PULSE Front-end Driver Type 3099-A

PULSE™ Front-end Driver Type 3099-A allows Brüel & Kjær's PULSE data acquisition software, including any PULSE LabShop and PULSE Reflex real-time analysis applications, or PULSE Time Data Recorder, to acquire data from PULSE data acquisition hardware:

• PULSE LAN-XI Data Acquisition Modules Types 3050 – 3057, 3160 and 3161

or

• PULSE IDA^e Data Acquisition Front-end Type 3560-B and frames containing LAN Controller Modules Types 7536 – 7540

The driver interfaces with PULSE's software-based Front-end Setup utility to select and connect to the front-end.

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Features and Benefits

Features

- All of the clock, trigger, and command synchronization between frames is handled automatically
- Cross-channel phase accuracy is kept within specifications, even between different families of hardware
- Available in both node-locked and floating license versions

Benefits

- Protect your investment – support available for previous generation of Brüel & Kjær data acquisition hardware
- Flexible modularity – hardware can be used as separate systems or quickly combined into a larger system
- Effortless precision – the front-end driver automatically synchronizes and compensates for small differences in both amplitude and phase between different serial numbers and types

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The Front-end Drivers

Three front-end drivers are available for PULSE's LAN-based data acquisition hardware[*]:
- Type 3099-A-X: Multiple module front-end driver for PULSE LAN-XI or IDA^e systems
- Type 3099-A-X1: Front-end driver for single module PULSE LAN-XI or any size IDA^e systems
- Type 3099-A-X2: Front-end driver for dual module PULSE LAN-XI or any size IDA^e systems

See the specifications for an overview of the front-end configurations supported by each driver type.

Available Licenses

The drivers are available in node-locked (N) and floating (F) license versions. Node-locked drivers are either locked to a USB key for easy sharing between computers or to a specific computer. Floating drivers are ideal for multi-user labs, where the licenses can be accessed over the local network, including remotely using VPN, or checked-out for field measurements away from network access.
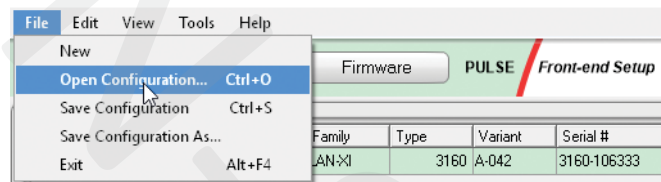
Front-end Setup

Fig. 1
With the Front-end Setup utility, it is possible to configure, save, recall and share front-end setups

When configuring your hardware setup in PULSE, use the Front-end Setup utility. There you can find and connect any front-end available on the LAN. Management of the front ends and their IP addresses is done via LAN. It is also possible to save, recall and share front-end setups.

PULSE LAN-XI Front Ends

Fig. 2
PULSE LAN-XI Front-end Driver Types 3099-A-X, 3099-A-X1 and 3099-A-X2 allow Brüel & Kjær's PULSE data acquisition software to acquire data from the LAN-XI family of hardware

The modular nature of LAN-XI hardware and front-end drivers provides the maximum flexibility. The same system can be, for example, either one 18-channel system for large measurements or three 6-channel systems for routine measurements.

PULSE LAN-XI Multiple Module Front-end Driver Type 3099-A-X

This multiple module front-end driver is the most flexible. It supports LAN-XI modules (in one LAN-XI Frame Type 3660 and/or distributed).

PULSE LAN-XI Single/Dual Module Front-end Driver Type 3099-A-X1/2

The single module front-end driver allows data acquisition from one LAN-XI module. It is, therefore, ideal for 1- to 12-channel systems. The dual module front-end driver allows data acquisition from up to two LAN-XI modules.

It is possible to stack multiple Type 3099-A-X1 drivers, for example, a system consisting of three LAN-XI modules could use three Type 3099-A-X1 drivers, instead of a single Type 3099-A-X. The same hardware and front-end drivers could also be used as three separate, stand-alone measurement systems, provided each system has the appropriate PULSE data acquisition licenses.

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* X indicates the license model, either N: node-locked or F: floating

Once three single modules (or one single and one dual front-end driver) are combined in a system, they function as a PULSE Multiple Module Front-end Driver Type 3099-A-X, which allows large numbers of LAN-XI modules to be used.

PULSE IDA^e Front Ends

Fig. 3
PULSE Front-end Driver Types 3099-A-X 3099-A-X1 or 3099-A-X2 allow Brüel & Kjær's PULSE data acquisition software to acquire data from the IDA^e family of hardware

The IDA^e family of data acquisition hardware continues to provide users with versatile, task-oriented systems for noise and vibration analysis with up to 96 channels using Type 3560-E frames.

Support for data acquisition using IDA^e is available using PULSE Front-end Driver Types 3099-A-X, -X1 or -X2. The drivers all support both single IDA^e frames and systems composed of multiple IDA^e frames, regardless of the number of modules.

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MULTIPLE FRONT-END SUPPORT
- All clock, trigger, and command synchronization between frames is handled automatically
- Cross-channel phase accuracy is kept within specifications, even between different families of hardware
- Full output phase control among LAN-XI modules

SUPPORTED FRONT-END CONFIGURATIONS

PULSE Front End	PULSE Front-end Driver		
	Type 3099-A-X	Type 3099-A-X1	Type 3099-A-X2
	PULSE LabShop and PULSE Reflex Real-time Analysis PULSE Time Data Recorder Type 7708		
Single LAN-XI Module	Yes	Yes	Yes
Dual LAN-XI Modules	Yes	Yes[*]	Yes
Multiple LAN-XI Modules	Yes	Yes[*]	Yes[†]
IDA[e] Modules (Front-end Type 3560-B or LAN Controller Module Types 7536 – 7540)	Yes	Yes	Yes

[*] One per LAN-XI module. Up to three total. 3 × 3099-A-X1 give the functionality of one Multiple Module Front-end Driver Type 3099-A-X

[†] 2 × 3099-A-X2 or 1 × 3099-A-X1 and 1 × 3099-A-X2 give the functionality of one Multiple Module Front-end Driver Type 3099-A-X

Ordering Information[*]

Type 3099-A-X	PULSE LAN-XI and IDA[e] Multiple Module Front-end Driver
Type 3099-A-X1	PULSE LAN-XI Single Module and IDA[e] Systems Any Size Front-end Driver
Type 3099-A-X2	PULSE LAN-XI Dual Module and IDA[e] Systems Any Size Front-end Driver

OPTIONAL EXTENSION
Type 3099-E-X — PULSE Generic Auxiliary Digital Interface (GADI)

ALTERNATIVES
For VXI customers, the following alternatives are available:

Type 3099-D-F	PULSE VXI Multiple Module Front-end Driver, Floating License
Type 3099-D-N	PULSE VXI Multiple Module Front-end Driver, Node-locked License

SERVICES

M1-3099-A-X	Software Maintenance and Support Agreement for PULSE LAN-XI and IDA[e] Multiple Module Front-end Driver
M1-3099-A-X1	Software Maintenance and Support Agreement for PULSE LAN-XI Single Module and IDA[e] Systems Any

[*] When ordering, replace "X" by the license model, either N: node-locked or F: floating

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