

Nikon DSLR AF Motor, NAI, AI, AI-S, AI-P, AF-D, AF-I, AF-S Lens & GPS Compatibility Chart

Last update: October 24, 2014

Exposure Modes		Metering Modes		Focus Modes	
Auto	Auto or Scene modes	3D	3D Color Matrix Metering	AF	Auto focus
P/P*	Auto Program Mode / Flexible Program Mode (*)	CM	Color Matrix metering	MF	Manual focus
S	Semi-auto Shutter Priority Mode	CW	Center Weighted metering		
A	Semi-auto Aperture Priority Mode	S	Spot metering		
M	Manual Mode	Note that in S mode the camera meters on the selected focus point			

Camera Model	AF Motor	Metering with MF Lenses	MF Range finder ¹	MF Lens Info & EXIF	Mounts Unmodified Non-AI (NAI)	AI-mod/AI/AI-S Series-E Exposure & Metering Modes	AI-P (MF+CPU) Exposure & Metering Modes	AF with MF lenses	AF-D non-AF-S Exposure & Metering Modes	AF with AF-D lenses	AF-I/AF-S Exposure & Metering Modes	AF Range finder ¹	GPS compatible
Nikon D1	YES	YES	YES	NO (F--)	Do NOT Mount	A/M • CW/S	P/S/A/M • CM/CW/S	MF	P/S/A/M • CM/CW/S	AF	P/S/A/M • 3D/CW/S	YES	NO
Nikon D1X	YES	YES	YES	NO (F--)	Do NOT Mount	A/M • CW/S	P/S/A/M • CM/CW/S	MF	P/S/A/M • CM/CW/S	AF	P/S/A/M • 3D/CW/S	YES	YES
Nikon D1H	YES	YES	YES	NO (F--)	Do NOT Mount	A/M • CW/S	P/S/A/M • CM/CW/S	MF	P/S/A/M • CM/CW/S	AF	P/S/A/M • 3D/CW/S	YES	YES
Nikon D100	YES	NO	YES	NO (F--)	Do NOT Mount	M* • NO	P/S/A/M • CM/CW/S	MF	P/S/A/M • CM/CW/S	AF	P/S/A/M • 3D/CW/S	YES	NO
Nikon D2H	YES	YES	YES	YES**	Do NOT Mount	A/M • CM/CW/S**	P/S/A/M • CM/CW/S	MF	P/S/A/M • CM/CW/S	AF	P/S/A/M • 3D/CW/S	YES	YES
Nikon D70	YES	NO	YES	NO (F--)	Do NOT Mount	M* • NO	P/S/A/M • CM/CW/S	MF	P/S/A/M • CM/CW/S	AF	P/S/A/M • 3D/CW/S	YES	NO
Nikon D2X	YES	YES	YES	YES**	Do NOT Mount	A/M • CM/CW/S**	P/S/A/M • CM/CW/S	MF	P/S/A/M • CM/CW/S	AF	P/S/A/M • 3D/CW/S	YES	YES
Nikon D2Hs	YES	YES	YES	YES**	Do NOT Mount	A/M • CM/CW/S**	P/S/A/M • CM/CW/S	MF	P/S/A/M • CM/CW/S	AF	P/S/A/M • 3D/CW/S	YES	YES
Nikon D70S	YES	NO	YES	NO (F--)	Do NOT Mount	M* • NO	P/S/A/M • CM/CW/S	MF	P/S/A/M • CM/CW/S	AF	P/S/A/M • 3D/CW/S	YES	NO
Nikon D50	YES	NO	YES	NO (F--)	Do NOT Mount	M* • NO	P/S/A/M • CM/CW/S	MF	P/S/A/M • CM/CW/S	AF	P/S/A/M • 3D/CW/S	YES	NO
Nikon D200	YES	YES	YES	YES**	Do NOT Mount	A/M • CM/CW/S**	P/S/A/M • CM/CW/S	MF	P/S/A/M • CM/CW/S	AF	P/S/A/M • 3D/CW/S	YES	YES
Nikon D2Xs	YES	YES	YES	YES**	Do NOT Mount	A/M • CM/CW/S**	P/S/A/M • CM/CW/S	MF	P/S/A/M • CM/CW/S	AF	P/S/A/M • 3D/CW/S	YES	YES
Nikon D80	YES	NO	YES	NO (F--)	Do NOT Mount	M* • NO	P/S/A/M • NO	MF	P/S/A/M • CM/CW/S	AF	P/S/A/M • 3D/CW/S	YES	NO
Nikon D40	NO	NO	YES	NO (F--)	Do NOT Mount	M* • NO	P/S/A/M • NO	MF	P/S/A/M • CM/CW/S	MF	P/S/A/M • 3D/CW/S	YES	NO
Nikon D40X	NO	NO	YES	NO (F--)	Do NOT Mount	M* • NO	P/S/A/M • CM/CW/S	MF	P/S/A/M • CM/CW/S	MF	P/S/A/M • 3D/CW/S	YES	NO
Nikon D3	YES	YES	YES	YES**	Do NOT Mount	A/M • CM/CW/S**	P/S/A/M • CM/CW/S	MF	P/S/A/M • CM/CW/S	AF	P/S/A/M • 3D/CW/S	YES	YES
Nikon D300	YES	YES	YES	YES**	Do NOT Mount	A/M • CM/CW/S**	P/S/A/M • CM/CW/S	MF	P/S/A/M • CM/CW/S	AF	P/S/A/M • 3D/CW/S	YES	YES
Nikon D60	NO	NO	YES	NO (F--)	Do NOT Mount	M* • NO	P/S/A/M • CM/CW/S	MF	P/S/A/M • CM/CW/S	MF	P/S/A/M • 3D/CW/S	YES	NO
Nikon D700	YES	YES	YES	YES**	Do NOT Mount	A/M • CM/CW/S**	P/S/A/M • CM/CW/S	MF	P/S/A/M • CM/CW/S	AF	P/S/A/M • 3D/CW/S	YES	YES
Nikon D90	YES	NO	YES	NO (F--)	Do NOT Mount	M* • NO	P/S/A/M • CM/CW/S	MF	P/S/A/M • CM/CW/S	AF	P/S/A/M • 3D/CW/S	YES	YES
Nikon D3X	YES	YES	YES	YES**	Do NOT Mount	A/M • CM/CW/S**	P/S/A/M • CM/CW/S	MF	P/S/A/M • CM/CW/S	AF	P/S/A/M • 3D/CW/S	YES	YES
Nikon D5000	NO	NO	YES	NO (F--)	Do NOT Mount	M* • NO	P/S/A/M • CM/CW/S	MF	P/S/A/M • CM/CW/S	MF	P/S/A/M • 3D/CW/S	YES	YES
Nikon D300S	YES	YES	YES	YES**	Do NOT Mount	A/M • CM/CW/S**	P/S/A/M • CM/CW/S	MF	P/S/A/M • CM/CW/S	AF	P/S/A/M • 3D/CW/S	YES	YES
Nikon D3000	NO	NO	YES	NO (F--)	Do NOT Mount	M* • NO	P/S/A/M • CM/CW/S	MF	P/S/A/M • CM/CW/S	MF	P/S/A/M • 3D/CW/S	YES	NO
Nikon D3S	YES	YES	YES	YES**	Do NOT Mount	A/M • CM/CW/S**	P/S/A/M • CM/CW/S	MF	P/S/A/M • CM/CW/S	AF	P/S/A/M • 3D/CW/S	YES	YES
Nikon D3100	NO	NO	YES	NO (F--)	Do NOT Mount	M* • NO	P/S/A/M • CM/CW/S	MF	P/S/A/M • CM/CW/S	MF	P/S/A/M • 3D/CW/S	YES	YES
Nikon D7000	YES	YES	YES	YES**	Do NOT Mount	A/M • CM/CW/S**	P/S/A/M • CM/CW/S	MF	P/S/A/M • CM/CW/S	AF	P/S/A/M • 3D/CW/S	YES	YES
Nikon D5100	NO	NO	YES	NO (F--)	Do NOT Mount	M* • NO	P/S/A/M • CM/CW/S	MF	P/S/A/M • CM/CW/S	MF	P/S/A/M • 3D/CW/S	YES	YES
Nikon D4	YES	YES	YES	YES**	Do NOT Mount	A/M • CM/CW/S**	P/S/A/M • CM/CW/S	MF	P/S/A/M • CM/CW/S	AF	P/S/A/M • 3D/CW/S	YES ²	YES
Nikon D800/E	YES	YES	YES	YES**	Do NOT Mount	A/M • CM/CW/S**	P/S/A/M • CM/CW/S	MF	P/S/A/M • CM/CW/S	AF	P/S/A/M • 3D/CW/S	YES ²	YES
Nikon D3200	NO	NO	YES	NO (F--)	Do NOT Mount	M* • NO	P/S/A/M • CM/CW/S	MF	P/S/A/M • CM/CW/S	MF	P/S/A/M • 3D/CW/S	YES	YES
Nikon D600	YES	YES	YES	YES**	Do NOT Mount	A/M • CM/CW/S**	P/S/A/M • CM/CW/S	MF	P/S/A/M • CM/CW/S	AF	P/S/A/M • 3D/CW/S	YES ²	YES
Nikon D5200	NO	NO	YES	NO (F--)	Do NOT Mount	M* • NO	P/S/A/M • CM/CW/S	MF	P/S/A/M • CM/CW/S	MF	P/S/A/M • 3D/CW/S	YES	YES
Nikon D7100	YES	YES	YES	YES**	Do NOT Mount	A/M • CM/CW/S**	P/S/A/M • CM/CW/S	MF	P/S/A/M • CM/CW/S	AF	P/S/A/M • 3D/CW/S	YES ²	YES
Nikon Df	YES	YES	YES	YES**	Certain NAI are NOT compatible	A/M • CM/CW/S**	P/S/A/M • CM/CW/S	MF	P/S/A/M • CM/CW/S	AF	P/S/A/M • 3D/CW/S	YES ²	YES
Nikon D610	YES	YES	YES	YES**	Do NOT Mount	A/M • CM/CW/S**	P/S/A/M • CM/CW/S	MF	P/S/A/M • CM/CW/S	AF	P/S/A/M • 3D/CW/S	YES ²	YES
Nikon D5300	NO	NO	YES	NO (F--)	Do NOT Mount	M* • NO	P/S/A/M • CM/CW/S	MF	P/S/A/M • CM/CW/S	MF	P/S/A/M • 3D/CW/S	YES	Built-in
Nikon D4S	YES	YES	YES	YES**	Do NOT Mount	A/M • CM/CW/S**	P/S/A/M • CM/CW/S	MF	P/S/A/M • CM/CW/S	AF	P/S/A/M • 3D/CW/S	YES ²	YES
Nikon D3300	NO	NO	YES	NO (F--)	Do NOT Mount	M* • NO	P/S/A/M • CM/CW/S	MF	P/S/A/M • CM/CW/S	MF	P/S/A/M • 3D/CW/S	YES	YES
Nikon D810	YES	YES	YES	YES**	Do NOT Mount	A/M • CM/CW/S**	P/S/A/M • CM/CW/S	MF	P/S/A/M • CM/CW/S	AF	P/S/A/M • 3D/CW/S	YES ²	YES
Nikon D750	YES	YES	YES	YES**	Do NOT Mount	A/M • CM/CW/S**	P/S/A/M • CM/CW/S	MF	P/S/A/M • CM/CW/S	AF	P/S/A/M • 3D/CW/S	YES ²	YES

ALWAYS check your manual before mounting unidentified MF lenses, specialty lenses and other accessories

¹ For lenses or lens-accessory combinations with a maximum effective aperture of f/5.6 or faster

² F/8 capable camera. Between one and eleven focus-points are AF and Rangefinder capable with lenses and/or lens+TC combinations with a maximum effective aperture of f/8 or faster. All other focus points are f/5.6 capable

* The mode dial must be set to manual (M). In any other mode the camera will not fire and show a blinking F-- icon in the control panel(s). The exposure meter does not work.

** The user must include Non-CPU MF lens data (max. aperture, [min.] focal length) in the camera's database for it to be included in Exif (model, max. aperture, selected f-stop and focal length). If lens data is not included in the camera's database, only Center Weighted or Spot metering can be used. Once a Non-CPU MF lens is registered in the database, Color Matrix metering mode becomes available in exposure modes M and A. The P and S modes can not be used. If either of these modes is selected, the camera will either automatically select shooting mode A, or refuse to fire and show a blinking F-- icon in the control panel(s).