Video-Synchronization. Timecode is supported via LTC-I/O, MIDI and others…

The MT-128 supports WAVE, Broadcast-Wave (RF64) and AIFF file formats and operates in „single file per track “ mode. Projects and audio files can be imported- and exported.

All incoming and outgoing audio signal can be free routed. An internal mixer controls the levels of audio outputs (direct track output) and it allows up to 9 stereo mix busses plus a separate stereo PFL-Bus.

Loop-Recording, Auto Punch-In/Out, Pre-and Post-record buffer (up to 3 seconds), Track-Arming while recording and some more recording features make the MT-128 a state of the art non-destructive „Audio-Multitracker“.

Generated audio files are displayed in „classical“ time-line view, but also in a list view. This helps to keep the overview and makes it easy to handle the MT-128 projects. All recorded audio is managed as record-sessions, takes, clips and files. The Take-management fulfils the needs of take organized recording workflow.

The security of audio data is given by a permanent auto save, in worst case (like power loss) only last buffers (max. 10 seconds) will be lost. The possible RAID support of the System helps to reduce the risk of data-loss by hard disc failure.

Technical properties:

Support of:

32, 64 or 128 TRACKS (according version),
8-32 BIT (FLOAT) @ 32-384 KHZ SAMPLERATE,
I/O OPTIONS MADI/AES/ADAT®/ANALOG…
PLAYBACK VARISPEED,
CONTINUOUS RECORDING, MIRROR RECORDING,
BWF (RT64), WAV, AIFF,
SINGLE FILE PER TRACK (STEREO FILE FOR LINKED TRACK),
FILE IMPORT & EXPORT, CONSOLIDATE, MULTI CHANNEL RENDERING.
TIME AND TRACK STAMPING,
REDUNDANT PLAYBACK

Some Features:

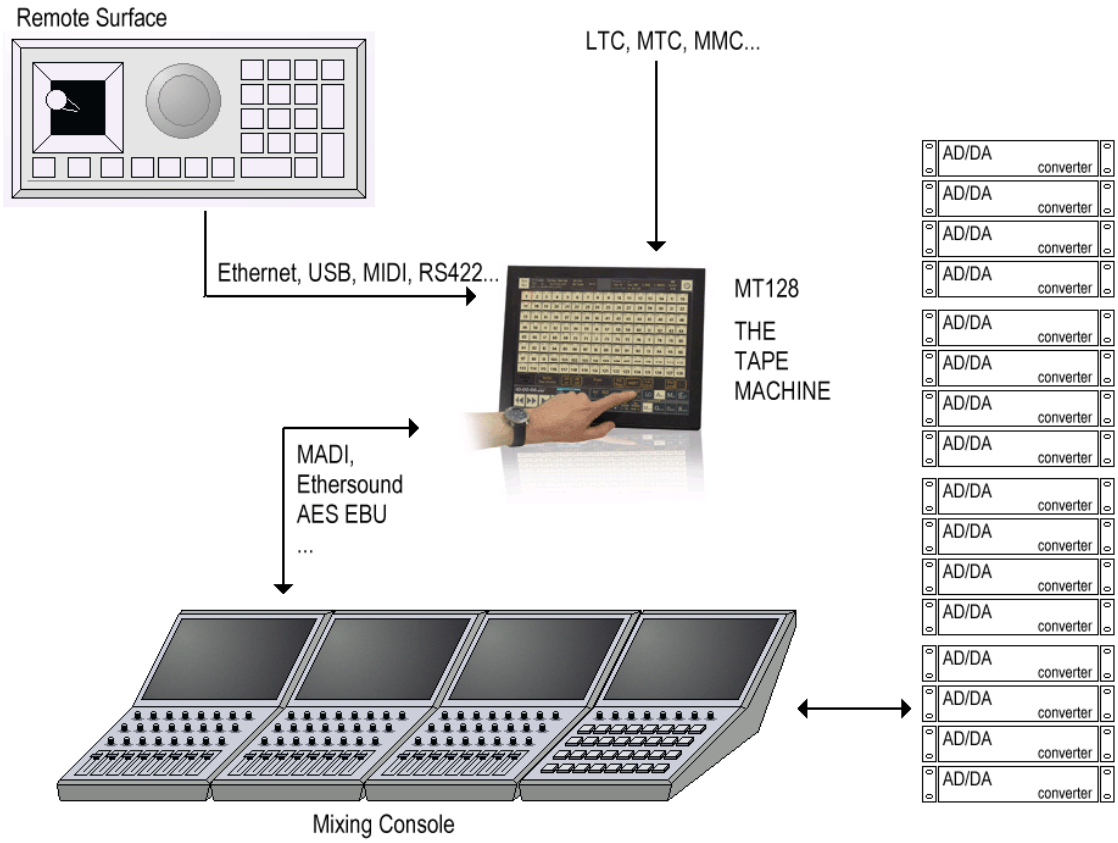
TOUCH SCREEN, MOUSE, KEYBOARD,
EXTERNAL TIMECODE, WORDCLOCK, VIDEOSYNC,
MONITORING, DELAY LINE PER TRACK,
MATRIX-MIXER, MAIN- PFL- AND AUX-Busses,
16x FADER/TRACKS GROUPS (VCA),
FLEXIBLE ROUTING (128 I/O),
FULL METERING,
TIMELINE, LIST VIEW, WAVEFORM DISPLAY.
LOCATOR MANAGEMENT, CUE PLAY/STOP, CUE MIDI OUT
TAKE MANAGEMENT,
WAVEFORM DISPLAY, TIME LINE BASIC EDITING
CONSOLITADE TRACKS;
REMOTE CONTROL,
SOUND PAD, INSTANT PLAYBACK, PLAYLIST MANAGEMENT.
CONTROL BY XKEY-24 / GPIO / MMC PROTOCOL

Sound Pad Module

64 INSTANT PLAYBACK SOUNDS
4 PLAYLISTS WITH UPTO 256 SOUNDS
SUPPORTS WAV, AIF, BWF, MP3, M4A, WMA, WMV, MP4, AVI, MOV, CDA
REAL TIME SAMPLERATE AND BIT RESOLUTION CONVERSION
1-8 CHANNEL SOUND MANAGEMENT
M.I.D.I. CONTROL BY LEARN FUNCTION
GPIO AND SPECIAL KEYBOARD REMOTING
SAMPLING AND EDITING FUNCTIONS (PITCH, GAIN, ATTACK, RELEASE),
INTERACTION WITH MT128 TIMELINE.

EQUIPMENT USE ENVIRONMENT

The MT128 is Multi Tracks Audio Recorder Player system dedicated to stressful environment such as live performances, shows, public events or record session with a band or orchestra.



DEFINITION OF USED TERMS

source: Wikipedia, the free encyclopedia.

AD Converter

An analog-to-digital converter (abbreviated ADC, A/D or A to D) is a device which converts continuous signals to discrete digital numbers. The reverse operation is performed by a digital-to-analog converter (DAC).

Typically, an ADC is an electronic device that converts an input analog voltage (or current) to a digital number proportional to the magnitude of the voltage or current. However, some non-electronic or only partially electronic devices, such as rotary encoders, can also be considered ADCs. The digital output may use different coding schemes, such as binary, Gray code or two's complement binary.

ADAT

Alesis Digital Audio Tape or ADAT, first introduced in 1991, was used for simultaneously recording eight tracks of digital audio at once, onto Super VHS magnetic tape - a tape format similar to that used by consumer VCRs. Greater numbers of audio tracks could be recorded by synchronizing several ADAT machines together. While this had been available in earlier machines, ADAT machines were the first to do so with sample-accurate timing - which in effect allowed a studio owner to purchase a 24-track tape machine eight tracks at a time. This capability and its comparatively low cost were largely responsible for the rise of project studios in the 1990s.

"ADAT" is also used as an abbreviation for the ADAT Lightpipe protocol, which transfers 8 tracks in a single fiber optic cable. The ADAT cable standard is no longer strictly tied to ADAT tape machines, and is now utilized by analog-to-digital converters, input cards for digital audio workstations, effects machines, etc. One of the original benefits of utilizing ADAT versus S/PDIF or AES/EBU was that a single cable could carry up to eight channels of audio. (AES10 (MADI) can now carry up to 64 channels.)

AES / EBU

The digital audio standard frequently called AES/EBU, officially known as AES3, is used for carrying digital audio signals between various devices. It was developed by the Audio Engineering Society (AES) and the European Broadcasting Union (EBU) and first published in 1985, later revised in 1992 and 2003. Both AES and EBU versions of the standard exist. Several different physical connectors are also defined as part of the overall group of standards. A related system, S/PDIF, was developed essentially as a consumer version of AES/EBU, using connectors more commonly found in the consumer market.

AIFF

Audio Interchange File Format (AIFF) is an audio file format standard used for storing sound data for personal computers and other electronic audio devices. The format was co-developed by Apple Computer in 1988 [1] based on Electronic Arts' Interchange File Format (IFF, widely used on Amiga systems) and is most commonly used on Apple Macintosh computer systems.

The audio data in a standard AIFF file is uncompressed pulse-code modulation (PCM). There is also a compressed variant of AIFF known as AIFF-C or AIFC, with various defined compression codecs.

Standard AIFF is a leading format (along with SDII and WAV) used by professional-level audio and video applications, and unlike the better-known lossy MP3 format, it is non-compressed (which aids rapid streaming of multiple audio files from disk to the application), and lossless. Like any non-compressed, lossless format, it uses much more disk space than MP3—about 10MB for one minute of stereo audio at

a sample rate of 44.1kHz and a sample size of 16 bits. In addition to audio data, AIFF can include loop point data and the musical note of a sample, for use by hardware samplers and musical applications.

The file extension for the standard AIFF format is .aiff or .aif. For the compressed variants it is supposed to be .aifc, but .aiff or .aif are accepted as well by audio applications supporting the format.

ASIO

Audio Stream Input/Output (ASIO) is a computer soundcard driver protocol for digital audio specified by Steinberg, providing a low-latency and high fidelity interface between a software application and a computer's sound card. Whereas Microsoft's DirectSound is commonly used as a stereo input and output for non-professional users, ASIO allows musicians and sound engineers to process their audio via Windows computer software instead of external hardware.

BWF

Broadcast Wave Format (BWF) is an extension of the popular Microsoft WAVE audio format and is the recording format of most file-based non-linear digital recorders used for motion picture and television production. It was first specified by the European Broadcasting Union in 1997, and updated in 2001 and 2003.

The purpose of this file format is the addition of metadata to facilitate the seamless exchange of sound data between different computer platforms and applications. It specifies the format of metadata, allowing audio processing elements to identify themselves, document their activities, and permit synchronization with other recordings. This metadata is stored as extension chunks in a standard digital audio WAV file.

Files conforming to the Broadcast Wave specification have names ending with the extension .WAV.

DANTE

Dante (Digital Audio Network Through Ethernet) is a combination of software, hardware, and network protocols that deliver uncompressed, multi-channel, low-latency digital audio over a standard Ethernet network using Layer 3 IP packets. Developed in 2006 by a Sydney-based company named Audinate, Dante builds and improves on previous audio over Ethernet technologies, such as CobraNet and EtherSound.

Ethernet

Ethernet is a family of frame-based computer networking technologies for local area networks (LANs). The name comes from the physical concept of the ether. It defines a number of wiring and signaling standards for the Physical Layer of the OSI networking model, through means of network access at the Media Access Control (MAC) /Data Link Layer, and a common addressing format.

Ethernet is standardized as IEEE 802.3. The combination of the twisted pair versions of Ethernet for connecting end systems to the network, along with the fiber optic versions for site backbones, is the most widespread wired LAN technology. It has been in use from around 1980 to the present, largely replacing competing LAN standards such as token ring, FDDI, and ARCNET.

Ethersound

EtherSound is one of several Audio over Ethernet technologies currently used in audio engineering and broadcast engineering applications. EtherSound is developed and licensed by Digigram.

EtherSound is compliant with IEEE Ethernet standards allowing the use of standards-compliant hardware and cables. However, EtherSound is not designed to share Ethernet LANs with typical office operations data or Internet traffic such as email. Like all audio-over-Ethernet technologies, EtherSound adapts the non-deterministic nature of CSMA/CD protocols to provide a continuous stream of high-sample rate, 24-bit digital audio data. The Ethernet protocol allows every device equal access to the network (Carrier Sense Multiple Access) and accepts the inevitability of "collisions" as a result. Ethernet data is sent in bursts. Ethernet frames are sent in a serial stream (one after the other) and contain addresses, protocol control information and data. EtherSound's solution to the problem of using a non-deterministic equal-priority network to transmit deterministic, prioritized audio data is proprietary, as are the solutions adopted by other audio-over-Ethernet technologies.

GPIO

General-purpose input/output (GPIO) is a generic pin on an integrated circuit (commonly called a chip) whose behavior (including whether it is an input or output pin) can be controlled (programmed) by the user at run time.

GPIO pins have no special purpose defined, and go unused by default. The idea is that sometimes the system integrator building a full system that uses the chip might find it useful to have a handful of additional digital control lines, and having these available from the chip can save the hassle of having to arrange additional circuitry to provide them.

LTC

Linear (or Longitudinal) Timecode (LTC) encodes SMPTE timecode data as a Manchester-Biphase encoded audio signal. The audio signal is commonly recorded on a VTR track or other storage media. Each frame is terminated by a 'sync word' which has a special predefined sync relationship with any video or film content.

A special bit in the linear timecode frame, the 'biphase mark correction' bit, ensures that there are an even number of AC transitions in each timecode frame.

The sound of linear timecode is a jarring and distinctive noise and has been used as a sound-effects shorthand to imply 'telemetry' or 'computers'. Many professional audio engineers see this use of LTC in sound-effects as an exceptionally lazy, unrealistic sound design technique. In the industry "LTC" is pronounced "Litsy" except in the UK where it is pronounced "ell-tee-cee".

MADI

Multichannel Audio Digital Interface, or MADI, is an industry-standard electronic communications protocol that defines the data format and electrical characteristics of an interface carrying multiple channels of digital audio. The AES standard for MADI is currently documented in AES10-2003. The MADI standard includes a bit-level description and has features in common with the two-channel format of AES3. Serial digital transmission over coaxial cable or fibre-optic lines of 28, 56, or 64 channels is supported, with sampling rates of up to 96 kHz and resolution of up to 24 bits per channel.

MIDI

MIDI (Musical Instrument Digital Interface), is an industry-standard protocol defined in 1982 that enables electronic musical instruments such as keyboard controllers, computers, and other electronic equipment to communicate, control, and synchronize with each other. MIDI allows computers, synthesizers, MIDI controllers, sound cards, samplers and drum machines to control one another, and to exchange system data. MIDI does not transmit an audio signal or media — it transmits "event messages" such as the pitch and intensity of musical notes to play, control signals for parameters such as volume, vibrato and

panning, cues, and clock signals to set the tempo. As an electronic protocol, it is notable for its widespread adoption throughout the music industry.

Note names and MIDI note numbers. All MIDI compatible controllers, musical instruments, and MIDI-compatible software follow the same MIDI 1.0 specification, and thus interpret any given MIDI message the same way, and so can communicate with and understand each other. MIDI composition and arrangement takes advantage of MIDI 1.0 and General MIDI (GM) technology to allow musical data files to be shared among many different files due to some incompatibility with various electronic instruments by using a standard, portable set of commands and parameters. Because the music is simply data rather than recorded audio waveforms, the data size of the files is quite small by comparison.

MMC

MIDI Machine Control, or MMC, a subset of the MIDI specification, provides specific commands for controlling recording equipment such as multi-track recorders.

MMC messages can be sent along a standard MIDI cable for remote control of such functions as Play, Fast Forward, Rewind, Stop, Pause, and Record. These are "System Exclusive" (SysEx) messages.

MTC

MIDI time code (MTC) embeds the same timing information as standard SMPTE time code as a series of small 'quarter-frame' MIDI messages. There is no provision for the user bits in the standard MIDI time code messages, and SysEx messages are used to carry this information instead. The quarter-frame messages are transmitted in a sequence of eight messages, thus a complete timecode value is specified every two frames. If the MIDI data stream is running close to capacity, the MTC data may arrive a little behind schedule which has the effect of introducing a small amount of jitter. In order to avoid this it is ideal to use a completely separate MIDI port for MTC data. Larger full-frame messages, which encapsulate a frame worth of timecode in a single message, are used to locate to a time while timecode is not running.

Unlike standard SMPTE timecode, MIDI timecode's quarter-frame and full-frame messages carry a two-bit flag value that identifies the rate of the timecode, specifying it as either:

24 frame/s (standard rate for film work)
25 frame/s (standard rate for PAL video)
30 frame/s (drop-frame timecode for NTSC video)
30 frame/s (non-drop timecode for NTSC video)

MTC distinguishes between film speed and video speed only by the rate at which timecode advances, not by the information contained in the timecode messages; thus, 29.97 frame/s dropframe is represented as 30 frame/s dropframe at 0.1% pulldown.

MTC allows the synchronisation of a sequencer or DAW with other devices that can synchronise to MTC or for these devices to 'slave' to a tape machine that is striped with SMPTE. For this to happen a SMPTE to MTC converter needs to be employed. Please note that it is possible for a tape machine to synchronise to an MTC signal (if converted to SMPTE), if the tape machine is able to 'slave' to incoming timecode via motor control, which is a rare feature.

NTFS

NTFS is the standard file system of Windows NT, including its later versions Windows 2000, Windows XP, Windows Server 2003, Windows Server 2008, Windows Vista, and Windows 7.

NTFS supersedes the FAT file system as the preferred file system for Microsoft's Windows operating systems. NTFS has several improvements over FAT and HPFS (High Performance File System) such as improved support for metadata and the use of advanced data structures to improve performance, reliability, and disk space utilization, plus additional extensions such as security access control lists (ACL) and file system journaling.

Ravenna

Ravenna is a technology for real-time transport of audio and other media data in IP-based network environments, which was introduced to the public on Sep. 10, 2010 at the International Broadcasting Convention in Amsterdam. Ravenna can operate on most existing network infrastructures using standard networking technology. Performance and capacity scale with network performance. Ravenna is designed to match broadcasters' requirements for low latency, full signal transparency and high reliability. Fields of application include (but are not limited to): in-house signal distribution for broadcasting houses and other fixed installations, flexible setups at venues and live events, outside broadcasting support, and inter-studio links across wide area network links and production facilities.

RF64

RF64 is a BWF-compatible multichannel file format enabling file sizes to exceed 4 GB. It has been specified by the European Broadcasting Union.

The file format is designed to meet the requirements for multichannel sound in broadcasting and audio archiving. It is based on the Microsoft RIFF/WAVE format and Wave Format Extensible for multichannel parameters. Additions are made to the basic specification to allow for more than 4 GB file sizes when needed. The format is transparent to the BWF and all its supplements and chunks.

A maximum of 18 surround channels, stereo down mix channel and bit stream signals with non-PCM coded data can also be stored in the file format. RF64 can be used in the entire programme chain from capture to editing and play out and for short or long term archiving of multichannel files.

SMPTE Timecode

SMPTE timecode is a set of cooperating standards to label individual frames of video or film with a timecode defined by the Society of Motion Picture and Television Engineers in the SMPTE 12M specification. SMPTE revised the standard in 2008, turning it into a two-part document: SMPTE 12M-1 and SMPTE 12M-2, including important new explanations and clarifications.

Timecodes are added to film, video or audio material, and have also been adapted to synchronize music. They provide a time reference for editing, synchronisation and identification. Timecode is a form of media metadata. The invention of timecode made modern videotape editing possible, and led eventually to the creation of non-linear editing systems.

Sony 9 PIN

The 9-Pin Protocol is an RS-422 communications protocol using a 9 pin serial cable that allows a computer interface to Sony and other manufacturer's VTRs. This protocol supports both one-inch reel-to-reel video tape recorders as well as cassette video tape recorders.

S-PDIF

S/PDIF specifies a Data Link Layer protocol and choice of Physical Layer specifications for carrying digital audio signals between devices and stereo components over either optical or electrical cable. The

name stands for Sony/Philips Digital Interconnect Format (more commonly known as Sony Philips Digital InterFace), the two companies being the primary designers of the S/PDIF format. It is part of a larger collection of international standards known as IEC and defined by IEC 60958 (often referred to as AES/EBU), where it is known as IEC 60958 type II. S/PDIF is essentially a minor modification of the original AES/EBU standard for consumer use, providing small differences in the protocol and requiring less-expensive hardware.

USB

USB (Universal Serial Bus) is a way of setting up communication between a computer and peripheral devices. USB is intended to replace many varieties of serial and parallel ports. USB can connect computer peripherals such as mice, keyboards, PDA, gamepad and joysticks, scanners, digital cameras, printers, personal media players, flash drives, and external hard drives. For many of those devices, USB has become the standard connection method. USB was designed for personal computers, but it has become commonplace on other devices such as PDA and video game consoles, and as a power cord between a device and an AC adapter plugged into a wall plug for charging. As of 2008, there are about 2 billion USB devices sold per year, and about 6 billion total sold to date.

The design of USB is standardized by the USB Implementers Forum (USB-IF), an industry standards body incorporating leading companies from the computer and electronics industries. Notable members have included Agere (now merged with LSI Corporation), Apple Inc., Hewlett-Packard, Intel, Microsoft and NEC.

VITC

Vertical Interval TimeCode (VITC) is a form of SMPTE timecode embedded as a pair of black-and-white bars in a video signal. These lines are typically inserted into the vertical blanking interval of the video signal. There can be more than one VITC pair in a single frame of video: this can be used to encode extra data that will not fit in a standard timecode frame.

VITC contains the 64 data bits of the SMPTE linear timecode frame embedded in a new frame structure with extra synchronization bits and an error-detection checksum. The VITC code is always repeated on two adjacent video lines, one in each field. This internal redundancy is exploited by VITC readers, in addition to the standard timecode "flywheel" algorithm.

WORD CLOCK

A word clock or wordclock (sometimes sample clock, which can have a broader meaning) is a clock signal (not the actual device) used to synchronise other devices, such as digital audio tape machines and compact disc players, which interconnect via digital audio. S/PDIF, AES/EBU, ADAT, TDIF and other formats use a word clock. Various audio over Ethernet protocols use broadcast packets for the word clock. The device which maintains the word clock on a network is the master clock.

Word clock should not be confused with timecode; word clock is used entirely to keep a perfectly-timed and constant bitrate to avoid data errors. The word clock generator, usually built-in to analog-to-digital converters, creates digital pulses which contain no other data, and is considered essential to avoid frequency drift between the internal oscillators of each device. Timecode is actual data (technically metadata) about the media content being transmitted, and is optional, being sent in a higher layer.

WAV

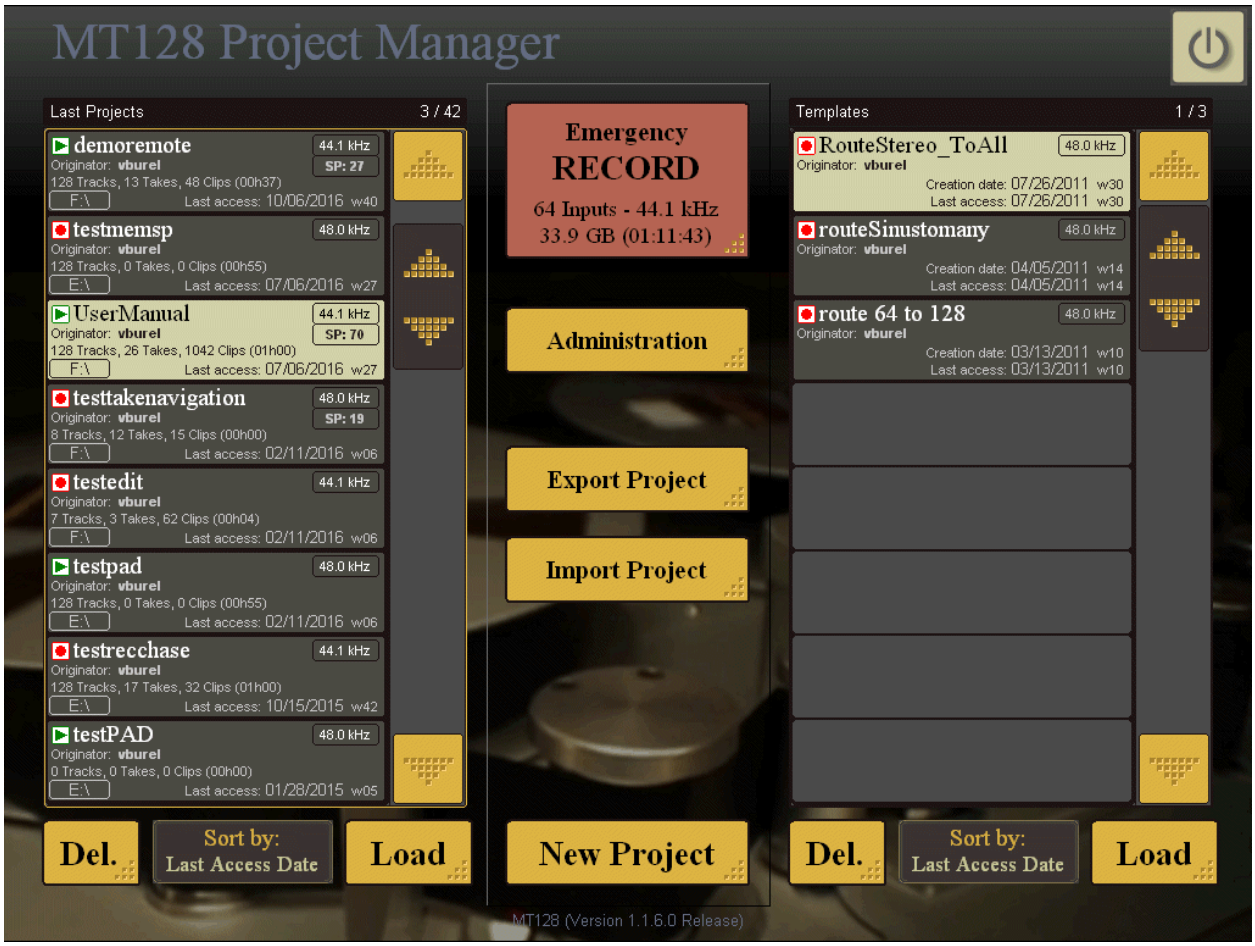
WAV (or WAVE), short for Waveform audio format, also known as Audio for Windows, is a Microsoft and IBM audio file format standard for storing an audio bitstream on PCs. It is an application of the RIFF bitstream format method for storing data in “chunks”, and thus also close to the 8SVX and the AIFF

format used on Amiga and Macintosh computers, respectively. It is the main format used on Windows systems for raw and typically uncompressed audio. The usual bitstream encoding is the Pulse Code Modulation (PCM) format.

PUTTING IN OPERATION

MT 128 Project Manager

After launching the MT128 (or MT64-Standard) application, the project manager screen appears. It gives the list of all projects and templates found on the system. All available disks are automatically scanned. If this list is empty, it means that all disks are empty. If using MT32-SPLite, jump to next chapter. MT32-SPLite does not include project management.



Emergency RECORD

A tap on this button starts immediately the recording. A project called “Emergency _xx” is automatically created. All inputs available are routed 1:1 to automatically armed tracks. "Emergency Record" starts with the last audio-device settings.

Scroll bar

The scroll bar allows moving up and down in the list of recent projects as in the list of templates. The digits on top show the current selection and total number of projects/templates.

Load

Select a project or template from list and tap this button to recall a recent project or to create a new project based on a template.

Delete
Select a project or template from list and tap this button to delete a recent project or template (a specific dialog box will appear to confirm the operation).

Power off
Tap on this button to shut down the MT-128 Application. (by option it is possible to also shut down the computer in the same time).

Sort by
Tap on this button to select the criteria of sorting the list.

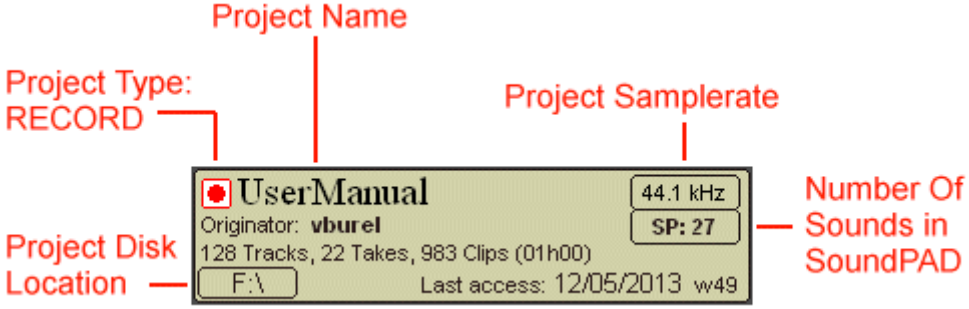
New Project
A tap on this button will make appear the Project Setting Dialog box in order to create a new project.

Administration
Tap on this button to enter in the administration pages (login/password required). *See Administration pages later in this document.*

Export
A Tap on this button will open a specific Dialog Box to Export the current selected project to an extra disk or any folder. This is made to archive or port the project on other computer. Entire project can be exported, it means all settings, EDL, Cues, SoundPad Session and all media used by the project (including recorded, imported and audio file used by Sound Pad). It is also possible to Export Takes only (recorded audio files). *See Project Export chapter later in this document.*

Import
A Tap on this button will open a specific Dialog Box to Import a project (previously exported) in the current project base. All settings, data base, media files will be copy on the given local disk as regular MT128 project. After the operation, the imported project will be listed in the project list. *See Project Import chapter later in this document.*

Project Item
Project (or Template) items in list, show different useful information: Project Name, type, sample rate, initial disk location (for the project only, media can be located on different disks) and number of sounds in Sound-Pad module.



Project settings

The project settings page appears after creating a new project or after loading an existing project.

All Metadata, recording parameters (resolution, samplerate, file format) and TC-Sync source are entered or listed here. This page can be re-called in operation with a tap on the Project display in the top bar.

Name
A tap opens the virtual keyboard to enter name of a new project (the name cannot be modified after having created the project). If it's a new project, the Take Prefix is automatically filled with the name of the project.

Description
A tap opens the virtual keyboard to enter/change text data. This field is also used to fill broadcast wave file header information (when recording BWF audio file).

Originator
A tap opens the virtual keyboard to enter/change text data. This field is also used to fill broadcast wave file header information (when recording BWF audio file).

References
A tap opens the virtual keyboard to enter/change text data. This field is also used to fill broadcast wave file header information (when recording BWF audio file).

Project Mode

A tap on this field will change the project mode in RECORDER, PLAYER or SOUNDPAD. This mode changes the Graphic user interface layout and the availability of different functions. For example in PLAYER mode, Transport Bar provides navigation buttons instead of REC buttons.

Sample rate
A tap opens list for selection of sampling frequency (recording/playback) to define the sample rate of the project.

Bit res
A tap opens list for selection of bit resolution (8 /16 / 24/ 32 bits) for recording audio file.

File type: BWF/ WAV / AIFF
A tap opens list for selection of file format – WAV, AIF, BWF (RF 64).

TC Source
A tap opens list for selection TC-Source – Internal, Local PC Clock, Ext TC, MIDI TC, LTC, TC from Remote drivers… This options is also in the Transport Option Dialog Box.

Disk Mode
A tap on this button will display a small contextual menu to select the following mode:

- TAPE: this regular mode, makes the recording on disks given by the preferred disk list. If several disk are selected, it will fill disk in the defined disk order.
- SPLIT: enables recording across several drives. Tracks are logically distributed on disks. For example with two drives, the 64 first tracks will be recorded on first disk while the 64 others will be recorded on the second disk.
- MIRROR: The last disk of the Preferred Disk Selection is use as mirror disk. It means it makes a backup copy of all audio file being recorded.

REM: Mirror mode works in 128 tracks only for 44.1 / 48kHz Sample rate. At 96 kHz the Mirror mode can work if the MT128 is limited to 64 tracks (depends on administration pages.).

Take prefix
A tap opens the virtual keyboard to enter/change name of take prefix. Name is reflected in filename of recorded audio files.

Create Project
A tap created the new defined project.

Cancel
A tap returns to project manager if coming from there. / Or discards changes if editing project currently in operation.

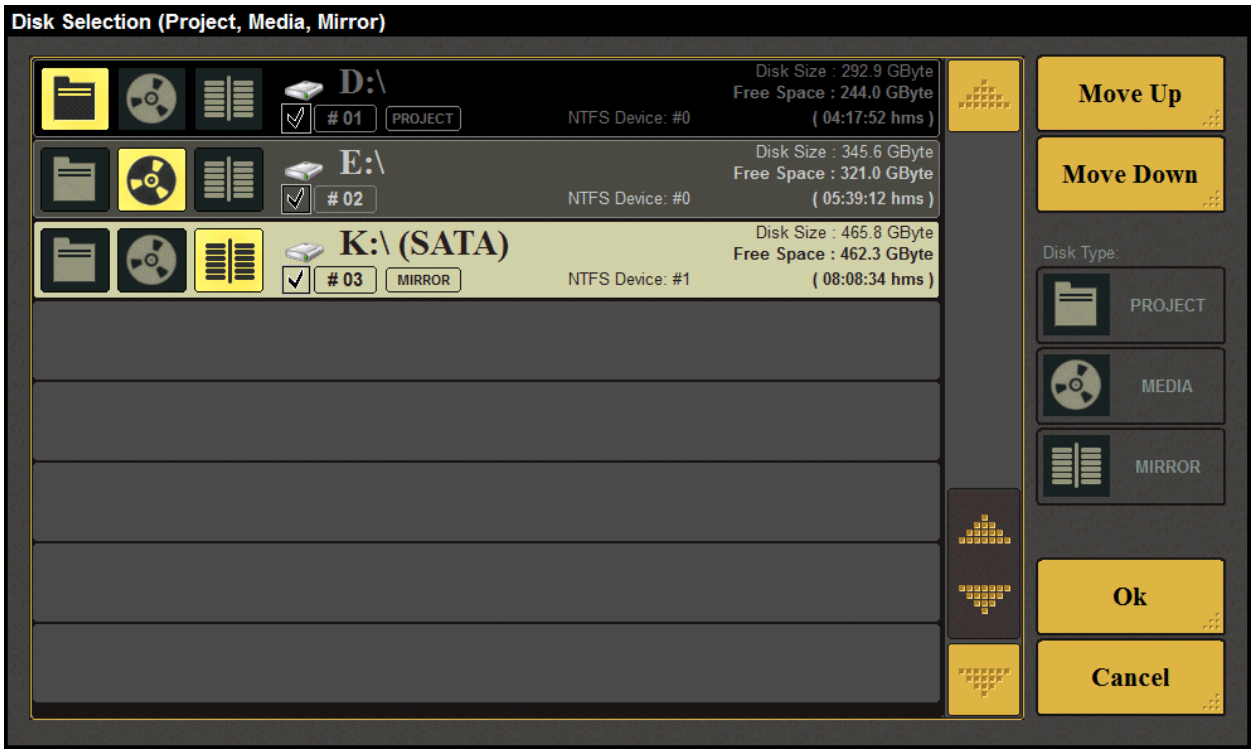
Preferred disk

A tap opens a specific dialog box (see below) to let the user select which disk will be involved in the recording (As Project disk, as Media disk or as Mirror disk).

PROJECT DISK: is used to store the project (including SoundPad session) and it is used as default disk to import Sound for SoundPad (and for Timeline if there is no Media Disk).

MEDIA DISK(s) are used to store Recorded or Imported audio files on Timeline. Selecting Media Disk is mandatory for Recording Project.

MIRROR DISK: is used to make the Mirror Recording (Disk Mode must be set to MIRROR).



The Recording process is using Media disk to store audio file (sequentially or simultaneously in SPLIT mode. When several disks are selected, in TAPE mode, the MT128 will detect when the disk becomes full and automatically continue the recording on next selected Media disk without any data loss. That's why it is possible to change the disk order in the selection (by Button Move Up / Down).

Move up

A tap moves a selected drive on step 1 higher. Order of disk determines the priority to which drive recording is being made, once it is set as Media disk.

Move down

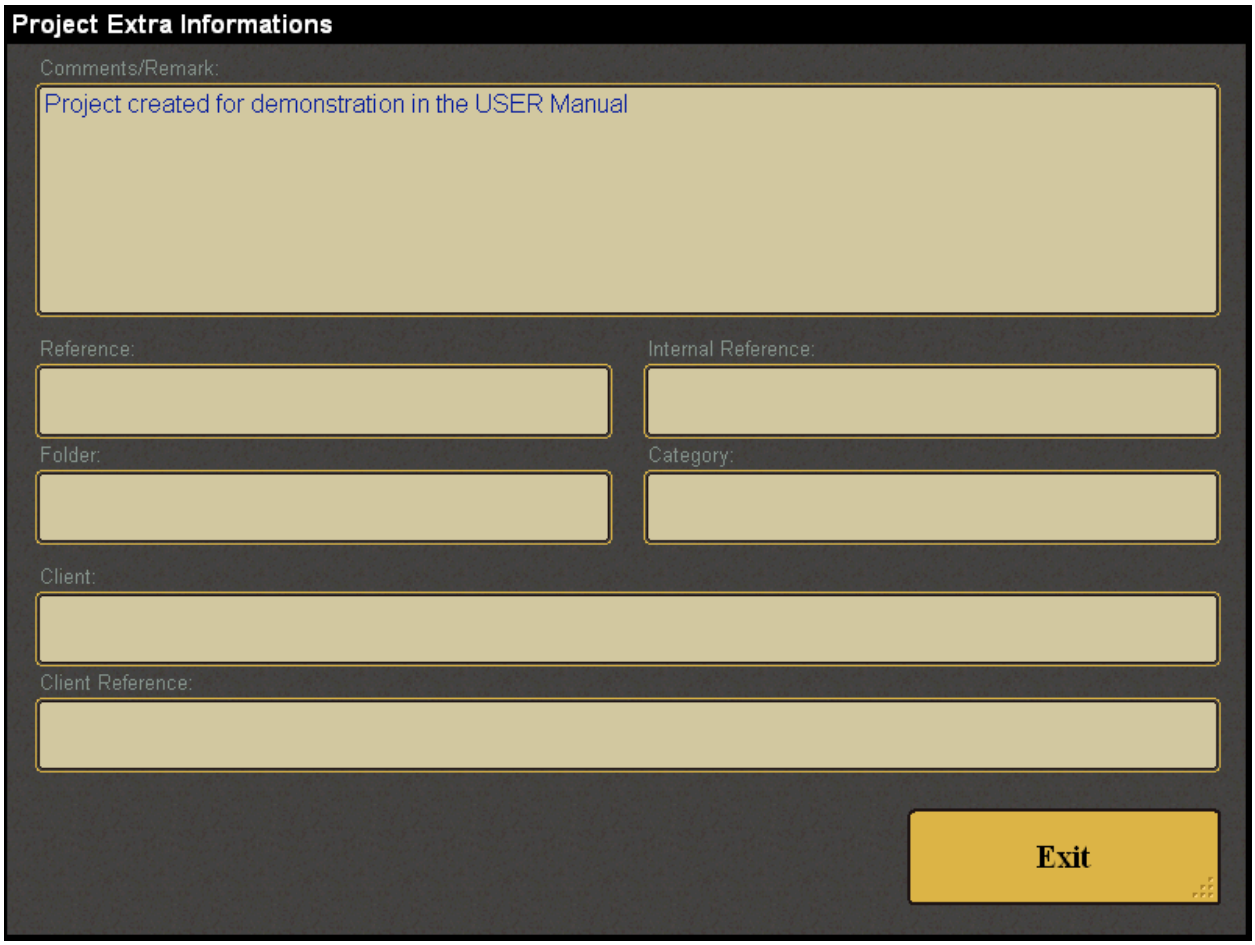
A tap moves a selected drive on step lower.

OK
Clisk Ok to validate the current disk selection and close dialog box.

Cancel
A tap discards changes being made and exits.

Extra information

A tap opens a sub page for editing further metadata of current project.



Comments/Remarks
A tap opens the virtual keyboard to enter metadata of current project.

Reference
A tap opens the virtual keyboard to enter metadata of current project.

Internal reference
A tap opens the virtual keyboard to enter metadata of current project.

Folder
A tap opens the virtual keyboard to enter metadata of current project.

Category
A tap opens the virtual keyboard to enter metadata of current project.

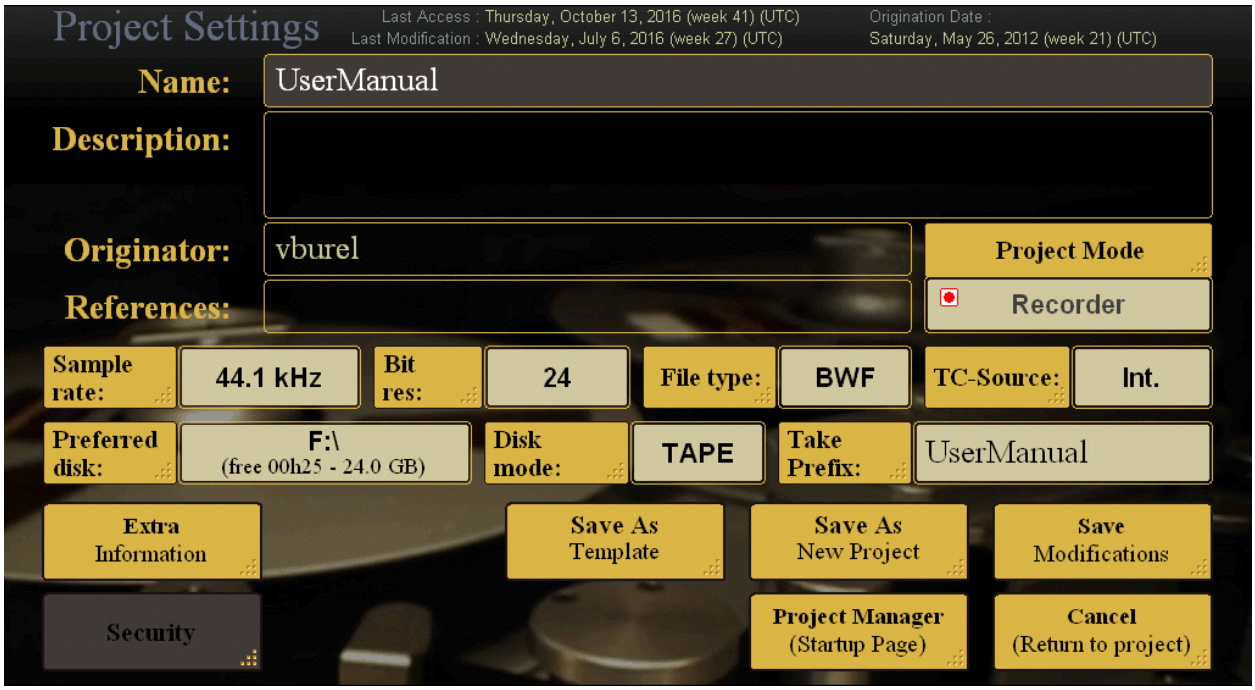
Client
A tap opens the virtual keyboard to enter metadata of current project.

Client reference
A tap opens the virtual keyboard to enter metadata of current project.

Exit
A tap closes the dialog box.

Project Settings page in Edit Mode.

When editing project (after having loaded the project), other functions are available such as SAVE AS Template. However the name cannot be modified except on SAVE AS command. Project Editing can be done while Playback or Recording.



Save Modification
Save the actual setting. This button is blinking when something has been modified.

Cancel
Return to operation without changing parameters of the project.

Project Manager
A tap exits current project and opens the project manager (the startup page). This function is active only after having loaded a project

Save as template
Opens a dialog box for defining a new template (or overwriting an existing one) based on the current project. This function is active only after having loaded a project.

Save as new project
A tap saves current project as a further project. This function is active only after having loaded a project.

DESCRIPTION OF WORKSPACE

The workspace of the MT-128 is subdivided in to 3 main parts. On top there is the "Top bar, in center there is the space for all "Function-Pages", on bottom is the "Transport Panel“, the „Locator Function Bar“ and the „Page-Selector Bar“.

Top bar

The "Top bar“ shows four buttons. On the left the "Sys Set" button to access the "System Settings" page and the HOME button to go back to startup page. On the right the “Folder” button to open Project Settings Dialog Box (showing essential system and project information) and the LOCK button to lock the screen.

SYS Set (top left button)

The “Sys Set” button opens the System Settings Pages.

LOCK (top right button)

A tap on this button lock the screen (mouse and touch) to prevent accidental actions (page selector is still working to navigate in the different pages, but action are disabled). Tap again on this button to unlock the user interface (a confirmation dialog box will appear to ask for confirmation).

Home (left of the Info Section)
The HOME button allows going back to startup page (the first page showing project and template list).

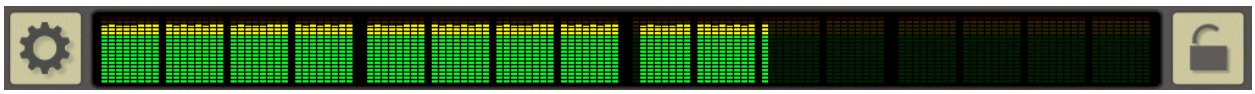
Project (Folder icon on the left of the Project section)
The project button opens the project settings page (shown in the previous pages).

Caption Display (on the middle)
On the Middle of the caption, there is a button selector to display two different view: the TimeCode/Status view or the Meter Bridge to see all track output levels.

DISPLAY Status
Display the big caption info bar, to display timecode and recorder status in big format.

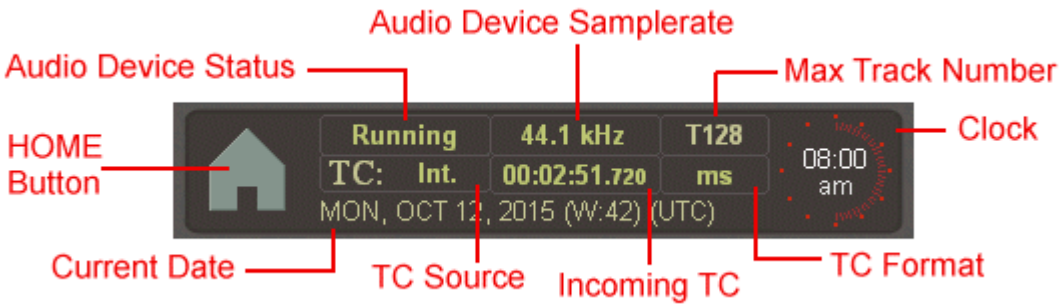
The Big Caption also displays useful warning to prevent user to make some possible mistake (for example a blinking red alert is displayed if the recording is done without any tracks armed) or if there is a problem like disk error, audio device sync problems…

DISPLAY Meter
When taping on DISPLAY METER button part, the caption show the meter bridge, showing track output levels.



SYS-INFO Section :

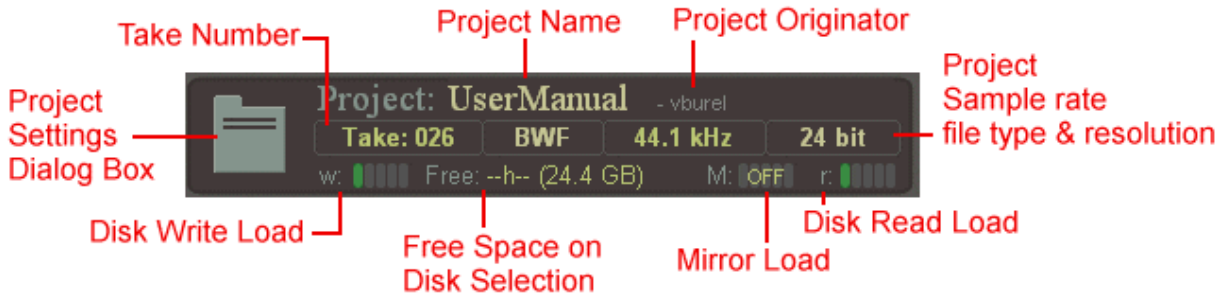
This section displays system information. Clicking in it will open the WatchDog Dialog Box (for expert user only).



The incoming TC is shown in its original native format. The Format is blinking when chasing if it does not fit the Timecode format of the project (see Transport Option Dialog Box). The audio device sampling rate is also blinking if different from the project sample rate.

Project-INFO Section:

This section displays current project information. Clicking in it will open the Project Settings Dialog Box.



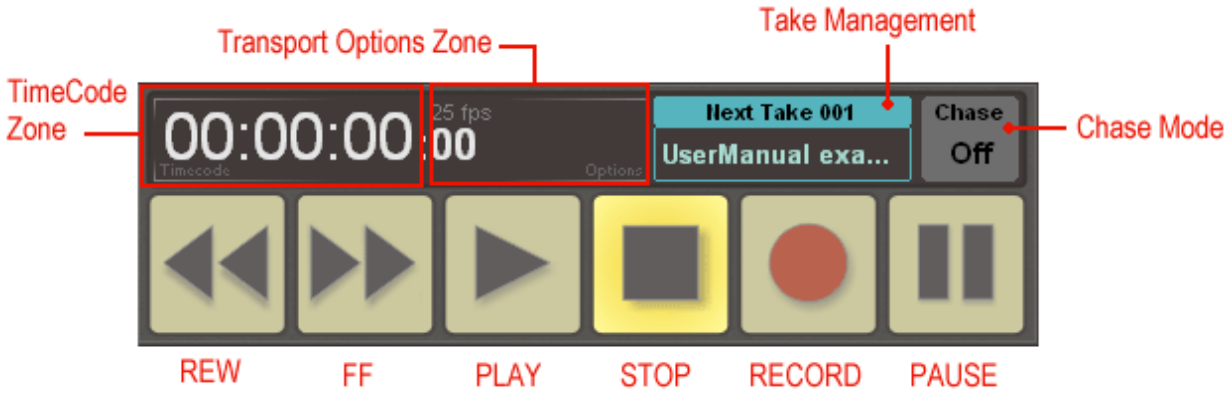
The Free memory shown is also pending on the number of armed track and the current audio file format of the project.

The bottom bar

The "Bottom Bar“ bar consists of three parts. On left there is the transport control panel, as known from tape machines. In the middle there is a function bar for cue points, locators and punch recording functionality. On the right side the "Page Selector Bar" is shown. To facilitate operating, the layout of the "Bottom Bar“ can be changed. (see "System Settings")

Transport control panel

The Transport Control Panel shows six buttons to control the MT-128, like on common tape machines. The color of the buttons changes from gray to yellow when a function is active. The display on top of the buttons shows on the left side the current position of the play/record cursor on the MT-128 TimeLine. On the right side it shows the take-information. Also a special function is given on the display; tap on the timecode of play cursor to go to a desired time-line position (only in stop or play mode), tap on the take-information area to open the Take Validation Box.



REW : Rewind

A tap switches from „Stop“ or „Playback“ to Varispeed-Operation in reverse direction (rewind). There are up to 4 speed levels. Each tap steps to the next level. Each speed level can be defined in SysSet-Playback page.

FF : Forward/FS

A tap switches from „Stop“ or „Playback“ to Varispeed-Operation in normal direction (forward). There are up to 4 speed levels. Each tap steps to the next level. Each speed level can be defined in SysSet-Playback. During record the button becomes a „Fail Start“-function that is indicated by the letters „FS“. Then a tap on „FS“ will generate a marker at the preceding position (start of record or the previous FS-position). When record is stopped the all markers are updated on the timeline. FS-markers contain the sufix „_FS##“ (## = number).

Play

A tap starts Playback or (if enabled) toggles between Reverse Playback and normal Playback.

Stop

A tap stops Playback/Record. Pushing STOP again can toggle the cursor position between previous playback starting point and last Stop point (see TRANSPORT options).

Record

A tap starts recording. During record each tap will start a new take (if enabled in SysSet-Record). In Punch-Mode – indicated by the letter „P“ in the center of the button – the button-border is blinking while not recording; i.e. outside a punch-region.

Pause
A tap will toggle between Pause-Mode and Playback/Recording. While Recording, PAUSE mode does not create new clip or new file or new take, it’s like a time break.

TimeCode Zone
A tap opens Num Pad Dialog Box to let you define a new timecode to place the cursor on new position.

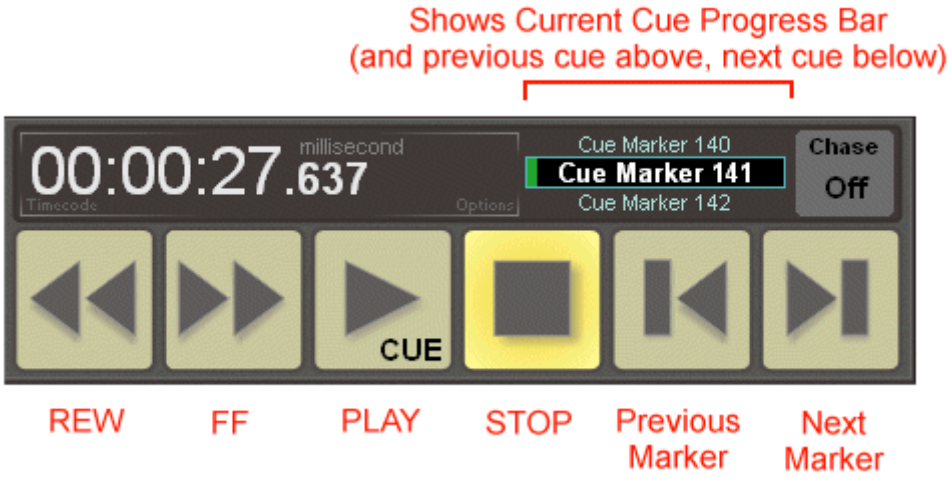
Options Zone
A tap in this area opens the Transport Option Dialog Box.

Next take
A tap opens the Take Preparation Box to define the name and comments for the next take.

CHASE
The Chase Button activated the chasing process to follow the current selected TC source.

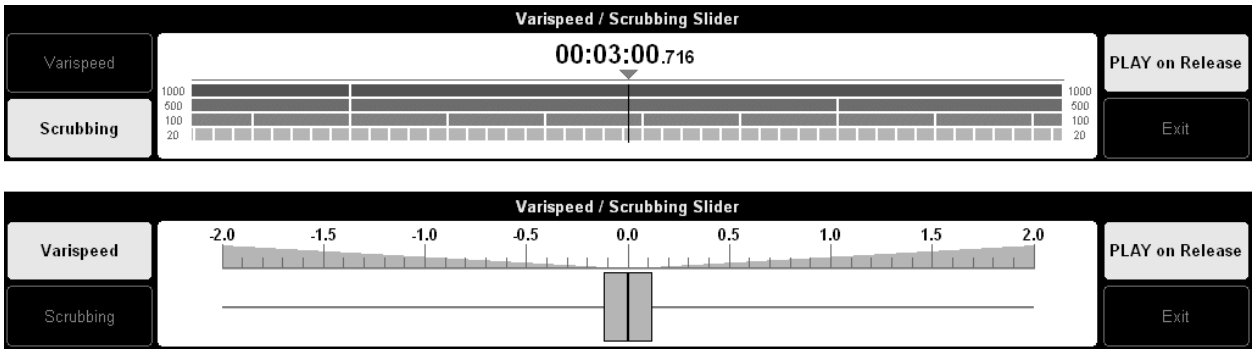
Playback Transport Control Panel

If the Project is set In “Player Mode”, the Transport Bar is a bit different: REC and PAUSE buttons are replaced by Marker Navigation Buttons and the Take Management Area is used to show the current CUE playing back and around the previous and next cue.



Varispeed / Scrubbing

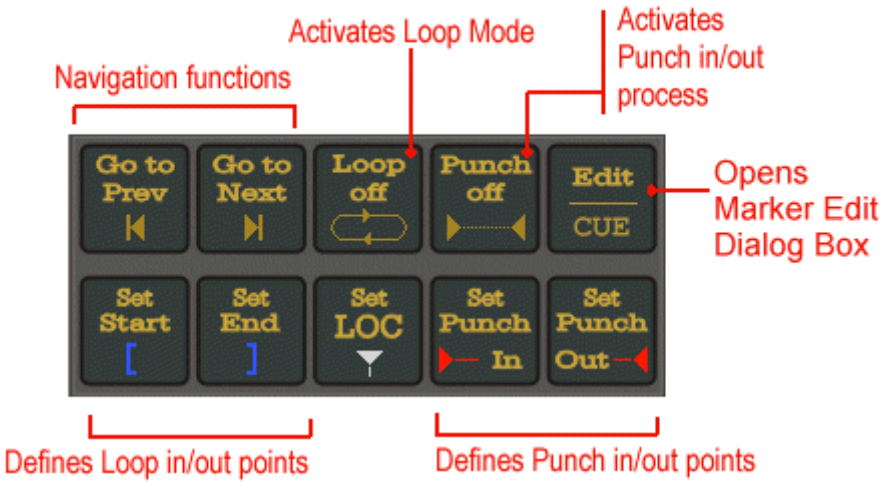
Depending on chosen mode the varispeed / scrubbing slider allows to move on the tape. This popup box appears when using FF/REW Transport functions (and if the option is enabled in Sys Set / Playback options Page).



Play / Stop on release
A tap on this button switch the release mode and says if the player will continue or stop to play after releasing the control.

Locator function bar

This section of the "Transport & Page Selector" bar is done to operate with Cue points (Marker), Locator (only for MT-128 transport function) and to set and edit sections for auto punch recording. Marker-positions can be recalled by using <Goto next/prev>, and also via „Marker Manager“ or by tapping in timeline (top timeline for Locator, Start, End – bottom timeline for Punch In/Out). Maximum number of all markers: 999



Go to Prev
A tap places Playhead to previous (left hand side) Marker (all types)

Go to Next
A tap places Playhead to next (right hand side) Marker (all types)

Edit / CUE

A tap opens the „Marker Manager“ sub page. This Dialog Box allows to Edit Marker and CUE and displays Cue Show Panel to manage the Timeline by CUE list.

Set Start
A tap sets Start-Marker at current cursor position for Loop-operation

Set End
A tap sets End-Marker at current cursor position for Loop-operation

Set LOC
A tap sets Locator-Marker at current cursor position (Cue)

Set Punch In
A tap sets Punch In-marker at current cursor position for Punch recording

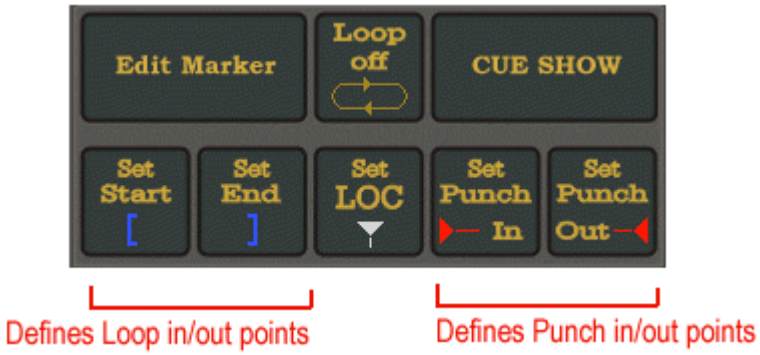
Set Punch Out
A tap sets Punch Out-marker at current cursor position for Punch recording

Loop off active
A tap toggles between „Loop active“ and „Loop off“ - Loop active is also indicated in the REC-Button of transport-control

Punch off active
A tap toggles between „Punch active“ and „Punch off“. Punch active is indicated in the REC-Button of transport-control. When punch is activated, the recording is done only, between punch-in and punch-out point (for armed tracks of course).

Locator function bar in Player Mode

In player mode, the Function bar is displayed as below, with 2 big buttons, one to get access to marker edit dialog box and one to display Cue Show Panel directly.



Page Selector Bar

The different functions pages of the workspace can be easily accessed by one or two taps on the „Page Selector Bar“. There are four „top pages“ containing up to four „sub pages“ each.

I/O & Meters

This page allows access to 4 sub pages to manage different system functions and audio routing pages:

Meters	Displays all levels for physical I/O as well as for Tracks I/O
ASIO Device	To manage ASIO driver (Selection, Control Panel, Restart)
Tools & VBAN	To launch additional programs and manage VBAN Streams
Route	To route Tracks and BUS to physical I/O.

Tape Recorder

This page allows access to 4 sub pages to manage everything related to Recording.

Arm	Allows to Arm (edit name) up to 128 tracks
Time Line	Displays 128 Tracks regular Timeline and allows basic Editing
List	Displays Record history list and EDL Clip List.
Import / Export	To import audio file on timeline or export timeline parts to audio files.

Sound Pad

This page allows access to 4 sub pages to manage integrated Mixer functions.

Sound PAD	Sound PAD / PlayList Manager
Empty	Reserved for future use
Empty	Reserved for future use
Import / Export	To import/export SoundPad Sessions

Mixer

This page allows access to 3 sub pages to manage TimeLine and Import/Export functions

Matrix	Inline mixer to manage all individual Tracks output gain
Mixes	To manage Stereo Main Mixer and 8 AUX Mix
Group	To use the 16 Track's Groups as VCA on whatever mixers
Main	To manage BUS and special routing for extra components

MT128 Page Overview

The different pages of the workspace can be easily accessed by one or two taps. From the main operational pages, we can already access directly to different important pages like System Settings pages, project Settings page and Transport Option Page.

Note we can go back to startup page (the Project Manager page) by the Project settings page with the Button called “Project Manager”.

From the Transport bar we can access to 2 important pages:

The Transport Option Dialog Box to setup Time Code, Chase options, and different Recording or Playback Options related to Transport actions (what happens when pushing REC and STOP button for example).

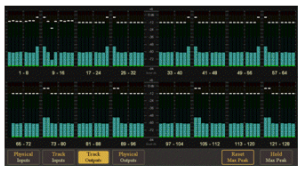
The Take Validation Dialog Box can also be displayed by clicking in the Transport Bar area related to Next Take.

Marker and CUE management Dialog Box is accessible by the Function Bar: the button called (EDIT / CUE).

MT128 Function Pages Overview:

Page Selector allows access to most of operational pages in 2 taps.

I/O Meters



To Watch on all levels

I/O ASIO Device

To manage and configure ASIO device.

I/O Tools & VBAN

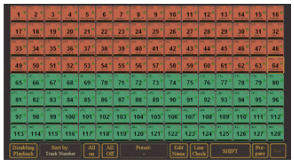
To run extra applications & manage VBAN Streams.

I/O Routing

To manage I/O to Tracks Routing.

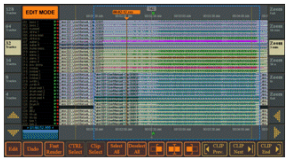
The Tape Recorder pages allow managing main recorder/player functions.

Arm Matrix



To arm tracks, check line input, rename tracks, disable playback...

Timeline



Regular Timeline View of 4 to 128 tracks with basic editing functions.

EDL / Take List

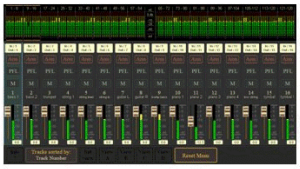
Record History by Session, Take and clips, files and EDL clip List

Import/Export

To Import Audio files on Timeline or create file from part of timeline.

The SoundPad pages allow access to Sound Pad / Playlist Manager.

Mixer Matrix



Inline Mixer to control each track output gain

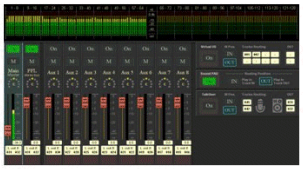
Mixer Mixes

Stereo Main Mixer and 8 Stereo Aux Mixer.

Mixer Group

To use track's groups as VCA on any selected mixer

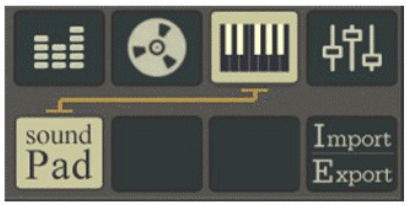
Mixer Main



Master section to enable BUS and other options

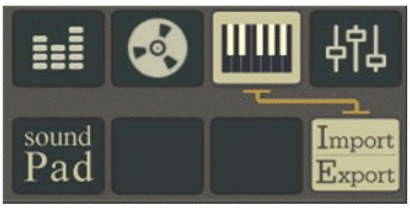
SoundPad pages allow access to Sound Pad / Playlist Manager.

Sound PAD



To get access to Sound Pad functions.

Import / Export



To Import / export SoundPad Session

Transport Option Dialog Box

By clicking on the right part of the Timecode display in the transport bar, a specific option dialog box appears to setup different options regarding the Transport.

Transport Scaling

This Defines the scale type used to display timecode in the transport bar. Setting this scale is also setting the TimeLine Scale in the same time. While changing TimeLine Scale does not affect the selected Transport Scale.

TimeLine Scaling

Defines the scale type used to display timecode on timeline and list (Rec Session, Take, Clips, Files, EDL…).

TimeCode Source

Gives the source of Timecode used in chasing mode. Click on it to make appear a menu of different TC-Sources:.

Time Code Source	Comment
Internal	Time code is given by the project timeline
24H	Real Time given by PC Clock
LTCa	LTC coming from ASIO driver (RME TCO)
LTCi	LTC coming from physical audio input
MTC1	SMPTE time code coming from M.I.D.I. input 1
MTC2	SMPTE time code coming from M.I.D.I. input 2
VBAN1	SMPTE time code coming from VBAN MIDI 1
VBAN2	SMPTE time code coming from VBAN MIDI 2
MMC TC	SMPTE coming from MMC Remote Driver

REM: LTCi (audio input) and MIDI input 1&2 can be configured in the System Settings Pages (see M.I.D.I. / LTC section).VBAN MIDI in VBAN Streams List.

TimeCode Format
Gives the current Timecode format used to display Cursor position as timecode (hh:mm:ss:frame). **In chase mode, this format must fit the format of the incoming timecode**.

Incoming Timecode
This Shows the source Timecode in the selected format. Below it displays the same time code with the offset applied on. **This second Timecode will be the one followed by the chasing process**.

TimeCode Offset
Is the Offset applied to the incoming Timecode in chasing mode.

Send All Timecode
When checked on, the MT128 is sending timecode on all possible output (LTC, MTC…).

Chase :
The chase section starts with the Delta Meter Bar that gives the drift of the timecode compared to the current playback position in chasing mode. Clicking on this meter bar opens/closes a TC-logger sub page on the right. This TC-logger allows to have the history of received timecode in chasing mode.

Chase Mode :
There is chase mode for recording and playback. In playback the chase mode can be SOFT, HARD or VARI. For Recording, the chase mode can be SOFT only (automatic).

RESYNC:
Means try to lock again on the timecode if it is lost.

STOP AFTER TC-LOSS :
Means stop playback or record if the timecode is not present or corrupted during a certain amount of frames.

Mute FF/REW :
While FF or REW , the playback can be played at different speed than x1 (like on a true tape machine). If Muted, the FF/REW process will be all-silent.

Reverse Playback :
If the option is checked on, to push PLAY twice will go on reverse playback.

Goto End on Record :
If the option is enabled, the cursor will go automatically at the end of the project (end of the last clip on the timeline) when pushing REC button.

Return on Stop:
Return to previous position when stopping.

Stop Goto Previous Point:
If this options is activated, pushing STOP (when transport is already stopped) will automatically place cursor to previous position (used to start playback or record).

Record Start Time:
Start a recording session at pre- defined time. This time can be defined by clicking in the right box. The time reference is the PC time given by the small clock on the caption SYS-INFO section.

Record Duration:
Stops recording after defined time. This time can be defined by clicking in the right box.

Time Limited Files:
Auto creates periodically new audio files.

Pre Record Buffer:
When enabled there is audio added to the audio file preceding the start point of the recording.

Post Record Buffer:
When enabled there will be audio added at the end of the audio file following the end of the recording.

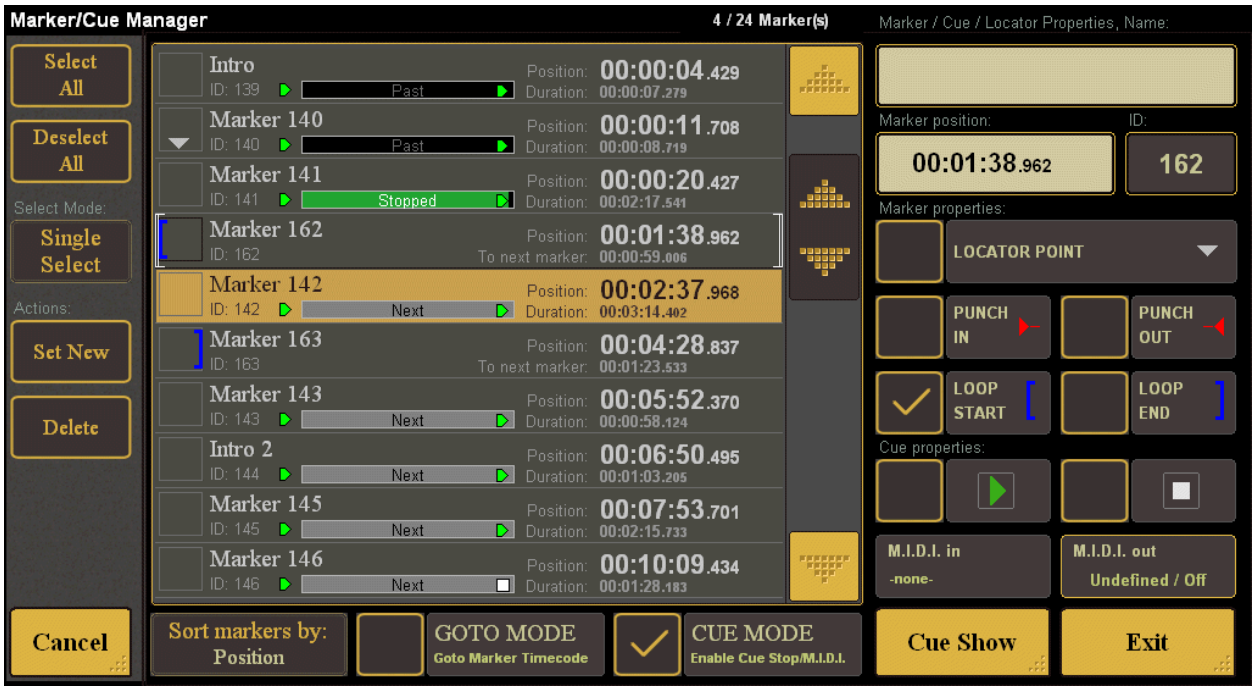
Pre –Roll:
Time to start playback or record before the original start point.

Edit Marker / Cue

This page gives basically access to 2 view: the marker manager to edit locators, marker and cues, and the Cue Show Panel for operational Playback actions.

Marker Manager:

This dialog box displays the list of Marker and their properties. It allows to define different types of marker: simple locators, Punch point (for dubbing recording), Loop Start and Loop End point (also used as left and right locator in some timeline editing tasks) and CUE point : PLAY and STOP marker. These CUE's are also shown as CUE buttons in the CUE Show Panel.



Markers List

On the left side all markers are listed. A scrollbar on the right side navigates through all marker entries. Icons reflect the attribute of the markers that can be adjusted on the right side. Markers contain at least one attribute.

Select all

A tap selects all markers in the list. Button is blinking. Tapping again resumes to previous selection.

Deselect all

A tap deselects all markers in the list. Button is blinking. tapping again resumes to previous selection.

Select Mode

This button Allows changing the current selection mode.

- Single Select: Exclusive Single Selection.
- CTRL Select: Cumulative selection
- SHIFT Select: Area Selection.

Set new
A tap defines a new marker (type Locator) at the current playhead position.

Delete
A tap deletes selected marker after confirming the step.

Sort Markers by
A tap opens list for selection the sorting order (position, name, ident)

On the right side, we have all (possibly editable) information related to the current marker (selected in the list by cursor).

Marker Name
A tap opens the virtual keyboard to enter name of selected marker.

Marker Position
A tap opens numeric to enter TC position of selected marker.

ID
shows the internal ID of selected marker (not editable unique number).

Locator Point
A tap toggles marker attribute between „on“ and „off“. A hook indicates „on“.

Punch in
A tap toggles marker attribute between „on“ and „off“. A hook indicates „on“.

Punch out
A tap toggles marker attribute between „on“ and „off“. A hook indicates „on“.

Start Point
A tap toggles marker attribute between „on“ and „off“. A hook indicates „on“. System support a single Start Point only

End Point
A tap toggles marker attribute between „on“ and „off“. A hook indicates „on“. System supports a single End Point only

CUE Play
Cue Play Marker will be shown in the CUE SHOW PANEL. System supports 96 CUE Markers.

CUE Stop
Cue Stop Marker will stop the playback when cursor will reach the time code point.

M.I.D.I. In
Not implemented yet

M.I.D.I. Out
Opens Dialog to define a M.I.D.I. Command to be send to M.I.D.I. Out #1 & #2 (defined in System Settings pages) as well as to the SoundPad to launch a sound.

GO TO POSITION MODE
A tap toggles function – a hook indicates „on“. When function is „on“ the play head jumps to marker position when selecting marker entry in the list. This works in Stop and Play.

CUE MODE
A tap toggles function – a hook indicates „on“. When function is „on“ the cue point are used in playback (CUE STOP is activated and MIDI implementation too).

Cancel
A tap discards changes being made and exits subpage.

CUE Show
A Tap changes view to Cue Show Panel (see next topic).

Exit
A tap keeps changes being made and exits subpage.

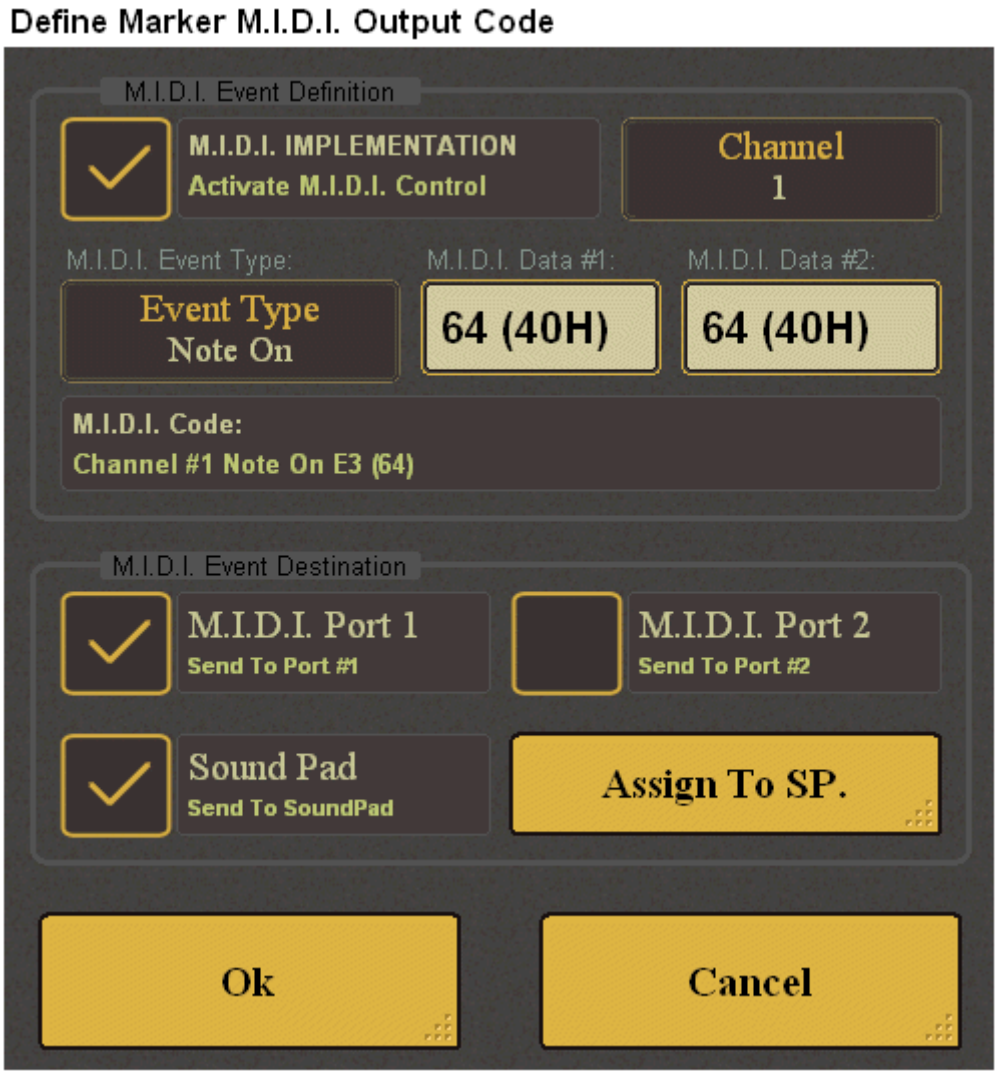
Marker with M.I.D.I Event:
It is now possible to associate a M.I.D.I event to a marker in order to send M.I.D.I. message to M.I.D.I. Out #1 & #2 (defined in System Settings pages) as well as to the Sound-Pad to launch a sound.

As it is shown by the picture below, the M.I.D.I. Implementation Dialog Box displays two sections:

M.I.D.I. Event Definition:
The area let you define the M.I.D.I. Event Type:
- Note On
- Note Off
- Control Change
- Program Change

You can also select the M.I.D.I. Channel of the Event and define manually the 2 possible data value associated with the event type. For Program change (requiring a single data value) M.I.D.I. Data #2 is not used.

In the field M.I.D.I. Code the current defined Event is displayed in human language : for example : Channel #1 Note On E3 (64). 64 in parenthesis is the note number in decimal (Midi Data #1).



M.I.D.I. Event Destination:
The section let you define where the M.I.D.I. message is sent :

- To M.I.D.I. Output Port #1 (defined in the System Settings Pages).
- To M.I.D.I. Output Port #2 (defined in the System Settings Pages).
- To Sound PAD.

Assign To SP.
This button allows to assign the M.I.D.I. Event directly to SoundPad Sound. A Popup List appear to let you select the SoundPAd Button you want to associated to the current M.I.D.I. Event.

Cue Show Panel:

The Marker Manager Dialog Box provides two different views: An Edit one to manage the marker list and an operational one to use CUE marker as playback button to start timeline on different Timecode points. The CUE Show panel provides another way to use Timeline playback, for example for rehearsal or for show management.

On the left side the Cue Show Panel displays 3 columns on 8 possible CUE PLAY markers in TimeCode Order (from top to bottom and left to right). The page selector on the right allows handling 4 pages of CUE's. It makes 96 possible CUE. A tap on button starts the CUE (start timeline from initial CUE Timecode). A second TAP stops it. Transport bar can still be used to PAUSE and CONTINUE Playback of course.

On the right side, there is information on the current CUE being played or ready to be started. It displays the remaining time before next CUE STOP (if exists) and the remaining time before next CUE.

Edit Marker

A Tap changes view to previous Marker Manager Page (see previous topic).

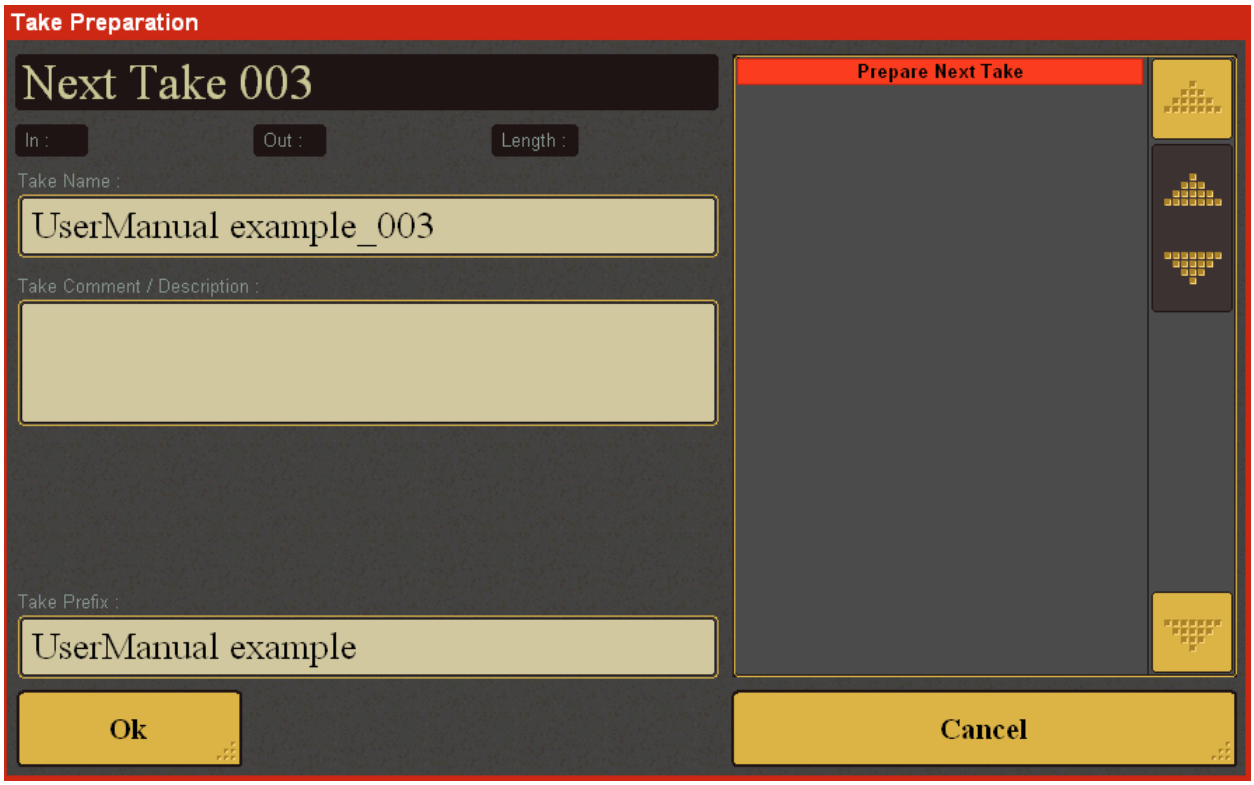
Exit

A tap exits subpage.

MT128 Cue Launcher on stage (managed by the drummer):

Take validation box

The „Take Validation Box“ allows for preparing the next take. After recording a take it will popup automatically (depending on „SysSet-Recording-Always Good Take“) for confirmation of already recorded takes. The functionality of the Take Validation Box depends whether a new take needs to be prepared or existing takes need to validated. A tap on the „OK/Cancel“ or „Exit“-button will close the Take Validation Box and allow for further operation without preparing or confirming takes.



Take name
A tap opens the virtual keyboard to enter the take name being recorded next. The take name will be reflected by the clip- and file-name.

Take comment/Description
A tap opens the virtual keyboard to enter metadata for the next take.

Take prefix
A tap opens the virtual keyboard to enter prefix for the next take.

OK
A tap saves changes being made and exits subpage

Cancel
A tap discards changes being made and exits subpage.

Non validated Takes
A list shows all takes, that are not validated so far. A scrollbar on the right hand side allows for navigation through the list i.e. the take entries. A tap on the take name will select it for edit and shows all information related to the take (Origination Date, Record Session,...).

Good Take
A tap marks the take as good. Its related audio (clip) is enabled on timeline.

Bad take (disable)
A tap marks the take as bad. Its related audio (clip) is enabled on timeline. A „bad take“ is marked in the List-View.

Abort take (delete)
A tap deletes the take and its related audio files. No audio (clip) will be added to the timeline.

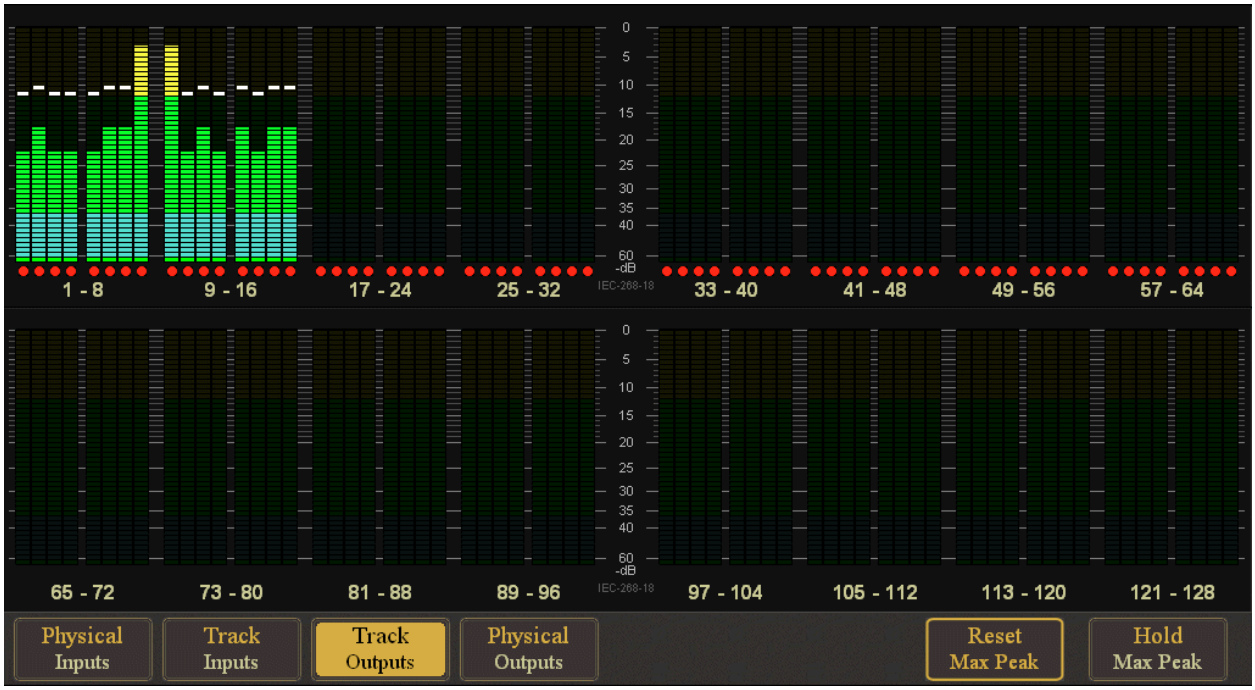
Exit
A tap exits the subpage.

I/O FUNCTION PAGES

The first group of pages allows to check audio i/o (metering pages) and configure ASIO driver. The “Tools & VBAN” sub page provides access to possible additional components and VBAN Streams. The last sub page gives access to ROUTE page to patch physical I/O to Tracks or BUS.

Meters

Metering of audio signal at four different measure points is provided on this page. Red Dots at the bottom of each track show that track is armed. Green rectangle at the bottom of the scale of each track shows whether there is signal present or not. Green = signal is present



Physical Inputs

A tap shows the metering of all physical inputs.

Physical Outputs

A tap shows the metering of all physical outputs.

Track Inputs

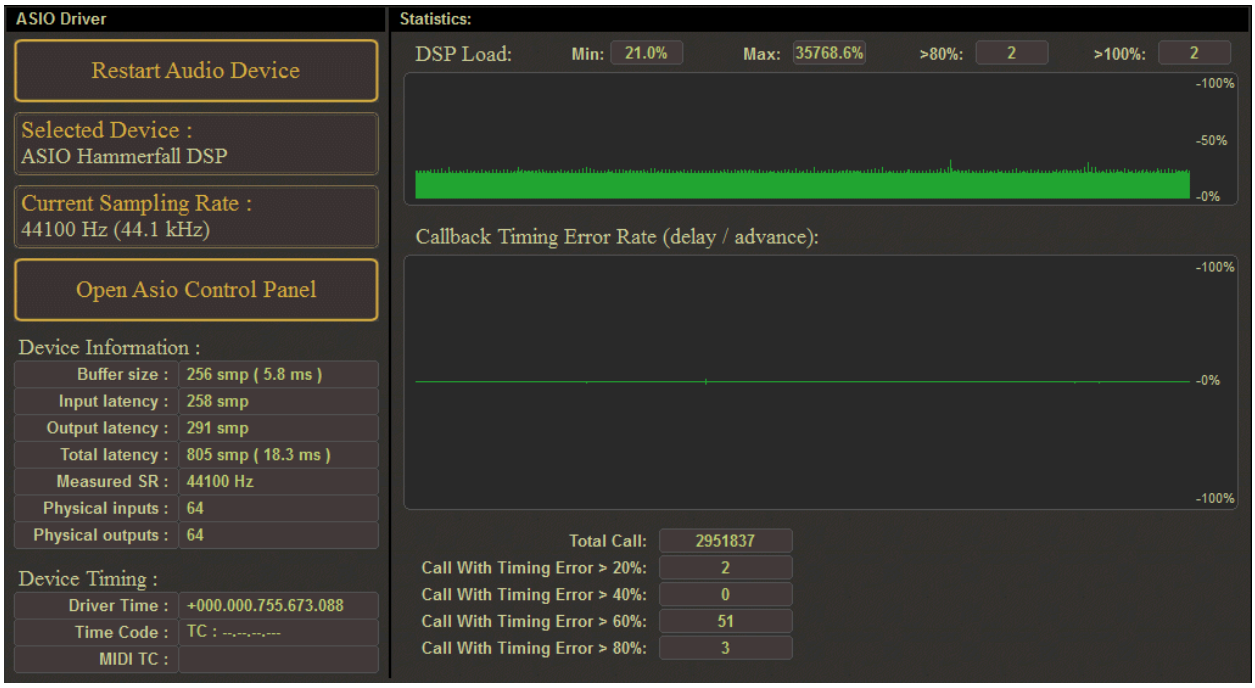
A tap shows the metering of all track inputs.

Tracks Output
A tap shows the metering of all track outputs

Reset Max Peak
A tap resets the maximum peak when „Hold Max Peak“ is on.

Hold Max Peak
A tap toggles between „Hold Max Peak“ on and off. Button is lit when function is „on“.

ASIO Device
Control and information about the used audio device and it's properties..



Restart Audio Device
A tap will restart the audio device after confirming with „ok“.

Selected Device
A tap opens a selection of all available audio devices (ASIO Drivers).

Current Sampling Rate
A tap opens a menu to select another sampling frequency. The ASIO driver can accept or not this new sampling rate (depends on hardware configuration, ASIO synchro type…).

Open ASIO Control Panel
A tap opens the driver dialog of used / selected audio device.

Device Information:
This section gives Information about audio device properties (buffer size, latency, sample rate, number of i/o's).

Samplerate is Measured SR: it means the MT128 is measuring the sampling rate according the number of sample provided per second by the audio driver. If this sampling rate is not according current project sample rate, MT128 show different alert. This allows to detect bad hardware sync for example (bad wordclock, bad clock).

Device Timing:
This section gives Information about elapsed time since start of audio device in sample, and current time code coming from the ASIO Driver (for example from the RME TCO board).

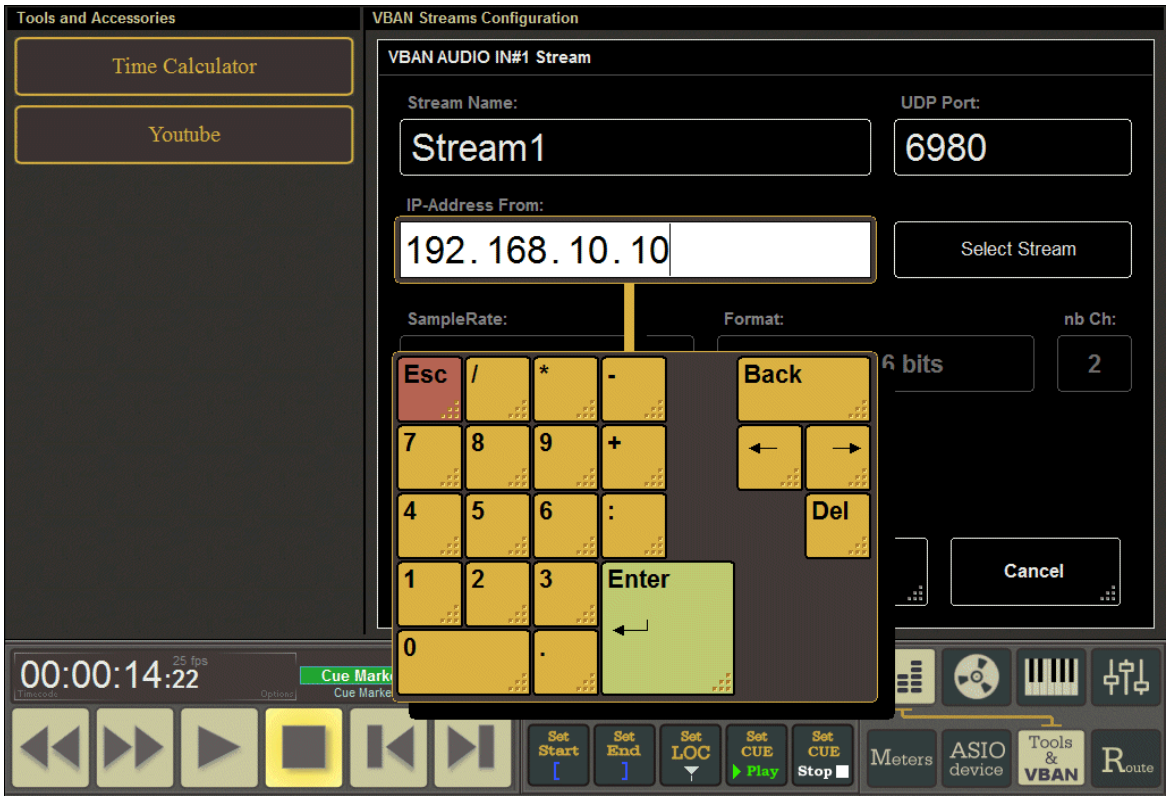
Statistics
This area shows two real time measures: the DSP Load (that must never go over 80% - there is counter to detect if a buffer is processed with more than 80% and 100% DSP load) and the Callback Timing error in percent. This last measure shows the driver stability in the DSP call from ASIO driver. Big timing error does not always generate problem, but if there is audio problem (like cut/crack in the sound) this can give the reason why.

Tools & VBAN

This page is intended to give access to additional components and manage different VBAN streams. Tools & Accessories can be regular software which will be listed on the left section (the list is given by the startup script, see administration page and MT128 StartupScript language documentation).

VBAN Services can be Enabled/Disabled by the first line check box. This parameter is stored in the current MT128 project. A tap on the first line will open the macro menu.

A Click on selected stream will open the configuration dialog box:



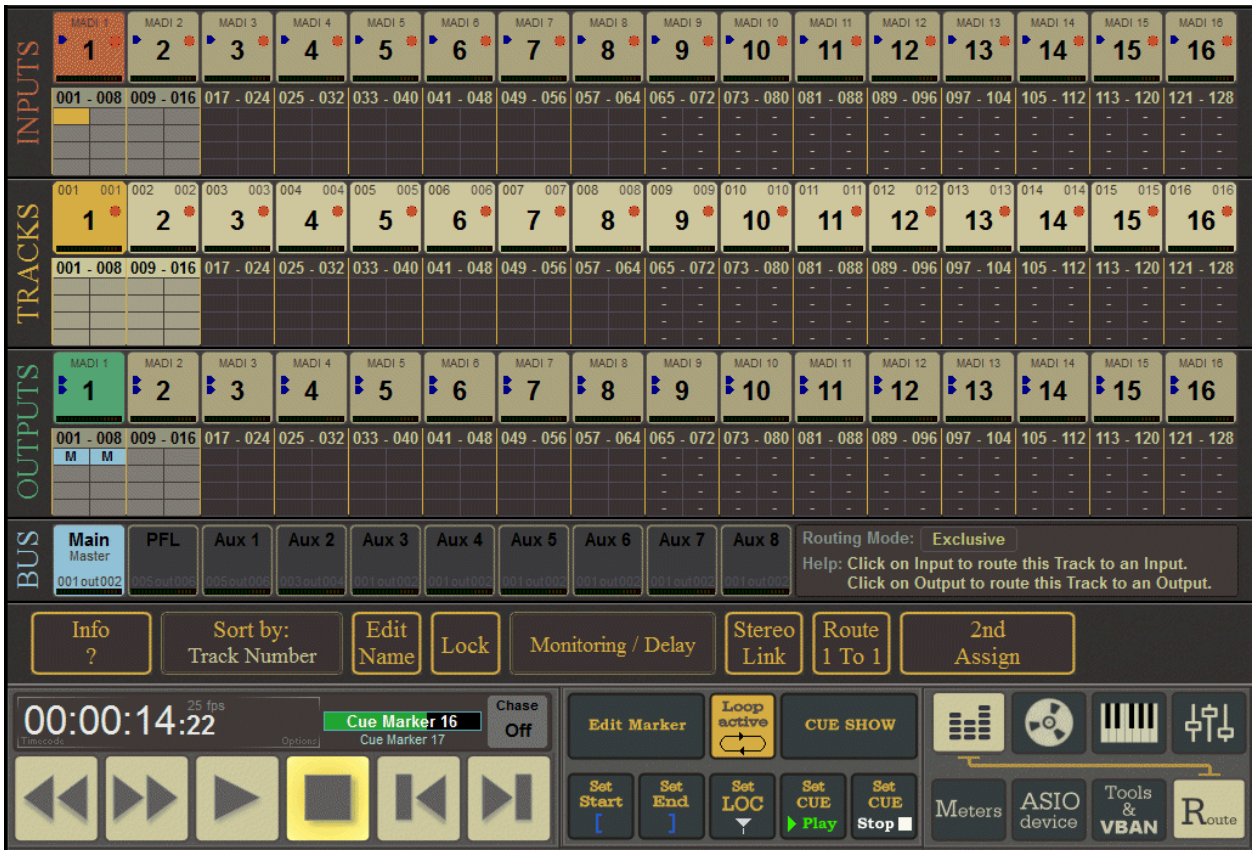
VBAN Stream configurations are stored as system settings (in user registry) – not pending on project.

Route

This last page allows patching Physical I/O to Tracks and BUS. There are three lines: Inputs / Tracks / Outputs Depending of SysSet-Mixer / Routing – Exclusive Routing options. Each Physical Input can be assigned to one or more tracks. Each track can be routed to one physical output. Also a track can have 2 assignment and combine two physical inputs and 2 physical outputs.

BUS (MAIN, PFL and 8 AUX) can also be routed to physical outputs, or/and tracks inputs (to be able to record BUSES if required).

The matrix-view shows 16 of 128 possible channels. The view is organized in 2 successively „channel- units“ of 8 channels. There are 16 „channel-units“ (16x16 = 128) that can be accessed tapping in the info display related to each line. Browsing is done for each line (Inputs / Tracks / Outputs) independently. Routing is done with two taps (source => destination or destination => source).



Physical Input

Input Selector and input overview that can be used as slider to select the desired 16 input area.

Tracks
Tracks selector and overview that can be used as slider to select the wanted 16 tracks.

Physical Output
Out put Selector and overview that can be used as slider to select the wanted 16 output.

Bus outputs
BUS Selector.

Info display
Contextual help. Reserved for overview function and matrix view.

Sort by:
A tap opens a selection for different sorting options (track number, track name, input assignment, output assignment).

Edit name
A tap opens enables the naming mode for Inputs / Tracks / Outputs / Busses. A further tap on any channel-button (input, track, output, bus) will open the virtual keyboard for text input. See also Help in the „Info display“.

Lock
A tap enables the lock-mode. Button is blinking when mode is active, then a tap on any channel-button (input, track, output, bus) will lock it. See also Help in the „Info display“.

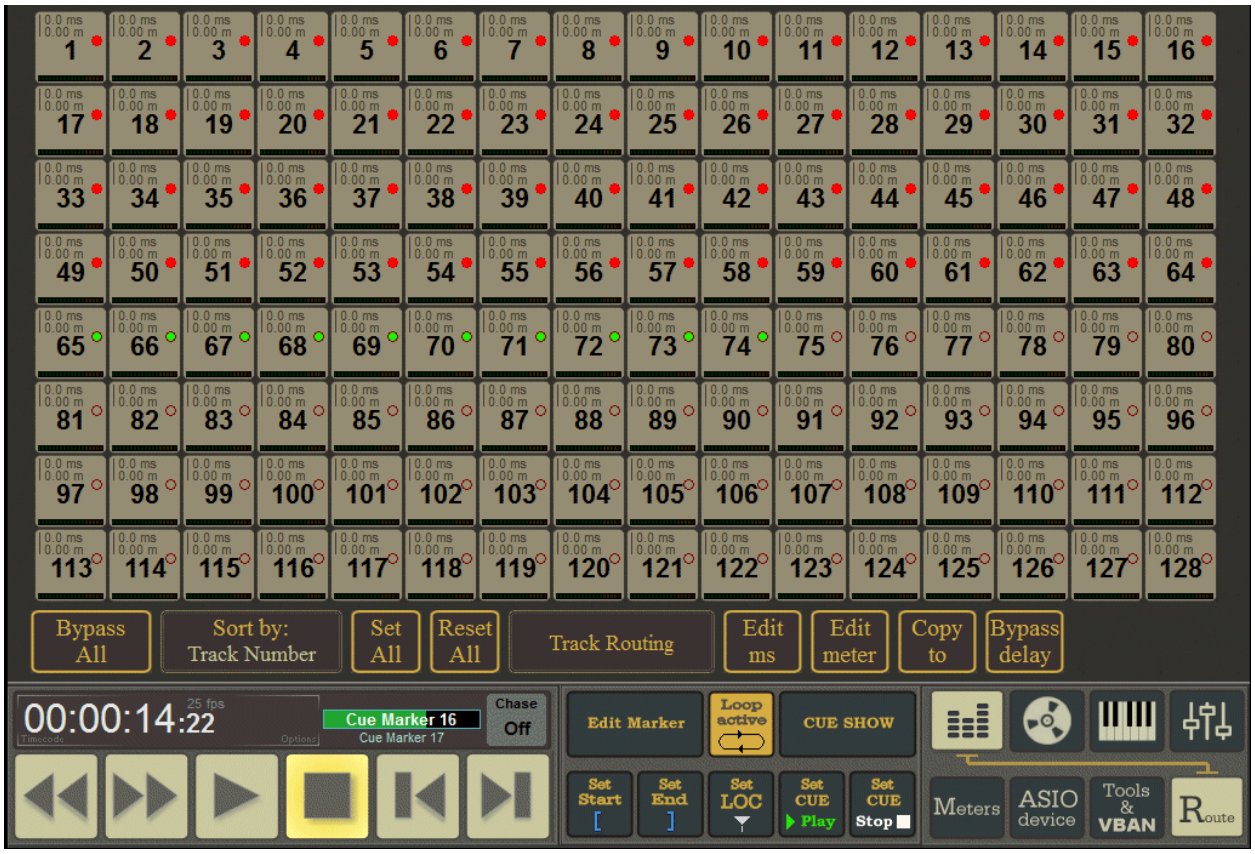
Stereo Link
Enter this mode to link (or unlink) 2 adjacent tracks together. When 2 tracks are linked, the recorded file (related to these 2 tracks) is a stereo one. Tracks are also automatically linked on different mixer pages.

2nd assign
This mode allows to set a second input/output assignment. Tracks can receive signal from 2 inputs, and can send signal to 2 outputs.

Route 1:1
Reset routing to initial one. The button is ON while it can restore the previous routing. In this case, clicking again will recall the previous setting.

Monitoring / Delay
This large button allow to switch to the delay monitoring page. See next section.

Delay
Delay can be used at the Track Output before the mixers. Delay is „non-destructive“ and therefore intended for monitoring.



Track Button (128)
For each track a delay can be set , reset, muted.

Bypass All
A tap bypasses all track delays. Button is blinking and track buttons become violet when mode is active.

Sort by
A tap opens a selection for different sorting options (track number, track name, input assignment, output assignment).

Set all
A tap will copy the delay-value of the selected track to all other tracks. Button stays ON when function is active. A further tap will resume to previous values.

Reset all
A tap resets all adjusted track delays to zero. Button stays ON when function is active. A further tap will resume to previous values for each track delay.

Track Routing
A tap on this button switch back to route page.

Edit ms

A tap enables the enter-mode for the track delay in milliseconds. Button is blinking when mode is active, then a tap on a track button will open the virtual numeric for input of desired value. Maximum delay is 100ms.

Edit meter

A tap enables the enter-mode for the track delay in meters. Button is blinking when mode is active, then a tap on a track button will open the virtual numeric for input of desired value. Maximum delay is 34,4 meters (related to speed of sound defined by the System Setting Regional Options).

Copy to

A tap enables the copy-mode. Button is blinking when mode is active, then a tap on a track button will copy the delay value of the previous selected track button.

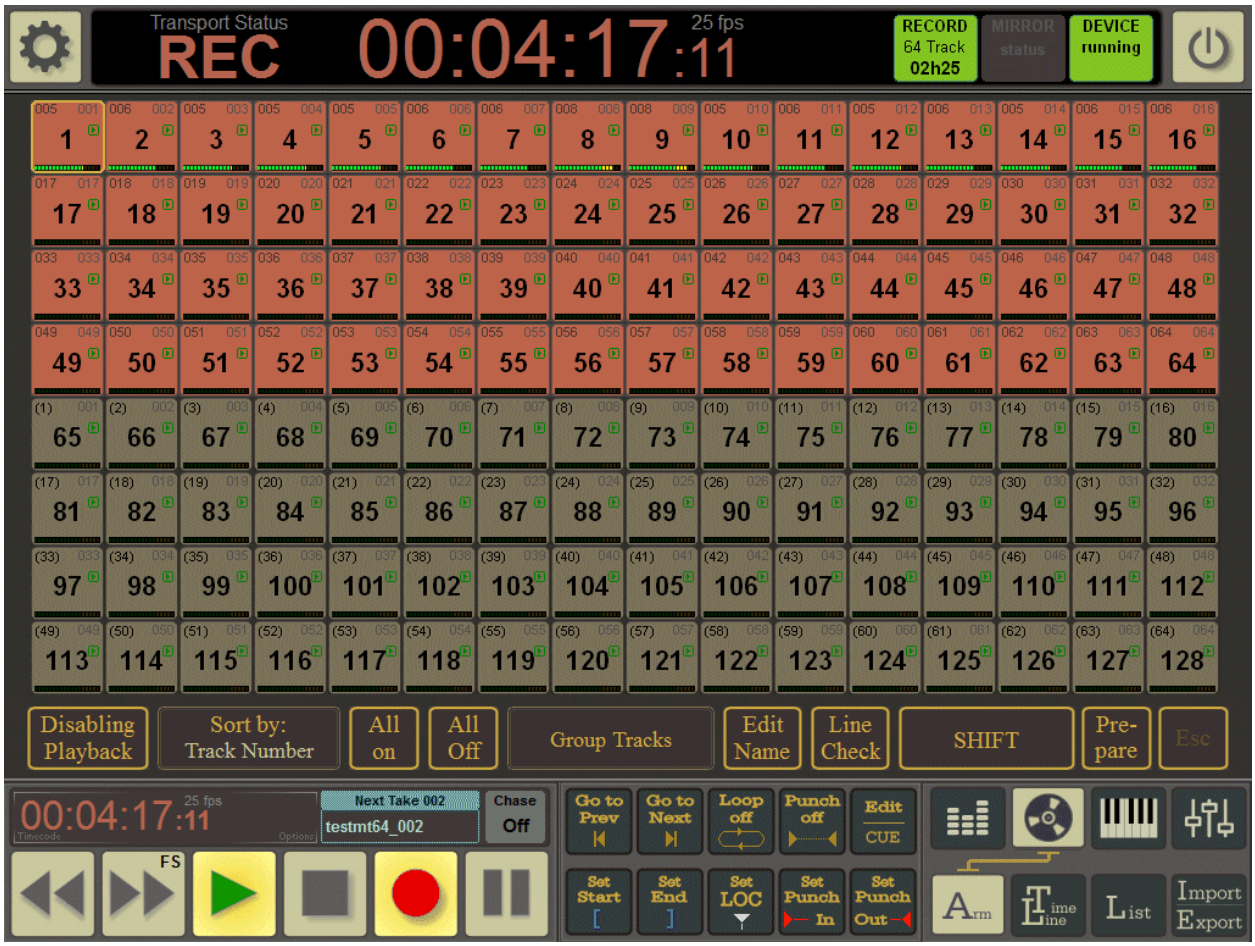
Bypass Delay

In this mode a delay can be muted on individual tracks

TAPE RECORDER PAGES

This group of 4 pages is dedicated to Timeline Recording and playback. They allow managing track arming, Timeline, EDL Editing, Import/Export; all the bare necessities to manage main functions of a recording session.

Arming Matrix



Track Button (128)

A tap arms / unarms the related track. Button becomes red if track status is armed. Depending of alternate modes (Edit Name / Line Check / Prepare / Disabling Playback) a tap will cause different functions.

Disabling Playback

Enter in a mode where you act on Playback status (small green arrow in each track button).

Sort by:

A tap opens a selection for different sorting options (track number, track name, input assignment, output assignment).

All On

A tap arms all tracks (or enable playback if in this mode). Button is ON when all tracks are armed and previous states can be restored. A further tap will resume to previous arming selection.

All Off

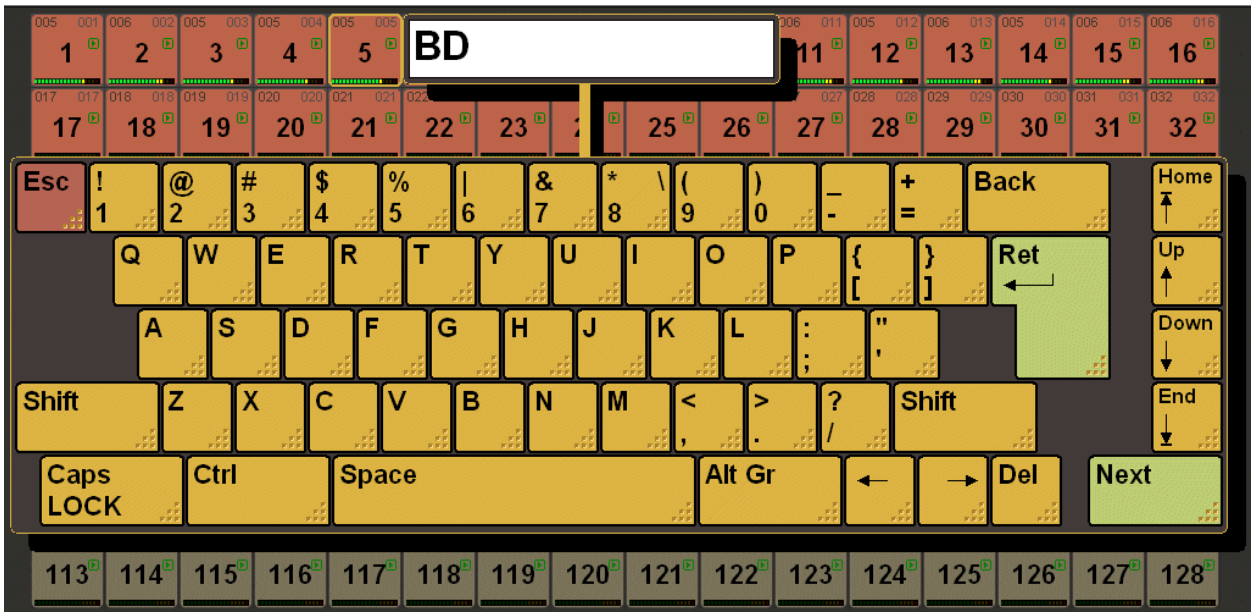
A tap unarms all tracks (or disable playback on all tracks if in this mode). Button is ON when all tracks are unarmed and previous states can be restored. A further tap will resume to previous arming selection.

Group Tracks

A tap switches display to group page (see next section).

Edit Name

A tap enables the Naming-mode. Button is blinking when naming mode is active, then a tap on a track button will open the virtual keyboard for naming. The button NEXT allows to valid the current name and go to edit the next track name. This navigation is also implemented on true keyboard with page-up / page down key.



SHIFT

A tap enables coherently ARM/UNARM of several tracks. tap <Shift>, then first track and last track => selection of all tracks in between

Line Check

This mode allow to monitor (in the PFL bus) the input of the track you select. This monitored track can be armed/ unarmed by clicking twice. This mode is automatically canceled if going in a n other page.

Prepare

In this mode, the arming can be set on several track but without being active. It's a preparation. When finished, the user will have to click on SET (confirm the preparation) or ESC (abort).

Group

Tracks can be combined as track groups. Depending on „SysSet-Mixer / Routing – Exclusive Group“ a track can be part of one or more track groups. There are 16 Group buttons with group number, group name, meter and count of tracks

Group button

Like in the arming matrix page, typing on group buttons acts on arming status. To select a group without changing its arming status can be done in INFO SELECT mode.

128 field Matrix for Group information

Display shows track number assigned to the selected group. Armed tracks are marked with a red square in the background.

Sort by:

A tap opens a selection for different sorting options (group number, group name).

All On

A tap arms all groups. If the button is ON, a further tap will resume to previous arming state.

All Off
A tap unarms all groups. If the button is ON, a further tap will resume to previous arming state.

Tracks Arming
A tap switches display to Arm Matrix (see previous section).

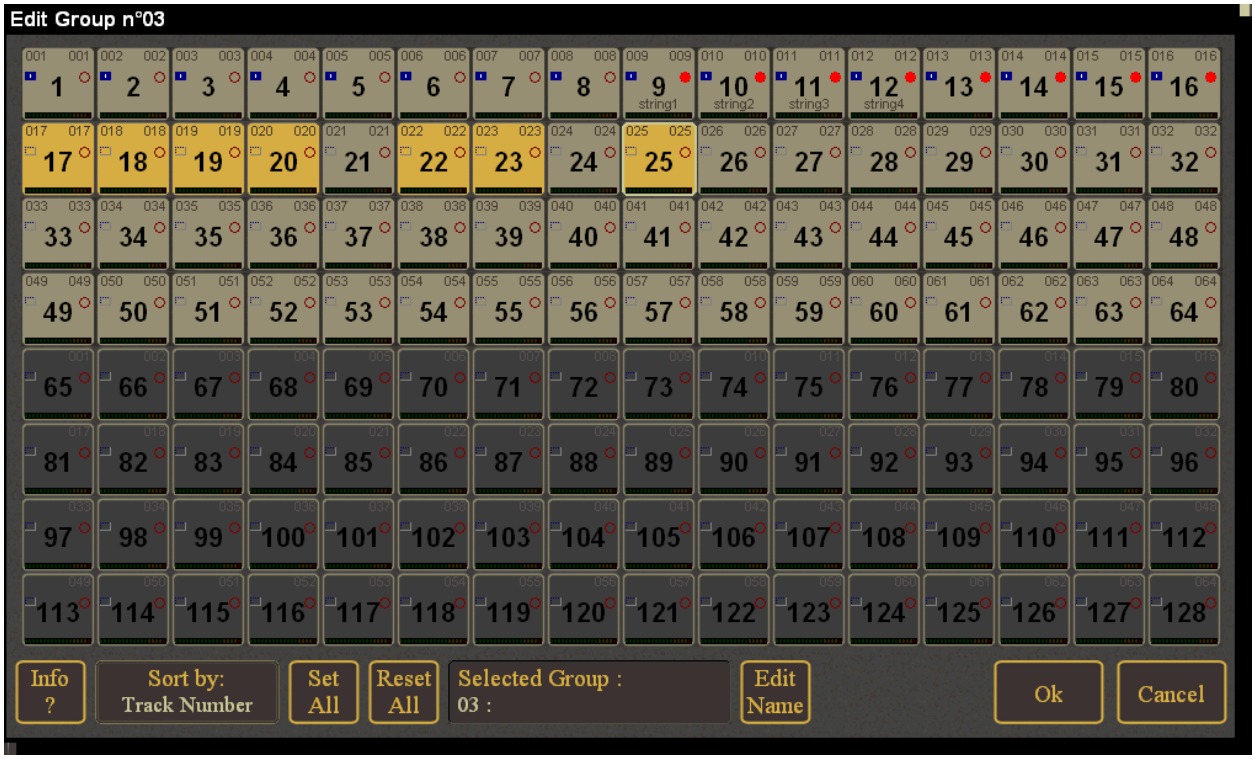
Edit Name
A tap enables the Naming-mode. Button is blinking when naming is active, then a tap on a track-group button will open the virtual keyboard for naming.

Info select
A tap enables the Info-mode. Button is blinking when mode is active, then a tap on a track-group button will show all tracks assigned in the info display.

Edit Group
A tap enables the Edit-mode. Button is blinking when mode is active. A tap on a track group will open a sub page (Edit Group) for assignment of tracks to that group.

Prepare
Preparation to arm / unarm several groups.

Edit Group Dialog Box
A dialog box appears to select the tracks which will be in the group.



Sort by:

A tap opens a selection for different sorting options (track number, track name, input assignment, output assignment).

Set All
A tap assigns all tracks. Button stays ON when all tracks are assigned, a further tap will resume to previous assignment.

Reset All
A tap un-assigns all tracks. Button stays ON when all tracks are unassigned. A further tap will resume to previous assignment.

Selected group
Display Information related to the current group.

Edit Name
A tap opens the virtual keyboard to enter name of track group.

OK
A tap saves changes being made and exits.

Cancel
A tap discards changes being made and exits.

MIXER PAGES

The MT-128 has three mixers – matrix, mixes and main. There are 9 stereo-busses (main, aux 1-8) for independent mixes and a pfl-bus which can be routed to any of the 128 physical outputs. Matrix- and Main mixer work parallel; i.e. both of them can feed every physical output with signal. The mixer „Mixes“ feeds the 9 stereo-busses. On top there is a meter bar which is also used for browsing through all „channel-units“. The bus-routing can be predefined in the „startup-script“. By default the „main“-bus and the „pfl-bus“ are routed to the last two physical outputs. The auxiliary busses are routed to the backwards counted pairs of physical outputs. Example: 64 possible tracks – main = 63/64, pfl = 63/64, aux 1 = 61/62, aux 2 = 59/60,... Note: When „main-bus“ and „pfl-bus“ use the identical outputs any used pfl-function will work as „solo/cut“-function by muting the „main-bus“.

Mono matrix mixer

Meter bar

Displays level of all tracks. The meter bar is also used to select part of the mixer and to show which strip are displayed in the mixer section.

Strips

Each track is represented by a strip. In each strip we have from the top to the bottom, a routing button, a button to ARM / UNARM track, a PFL button, a MUTE button and a fader to set the gain of the track.

Slider (level)

A „zoomed“ fader is used for optimized handling on touchscreen. Two sliders are provided for coarse and fine adjustment.

Route page access

On the top of the strip, the routing is displayed (physical input, physical output). A tap will access the view of the related track on the routing page.

Arm

A tap arms / unarms the related track. Button becomes red if track status is armed.

PFL

A tap toogles the pfl-function (on / off). Button is lit when pfl is on. Then the track output is fed to the pfl-bus.

Mute

A tap toogles the mute-function (on / off). Button is lit when mute is active. Then the track output is muted on its assigned physical output. Note: there can be still signal present on this physical output as it can be fed from another mixer.

Gain
A Tap on it display a precision fader to adjust level.
Sort by:
Sort by: Track Number, Track Name, Input assignment, Output Assignment

Reset Menu
This button opens a menu to reset different type of parameters of the mixer on all tracks : ARM ALL, ARM OFF, RESET PFL, RESET MUTE, SET SLIDER GAIN.

Mixes

Mixes-Mixer allow for independent stereo mixes which can be routed to any physical stereo output. Further there is a PFL-bus which can be routed to any physical output.16 track fader (= 2 channel units) are shown per page – display of track number, track name, current level and panoramic. On top there is a meter bar showing all available channels which is also used for browsing through all „channel-units“.

On the bottom, the Current Mixer is displayed in a button used to open a menu to select the desired mixer: Stereo Mixer (per default) or Aux 1 to Aux 8. The BUS Assignment of these mixers is in the Main Mixer sub page.

Meter bar

Displays level of all tracks of the current selected mixer. The meter bar is also used to select part of the mixer and to show which strip are displayed in the mixer section.

PFL

A tap toogles the pfl-function (on / off). Button is lit when pfl is on. Then the track output is fed to the pfl-bus.

Solo

A tap toogles the solo-function (on / off). Button is lit when solo is active. Then all other channels are muted and only solo'ed channels are fed to the stereo bus.

Mute

A tap toogles the mute-function (on / off). Button is lit when mute is active. Then the track output is muted on its assigned physical output. Note: there can be still signal present on this physical output as it can be fed from another mixer.

Panoramic

Since the mixer are stereo and send signal to a stereo BUS, the panoramic control allows to adjust the signal on Left or Right Channel of the BUS..

Gain
A Tap on it display a precision fader to adjust level.

Sort by:
Sort by: Track Number, Track Name, Input assignment, Output Assignment
tap closes the slider.

Reset Menu
This button opens a menu to reset different type of parameters of the mixer on every track: RESET PFL, RESET SOLO, RESET MUTE, RESET PANORAMIC, RESET SLIDER GAIN.

Group

In this section, we retrieve our groups defined in the ARM-GROUP page. For each group (upto 16) a related strip has been created and fits the strip of the mixer it belongs to. The group can be related to all of mixers : Mono Matrix mixers, Stereo Main mixer, and AUX mixers.

Meter bar
Displays level of all tracks of the current mixer related to groups. The meter bar is also used to show which strip are part of the selected group.

Sorted Track
The sorted function is the same as for all other mixer pages, but here will take effect only in the meter view. While the strip, showing group can be sorted by the other button.

Sorted Groups:
Allows to sort the 16 strips of groups (by number or by name).

Main
The main mixer provides level control of all stereo busses (Main, PFL, AUX 1-8) and special routing options (for VAIO and Sound-Pad). Every Strip displays ON/OFF Status, MUTE status, name, Panoramic state and Fader Level. On the bottom of the strip, the output routing (where the BUS is routed to) and below the possible Track INPUT Routing (BUS can be routed in Tracks input for recording for example). On top there is a meter bar showing all available physical outputs (where the buses are routed to).

On (activate)
A tap toggles between „on“ and „off“. Button is lit when „on“. Then bus signal is fed to assigned physical output, replacing possible signal coming from tracks.

M: Mute
A tap toggles the mute-function (on / off). Button is lit when mute is active. Then the bus signal is muted on its assigned physical output. Note: there can be still signal present on the physical output as it can be fed from the matrix mixer/bus.

Balance
A tap opens the large slider for adjustment of balance level of stereo signal.

Gain Slider
A tap opens the large slider for adjustment of gain of the BUS.

Meter bar
A 128 channel meter bar showing level of the physical outputs to which the buses are assigned to.

Routing
This bottom section shows the current routing of bus output, a tap on opens the routing page. In white the routing to physical outputs, in red below the routing to track inputs if any.

Virtual I/O:
The MT128 can use a specific VB-CABLE called MT128 VAIO as Virtual audio I/O for example to record sound coming from DVD, Web Radio or any player or audio applications using Windows audio device interface. This virtual Input can be activated by ON/OFF button and routed to Tracks Inputs (IN button) for record or Tracks Outputs (OUT button) for playback only. Tracks Assignment can be done by clicking on routing table showing the current Track Assignment for 8 possible channels. It is also possible to route a stereo output to virtual output point (see OUT assignment on the right).

SoundPad Routing:
The SoundPad Module can also be disabled by ON/OFF button and routed to Tracks Inputs (IN button) for recording or Tracks Outputs (OUT button) for playback only. Per default SoundPad is activated and routed to Tracks Outputs. Channel Assignment is made directly by SoundPad Sound properties (see SoundPad Chapter later in this document).

Talkover & Monitoring:
MT128 can manage extra device to talk over or monitor any track on a regular audio device (like audio onboard or USB headset). Like Virtual I/O it's possible to route the incoming signal on any tracks in or out, and to monitor any audio track outputs on the regular playback device (see system settings / Mixer Routing / Extra I/O options to select extra audio device).

TIME LINE PAGES

All timeline based operation, take history and audio import/export-functions are provided in this suite of pages.

Tracks view

This page displays the timeline with possible waveform and allows to perform basic editing: COPY / CUT / DELETE / CROP.

Tracks vertical view 32 tracks

Timeline with 32 tracks visible. There are navigation-shortcuts on different areas of the timeline-window. On the left hand side there is information of track status and a vertical numeration of all tracks.

Top Timeline

Timeline – a tap in the top area will snap the playcursor to the nearest locator position.

Middle Timeline

In this track view, a tap in the middle area (top half) will place the playback cursor to the exact „tap-position“. A tap in the middle area (bottom half) will let you move the timeline horizontally left or right.

Bottom Time Line
Timeline – a tap in the bottom area will snap the playcursor to the nearest punch-marker position.

Track Status
This area displays the track number (or track range if there is not enough place) and the status of the track: A green led indicates when a track contains audio and a red led indicates an armed track.

Vertical Zoom (Left Button raw)
A tap zoom the vertical view to 128, 64, 32, 16, 8, or 4 tracks. Cursors allow to navigate vertically.

Horizontal Zoom (right Button raw)
Different buttons allow to see all the timeline (Full Zoom) or just 10 minutes of the timeline, 3 minutes or 30 seconds. Zoom in / Zoom out allows to zoom in a free way in both directions.

Navigation buttons:
The 3 navigation buttons allow to go quickly to different key positions: previous clip, next clip or clip end.

Keyboard Shortcuts:
It is also possible to navigate by using Keyboard and Mouse. Mouse Wheel can change the zoom while arrow keys move the timeline in both directions horizontally or vertically.

- '+' Zoom in
- '-' Zoom out
- '*' Zoom Full
- KEY '1' : 128 Tracks Display.
- KEY '2' : 64 Tracks Display.
- KEY '3' : 32 Tracks Display.
- KEY '4' : 16 Tracks Display.
- KEY '5' : 8 Tracks Display.
- KEY '6' : 4 Tracks Display.
- Left Arrow, Right Arrow move the displayed time line zone
- CTRL + Left Arrow : Goto Previous Clip
- CTRL + Right Arrow : Goto Clip End / Next Clip End.
- Up and Down: Scroll Track by one up and down.
- CTRL + UP Arrow : move select track up.
- CTRL + Down Arrow : move select track down.
- Page Up: Previous Track Page
- Page Down: Next Track Page
- CTRL + Page Up: First Track Page
- CTRL + Page Down: Last Track Page
- END : Goto End Of timeline (end of last clip)
- HOME: Goto beginning of timeline (first clip)
- 'E' : Switch Edit Mode

Edit Mode:
Now Timeline includes an EDIT mode to perform basic edition on one or several Clips. EDIT mode must be activated by a tap on EDIT MODE button above list of track status.

In EDIT mode the playback cursor becomes orange (the Color of Editing Functions), and several buttons becomes active (again in Orange) on the bottom of the timeline.

The basic Editing task is performed by the following step:

- Select one or several clips to edit.
- Possibly use Start and End Point to define Left and Right Locator.
- Click on EDIT button on the left to open the EDIT Dialog Box.

REM: After Editing Timeline, the project must be saved to take the changes in account and store the new EDL with the project.

Top Timeline in Edit Mode

Timeline – a tap in the top area will place the playcursor to the exact „tap-position“.

Middle Timeline in Edit Mode

A tap in the middle area will will place the playcursor to the exact „tap-position“ and select or deselect clip if any.

Bottom Time Line in Edit Mode

A tap in the bottom area will let you move the timeline horizontally left or right.

Single/CTRL Select

A tap toggles selection mode between single and CTRL. Single = only one clip can be selected // CTRL = several clips can be selected.

Clip /Take select
A tap toggles selection mode between clip and take. clip = only the tapped clip is selected // Take = all clip of the same take are selected.

Select All
A tap selects all clips on timeline. Button remains pushed when function is active. A further tap resumes to previous selection.

Deselect All
A tap deselects all clips on timeline. Button remains pushed when function is active. A further tap resumes to previous selection.

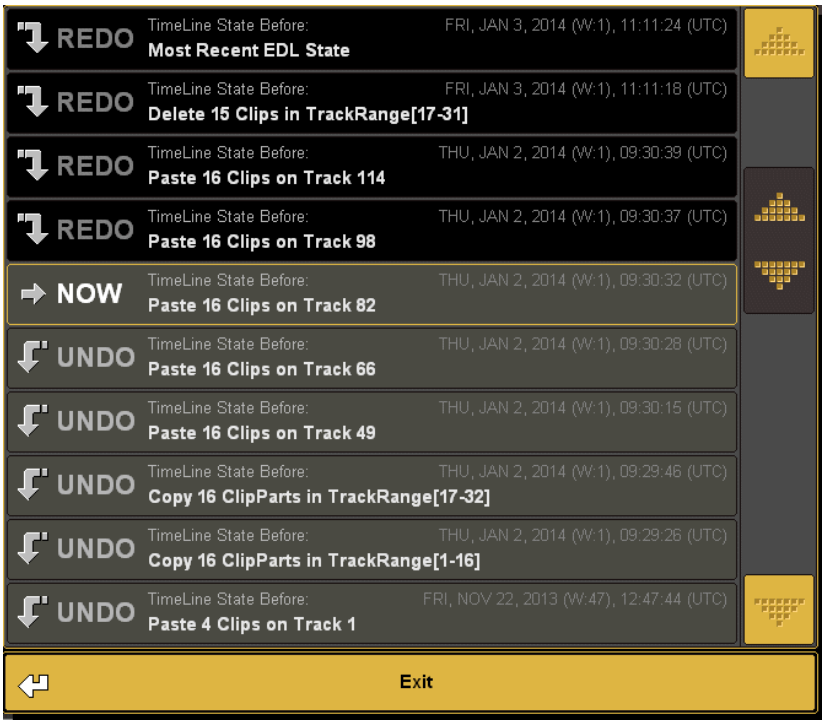
Right to the “Deselect All” button we have 3 direct Edit Buttons to

Crop Left under cursor
Selected Clip are cropped by left under current playback cursor

Scissor under cursor
Selected Clip are split under current playback cursor

Crop Right under cursor
Selected Clip are cropped by Right under current playback cursor

UNDO
A Tap on UNDO button displays the UNDO List below:



Editing functions support 16 Undo Levels stored on disk (it means you retrieve your UNDO level when reloading project). CTRL-Z and CTRL-Y keyboard Shortcut are also available:

Edit Dialog Box:
A Tap On EDIT button will open the Edit Dialog Box below:

This Dialog Box allows making complex operation in few clicks on one or several clips:

Main operations: Edit Action

Copy To
To Copy the Clips Selection to a Track / Time Code Destination

Move To
To Move the Clips Selection to a Track / Time Code Destination

Delete
To Delete the Clips Selection

Secondary Operations: Bound by Locators

Crop by Left
Crop the Clips Selection by the Left Locator (Also Loop Start Point). It is applied before previous operation (COPY, MOVE, DELETE)

Crop by Right
Crop the Clips Selection by the Right Locator (Also Loop End Point). It is applied before previous operation (COPY, MOVE, DELETE)

Destination and Reference:
Destination for Copy and Move operations are given by the Destination Time and Destination Tracks field. These data are related to Selection Base Reference. You can set the same time code or same track than the Selection Base reference by clicking on the black field for “Selection Time Reference” and “Base Track”.

Per default the TimeCode Reference is given by the START point of the clip(s) or group of clips, but this reference can be switched to END of the clip(s) - for example to place clip’s) by the end (instead of by the beginning).

Third Operations: Properties changes

Change Name
Change the name of the Selected Clips

Change Gain
Change the gain of the Selected Clips

Change Fade In / Out
Change Fade In / Out time of the Selected Clips

Change WaveForm Color
Change waveform color of the Selected Clips

Ok
A Tap on OK button will perform the editing task.

Cancel
A Tap on Cancel button will exit the dialgo box.

Fast Render:
A tap on this button will open the fast render dialog box to export the selected clip as audio file with respect of

- the length given by the start point given by the beginning of the first selected clip on the timeline and the end point given by the end of the last selected clip on the timeline.
- The channel number given by the number of track involved by the clip selection

FAST Render function is a very unique function to build very quickly multi channel audio file from the timeline. Of course Loop Start and Loop End Point could be used as Left and Right Locator to bound the selection. See Import / Export Chapter for further information.

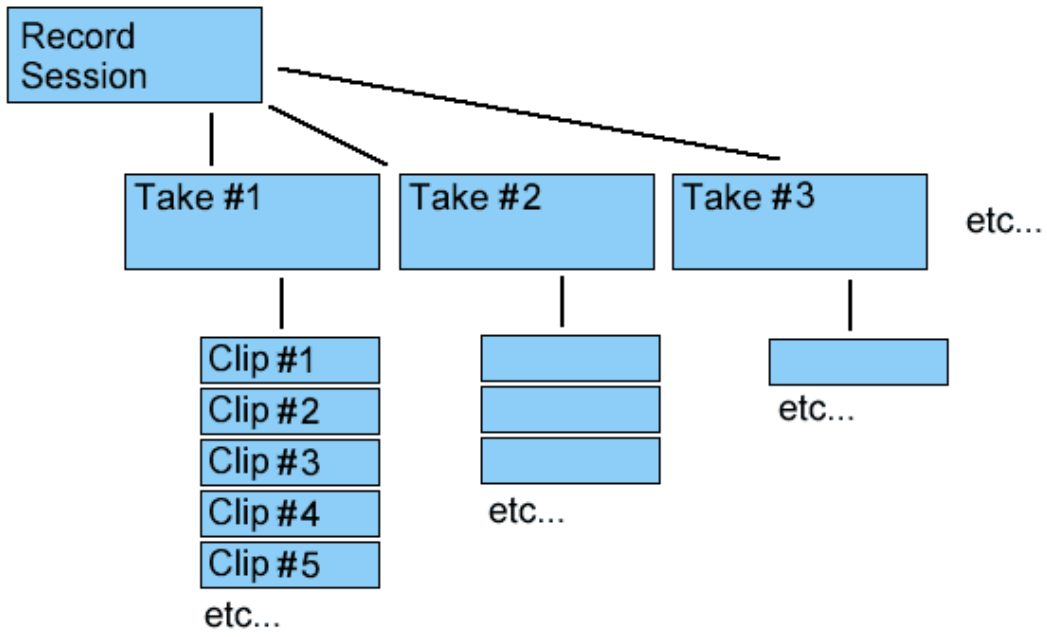
Edit with Keyboard Shortcut:
Editing Action can also be managed by keyboard shortcut:

- F: FAST RENDER
- CTRL (CTRL Select Mode)
- DEL : Deleted Selected Clip
- CTRL + S : Scissor selected Clips under cursor
- CTRL + L : Crop Left selected Clips under cursor
- CTRL + R : Crop Right selected Clips under cursor
- CTRL + A : Select ALL
- CTRL + T : Select All clip of the current track
- CTRL + Z : UNDO
- CTRL + Y : REDO
- CTRL + C : Copy selected clip
- CTRL + X : Cut selected clip
- CTRL + V : Paste clips previously copied (in clipboard)

List : Database organization.

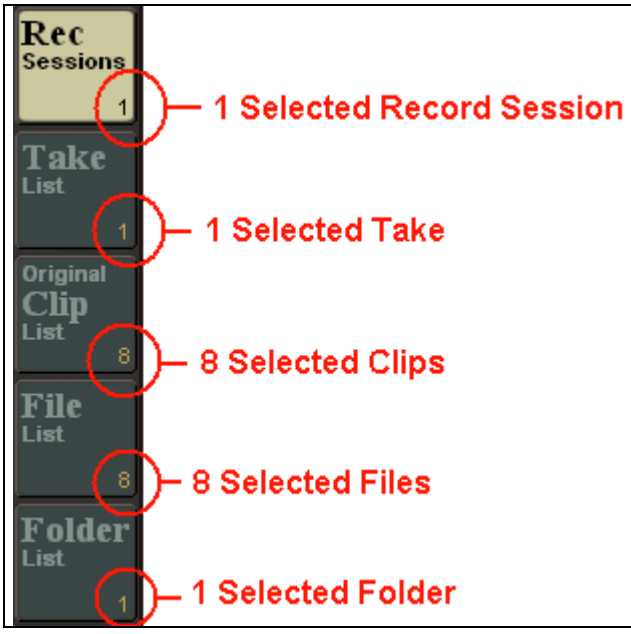
The List page is the database view of all recorded / imported audio file: Take and record session history, Files and Clips History. And finally EDL List which is the list of clip related to the timeline (what you see in the timeline view). The timeline is a kind of 2D projection of the stack of all records history.

- **Record** Session: a “Record Session” is created at each start of record – also produces a new “Take”
- **Take**: a “Take” is created at record start and also when clicking the record button again, during recording (if the option is enabled in <SysSet-Recording>).
- **File**: Physical Audio Data – each track is recorded in its own “File”.
- **Clip**: Clips are defining track region related to recorded file.



Record List

A Record Session is created at the beginning of the record (since you press the REC button of the transport bar). A record session is created even if no track are armed. A Record session is finished when push the STOP button.



Selecting an item in a list is automatically producing a selection of involved items in other list.

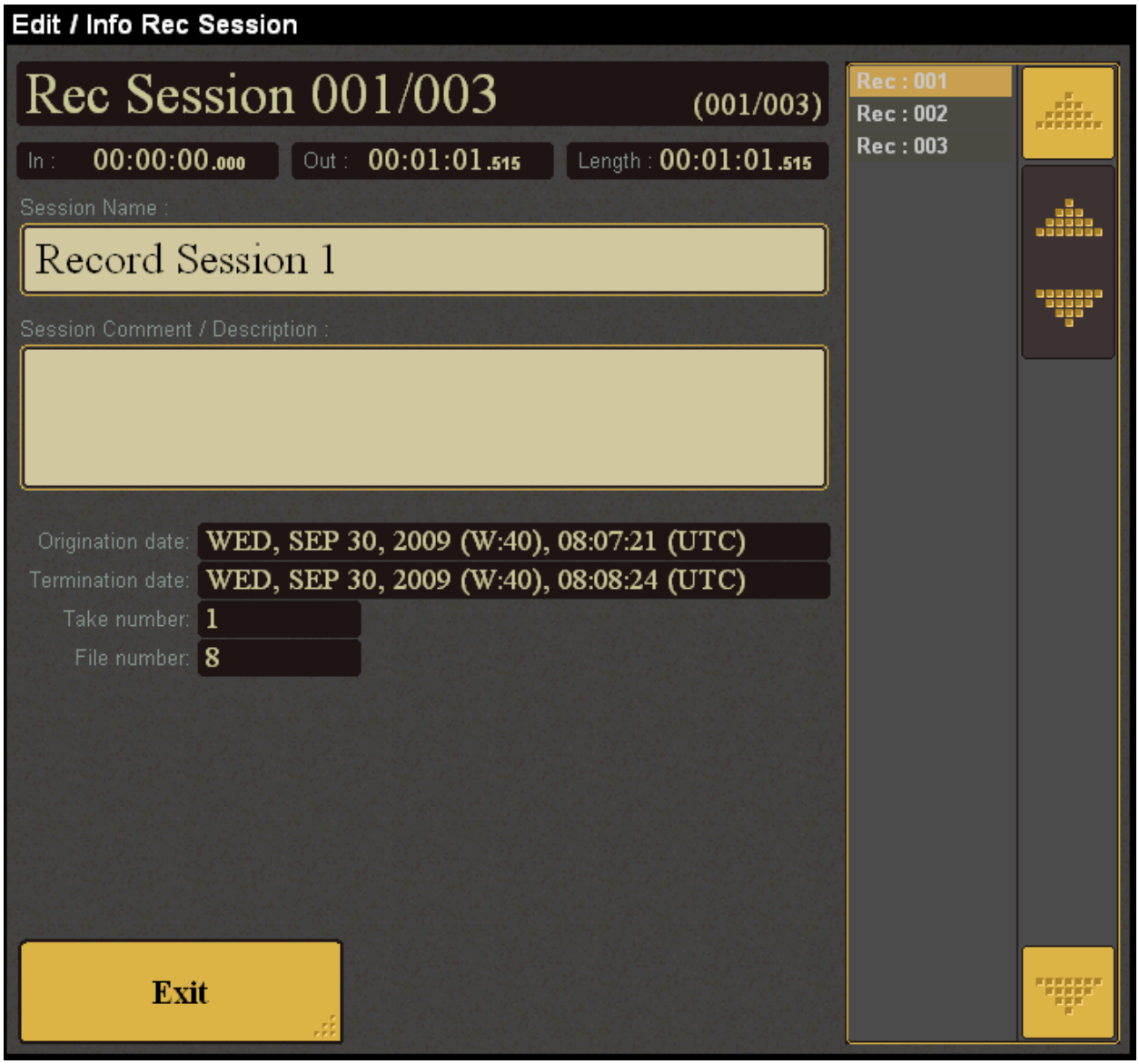
For example, here we have selected a Record Session, we can see that it contains 1 take, 8 clips and 8 files. And we can also see that only 1 folder is concerned.

All the selection process is linked in this way to show the relationship between items type.

Deleting (Disabling or Enabling) Record session (s), automatically deletes (Disables or Enables) pending Takes and clips.

Item Info

A tap shows detail of the current selected Item and allow to edit some field : For example the session name and a comment can be typed here for each Rec Session item : the following dialog box appears :



Session name :

shows name of selected <item>, a tap opens the virtual keyboard for text input.

Session comment / description

shows comment / description of selected <item>, a tap opens the virtual keyboard for text input.

Origination date
Shows date and time of origin

Termination date
Shows date and time of termination.

Take number
Shows count of takes contained in the Record session

File number
Shows count of files contained in the Record session

Take List
A tap shows a list of takes.

Deleting (Disabling or Enabling) Take(s), automatically deletes (Disables or Enables) pending clips.

On the right, there is navigation buttons :

Home
A tap switches the list view to the top position of the list.

Page up
A tap switches the list view by page in up-direction.

Page down
A tap switches the list view by page in down-direction.

End
A tap switches the list view to the end position of the list.

scroll buttons
A tap scrolls the list view in up- or down-direction.

scroll slider
scrolls variable the list vertically
List View Functions

Sort by:
A tap opens a selection for different sorting options (history, name, start point, length, track+history, track+start point).

Single/CTRL Select
A tap toggles selection mode between single and CTRL. Single = only one item can be selected // CTRL = several items can be selected. Note: there is interplay with „Item/Group Select“.

Item/Group select
A tap toggles selection mode between item and group. Item = only the tapped item is selected // Group = all coherent items are selected // Note: there is interplay with „Single/Multi Select“.

Select All
A tap selects all items in the list. Button is blinking when function is active. A further tap resumes to previous selection.

Deselect All
A tap deselects all items in the list. Button is blinking when function is active. A further tap resumes to previous selection.

GOTO Mode
A tap enables the „goto-mode“. Button is colored when mode is active. Then a tap on an item will place the playcursor to the start point given by the item.

Enable
A tap enables selected item(s) on the timeline (and all related EDL). Note: depending the order of record, the item can be „under“ a 1 higher item.

Disable
A tap disables selected item(s) on the timeline (and all related EDL). The related clips disappear from timeline. A disabled item can be enabled again.

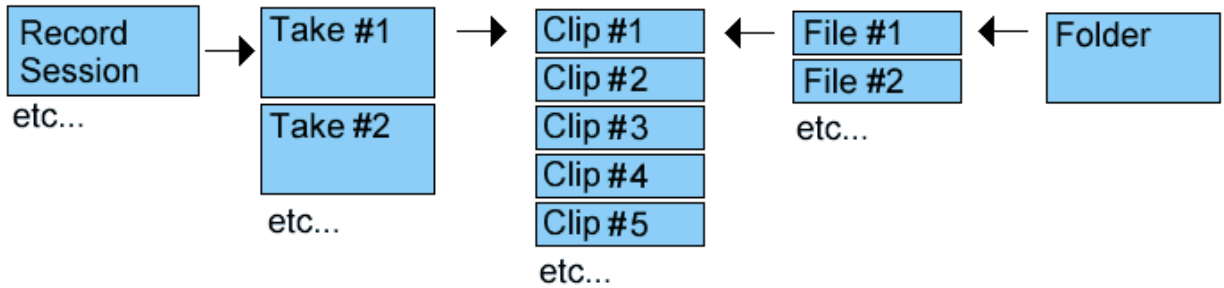
Delete
A tap deletes selected item(s). The related clips disappear from timeline (and all related EDL)*. Related audio is deleted if we are in the file list. There is no undo of deletion.*

Original Clip List

A tap shows a list of clips generated by the different record sessions (or import sessions). This is the original clip list related to the record history.

Editing policy :

Clips are the center of the editing process and are always concerned by the functions (Enable / Disable / Delete).



The user can act on Clip disabling/deleting by different ways and according several hierarchies. For example deleting a Take will consequently delete related clips (but related files and folder won't be deleted). On the side, deleting a File will delete all clips pending on this file (but of course related takes and record session won't be affected).

File List

All generated files (or imported files on the Time Line) are listed in the File List.

Delete

A tap deletes selected item(s). The related clips disappear from timeline (and consequently all related clips in EDL)*. Related audio file is also deleted. There is no undo of deletion.*

Folder List

The list of folders shows all the folders involved in the project, containing all files of the project. This list is auto generated/checked and cannot be edited. However the user can use functions (like Delete, Disable/Enable) to edit all Clips and Files related to selected folder.

EDL List Clip(s)

A tap shows the list of active clips on the timeline. The EDL reflects exactly what is represented on the Time Line Track(s).

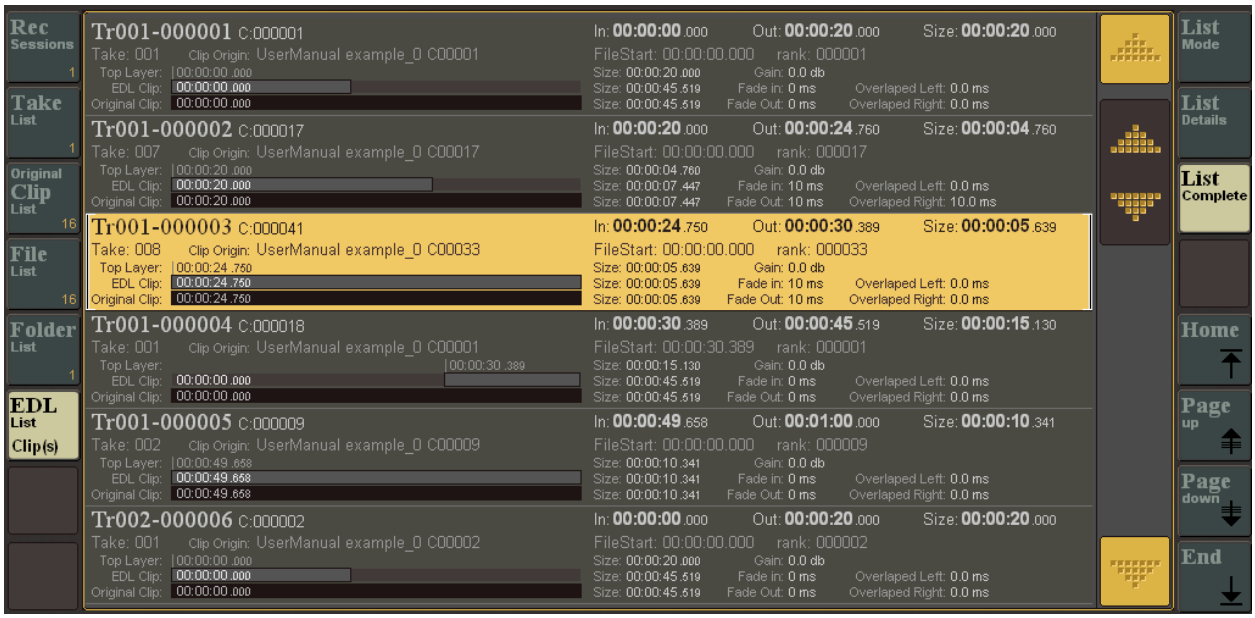
Since we can edit now the TimeLine Clips, we are retrieving in this page the EDIT button to perform editing operations on selected clips in the EDL (same as EDIT Dialog Box, see previous chapter related to timeline editing tasks). We have also 2 Direct Edit Functions: one to **delete** the selection and one to **rebuild the EDL** from the Record History (in a way to reset the EDL in its original state after doing recording session(s)).

List mode

Allows to get 3 different view of the List : Basically with 24, 12, or 6 item per page. For each different size of item line, the list can display further information.

List complete

A tap switches to a complete view. For the EDL list, many information are now displayed: name, in point, out point, size, original clip, file start point where the clip begins (in the file), and many other information related to the clip position on the timeline according different possible layer of clip.



In
shows in-time of selected <item> (all items)

Out
shows out-time of selected <item> (all items)

Size
shows length of selected <item> (all items)

Take
shows the take the <item> belongs to (clip)

The EDL item shows also information concerning the relation between the clip representation in the timeline (top layer) and the original clip as it has been originally recorded.

In the example above, we can see that only a part of the original clip is used in the timeline (top layer). To be precise, only the beginning of the original clip is visible (size = 4s.760ms) and the right part is overlapped by another clip (on a upper layer : rank > 17), that's why we can see the overlapped Right : 10.0ms (default cross-fade duration).

Import / Export

The Import/Export Page is intended to provide different functions to import audio file into current project or export audio file or other type of file from the current project. It allows (or will allow in future version) to import or export different part of project, in different format into or from the current project (EDL / SoundPad).

Import Audio Files

A tap opens subpage „Import Audio File“, to import audio file(s) directly on timeline. See next pages for procedure details.

Import TC Track

A tap opens subpage „Import TC Track“, to generate and import audio LTC file directly on timeline. See next pages for procedure details.

Import Sound Pad Session

A tap opens subpage „Import SoundPad Session“, to imports in the current MT128 Project, a complete SoundPad session (audio files and Playlists) to the SoundPad Module. See next pages for procedure details.

Export Consolidated Tracks

A tap opens subpage „Export Consolidated Tracks“, to compile one or several track in a single audio file per track. See next pages for procedure details.

Export Fast Render

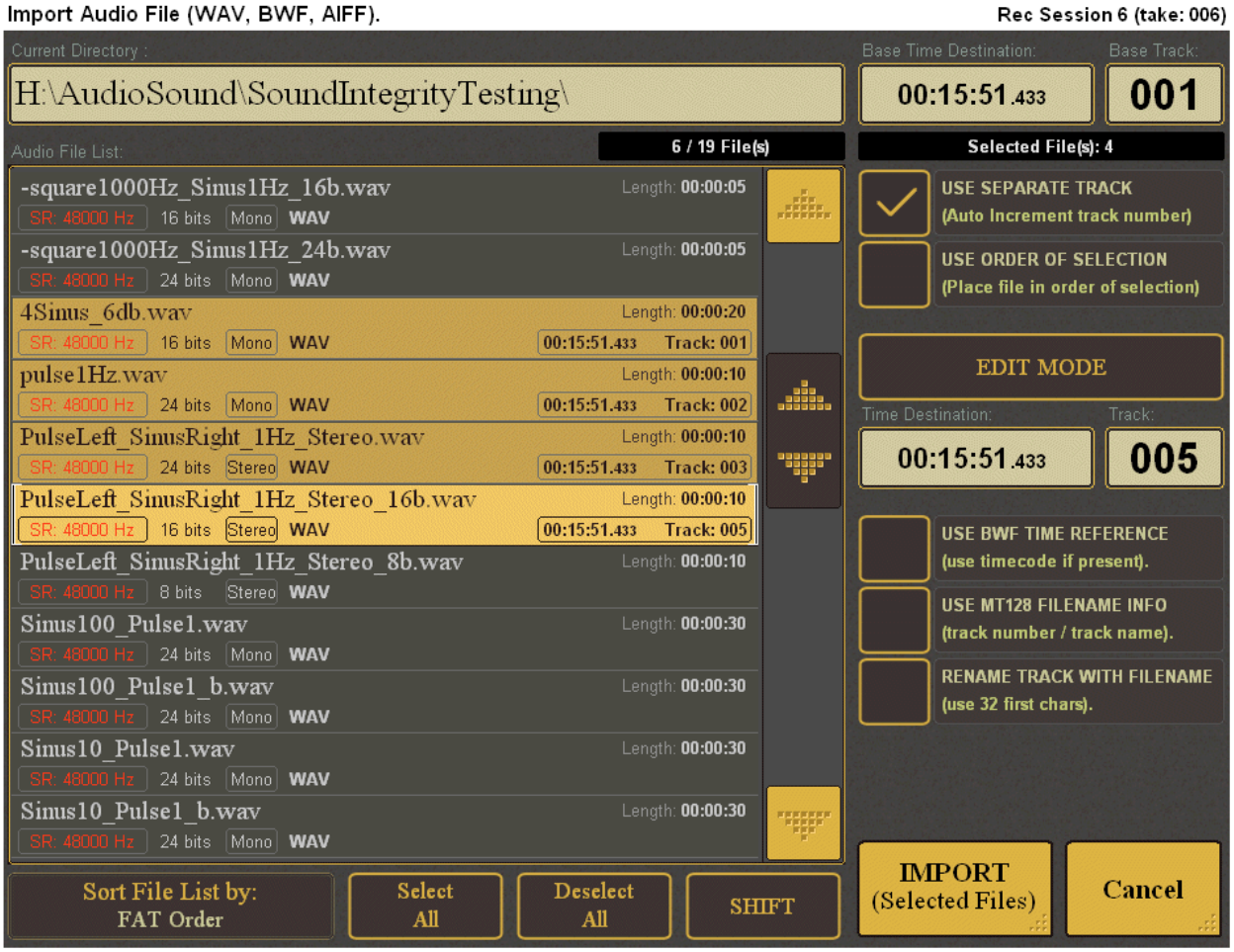
A tap opens subpage „Export Fast Render“, to create multi channel audio file from a selection of clips in timeline. See next pages for procedure details.

Export Fast Render

A tap opens subpage „Export SoundPad Session“, to export the current SoundPad Session (Audio Files and Playlists) to a given folder. See next pages for procedure details.

Import Audio File

MT-128 can import regular professional uncompressed audio files (wav, bwf, aiff) as a „virtual take“. All audio files located in a (previous browsed) directory are listed and can be marked for import to the current project. Every import produces a new „virtual take“. *(Note: scanning disk to build file list can take some time)*.



Current Directory

This gives the path of browsed directory for import. A tap opens dialog box to „Select Folder containing Audio File“

Base Time Destination

This filed is the Initial TC-Position where to imported audio files (the current play cursor when opening the dialog). A tap opens the virtual numeric pad to enter TC-value (which can be negative).

Base Track

Initial Track where audio will be imported. A tap opens the virtual numeric pad to enter value.

<selected/count of files>

This area shows position of selection cursor and total number of files.

Selected file
This area shows count of selected files for import.

Use Separate Track
Each audio file is imported to a separate track, incrementing from „Base Track“, vertical increment. Audio is aligned horizontally on the timeline.

Use Order of Selection
The order of selection is considered for import of files. Horizontal increment or vertical increment (when <Use separate track> is <on>).

Edit Mode
Allows individual (<> base) assignment of TC-Position („Time Destination“) and Track Position („Track“) of an already selected audiofile. Tap to enter and exit the Edit-Mode. Attention: Changes being made will be discarded when a new selection is done.

Time Destination
A tap opens virtual numeric pad to enter TC-value.

Track
A tap opens virtual numeric pad to enter value.

Use BWF Time Reference
Audio will be placed on the timeline according to the TC-Stamp in the BWF-Header. If there are files with identical TC-Stamp in the same track, MT-128 will place them at their defined position but on different „layers“ (see database).

Use MT Filename Info
Recorded audio files with MT-128 (from a different project) will be placed to track according to their filename. Don't forget <Use separate Track> for horizontal alignment.

Rename Track with Filename
Audio file name will be used to rename its destination-track of the Project.

Sort File List by:
A tap opens a selection for different sorting options (FAT order, name, BWF TC Ref, File length).

Select All
A tap selects all <items> in the list. Button is blinking when function is active. A further tap resumes to previous selection.

Deselect All

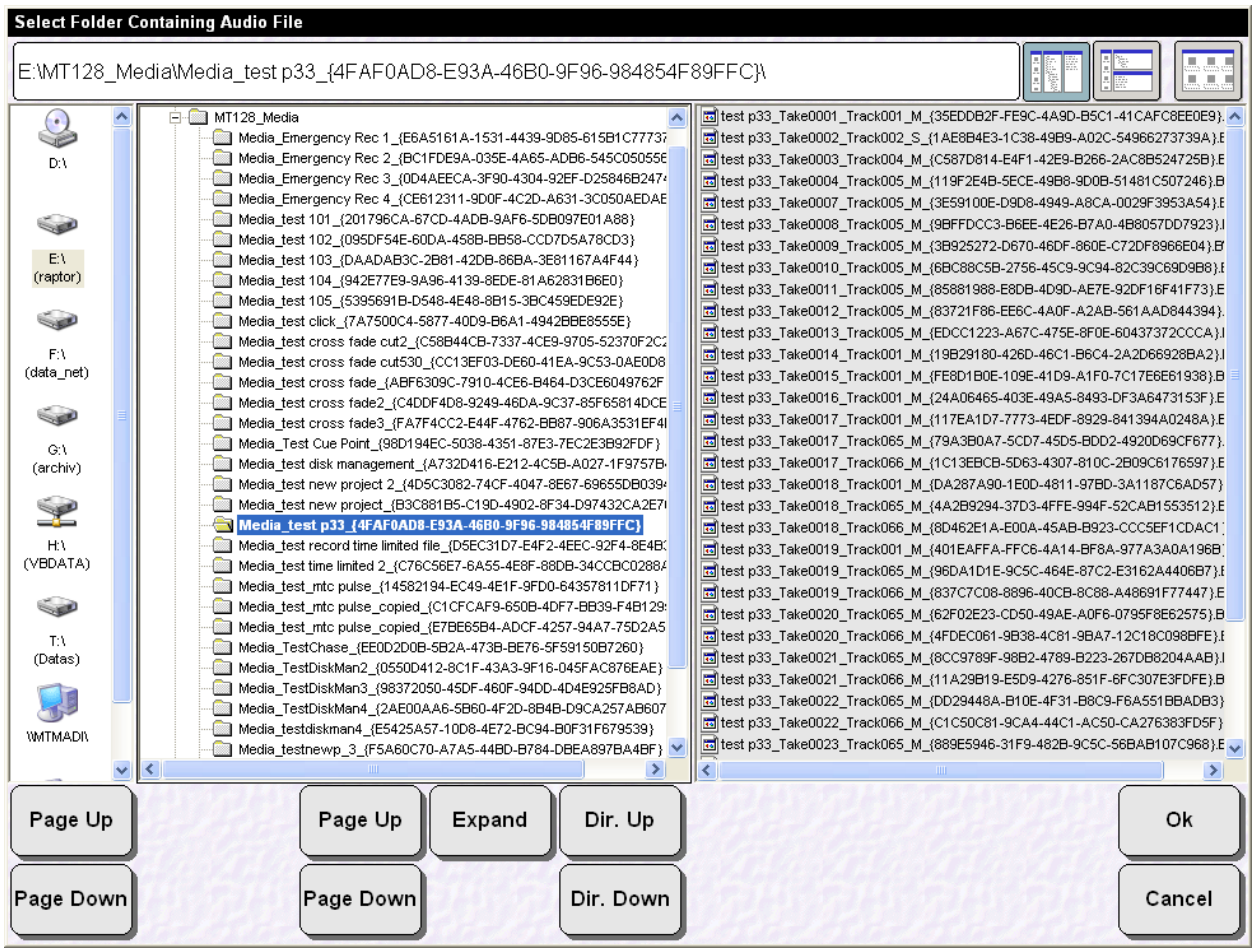
A tap deselects all <items> in the list. Button is blinking when function is active. A further tap resumes to previous selection.

SHIFT
A tap enables coherently selection of two or more items in the list. Tap <Shift>, then first item entry and last item entry => selection of all items in between

Scroll buttons
A tap scrolls the list view in up- or down-direction.

Scroll slider
Scrolls variable the list vertically

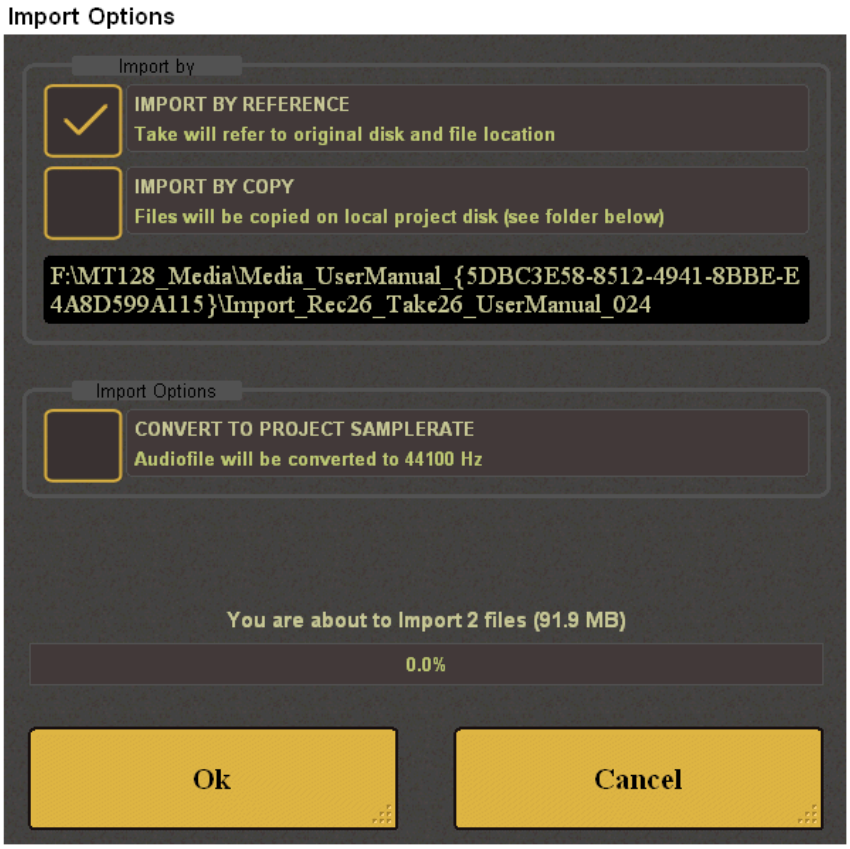
Select Folder Containing Audio File
Dialog for browsing the directory for import. There are three windows (drives, tree, folder). The layout of the view and the folder view (icon, list) can be changed. Note: Disabling network-scan when not connected to a LAN will speed up the scan.



Cancel
A tap will close the page.

Import (Selected Files)

A tap will display a confirmation dialog box to import selected audiofiles as a „virtual take“ according different options:



Import by Reference
Let the selected audio files where they are and create a virtual take by referencing the audio files.

Import by Copy
Copy selected audio files first in the current project disks. Then it creates a virtual take by referencing these copied audio files.

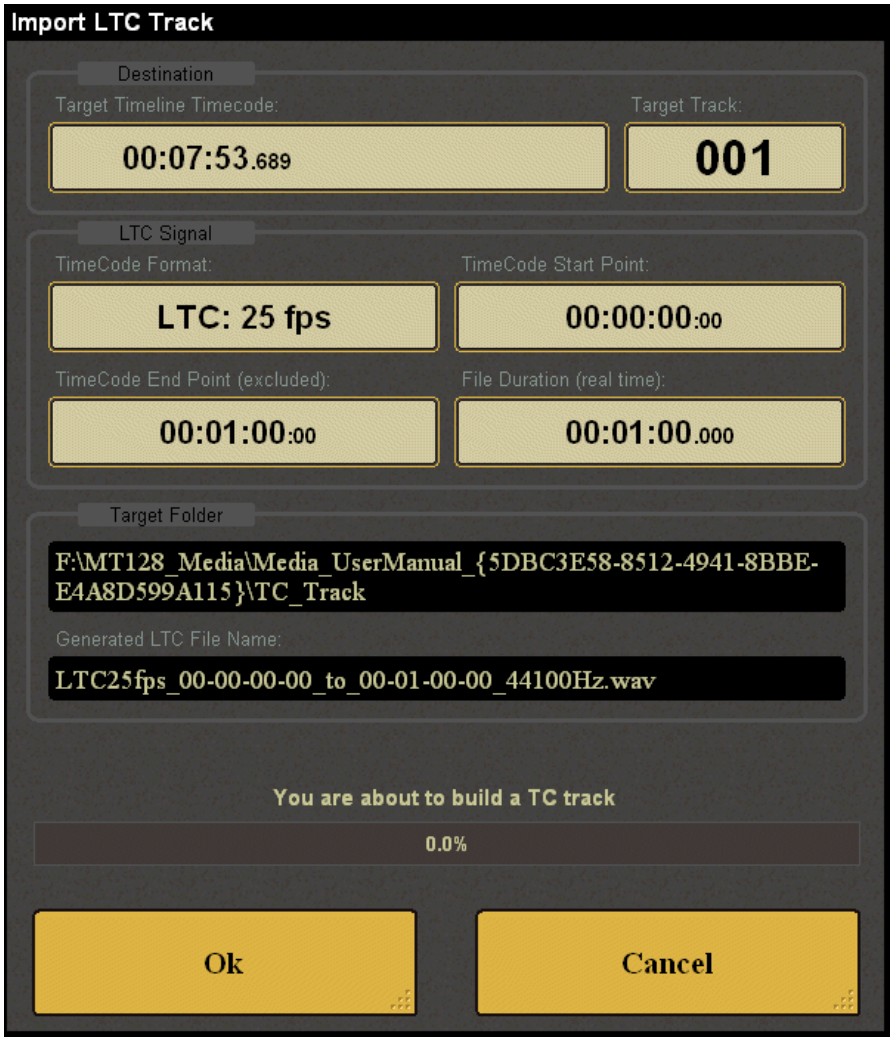
Convert to project samplerate
Copy and convert selected audio files first in the current project disks. Then it creates a virtual take by referencing these copied/converted audio files.

Ok
This button will start the import process according checked options.

Cancel
This button will cancel the import process.

Import TC Track

MT-128 can generate and import LTC (Linear Time Code) as simple audio file. This is made to send different LTC signal to different machines running with time code.



Define Destination

Destination section allows defining where to import the LTC Track: Target TimeLine TimeCode and Target Track. The generated LTC is mono.

Define LTC Signal

LTC signal is defined by its format (23.98 fps, 24 fps, 25 fps, 29.97 fps, 29.97 dfps, 30 fps and 30 dfps), the first TimeCode (called TimeCode Start Point) and the duration of the file. This duration can be given by a TimeCode End Point as well as by file duration (in real time).

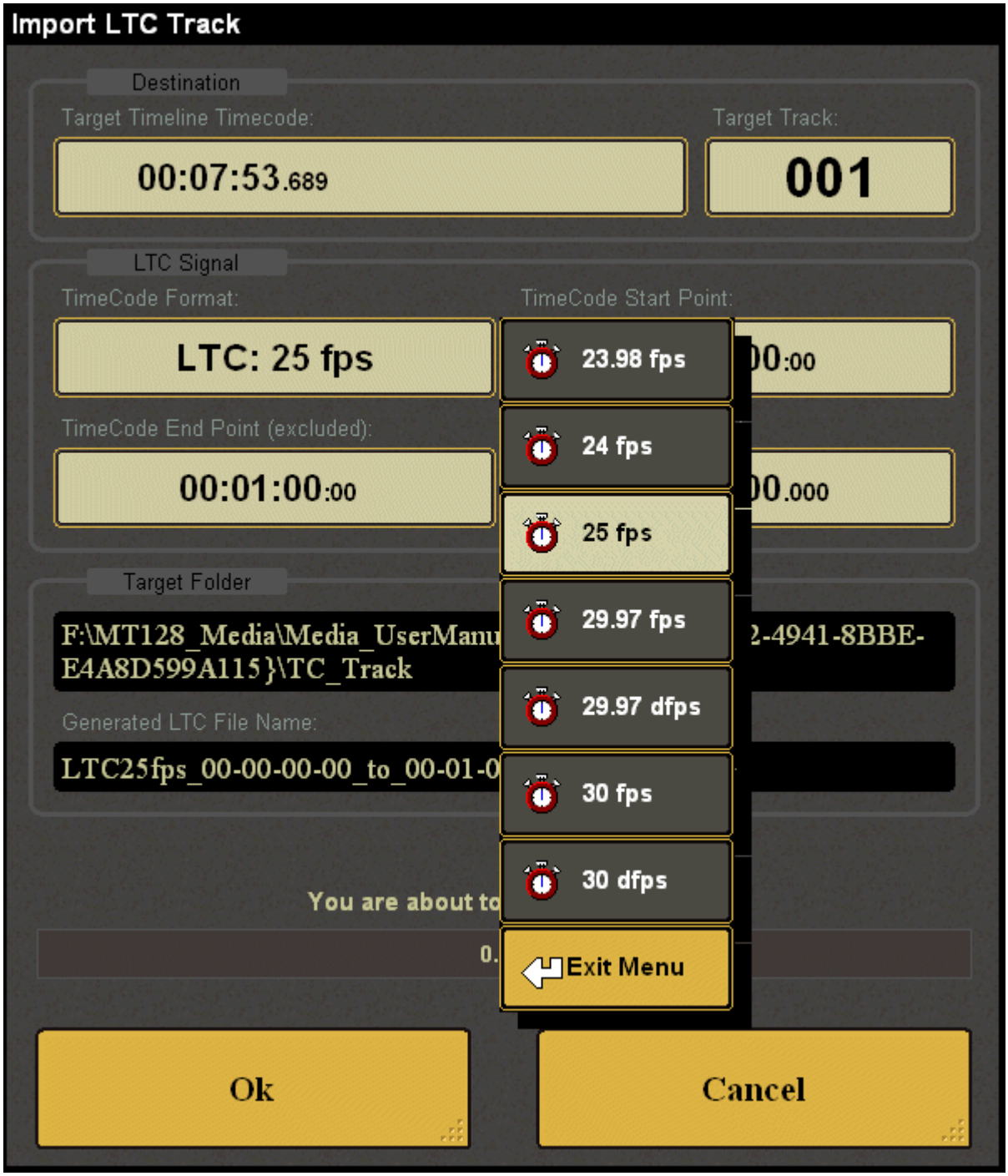
Target Folder / filename

The target folder and filename are automatically generated and shown in blak box below.

Ok

This button will start to generate the LTC file and then will import it on timeline on defined target track / timecode position.

Cancel
This button will cancel the import process.



Export Consolidated Tracks

MT-128 can compile timeline to export an audio file per track. This operation is useful when having done multiple recordings, re recording or dubbings on the same timeline region and when it's needed to consolidate track(s) to export them to a post production station for example.

The List shows the different available tracks that can be consolidated (compiled in a single audio file). Check Box for each track tells if the track must be part of the export process or not.

Select All

A tap Check On all <items> in the list. Button is blinking when function is active. A further tap resumes to previous check box status.

Deselect All

A tap Check Off all <items> in the list. Button is blinking when function is active. A further tap resumes to previous check box status.

SHIFT

A tap enables coherently selection of two or more items. tap <Shift>, then first item entry and last item entry => selection of all items In between

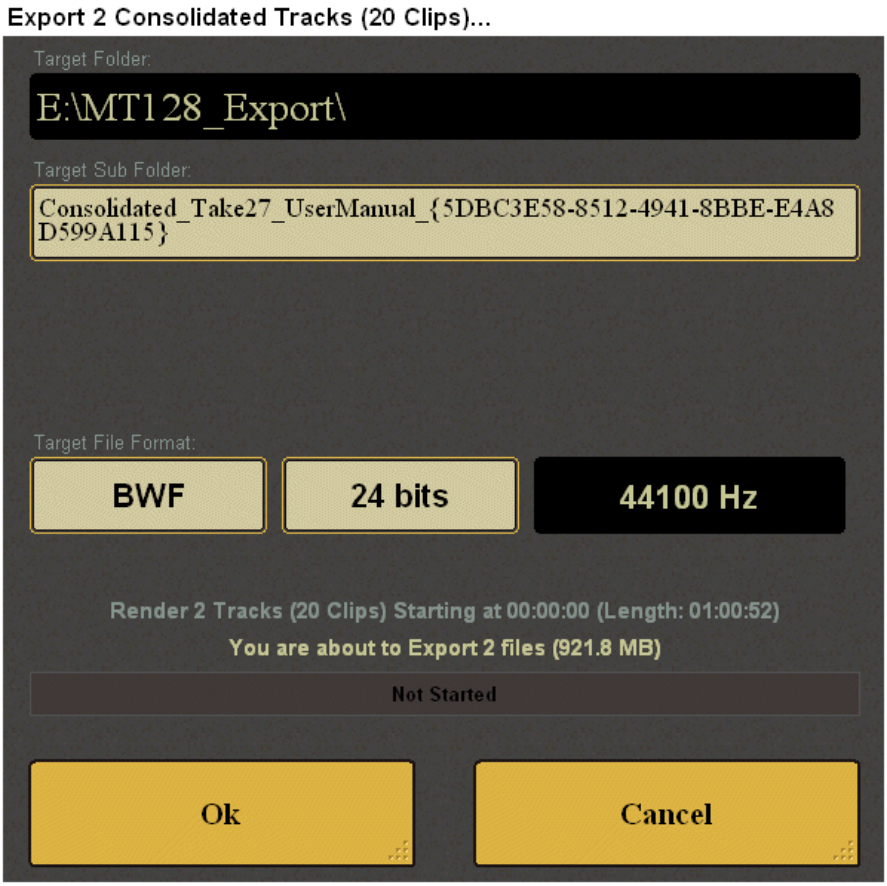
Target Folder
This field displays the current main target where the Exported audio file will be created. This can be changed by a tap on it. A Dialog box will appear for browsing directory and let you select new target folder.

Start By Left Locator
This check box allows limiting the Tracks selection on timeline by the left (Loop Start Point) in the consolidate process.

Start By Right Locator
This check box allows limiting the Tracks selection on timeline by the right (Loop End Point) in the consolidate process.

Selected Clip Only
This check box allows to take only the Selected clips in account in the consolidate process.

Export
This button will open the Consolidate process dialog box here below.



Target Sub Folder
Target sub folder can be modified by user directly in this dialog box.

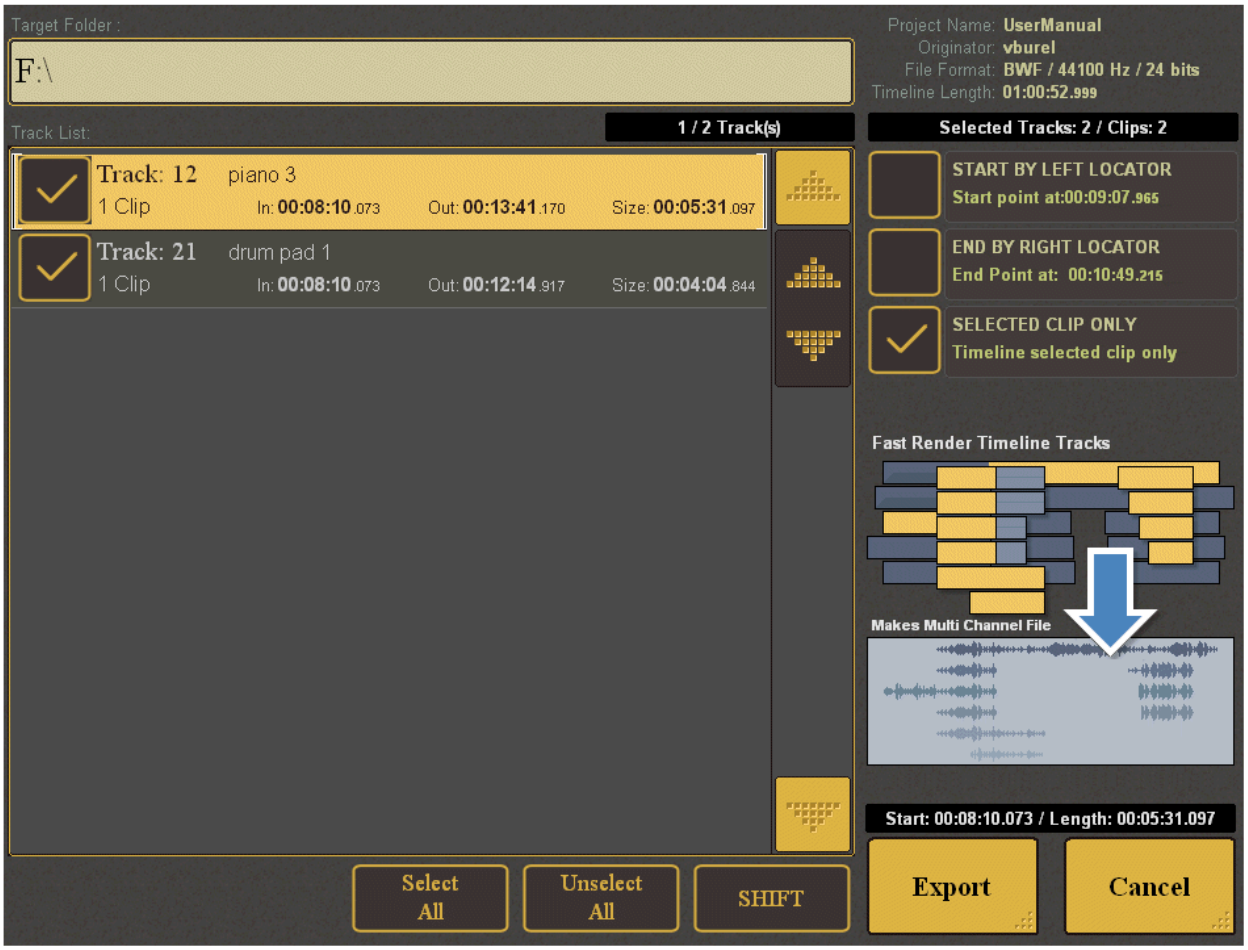
Target File Format
File Format and Bit Resolution can be set there.

All information are displayed above the progress bar: the number of tracks (and files) that will be generated, the estimated memory required and in parenthesis the number of clips involved in the consolidate process.

Ok
A tap on this button will launch the consolidate process.

Export Fast Render
The MT-128 Fast Render process allows building a single but multi channel file from the timeline. This is a quick way to extract part of the timeline and make a file for SoundPad for example.

Export Fast Render



The List shows the different available tracks that can be involved in the render process. Check Box for each track tells if the track must be part of the export process or not.

Select All

A tap Check On all <items> in the list. Button is blinking when function is active. A further tap resumes to previous check box status.

Deselect All
A tap Check Off all <items> in the list. Button is blinking when function is active. A further tap resumes to previous check box status.

SHIFT
A tap enables coherently selection of two or more items. tap <Shift>, then first item entry and last item entry => selection of all items In between

Target Folder
This field displays the current main target where the Exported audio file will be created. This can be changed by a tap on it. A Dialog box will appear for browsing directory and let you select new target folder.

Start By Left Locator
This check box allows limiting the Tracks selection on timeline by the left (Loop Start Point) in the consolidate process.

Start By Right Locator
This check box allows limiting the Tracks selection on timeline by the right (Loop End Point) in the consolidate process.

Selected Clip Only
This check box allows to take only the Selected clips in account in the consolidate process.

Export
This button will open the Export process dialog box similar to the one used by the consolidate process (see previous topics above) but with the possibility to define a filename.

Import SoundPad Session

MT-128 can import Sound Pad session in the current project (to replace the current SoundPad configuration). A Sound Pad Session includes all sounds used in SoundPAD (instant playback) and Playlists, with all configuration options (including MIDI implementation).

Current Directory

This gives the path of browsed directory for import. A tap opens dialog box to „Select Folder containing SoundPad Session (SPS file).

Recurse Directory

If enabled, this options forces the scanning to be made also in sub directories.

Search In FileName

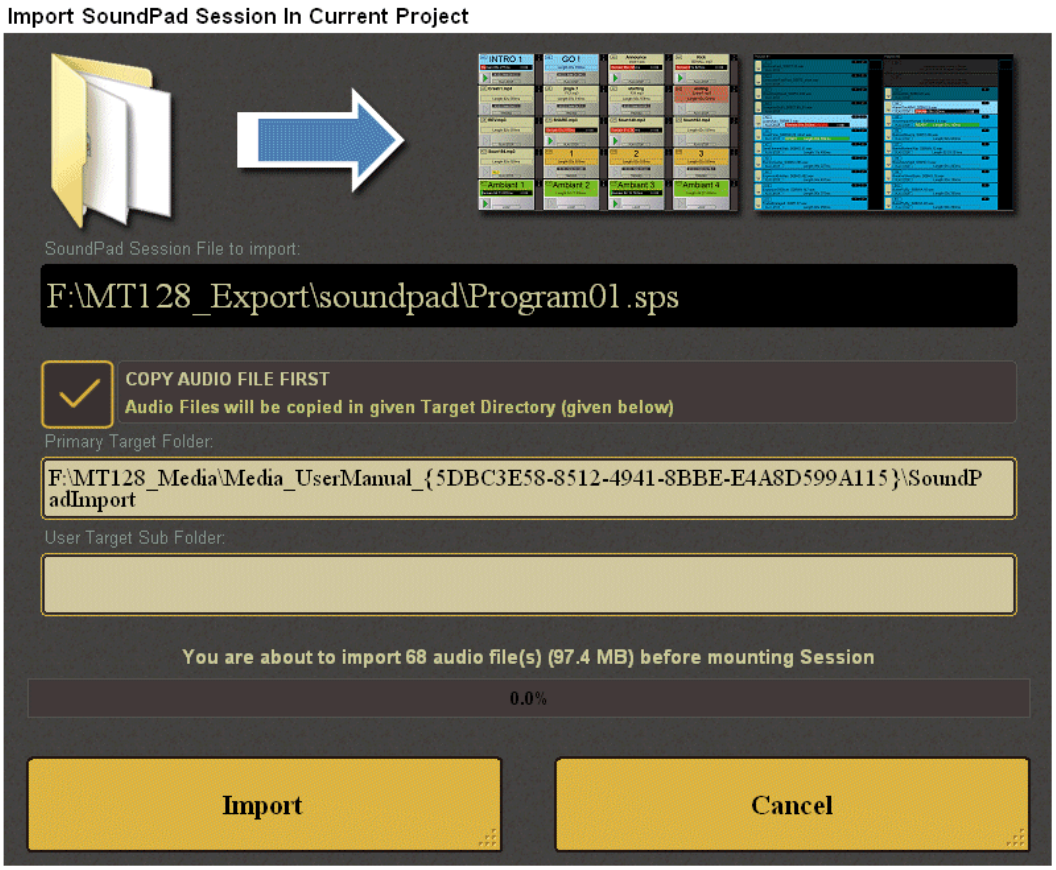
This field can be edited to search file containing a keyword in its name. It is a fast way to find a specific file, especially in complex folder three (enable Recurse Directory).

Sort File List by:

A tap opens a selection for different sorting options (FAT order, name, File length).

Import (SoundPad Session)

A tap will display the following dialog box to import the selected SoundPad Session with the possibility to copy audio files in local disk, or in a given folder.



Copy Audio files First

Copy related audio files in the target folder given below (otherwise all files referenced in the Sound Pad will have to be accessible on the original disk to mount the session correctly).

Primary Target Folder

Allows to select another folder where to import/copy audio files of the session.

User Target Sub Folder

A Sub folder can be defined here to create a subfolder in the primary target directory..

Import

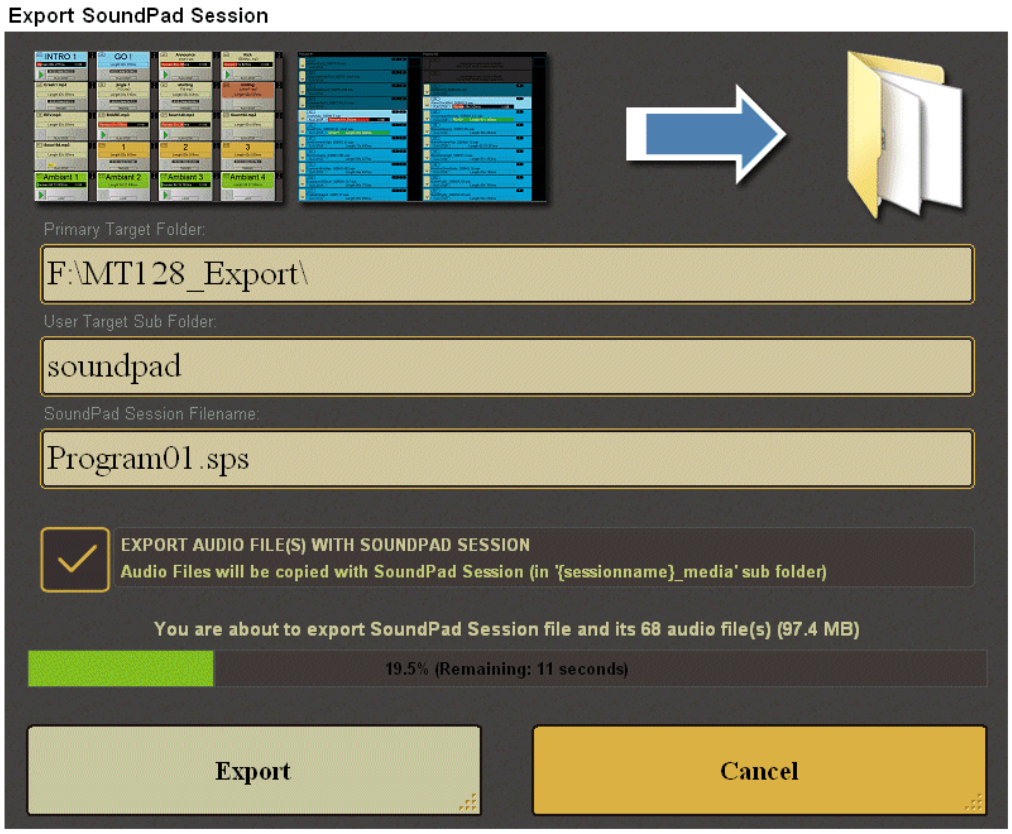
This button will start the import process according options.

Cancel

This button will cancel the import process.

Export SoundPad Session

MT-128 can export the current Sound Pad session in a SPS file, with or without related audio files.



Primary Target Folder

Allows to select another folder where to export/copy SoundPad session.

User Target Sub Folder

A Sub folder can be defined here to create a subfolder in the primary target directory..

SoundPad Session Filename

Define the name of SoundPad session.

Export Audio files with SoundPad Session

Copy all audio files referenced in the current SoundPad session in the target folder given above followed by the automatic subfolder [filename]_media.

Export

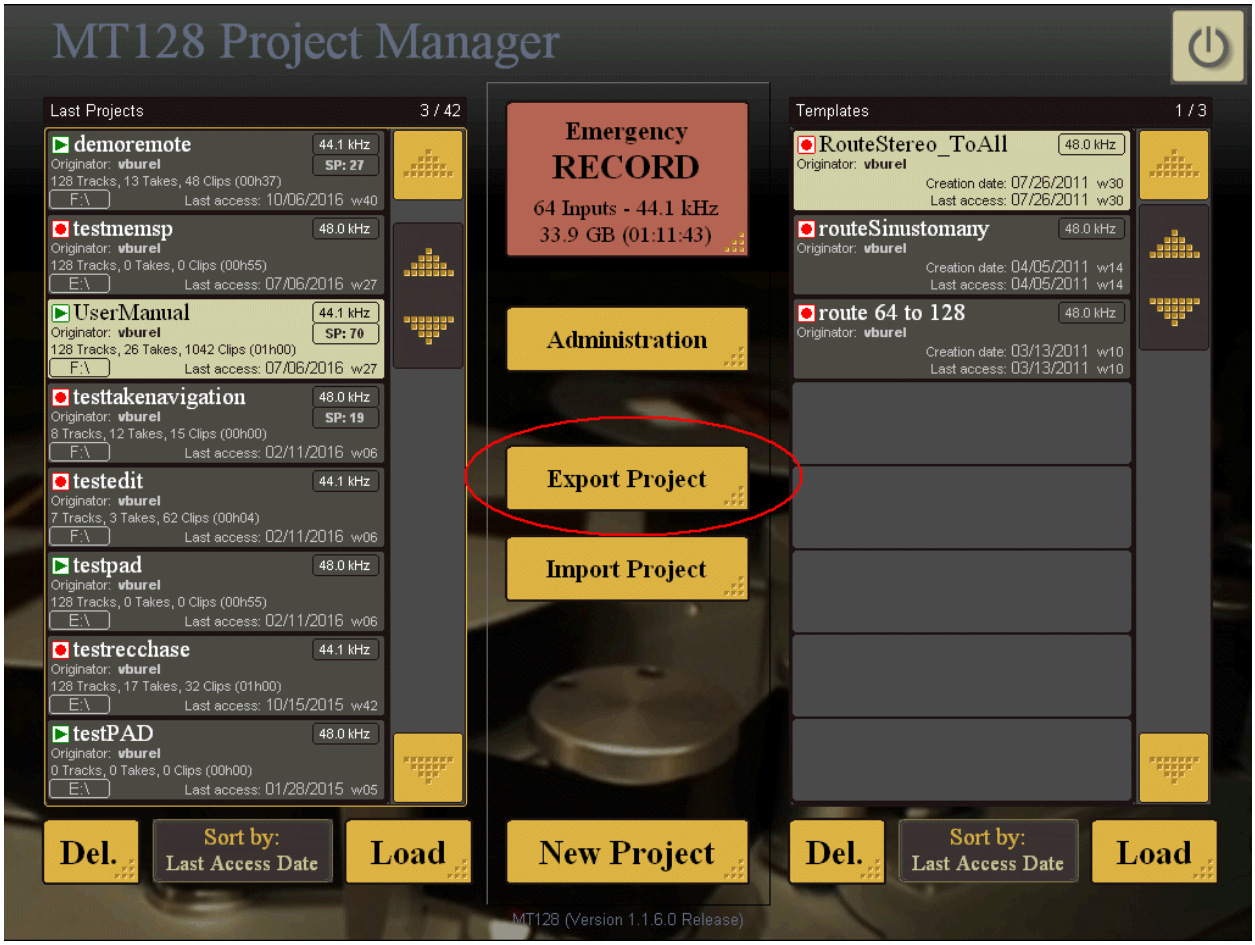
This button will start the export process according options.

Cancel

This button will cancel the Export process.

Project Export

In the startup page there is an EXPORT PROJECT button to export the current selected project entirely, or just the take to other hard disk (or any USB or network storage).



Export

A tap on this button will open the following dialog box to let you choose what you want to export and where (see picture on next page).

Exporting MT128 Project.

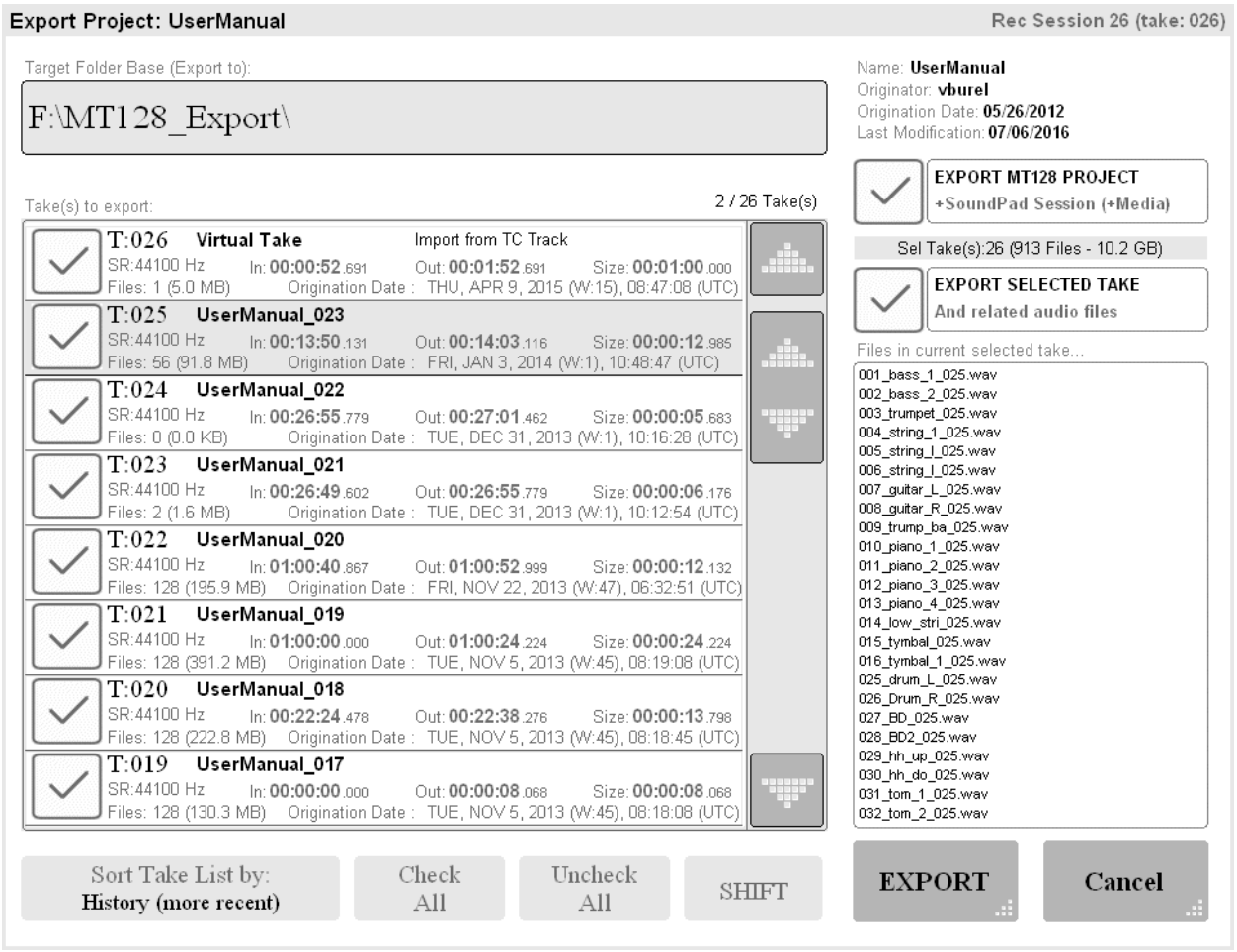
Target Folder Base (Export To)

A tap in this area will let you select a destination disk or folder. If a Disk is selected, the exported take will be done in MT128_Export directory. Export procedure creates a folder with the name of the project it comes from.

Take List

The take list is showing the available takes you can export. Per default all takes are selected. For each take highlighted you can see the related audio file in the right list (showing the first 25 files contained in the takes).

On the bottom of the take list, there is 4 buttons to help you to make your selection if required. On the top right you can decide to export the MT128 project (including Sound Pad session) or takes only (both are selected per default).



Sort Take List by :
Click on this button to select a sorting criteria and get the list in the wanted order.

Check All:
Select all takes in the list

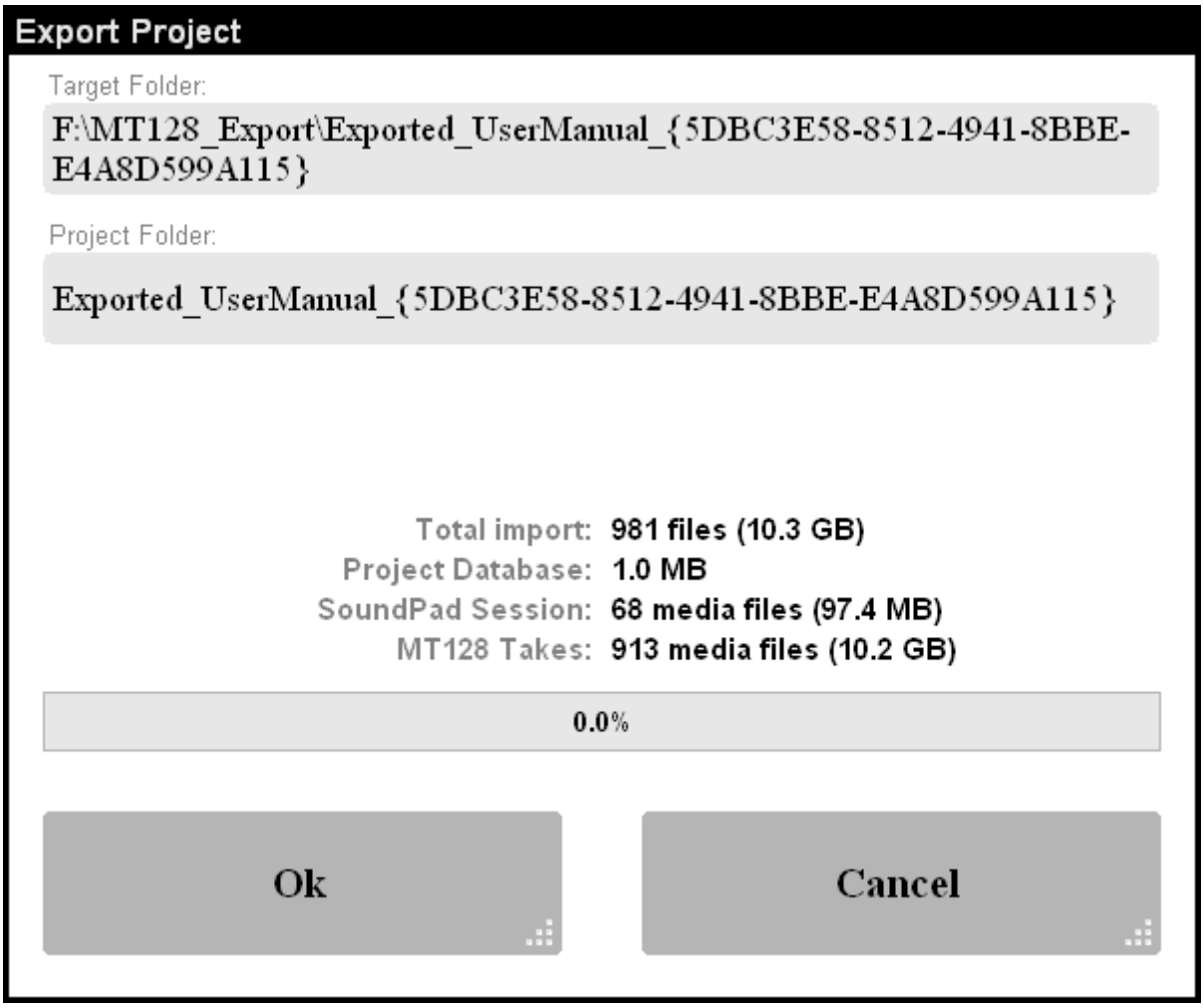
Uncheck All:
Deselect all takes from the list.

SHIFT:
Click on this button to make selection by clicking twice : on the first item and on the last item. Every item between will be also selected.

Export:

Click on this button to make appear the dialog box below to confirm and launch the export process.

In this dialog box, the full target folder is reminded and the Project Folder Name (Export Folder) that will contain absolutely all files (with possibly subfolders) giving the entire exported project.

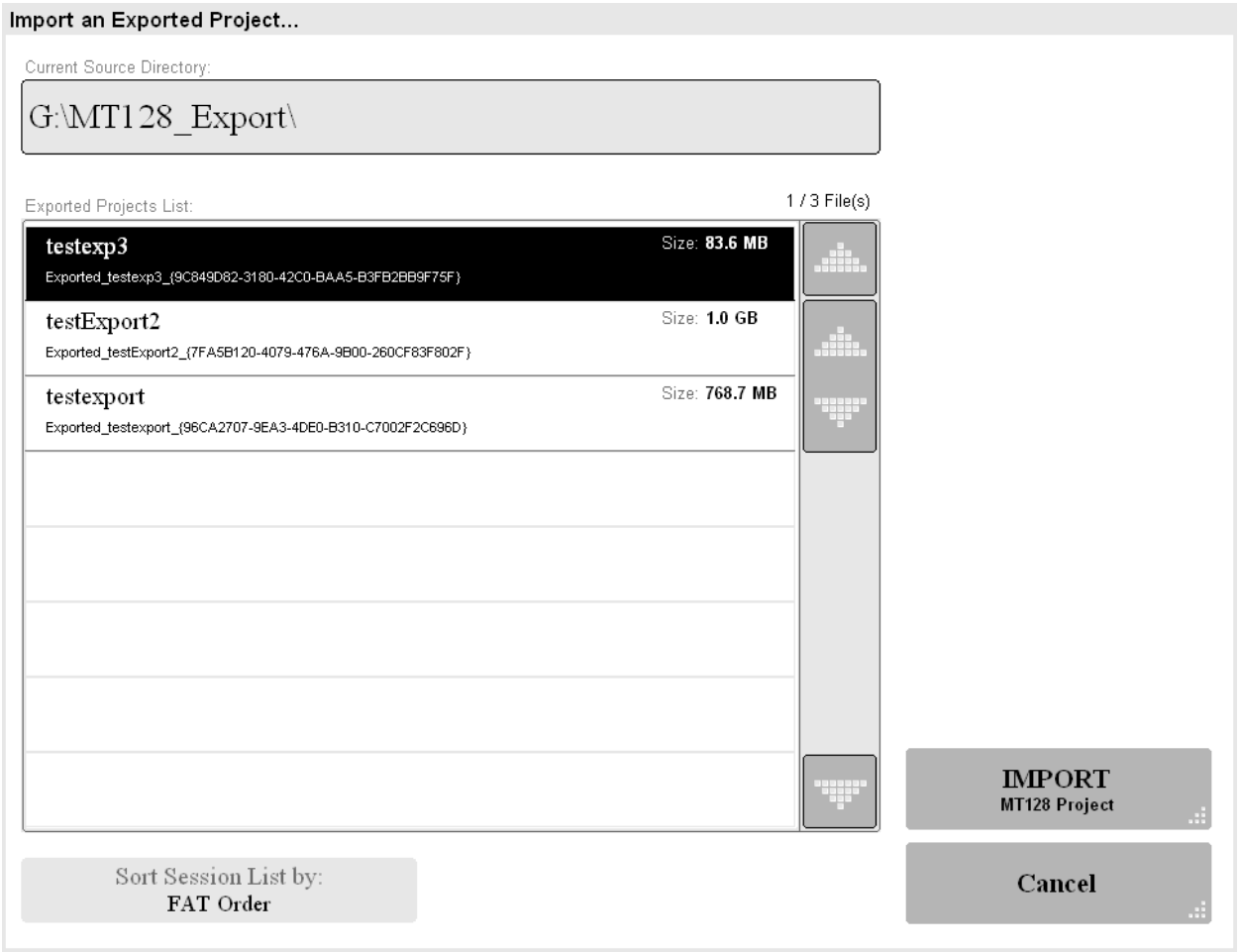


Ok :
Tap on OK button to start to Export procedure. A progress bar (with remaining time) will show you the export process progression.

Cancel :
Click on this button to cancel operation.

Project Import

In the startup page there is an IMPORT PROJECT button to import an archived project on local disk, to be used as regular project by the MT128..



Importing MT128 Project.

Current Source Directory (Import From)

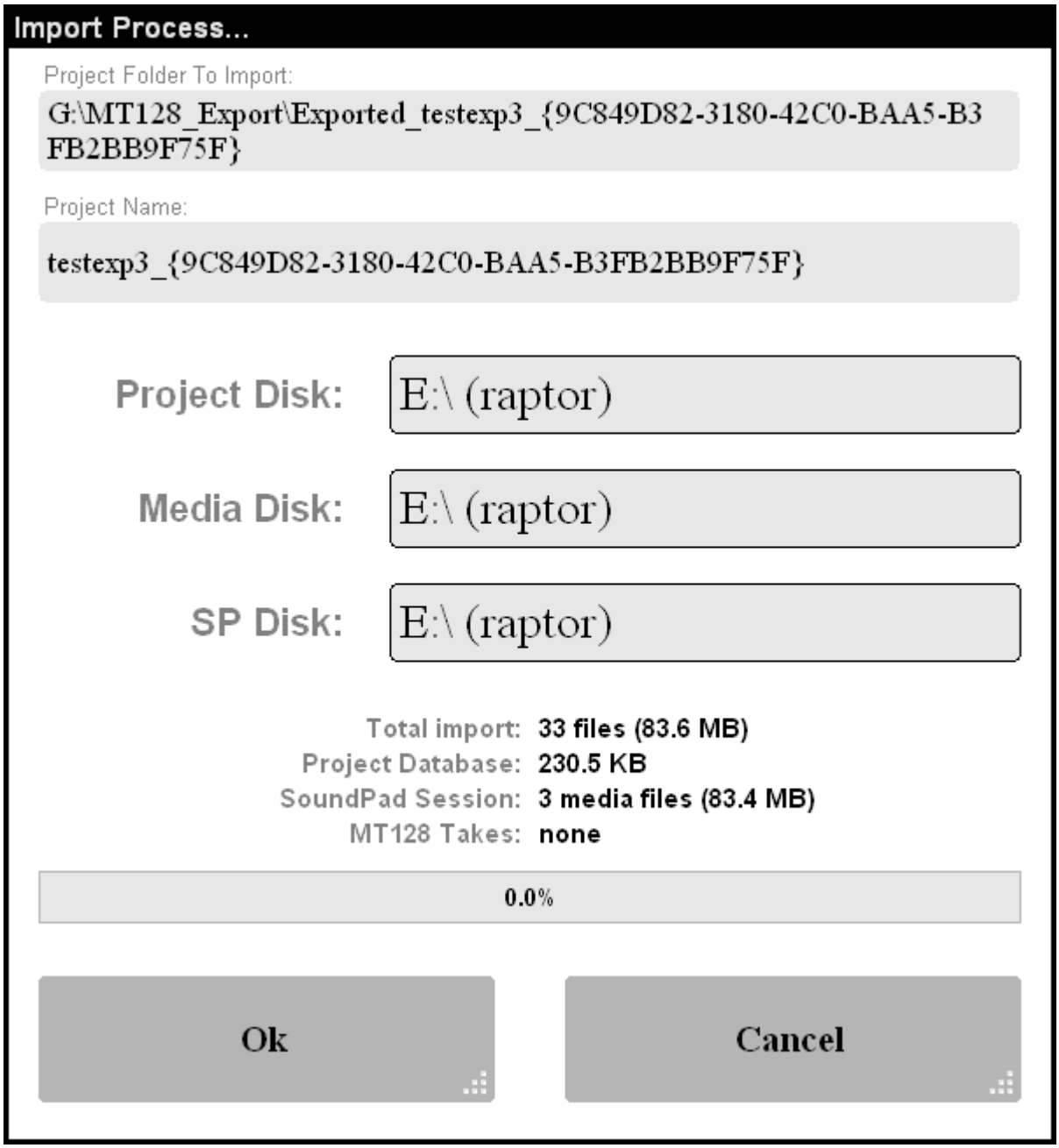
A tap in this area will let you select the folder where are Exported project (usually in MT128_EXPORT directory). If the selected folder contains project to import, they will be displayed in the list box.

Sort Session List by :

Click on this button to select a sorting criteria and get the list in the wanted order.

Import:

Click on this button to import the selected project in the list. It will display a dialog box to confirm the operation and select the target disk (where to import the project). 3 Disks can be selected to store the project, the media and the sound pad session. After the operation, the project will appear in the startup page project list, as a regular project.



Ok :
Tap on OK button to start to import procedure. A progress bar (with remaining time) will show you the process progression.

Cancel :
Click on this button to cancel operation.

SOUND PAD MODULE

SOUND PAD MODULE

MT128 can include now an extra module called SoundPAD allowing to make instant playback and playlists management. When activated, the Sound PAD page looks like below:

SoundPAD module can display tow different operational pages: this one above showing SoundPad page and the Playlist Page by pushing PLAY LIST button on the right. Bleu down arrow allows extending area to the bottom screen by overlapping traditional MT128 bottom bar.

SoundPAD is basically a Sampler Reader able to launch several sounds like a musical instrument can do it, in different mode PLAY-STOP, ONE SHOT or KEY MODE. Playlist works basically like an mp3 Player by playing back audio tracks one by one in a given order. Both functions can deal with 1 to 8 channels sound and manage different audio file format: WAV, AIF, BWF, MP2, MP3, M4A, WMA, WMV, MP4, AVI, MOV and CDA (Audio CD tracks).

Note: M.A.R.S. version will support only WAV, AIF, BWF, MP2, MP3 formats.

Per default, SoundPAd Module is running in operational mode, ready for production. Edit mode needs to be activated to add or modified a sound. Per default, The

SoundPad page shows 16 Sound Buttons (20 in extended mode, up to 32 if displayed in Full HD extra Display Monitor).

SoundPAD Edit Mode

To import Sound in SoundPAD, EDIT mode must be activated to make appear the different possible actions (in orange). On each button we can import audio file or directly sample audio from audio inputs as it is shown on the part of screenshot below:

Import Audio File:
A Tap in this area will open a dialog box to select audio file from disk.

Sampling:
A Tap in this area will open a dialog box to let you record audio directly from MT128 tracks inputs.

Copy:
A Tap in this button make you enter in the COPY Mode to let you copy a button to another place, possibly in another buttons page. It is also possible to copy routing option only by clicking on routing area.

Move:
A Tap in this button make you enter in the MOVE Mode to let you Move a button to another place, possibly in another buttons page.

Delete:
A Tap in this button will make you enter in the DELETE Mode to let you delete any button on any page.

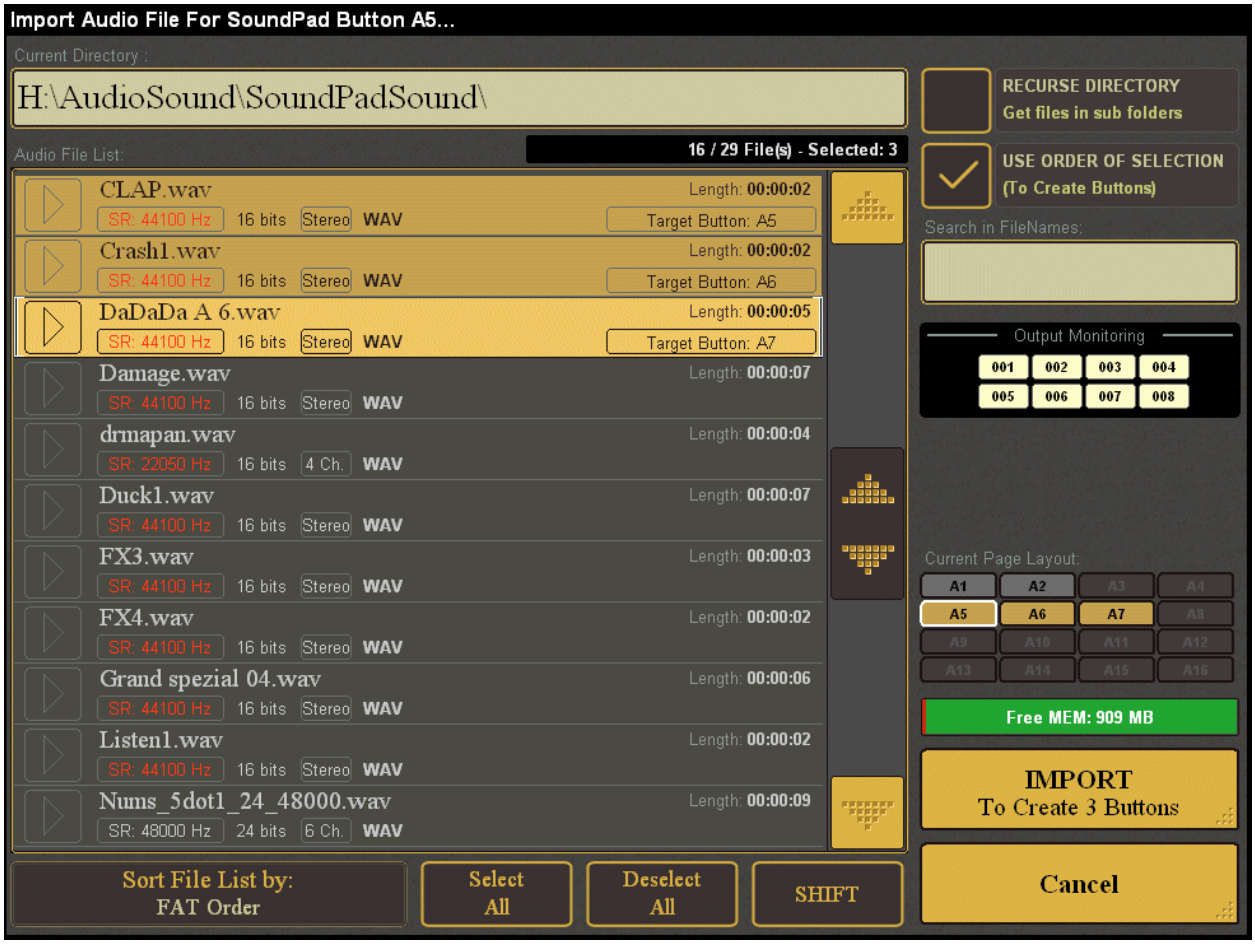
Page A, B, C, D:
These 4 buttons allows displaying 4 different page of buttons. Page A is the first page and displays the 16 first buttons (20 if the panel is extended to the bottom screen).

Edit Sel.:
A Tap in this button will make you enter in the Multi Selection Mode to let you select several buttons to edit their properties at once (routing or properties). If selected a single button, the INSERT function will be activated to let you insert an empty button and shift all buttons to the next positions.

Audio File Selector

When clicking on section called “Import Audio File” and Audio File Selector appears to let you select one or several audio file to create one or several SoundPAD buttons.

This dialog Box, shown on next page, allows different actions: Searching audio file name, possibly in sub folder, possibly by keyword, monitor sounds and import them by reference or by copy.



The List display the current file item found on Current Directory (and possibly its sub directories, if the option is enabled). The Scanning can take some minutes if there is a big amount of file to scan. On the Left side of each file item, there is a small playback button to preview the sound and listen it.

Supported Audio Format:

The SoundPAD can read different audio format and extract audio tracks from CD as well: WAV, AIF, BWF, MP3, M4A, WMA, WMV, MP4, AVI, MOV.

Current Directory:

This field shows the current directory being scanned. A Tap on it will open a Folder Selector Dialog Box.

Sort File List by:
A tap opens a selection for different sorting options (FAT order, name, file type, file length).

Select All
A tap selects all files in the current list. Button remains pushed when function is active. A further tap resumes to previous selection.

Deselect All
A tap deselects all files in the current list. Button remains pushed when function is active. A further tap resumes to previous selection.

SHIFT
A tap enables coherently selection of two or more items in the list. Tap <Shift>, then first item entry and last item entry => selection of all items in between

Recurse Directory
If enabled, this options forces the scanning to be made also in sub directories.

Use Order Of Selection
If enabled, this options allows to create button according the order of selected files.

Search In FileName
This field can be edited to search file containing a keyword in its name. It is a fast way to find a file, especially in complex folder three (enable Recurse Directory).

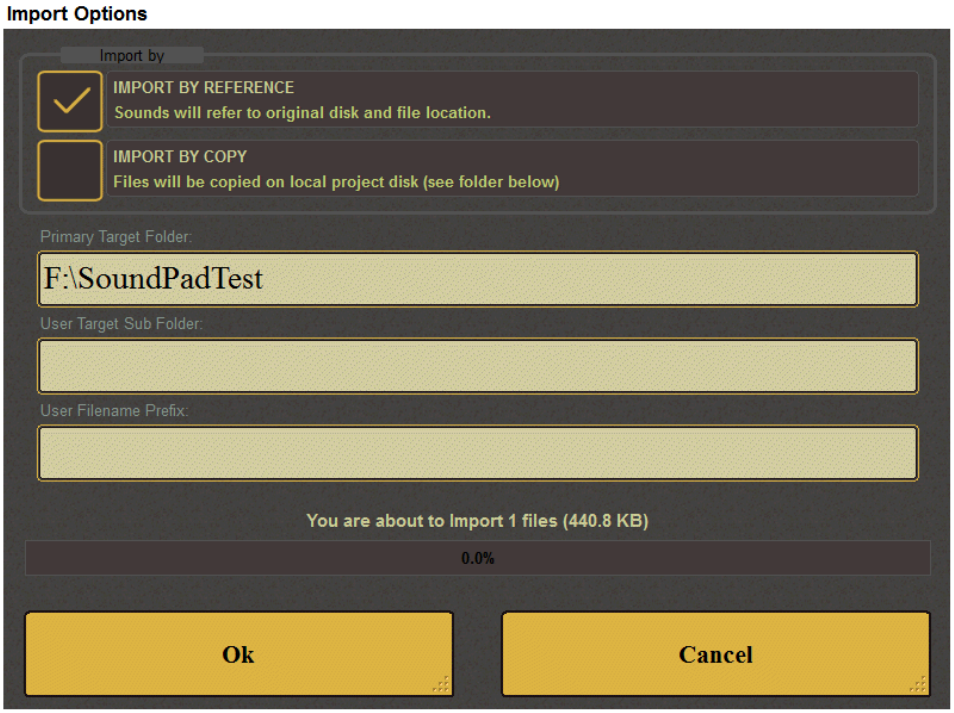
Output Monitoring
This area displays the routing of the monitoring: where we will get audio signal if we preview sound (with the preview button on each file item on the left).

Current Page Layout
This area shows the current displays the routing of the monitoring: where we will get audio signal if we preview sound (with the preview button on each file item on the left).

Import
This button Opens the Import Dialog Box.

Cancel
This button Exits to previous screen.

Import Options Dialog Box:
The Sound PAD proposes to import file by reference (use the file directly from its initial directory) or by copy. In this last case, user can define the target folder, a possible sub folder (that will be created) and a name prefix (especially useful for CD tracks extraction).

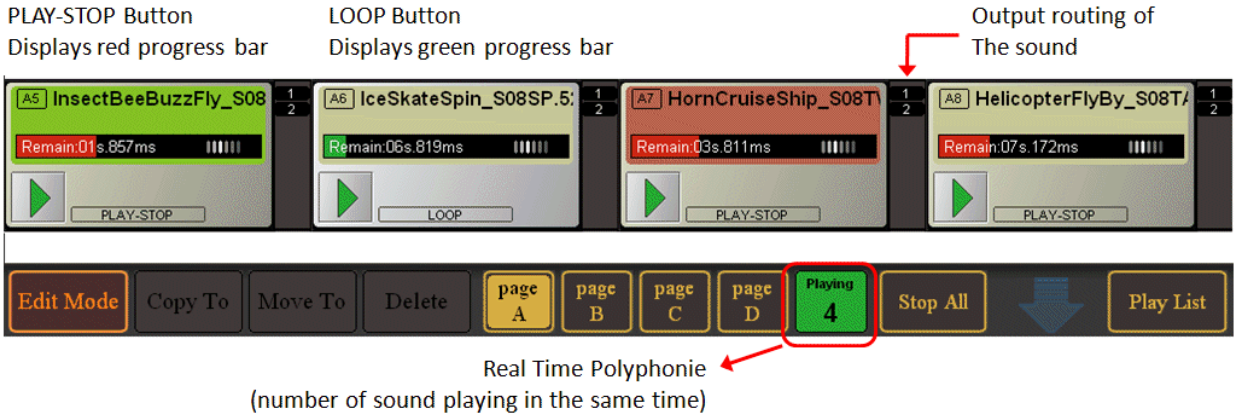


Pushing OK button will start the import process (including possible Copy) and will create related buttons in Sound Pad.

SoundPad Operational Page

After having loaded audio file, buttons can be used right immediately to launch sound, jingles, announce, music or any sound effects.

Click on button to play Sound, Click again to stop it. PLAY-STOP is the default mode for a new button just being created.



SoundPad and Playlist:

On the right bottom, the button “Play List” allows switching to Playlist Page. The Mixed Display Option display the first playlist on the right of the soundpad page, as it is shown below:

SoundPad Mode and Special Bottom Bar:
The project mode, given in the project settings, displays a special transport bar.

The SoundPad Transport bar allows to manage playlist with big button to play / stop current item or play next one.

Then it's possible to keep 16 instant playback button on screen and manage 2 playlist by this SoundPad Transport bar.

Display List 1
This button allows showing/hiding playlist #1 on the right of the SoundPad.

Display List 2
This button allows showing/hiding playlist #2 on the right of the SoundPad.

Playlist 1 / 2
This Big Button, displaying the current state of the related playlist, allows to play / stop current playlist item or to play next one.

Stop All Pads
This button stops all sound of the sound pad.

Stop All Playlist
This button stops all sound of all playlists.

SoundPad Dual Screen:
It is also possible to display Sound Pad on secondary monitor (possibly full HD – 1920 x 1080) and then keep the original 4:3 main display monitor for other page of the MT128.

To display SoundPad page on another monitor, go in system option pages: Layout options. There, “Extend SoundPad Display” option will allow you to position the SoundPad page on secondary or primary monitor.

It is also possible to activate the full screen mode to take advantage of a full HD display monitor with the Sound PAD page view.

SoundPad Button Editing

In Edit Mode, the sound can be edited by clicking on the desired button. The following Dialog Box Appears to let you configure the button behavior and change some parameters related to the Sound (Start and End Point, Gain, Pitch, Fade-in, Fade Out).

Waveform Area

The waveform area enables different navigation and editing actions. It allows positioning cursor by a tap on the top half of the timeline. A Tap on the bottom half will let you scroll the waveform horizontally. The Start and End points, defining the part of the sound being played, can also be defined by mouse or finger by grabbing the point and move it directly on waveform. Fade In and Fade Out point (blue square) can also be defined by grabbing them with mouse or finger (touch screen).

On the left of the Waveform (that can display up to 8 channels) we have the nominal routing: the tracks where the sound is playing out. A Tap on this left part will open a Routing Dialog Box to change this track assignation. Per default, Sound is routed to tracks outputs, but can be routed to tracks inputs to be possibly recorded by the MT128 recorder (by the MIXER / MAIN page, see Mixer topics earlier in this document).

Extend Dialog

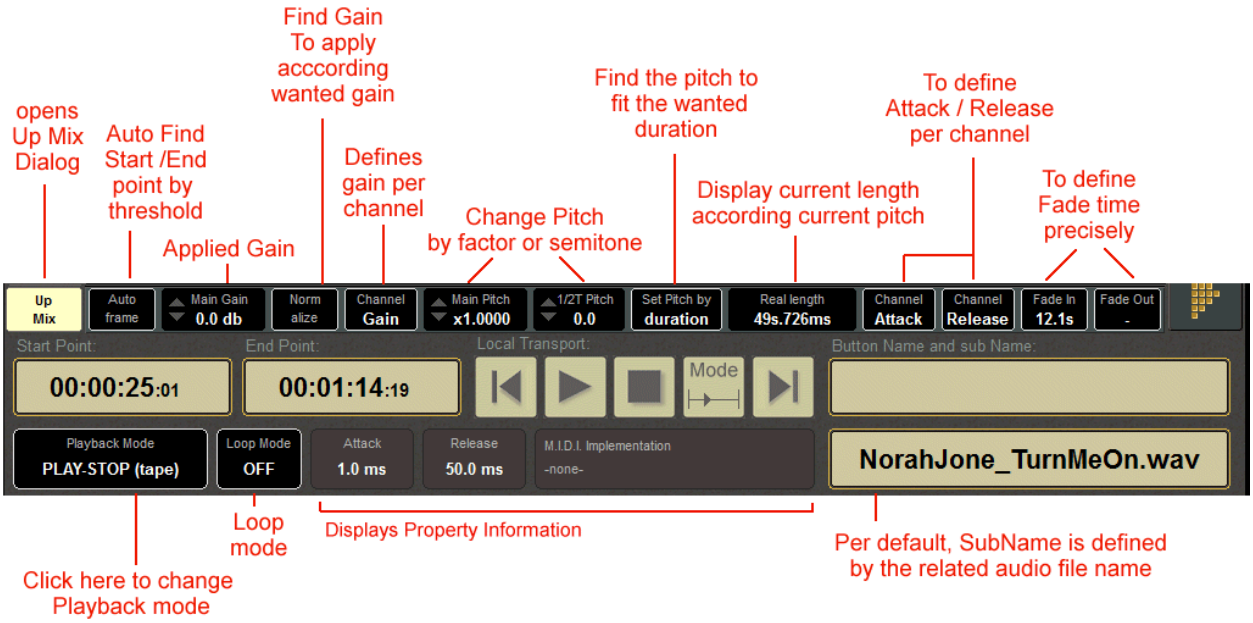
This button enlarge the Edit Dialog Box (by up sizing the waveform area). Per default this Edit Dialog Box is fitting the regular body part of the MT128 interface.

Up Mix

This button will display a special dialog box to let you up mix (increase channel number) or down mix (reduce channel number) of the sound by using/combining existing sound channels.

On the right of the waveform we are retrieving the same buttons than on Timeline to Zoom in and out and move the waveform horizontally on the left and on the right.

The different controls of the Edit Dialog Box allow changing different aspects of the sound or button properties:



Main Gain

This control makes appear the Numeric Pad to enter a gain in db, that will be the main gain of the sound. It is also possible to use mouse wheel to change the gain in real time. The Waveform is displayed according the new gain and possible peak are displayed in red inside the waveform.

Main Pitch

This control makes appear the Numeric Pad to enter the pitch of the sound according a speed factor. x1 means normal speed, x2 means double speed, x0.5 means half speed. It is also possible to use mouse wheel to change the pitch in real time.

Semitone Pitch

This control makes appear the Numeric Pad to enter the pitch of the sound in semitone. 0 means normal speed, 12 semitones (upper octave) means double speed, -12 semitones (lower octave) means half speed. It is also possible to use mouse wheel to change the pitch in real time.

Set Pitch by Wanted Duration

This control makes appear the Numeric Pad to enter duration. Then it will define the pitch to get this exact duration.

Auto Frame

This control makes appear the Numeric Pad to enter a gain threshold (per default -30 dB) to find beginning and end of the sound. This function is then automatically setting the Start point and End point according a level threshold.

Normalize
This control makes appear the Numeric Pad to enter a normalization gain (per default -0 dB). This normalization will find the gain to apply to the sound defined by start and end point. This function is then automatically setting the main gain according a wanted max level.

Gain per Channel
Click on this area will make appear an Edit Gain Box on every channel of the sound to let the user adjust the gain per channel. These gain are also available in the properties dialog box..

Channel Attack
Click on this button will make appear an Edit Attack Box on every channel of the sound to let the user adjust the attack time per channel.

Channel Release
Click on this button will make appear an Edit Release Box on every channel of the sound to let the user adjust the release time per channel.

Fade In
This control makes appear the Numeric Pad to enter the fade in time in second.

Fade Out
This control makes appear the Numeric Pad to enter the fade out time in second.

UP Mix Dialog Box
This button on the left opens a dialog box to change the number of channel of the sound (1 to 8) by combining existing channel (2 by 2).

Start Point
A Tap in this area will define the start point of the sound by using the current position of the cursor. A long tap will open a TimeCode edit box to enter exact position.

End Point
A Tap in this area will define the end point of the sound by using the current position of the cursor. A long tap will open a TimeCode edit box to enter exact position.

Local Transport
These five buttons allow to navigate and playback the sound. The Mode button provides different local playback modes to play the sound in loop or not, or partial loop. In partial loop mode, the playback plays the sound some seconds around the loop point. This is made to adjust the loop point without having to hear the entire sound on every loop.

Name and Sub-name
These 2 fields can be used to define a Button Name and Sub-Name.

Playback Mode:
A Tap in this button will change the playback mode of the button. It means how the button will play the sound according user action. This mode is mainly related to M.I.D.I. or remoting Implementation (XKEYS, M.I.D.I. Controller, GPIO…)

Mode	Behavior
Play Stop	A click on button starts the sound. The second click stops the Sound. (Next Click will restart the sound from beginning). M.I.D.I. Event starts the Sound. Next event stops the sound (Note OFF is not used in this mode).
Trigged / One shot	Click on button will start the sound. Next click will restart the sound from the beginning. M.I.D.I. Event starts the Sound. Next event restart the sound from the beginning (it is the Beat Box mode / Note OFF is not used in this mode).
Key (Piano mode)	Basically, this mode takes in account release actions: Click on button starts the sound and click release stops the sound. M.I.D.I. Note On Event starts the Sound and Note Off Event stops the Sound.

Loop Mode
A Tap in this button will enable or disable the LOOP Mode (the sound is played continuously).

Properties Button
A Tap on this button will open the Properties Dialog Box (see below or next page) to set other parameter of the Sound Pad Button: Attack / Release Properties, M.I.D.I. Implementation, Sounds Interactions and TimeLine Interaction.

Sound Properties Dialog Box:
When clicking on properties button, the following dialog box appears:

Attack Time
This control makes appear the Numeric Pad to enter attack time in ms (for all channels). It is the time to reach the nominal level when Touch on (when starting playback).

Release Time
This control makes appear the Numeric Pad to enter release time in ms (for all channels). It is the time of the Touch off fade out. When the sound is stopped, it continues to play during this time in a fading out.

M.I.D.I. Implementation
The SoundPad Sound can be started and stopped by M.I.D.I. Message. This section allows to define the associated M.I.D.I. message by a LEARN function. If checked On, M.I.D.I. Implementation is enabled and the related MIDI event will be processed for this Sound Button.

Channel Mode
A Tap on this field allows selecting M.I..D.I. Channel (1 to 16). OMNI (default) means that the MIDI channel is not taken in account (all MIDI Channels will work).

M.I.D.I. Code
This shows the current M.I.D.I. message associated with the button or playlist (last learnt).

Learn

This button enters in LEARN mode and wait for an incoming M.I.D.I. message coming from MT128 MIDI port #1 or port #2 or from MT128 Remote Driver generating MIDI code (like XKEYS-24 driver for example).

Need To Be Armed
If enabled, this mode place the button in NOT ARMED state, and the user interface allows to ARM or unARM button to be able to receive or not M.I.D.I. Code.

Sound Interactions:

Solo Mode
This option gives the button the SOLO property. Starting this sound will stop all possible others sounds already playing back (but those which are SOLO SAFE)

Solo Safe
This option gives the button the SOLO SAFE property. Means it is not sensitive to SOLO mode given by starting a sound with SOLO Status.

TimeLine Interactions:

TimeLine PLAY
This option, if enabled, will generate a PLAY command to MT128 Transport Bar, when the SoundPad sound will be started (Touch On).

TimeLine STOP
This option, if enabled, will generate a STOP command to MT128 Transport Bar, when the SoundPad sound will be started (Touch On).

Fade in/out:

Fade In
This control makes appear the Numeric Pad to enter the fade in time in second (same than on Edit Dialog Box).

Fade Out
This control makes appear the Numeric Pad to enter the fade out time in second (same than on Edit Dialog Box).

Playback Mode:

Loop Mode
A Tap in this button will enable or disable the LOOP Mode (the sound is played continuously / same option than in Edit Dialog Box).

Playback Mode:

A Tap in this button will change the playback mode of the button. (same than on Edit Dialog Box).

Display Mode:

Big Display
This option allows to display the Button name in Big.

Button Color:
A Tap in this button will change the color of the button (click on it to select the wanted color).

Gain / Pitch:

This section enable to set main gain, main pitch and gain per channel (these parameters are also in the Edit Dialog Box).

Other buttons of the Edit Dialog Box:

Change Audio File
This button will allow changing the sound of the button by selecting another audio file. A tap on this button will make appear the Audio File Import Dialog box (already shown earlier above in this document) to select a single file.

Local Monitoring
For Editing the Sound and monitor it independently from nominal routing or the main routing of the other sounds being played, we can use the local Monitoring by setting the check box on. A tap in the route assignation table will open a dialog box to define another routing assignment.

This dialog box allows selecting tracks for 1 to 8 possible channels in the 128 possible input or output MT128's tracks. This selection is made according the order of selection and it's shown on the bottom, in the current order. First selected track is for channel one, second selected track is for channel two etc…

This dialog box allows selecting whatever group of 8 channels in whatever order. It is possible to reset the current selection, but it is also possible to modify the current selection, by 2 clicks: one in the current selection on bottom to select the desired channel assignation to change, the second in the 128 matrix area to assign a track to this channel.

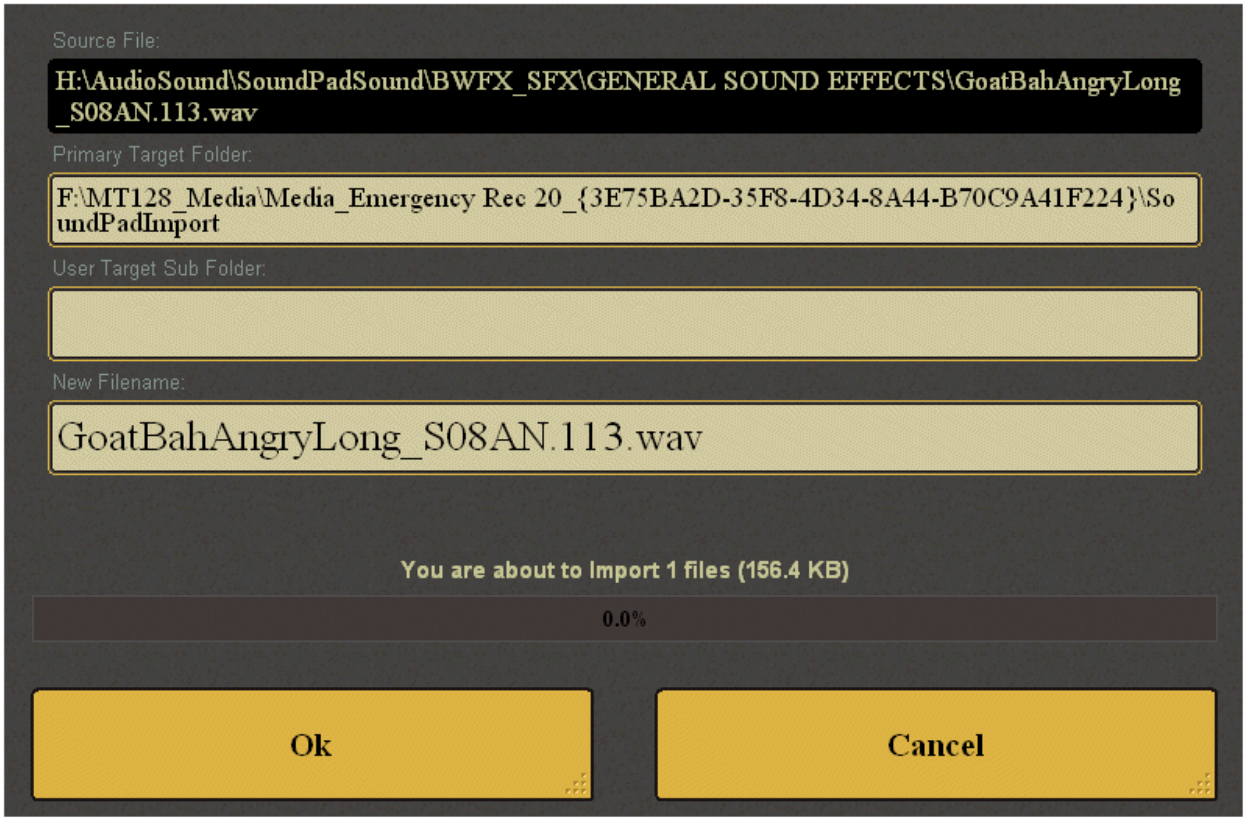
Last button of the Edit Dialog Box:

OK
Click Ok to validate the all editing action made close dialog box.

Cancel
A tap discards changes being made and exits.

Sace As
Save AS Button is made to store the current audio file being used in another disk location.

Save As



It displays the source File with its entire directory and the current Target Folder. A sub folder can be created here by typing a directory name in the field “User Target Sub Folder”. Also the New Filename field will allow to define a new filename.

OK
Click Ok to start the SAVE AS process.

Cancel
A tap on Cancel button will exits to previous page.

SoundPad Group Editing

The **Edit Sel** Button allows selecting several buttons to edit their properties at once.

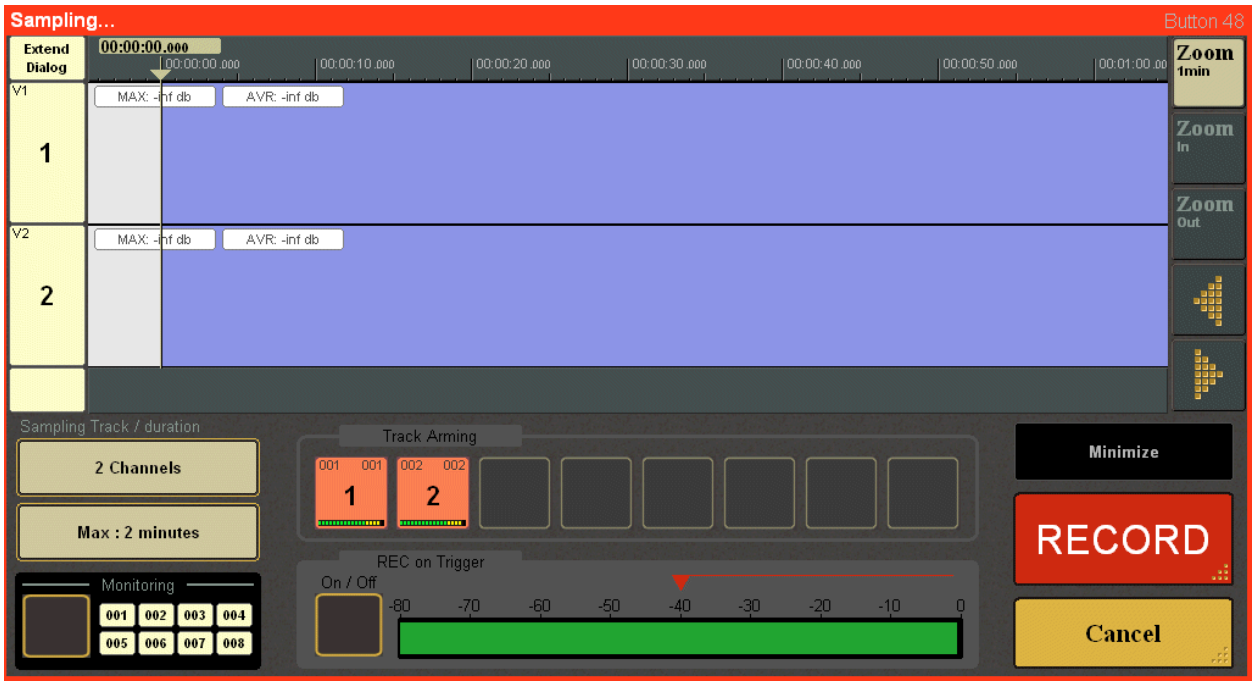
Clicking on Prop button will open the regular property dialog box and will allow to change/set one or several parameters (modifications are shown in orange): Clicking on Route button will open the regular routing dialog box.

When Clicking OK, the previously selected buttons will get their properties changed for Solo Mode, Loop Mode and Playback mode (orange frame) while other properties will be unchanged.

SoundPad Sampling

In Edit mode, while the left part of the SoundPad button allows loading an audio file, the right part allows opening Sampling Dialog Box to capture sound from any MT128 Tracks input. Sampling is made in memory (DTR = Direct To RAM) and can record until 10 minutes of 8 channels sound (in the current MT128 project Sample rate).

In the sampling dialog box, we are retrieving the same kind of waveform display than in the Edit Box, except it's empty (not recorded yet) and the Left side shows the Input Routing for recording (not the output routing for playback). V1 and V2 written in the routing area means that the Virtual Input are also coming here (MT128 VAIO Driver) to record any PC Sound (Media Player, Spotify, Deezer, DVD 5.1, and all audio application using regular windows audio driver).



Track Number

A tap in this field will open a numeric pad to enter the number of channel to record (1 to 8).

Max Duration

A tap in this field will open a numeric pad to enter the number of minutes to record before automatically stop record.

Track Arming

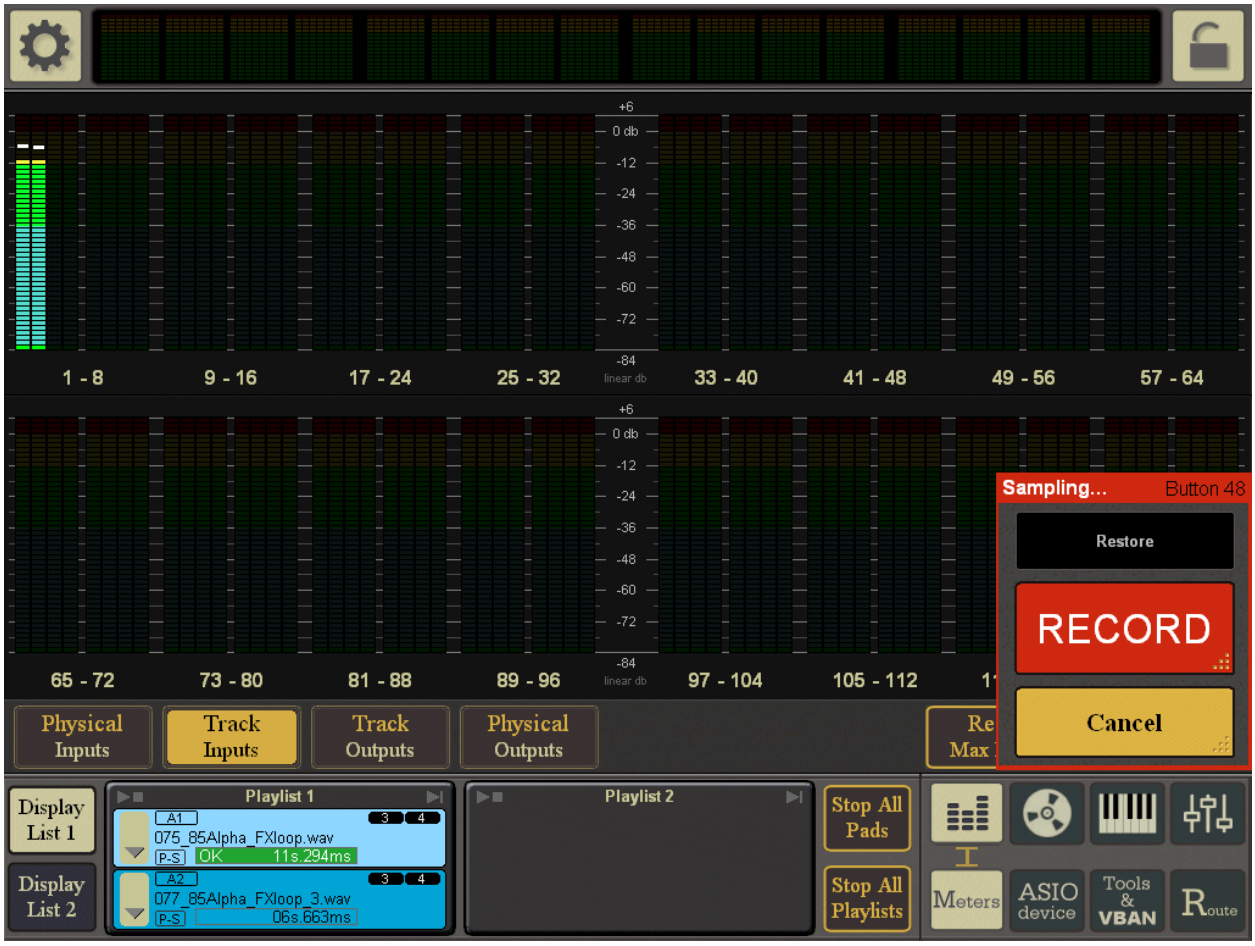
This section allow to arm the tracks to be recorded (unarmed track will produce silence on the related channel).

REC On Trigger

This section shows a big meter where the user can position a cursor: the trigger threshold. If activated (check box On) the Record will start automatically when the level will go over the current threshold.

Minimize

This button allows to minimize the Sampling page and display it in Top Z order to let you navigate in other MT128 pages to check levels, or routing or launch extra applications (media player, internet browser etc…).



Monitoring

This section is like the Local Monitoring section of the Edit Dialog Box and will let the user monitor tracks input independently from input routing (or the main routing of the other sounds being played). We can use the local Monitoring by setting the check box on. A tap in the route assignation table will open a dialog box to define another routing assignment.

Record
A Tap on this button will start the Sampling process. The recorded sound will appear on the waveform in real time. Record buttons is now displayed as a STOP button to terminate the sampling process at any time. After Recording the Sampling Dialog Box is transformed in Edit Dialog Box.

Cancel
A Tap on this button will cancel the current process if any and close the dialog box.

SYSTEM SETTINGS
(Blue pages)

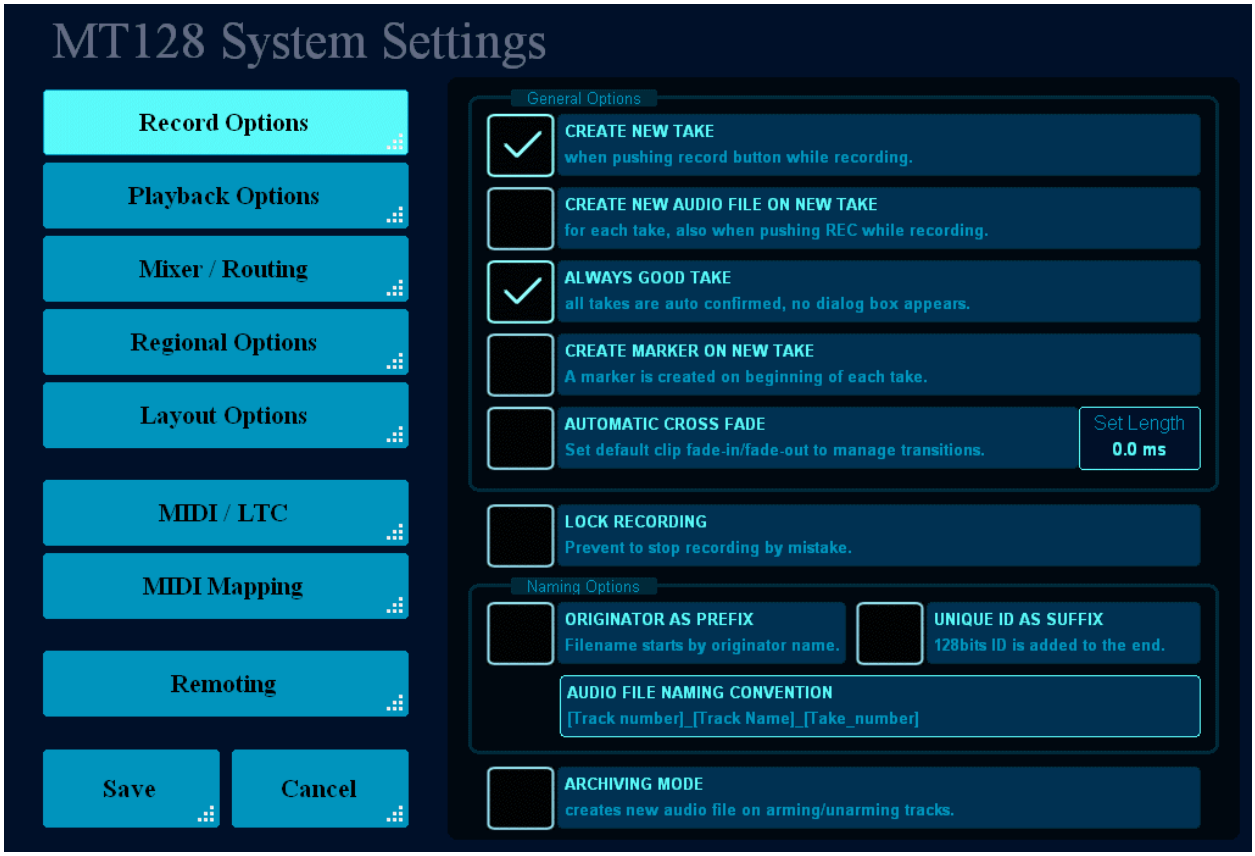
&

ADMINISTRATION PAGES
(Black pages)

SYSTEM SETTINGS

For individual control of the MT-128, there are several options to match requirements needed by the user. System settings are global options that are more depending on the general configuration and possible connected hardware.

The System Settings pages are based on a list of thumbnails on the left that display different configuration pages (on the right).



Cancel

A tap discards changes being made and exits (except for remoting parameters which are set in time).

Save

A tap saves changes being made and exits. ! Audio Device can be restarted according parameters/configuration change (in this case, it is notified on the save button) !

RECORD OPTIONS

This first page of the system settings will enable you to set some options related to recording.

CREATE NEW TAKE

When pushing record button while recording a new take is created.

CREATE NEW AUDIO FILE ON NEW TAKE
For each take (also while recording), a new audio file is created.

ALWAYS GOOD TAKE
All takes are auto confirmed, no take validation dialog box appears.

CREATE MARKER ON NEW TAKE
A marker (locator) is created on beginning of each take.

AUTOMATIC CROSS FADE
Set default clip fade-in/fade-out to manage transitions. The default duration of this fade-in fade out can be set by clicking on the right box (Set Length).

LOCK RECORDING
If set, this option ask to user a confirmation (through a yes/no dialog box) to stop the current recording process.

ORIGINATOR AS PREFIX
If checked, originator name of the project settings is used as prefix for all recorded audio file.

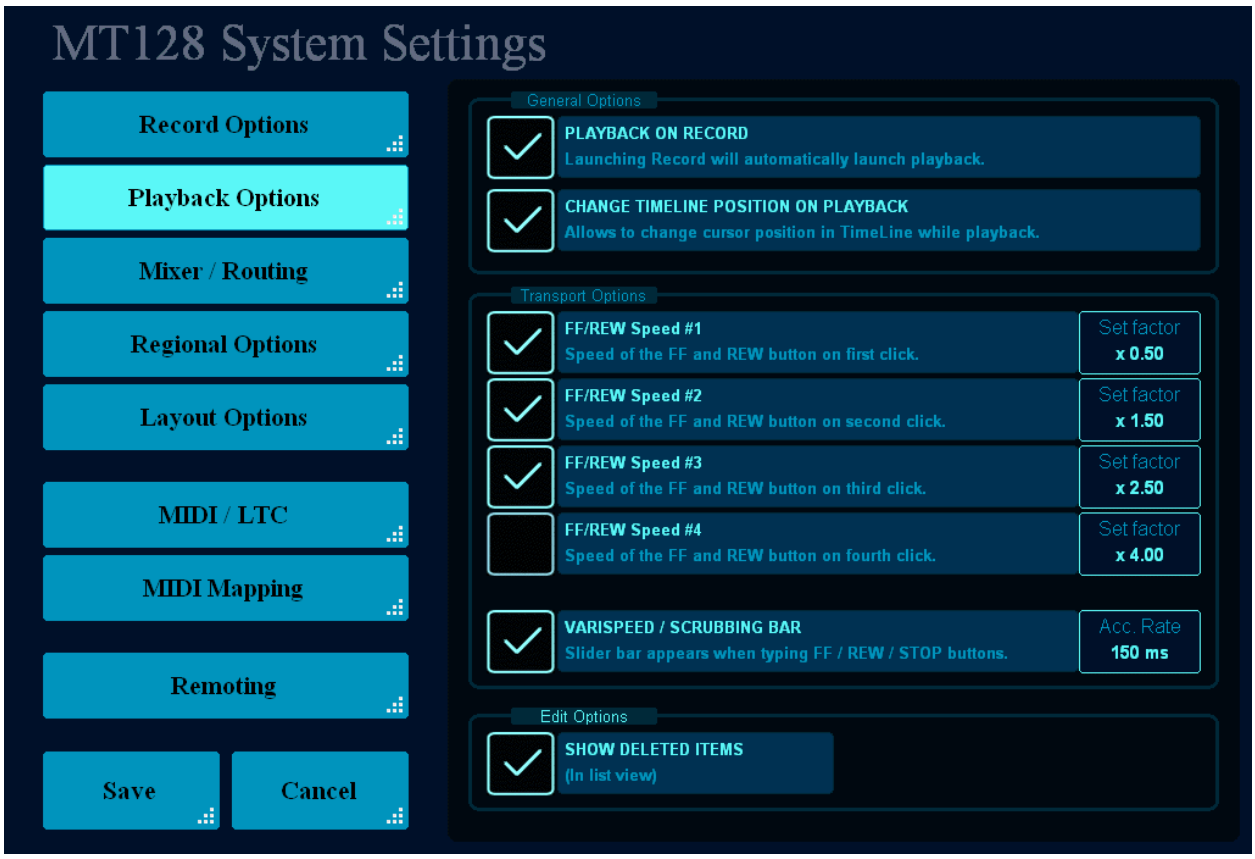
UNIQUE ID AS SUFFIX
If checked, generated filename are unique thanks to a unique number attached as name suffix.

AUDIO FILE NAMING CONVENTION
Disaplay a list of different naming convention and let you select which one will be used to automatically set the name of the audio file generated during recording..

ARCHIVING MODE
Create new audio files on arming/unarming tracks.(not recommended for punch in/out)

PLAYBACK OPTIONS

The second thumbnail is presenting option related to playback.



PLAYBACK ON RECORD

Playback is launched when pushing record button.

CHANGE TIMELINE POSITION ON PLAYBACK

Allows user to change cursor position while playback.

FF/REW Speed X

This section allows to define speed for 4 different FF / REW speed.

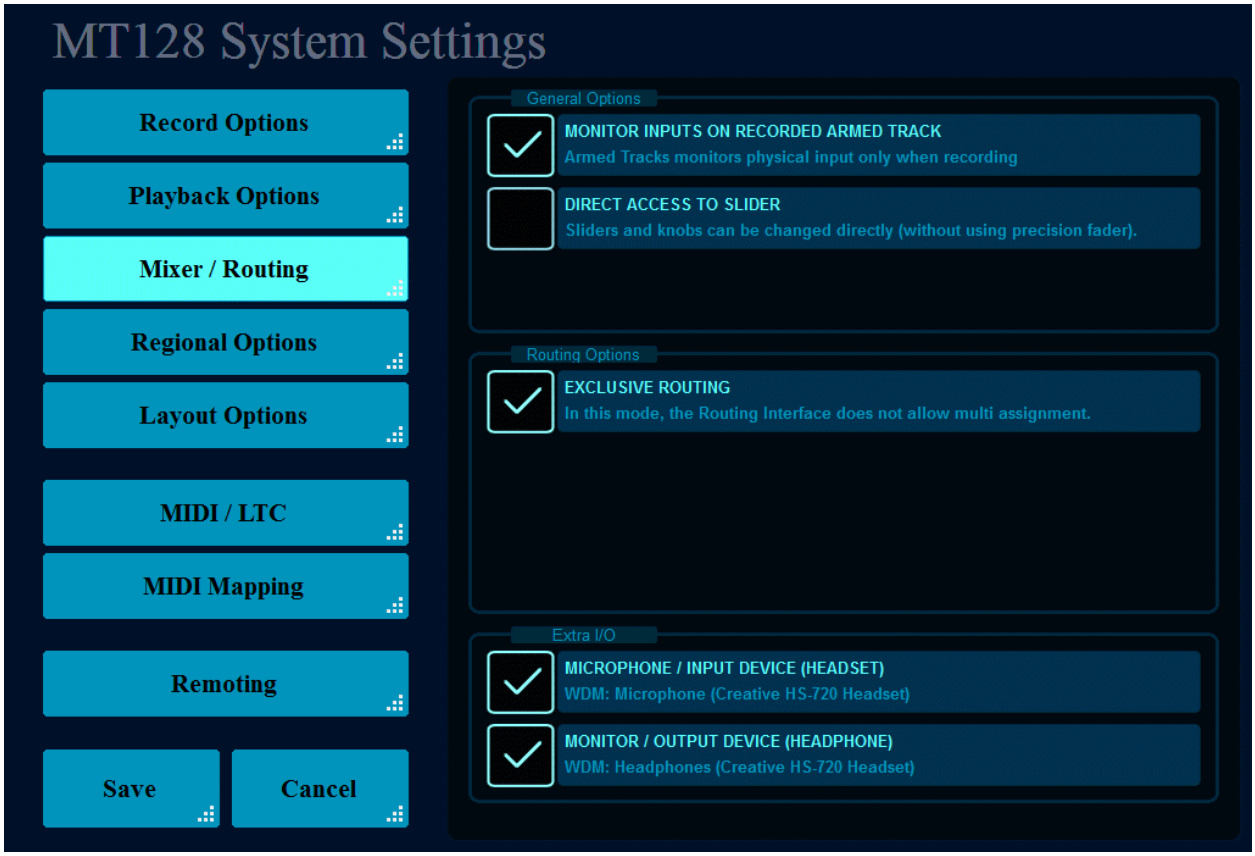
VARISPEED/SCRUBBING BAR

Slider Bar appears when typing FF / REW / STOP buttons. ACC Rate (smoothing parameter) gives the time used to change the pitch of the sound : time to go from an octave to the next one (below or above).

SHOW DELETED ITEMS

If checked, all deleted item (clip, take, file, rec session…) are shown in the List view.

MIXER/ROUTING



MONITOR INPUTS ON RECORDED ARMED TRACK

This process is made before mixers. It allows to monitor tracks input only when armed. Otherwise the track input is monitored all the time (also in playback).

DIRECT ACCESS TO SLIDER

If checked, this option allow to directly move mixer slider without having to use the big precision fader displayed on the left or on the right of the screen.

EXCLUSIVE ROUTING

In this mode, the Routing Interface does not allow multiple assignment. An input can be routed to a single track.

EXTRA I/O MICROPHONE

The MT128 can manage additional audio recording device to let you talk over any channel of the main audio stream with a regular microphone connected to your audio onboard or through a USB Headset (see MIXER Main section to activate and route this extra device).

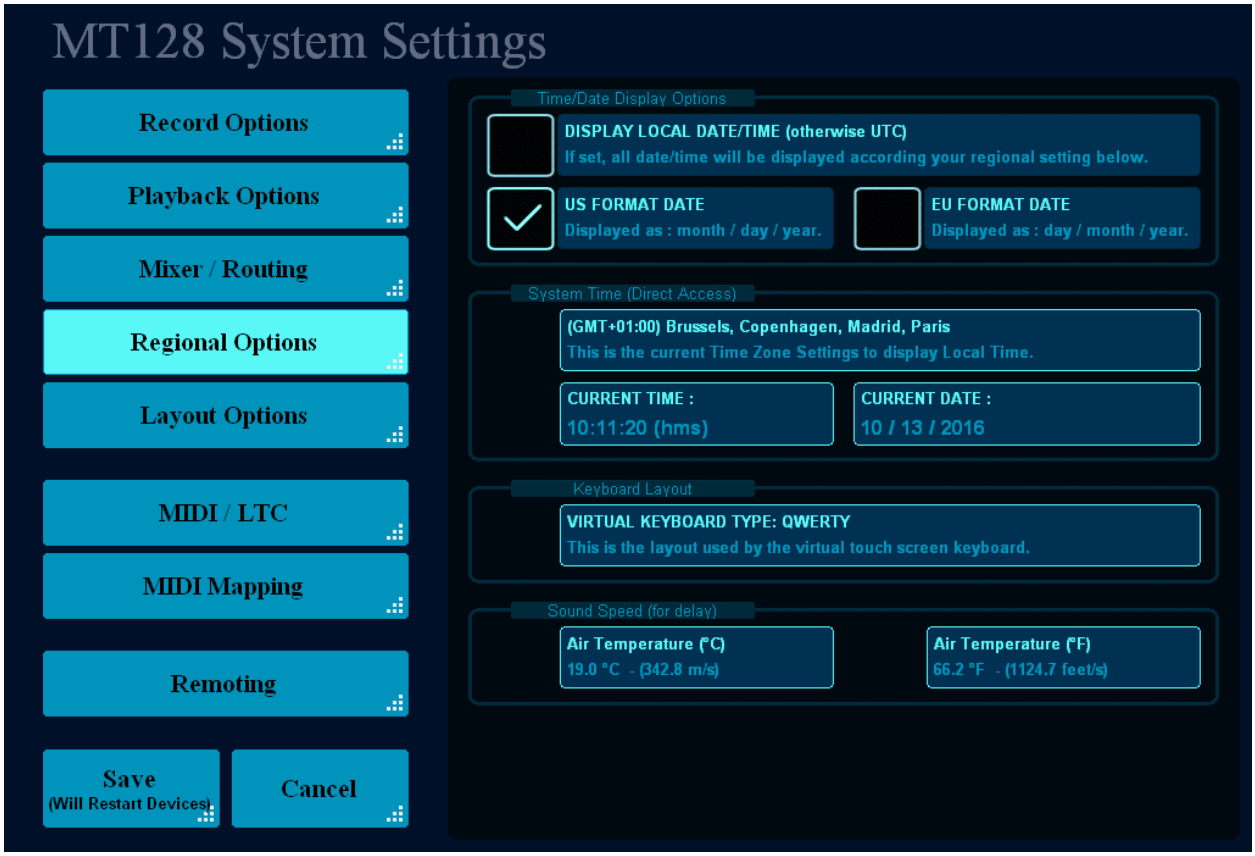
EXTRA I/O MONITOR

The MT128 can manage additional audio playback device to let you monitor any channel of the main audio stream with a regular speaker connected to your audio

onboard or USB Headset (see MIXER Main section to activate and route this extra device).

REGIONAL OPTIONS

The Regional option thumbnail allows to set some well known system parameters



DISPLAY LOCAL DATE/TIME (otherwise UTC)

If set, all date/time will be displayed according your regional setting below.

US FORMAT DATE

Displayed as : month / day / year.

EU FORMAT DATE

Displayed as : day / month / year.

(*GMT+01:00) Amsterdam, Berlin, Bern, Rom, Stockholm, Wien*

This is the current Time Zone Setting to display Local Time. You can change it by clicking on it. The change takes effect immediately.

CURRENT TIME : 16:43:16

A tap opens numeric to enter time. The change takes effect immediately.

CURRENT DATE : 09 / 30 / 2009
A tap opens numeric to enter date – according the chosen format (US / EU). The change takes effect immediately.

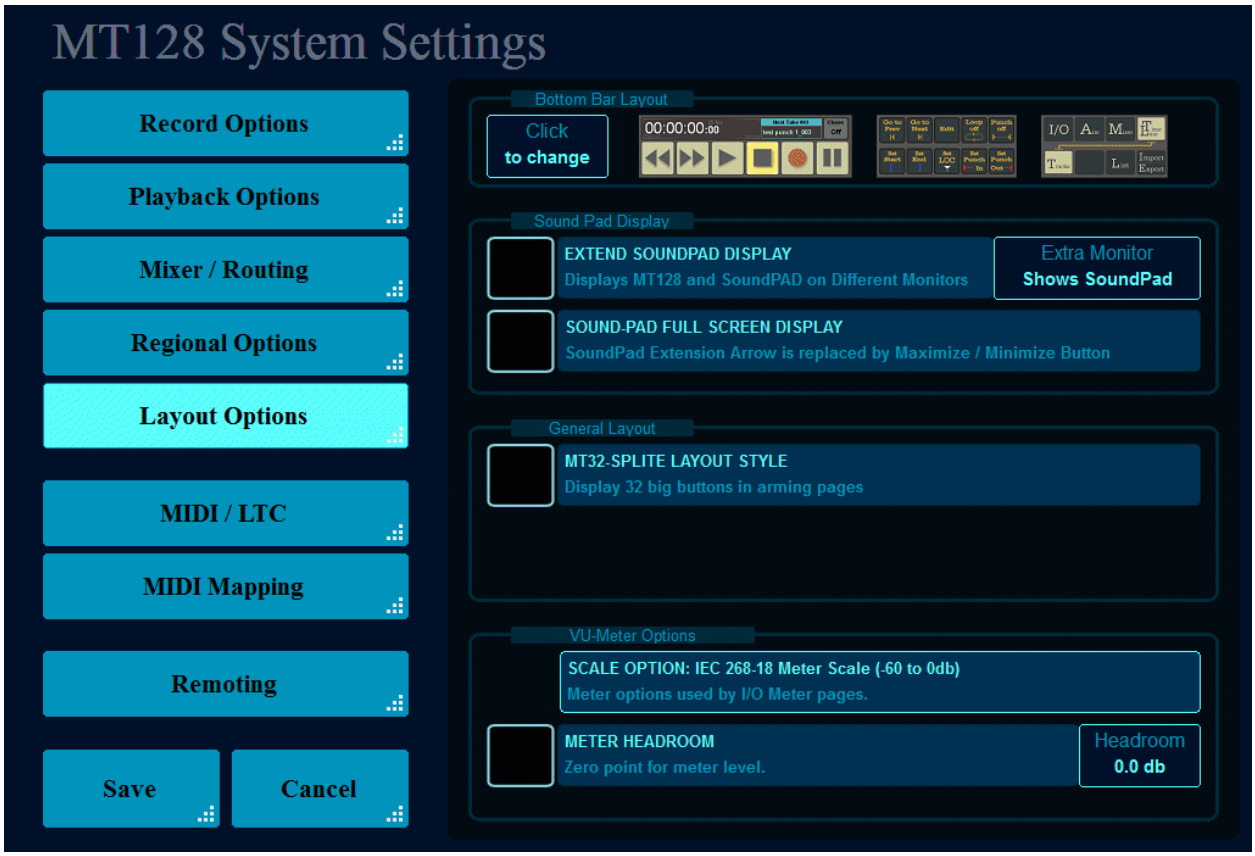
VIRTUAL KEYBOARD TYPE :
This is the layout used be the virtual touch screen keyboard. Options: AZERTY / QWERTY / DWORAK / QWERTZ

Air Temperature (ºC)
A tap opens numeric to enter value of temperature in Celsius. The speed of sound is calculated in meters for the delay.

Air Temperature (ºF)
A tap opens numeric to enter value of temperature in Fahrenheit. The speed of sound is calculated in feets for the delay.

LAYOUT OPTIONS

This page allows to change layout of the bottom bar and different display options.



EXTEND SOUNDPAD DISPLAY
Display SoundPad page on secondary monitor or the opposite: extra monitor can display MT128 while SoundPad page stays on main display monitor. SoundPAD can be

displayed on different monitor size (1024x768 min to 16/9 full HD or more) while MT128 is fixed to 1024x768 screen resolution.

SOUNDPAD FULL SCREEN DISPLAY

Allow to Display SoundPad in full screen when using a full HD display monitor for example. A button appears in the SoundPad Interface to switch to FULL Screen or normal display.

MT32 SPLITE LAYOUT STYLE

Display 32 buttons in Arm Page and limit user interface to 32 tracks. This mode is working only if limiting Max Track Number to 32 in Startup Script.

SCALE OPTION

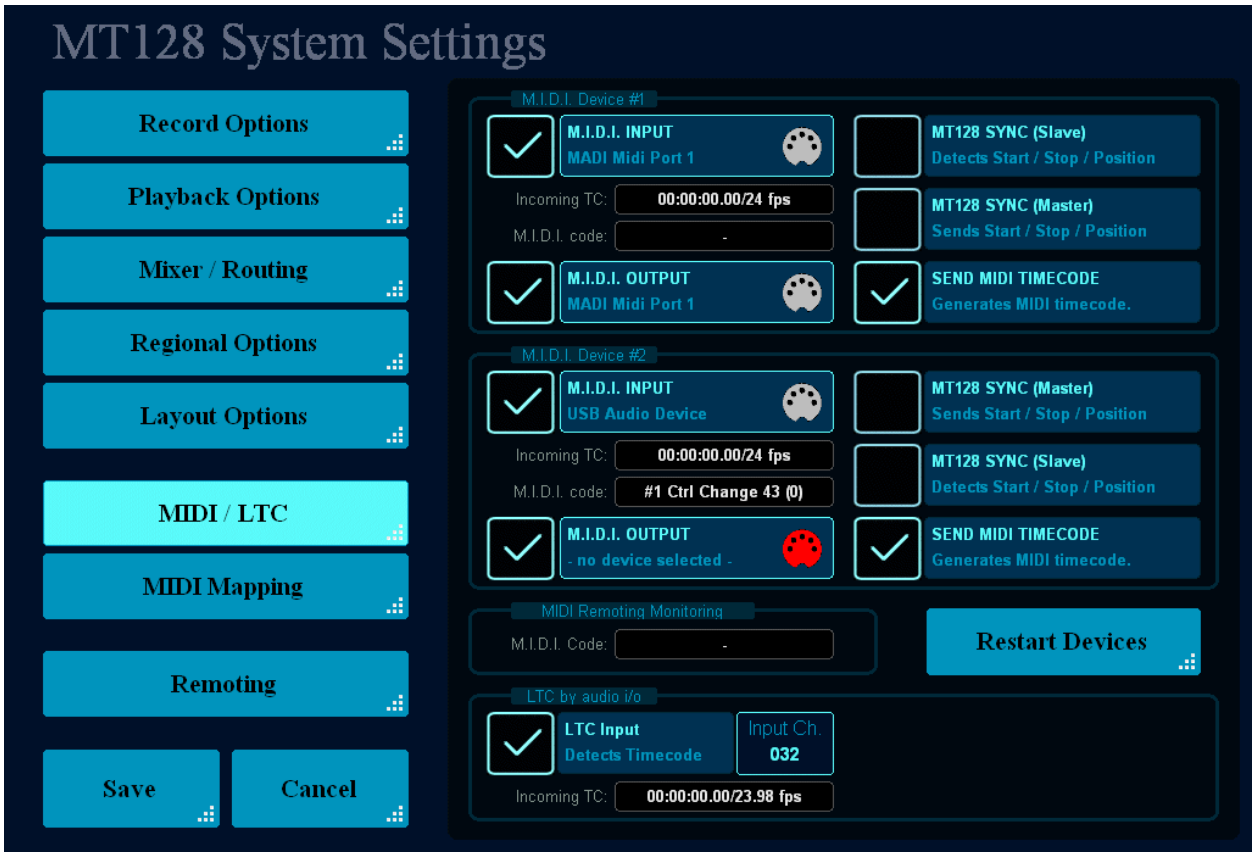
Display a list of different meter scale to let you select the one you want to see in the I/O Meter page.

METER HEADROOM

Allows to add a db value to the Metering (basically to change the ZERO point of the measure).

MIDI / LTC

This page allows to setup a couple of MIDI i/o and the LTC by audio i/o. It also allows monitoring MIDI input message and check that all MIDI pipe are working, also the MIDI code possibly coming from Remote Drivers.



M.I.D.I. Input
To activate and select a MIDI input Device

M.I.D.I. Output
To activate and select a MIDI output Device

MT128 MIDI SYNC
To activate the MT128 Property protocol on input or/and on output. This is made to synchronize 2 MT128 Machine (only for Play / Stop / Record / Goto command).

SEND MIDI TIMECODE
Activate the generation of Midi Time Code on MIDI output.

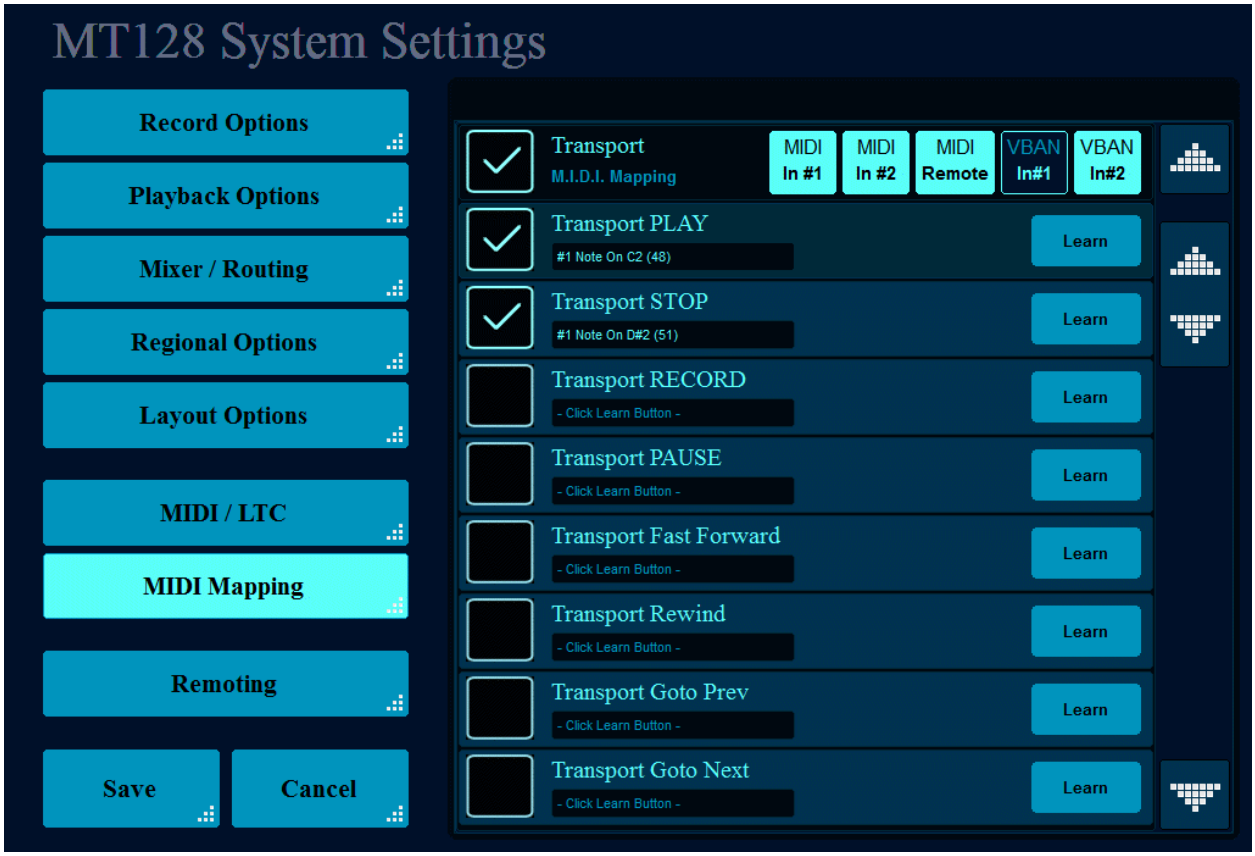
MIDI Remote Monitoring
Show the last MIDI message received from Remoting Driver System (some Remote are providing MIDI mode to generate MIDI code, like GPIO or XKeys drivers).

Restart Devices
This button restarts all devices (including Audio) with the new possible MIDI device selection and options. This is made to activate MIDI monitoring with the new select devices.

LTC input
Activate and set the physical input pin for receiving LTC signal on a physical audio input..

MIDI Mapping

This page allows assigning MIDI code (coming from any MIDI sources) to MT128 functions (TRANSPORT and SOUND PAD).

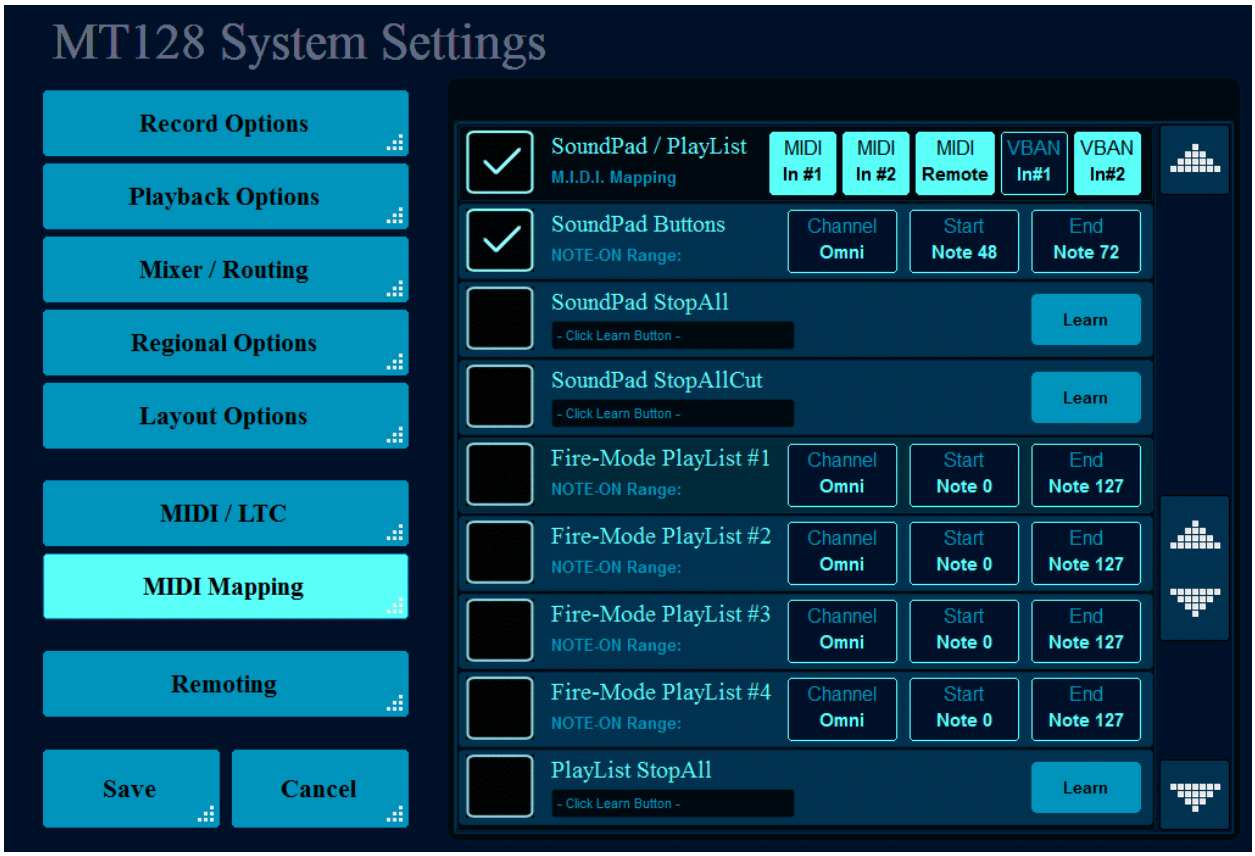


Transport MIDI Mapping

This first line allows to ENABLE / DISABLE Transport MIDI mapping and select the MIDI source, MIDI in#1, MIDI in #2, MIDI coming from remote drivers, MIDI coming from VBAN Stream MIDI 1 or VBAN-MIDI2 or all in the same time (per default).

Transport Functions

For every TRANSPORT function, it is possible to LEARN a MIDI code and ENABLE / DISABLE the function (PLAY, STOP, REC, PAUSE, FF, REW, GOTO PREV, GOTO NEXT)..



Sound PAD Mapping

This line allows to ENABLE / DISABLE SoundPad MIDI mapping and select the MIDI source, MIDI in#1, MIDI in #, MIDI coming from remote drivers, MIDI coming from VBAN Stream MIDI 1 or VBAN-MIDI2 or all in the same time (per default).

Button Range

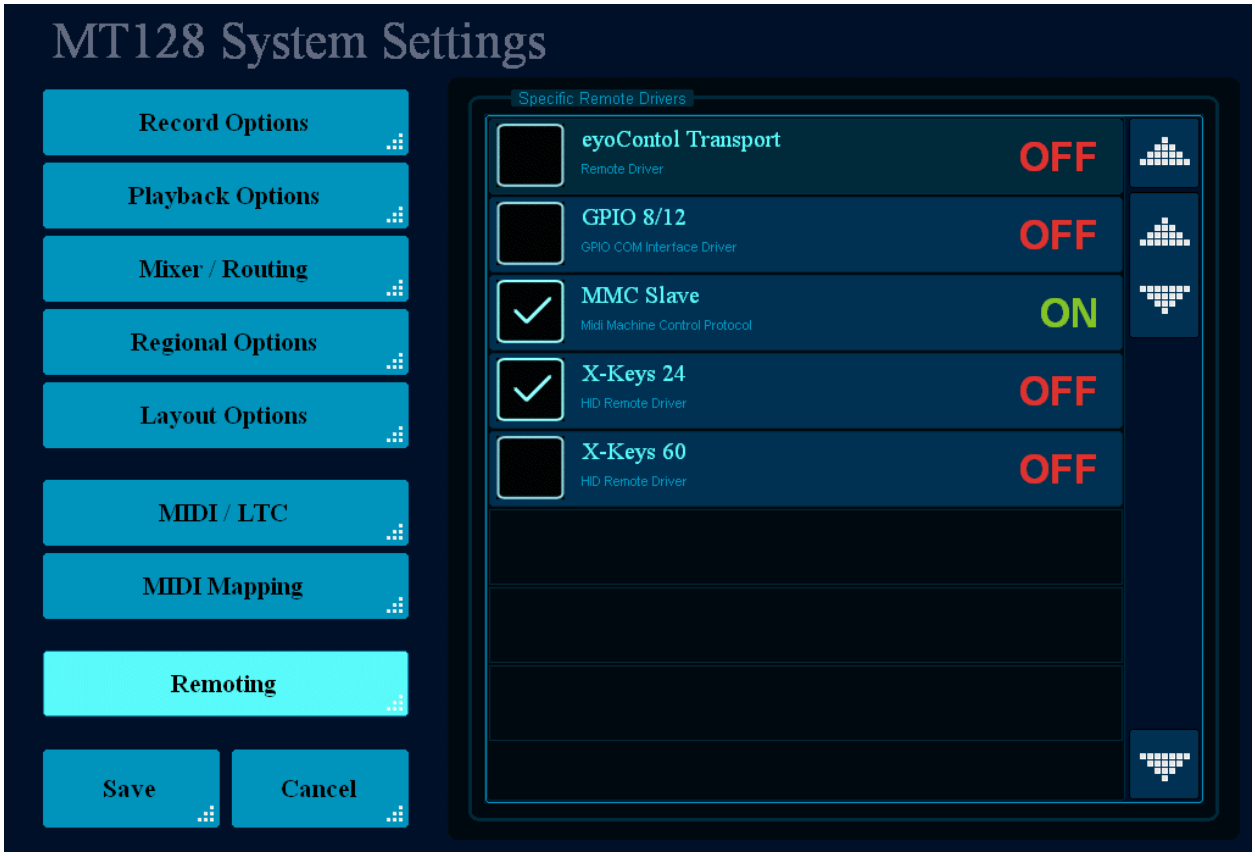
SoundPAD or Playlist can be handle by Note On MIDI message, automatically assigned according a range. START note will be assigned to the first Sound Pad button (or Playlist item, in fire mode).

Stop All / Stop All Cut

This function allows assigning a MIDI code to Stop All sounds (for Sound Pad or Playlist). Stop All Cut function stops all sounds without release (stop sound anyway).

Remoting Options

A tap opens the „Remoting Options“ Page. This is listing all drivers found on the system to interface different remote surface. This list will be increased in the time according the user needs and different supported devices…



Every Remote driver can be activated in the same time (if there is no conflict, for example if they are not using same MIDI I/O) and each Driver has its own Configuration Panel.

Click on Item to Display it, for example the X-Keys 24 left there allows configuring the behavior of this specific keyboard, by changing key mode, or Midi Channel (if set in MIDI Mode).

On the Bottom left, the current status tells if the remote is running or not connected (or not found).

X-Key 24 Midi Mapping

If not using “Direct SoundPad Protocol” the X-Key Driver generates M.I.D.I. messages for the 23 first keys (the last one, bottom right, is sending a STOP ALL command to the SoundPAD)..

When pushing a key, a M.I.D.I. note ON is sent to the MT128 on the M.I.D.I. channel specified in the X-Keys configuration dilog box above.

Releasing a key will produce a M.I.D.I. Note OFF message.

All keys can be used in same time.

M.I.D.I. Implementation is starting by NOTE ON 64 (velocity = 64).

Keys List (line by line):

1: Note On E3 (Velocity 64)
2: Note On F3 (Velocity 64)
3: Note On F#3 (Velocity 64)
4: Note On G3 (Velocity 64)

5: Note On G#3 (Velocity 64)
6: Note On A3 (Velocity 64)
7: Note On A#3 (Velocity 64)
8: Note On B3 (Velocity 64)

9: Note On C4 (Velocity 64)
10: Note On C#4 (Velocity 64)
11: Note On D4 (Velocity 64)
12: Note On D# (Velocity 64)

13: Note On E4 (Velocity 64)
14: Note On F4 (Velocity 64)
15: Note On F#4 (Velocity 64)
16: Note On G4 (Velocity 64)

17: Note On G#4 (Velocity 64)
18: Note On A4 (Velocity 64)
19: Note On A#4 (Velocity 64)
20: Note On B4 (Velocity 64)

21: Note On C5 (Velocity 64)
22: Note On C#5 (Velocity 64)
23: Note On D5 (Velocity 64)

GPIO Midi Mapping

If not using “Direct SoundPad Protocol” the GPIO Driver generates M.I.D.I. messages for the 12 GPI line

When CONTACT ON, a M.I.D.I. note ON message is sent to the MT128 on the M.I.D.I. channel specified in the X-Keys configuration dialog box above.

CONTACT OFF will produce a M.I.D.I. Note OFF message.

All CONTACT Lines can be used in same time.

M.I.D.I. Implementation is starting at NOTE ON 64 (velocity = 64).

DSUB 1 (line = pin)
Line 1: Note On E3 (Velocity 64)
Line 2: Note On F3 (Velocity 64)
Line 3: Note On F#3 (Velocity 64)
Line 4: Note On G3 (Velocity 64)

Line 5: Note On G#3 (Velocity 64)
Line 6: Note On A3 (Velocity 64)
Line 7: Note On A#3 (Velocity 64)
Line 8: Note On B3 (Velocity 64)
(pin 9 = common).

DSUB 2 (line = pin)
Line 1: Note On C4 (Velocity 64)
Line 2: Note On C#4 (Velocity 64)
Line 3: Note On D4 (Velocity 64)
Line 4: Note On D# (Velocity 64)
(pin 9 = common).

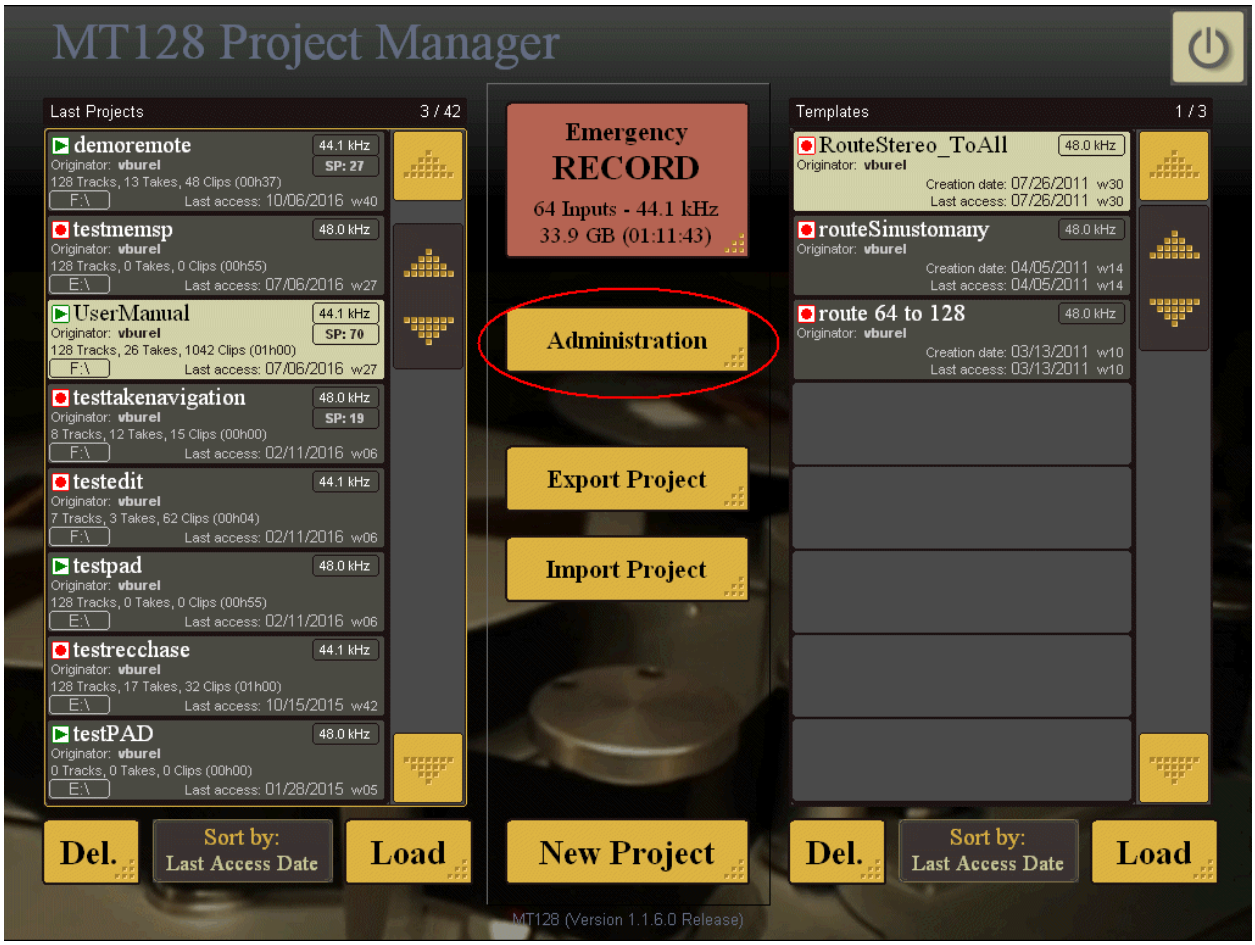
If KEY MODE is set to Transport Options, the 2 first lines are used to manage the PLAY and RECORD status. Midi implementation stars on line 3:

Line 1: PLAY / STOP
Line 2: REC / STOP
Line 3: Note On F#3 (Velocity 64)
Line 4: Note On G3 (Velocity 64)

Line 5: Note On G#3 (Velocity 64)
Line 6: Note On A3 (Velocity 64)
Etc…

ADMINISTRATION PAGES

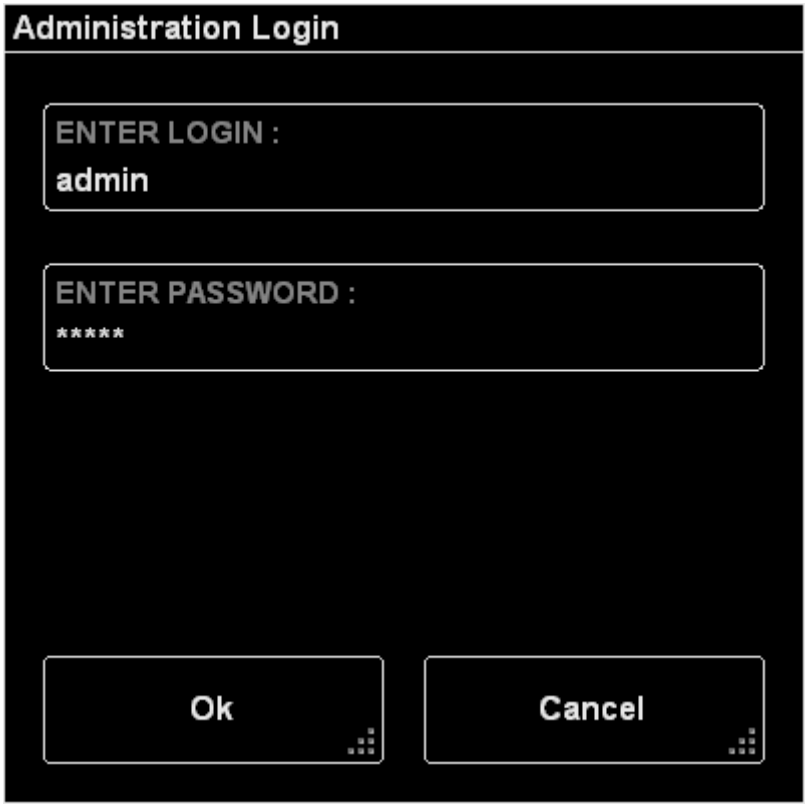
From the Startup page, the user can get access to administration pages. These pages are protected by login / password.



Administration pages allow to change some system options (also by managing startup script), update the MT128 version with a new package, manage licensing and format disks according a secure procedure.

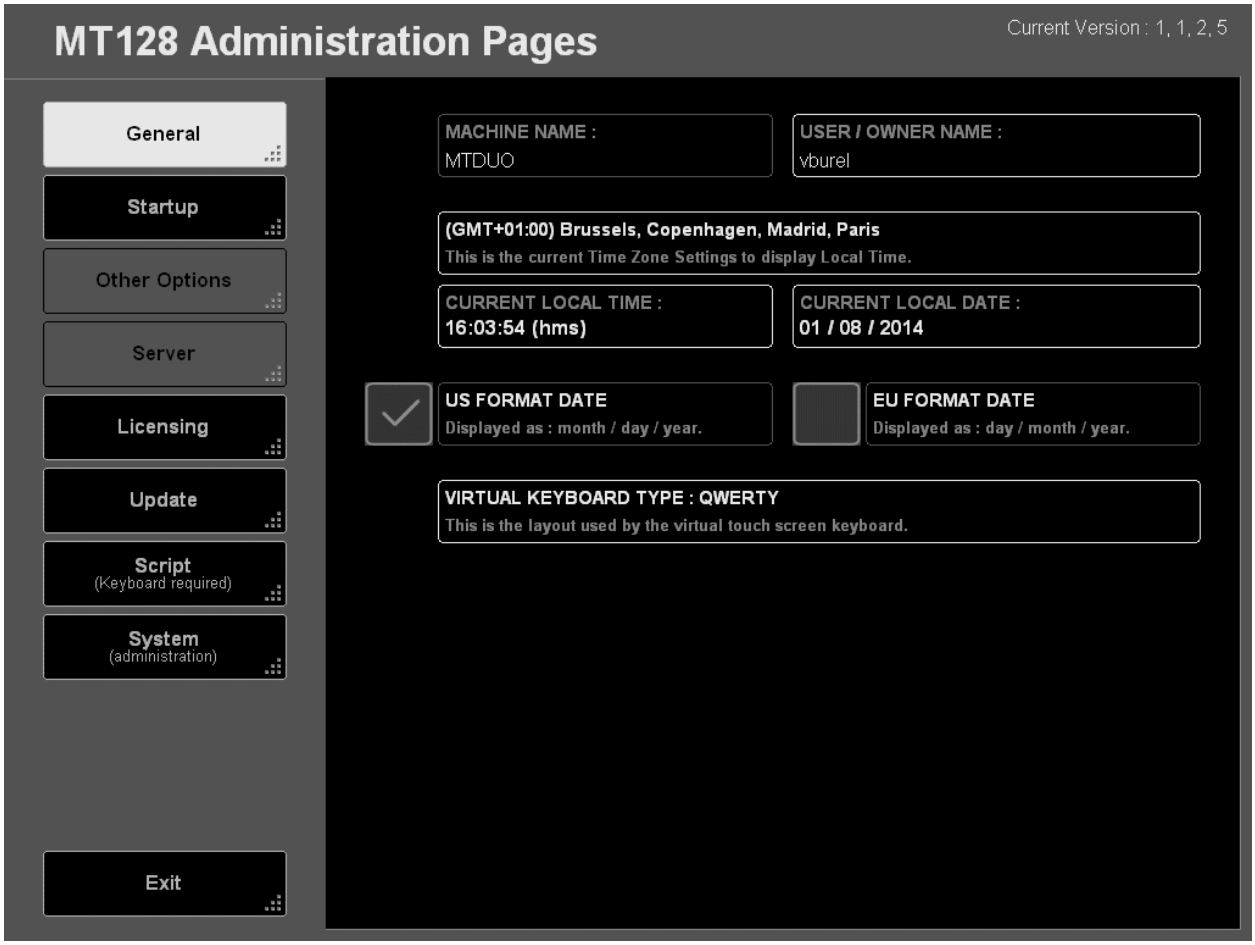
Administration Login:

The default Login / Password is ‘admin / admin’



General Options:

In the first page we are retrieving regular system options and regional settings.



Local Time Reference
A tap in this field will open a popup list of GMT references (same as Windows).

CURRENT LOCAL TIME
This field is made to update local time.

CURRENT LOCAL DATE
This field is made to edit local Date.

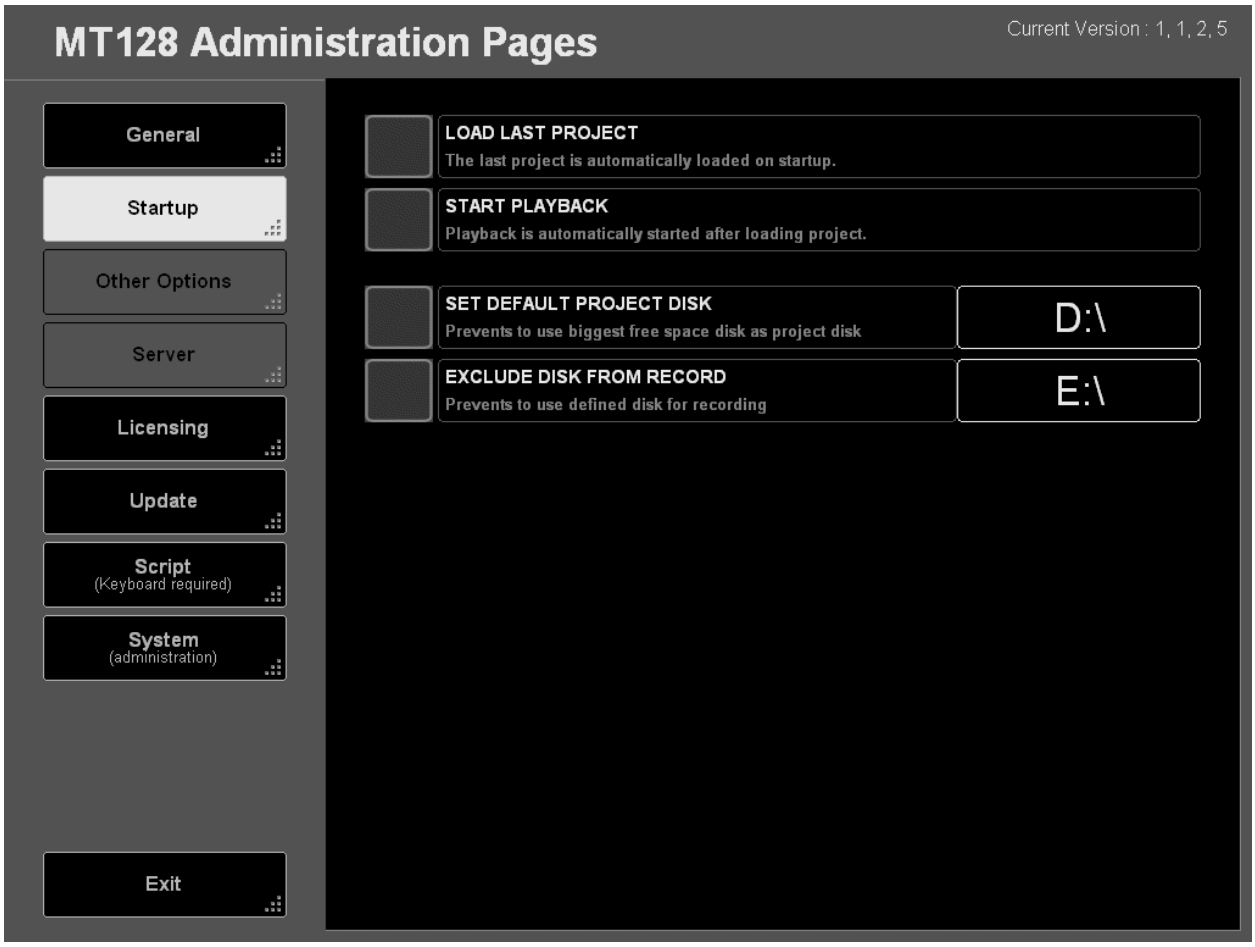
US FORMAT DATE
If set, date will be displayed according USA format: month / day / year.

EU FORMAT DATE
If set, date will be displayed according European format: Day / month / year.

VIRTUAL KEYBOARD TYPE
This control allows selecting Virtual Keyboard Type.

Startup Options

This page is made for special configuration option related to MT128 startup sequence.



LOAD LAST PROJECT

If set, this option will automatically load last used project on startup.

START PLAYBACK

If set, this option will automatically launch Playback after load project.

SET DEFAULT PROJECT DISK

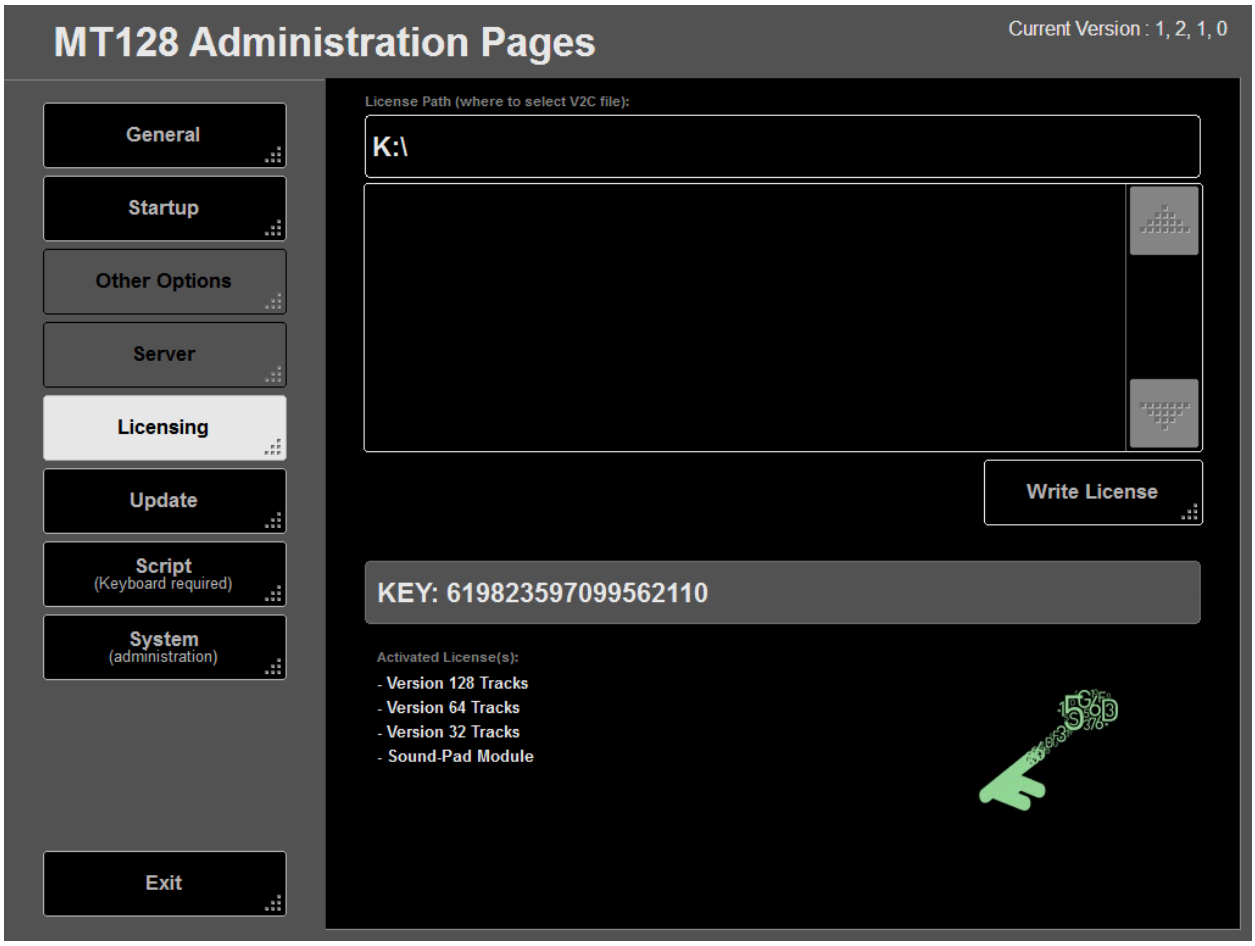
If set, the disk defined on the right is used as default disk for new created project. Per default the MT128 use the disk with biggest free space as default disk.

EXCLUDE DISK FROM RECORD

This option allows excluding a disk from the record process. It is useful to keep a disk for other purpose than record on the MT128 Sound Pad Station for example.

Licensing:

The Licensing page, will allow changing the licensing of the Hardlock dongle connected inside the MT128 station. It can be useful to renew temporary license or to add possible optional feature if required (possible future options).



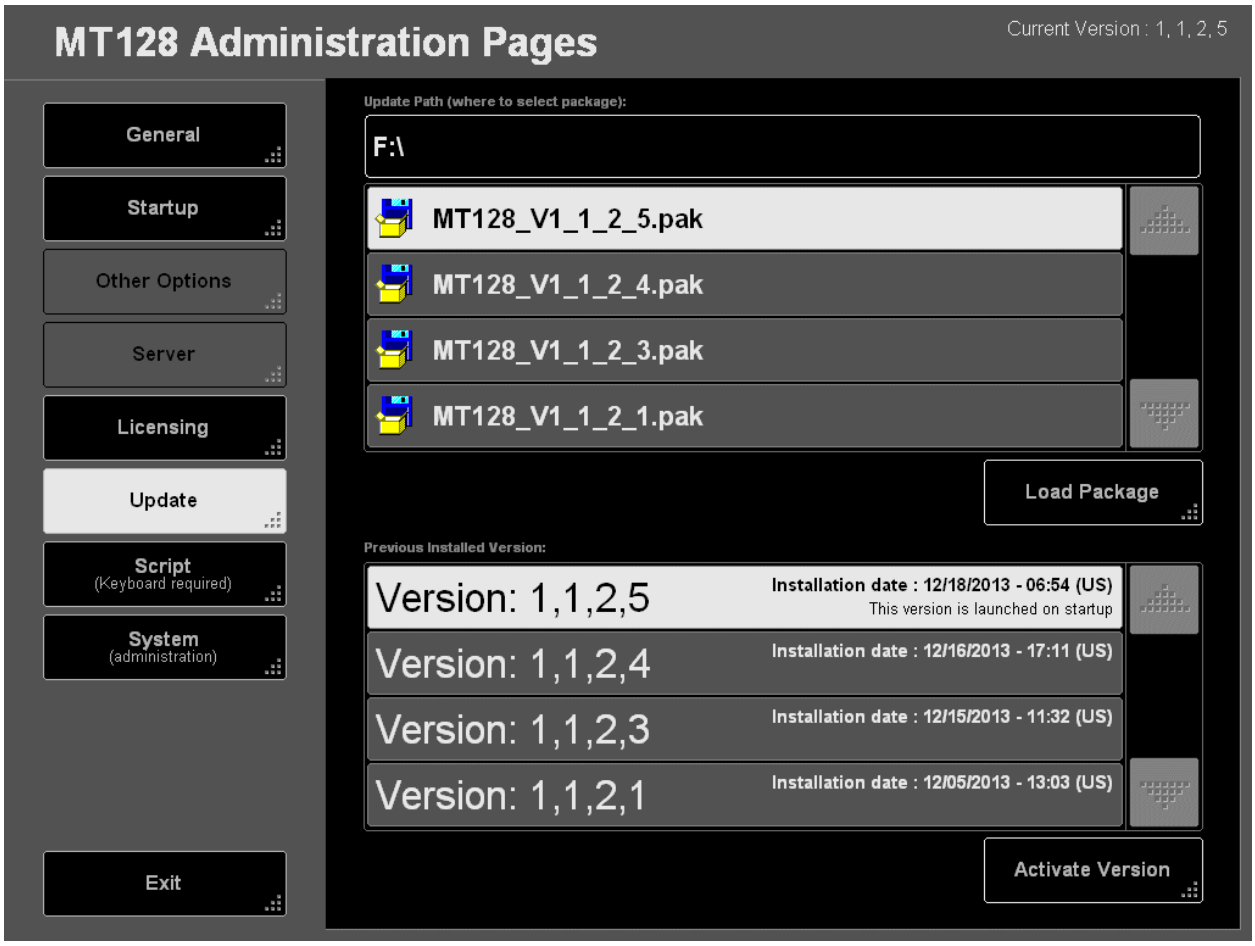
To activate Sound PAD module for example, it could be necessary to this administration page to upgrade dongle.

Select Directory
On the top, the user can tap in the directory field to change it and select the one where to find VTC files (VTC file contains licenses for VB-Audio Dongle). The possible found VTC file are displayed in the list right below

Write License
A tap on this button will upgrade MT128 Dongle with the currently selected VTC file in the list.

Update page

The Update page allows updating the MT128 version with a new package. It also allows activating a previous version. In all cases the update/activation procedure will take effect on next launch.



Load Package

Push this button to load the selected package present on the current selected folder. Another Dialog Box appear to give further information and let you start the instllation (see next page).

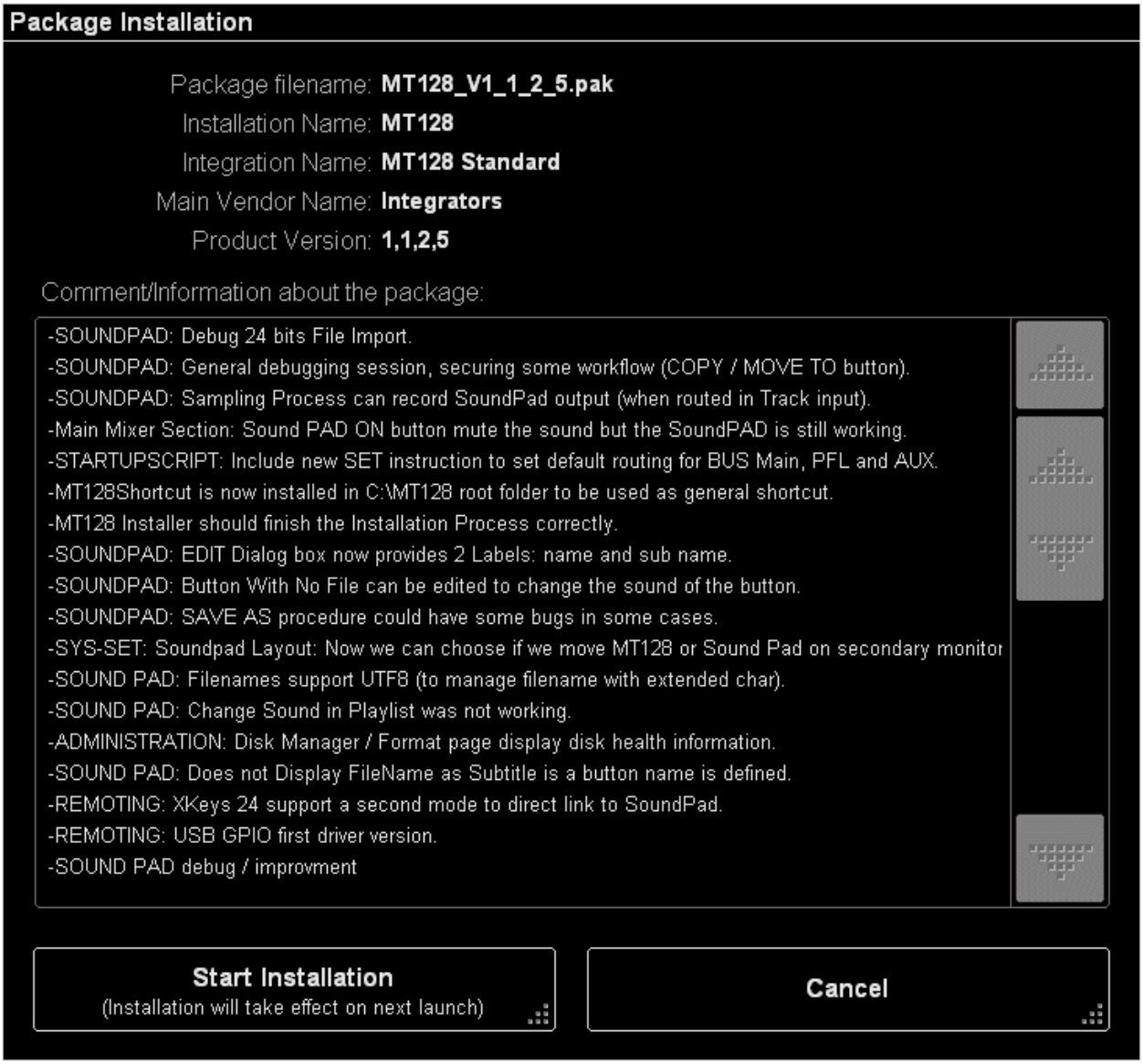
The package must fit your MT128 Integration model. MT128 Standard Version will not install other package made for other kind of integration (like Innovason M.A.R.S. for example).

Activate Version

Push this button to activate a previous version already installed.

Load Package and Installation procedure.

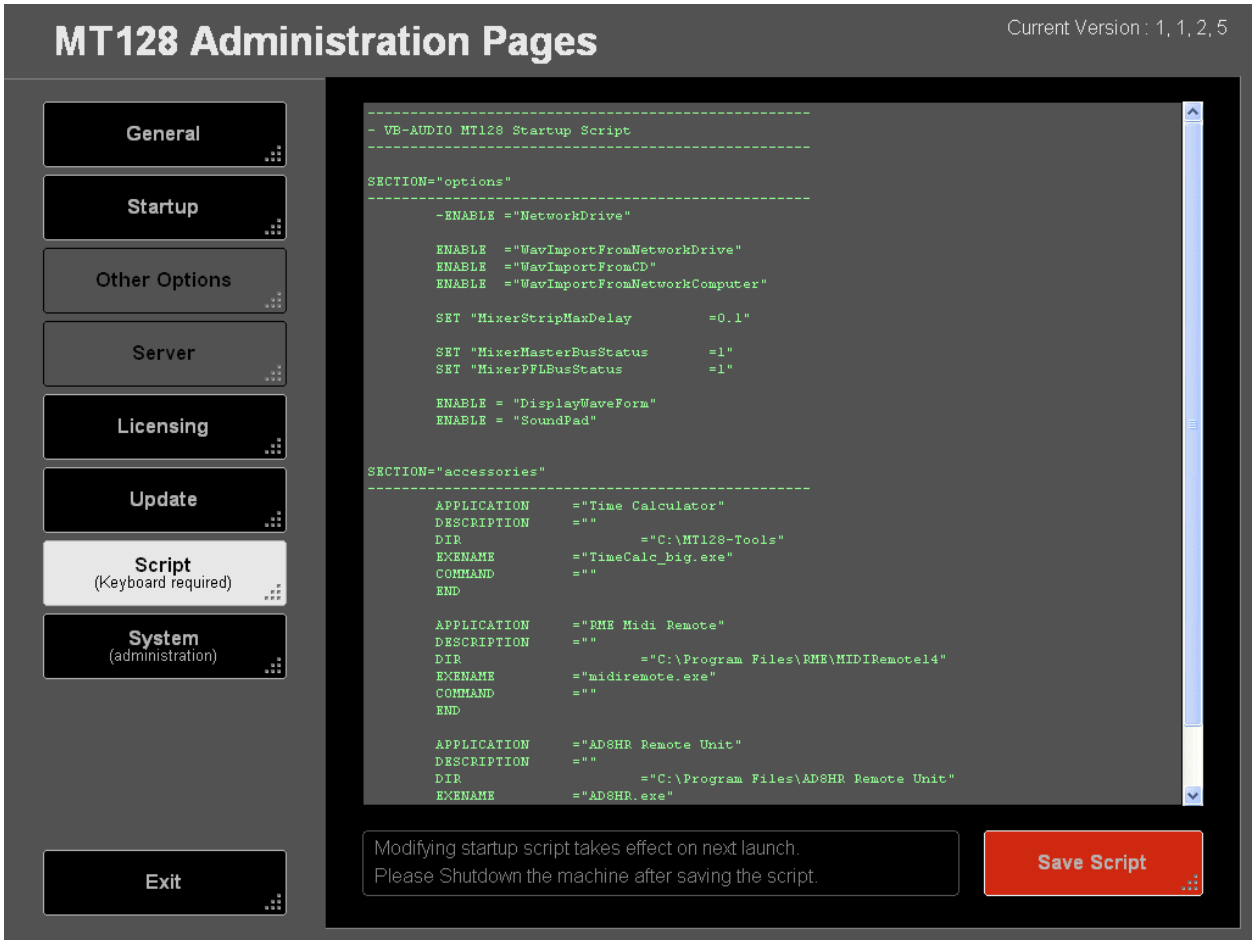
Clicking on LOAD PACKAGE button opens the dialog box below. It displays different information about the package. The “comment” field gives the main new features / functions / correction added in the package.



Click on **Start Installation** button if you want to install this package. Reboot will be required to run the new installed version.

Script Page

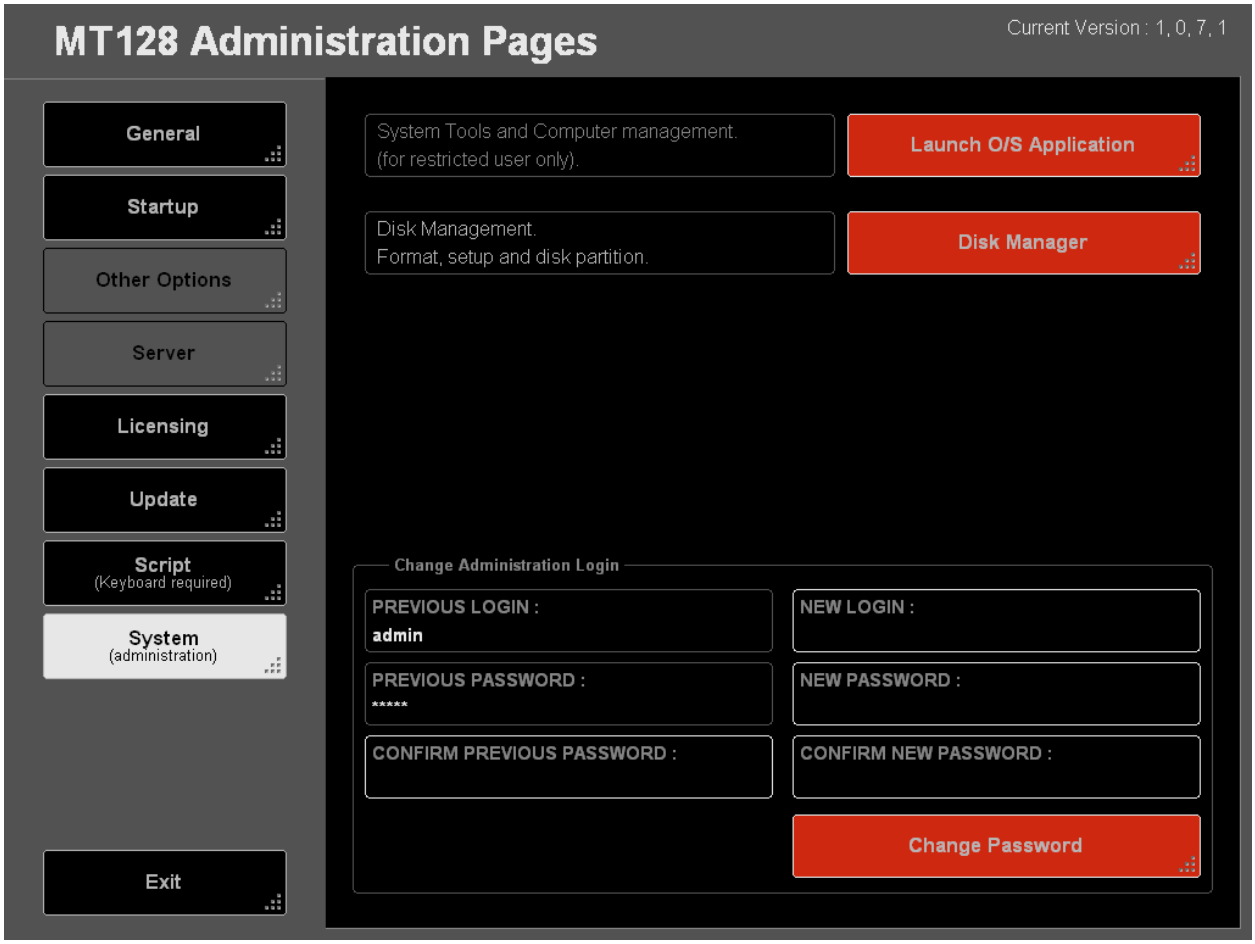
The MT128 Startup is conditioned by 2 scripts. The system script provided by the manufacturer (not editable) and the startup script that can be edited in this administration page:



The startup Script is read and interpreted on MT128 startup. For more information about the script instruction set, refer to the document called “MT128_StartupScript_Language.pdf”.

System pages: System function access.

The last page gives access to system function and components. For example Windows Explorer could be launched from the O/S Application menu. Also the Administration pages Login and Password can be modified in this page.



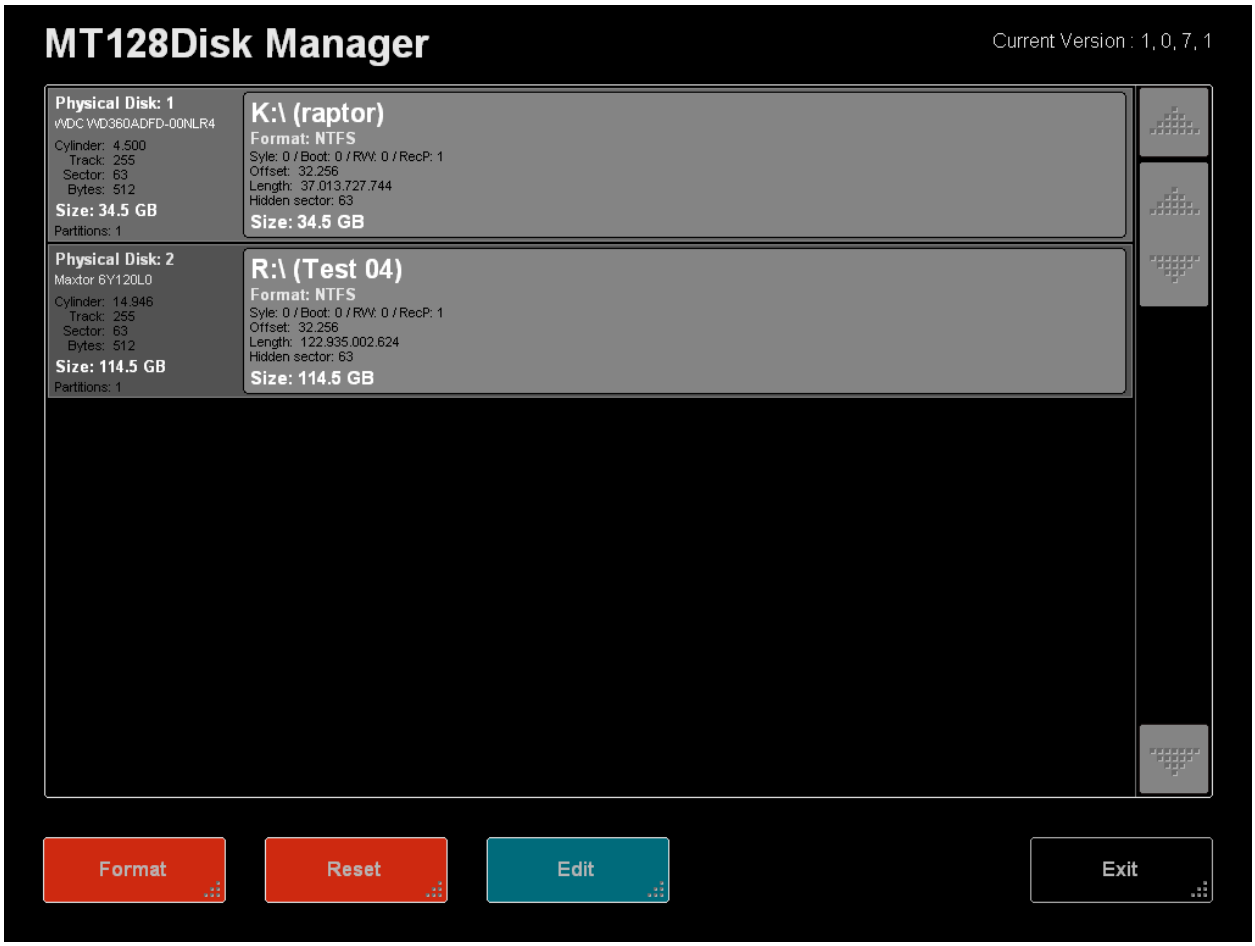
Disk Manager

This button opens a dialog box to manage Disk Format / Partition.

Disk Manager

The Disk manager component is here to provide a simplified and secure way to manage disk, without risk to format or reset system disk.

REM: A direct Access to Disk manager can be set in the Startup Page (so without asking to the user to enter in the administration pages) – See Startup Script Instruction set…



Disk manager shows the list of detected disk on the system and displays up to 4 partitions per disk (even if the disk owns more partition).

Format

The Format button will display a Dialog Box to format the selected partition

Reset

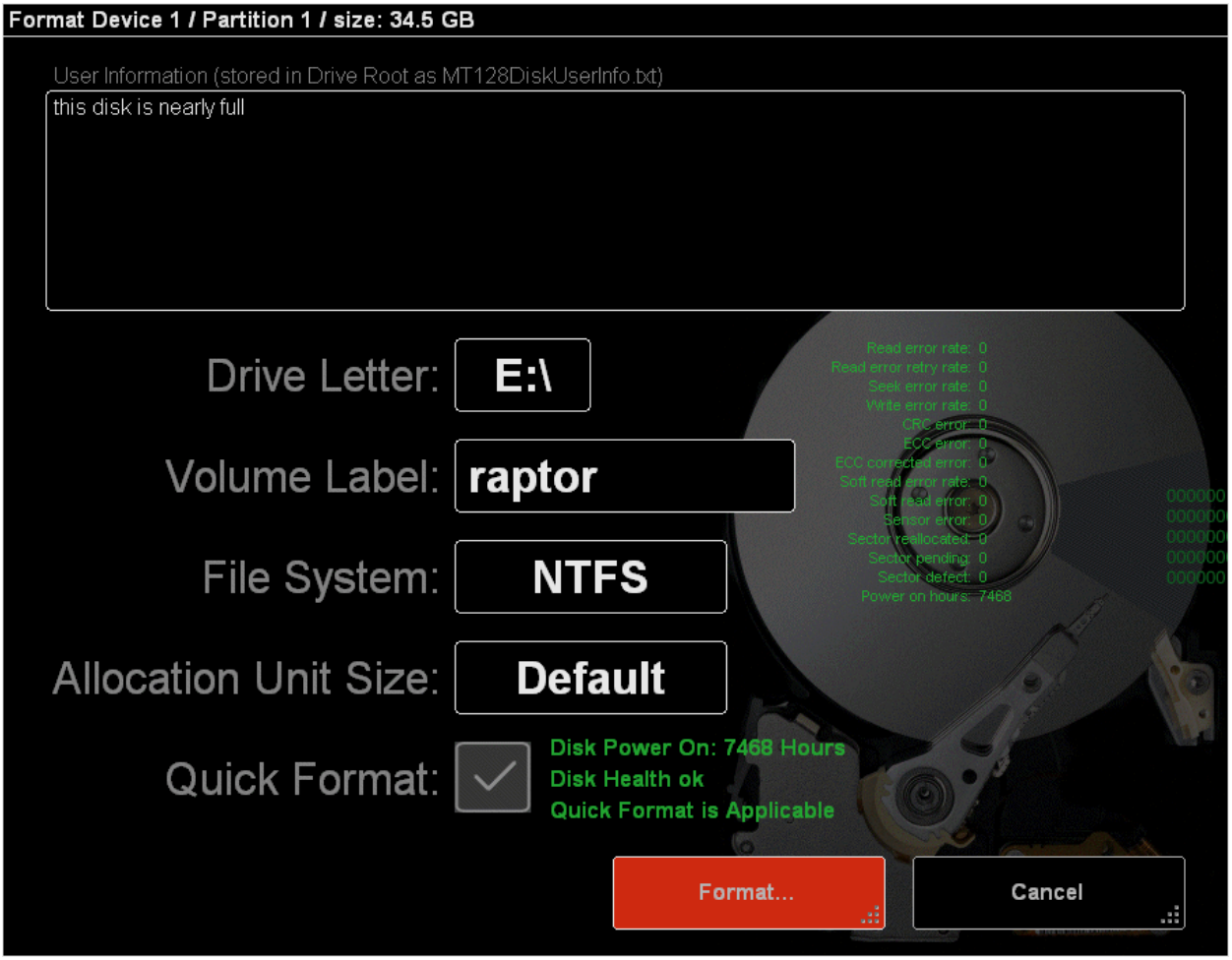
The RESET button is made to reset completely the selected Disk (All data are removed and a single partition is created, fitting the entire disk size).

Edit

Edit button allows to change Disk Name and driver letter assignation.

Format Disk

When pushing the FORMAT button, the following dialog box appears.



Different information can be set before launching the format process.

User Information

This text field is free for user to write whatever kind of information. IT will be stored on the root as regular TXT file to help to identify the disk, without having to scan it precisely.

Drive Letter

Letter assignation can be set directly there.

Volume Label

Letter assignation can be set directly there.

File System

To select NTFS or FAT32 format type.

Allocation Unit Size

Regular Windows Format Option (Default value is recommended).

Quick Format

This option is made to perform a QUICK or ENTIRE format. Quick format will make a logical format by resetting the FAT only, while entire format will check all sectors and possibly mark them if defected. If you are using an old disk (over 2 years old) it's better to use complete format procedure.

Now the Disk Manager read SMART Information of the disk to get different indicators giving information about disk health. The number of Power On Hours gives an idea about the age of the Disk (10.000 Hours is usually for 2 years old disk and has to be considered as pretty old)…

The number of error and possible sector defect is also used to recommend or even forbid to use the QUICK option.

REM: if the QUICK format is made on tired disk, wrong sector won't be marked as defect and will be used by the operating system / disk controller to store data on it. This data will be possibly lost at the end.

For audio recording, Hard disk must be considered like a magnetic tape. There is a limited duration life and a performance degradation according number or usage (number of recording being made). In live environment, where we are recording every day, disk life is about 2 years (or must be considered like this to avoid any problems).

Format…

Push this button to run the format procedure.