Irinos Firmware Revision History

Date: 2021-November-18			
Affected Boxes	**New Version**	**Changes for „Master-Box"**	**Changes for „Slave-Box"**
IR-TFV	V 2.1.0.14	X	X
Changes			
Support for new hardware revision 3 ("C"), which was necessary due to chip shortage. (Older hardware is also supported by this firmware version.)			

Date: 2020-July-31			
Affected Boxes	**New Version**	**Changes for „Master-Box"**	**Changes for „Slave-Box"**
IR-FB	V 2.0.1.4		X
Bugfixes			
NmxDLL: Automatic Reset of output bits after communication loss did not work in all conditions.			

Date: 2020-January-14			
Affected Boxes	**New Version**	**Changes for „Master-Box"**	**Changes for „Slave-Box"**
IR-TFV	V 2.0.1.12	X	
IR-INC	V 2.1.1.6	X	
IR-AIN	V 2.0.1.4	X	
IR-MASTER	V 2.0.0.3	X	
IR-DIO	V 2.0.1.19		X
IR-TEMP	V 2.0.0.1		X
IR-HMI	V 2.0.0.1		X
Bugfixes			
NmxDll-Interface did not work properly at low sampling speed with a large number of digital I/Os. This bug could only occur with the new fieldbus-Box IR-FB.			
Changes			
Updated all Boxes to V2 (see also change notice from 2019-May).			

Date: 2019-August-26			
Affected Boxes	**New Version**	**Changes for „Master-Box"**	**Changes for „Slave-Box"**
IR-INC	V 2.1.0.5	X	X
Changes			
Enhanced error detection support for box type "TTL" with high-speed inputs for TTL based encoders: - Fault pin evaluation for Heidenhain incremental probes. - Fault evaluation for Magnescale TTL probes. The new error detection mechanisms require hardware revision 4, which is delivered from now on. (No functional changes for classic box types with 1Vpp inputs "SEL1VSS" and standard TTL inputs "SELTTL".)			

Date: 2019-May				
Affected Boxes	**New Version**		**Changes for „Master-Box"**	**Changes for „Slave-Box"**
ALL	**V 2**		X	X
General note on Firmware version V2: Firmware version V2 is backward compatible and supports the same functionality as V1. In fact, it is a major feature update of V1. **Please note: The new V2 – functionality is only activated, if ALL boxes of a system have V2 or greater!**				
New features / updates - Support of new software interface "NmxDLL". - Support of new software interface for ASCII based readout of measurement values via UDP or TCP. - Webserver now also shows state of digital outputs.				

Date: 2019-May-02				
Affected Boxes	**New Version**		**Changes for „Master-Box"**	**Changes for „Slave-Box"**
IR-INC	V 1.11.0.31		X	X
Changes - Support for new box type "TTL" with high-speed inputs for TTL based encoders. (No functional changes for classic box types with 1Vpp inputs "SEL1VSS" and standard TTL inputs "SELTTL".)				

Date: 2018-December-14				
Affected Boxes	**New Version**		**Changes for „Master-Box"**	**Changes for „Slave-Box"**
IR-INC	V 1.10.0.27		X	
Changes - Support for new "integrated Master" Box-Type IR-INC-…-***EPI***				

Date: 2018-October-31				
Affected Boxes	**New Version**		**Changes for „Master-Box"**	**Changes for „Slave-Box"**
IR-TEMP	V 1.9.0.10		X	X
Changes Support for new hardware version V1.3 / Hardware revision B. (Minor hardware change was necessary to keep delivery times short. No functional change.)				

Date: 2018-September-28			
Affected Boxes	**New Version**	**Changes for „Master-Box"**	**Changes for „Slave-Box"**
IR-AIN	V 1.9.0.15	X	

Bugfixes
- Removed bug in dynamic measurement (Master only). Measurement values were completely wrong.

Changes
Support for new "integrated Master" Box-Type IR-AIN-…-*EPI*

Date: 2018-September-24			
Affected Boxes	**New Version**	**Changes for „Master-Box"**	**Changes for „Slave-Box"**
IR-TFV	V 1.9.0.29	X	

Changes
- Support for new "integrated Master" Box-Type IR-TFV-…-*EPI*

Date: 2018-July-12			
Affected Boxes	**New Version**	**Changes for „Master-Box"**	**Changes for „Slave-Box"**
IR-INC	V 1.9.0.26	X	X

Bugfixes
- Diagnostic memory: Additional information for "Inc. encoder application error" contained the wrong channel number (0..3 instead of 1..4).

Changes
- Enhanced diagnostic data for incremental encoders (measurement of supply voltage for incremental encoders).

Date: 2017-October-04			
Affected Boxes	**New Version**	**Changes for „Master-Box"**	**Changes for „Slave-Box"**
IR-TFV	V 1.8.0.26	X	X
IR-INC	V 1.8.0.25	X	X
IR-AIN	V 1.8.0.14	X	X
IR-MASTER	V 1.8.0.17	X	
IR-DIO	V 1.8.0.12	X	X
IR-HMI1	V 1.8.0.10	X	X
IR-TEMP	V 1.8.0.9	X	X

Bugfixes
- Extremely slow dynamic measurement (e.g. 10Hz) did not work properly with more than one box.
  This bug had no practical implications, since such a slow dynamic measurement makes no sense.

Changes
- New Opcode opcRdc allows reading the number of measurement samples, after the dynamic measurement has been finished.
  This can be helpful for the measurement software to determine, how much dynamic measurement values need to be read from the Irinos system.

Date: 2017-August-30			
Affected Boxes	**New Version**	**Changes for „Master-Box"**	**Changes for „Slave-Box"**
IR-TFV	V 1.7.0.21	X	X
Bugfixes			
- None			
Changes			
- Support for new probe type Marposs LVDT.			
- Support for sine oscillator LED for boxes with external connector box (IR-TFV-8-xxx-KF27-xx).			

Date: 2017-July-17			
Affected Boxes	**New Version**	**Changes for „Master-Box"**	**Changes for „Slave-Box"**
IR-INC	V 1.5.0.24	X	X
Bugfixes			
- None			
Changes			
- TTL/RS422 Quadrature-Decoding (4x) implemented.			
- Possibility to reset reference mark flag without any other changes (via Opcode opcSP, e.g. "T3;*;REFON#").			
Information			
- For selecting Quadrature-Decoding from the Irinos-Tool, its Version V2.2.0.12 is required.			

Date: 2017-July-11			
Affected Boxes	**New Version**	**Changes for „Master-Box"**	**Changes for „Slave-Box"**
IR-TFV	V 1.6.1.20	X	X
Bugfixes			
- Under rare circumstances a static measurement value could have been outdated. Now always the newest values are delivered.			
Changes			
None			
Information			
- This bug did not affect dynamic measurement.			
- Both measurement types (static & dynamic) have passed a new extended simulation model.			

Date: 2017-April-6			
Affected Boxes	**New Version**	**Changes for „Master-Box"**	**Changes for „Slave-Box"**
IR-TFV	V 1.6.0.19	X	X
Bugfixes			
None			
Changes			
- Support for new application specific probe type (SOLVDT100E1MM).			
Information			
No changes for other probe types (TESA, Knäbel IET, Feinprüf).			

Date: 2017-March-27			
Affected Boxes	**New Version**	**Changes for „Master-Box"**	**Changes for „Slave-Box"**
IR-TFV	V 1.5.0.18	X	X

Bugfixes
None

Changes
- Support for new Box types for Solartron LVDT probes.

Information
No changes for other probe types (TESA, Knäbel IET, Feinprüf).

Date: 2016-November-29			
Affected Boxes	**New Version**	**Changes for „Master-Box"**	**Changes for „Slave-Box"**
IR-TFV	V 1.4.1.15	X	-
IR-INC	V 1.4.1.23	X	-
IR-AIN	V 1.4.1.13	X	-
IR-MASTER	V 1.4.1.16	X	
IR-DIO	V 1.4.1.11	X	-
IR-HMI1	V 1.4.1.9	X	-
IR-TEMP	V 1.4.1.7	X	-

Bugfixes
- Old firmware versions could have signaled a "MscDll communication error" (F4) when the measurement software of the Irinos-Tool was closed. This has been fixed.
- The opcode opcACL (0x24) did not work properly. The Irinos-System could hang-up, when this opcode was used.

Changes
None

Information
- No changes for Slave-Boxes.
- Currently no Master-Boxes of the Box types IR-DIO, IR-HMI1 and IR-TEMP are available. There would have been no need to update these firmware files.
  Due to our policy of keeping currently unused functionality updated, these firmware files have been updated as well.

Date: 2016-November-17			
Affected Boxes	**New Version**	**Changes for „Master-Box"**	**Changes for „Slave-Box"**
IR-TFV	V 1.4.0.13	X	-
IR-INC	V 1.4.0.22	X	-
IR-AIN	V 1.4.0.12	X	-
IR-MASTER	V 1.4.0.13	X	
IR-DIO	V 1.4.0.10	X	-
IR-HMI1	V 1.4.0.8	X	-
IR-TEMP	V 1.4.0.6	X	-

Bugfixes
None

Changes
All Master-Boxes:
New opcode opcBIORO (0x43), which allows reading the in- and output status without changing the outputs. It can be helpful to determine the output status after (re-)starting the measurement software without changing the outputs.

Information
- No changes for Slave-Boxes.
- Currently no Master-Boxes of the Box types IR-DIO, IR-HMI1 and IR-TEMP are available. There would have been no need to update these firmware files.
  Due to our policy of keeping currently unused functionality updated, these firmware files have been updated as well.

Date: 2016-September-27			
Affected Boxes	**New Version**	**Changes for „Master-Box"**	**Changes for „Slave-Box"**
IR-AIN	V 1.1.4.11	X	X

Bugfixes
- Single measurement values could be corrupted (static measurement).

Changes
None

Date: 2016-September-26			
Affected Boxes	New Version	Changes for „Master-Box"	Changes for „Slave-Box"
IR-TFV	V 1.3.2.12	X	-
IR-INC	V 1.1.3.21	X	-
IR-AIN	V 1.1.3.10	X	-
IR-MASTER	V 1.1.2.12	X	
IR-DIO	V 1.0.2.9	X	-
IR-HMI1	V 1.0.2.7	X	-
IR-TEMP	V 1.0.2.5	X	-

Bugfixes

All Master-Boxes:

Under very rare circumstances, starting a dynamic measurement failed (the next start worked again). This bug has been fixed.

This update is recommended, if dynamic measurement is used.

Changes

None

Information

Currently no Master-Boxes of the Box types IR-DIO, IR-HMI1 and IR-TEMP are available. There would have been no need to update these firmware files.

Due to our policy of not accepting known bugs in our code, even if it is currently unused, these firmware files have been updated as well.

Date: 2016-September-15			
Affected Boxes	New Version	Changes for „Master-Box"	Changes for „Slave-Box"
IR-TFV	V 1.3.1.11	X	-
IR-INC	V 1.1.2.17	X	-
IR-AIN	V 1.1.2.9	X	-
IR-MASTER	V 1.1.1.9	X	
IR-DIO	V 1.0.1.8	X	-
IR-HMI1	V 1.0.1.6	X	-
IR-TEMP	V 1.0.1.4	X	-

Bugfixes

All Master-Boxes:

A repeated Ethernet packet loss could lead to invalid dynamic measurement data.

If a proper Ethernet connection is used, such a packet loss almost never happens. Therefore this bug does not cause problems in most systems.

However, due to its severity, **this update is strongly recommended in all cases**.

Changes

None

Information

Currently no Master-Boxes of the Box types IR-DIO, IR-HMI1 and IR-TEMP are available. There would have been no need to update these firmware files.

Due to our policy of not accepting known bugs in our code, even if it is currently unused, these firmware files have been updated as well.

Date: 2016-August-19				
Affected Boxes	**New Version**		**Changes for „Master-Box"**	**Changes for „Slave-Box"**
IR-TFV	V 1.3.0.10		X	X
Bugfixes				
- None				
Changes				
- Support for new Box type for Feinprüf/Mahr probes. No changes for other probe types.				

Date: 2016-May-10				
Affected Boxes	**New Version**		**Changes for „Master-Box"**	**Changes for „Slave-Box"**
IR-TFV	V 1.2.0.9		X	X
IR-INC	V 1.1.1.15		X	X
IR-AIN	V 1.1.1.7		X	-
Bugfixes				
- All: Digital inputs of "integrated Master" were switched (1 <-> 2).				
- IR-INC: Setting the position for TTL/RS422 encoders via opcSP (0x35) was wrong (wrong position was set).				
Changes				
- IR-TFV: Support for new connector types KF27 and KF212. No functional changes for existing connector types M16 & M16IP.				

Date: 2016-Apr-15				
Affected Boxes	**New Version**		**Changes for „Master-Box"**	**Changes for „Slave-Box"**
IR-TFV	V 1.1.1.8		X	-
Bugfixes				
- Measurement value may have remained at the end of the value range under special circumstances ("hanging up of measurement value").				
Changes				
None				

Date: 2016-Mar-10				
Affected Boxes	**New Version**		**Changes for „Master-Box"**	**Changes for „Slave-Box"**
IR-MASTER	V 1.1.0.8		X	
IR-TFV	V 1.1.0.7		X	-
IR-INC	V 1.1.0.14		X	-
IR-AIN	V 1.1.0.6		X	-
Bugfixes				
- Start of second dynamic measurement could lead to stop first dynamic measurement under very rare circumstances.				
Changes				
- Webserver „Measurement-Page" allows switching between physical units (e.g. μm) and Digits.				

Date: 2016-Feb-10			
Affected Boxes	**New Version**	**Changes for „Master-Box"**	**Changes for „Slave-Box"**
IR-MASTER	V 1.0.2.6	X	
IR-TFV	V 1.0.3.5	X	X
IR-INC	V 1.0.4.12	X	X
IR-AIN	V 1.0.1.4	X	X
Bugfixes None (Initial revision)			
Changes None (Initial revision)			