

# Natural Relay

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## Glossary

- ART: artificial
- NF: non-forcing
- GF: game forcing
- INV: invitational
- **M/m**: Major/minor
- L/M/H: low, middle, higher suit
- Rxx: relay with xx. E.g. R2♦: relay with 2♦ (meaningless)
- kc (lower case): keycard

## General Approach

- 5 card Major, 1♣=16+; 1♦=4+♦, 2 or 3 suited, 11-15; 1NT=13-16, no 5M, no 6m, no (5422); 2♣=5♣+4M OR 6♣, 11-15; 2♦=single suited 6+♦, 11-15.
- Transfer GF responses to 1♣
- INV+ Relay after 1 level opening (excluding 1♣), relay twice is GF. Most of other bids are (6)8-11 NAT, NF.
  - 1♦ - 1♥: 4♥ weak OR ART INV+
  - 1M - 2♣: ART INV+

## Opening structure

- 1♣: ART, 16+
- 1♦: 4+, 2 or 3 suited, 11-15
- 1M: 11-15, 5M
- 1NT: 12-15, BAL (minor 5332, 4432, 4333) or =4414, =2452
- 2♣: 11-15, 6+♣ OR 5♣+4M
- 2♦: 11-15, 6+♦, no 4 card side suit
- 2M: weak 2s

- 2NT: minors 55
- 3x: pre-empt of preference.
- 3NT: Gambling.

# Table of Contents

- [Natural Relay](#)
- [Glossary](#)
- [General Approach](#)
- [Opening structure](#)
- [Table of Contents](#)
- [Relay Guideline](#)
  - [Step 1: shape](#)
  - [Step 2: Sign-off/Keycard](#)
    - [Keycard procedure](#)
      - [Range](#)
      - [Keycard - A](#)
      - [Keycard - K/Q](#)
      - [Keycard - J](#)
  - [Shape classification](#)
- [Exact relay definition](#)
  - [1♣ – 1♥ \(R1♠\)](#)
  - [5M relay](#)
  - [1♣ – 1♠ \(Bal\), \(R1NT\)](#)
  - [1♣ – 2♦ \(6♥, void\)](#)
- [Relay after interference](#)
  - [2♠ \(R2NT\) Balanced hand](#)
  - [2NT balanced hand](#)
- [1♦ Opening](#)
  - [1♦ – 1♥](#)
    - [1♦ – 1♥ – 1♠](#)
      - [1♦ – 1♥ – 1♠ - 1NT](#)
    - [1♦ – 1♥ - 1NT](#)
    - [1♦ – 1♥ – 2♣](#)
      - [1♦ – 1♥ - 1NT/2♣ - 3NT](#)
      - [1♦ – 1♥ - 1NT/2♣ – 2♣/2♦ Relay](#)

- 1♦ - 1♥ - 2♦/2♥
  - 2♠ Relay after 541
- 1♦ - 1♥ - 2♠
  - 2NT Relay
  - extreme shape keycard
- 1♦ - 1♠
- 1NT Opening
  - 1NT - 2♣
- 2♣ Opening
  - 2♣ - 2♦
- 2♦ Opening

# Relay Guideline

## Step 1: shape

The responder shows his shape. Any bid + 1 is relay. The enquirer may break the relay by bidding anything higher to skip to step 2 or sign off.

General principle when showing shape in relay:

1. Balanced hand: 4 card suit, 2nd 4 card suit, then 3 card suit to complete 4432.
2. Bid your first suit, then always second suit, then shortage
  - 54: first then second
  - 64: first then second
  - If there is a lower bid available and meaningless, use it to replace highest bid to show shortage.
3. If you rebid your suit, it's one card longer
  - 6: bid your first suit twice
  - 64: first suit, then second suit, then first suit again
4. Second suit cannot be longer than first suit. Bid lower of equal length first.  
The order is H
5. C then D then D means 56
6. D then C then C means 55
7. There may be multiple ways to bid the same suits. A jump usually indicate a void/no shortage
  - 1♣ - transfer 2 level = 6322 or hint a void

- 1♣ - suit once, suit twice = no void
8. Shape relay stops at 3NT. Any bid at 3NT or higher is not asking for shape. But the shape response may go beyond 3NT.

## Step 2: Sign-off/Keycard

Partner may choose not to keycard.

If partner makes a non-jumping game bid, it is sign-off. Any 3NT immediately after complete shape relay is sign off.

After enquirer chooses to sign-off with a minimum, if the responder has extras, e.g. ultra-good 1M opening, 12+ responder to 1♣ with good controls, he may responder to a sign-off bid with keycard. E.g. 3NT (sign-off) - 4♥ (+3 steps, 2 without Q, with extras)

After starting of keycard, any relay bid, even if it's also a game bid, is still relay. Do NOT relay further if you cannot tolerate the response.

### Keycard procedure

The enquirer is allowed to keycard in any suit, and keycard in any suit does not imply suit-setting the suit. Any bid breaking the relay after initiating the keycard procedure is the intended final contract, including 4NT.

Warning: 4NT is rarely used in relay for keycard.

### Range

If responder's point range is wider or equal to 4 points, including 1x opening, 1NT (13-16), responding to 1♣ opener, we recommend relay for point range.

- +1: minimum (11-12 if 1x, 13-14 if 1NT, 8-11 if responding to 1♣)
- +2: maximum, first step response in keycard
- +3: maximum, second step response in keycard
- so on

## Keycard - A

The enquirer can choose to keycard in any suit. This is very beneficial if the enquirer want to do a pure A ask (gerber) or investigate Ks in case of a double fit, the enquirer can choose to keycard in a suit that he has the K.

The default relay bid is to keycard in responder's first suit. +2 bid for relay is in responder's second longest suit. +3/+4 are so on.

In case of 2 suits are the same length, major first, then lower first.

E.g. if p is 4225, then +1 = ♣ (longer), +2 = ♥, +3 = ♠ (Major first), +4 = ♦

We recommend RKCB, while even/odd responses can be used.

- +1: 1/4
- +2: 0/3
- +3: 2 no Q
- +4: 2 with Q

## Keycard - K/Q

Relay once for K, and again for Q

- +1: no
- +2~4: L/M/H K or the other 2 side suit Ks

After the K&Q ask, the next relay seeks to clarify any confusion in case the enquirer is missing all 3 K/Qs in the side suit.

- +1: I have one of each responded
- +2: I have one extra honor
- +3: I have two of each responded

## Keycard - J

Respond side suit J in the same way as K/Q. If there are more space, the next relay is trump J, where +1=no, +2=yes.

# Shape classification

1. Bal/Semi-bal 4333, 4432, 5332 (5m), 4441
2. Single suit no shortage 5332, 6322, 7222
3. Unbal:
  1. Single suit: 6331, 7321, 7330
  2. 5~7+4: 5431(22), 5440, 6421, 6430, 7411
  3. 55+: 5521, 5530, 6511, 6520, 6610

## 4. Exact relay definition

1♣ – 1♥ (R1♠)

1NT (waiting bid) shows the higher suit (♠), any other bid shows ♥. This applies in competition where X/XX is ♠, P or any other bid shows ♥.

- 1NT: 5♠ (R2♣)
  - See [5M relay](#)
- 2♣: 4♣. (R2♦)
  - 2♥: 6+♥, =4♣ (R2♠)
    - 2NT: replaces 3♦, ♦ shortage, =2614
    - 3♣: replaces 3♠, ♠ shortage, =1624
    - 3♥: 7♥, =1714
  - 2♠: 1♠, =1534 (R2NT = kc in ♥)
  - 2NT: 22, =2524
  - 3♣: 5♣. Deny void generally (R3♦)
    - 3♥: 6♥, 5♣, =1615
    - 3♠: ♠ shortage, =1525
    - 3NT: replaces 4♦, ♦ shortage, =2515
    - 4♣: 6♣, implies 6♥, take it slow so lower shortage, =1606
    - 4♦: originally meaningless, implies longer ♥, =1705
  - 3♦: 1♦, =3514
  - 3♥: 7♥, jump implies void (R3♠ for void if couldn't jump to differentiate void)
- 2♦: 4♦. (R2♥)
  - TODO
- 2♥+: See [5M relay](#)

## 5M relay

5M relay response starts after 2♣.

Applicable situations include:

- 1M – 2♣
- 1♣ – 1♥ (– 1♠ – 1NT) – 2♣

Key concept:

- minor compression: 2♦ shows an unknown 4+m. R2♥, 2♠=♦, anything else shows ♣.
- 2♥ and 2♠ are the same regardless of which Major relayee has.

Relay:

- 2♦: unknown 4+m (R2♥)
  - 2♠: m=♦ (R2NT)
    - Natural relay continuation
  - 2NT: 5422, unknown minor (R3♣)
    - 3♦: min, (R3♥)
      - 3♠/3NT: ♣/♦
    - 3♥/3♠: max, ♣/♦
  - 3♣+: m=♣, Natural relay continuation
- 2♥: Single suited M. 5322/6322/7321 (R2♠)
  - 2NT: 6(322)/7(321) (R3♣)
    - 3♦/3♠/3NT: 6322, 3 in ♦/♠/♣
    - 3M: 7(32)1, low shortage
  - 3♣/3♦/3♠: 5332, 2 in ♣/♦/♠
  - 3M: 7(32)1, middle shortage
- 2♠: 4♠
- 2NT: 6(331) (R3♣)
  - 3♦/3♠/3NT: ♦/♠/♣ shortage
  - 3M: ? //TODO
- 3♣: 55, implies void
- 3♦: 55, implies void
- 3M: 7(32)1, high shortage

- 3NT: 7222

## 1♣ – 1♠ (Bal), (R1NT)

Transfer to 1NT shows a balanced hand. This could include perfectly balanced ones including 4432, 4333, and semi-balanced ones including 5332 with 5m, and 4441.

1. 4333: bid the suit and then NT
2. 4432: bid 4 card suits up the line, and then your 3 card suit to complete the shape.
  1. If the second 4 card suit is the relay bid, then skip all bids that shows any 4 card suit, skip 2NT that shows a 4333, use 3♣/3♦ to show the 3 card suit and a touching 4 card suit.
  2. If the next 2 bid matches the 2 unbid 3 card suit, then bid the matching one.
  3. If one of the bid matches the 2 unbid 3-card suit, then the one matches shows that suit.
  4. If both bids don't match, then the lower bid matches the lower suit
3. 5332: Use 2NT for 5♣ and 3♣ for 5♦
4. 4441: 3♦-3NT. 3♦-3♠ shows matching singleton and 3NT shows ♣ singleton.
  - 2♣: 4♣, 4333/4432 (R2♦)
    - 2♥: 4♥ (R2♠)
      - 2NT: 3♦
      - 3♣: 3♠
    - 2♠: 4♠ (R2NT)
      - 3♣: 3♥
      - 3♦: 3♦
    - 2NT: =3334
    - 3♣: 4♦, lower 3 card suit (♥), =2344
    - 3♦: 4♦, higher 3 card suit (♠), =3244
  - 2♦: 4♦, deny 4♣ (R2♥)
    - 2♠: 4♠ (R2NT)
      - 3♣: 3♣
      - 3♦: 3♥
    - 2NT: =3343



- 3♣: =2443
- 3♦: =3442
- 2♥: 4♥, deny 4m (R2♠)
  - 2NT: =3433
  - 3♣: =4423
  - 3♦: =4432
- 2♠: 4♠, =4333
- 2NT: 5♣, 5332, relay for doubleton
- 3♣: 5♦, 5332, relay for doubleton
- 3♦~3NT: 4441. All bids except 3NT are keycard.

## 1♣ – 2♦ (6♥, void)

- 2♠: 4♠ (R2NT)
  - 3♣: ♣ shortage, =4630
  - 3♦: ♦ shortage, =4603
  - 3♥: 7♥, =4♠
  - 3♠: 5♠, implies 6♥, and low shortage (didn't jump again), =5620
- 2NT: 7330 (R3♣ for LMH void)
- 3♣: 4♣
- 3♦: 4♦
- 3♠: 5♠, implies 6♥, and high shortage, =5602

# Relay after interference

## 2♠ (R2NT) Balanced hand

- 3♣: 5♣ or 4♣+ 4M (R3♦)
  - 3M: 44
  - 3NT: 5♣
- 3♦: 4♦ + 4M (R3♥)
  - 3♠/3NT: ♠/♥
- 3♥: 4♥ could have 4♠ (R3♠ promise 4♠)
  - 3NT: =3433
  - 4♣/♦: singleton. =4441/=4414
    - 4♦/4NT: ♠ keycard

- 4♥: 4♠, 44(32)
  - 4NT: ♠ keycard
- 3♠: =4333
- 3NT: 33(43), (23)44, 5♦(332)

## 2NT balanced hand

- 3♣: stayman
  - 3♦: No
    - 3M: 54
      - 3♠/4x: keycard response agreeing M
  - 3M: 4
    - 3♠/4NT: keycard agreeing M
    - 4m: NAT
  - 3NT: both
    - 4m: tied major keycard SI
      - 4m+1: min
        - 4M: sign-off
      - 4M+: keycard response

## 1♦ Opening

1♦ is 4+♦ 2 or 3 suiter. Specifically 4♦(441), 5♦(440), and any ♦ two suiter.

- 1♥: NAT or INV+
  - 6-11, 4♥
  - 12+ INV+
- 1♠: 4+♠, 6-11, NF
- 1NT: 8-11, encourage opener to rebid minors.
- 2♣: 5-11, 5+♣, ♦ tolerance
- 2/3♦: pre-emptive
- 2M: 8-, 6+ suit. No game interest.
- 2NT: INV?
- 3x: NAT, no game interest

1♦ – 1♥

1♥ is ♥ or ANY INV+

- 1♠: 4♠, 5+♦ unless =4144
- 1NT: 5+♦, 4+♣
- 2♣: 5+♣, 4+♦
- 2♦: 4♥, 5+♦, 1-♣
- 2♥: 4♥, 5+♦, 1-♠
- 2♠: minors, 55/66
- 2NT: =1444
  - 3♣/♠: ♣/♦ keycard
  - 3♦: INV+ ♥ keycard
  - 3♥: To play
- 3♣: =4441
  - 3♥: To play
  - 3♦: INV+ ♥ keycard

1♦ – 1♥ – 1♠

1♠: 4+S, deny 4♥.

- 1NT: **Relay**, **could be Weak** (5+♥), F1
- 2♣: NAT, weak, NF (Worst case =2434)
- 2♦: To play
- 2♥: To play. **NOT** recommended
- 2♠: pre-emptive
- 2NT: INV. **NOT** recommended

1♦ – 1♥ – 1♠ - 1NT

**Relay**, **could be Weak** (with 5+♥), F1

- 2♣: =4144
  - 2♦/2♥: To play
  - 2♠/3♣/3♦: keycard
  - 2NT/3♥/3♠: INV
  - 3NT: To play

- 2♦: 1-♥, 5+♦ (cannot skip 2♦ for weak ♥)
  - 2♥: To play
  - 2♠: [GF Relay](#)
  - 2NT/3♦: INV/♦ INV, could play 3NT
- 2♥: 2-3♥, 1-♣, 5+♦
  - 2♠: [GF Relay](#)
  - 2NT/3♦: INV/♦ INV, could play 3NT
  - 3♣: 5♥ INV
  - 3♥: 6+♥ INV
- 2♠: 7+♦, max (R2NT)
  - 3♣: 8+ (R3♦ for ♥/♣ void)
  - 3♦/3♥/3♠: =4171/=4072/=4270

1♦ – 1♥ - 1NT

1NT: 5+♦, 4+♣.

Responses:

- [2♣ relay](#)
- 2♦/2♥/3♣: to play
- 2♠: INV for ♣
- 2NT: INV for NT
  - 3♣/3♦: NAT, min
  - 3♥/3♠: longer tied minor, max
  - 3NT: To play
- 3♦: INV for ♦
- 3M: splinter INV for either minor
  - 4♣: sign off, P/C
- 3NT: To play

1♦ – 1♥ – 2♣

2♣: 5+♣, 4+♦.

Responses:

- [2♦ relay](#)

- 2♥/3♦: to play
- 2♠: INV for ♦
- 2NT: INV for NT
  - 3♣/3♦: NAT, min
  - 3♥/3♠: longer tied minor, max
  - 3NT: To play
- 3♣: INV for ♣
- 3M: splinter INV for either minor
  - 4♣: sign off, P/C
- 3NT: To play

1♦ – 1♥ – 1NT/2♣ – 3NT

Responder picks 3NT as contract. Opener may correct with 65+/74+.

- 4m: 74+
- 4!om: 65+

1♦ – 1♥ – 1NT/2♣ – 2♣/2♦ **Relay**

Opener is (45+) in the minors.

- 1NT = longer ♦
- 2♣ = longer ♣

Followed by GF relay.

- (2♣) 2♦: =2254, does not want to declare NT.
  - 2♥: forces 2♠
    - 2♠
    - 2NT: keycard in ♦
  - 2NT: keycard in ♣
  - 2♠/3♣: keycard in ♥/♠
- 2♥/2♠: shortage. =31(45);=13(45)
- 2NT: =22(45)
- 3♣: 64 (R3♦)
  - 3♥/3♠: shortage. =21(46);=12(46)
  - 3NT: ♥ void. =30(46);

- 4♣: ♠ void. =03(46);
  - 4♦: longer minor keycard
  - 4♥: To play
  - 4♠: shorter minor keycard
- 3♦: 65 (R3♥)
  - 3♠: =02 (56)
  - 3NT: =11(56)
  - 4♣: =20 (56)
- 3♥/3♠/3NT: 74, void/2 singletons. =02(47)/=20(47)/=11(47).

1♦ – 1♥ – 2♦/2♥

- 2♦: 4+♥, 5+♦, 1-♣
- 2♥: 4+♥, 5+♦, 1-♠

Responses:

- (2♦) 2♥: To play
- 2♠: [GF Relay](#)
- 2NT/3♦/3♥: INV
- (2♦, 1-♣):
  - 3♣: 5♠ INV
  - 3♠: 6♠ INV
- (2♥, 1-♠):
  - 3♣/3♠: NAT INV
- 3NT: To play

## 2♠ Relay after 541

- 2NT: void (R3♣)
  - 3♦/♥/♠/NT: 0454/0463/0472
- 3♣/♦/♥/♠: 1453/1462/1471/1480

1♦ – 1♥ – 2♠

2♠: minors, 55/66

Responses:

- 2NT: GF Relay
- 3 $\clubsuit$ : To play
- 3 $\heartsuit$ : Tied minor INV
- 3NT: To play

## 2NT Relay

- 3 $\clubsuit$ : tied  $\heartsuit$  shortage. =2155/=1255
- 3 $\heartsuit$ : void. =3055/0355
- 3NT/4 $\clubsuit$ : 66. =1066/=0166

## extreme shape keycard

After opener shows at least 65+ in two known suits with known shortage, 4-way RKCB is replaced by 6-key keycard. Responses are:

- +1: 1/4
  - Q response: 0/1/2
- +2: 0/3/6
  - Q response: 0/1/2
- +3: 2/5 with 0 Q
- +4: 2/5 with 1 Q
- +5: 2/5 with 2 Qs

1 $\diamond$  – 1 $\spadesuit$

We encourage to bid on with 3 $\spadesuit$ .

- 1NT: 3- $\spadesuit$ , 4 $\heartsuit$
- 2 $\clubsuit$ : 5+ $\clubsuit$ , 4 $\diamond$
- 2 $\diamond$ : 5+ $\diamond$ , 4 $\clubsuit$
- 2 $\heartsuit$ : max, =31(45)?
  - 2 $\spadesuit$ : to play
  - 2NT: bid your minor
  - 3 $\spadesuit$ : INV?

- 2♠: 4252 or min?
  - 2NT: shortage enquiry
  - 3♣: shortage
  - 3♦: min, 4252
  - 3♥: shortage
  - 3♠: max, 4252
- 2NT: minors 55+
  - 3M: tied minor INV?
- 3♣: max, splinter
- 3♦: 4♠, 6+♦
- 3♥: max, splinter
- 3♠: max, H void?

# 1NT Opening

First response

- 2♣: Stayman. Does not promise 4M if GF.
- 2♦: ♥
- 2♥: ♠
- 2♠: Range finder.
- 2NT: single suited minor
- 3♣: minors

## 1NT - 2♣

- 2♦: no 4M (R2♠)
  - 2NT: 5♣, 5 (332)
  - 3♣: 5♦, 5 (332)
  - 3♦: =33 (43)
  - 3♥: =2344
  - 3♠: =3244
- 2♥: 4♥ (R2♠)
  - 2NT: =3433
  - 3♣: 4♣ (R3♦)
    - 3♥: 3♦, =2434
    - 3♠: 3♠, =3424



- 3NT: 4♠ = 4414
- 3♦: 4♦ (R3♥)
- 3♥: 4♠, 3♣
- 3♠: 4♠, 3♦
- 3NT: =2452
- 2♠: 4♠ (R3♣)
  - 3♦: 4♦
  - 3♥: =4324
  - 3♠: =4234
  - 3NT: =4333

## 2♣ Opening

6+♣ or 5+♣ + 4M, 11-15.

First response:

- 2♦: ART, INV+, relay
- 2M: NAT, NF
- 2NT: bal, INV
- 3♣: pre-emptive
- 3♦: pre-emptive
- 3M: GF, NAT, 6+
- 3NT: To play

2♣ – 2♦

2♦: ART, INV+

- 2♥: 4♥,
- 2♠: 4♠,
- 2NT: max, 6+♣ (R3♣)
  - 3♦: (331)6 (R3♥)
    - 3♠: =1336
    - 3NT: =3136
    - 4♣: =3316 (skipping 3NT requires both majors)
  - 3♥: =2326

- 3♠: =3226
- 3NT: =2236
- 3♣: min, 6+♣ (R3♦: same as above)
- 3♦: max, 6♣, 4♦
- 3♥: max, 7330
- 3♠: max, 7321
- 3NT: max: 7222

## 2♦ Opening

6+♦, no 4 card side suit, (10)11-15.

First response:

- 2M: NAT, 5+, INV+, F1
  - 2NT: Max, no fit
  - 2♠/3♥ (oM): splinter agreeing M
  - 3♣: splinter agreeing M
  - 3♦: min, no fit
  - 3M: support, no shortage, min
  - 3NT: support, no shortage, max
- 2NT: ART, GF, relay
  - 3♣: 7+ with shortage (R3♦)
    - 3♥/3♠/3NT: ♥/♠/♣ shortage
  - 3♦/3♥/3♠: 6331, ♣/♥/♠ shortage
  - 3NT: no shortage
- 3♣: ART, INV+ for ♦/NT
  - 3♦: min
  - 3M: max, you play 3NT
  - 3NT: To play
- 3♦: pre-emptive