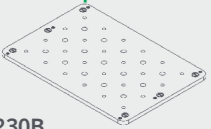
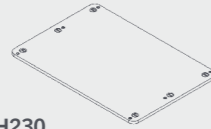
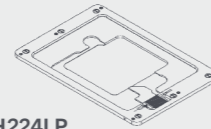
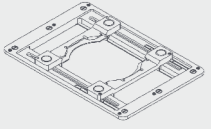
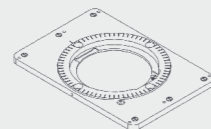
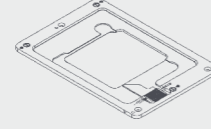
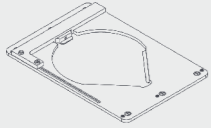
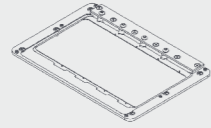
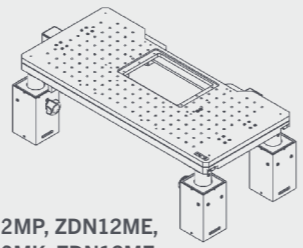


Nikon FN1 configuration chart

6 Sample holders

 H230B Breadboard insert plate	 H230 Solid stage plate	 H224LP Low profile 3 in x 1 in slide holder
 H473UP Universal sample holder	 H224ROT 3 in x 1 in manual rotating slide holder	 H237LP Low profile 3 in x 1 in slide holder
 H229UP Universal Petri dish holder	 H234LP Low profile, four 3 in x 1 in slide holder	

1 Stages



ZDN12MP, ZDN12ME, ZDN12MK, ZDN12MF
ZDeck stages

3 Objective positioner

 QG-OP-MIC-M25 Generic focus drive and adapter	 QGOP200-UP-D1 QGOP400-UP-D1 QGOP400-UP-HL-D1 QGOP800-UP-D1 QGOP800-UP-HL-D1
 QG-OP-OBJ-M25 Direct fine focus coupling	

5 Motorized focus

 PS3H122R Generic focus drive and adapter
 H550 Focus sleeve

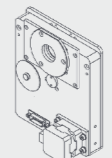
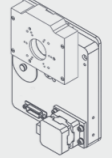

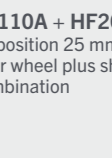
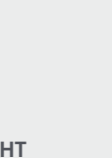

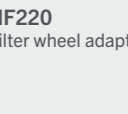

9 Nanopositioning sample holders

 QGSP302XR SP universal sample holder XR	 QGSP303XR Slide holder
 QGSP301XR SP multiwell holder XR	

7 Illumination

 L200SNI, L220SNI Fluorescence illuminator, built in shutter
 L200NI, L220NI Fluorescence illuminator

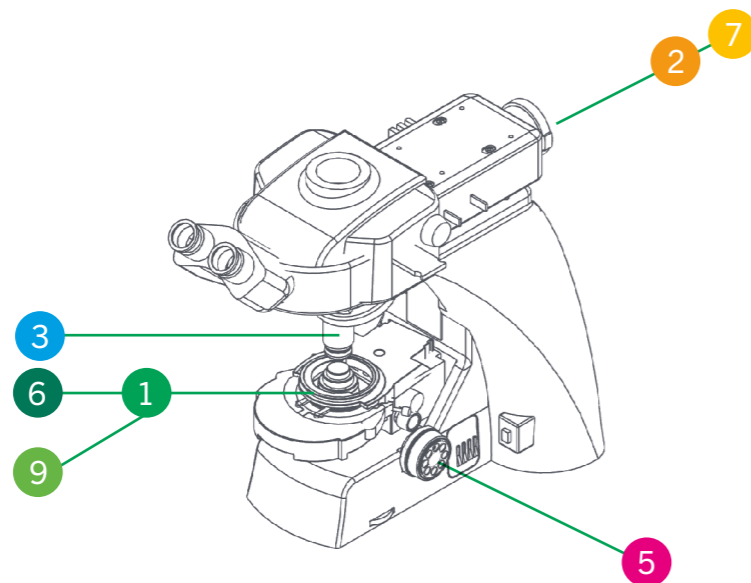
2 Excitation path

 HF106A Filter wheel, 6 position, 25 mm diameter filters	 HF108A + HF201HT 8 position 32 mm diameter filter wheel plus shutter combination
 HF108A Filter wheel, 8 position, 32 mm diameter filters	 HF110A + HF202HT 10 position 25 mm diameter filter wheel plus shutter combination
 HF110A Filter wheel, 10 position, 25 mm diameter filters	 HF202HT 25mm high temperature standalone shutter
 HF204HT 35mm high temperature standalone shutter	 HF220 Filter wheel adapter (Nikon)

9 Nanopositioning stages



**QGSP400-D1
QGSP600-D1
QGSP800-D1**



See the following pages for more product information.

Nikon FN1 configuration guide

The Nikon FN1 is a manual microscope designed for electrophysiology. Prior Scientific can motorize many aspects of this microscope.

Motorized XY stages and sample holders

All the sample holders listed in the second section are compatible with the ZDN12MP, ZDN12ME, ZDN12MK, and ZDN12MF. The Zdeck systems are supplied with a H31XYZE/V31XYZE controller and CS200 joystick (-MK and -MF variant is not motorized, so no controller or joystick are supplied), an adapter for the sample holders, an H473 universal sample holder, and a Nikon 108 mm ring insert.

ZDeck stages and sample holders

Part	Description
ZDN12MP	ZDeck, Nikon, 2 mm pitch, 200 step, motorized
ZDN12ME	ZDeck, Nikon, 2 mm pitch, 200 step, motorized, encoded
ZDN12MK	Manual ZDeck, Nikon
ZDN12MF	ZDeck, Nikon, fixed
H224LP	Low profile 3 in x 1 in slide holder
H234LP	Low profile, four 3 in x 1 in slide holder
H237LP	Low profile 3 in x 2 in slide holder
H229UP	Universal Petri dish holder, upright stages, up to 90 mm diameter
H230	Solid stage plate, H101A stages
H224ROT	3 in x 1 in manual rotating slide holder
H230B	Breadboard insert plate M4 & M6 (H101)
H220	H101 glass stage plate assy

Motorized focus

The PS3H122R plus H550 combination is required to drive the fine focus knob of the microscope. The coarse focus will not be motorized. Prior Scientific offers a specific kit (NIKFN1EK) for mounting an encoder probe (H393) into the microscope if the encoding is required. Enquire with the regional Prior Scientific office for the best way to purchase this configuration.

Part	Description
PS3H122R	Generic focus drive and adapter with rotating cable system preventing cable twisting
H550	Focus adapter (Prior/Swift)

Nanopositioning stages and sample holders

Nanopositioning stages require a suitable motorized stage for mounting. All Prior motorized stages listed in this guide are compatible. Please get in touch with Prior Scientific if the microscope has another brand of the motorized stage. Note that a sample holder from the nanopositioning stage section is required for use and replaces the sample holder fitted to the motorized stage. Please discuss the use of a nanopositioning stage with Prior Scientific when placing your order if using a rotary nosepiece.

Part	Description
QGSP400-D1	System SP400, 400 µm travel, and NPC-D-6110 controller
QGSP600-D1	System SP600, 600 µm travel, and NPC-D-6110 controller
QGSP800-D1	System SP800, 800 µm travel, and NPC-D-6110 controller
QGSP301XR	SP multiwell holder XR
QGSP302XR	SP universal sample holder XR
QGSP303XR	SP single slide holder suitable for 1 in x3 in and 2 in x3 in slides

Objective positioners

When ordering, ensure the correct part number is used to specify inverted calibration. Objective positioners require a threaded adapter to be fitted to the microscope nosepiece and the microscope objective. Nikon microscopes typically use M25 threads; please contact Prior Scientific if the nosepiece uses an alternative thread size. Some FN1 nosepieces have a raised lip surrounding the objective positions, which may clash with the objective positioner; a 15 mm spacer can be added to clear the lip. Please specify the nosepiece attachment fitted to the microscope when ordering. Please note that the two objective positions adjacent to the objective positioner will not be usable due to space constraints; additional positions may be unusable on smaller nosepieces. A high load calibration is available for specialist heavy objectives. Control of the via Nikon Software requires using the Nikon Realtime Controller.

Part	Description
QGOP200-UP-D1	OP200 Objective Scanner with NPC-D-6110 controller Upright 0-500g load
QGOP400-UP-D1	OP400 objective scanner system incl. NPC-D-6110 controller for upright microscopes (0 – 500 g load)
QGOP400-UP-HL-D1	OP400 objective scanner system incl. NPC-D-6110 controller for upright microscopes (500 – 1000 g load)
QGOP800-UP-D1	OP800 objective scanner system incl. NPC-D-6110 controller for upright microscopes (0-500 g load)
QGOP800-UP-HL-D1	OP800 objective scanner system incl. NPC-D-6110 controller for upright microscopes (500-1000 g load)
QG-OP-MIC-M25	OP microscope adapter M25 x 0.75
QG-OP-OBJ-M25	OP objective adapter M32 x 0.75 to M25 x 0.75
QG-OP-SPACE-M25	M25 x 0.75 static objective spacer to align with OP400 objective

Illumination

The L200NI and L200SNI are recommended for fluorescence microscopy, [see datasheet for details](#). Note that the L200SNI has a built-in shutter mechanism that can be controlled via a ProScan III controller, so a standalone shutter is not required. The L220NI and L220SNI are available for customers doing fluorescence imaging in the far-red.

Part	Description
L200SNI	L200 standard box, lamp, light guide, shutter and Nikon collimator
L200NI	L220 standard box, lamp, light guide and Nikon collimator
L220SNI	L220 standard box, lamp, light guide, shutter and Nikon collimator
L220NI	L220 standard box, lamp, light guide and Nikon collimator

Excitation path

Filter wheels are not supplied with filters. Contact Prior Scientific if you wish to purchase a filter wheel stand that can be fixed to an optical table. For systems requiring a shutter and filter wheel, it is recommended to buy one of the combinations listed above. The HF220 adapter is required for filter wheels and shutters in the episcopic illumination pathway. Excitation path components require the NI-FLEI or CI-FL epifluorescence units. Shutters and filter wheels cannot be added to the diascope illumination pathway.

Part	Description
HF220	Filter wheel adapter (Nikon)
HF202HT	25 mm high temperature standalone shutter
HF204HT	35 mm high temperature standalone shutter
HF110A	Filter wheel, 10 position, 25 mm diameter filters without stand
HF106A	Filter wheel, 6 position, 25 mm diameter filters without stand
HF108A	Filter wheel, 8 position, 32 mm diameter filters without stand
HF110A + HF200HT	10 position 25 mm diameter filter wheel plus shutter combination
HF108A + HF201HT	8 position 32 mm diameter filter wheel plus shutter combination