

LIGHTS · SHAPES · ARCS

as seen from ahead unless noted · R red · G green · W white · Y yellow

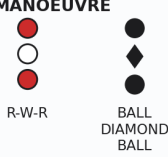
NOT UNDER COMMAND



NO masthead light.
Sidelights and stern
ONLY when making way.

adrift, cannot manoeuvre

RESTRICTED IN ABILITY TO MANOEUVRE



DOES show masthead lights when making way.
dredging: 2 RED the foul side,
2 GREEN the side to pass

DIVING · Rule 27(e)



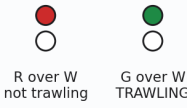
CONSTRAINED BY HER DRAUGHT



INTERNATIONAL ONLY

No such vessel in the Inland Rules at all.

FISHING



Gear out more than 150 m:
extra W all-round or cone
APEX UP toward the gear.

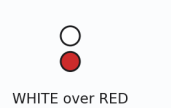
SAILING



Sidelights + stern.
NO masthead light.
Under 20 m may combine all three in one lantern.

under sail AND power = a POWER-DRIVEN vessel

PILOT VESSEL ON DUTY



Plus sidelights and sternlight when underway.
Anchor lights when at anchor.

NO masthead light.

Fog: her signals PLUS an identity signal of FOUR SHORT blasts.

MINE CLEARANCE



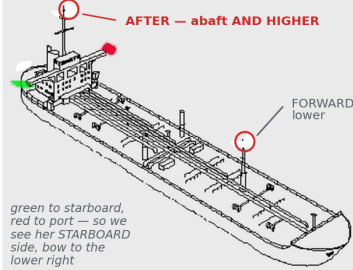
DANGER: do not approach within 1000 m.

BY DAY



Shown IN ADDITION to the lights for her length.
Same International and Inland.

POWER-DRIVEN, UNDERWAY



The AFTER masthead light is ABAFT of AND HIGHER than the forward one.
2nd masthead light REQUIRED at 50 m or more, optional under 50 m. Sidelights + sternlight always.

Under 12 m: one all-round WHITE and sidelights.

AT ANCHOR · AGROUND ANCHORED



AGROUND



TOWING · Rule 24

INTERNATIONAL

tow 200 m or less astern — 2 masthead lights in a vertical line

tow MORE than 200 m — 3 masthead lights in a vertical line

YELLOW towing light, 135°, ABOVE the sternlight

DIAMOND on tug AND tow when the tow exceeds 200 m

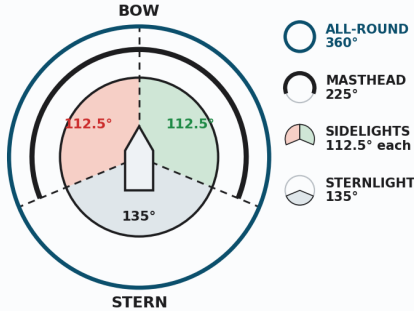
Pushing ahead / towing alongside: 2 masthead + sidelights + STERNLIGHT.

INLAND ONLY

SPECIAL FLASHING light — yellow, 50-70 flashes/min, 180°-225°, at the FORWARD end of a vessel being pushed ahead.

Pushing ahead / towing alongside: TWO TOWING LIGHTS, not a sternlight. Western Rivers: sidelights + two towing lights, NO masthead lights.

ARCS OF VISIBILITY



RANGES · Rule 22 (nautical miles)

length	mast	side	stern	tow	all-rd
50 m or more	6	3	3	3	3
12 to under 50 m	5	2	2	2	2
but under 20 m	3	2	2	2	2
under 12 m	2	1	2	2	2
towed object	—	—	—	—	3

The one they ask: a 50 m vessel's MASTHEAD light is 6 miles.
Everything else on her is 3.

Special flashing (Inland): 2 miles.

SPECIAL LIGHTS WORTH KNOWING

7 AND 7

under 7 m AND under 7 kt: ONE all-round WHITE, sidelights if practicable. INTERNATIONAL only.

UNDER 12 m

power-driven may show ONE all-round WHITE plus sidelights, in place of masthead and stern.

UNDER 20 m

sailing may combine sidelights and stern in ONE lantern at or near the top of the mast.

UNDER OARS

the lights for a sailing vessel — or keep a TORCH ready and show it in time to prevent collision.

FLASHING BLUE

law enforcement vessel on duty. 33 CFR 88.05.

RED / YELLOW

alternating flash = a PUBLIC SAFETY vessel.

The last two are INLAND ONLY — Annex V, 33 CFR 88. Neither confers privilege, nor may interfere with her navigation lights.

MASTHEAD LIGHT HEIGHTS · Annex I

At least 6 m above the hull, or her breadth if that is more than 6 m — but never more than 12 m is required. The after light at least 4.5 m above the forward one, the two spaced at least half her length apart, and the forward one within a quarter of her length of the stern.

THE LISTS WORTH LEARNING COLD

5 vessels that NEVER show a masthead light

not under command · fishing · sailing · pilot on duty · a vessel being towed

4 that may NOT IMPEDE in a narrow channel

sailing · under 20 m · fishing · any vessel crossing it

4 that show NO lights at all when underway but stopped

not under command · restricted in ability · fishing · trawling (they drop sidelights and stern the moment they stop making way)

4 that do NOT show anchor lights when anchored

fishing · trawling · dredging or RAM · diving (they keep showing their own special lights instead)

2 that sound the SAME fog signal underway or at anchor

restricted in ability to manoeuvre · fishing one prolonged and two short, every 2 minutes

THE RHYMES · say them out loud

Red over red, the captain is dead
not under command · Rule 27(a)

Red white red, restricted ahead
restricted in ability to manoeuvre · Rule 27(b)

Three reds in a row, no room below
constrained by draught Rule 28 · INTL ONLY

Red over white, fishing at night
fishing, but NOT trawling · Rule 26(c)

Green over white, trawling at night
trawling · Rule 26(b)

White over red, pilot ahead
pilot vessel on pilotage duty · Rule 29

Red over green, sailing machine
optional masthead pair · Rule 25(c)

Yellow over white, my cable is tight
from ASTERN: towing light over sternlight · Rule 24(a)

Yellow over yellow, push or hip tow fellow
pushing ahead or alongside · 24(c) INLAND ONLY

If to starboard red appear, keep clear
crossing from starboard — YOU give way · Rule 15

Turn to port, go to court
never to PORT: crossing, or fog target · 17(c), 19(d)

SOUND EQUIPMENT · Rule 33 & Annex III

Identical in International and Inland — no difference to learn here.

Under 12 m	none prescribed — other efficient means
12 m or more	WHISTLE
20 m or more	whistle AND BELL
100 m or more	whistle, bell AND GONG — tone unlike bell

Bell or gong may be replaced by gear of the same characteristics — but MANUAL sounding must always remain possible.

WHISTLE AUDIBILITY · Annex III

200 m or more	2.0 NM
75 to under 200 m	1.5 NM
20 to under 75 m	1.0 NM
under 20 m	0.5 NM

Whistles more than 100 m apart shall NOT be sounded simultaneously. Only ONE whistle for manoeuvring and warning signals.

SOUNDS · SITUATIONS · RESTRICTED VISIBILITY

short = about 1 second

prolonged = 4 to 6 seconds

RULE 34 · MANOEUVRING AND WARNING SIGNALS — the most examined rule of the lot

INTERNATIONAL

I am telling you what I AM DOING

- I am altering my course to STARBOARD
- ■ I am altering my course to PORT
- ■ ■ I am operating ASTERN propulsion

OVERTAKING IN A NARROW CHANNEL

- ■ ■ to pass on YOUR STARBOARD side
- ■ ■ ■ to pass on YOUR PORT side
- ■ ■ ■ her ANSWER, if she agrees

Applies whenever vessels are IN SIGHT. No distance limit. No reply is required.

LIGHT SIGNAL: all-round WHITE, 5 miles, at least 10 seconds between signals.

No equivalent of the two Inland provisions opposite.

INLAND

I am telling you what I INTEND to do

- I intend to leave you on my PORT side
- ■ I intend to leave you on my STARBOARD side
- ■ ■ I am operating ASTERN propulsion

OVERTAKING IN A NARROW CHANNEL

- overtaking on your STARBOARD side
 - ■ overtaking on your PORT side
- she ANSWERS IN KIND — the same signal back

Applies in sight AND WITHIN HALF A MILE. She MUST answer — same signal if she agrees, five short if in doubt.

LIGHT SIGNAL: all-round WHITE or YELLOW, 2 miles, synchronised with the whistle.

ONE PROLONGED leaving a dock or berth. Agreement by BRIDGE-TO-BRIDGE RADIO excuses the whistle — but if agreement is NOT reached, whistle signals shall be exchanged and PREVAIL.

■ ■ ■ ■ ■ DOUBT or DANGER — AT LEAST five short and rapid

■ ■ ■ ■ ■ NEARING A BEND — answered by one prolonged

RULE 35 · SOUND SIGNALS IN RESTRICTED VISIBILITY

UNDERWAY — every 2 minutes

- power-driven, MAKING WAY
- ■ power-driven, underway but STOPPED
- ■ ■ NUC · RAM · sailing · fishing · towing
- ■ ■ ■ the vessel TOWED, if manned (last of the tow)

NOT UNDERWAY — every 1 MINUTE

- ANCHORED** rapid ringing of the BELL for about 5 seconds
- 100 m or more: bell FORWARD, then the GONG rapidly AFT
- may also sound ■ ■ ■ to warn an approaching vessel
- AGROUND** THREE strokes on the bell, the 5-second ringing, THREE more

INLAND special anchorage: a vessel UNDER 20 m, and any barge or nondescript craft, need not sound the anchor signal — nor show anchor lights.

RULE 19 RESTRICTED VISIBILITY · RULE 9 NARROW CHANNELS

IN FOG THERE IS NO STAND-ON VESSEL

Rules 11-18 apply only to vessels IN SIGHT. A radar contact — plotted, course and speed known — is NOT in sight.

Hear a fog signal FORWARD OF THE BEAM, or you cannot avoid a close-quarters situation with a vessel forward of the beam:

► **REDUCE TO MINIMUM STEERAGEWAY. TAKE ALL WAY OFF IF YOU MUST.**

Avoid a turn to PORT for a vessel forward of the beam (unless overtaking). Avoid a turn TOWARD a vessel abeam or abaft the beam.

NARROW CHANNEL — keep as near the OUTER LIMIT ON YOUR STARBOARD SIDE as is safe and practicable.

SHALL NOT IMPEDE a vessel that can navigate only within the channel: sailing · under 20 m · fishing · any vessel crossing it.

'Shall not impede' is NOT 'give way' — it means take early action to leave room.

IN SIGHT OF ONE ANOTHER · Rules 13 to 17

OVERTAKING

Rule 13

coming up from more than 22.5° ABAFT THE BEAM

the OVERTAKING vessel keeps clear until FINALLY PAST AND CLEAR. In doubt, assume you are overtaking.

HEAD-ON

Rule 14

reciprocal courses, you see both her sidelights

BOTH alter to STARBOARD and pass PORT TO PORT. In any doubt, assume it is head-on.

CROSSING

Rule 15

she is on your own STARBOARD side

YOU give way, and you shall AVOID CROSSING AHEAD of her.

RULE 17 — THE STAND-ON VESSEL, in three stages

- normally
- when it is apparent she is not taking appropriate action
- when collision cannot be avoided by her action alone

KEEP course and speed
you MAY act alone
you SHALL act

Never alter to PORT for a vessel on your own PORT side. Rule 16: EARLY and SUBSTANTIAL action to keep WELL CLEAR.

RULE 5 LOOKOUT · RULE 6 SAFE SPEED

A proper lookout at ALL TIMES by SIGHT and HEARING and by ALL AVAILABLE MEANS — so as to make a full appraisal of the situation AND of the risk of collision.

SAFE SPEED — every vessel, at all times:

- visibility
- traffic density
- manoeuvrability, stopping distance, turning ability
- at night, background light from shore or her own lights
- wind, sea, current and nearby hazards
- DRAUGHT in relation to the depth of water

HAVING RADAR DOES NOT PERMIT A HIGHER SPEED.

It adds six more factors you must weigh. In or near restricted visibility a power-driven vessel shall have her ENGINES READY FOR IMMEDIATE MANOEUVRE.

50 questions
27% lights and shapes

90% to pass — FIVE WRONG IS A FAIL
23% sound and light signals

closed book
Rule 34 the most examined rule

Oceans and Near Coastal candidates sit Q100, International and Inland together. Great Lakes and Inland candidates sit Q100 AND Q300 — 100 questions, both at 90%. There is no tonnage difference: a six-pack OUPV and a Master Unlimited sit the same Rules paper.