

Draco Tera / Extender – Firmware

Release Notes

Changes Matrix FW		
Date	Version	Change
2019-04-23	MATXCPU V3.06 MATXLCPU V3.06 MATXIO8 V3.06 MATLIO8 V3.06	New Features and Enhancements: <ul style="list-style-type: none"> • Support of Secure Sockets Layer (SSL) encryption protocol (480-CTRL2 only) • Support of ECTDLCPU and ECTDLCON firmware (482 series) • Support of IP CPU extenders (488 series) • Support of HDMI 2.0 extenders (495 series) • Support of OPS+ 4K60 extenders (490 series) • Support of GPIO extender add-on modules • Synchronization locking option for active directory users in groups • Support of 3G XV Cat X I/O boards • Support of Bridge I/O boards • Exclusive Mode for shared access based on CON/User priorities • API status for available and occupied grid lines • Fix colours for CPU and CON Devices (7 colours) • Change of fix colours via API • No more Grid lines notification • SSL implementation for 480-CTRL2 boards (API & Matrix Grid) • Switching of CPU groups via macro • Support of VNC and web protocol for the IP CPU Improvements: <ul style="list-style-type: none"> • Handling of VGA CPU Switch • Communication between I/O boards • Communication between extenders and the matrix • Handling of LDAP login in a Matrix Grid • Network communication of Draco tera enterprise 576 in a Matrix Grid • Switching to next available non-connected CPU Device in CPU Group (Matrix vs. Matrix Grid) • Update of I/O board Rev. 1
2018-01-31	MATLPXP V1.02	
2018-12-03	MATLOS V1.02	
2015-03-12	MATXDVI V1.15	
2019-02-06	MATXHID V4.01	

		<ul style="list-style-type: none"> • Deactivation of I/O ports during OSD firmware update • Extender initialization of 482/492 series • Priority of internal matrix tasks • Adjustment of Syslog messages • Handling of Grid Lines in Matrix Grid • Review of SNMP configuration • OSD communication • OSD Login dialog • Redundancy of controller board V2 • Permanent activation of internal matrix trace • Deactivation of internal FTP server • User name with 32 characters (previously 16) • Support of umlauts (ä, ö, ü) in LDAP <p>Fixed Bugs:</p> <ul style="list-style-type: none"> • Extender update • Master / sub matrix synchronization in Matrix Grid • Real time clock • CON/user login in Matrix Grid • OSD Control in cascaded mode • Keyboard/mouse sharing between CON Devices • Handling of TCP/IP (LAN) processes • Multi-Screen Control via matrix • Local KVM switching • Enabling/disabling of API interface • OSD list arrangement • Initialization and handling of Grid lines • Switching behaviour of 576 port matrix when using 480-CTRL2 • Disconnect upon manual logout • Closing of command mode corrected
<ul style="list-style-type: none"> • 2018-03-01 	<ul style="list-style-type: none"> • MATXCPU V3.05 • MATLCPV V3.05 • MATXIO8 V3.05 • MATLIO8 V3.05 	<ul style="list-style-type: none"> • New Features and Enhancements: • Support of new I/O board (Rev.1) • 8 port Multi-Screen Control (Draco tera compact, Draco tera enterprise with new I/O board) • Multiple Multi-Screen Control instances within MSC group • Support of new extender series (492/493/496) • 2 step access control for Full Access connections • Improvements: • Port mode for 999 ports • Master save for all matrices in Matrix Grid • I/O board memory info for extender updates

		<ul style="list-style-type: none"> • Update of I/O boards • Handling of I/O boards in Matrix Grid • Acceleration of communication between controller board and I/O boards (flexible baud rate) • Periodic alignment of Grid data • User macros • User access in Full Access and Private Mode on different CON Unit • Parallel operation of Auto Logout and CPU Timeout • Expansion of Active Directory features • Matrix Grid communication in large configurations • Highlighting of faulty ports by red port LED • Monitoring of incorrect transfers (Syslog) • Initialization method of faulty extenders • Enhanced user login information in Syslog • Fixed Bugs: <ul style="list-style-type: none"> • Locking of Video Only mode • Access rights in Extended Switch • Echo function in Matrix Grid • OSD settings (480-CTRL2) • Private Mode with redundant CON Units • Update of user login/logout data • User login • CPU timeout for Full Access and Private Mode connections • Memory control for extender updates • Handling of connections after I/O board replacement • Control CON in Multi-Screen Control • Internal synchronization of Draco tera 576 • Character set of Fujitsu keyboard KB521DE in OSD • Minor bug fixes
2017-07-07	MATXCPU V3.05 MATXIO8 V3.05	<p>New Features and Enhancements:</p> <ul style="list-style-type: none"> • Support of 1024 CON Devices • Introduction of CPU and user groups • Assignment of CPU Devices to CPU groups via API • Support of CPU Switch in OSD • Keeping of active/previous connection after logout (“Keep CPU” function) • Previous connection after login • Priorities for CON Devices and users • 32 CON and user favorites

		<ul style="list-style-type: none"> • Support of 8 monitors in Multi-Screen Control • Active Directory synchronization of users (480-CTRL2 only) • “Show CPU” function to permanently display the CPU Device name in extender info box • Selectable colours for “Show CPU” function for text and background <p>Improvements:</p> <ul style="list-style-type: none"> • Handling of SDI signals via UNI I/O board • Handling/determining Real/Virtual CPU Devices • Adaption of OSD to new controller board 480-CTRL2 • Trap server port configuration • General handling of OSD • Closing of user login dialog in OSD • Process of extender updates • Acceleration of matrix firmware updates • Handling of update procedure for mixed hardware revisions • Handling of LAN tasks • Cursor on previously connected CPU upon login <p>Fixed Bugs:</p> <ul style="list-style-type: none"> • Texts in OSD lists • Sharing of keyboard and mouse control • Extender info box • Full access via CPU scanner • User login with admin account
2019-04-23	MATXOSD V3.43	<p>New Features and Enhancements:</p> <ul style="list-style-type: none"> • Support of bridge function for 1G/3G conversion (Bridge I/O board only) • Support of GPIO extender add-on modules <p>Improvements:</p> <ul style="list-style-type: none"> • Accelerated update <p>Fixed Bugs:</p> <ul style="list-style-type: none"> • Minor bug fixes • Grid line communication
2019-04-09	MATLOSD V1.00	
2019-03-23	MATXVOSD V3.43	
2018-07-13	MATLVOSC V1.01	
2019-03-06	MATLVOSD V1.01	
2019-04-16	MATXOSL V3.15	
2019-04-30	MATXVOSL V3.06	
2018-06-26	MATLBDG	

<p>2018-11-30</p>	<p>V1.00 MATXLNK V1.05</p>	
<p>2017-02-02 2017-09-04 2018-01-17 2017-07-04</p>	<p>MATXOSD V3.35 MATXVOSD V3.35 MATXOSL V3.12 MATXVOSL V3.05</p>	<p>New Features and Enhancements:</p> <ul style="list-style-type: none"> • Support of 8-port CPU VGA switch <p>Improvements:</p> <ul style="list-style-type: none"> • Accelerated update <p>Fixed Bugs:</p> <ul style="list-style-type: none"> • XV grid line communication • Video only switching in Draco tera compact matrices • Port communication • Minor bug fixes

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Changes Extender FW		
Date	Version	Change
	CON Units	<p>New Features and Enhancements:</p> <ul style="list-style-type: none"> • Support of 100 Mbit/s L/R474-BXE2 module (from 481 series) • Support of low latency option (49x series only) • Colored fix frame • Redundancy frame (some series only) • 144 Hz / 240 Hz frame rate support (490 series only) • Support of GPIO add-on modules <p>Improvements:</p> <ul style="list-style-type: none"> • Update process • Embedded audio (HDMI & DisplayPort interface) • LOS timer for HDMI only board (EXTHVCON) • Update behavior <p>Fixed Bugs:</p> <ul style="list-style-type: none"> • Support of RS422 add-on module • Link switching for redundancy • Analog audio • Dual-Head mode timing • OSD communication • EDID transmission
2018-11-22	EXTCON V3.26	
2018-11-16	EXTICON V1.29	
2018-11-16	EXTRCON V2.32	
2018-11-28	EXTHRCON V1.34	
2018-01-18	EXTDLCON V4.16	
2019-01-18	EXTDPCON V2.04	
2018-02-19	EXVDPCON V1.20	
2019-01-18	ECTDPCON V2.11	
2018-02-19	ECVDPCON V1.20	
2018-02-19	EXTVCON V3.20	
2018-11-22	EXTHVCON V1.07	
2018-05-07	EXVDLCON V1.21	
2017-11-21	EXTSCON V1.01	
2017-11-28	EZTDPCON V1.00	
2018-11-15	FZVDLCON V2.03	
2018-11-27	FCVDLCON V2.00	
2018-11-27	FCTDLCON V2.00	
2019-03-20	FZVDPCON V2.05	
2019-03-20	FCVDPCON V2.01	
2019-03-20	FCTDPCON V2.33	
2017-03-29	FMVDLCON V2.02	
2017-03-29	FSVDLCON V2.02	
2019-03-20	FXTDPCON V2.33	
2018-07-13	FZSDECON V1.01	
2019-03-29	FZSHRCON V1.03	
2018-06-11	FZTDLCON V2.30	
2019-03-20	FZTDPCON V2.33	
2018-12-13	FZVDECON V2.23	
2018-12-07	FZVOECON V2.00	
2018-12-11	FZXDECON V2.12	
2018-09-06	FZVOPS21 V1.01	
	CPU Units	<p>New Features and Enhancements:</p> <ul style="list-style-type: none"> • Reading out hardware ID <p>Improvements:</p> <ul style="list-style-type: none"> • Programming of EDID • Embedded audio (HDMI & DisplayPort interface) • Switching between digital audio add-on module and embedded audio <p>Fixed Bugs:</p> <ul style="list-style-type: none"> • Update CONVGPU (EXTIPCU only) • Fiber transmission
2018-11-22	EXTCPU V3.26	
2018-12-18	EXTICPU V1.50	
2018-03-08	EXTRCPU V2.22	
2018-11-27	EXTHRCPU V1.21	
2019-01-18	EXTDLCPU V4.13	
2019-01-18	EXTDPCPU V2.02	
2018-02-19	EXVDPCPU V1.20	
2019-01-18	ECTDPCPU V2.11	
2018-02-19	ECVDPCPU V1.20	
2018-02-19	EXTVCPU V3.20	
2018-11-22	EXTHVCPU V1.07	

<p>2018-02-19 2016-08-02 2017-11-21 2016-07-25 2018-07-10 2019-02-12 2018-11-26 2019-02-12 2018-11-13 2018-07-13 2018-09-21 2018-04-05 2018-11-27 2018-12-13 2019-02-06 2018-09-21 2018-07-13 2018-09-24 2018-06-11 2018-09-21 2018-12-13 2019-03-12 2019-03-12</p>	<p>EXVDLCPU V1.20 EXVICPU V0.92 EXTSCPU V1.01 EXTI8MOD V1.02 EXTIPCPU V1.04 FCVDLCPU V2.01 FCVDPCPU V2.00 FZVDLCPU V2.03 FZVDPCPU V2.03 FCTICPU V1.01 FCTDPCPU V2.31 FCTHRCPU V1.00 FCTDLCPU V2.00 FCVDECPU V2.26 FCXDECPU V1.01 FXTDPCPU V2.33 FZSDECPU V1.01 FZSHRCPU V1.01 FZTDLCPU V2.30 FZTDPCPU V2.31 FZVDECPU V2.24 FZXDECPU V2.19 FZXDBCPU V2.02</p>	<ul style="list-style-type: none"> • Video timing • Support of USB-HID add-on module • Matrix communication • Video mode detection • Communication with grid I/O boards • Switching of 8-port VGA CPU switch
<p>2017-12-21 2018-01-26 2018-01-29 2018-02-18 2018-01-25 2018-01-16 2018-02-19 2018-02-18 2018-02-19 2018-02-19 2017-10-18 2018-02-19 2017-11-21</p>	<p>CON Units</p> <p>EXTCON V3.25 EXTICON V1.21 EXTRCON V2.27 EXTHRCON V1.30 EXTDLCON V4.14 EXTDPCON V2.02 EXVDPCON V1.20 ECTDPCON V2.10 ECVDPCON V1.20 EXTVCON V3.20 EXTHVCON V1.05 EXVDLCON V1.20 EXTSICON V1.01</p>	<p>New Features and Enhancements:</p> <ul style="list-style-type: none"> • Support of USB 2.0 embedded module V2 (BXE2) • Blue frame on redundant link (ENARED) • Audio digital/analog conversion • Dedicated DVI or HDMI output of 481 series (ENADVI, ENAHDMI) <p>Improvements:</p> <ul style="list-style-type: none"> • Video timing • RAM timing • Transmission of USB 2.0 embedded V1 • USB-HID filter for OSD control • Support of 1440x2560 (482 & 483 series) • Freeze of the last frame (ENAHOLDPIC) <p>Fixed Bugs:</p> <ul style="list-style-type: none"> • String name (EXR -> EXT) • H-sync/v-sync (EXTICON) • Resolution 1720x1440 • Minor bug fixes
	<p>CPU Units</p>	<p>New Features and Enhancements:</p>

<p>2018-02-02 2018-02-13 2018-01-26 2018-01-25 2018-01-17 2018-01-16 2018-02-19 2018-02-19 2018-02-19 2018-02-19 2018-02-19 2017-10-18 2018-02-19 2016-08-02 2017-11-21</p>	<p>EXTCPU V3.25 EXTICPU V1.43 EXTRCPU V2.21 EXTHRCPU V1.17 EXTDLCPU V4.12 EXTDPCPU V2.01 EXVDPCPU V1.20 ECTDPCPU V2.10 ECVDPCPU V1.15 EXTVCPU V3.20 EXTHVCPU V1.05 EXVDLCPU V1.20 EXVICPU V0.92 EXTSCPU V1.01</p>	<ul style="list-style-type: none"> • Support of USB 2.0 embedded module V2 (BXE2) with 50Mbit/s • Writing/reading Config.txt via matrix <p>Improvements:</p> <ul style="list-style-type: none"> • Video timing • Transmission of USB 2.0 embedded V1 • Support of 1440x2560 (482 & 483 series) <p>Fixed Bugs:</p> <ul style="list-style-type: none"> • String name (EXR -> EXT) • Handling of SFP modules • Resolution 1720x1440 • Resolution 1024x768 (EXTICPU) • Update (EXTICPU) • Minor bug fixes
<p>2018-06-06 2019-01-16 2018-06-06 2018-11-22 2017-11-21 2018-07-13 2018-06-06 2019-01-16 2018-06-06</p>	<p>EXTMSD V2.45 EZTMSD V1.06 EXTIMSD V1.28 EXTDLMSD V1.33 EXTLMSD V1.02 EXTDEMMSD V1.14 EXTDZMSD V1.07 EZTDEMMSD V1.12 EZTDLMSD V1.04</p>	<p>New Features and Enhancements:</p> <ul style="list-style-type: none"> • Updatability of MSD files via Tera Tool (EZx only) <p>Improvements:</p> <ul style="list-style-type: none"> • USB-HID reset <p>Fixed Bugs:</p> <ul style="list-style-type: none"> • Minor bug fixes
<p>2017-05-31 2017-05-03 2017-04-11 2017-11-21</p>	<p>EXTMSD V2.42 EXTIMSD V1.26 EXTDLMSD V1.30</p>	<p>New Features and Enhancements:</p> <ul style="list-style-type: none"> • New parameters (see CPU/CON firmware) <p>Improvements:</p> <ul style="list-style-type: none"> • USB-HID reset <p>Fixed Bugs:</p>

	EXTLMSD V1.02	<ul style="list-style-type: none"> • Converter settings are preserved after update (EXTIMSD) • Minor bug fixes
2016-01-29	EXTMSD V2.38	<p>New Features and Enhancements:</p> <ul style="list-style-type: none"> • New DISPLAY2 parameter selects second video channel of 482 Dual-Head CPU unit • Deletion of Config.txt recovers factory settings • Versioning of Config.txt file <p>Improvements:</p> <ul style="list-style-type: none"> • Manual extender update from Windows 8 computers • Differentiation of EDIDs (482 series only) <p>Fixed Bugs:</p> <ul style="list-style-type: none"> • Digital audio parameters for redundant CPUs • USB 1.1 support of USB 2.0 embedded upgrade modules • Various minor bug fixes
2016-01-29	EXTIMSD V1.22	
2016-05-03	EXTDLMSD V1.27	
2017-03-30	EXTDEMSD V1.09	
2017-02-22	EXTDZMSD V1.05	

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Changes HID FW		
2019-02-06	HIDCPU HIDCON V4.01 MATXHID V4.01	<p>New Features and Enhancements:</p> <ul style="list-style-type: none"> • Support of Kensington Expert Mouse Wireless Trackball • Support of TIPRO keyboard • Support of VuWall controller • Support of Raritan KX4-101 • Support of HP Smartcard CCID keyboard <p>Improvements:</p> <ul style="list-style-type: none"> • Acceleration of keyboard/mouse sharing in a matrix environment <p>Fixed Bugs:</p> <ul style="list-style-type: none"> • USB-HID behavior on extenders connected to fix ports • Support of Focus rack mount tray • Keyboard LED status in USB-HID ghosting mode
2018-02-18	HIDCPU HIDCON V4.01	<p>New Features and Enhancements:</p> <ul style="list-style-type: none"> • Support of 4 key and 8 key X-Keys for executing favorites <p>Improvements:</p> <ul style="list-style-type: none"> • Initialization of U-Switch • MSC for mice based on a mouse or pointer report • Support of Filco keyboard • Support of customer specific input devices • Support of Cherry RS 6000 keyboard • Storage handling of keyboard report • Open and close of OSD (in combination with extender FPGS update) • Compatibility to 3rd party KVM devices • MSC support for MAC OS from version 10.10 (remove JP11 on CPU extender) • Support of OTG descriptor <p>Fixed Bugs:</p> <ul style="list-style-type: none"> • Manual switching of U-Switch • Switching of U-Switch in MSC mode • Various framework corrections • Wake up behavior of USB-HID ghosting • Various minor bug fixes

Changes Converter FW		
2017-10-13	CONVGPU V1.47	<p>New Features and Enhancements:</p> <ul style="list-style-type: none"> • New customized video modes • Support of XV extenders <p>Fixed Bugs:</p> <ul style="list-style-type: none"> • Update • Minor bug fixes
2016-07-14	CONVGPU V1.40	<p>New Features and Enhancements:</p> <ul style="list-style-type: none"> • New resolutions for SDI (1080p@24/25/30Hz) • EDID change via keyboard command (VGA vs. DVI) <Hotkey><V><G> (VGA) or <Hotkey><V><D> (DVI) <p>Improvements:</p> <ul style="list-style-type: none"> • EDID transmission • Scaling <p>Fixed Bugs:</p> <ul style="list-style-type: none"> • RAM timing • Saving of image settings • Minor bug fixes

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